Aerotech Environmental Consulting, Inc.
17837 First Avenue South, Suite No. 576
Normandy Park, Washington 98148
(360) 710-5899 / Alan@DirtyDirt. Us

TO: Mr. Tim Mullin, LHG
State of Washington Department of Ecology
Post Office Box 47775
Olympia, Washington 98504
(360) 999-9589 / tim.mullin@ecy.wa.gov

January 9, 2026

RE: **Pioneer Museum Property**
2301 - 23rd Avenue Southeast
Puyallup, Washington 98373
VCP Project No.: SW1846

Final Subsurface Soils Investigation
– and –
Request to Washington Department of Ecology
for
No Further Action Likely Determination

Rear Mr. Mullin;

Attached are Phase 2 Subsurface Investigations for the aforementioned *Pioneer Museum* Property. To facilitate your evaluation, the subject Property has been addressed as three areas based upon the anticipated types of Contaminants of Concern; (1) the *Former Museum Building* located in the southwestern corner of the subject Property; (2) the *Drum Storage Area* located adjoining the north side of the Museum Building; and (3) the *Horse Barn* adjoining the southern Property boundary east of the Museum Building.

All of Laboratory analytical results of the attached reports have reported laboratory results by the most stringent Cleanup Levels. Now that all of the areas of possible soil contamination have been investigated, we will complete your requests in your Opinion Letter dated January 10, 25

> "As the Site is within the 10-year wellhead protection zone of the Well #13, AEF202, \ecology recommends collecting at lease one hydropunch/grab groundwater sample within each area of concern to determine Site groundwater quality Based upon the surface elevation in the stormwater pond, groundwater at the Site is expected to be shallow, at approximately 10 feet below ground surface ... " *Further Action at the following Contaminated Site: Pioneer Museum,* WDOE, January 10, 2025, p.6.

> "Ecology recommends confirming current concentrations for pesticides at locations S1, S2, and S3 with both soil and with at least one groundwater sample.. the groundwater sample can be collect by using either a hydropunch / grab method of fron a permanent groundwater monitoring well." (Ibid).

Final Investigation Submittal
Subsurface Soils

Pioneer Museum
2301 - 23rd Avenue Southeast
Puyallup, Washington 98373
VCP No. SW1846

TABLE of CONTENTS

Section 1.....

Final Subsurface Soils Investigations and
Request for No Further Action Likely Determination

Section 2.....

Ecology Form 070-219
Request for No Further Action Likely Determination

Section 3.....

Museum Building Summary
Sample Location Map & Photographs
Laboratory Analytical Results Total Metals
Laboratory Analytical Results PFAS EPA Method 1633

Section 4.....

Drum Storage Exterior Area
Sample Location Map & Photographs
Laboratory Analytical Results PFAS EPA Method 1633

Section 5.....

Horse Barn
Sample Location Map & Photographs
Laboratory Analytical Results Gasoline by NWTPH
Organic Pesticides by EPA 8081B
Total Metals by EPA 6020B
Volatile Organic Compounds 8260D
Laboratory Analytical Results
– PFAS EPA Method 1633

Thank you for your assistance in this matter. If I can answer any additional questions or be of further assistance, please do not hesitate to contact me at (360) 710-5899 or Alan@DirtyDirt.us.

Best Regards,

Alan T. Blotch

DEPARTMENT OF ECOLOGY
State of Washington

Voluntary Cleanup Program Request for Opinion Form

Washington State Department of Ecology – Toxics Cleanup Program

Use this form to request a written opinion on your planned or completed independent remedial action under the Voluntary Cleanup Program (VCP). Attach to this form the plans or reports documenting the remedial action submitted for our review. Please submit only one form for each request.

Step 1: Identify the cleanup site

Enter information here about the subject VCP cleanup site associated with the requested document review. This information may be identified in the VCP agreement for the project.

Site name: Pioneer Museum

Site address: 2301 - 23rd Avenue Southeast, Puyallup, WA 98372

Facility Site ID: 9404 **Cleanup Site ID:** 11739 **VCP project #:** SW1846

Step 2: Request written opinion on a plan or report

Enter the date this form is being submitted:

Then identify the type of independent remedial action document you're submitting for Ecology review and requesting for a written opinion under the VCP. Check all that apply.

- ☐ Remedial investigation plan
- ☐ Remedial investigation report
- ☐ Feasibility study
- ☐ Property cleanup plan (for one or more parcels within a Site)
- ☐ Property cleanup report (for one or more parcels within a Site)
- ☐ Site cleanup plan
- ☐ Site cleanup report
- ☐ Technical assistance letter
- ☑ Other – please specify: **No Further Action Likely Opinion**

Note that Ecology's written opinion and/or technical assistance will be limited to whether:

- The planned or completed Site remedial action meets, or likely meets, the substantive cleanup requirements of the Model Toxics Control Act (MTCA).

  OR

- Further Site remedial action is necessary to comply with MTCA cleanup requirements.

Voluntary Cleanup Program Request for Opinion Form

Washington State Department of Ecology – Toxics Cleanup Program

Step 3: Representations and signature

The undersigned representative of the customer certifies their authority to request services from Ecology under the signed agreement for this VCP project.

Name: Alan T. Blotch **Title:** President

Organization: Aerotech Environmental Consulting, Inc.

Mailing address: 17837 First Acenue, Suite 556

City: Normandy Park **State:** WA **Zip:** 98148

Phone: (360) 710-5899 **Cell:** (360) 710-5899 **Email:** Alan@DirtyDirt.us

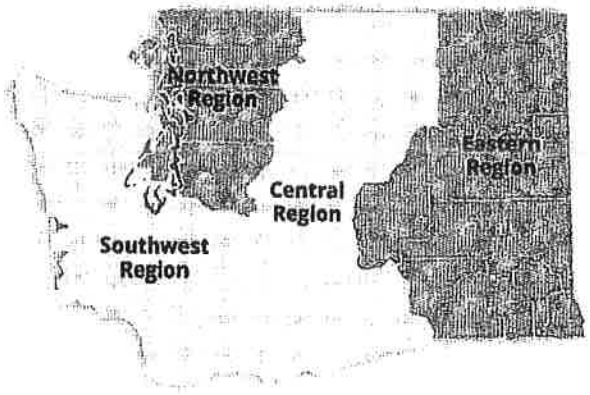
Signature: **Date:** 1/11/26

Step 4: Submittal

Email this completed form to the Ecology cleanup manager assigned to your Site. If a cleanup manager has not yet been assigned, email this completed form to the Ecology region office in the county of your Site.

Northwest Region counties
Island, King, Kitsap, San Juan, Skagit, Snohomish, Whatcom
vcp-nwro@ecy.wa.gov

Central Region counties
Benton, Chelan, Douglas, Kittitas, Klickitat, Okanogan, Yakima
vcp-cro@ecy.wa.gov



Southwest Region counties
Clallam, Clark, Cowlitz, Grays Harbor, Jefferson, Mason, Lewis, Pacific, Pierce, Skamania, Thurston, Wahkiakum
vcp-swro@ecy.wa.gov

Eastern Region counties
Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, Whitman
vcp-ero@ecy.wa.gov

If you need this publication in an alternate format, please contact the Ecology ADA coordinator at ecyadacoordinator@ecy.wa.gov or call (360) 407-6831. Persons with hearing loss can call 711 for Washington Relay Service. For persons with a speech disability needing TTY service, call 877-833-6341.

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January 9, 2026

RE: **Pioneer Museum Property**
2301 - 23rd Avenue Southeast
Puyallup, Washington 98373
VCP Project No.: SW1846

Final Subsurface Soils
Investigation Submittal
Completed Soils Characterization for
Sunset Pointe Development
MUSEUM BUILDING

Rear Mr. Mullin;

Attached are Phase 2 Subsurface Investigations for the aforementioned *Pioneer Museum* Property. To facilitate your evaluation, the subject Property has been addressed as three areas based upon the anticipated types of Contaminants of Concern; (1) the *Former Museum Building* located in the southwestern corner of the subject Property; (2) the *Drum Storage Area* located adjoining the north side of the Museum Building; and (3) the *Horse Barn* adjoining the southern Property boundary east of the Museum Building.

Your *Opinion Letter* dated January 10, 2025, identified the following concerns that required additional investigation;

Former Museum Building Interior.

> "Ecology recommends confirming current concentrations for pesticides at locations S1, S2, and S3 [performed by *Pierce County Environmental Health* Specialist, Sharon Bell) recommended sampling both soil and one groundwater sample be collected to show that groundwater was not impacted. .."

> "Aqueous non-film forming firefighting form (AFFF) may have been used to extinguish the fire, indicating a potential for per- and poly- fluoroalkyl substance (PFAS) to be present at the Site. (Opinion Letter dated January 10, 2025, p.4)."

PFAS Analytical Results

On September 22, 2025, Aerotech collected two (2) subsurface soil samples underneath the concrete foundation. The Area of Concrete was identified in the Tacoma-Pierce County Health Department ("TPCHD") post fire 2011 photos of the interior of the southern end of the Museum Building where the inside stored 55-gallon drums were damaged and destroyed in the 2011 Arson Fire.

Boring location #4 was located twenty (20) feet north of the southern wall, and approximately four feet west of the of the eastern wall – at the location of former entrance doors openings. This location is shown in the 2011 photos of the showing the fire damage.

Boring location #5 was three feet west of Boring Location 4 and twenty (20) feet north of the southern wall – inside the Museum Building in a severely damaged fire area

PFAS / PFOS by EPA Method 1633 Analytical Results

Soil Sample #4 contained PFOS of 0.272 ng/g-dry

Soil Sample #5 - no samples were above the Laboratory Limit of Detection

Thank you for your assistance in this matter. If I can answer any questions or further clarify the contents of the report, please do not hesitate to contact me at (360) 710-5788 or Alan@DirtyDirt.US.

Best regards,

Alan T. Blotch

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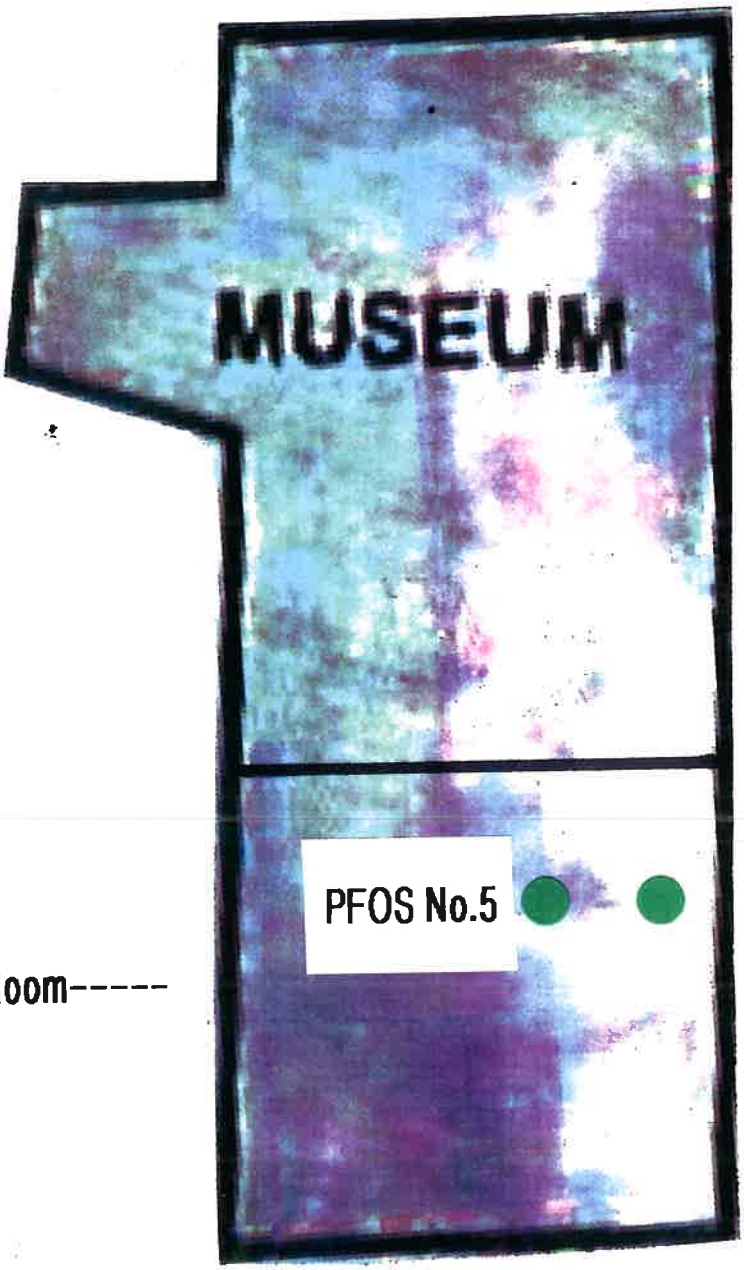
Best regards,

Alan T. Blotch

Pioneer Museum Building

North----



Drum Storage Room-----

(35' x 115')

Boring Location No.4
Museum Foundation
southern

Boring location adjoining the east side main entrance doors

Drill rig set-up

Sample 04-12

Boring Location B-5
Southern end Museum
foundation

West side of foundation

Surface conditions

PFAS Sample 5

Alliance TECHNICAL GROUP
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790

Chain of Custody Record & Laboratory Services Agreement

Date: 09-22-25 Page: 1 of: 1
Laboratory Project No (internal): 2509511
Project Name: SUNSET POINTE
Special Remarks:
Project No:
Collected by: A. BLOTCH
Location:
Report To (PM):
Disposal: Samples will be disposed in 30 days unless otherwise requested
☐ Return volume (specify above) ☐ Return to client

Client: AEROTECH ENV CONSULTING INC
Address:
City, State, Zip: NORMANDY PL, WA
Telephone: 360-710-5899
Email(s): ALAN @ DIRTY DIRT.US

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	# of Cont.	VOCs (EPA 8260 / 624)	BTEX	Gasoline Range Organics (GX)	Hydrocarbon identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082) / 608)	Metals** (EPA 6020 / 200.8)	Total (T) / Dissolved (D)	Anions (IC)***	EDB (8011)	Comments
1	PFAS 01-08	09-22		S	1													PFOS = 0.543
2	02-04																	PFOS = 0.272
3	03-08																	
4	04-12																	
5	05-10																	
6	06-01																	
7	07-01																	PFOS = 0.249
8																		
9																		
10																		

PFAS Soil Sampling

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water
**Metals (Circle): MTCA 5 RCRA 8 Priority Pollutants Individual: Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Si Sn Ti Tl V Zn
***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Turn-around Time:
☒ Standard ☐ Next Day
☐ 3 Day ☐ Same Day
☐ 2 Day (specify)

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above, that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x			x		
x		09/23 @ 10:20		Jack Hawthorne	9/23/25 1020

Alliance
TECHNICAL GROUP
3600 Fremont Ave N
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
Info@fremontanalytical.com

Aerotech Environmental Consulting
Alan Blotch
17837 1st Ave S #556
Normandy Park, WA 98148

RE: Sunset, Museum Foundation
Work Order Number: 2509164

September 24, 2025

Attention Alan Blotch:

Alliance Technical Group, LLC - Seattle received 14 sample(s) on 9/8/2025 for the analyses presented in the following report.

Sample Moisture (Percent Moisture)
Total Metals by EPA 6020B

All analyses were performed according to our accredited Quality Assurance program. Please contact the laboratory if you should have any questions about the results.

Alliance Technical Group is committed to accuracy, speed, and customer service. Thank you for choosing Alliance Technical Group's Seattle laboratory team for your analytical needs. We appreciate this opportunity to serve you!

Sincerely,

Kelley Lovejoy

Kelley Lovejoy
Project Manager

CC:
Hudson Gerkin

DoD-ELAP Accreditation #79636 by PJLA, ISO/IEC 17025:2017 and QSM 5.4 for Environmental Testing
ORELAP Certification: WA 100009 (NELAP Recognized) for Environmental Testing
Washington State Department of Ecology Accredited for Environmental Testing, Leb ID C910

Original

Alliance TECHNICAL GROUP

Date: *09/24/2025*

CLIENT: Aerotech Environmental Consulting
Project: Sunset
Work Order: 2509164

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2509164-001	MF-01	08/04/2025 12:00 AM	09/08/2025 2:30 PM
2509164-002	MF-02	08/04/2025 12:00 AM	09/08/2025 2:30 PM
2509164-003	MF-03	08/04/2025 12:00 AM	09/08/2025 2:30 PM
2509164-004	MF-04	08/04/2025 12:00 AM	09/08/2025 2:30 PM
2509164-005	MF-05	08/04/2025 12:00 AM	09/08/2025 2:30 PM
2509164-006	MF-06	08/04/2025 12:00 AM	09/08/2025 2:30 PM
2509164-007	MF-07	08/04/2025 12:00 AM	09/08/2025 2:30 PM
2509164-008	MF-08	08/04/2025 12:00 AM	09/08/2025 2:30 PM
2509164-009	MF-09	08/04/2025 12:00 AM	09/08/2025 2:30 PM
2509164-010	MF-10	08/04/2025 12:00 AM	09/08/2025 2:30 PM
2509164-011	MF-11	08/04/2025 12:00 AM	09/08/2025 2:30 PM
2509164-012	MF-12	08/04/2025 12:00 AM	09/08/2025 2:30 PM
2509164-013	MF-13	08/04/2025 12:00 AM	09/08/2025 2:30 PM
2509164-014	MF-14	08/04/2025 12:00 AM	09/08/2025 2:30 PM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

Original

Alliance TECHNICAL GROUP

Case Narrative

WO#: **2509164**
Date: **9/24/2025**

CLIENT: Aerotech Environmental Consulting
Project: Sunset

I. SAMPLE RECEIPT:
Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:
Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:
Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Qualifiers:

* - Flagged value is not within established control limits
B - Analyte detected in the associated Method Blank
D - Dilution was required
E - Value above quantitation range
H - Holding times for preparation or analysis exceeded
I - Analyte with an internal standard that does not meet established acceptance criteria
J - Analyte detected below Reporting Limit
N - Tentatively Identified Compound (TIC)
Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria
S - Spike recovery outside accepted recovery limits
ND - Not detected at the Reporting Limit
R - High relative percent difference observed

Acronyms:

%Rec - Percent Recovery
CCB - Continued Calibration Blank
CCV - Continued Calibration Verification
DF - Dilution Factor
DUP - Sample Duplicate
HEM - Hexane Extractable Material
ICV - Initial Calibration Verification
LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
MCL - Maximum Contaminant Level
MB or MBLANK - Method Blank
MDL - Method Detection Limit
MS/MSD - Matrix Spike / Matrix Spike Duplicate
PDS - Post Digestion Spike
Ref Val - Reference Value
REP - Sample Replicate
RL - Reporting Limit
RPD - Relative Percent Difference
SD - Serial Dilution
SGT - Silica Gel Treatment
SPK - Spike
Surr - Surrogate

CLIENT: Aerotech Environmental Consulting
Project: Sunset

Lab ID: 2509164-002 **Collection Date:** 8/4/2025
Client Sample ID: MF-02 **Matrix:** Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA 6020B				Batch ID: 49251		Analyst: ME
Arsenic	2.03	0.241		mg/Kg-dry	1	9/19/2025 5:15:00 PM
Lead	3.30	0.241		mg/Kg-dry	1	9/19/2025 5:15:00 PM
Sample Moisture (Percent Moisture)				Batch ID: R10304		Analyst: DI
Percent Moisture	15.0	0.500		wt%	1	9/18/2025 9:15:36 AM

Lab ID: 2509164-003 **Collection Date:** 8/4/2025
Client Sample ID: MF-03 **Matrix:** Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA 6020B				Batch ID: 49292		Analyst: ME
Arsenic	2.33	0.249		mg/Kg-dry	1	9/19/2025 5:34:00 PM
Lead	2.80	0.249		mg/Kg-dry	1	9/19/2025 5:34:00 PM
Sample Moisture (Percent Moisture)				Batch ID: R10304		Analyst: DI
Percent Moisture	19.8	0.500		wt%	1	9/18/2025 9:15:36 AM

Lab ID: 2509164-006 **Collection Date:** 8/4/2025
Client Sample ID: MF-06 **Matrix:** Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA 6020B				Batch ID: 49292		Analyst: ME
Arsenic	2.08	0.220		mg/Kg-dry	1	9/19/2025 5:37:00 PM
Lead	1.96	0.220		mg/Kg-dry	1	9/19/2025 5:37:00 PM
Sample Moisture (Percent Moisture)				Batch ID: R10304		Analyst: DI
Percent Moisture	11.2	0.500		wt%	1	9/18/2025 9:15:36 AM

Alliance TECHNICAL GROUP

Date: *9/24/2025*

Work Order: 2509164
CLIENT: Aerotech Environmental Consulting
Project: Sunset

QC SUMMARY REPORT

Total Metals by EPA 6020B

Sample ID: MB-49292	SampType: MBLK			Units: mg/Kg		Prep Date: 9/18/2025			RunNo: 103114		
Client ID: MBLKS	Batch ID: 49292					Analysis Date: 9/19/2025			SeqNo: 2151197		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.200									
Lead	ND	0.200									

Sample ID: LCS-49292	SampType: LCS			Units: mg/Kg		Prep Date: 9/18/2025			RunNo: 103114		
Client ID: LCSS	Batch ID: 49292					Analysis Date: 9/19/2025			SeqNo: 2151198		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	41.4	0.200	40.00	0	103	80	120				
Lead	21.4	0.200	20.00	0	107	80	120				

Sample ID: 2508604-001AMS	SampType: MS			Units: mg/Kg		Prep Date: 9/18/2025			RunNo: 103114		
Client ID: BATCH	Batch ID: 49292					Analysis Date: 9/19/2025			SeqNo: 2151201		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	39.9	0.202	40.32	0	99.0	75	125				
Lead	20.6	0.202	20.16	0.08175	102	75	125				

Sample ID: 2508604-001AMSD	SampType: MSD			Units: mg/Kg		Prep Date: 9/18/2025			RunNo: 103114		
Client ID: BATCH	Batch ID: 49292					Analysis Date: 9/19/2025			SeqNo: 2151203		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	39.5	0.200	40.00	0	98.8	75	125	39.93	1.06	20	
Lead	20.0	0.200	20.00	0.08175	99.8	75	125	20.61	2.80	20	

Sample ID: MB-49251	SampType: MBLK			Units: mg/Kg		Prep Date: 9/16/2025			RunNo: 103115		
Client ID: MBLKS	Batch ID: 49251					Analysis Date: 9/19/2025			SeqNo: 2151319		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.200									
Lead	ND	0.200									

Alliance TECHNICAL GROUP

Date: *9/24/2025*

Work Order: 2509164
CLIENT: Aerotech Environmental Consulting
Project: Sunset

QC SUMMARY REPORT

Total Metals by EPA 6020B

Sample ID: MB-49251	SampType: MBLK			Units: mg/Kg		Prep Date: 9/16/2025		RunNo: 103115		
Client ID: MBLKS	Batch ID: 49251					Analysis Date: 9/19/2025		SeqNo: 2151319		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID: LCS-49251	SampType: LCS			Units: mg/Kg		Prep Date: 9/16/2025		RunNo: 103115		
Client ID: LCSS	Batch ID: 49251					Analysis Date: 9/19/2025		SeqNo: 2151320		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	41.4	0.200	40.00	0	103	80	120				
Lead	21.4	0.200	20.00	0	107	80	120				

Sample ID: 2509287-001AMS	SampType: MS			Units: mg/Kg-dry		Prep Date: 9/16/2025		RunNo: 103115		
Client ID: BATCH	Batch ID: 49251					Analysis Date: 9/19/2025		SeqNo: 2151324		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	49.1	0.247	49.31	0.2118	99.2	75	125				
Lead	35.9	0.247	24.66	11.71	98.0	75	125				

Sample ID: 2509287-001AMSD	SampType: MSD			Units: mg/Kg-dry		Prep Date: 9/16/2025		RunNo: 103115		
Client ID: BATCH	Batch ID: 49251					Analysis Date: 9/19/2025		SeqNo: 2151326		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	47.0	0.237	47.39	0.2118	98.7	75	125	49.12	4.46	20	
Lead	34.0	0.237	23.69	11.71	94.1	75	125	35.86	5.28	20	

Alliance TECHNICAL GROUP

Sample Log-In Check List

Client Name: **AEROTE** Work Order Number: **2509164**

Logged by: **Morgan Wilson** Date Received: **9/8/2025 2:30:00 PM**

Chain of Custody

1. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2. How was the sample delivered?	Client		

Log In

3. Custody Seals present on shipping container/cooler? (Refer to comments for Custody Seals not intact)	Yes ☐	No ☐	Not Present ☑
4. Was an attempt made to cool the samples?	Yes ☐	No ☑	NA ☐
	Unknown prior to receipt.		
5. Were all items received at a temperature of >2°C to 6°C *	Yes ☐	No ☐	NA ☑
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. Is there headspace in the VOA vials?	Yes ☐	No ☐	NA ☑
11. Did all samples containers arrive in good condition(unbroken)?	Yes ☑	No ☐	
12. Does paperwork match bottle labels?	Yes ☑	No ☐	
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all hold times (except field parameters, pH e.g.) able to be met?	Yes ☑	No ☐	

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

Item Information

Item #	Temp °C
Sample	20.1

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C

Original

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Chain of Custody Record & Laboratory Services Agreement

Date: 09/08/25 | Page: 1 of: 2 | Laboratory Project No (internal): 2509164

Project Name: SUNSET

Special Remarks:

Client: AEROTECH ENV CONSULTING

Project No: MUSEUM FOUNDATION

Address:

Collected by:

City, State, Zip:

Location:

Telephone:

Report To (PM):

Sample Disposal: ☐ Return to client ☒ Disposal by lab (after 30 days)

Fax:

PM Email:

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T)	Dissolved (D)	Anions (IC)***	EDB (8011)				Comments
1	MF-01	08-04		SOIL																		
2	02																					
3	03																					
4	04																					
5	05																					
6	06																					
7	07																					
8	08																					
9	09																					
10	10																					

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL Individual Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Si Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Turn-around Time:

- ☒ Standard
- ☐ 3 Day
- ☐ 2 Day
- ☐ Next Day
- Same Day _____ (specify)

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished	Date/Time	Received	Date/Time
x [signature]	09/08/25 2:30	x [signature]	9/8/25 1730
x		x	

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Chain of Custody Record & Laboratory Services Agreement

Date: 09/08/25 | Page: 2 of: 2 | Laboratory Project No (internal): 2509164

Project Name: 60 HSET

Special Remarks:

Client: AEROTECH ENV CONSULTING

Project No: MUSEUM

Address:

Collected by:

City, State, Zip:

Location:

Telephone:

Report To (PM):

Sample Disposal: ☐ Return to client ☒ Disposal by lab (after 30 days)

Fax:

PM Email:

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)	Comments
1	MF - 11	08.04		SOIL														
2	12																	
3	13																	
4	14																	
5																		
6																		
7																		
8																		
9																		
10																		

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O Phosphate Fluoride Nitrate+Nitrite

Turn-around Time:

- ☒ Standard
- ☐ 3 Day
- ☐ 2 Day
- ☐ Next Day
- Same Day _____ (specify)

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished	Date/Time	Received	Date/Time
x [signature]	09/08/25 2:3	x [signature]	9/8/25 1430
Relinquished x	Date/Time	Received x	Date/Time

Chain of Custody Record & Laboratory Services Agreement

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Date: 09/08/25 Page: 1 of: 2

Laboratory Project No (internal): 2509164

Project Name: SUNSET

Special Remarks: edits 9/16/25 5pm per AB

Client: AEROTECH ENV CONSULTING

Project No: MUSEUM FOUNDATION

Address:

Collected by:

City, State, Zip:

Location:

Telephone:

Report To (PM):

Sample Disposal: ☐ Return to client ☒ Disposal by lab (after 30 days)

Fax:

PM Email:

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8) Total (T) / Dissolved (D)	Anions (IC)***	EDB (8011)	LEAD + ARSENIC				Comments
1 MF-01	08-04		SOIL																	
2 02															X					
3 03															X					
4 04																				
5 05																				
6 06															X					
7 07																				
8 08																				
9 09																				
10 10																				

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished	Date/Time	Received	Date/Time
x	09/08/25 2:30	x	9/8/25 1430
Relinquished	Date/Time	Received	Date/Time
x		x	

Turn-around Time:
- ☒ Standard
- ☐ 3 Day
- ☐ 2 Day
- ☐ Next Day
- Same Day

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Chain of Custody Record & Laboratory Services Agreement

Date: 09/08/25 | Page: 2 of: 2 | Laboratory Project No (internal): 2509164

Project Name: 60 NSET

Special Remarks:

Client: AEROTECH ENV CONSULTING

Project No: MUSEUM

Address:

Collected by:

City, State, Zip:

Location:

Telephone:

Report To (PM):

Sample Disposal: ☐ Return to client ☒ Disposal by lab (after 30 days)

Fax:

PM Email:

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)	Comments
1	MF - 11	08.04		SOIL														
2	12	↓		↓														
3	13																	
4	14																	
5																		
6																		
7																		
8																		
9																		
10																		

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA 8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished	Date/Time	Received	Date/Time
x [signature]	9/08/25 2:3	x [signature]	9/8/25 1430
Relinquished x	Date/Time	Received x	Date/Time

Turn-around Time:

- ☒ Standard
- ☐ 3 Day
- ☐ 2 Day
- ☐ Next Day
- Same Day _____ (specify)

Alliance
TECHNICAL GROUP
3600 Fremont Ave N
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

Aerotech Environmental Consulting
Alan Blotch
17837 1st Ave S #556
Normandy Park, WA 98148

RE: Sunset Pointe,
Work Order Number: 2509511

October 07, 2025

Attention Alan Blotch:

Alliance Technical Group, LLC - Seattle received 7 sample(s) on 9/23/2025 for the analyses presented in the following report.

All analyses were performed according to our accredited Quality Assurance program. Please contact the laboratory if you should have any questions about the results.

Alliance Technical Group is committed to accuracy, speed, and customer service. Thank you for choosing Alliance Technical Group's Seattle laboratory team for your analytical needs. We appreciate this opportunity to serve you!

Sincerely,

Brianna Barnes
Project Manager

CC:
Hudson Gerkin

DoD-ELAP Accreditation #79636 by PJLA, ISO/IEC 17025:2017 and QSM 5.4 for Environmental Testing
ORELAP Certification: WA 100009 (NELAP Recognized) for Environmental Testing
Washington State Department of Ecology Accredited for Environmental Testing, Lab ID C910

Original

Alliance TECHNICAL GROUP

Date: *10/07/2025*

CLIENT: Aerotech Environmental Consulting
Project: Sunset Pointe
Work Order: 2509511

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2509511-001	PFAS 01-08	09/22/2025 12:00 AM	09/23/2025 10:20 AM
2509511-002	PFAS 02-04	09/22/2025 12:00 AM	09/23/2025 10:20 AM
2509511-003	PFAS 03-08	09/22/2025 12:00 AM	09/23/2025 10:20 AM
2509511-004	PFAS 04-12	09/22/2025 12:00 AM	09/23/2025 10:20 AM
2509511-005	PFAS 05-10	09/22/2025 12:00 AM	09/23/2025 10:20 AM
2509511-006	PFAS 06-01	09/22/2025 12:00 AM	09/23/2025 10:20 AM
2509511-007	PFAS 07-01	09/22/2025 12:00 AM	09/23/2025 10:20 AM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

Alliance TECHNICAL GROUP

Case Narrative

WO#: **2509511**
Date: **10/7/2025**

CLIENT: Aerotech Environmental Consulting
Project: Sunset Pointe

I. SAMPLE RECEIPT:
Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:
Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:
Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.
2509511-001A
SUB-PFAS-S-1633 has been Sub Contracted.
2509511-002A
SUB-PFAS-S-1633 has been Sub Contracted.
2509511-003A
SUB-PFAS-S-1633 has been Sub Contracted.
2509511-004A
SUB-PFAS-S-1633 has been Sub Contracted.
2509511-005A
SUB-PFAS-S-1633 has been Sub Contracted.
2509511-006A
SUB-PFAS-S-1633 has been Sub Contracted.
2509511-007A
SUB-PFAS-S-1633 has been Sub Contracted.

Alliance TECHNICAL GROUP

Sample Log-In Check List

Client Name:	**AEROTE**	Work Order Number:	**2509511**
Logged by:	**Lyann Rivera**	Date Received:	**9/23/2025 10:20:00 AM**

Chain of Custody

1.	Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2.	How was the sample delivered?	Client		

Log In

3.	Custody Seals present on shipping container/cooler? (Refer to comments for Custody Seals not intact)	Yes ☐	No ☐	Not Present ☑
4.	Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5.	Were all items received at a temperature of >2°C to 6°C *	Yes ☑	No ☐	NA ☐
6.	Sample(s) in proper container(s)?	Yes ☑	No ☐	
7.	Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8.	Are samples properly preserved?	Yes ☑	No ☐	
9.	Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10.	Is there headspace in the VOA vials?	Yes ☐	No ☐	NA ☑
11.	Did all samples containers arrive in good condition(unbroken)?	Yes ☑	No ☐	
12.	Does paperwork match bottle labels?	Yes ☑	No ☐	
13.	Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
14.	Is it clear what analyses were requested?	Yes ☑	No ☐	
15.	Were all hold times (except field parameters, pH e.g.) able to be met?	Yes ☑	No ☐	

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

Item Information

Item #	Temp °C
Sample	2.0

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C

Original

Alliance Technical Group - Akron
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

October 06, 2025

PM
ATG - SEATTLE LAB
3600 Fremont Ave N.
Seattle, WA 98103
TEL: (206) 352-3790
FAX:

RE:

Dear PM: Order No.: 25092029

Alliance Technical Group - Akron received 7 sample(s) on 9/25/2025 for the analyses presented in the following report.

There were no problems with the analytical events associated with this report unless noted in the Case Narrative.

Quality control data is within laboratory defined or method specified acceptance limits except where noted.

If you have any questions regarding these tests results, please feel free to call the laboratory.

Sincerely,

Brian J. Fackelman
Project Manager, LIMS Administrator
3310 Win St.
Cuyahoga Falls, Ohio 44223

Arkansas 88-0735, California 2943, Colorado, Connecticut PH-0828, Florida NELAC E87688, Idaho OH00923, Illinois 200061, Indiana C-OH-13, ISO/IEC 17025:2017 119125 L22-544, Kansas E-10347, Kentucky (Underground Storage Tank) 3, Kentucky 90146, Maryland 339, Michigan 9988, Minnesota 1780279, Nevada OH009232020-1, New Hampshire 2996, New Jersey OH006, New York 11777, North Carolina 39705 and 631, North Dakota R-201, Ohio DW, Ohio VAP CL0052, Oklahoma 2019-155, Oregon OH200001, Pennsylvania 68-01335, Rhode Island LA000317, South Carolina 92016001, Texas T104704466-19-16, Utah OH009232020-12, Virginia VELAP 10381, West Virginia 9957C

Alliance Technical Group - Akron
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

Case Narrative

WO#: 25092029
Date: 10/6/2025

CLIENT: ATG - SEATTLE LAB
Project:

WorkOrder Narrative:
25092029: This report in its entirety consists of the following documents: Cover Letter, Case Narrative, Analytical Results, QC Summary Report, Applicable Accreditation Information, Chain-of-Custody, Cooler Receipt Form, and other applicable forms as necessary. All documents contain the Alliance Technical Group Work Order Number assigned to this report.

Alliance Technical Group holds the accreditations/certifications listed at the bottom of the cover letter that may or may not pertain to this report. Please refer to the "Accreditation Program Analytes Report" for accredited analytes list.

The information contained in this analytical report is the sole property of Alliance Technical Group and that of the customer. It cannot be reproduced in any form without the consent of Alliance Technical Group or the customer for which this report was issued. The results contained in this report are only representative of the samples received. Conditions can vary at different times and at different sampling conditions. Alliance Technical Group is not responsible for use or interpretation of the data included herein.

All results for solid samples are reported on an "as received" or "wet weight" basis unless indicated as "dry weight" using the "-dry" designation on the reporting units.

This report is believed to meet all of the requirements of the accrediting agency, where applicable. Any comments or problems with the analytical events associated with this report are noted below.

Analytical Sequence Sample Notes:
25092029-(001A-006A) SVOC-EPA1633_S: Sample exhibited high recoveries for multiple IDAs. Potential low bias in associated analytes. Confirmed via reanalysis.

Alliance Technical Group - Akron
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

Workorder Sample Summary

WO#: **25092029**

06-Oct-25

CLIENT: ATG - SEATTLE LAB

Project:

Lab SampleID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
25092029-001	2509511-001A		9/22/2025	9/25/2025 10:30:00 AM	Solid
25092029-002	2509511-002A		9/22/2025	9/25/2025 10:30:00 AM	Solid
25092029-003	2509511-003A		9/22/2025	9/25/2025 10:30:00 AM	Solid
25092029-004	2509511-004A		9/22/2025	9/25/2025 10:30:00 AM	Solid
25092029-005	2509511-005A		9/22/2025	9/25/2025 10:30:00 AM	Solid
25092029-006	2509511-006A		9/22/2025	9/25/2025 10:30:00 AM	Solid
25092029-007	2509511-007A		9/22/2025	9/25/2025 10:30:00 AM	Solid

Alliance TECHNICAL GROUP

Alliance Technical Group - Akron
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

Analytical Report

(consolidated)

WO#: **25092029**

Date Reported: **10/6/2025**

CLIENT: ATG - SEATTLE LAB

Collection Date: 9/22/2025

Project:

Lab ID: 25092029-001

Matrix: SOLID

Client Sample ID: 2509511-001A

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PFAS BY EPA 1633				E1633	E1633	Analyst: **AEH**
PFAS IN SOLID SAMPLES (EPA METHOD 1633)						
11Cl-PF3OUdS	ND	0.879		ng/g-dry	1	9/29/2025 6:39:00 PM
3:3 FTCA	ND	1.10		ng/g-dry	1	9/29/2025 6:39:00 PM
4:2 FTS	ND	0.879		ng/g-dry	1	9/29/2025 6:39:00 PM
5:3 FTCA	ND	5.49		ng/g-dry	1	9/29/2025 6:39:00 PM
6:2 FTS	ND	0.879		ng/g-dry	1	9/29/2025 6:39:00 PM
7:3 FTCA	ND	5.49		ng/g-dry	1	9/29/2025 6:39:00 PM
8:2 FTS	ND	0.879		ng/g-dry	1	9/29/2025 6:39:00 PM
9CL-PF3ONS	ND	0.879		ng/g-dry	1	9/29/2025 6:39:00 PM
ADONA	ND	0.879		ng/g-dry	1	9/29/2025 6:39:00 PM
HFPO-DA	ND	0.879		ng/g-dry	1	9/29/2025 6:39:00 PM
NEtFOSA	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
NEtFOSAA	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
NEtFOSE	ND	2.20		ng/g-dry	1	9/29/2025 6:39:00 PM
NFDHA	ND	0.440		ng/g-dry	1	9/29/2025 6:39:00 PM
NMeFOSA	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
NMeFOSAA	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
NMeFOSE	ND	2.20		ng/g-dry	1	9/29/2025 6:39:00 PM
PFBA	ND	0.879		ng/g-dry	1	9/29/2025 6:39:00 PM
PFBS	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
PFDA	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
PFDoA	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
PFDoS	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
PFDS	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
PFEESA	ND	0.440		ng/g-dry	1	9/29/2025 6:39:00 PM
PFHpA	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
PFHpS	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
PFHxA	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
PFHxS	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
PFMBA	ND	0.440		ng/g-dry	1	9/29/2025 6:39:00 PM
PFMPA	ND	0.440		ng/g-dry	1	9/29/2025 6:39:00 PM
PFNA	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
PFNS	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
PFOA	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
PFOS	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM

Qualifiers:

- H Holding times for preparation or analysis exceeded
- ND Not Detected
- R RPD outside accepted recovery limits
- W Sample container temperature is out of limit as specified at testcode
- M Manual Integration used to determine area response
- PL Permit Limit
- RL Reporting Detection Limit

Original

Alliance Technical Group - Akron
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

Analytical Report

(consolidated)

WO#: **25092029**

Date Reported: **10/6/2025**

CLIENT: ATG - SEATTLE LAB **Collection Date:** 9/22/2025

Project:

Lab ID: 25092029-001 **Matrix:** SOLID

Client Sample ID: 2509511-001A

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PFAS BY EPA 1633				**E1633**	**E1633**	Analyst: **AEH**
PFAS IN SOLID SAMPLES (EPA METHOD 1633)						
PFOSA	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
PFPeA	ND	0.440		ng/g-dry	1	9/29/2025 6:39:00 PM
PFPeS	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
PFTeDA	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
PFTrDA	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
PFUnA	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
Surr: 13C2-PFDA	90.2	50 - 200		%Rec	1	9/29/2025 6:39:00 PM
Surr: 13C2-PFHxA	84.5	50 - 200		%Rec	1	9/29/2025 6:39:00 PM
Surr: 13C3-PFBA	81.3	50 - 200		%Rec	1	9/29/2025 6:39:00 PM
Surr: 13C4-PFOA	83.0	50 - 200		%Rec	1	9/29/2025 6:39:00 PM
Surr: 13C4-PFOS	91.5	50 - 200		%Rec	1	9/29/2025 6:39:00 PM
Surr: 13C5-PFNA	83.6	50 - 200		%Rec	1	9/29/2025 6:39:00 PM
Surr: 18O2-PFHxS	83.6	50 - 200		%Rec	1	9/29/2025 6:39:00 PM
PFAS BY EPA 1633				**A2540B**		Analyst: **DHF**
PERCENT MOISTURE BY SM2540MOD						
Percent Moisture	10.1	0.100		%	1	10/3/2025 6:00:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded
ND	Not Detected
R	RPD outside accepted recovery limits
W	Sample container temperature is out of limit as specified at testcode
M	Manual Integration used to determine area response
PL	Permit Limit
RL	Reporting Detection Limit

Original

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Analytical Report

(consolidated)

WO#: **25092029**

Date Reported: **10/6/2025**

CLIENT: ATG - SEATTLE LAB **Collection Date:** 9/22/2025

Project:

Lab ID: 25092029-002 **Matrix:** SOLID

Client Sample ID: 2509511-002A

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PFAS BY EPA 1633				**E1633**	**E1633**	Analyst: **AEH**
PFAS IN SOLID SAMPLES (EPA METHOD 1633)						
11Cl-PF3OUdS	ND	0.930		ng/g-dry	1	9/29/2025 6:54:00 PM
3:3 FTCA	ND	1.16		ng/g-dry	1	9/29/2025 6:54:00 PM
4:2 FTS	ND	0.930		ng/g-dry	1	9/29/2025 6:54:00 PM
5:3 FTCA	ND	5.81		ng/g-dry	1	9/29/2025 6:54:00 PM
6:2 FTS	ND	0.930		ng/g-dry	1	9/29/2025 6:54:00 PM
7:3 FTCA	ND	5.81		ng/g-dry	1	9/29/2025 6:54:00 PM
8:2 FTS	ND	0.930		ng/g-dry	1	9/29/2025 6:54:00 PM
9CL-PF3ONS	ND	0.930		ng/g-dry	1	9/29/2025 6:54:00 PM
ADONA	ND	0.930		ng/g-dry	1	9/29/2025 6:54:00 PM
HFPO-DA	ND	0.930		ng/g-dry	1	9/29/2025 6:54:00 PM
NEtFOSA	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
NEtFOSAA	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
NEtFOSE	ND	2.32		ng/g-dry	1	9/29/2025 6:54:00 PM
NFDHA	ND	0.465		ng/g-dry	1	9/29/2025 6:54:00 PM
NMeFOSA	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
NMeFOSAA	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
NMeFOSE	ND	2.32		ng/g-dry	1	9/29/2025 6:54:00 PM
PFBA	ND	0.930		ng/g-dry	1	9/29/2025 6:54:00 PM
PFBS	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
PFDA	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
PFDoA	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
PFDoS	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
PFDS	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
PFEESA	ND	0.465		ng/g-dry	1	9/29/2025 6:54:00 PM
PFHpA	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
PFHpS	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
PFHxA	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
PFHxS	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
PFMBA	ND	0.465		ng/g-dry	1	9/29/2025 6:54:00 PM
PFMPA	ND	0.465		ng/g-dry	1	9/29/2025 6:54:00 PM
PFNA	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
PFNS	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
PFOA	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
PFOS	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM

Qualifiers:

- H Holding times for preparation or analysis exceeded
- ND Not Detected
- R RPD outside accepted recovery limits
- W Sample container temperature is out of limit as specified at testcode
- M Manual Integration used to determine area response
- PL Permit Limit
- RL Reporting Detection Limit

Original

Alliance TECHNICAL GROUP

Alliance Technical Group - Akron
3310 Win St.
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Website: http://www.settek.com

Analytical Report

(consolidated)

WO#: **25092029**

Date Reported: **10/6/2025**

CLIENT: ATG - SEATTLE LAB

Collection Date: 9/22/2025

Project:

Lab ID: 25092029-002

Matrix: SOLID

Client Sample ID: 2509511-002A

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PFAS BY EPA 1633				**E1633**	**E1633**	Analyst: **AEH**
PFAS IN SOLID SAMPLES (EPA METHOD 1633)						
PFOSA	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
PFPeA	ND	0.465		ng/g-dry	1	9/29/2025 6:54:00 PM
PFPeS	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
PFTeDA	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
PFTrDA	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
PFUnA	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
Surr: 13C2-PFDA	82.5	50 - 200		%Rec	1	9/29/2025 6:54:00 PM
Surr: 13C2-PFHxA	81.0	50 - 200		%Rec	1	9/29/2025 6:54:00 PM
Surr: 13C3-PFBA	76.8	50 - 200		%Rec	1	9/29/2025 6:54:00 PM
Surr: 13C4-PFOA	78.6	50 - 200		%Rec	1	9/29/2025 6:54:00 PM
Surr: 13C4-PFOS	81.3	50 - 200		%Rec	1	9/29/2025 6:54:00 PM
Surr: 13C5-PFNA	82.0	50 - 200		%Rec	1	9/29/2025 6:54:00 PM
Surr: 18O2-PFHxS	71.4	50 - 200		%Rec	1	9/29/2025 6:54:00 PM
PFAS BY EPA 1633				**A2540B**		Analyst: **DHF**
PERCENT MOISTURE BY SM2540MOD						
Percent Moisture	15.3	0.100		%	1	10/3/2025 6:00:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded
ND	Not Detected
R	RPD outside accepted recovery limits
W	Sample container temperature is out of limit as specified at testcode
M	Manual Integration used to determine area response
PL	Permit Limit
RL	Reporting Detection Limit

Original

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Analytical Report

(consolidated)

WO#: **25092029**

Date Reported: **10/6/2025**

CLIENT: ATG - SEATTLE LAB **Collection Date:** 9/22/2025

Project:

Lab ID: 25092029-003 **Matrix:** SOLID

Client Sample ID: 2509511-003A

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PFAS BY EPA 1633				E1633	E1633	Analyst: AEH
PFAS IN SOLID SAMPLES (EPA METHOD 1633)						
11Cl-PF3OUdS	ND	0.869		ng/g-dry	1	9/29/2025 7:09:00 PM
3:3 FTCA	ND	1.09		ng/g-dry	1	9/29/2025 7:09:00 PM
4:2 FTS	ND	0.869		ng/g-dry	1	9/29/2025 7:09:00 PM
5:3 FTCA	ND	5.43		ng/g-dry	1	9/29/2025 7:09:00 PM
6:2 FTS	ND	0.869		ng/g-dry	1	9/29/2025 7:09:00 PM
7:3 FTCA	ND	5.43		ng/g-dry	1	9/29/2025 7:09:00 PM
8:2 FTS	ND	0.869		ng/g-dry	1	9/29/2025 7:09:00 PM
9CL-PF3ONS	ND	0.869		ng/g-dry	1	9/29/2025 7:09:00 PM
ADONA	ND	0.869		ng/g-dry	1	9/29/2025 7:09:00 PM
HFPO-DA	ND	0.869		ng/g-dry	1	9/29/2025 7:09:00 PM
NEtFOSA	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
NEtFOSAA	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
NEtFOSE	ND	2.17		ng/g-dry	1	9/29/2025 7:09:00 PM
NFDHA	ND	0.435		ng/g-dry	1	9/29/2025 7:09:00 PM
NMeFOSA	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
NMeFOSAA	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
NMeFOSE	ND	2.17		ng/g-dry	1	9/29/2025 7:09:00 PM
PFBA	ND	0.869		ng/g-dry	1	9/29/2025 7:09:00 PM
PFBS	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
PFDA	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
PFDoA	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
PFDoS	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
PFDS	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
PFEESA	ND	0.435		ng/g-dry	1	9/29/2025 7:09:00 PM
PFHpA	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
PFHpS	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
PFHxA	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
PFHxS	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
PFMBA	ND	0.435		ng/g-dry	1	9/29/2025 7:09:00 PM
PFMPA	ND	0.435		ng/g-dry	1	9/29/2025 7:09:00 PM
PFNA	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
PFNS	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
PFOA	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
PFOS	0.543	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM

Qualifiers:

- H Holding times for preparation or analysis exceeded
- ND Not Detected
- R RPD outside accepted recovery limits
- W Sample container temperature is out of limit as specified at testcode
- M Manual Integration used to determine area response
- PL Permit Limit
- RL Reporting Detection Limit

Original

Alliance Technical Group - Akron
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Cuyahoga Falls, Ohio 44223
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Website: http://www.settek.com

Analytical Report

(consolidated)

WO#: **25092029**

Date Reported: **10/6/2025**

CLIENT: ATG - SEATTLE LAB **Collection Date:** 9/22/2025

Project:

Lab ID: 25092029-003 **Matrix:** SOLID

Client Sample ID: 2509511-003A

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PFAS BY EPA 1633				**E1633**	**E1633**	Analyst: **AEH**
PFAS IN SOLID SAMPLES (EPA METHOD 1633)						
PFOSA	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
PFPeA	ND	0.435		ng/g-dry	1	9/29/2025 7:09:00 PM
PFPeS	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
PFTeDA	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
PFTrDA	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
PFUnA	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
Surr: 13C2-PFDA	74.8	50 - 200		%Rec	1	9/29/2025 7:09:00 PM
Surr: 13C2-PFHxA	71.2	50 - 200		%Rec	1	9/29/2025 7:09:00 PM
Surr: 13C3-PFBA	65.8	50 - 200		%Rec	1	9/29/2025 7:09:00 PM
Surr: 13C4-PFOA	74.2	50 - 200		%Rec	1	9/29/2025 7:09:00 PM
Surr: 13C4-PFOS	79.4	50 - 200		%Rec	1	9/29/2025 7:09:00 PM
Surr: 13C5-PFNA	68.1	50 - 200		%Rec	1	9/29/2025 7:09:00 PM
Surr: 18O2-PFHxS	62.4	50 - 200		%Rec	1	9/29/2025 7:09:00 PM
PFAS BY EPA 1633				**A2540B**		Analyst: **DHF**
PERCENT MOISTURE BY SM2540MOD						
Percent Moisture	9.61	0.100		%	1	10/3/2025 6:00:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded
ND	Not Detected
R	RPD outside accepted recovery limits
W	Sample container temperature is out of limit as specified at testcode
M	Manual Integration used to determine area response
PL	Permit Limit
RL	Reporting Detection Limit

Original

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Analytical Report

(consolidated)

WO#: **25092029**

Date Reported: **10/6/2025**

CLIENT: ATG - SEATTLE LAB

Collection Date: 9/22/2025

Project:

Lab ID: 25092029-004

Matrix: SOLID

Client Sample ID: 2509511-004A

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PFAS BY EPA 1633				E1633	E1633	Analyst: **AEH**
PFAS IN SOLID SAMPLES (EPA METHOD 1633)						
11Cl-PF3OUdS	ND	0.899		ng/g-dry	1	9/29/2025 7:23:00 PM
3:3 FTCA	ND	1.12		ng/g-dry	1	9/29/2025 7:23:00 PM
4:2 FTS	ND	0.899		ng/g-dry	1	9/29/2025 7:23:00 PM
5:3 FTCA	ND	5.62		ng/g-dry	1	9/29/2025 7:23:00 PM
6:2 FTS	ND	0.899		ng/g-dry	1	9/29/2025 7:23:00 PM
7:3 FTCA	ND	5.62		ng/g-dry	1	9/29/2025 7:23:00 PM
8:2 FTS	ND	0.899		ng/g-dry	1	9/29/2025 7:23:00 PM
9CL-PF3ONS	ND	0.899		ng/g-dry	1	9/29/2025 7:23:00 PM
ADONA	ND	0.899		ng/g-dry	1	9/29/2025 7:23:00 PM
HFPO-DA	ND	0.899		ng/g-dry	1	9/29/2025 7:23:00 PM
NEtFOSA	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
NEtFOSAA	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
NEtFOSE	ND	2.25		ng/g-dry	1	9/29/2025 7:23:00 PM
NFDHA	ND	0.449		ng/g-dry	1	9/29/2025 7:23:00 PM
NMeFOSA	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
NMeFOSAA	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
NMeFOSE	ND	2.25		ng/g-dry	1	9/29/2025 7:23:00 PM
PFBA	ND	0.899		ng/g-dry	1	9/29/2025 7:23:00 PM
PFBS	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
PFDA	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
PFDoA	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
PFDoS	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
PFDS	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
PFEESA	ND	0.449		ng/g-dry	1	9/29/2025 7:23:00 PM
PFHpA	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
PFHpS	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
PFHxA	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
PFHxS	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
PFMBA	ND	0.449		ng/g-dry	1	9/29/2025 7:23:00 PM
PFMPA	ND	0.449		ng/g-dry	1	9/29/2025 7:23:00 PM
PFNA	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
PFNS	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
PFOA	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
PFOS	0.272	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM

Qualifiers:

- H Holding times for preparation or analysis exceeded
- ND Not Detected
- R RPD outside accepted recovery limits
- W Sample container temperature is out of limit as specified at testcode
- M Manual Integration used to determine area response
- PL Permit Limit
- RL Reporting Detection Limit

Original

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Website: http://www.settek.com

Analytical Report

(consolidated)

WO#: **25092029**

Date Reported: **10/6/2025**

CLIENT: ATG - SEATTLE LAB **Collection Date:** 9/22/2025

Project:

Lab ID: 25092029-004 **Matrix:** SOLID

Client Sample ID: 2509511-004A

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PFAS BY EPA 1633				**E1633**	**E1633**	Analyst: **AEH**
PFAS IN SOLID SAMPLES (EPA METHOD 1633)						
PFOSA	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
PFPeA	ND	0.449		ng/g-dry	1	9/29/2025 7:23:00 PM
PFPeS	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
PFTeDA	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
PFTrDA	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
PFUnA	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
Surr: 13C2-PFDA	73.8	50 - 200		%Rec	1	9/29/2025 7:23:00 PM
Surr: 13C2-PFHxA	74.4	50 - 200		%Rec	1	9/29/2025 7:23:00 PM
Surr: 13C3-PFBA	64.3	50 - 200		%Rec	1	9/29/2025 7:23:00 PM
Surr: 13C4-PFOA	68.0	50 - 200		%Rec	1	9/29/2025 7:23:00 PM
Surr: 13C4-PFOS	80.6	50 - 200		%Rec	1	9/29/2025 7:23:00 PM
Surr: 13C5-PFNA	70.5	50 - 200		%Rec	1	9/29/2025 7:23:00 PM
Surr: 18O2-PFHxS	69.8	50 - 200		%Rec	1	9/29/2025 7:23:00 PM
PFAS BY EPA 1633				**A2540B**		Analyst: **DHF**
PERCENT MOISTURE BY SM2540MOD						
Percent Moisture	11.3	0.100		%	1	10/3/2025 6:00:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded
ND	Not Detected
R	RPD outside accepted recovery limits
W	Sample container temperature is out of limit as specified at testcode
M	Manual Integration used to determine area response
PL	Permit Limit
RL	Reporting Detection Limit

Original

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Analytical Report

(consolidated)

WO#: 25092029

Date Reported: 10/6/2025

CLIENT: ATG - SEATTLE LAB **Collection Date:** 9/22/2025

Project:

Lab ID: 25092029-005 **Matrix:** SOLID

Client Sample ID: 2509511-005A

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PFAS BY EPA 1633				E1633	E1633	Analyst: AEH
PFAS IN SOLID SAMPLES (EPA METHOD 1633)						
11Cl-PF3OUdS	ND	0.972		ng/g-dry	1	9/29/2025 7:38:00 PM
3:3 FTCA	ND	1.22		ng/g-dry	1	9/29/2025 7:38:00 PM
4:2 FTS	ND	0.972		ng/g-dry	1	9/29/2025 7:38:00 PM
5:3 FTCA	ND	6.08		ng/g-dry	1	9/29/2025 7:38:00 PM
6:2 FTS	ND	0.972		ng/g-dry	1	9/29/2025 7:38:00 PM
7:3 FTCA	ND	6.08		ng/g-dry	1	9/29/2025 7:38:00 PM
8:2 FTS	ND	0.972		ng/g-dry	1	9/29/2025 7:38:00 PM
9CL-PF3ONS	ND	0.972		ng/g-dry	1	9/29/2025 7:38:00 PM
ADONA	ND	0.972		ng/g-dry	1	9/29/2025 7:38:00 PM
HFPO-DA	ND	0.972		ng/g-dry	1	9/29/2025 7:38:00 PM
NEtFOSA	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
NEtFOSAA	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
NEtFOSE	ND	2.43		ng/g-dry	1	9/29/2025 7:38:00 PM
NFDHA	ND	0.486		ng/g-dry	1	9/29/2025 7:38:00 PM
NMeFOSA	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
NMeFOSAA	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
NMeFOSE	ND	2.43		ng/g-dry	1	9/29/2025 7:38:00 PM
PFBA	ND	0.972		ng/g-dry	1	9/29/2025 7:38:00 PM
PFBS	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
PFDA	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
PFDoA	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
PFDoS	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
PFDS	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
PFEESA	ND	0.486		ng/g-dry	1	9/29/2025 7:38:00 PM
PFHpA	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
PFHpS	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
PFHxA	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
PFHxS	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
PFMBA	ND	0.486		ng/g-dry	1	9/29/2025 7:38:00 PM
PFMPA	ND	0.486		ng/g-dry	1	9/29/2025 7:38:00 PM
PFNA	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
PFNS	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
PFOA	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
PFOS	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM

Qualifiers:

- H Holding times for preparation or analysis exceeded
- ND Not Detected
- R RPD outside accepted recovery limits
- W Sample container temperature is out of limit as specified at testcode
- M Manual Integration used to determine area response
- PL Permit Limit
- RL Reporting Detection Limit

Original

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Analytical Report

(consolidated)

WO#: **25092029**

Date Reported: **10/6/2025**

CLIENT: ATG - SEATTLE LAB

Collection Date: 9/22/2025

Project:

Lab ID: 25092029-005

Matrix: SOLID

Client Sample ID: 2509511-005A

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PFAS BY EPA 1633				**E1633**	**E1633**	Analyst: **AEH**
PFAS IN SOLID SAMPLES (EPA METHOD 1633)						
PFOSA	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
PFPeA	ND	0.486		ng/g-dry	1	9/29/2025 7:38:00 PM
PFPeS	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
PFTeDA	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
PFTrDA	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
PFUnA	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
Surr: 13C2-PFDA	95.6	50 - 200		%Rec	1	9/29/2025 7:38:00 PM
Surr: 13C2-PFHxA	84.7	50 - 200		%Rec	1	9/29/2025 7:38:00 PM
Surr: 13C3-PFBA	77.9	50 - 200		%Rec	1	9/29/2025 7:38:00 PM
Surr: 13C4-PFOA	86.8	50 - 200		%Rec	1	9/29/2025 7:38:00 PM
Surr: 13C4-PFOS	88.0	50 - 200		%Rec	1	9/29/2025 7:38:00 PM
Surr: 13C5-PFNA	88.8	50 - 200		%Rec	1	9/29/2025 7:38:00 PM
Surr: 18O2-PFHxS	82.7	50 - 200		%Rec	1	9/29/2025 7:38:00 PM
PFAS BY EPA 1633				**A2540B**		Analyst: **DHF**
PERCENT MOISTURE BY SM2540MOD						
Percent Moisture	18.4	0.100		%	1	10/3/2025 6:00:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded
ND	Not Detected
R	RPD outside accepted recovery limits
W	Sample container temperature is out of limit as specified at testcode
M	Manual Integration used to determine area response
PL	Permit Limit
RL	Reporting Detection Limit

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Analytical Report

(consolidated)

WO#: 25092029

Date Reported: 10/6/2025

CLIENT: ATG - SEATTLE LAB

Collection Date: 9/22/2025

Project:

Lab ID: 25092029-006

Matrix: SOLID

Client Sample ID: 2509511-006A

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PFAS BY EPA 1633				E1633	E1633	Analyst: AEH
PFAS IN SOLID SAMPLES (EPA METHOD 1633)						
11Cl-PF3OUdS	ND	0.845		ng/g-dry	1	9/29/2025 7:53:00 PM
3:3 FTCA	ND	1.06		ng/g-dry	1	9/29/2025 7:53:00 PM
4:2 FTS	ND	0.845		ng/g-dry	1	9/29/2025 7:53:00 PM
5:3 FTCA	ND	5.28		ng/g-dry	1	9/29/2025 7:53:00 PM
6:2 FTS	ND	0.845		ng/g-dry	1	9/29/2025 7:53:00 PM
7:3 FTCA	ND	5.28		ng/g-dry	1	9/29/2025 7:53:00 PM
8:2 FTS	ND	0.845		ng/g-dry	1	9/29/2025 7:53:00 PM
9CL-PF3ONS	ND	0.845		ng/g-dry	1	9/29/2025 7:53:00 PM
ADONA	ND	0.845		ng/g-dry	1	9/29/2025 7:53:00 PM
HFPO-DA	ND	0.845		ng/g-dry	1	9/29/2025 7:53:00 PM
NEtFOSA	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
NEtFOSAA	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
NEtFOSE	ND	2.11		ng/g-dry	1	9/29/2025 7:53:00 PM
NFDHA	ND	0.422		ng/g-dry	1	9/29/2025 7:53:00 PM
NMeFOSA	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
NMeFOSAA	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
NMeFOSE	ND	2.11		ng/g-dry	1	9/29/2025 7:53:00 PM
PFBA	ND	0.845		ng/g-dry	1	9/29/2025 7:53:00 PM
PFBS	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
PFDA	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
PFDoA	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
PFDoS	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
PFDS	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
PFEESA	ND	0.422		ng/g-dry	1	9/29/2025 7:53:00 PM
PFHpA	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
PFHpS	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
PFHxA	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
PFHxS	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
PFMBA	ND	0.422		ng/g-dry	1	9/29/2025 7:53:00 PM
PFMPA	ND	0.422		ng/g-dry	1	9/29/2025 7:53:00 PM
PFNA	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
PFNS	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
PFOA	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
PFOS	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM

Qualifiers:

- H Holding times for preparation or analysis exceeded
- ND Not Detected
- R RPD outside accepted recovery limits
- W Sample container temperature is out of limit as specified at testcode
- M Manual Integration used to determine area response
- PL Permit Limit
- RL Reporting Detection Limit

Original

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Analytical Report

(consolidated)

WO#: **25092029**

Date Reported: **10/6/2025**

CLIENT: ATG - SEATTLE LAB

Collection Date: 9/22/2025

Project:

Lab ID: 25092029-006

Matrix: SOLID

Client Sample ID: 2509511-006A

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PFAS BY EPA 1633				**E1633**	**E1633**	Analyst: **AEH**
PFAS IN SOLID SAMPLES (EPA METHOD 1633)						
PFOSA	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
PFPeA	ND	0.422		ng/g-dry	1	9/29/2025 7:53:00 PM
PFPeS	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
PFTeDA	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
PFTrDA	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
PFUnA	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
Surr: 13C2-PFDA	85.8	50 - 200		%Rec	1	9/29/2025 7:53:00 PM
Surr: 13C2-PFHxA	79.7	50 - 200		%Rec	1	9/29/2025 7:53:00 PM
Surr: 13C3-PFBA	72.0	50 - 200		%Rec	1	9/29/2025 7:53:00 PM
Surr: 13C4-PFOA	76.2	50 - 200		%Rec	1	9/29/2025 7:53:00 PM
Surr: 13C4-PFOS	83.7	50 - 200		%Rec	1	9/29/2025 7:53:00 PM
Surr: 13C5-PFNA	73.9	50 - 200		%Rec	1	9/29/2025 7:53:00 PM
Surr: 18O2-PFHxS	75.9	50 - 200		%Rec	1	9/29/2025 7:53:00 PM
PFAS BY EPA 1633				**A2540B**		Analyst: **DHF**
PERCENT MOISTURE BY SM2540MOD						
Percent Moisture	7.32	0.100		%	1	10/3/2025 6:00:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded
ND	Not Detected
R	RPD outside accepted recovery limits
W	Sample container temperature is out of limit as specified at testcode
M	Manual Integration used to determine area response
PL	Permit Limit
RL	Reporting Detection Limit

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Analytical Report

(consolidated)

WO#: **25092029**

Date Reported: **10/6/2025**

CLIENT: ATG - SEATTLE LAB

Collection Date: 9/22/2025

Project:

Lab ID: 25092029-007

Matrix: SOLID

Client Sample ID: 2509511-007A

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PFAS BY EPA 1633				E1633	E1633	Analyst: **AEH**
PFAS IN SOLID SAMPLES (EPA METHOD 1633)						
11Cl-PF3OUdS	ND	0.871		ng/g-dry	1	9/29/2025 8:07:00 PM
3:3 FTCA	ND	1.09		ng/g-dry	1	9/29/2025 8:07:00 PM
4:2 FTS	ND	0.871		ng/g-dry	1	9/29/2025 8:07:00 PM
5:3 FTCA	ND	5.44		ng/g-dry	1	9/29/2025 8:07:00 PM
6:2 FTS	ND	0.871		ng/g-dry	1	9/29/2025 8:07:00 PM
7:3 FTCA	ND	5.44		ng/g-dry	1	9/29/2025 8:07:00 PM
8:2 FTS	ND	0.871		ng/g-dry	1	9/29/2025 8:07:00 PM
9CL-PF3ONS	ND	0.871		ng/g-dry	1	9/29/2025 8:07:00 PM
ADONA	ND	0.871		ng/g-dry	1	9/29/2025 8:07:00 PM
HFPO-DA	ND	0.871		ng/g-dry	1	9/29/2025 8:07:00 PM
NEtFOSA	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
NEtFOSAA	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
NEtFOSE	ND	2.18		ng/g-dry	1	9/29/2025 8:07:00 PM
NFDHA	ND	0.435		ng/g-dry	1	9/29/2025 8:07:00 PM
NMeFOSA	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
NMeFOSAA	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
NMeFOSE	ND	2.18		ng/g-dry	1	9/29/2025 8:07:00 PM
PFBA	ND	0.871		ng/g-dry	1	9/29/2025 8:07:00 PM
PFBS	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
PFDA	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
PFDoA	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
PFDoS	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
PFDS	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
PFEESA	ND	0.435		ng/g-dry	1	9/29/2025 8:07:00 PM
PFHpA	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
PFHpS	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
PFHxA	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
PFHxS	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
PFMBA	ND	0.435		ng/g-dry	1	9/29/2025 8:07:00 PM
PFMPA	ND	0.435		ng/g-dry	1	9/29/2025 8:07:00 PM
PFNA	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
PFNS	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
PFOA	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
PFOS	0.249	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM

Qualifiers:

- H Holding times for preparation or analysis exceeded
- ND Not Detected
- R RPD outside accepted recovery limits
- W Sample container temperature is out of limit as specified at testcode
- M Manual Integration used to determine area response
- PL Permit Limit
- RL Reporting Detection Limit

Original

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Analytical Report

(consolidated)

WO#: **25092029**

Date Reported: **10/6/2025**

CLIENT: ATG - SEATTLE LAB **Collection Date:** 9/22/2025

Project:

Lab ID: 25092029-007 **Matrix:** SOLID

Client Sample ID: 2509511-007A

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PFAS BY EPA 1633				**E1633**	**E1633**	Analyst: **AEH**
PFAS IN SOLID SAMPLES (EPA METHOD 1633)						
PFOSA	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
PFPeA	ND	0.435		ng/g-dry	1	9/29/2025 8:07:00 PM
PFPeS	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
PFTeDA	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
PFTrDA	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
PFUnA	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
Surr: 13C2-PFDA	118	50 - 200		%Rec	1	9/29/2025 8:07:00 PM
Surr: 13C2-PFHxA	114	50 - 200		%Rec	1	9/29/2025 8:07:00 PM
Surr: 13C3-PFBA	107	50 - 200		%Rec	1	9/29/2025 8:07:00 PM
Surr: 13C4-PFOA	107	50 - 200		%Rec	1	9/29/2025 8:07:00 PM
Surr: 13C4-PFOS	132	50 - 200		%Rec	1	9/29/2025 8:07:00 PM
Surr: 13C5-PFNA	123	50 - 200		%Rec	1	9/29/2025 8:07:00 PM
Surr: 18O2-PFHxS	121	50 - 200		%Rec	1	9/29/2025 8:07:00 PM
PFAS BY EPA 1633				**A2540B**		Analyst: **DHF**
PERCENT MOISTURE BY SM2540MOD						
Percent Moisture	9.94	0.100		%	1	10/3/2025 6:00:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded
ND	Not Detected
R	RPD outside accepted recovery limits
W	Sample container temperature is out of limit as specified at testcode
M	Manual Integration used to determine area response
PL	Permit Limit
RL	Reporting Detection Limit

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QC SUMMARY REPORT

WO#: **25092029**
06-Oct-25

Client: ATG - SEATTLE LAB
Project:

BatchID: **87549**

Sample ID: **MB-87549**	SampType: **MBLK**	TestCode: **SVOC-EPA16**	Units: **ng/g**	Prep Date: **9/25/2025**	RunNo: **217632**
Client ID: **BatchQC**	Batch ID: **87549**	TestNo: **E1633**	**E1633**	Analysis Date: **9/29/2025**	SeqNo: **5801941**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
11Cl-PF3OUdS	ND	0.789									
3:3 FTCA	ND	0.986									
4:2 FTS	ND	0.789									
5:3 FTCA	ND	4.93									
6:2 FTS	ND	0.789									
7:3 FTCA	ND	4.93									
8:2 FTS	ND	0.789									
9CL-PF3ONS	ND	0.789									
ADONA	ND	0.789									
HFPO-DA	ND	0.789									
NEtFOSA	ND	0.197									
NEtFOSAA	ND	0.197									
NEtFOSE	ND	1.97									
NFDHA	ND	0.394									
NMeFOSA	ND	0.197									
NMeFOSAA	ND	0.197									
NMeFOSE	ND	1.97									
PFBA	ND	0.789									
PFBS	ND	0.197									
PFDA	ND	0.197									
PFDoA	ND	0.197									
PFDoS	ND	0.197									
PFDS	ND	0.197									
PFEESA	ND	0.394									
PFHpA	ND	0.197									
PFHpS	ND	0.197									

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected
PL	Permit Limit	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
W	Sample container temperature is out of limit as specified at testcode				

Original

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QC SUMMARY REPORT

WO#: 25092029
06-Oct-25

Client: ATG - SEATTLE LAB
Project:

BatchID: 87549

Sample ID: MB-87549	SampType: MBLK	TestCode: SVOC-EPA16	Units: ng/g	Prep Date: 9/25/2025	RunNo: 217632
Client ID: BatchQC	Batch ID: 87549	TestNo: E1633	E1633	Analysis Date: 9/29/2025	SeqNo: 5801941

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
PFHxA	ND	0.197									
PFHxS	ND	0.197									
PFMBA	ND	0.394									
PFMPA	ND	0.394									
PFNA	ND	0.197									
PFNS	ND	0.197									
PFOA	ND	0.197									
PFOS	ND	0.197									
PFOSA	ND	0.197									
PFPeA	ND	0.394									
PFPeS	ND	0.197									
PFTeDA	ND	0.197									
PFTrDA	ND	0.197									
PFUnA	ND	0.197									
Surr: 13C2-PFDA	1.43		2.465		58.0	50	200				
Surr: 13C2-PFHxA	3.35		4.931		67.9	50	200				
Surr: 13C3-PFBA	6.26		9.862		63.4	50	200				
Surr: 13C4-PFOA	3.03		4.931		61.5	50	200				
Surr: 13C4-PFOS	3.27		4.724		69.3	50	200				
Surr: 13C5-PFNA	1.64		2.465		66.4	50	200				
Surr: 18O2-PFHxS	2.81		4.675		60.1	50	200				

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected
PL	Permit Limit	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
W	Sample container temperature is out of limit as specified at testcode				

Original

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Website: http://www.settek.com

QC SUMMARY REPORT

WO#: **25092029**
06-Oct-25

Client: ATG - SEATTLE LAB
Project:

BatchID: **87549**

Sample ID: LCS-87549	SampType: LCS	TestCode: SVOC-EPA16	Units: ng/g	Prep Date: 9/25/2025	RunNo: 217632
Client ID: BatchQC	Batch ID: 87549	TestNo: E1633	E1633	Analysis Date: 9/29/2025	SeqNo: 5801942

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
11Cl-PF3OUdS	29.3	0.787	37.13	0	78.9	45	160				
3:3 FTCA	52.8	0.984	49.21	0	107	45	130				
4:2 FTS	32.5	0.787	36.89	0	88.0	60	150				
5:3 FTCA	221	4.92	246.1	0	89.9	60	130				
6:2 FTS	38.6	0.787	37.44	0	103	55	200				
7:3 FTCA	226	4.92	246.1	0	92.0	60	150				
8:2 FTS	38.0	0.787	37.80	0	101	70	150				
9CL-PF3ONS	28.1	0.787	36.73	0	76.5	70	150				
ADONA	31.2	0.787	37.20	0	83.8	70	160				
HFPO-DA	39.1	0.787	39.37	0	99.3	70	145				
NEtFOSA	9.89	0.197	9.843	0	100	70	140				
NEtFOSAA	8.31	0.197	9.843	0	84.5	65	165				
NEtFOSE	98.4	1.97	98.43	0	100	70	135				
NFDHA	17.1	0.394	19.69	0	86.8	60	155				
NMeFOSA	10.1	0.197	9.843	0	102	70	155				
NMeFOSAA	8.91	0.197	9.843	0	90.5	65	155				
NMeFOSE	103	1.97	98.43	0	104	70	140				
PFBA	39.3	0.787	39.37	0	99.8	70	140				
PFBS	8.31	0.197	8.740	0	95.1	65	145				
PFDA	10.7	0.197	9.843	0	108	70	155				
PFDoA	8.96	0.197	9.843	0	91.0	70	150				
PFDoS	8.94	0.197	9.528	0	93.8	25	160				
PFDS	9.66	0.197	9.488	0	102	40	155				
PFEESA	17.0	0.394	17.56	0	96.7	70	140				
PFHpA	10.5	0.197	9.843	0	107	65	145				
PFHpS	10.5	0.197	9.370	0	113	65	155				

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected
PL	Permit Limit	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
W	Sample container temperature is out of limit as specified at testcode				

Original

Alliance TECHNICAL GROUP

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Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

QC SUMMARY REPORT

WO#: **25092029**
06-Oct-25

Client: ATG - SEATTLE LAB
Project:

BatchID: **87549**

Sample ID: **LCS-87549**	SampType: **LCS**	TestCode: **SVOC-EPA16**	Units: **ng/g**		Prep Date: **9/25/2025**			RunNo: **217632**			
Client ID: **BatchQC**	Batch ID: **87549**	TestNo: **E1633**	**E1633**		Analysis Date: **9/29/2025**			SeqNo: **5801942**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
PFHxA	9.94	0.197	9.843	0	101	65	140				
PFHxS	8.85	0.197	8.980	0	98.5	60	150				
PFMBA	19.1	0.394	19.69	0	96.9	60	150				
PFMPA	19.5	0.394	19.69	0	98.9	30	140				
PFNA	10.6	0.197	9.843	0	108	70	155				
PFNS	9.77	0.197	9.449	0	103	55	140				
PFOA	9.50	0.197	9.843	0	96.5	70	150				
PFOS	9.38	0.197	9.134	0	103	65	160				
PFOSA	9.39	0.197	9.843	0	95.4	70	140				
PFPeA	18.4	0.394	19.69	0	93.5	60	150				
PFPeS	9.57	0.197	9.252	0	103	55	160				
PFTeDA	9.10	0.197	9.843	0	92.5	65	150				
PFTrDA	8.77	0.197	9.843	0	89.1	65	150				
PFUnA	9.69	0.197	9.843	0	98.5	70	155				
Surr: 13C2-PFDA	2.06		2.461		83.7	50	200				
Surr: 13C2-PFHxA	3.94		4.921		80.1	50	200				
Surr: 13C3-PFBA	8.02		9.843		81.4	50	200				
Surr: 13C4-PFOA	4.17		4.921		84.7	50	200				
Surr: 13C4-PFOS	3.63		4.715		76.9	50	200				
Surr: 13C5-PFNA	2.16		2.461		87.8	50	200				
Surr: 18O2-PFHxS	3.66		4.665		78.4	50	200				

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected
PL	Permit Limit	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
W	Sample container temperature is out of limit as specified at testcode				

Original

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Website: http://www.settek.com

QC SUMMARY REPORT

WO#: **25092029**
06-Oct-25

Client: ATG - SEATTLE LAB
Project:

BatchID: **R218039**

Sample ID: MB-R218039	SampType: MBLK	TestCode: PctMoist_S(2	Units: %	Prep Date:		RunNo: 218039	
Client ID: BatchQC	Batch ID: R218039	TestNo: A2540B		Analysis Date: 10/3/2025		SeqNo: 5813234	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Percent Moisture	ND	0.100									

Sample ID: 25092341-001ADUP	SampType: DUP	TestCode: PctMoist_S(2	Units: %	Prep Date:		RunNo: 218039	
Client ID: BatchQC	Batch ID: R218039	TestNo: A2540B		Analysis Date: 10/3/2025		SeqNo: 5813254	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Percent Moisture	17.1	0.100						18.06	5.67	5	R

Sample ID: 25100357-001ADUP	SampType: DUP	TestCode: PctMoist_S(2	Units: %	Prep Date:		RunNo: 218039	
Client ID: BatchQC	Batch ID: R218039	TestNo: A2540B		Analysis Date: 10/3/2025		SeqNo: 5813255	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Percent Moisture	12.7	0.100						12.61	0.964	5	

Qualifiers:

- H Holding times for preparation or analysis exceeded
- PL Permit Limit
- W Sample container temperature is out of limit as specified at testcode
- M Manual Integration used to determine area response
- R RPD outside accepted recovery limits
- ND Not Detected
- RL Reporting Detection Limit

Original

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Qualifiers and Acronyms

WO#: **25092029**
Date: **10/6/2025**

These commonly used Qualifiers and Acronyms may or may not be present in this report.

Qualifiers

U	The compound was analyzed for but was not detected above the MDL.
J	The reported value is greater than the Method Detection Limit but less than the Reporting Limit.
H	The hold time for sample preparation and/or analysis was exceeded. Not Clean Water Act compliant.
D	The result is reported from a dilution.
E	The result exceeded the linear range of the calibration or is estimated due to interference.
MC	The result is below the Minimum Compound Limit.
*****	The result exceeds the Regulatory Limit or Maximum Contamination Limit.
m	Manual integration was used to determine the area response.
d	Manual integration in which peak was deleted
N	The result is presumptive based on a Mass Spectral library search assuming a 1:1 response.
P	The second column confirmation exceeded 25% difference.
C	The result has been confirmed by GC/MS.
X	The result was not confirmed when GC/MS Analysis was performed.
B	The analyte was detected in the Method Blank at a concentration greater than the RL.
MB+	The analyte was detected in the Method Blank at a concentration greater than the MDL.
G	The ICB or CCB contained reportable amounts of analyte.
QC-/+	The CCV recovery failed low (-) or high (+).
R/QDR	The RPD was outside of accepted recovery limits.
QL-/+	The LCS or LCSD recovery failed low (-) or high (+).
QLR	The LCS/LCSD RPD was outside of accepted recovery limits.
QM-/+	The MS or MSD recovery failed low (-) or high (+).
QMR	The MS/MSD RPD was outside of accepted recovery limits.
QV-/+	The ICV recovery failed low (-) or high (+).
S	The spike result was outside of accepted recovery limits.
W	Samples were received outside temperature limits (0° – 6° C). Not Clean Water Act compliant.
Z	Deviation; A deviation from the method was performed; Please refer to the Case Narrative for additional information

Acronyms

ND	Not Detected
QC	Quality Control
MB	Method Blank
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
QCS	Quality Control Sample
DUP	Duplicate
MS	Matrix Spike
MSD	Matrix Spike Duplicate
RPD	Relative Percent Different
ICV	Initial Calibration Verification
ICB	Initial Calibration Blank
CCV	Continuing Calibration Verification
CCB	Continuing Calibration Blank
RLC	Reporting Limit Check
RL	Reporting Limit
MDL	Method Detection Limit
LOD	Level of Detection
LOQ	Level of Quantitation
PQL	Practical Quantitation Limit
CRQL	Contract Required Quantitation Limit
PL	Permit Limit
RegLvl	Regulatory Limit
MCL	Maximum Contamination Limit
MinCL	Minimum Compound Limit
RA	Reanalysis
RE	Reextraction
TIC	Tentatively Identified Compound
RT	Retention Time
CF	Calibration Factor

This list of Qualifiers and Acronyms reflects the most commonly utilized Qualifiers and Acronyms for reporting. Please refer to the Analytical Notes in the Case Narrative for any Qualifiers or Acronyms that do not appear in this list or for additional information regarding the use of these Qualifiers on reported data.

Original

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DATES REPORT

WO#: **25092029**

06-Oct-25

Client: ATG - SEATTLE LAB

Project:

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
25092029-001A	2509511-001A	9/22/2025	Solid	Percent Moisture by SM2540Mod			10/3/2025 6:00:00 PM
				PFAS in Solid Samples (EPA Method		9/25/2025 1:35:00 PM	9/29/2025 6:39:00 PM
				PFAS in Solid Samples (EPA Method		9/25/2025 1:35:00 PM	9/30/2025 4:44:00 AM
25092029-002A	2509511-002A			Percent Moisture by SM2540Mod			10/3/2025 6:00:00 PM
				PFAS in Solid Samples (EPA Method		9/25/2025 1:35:00 PM	9/29/2025 6:54:00 PM
				PFAS in Solid Samples (EPA Method		9/25/2025 1:35:00 PM	9/30/2025 4:59:00 AM
25092029-003A	2509511-003A			Percent Moisture by SM2540Mod			10/3/2025 6:00:00 PM
				PFAS in Solid Samples (EPA Method		9/25/2025 1:35:00 PM	9/29/2025 7:09:00 PM
				PFAS in Solid Samples (EPA Method		9/25/2025 1:35:00 PM	9/30/2025 5:13:00 AM
25092029-004A	2509511-004A			Percent Moisture by SM2540Mod			10/3/2025 6:00:00 PM
				PFAS in Solid Samples (EPA Method		9/25/2025 1:35:00 PM	9/30/2025 5:28:00 AM
				PFAS in Solid Samples (EPA Method		9/25/2025 1:35:00 PM	9/29/2025 7:23:00 PM
25092029-005A	2509511-005A			Percent Moisture by SM2540Mod			10/3/2025 6:00:00 PM
				PFAS in Solid Samples (EPA Method		9/25/2025 1:35:00 PM	9/29/2025 7:38:00 PM
				PFAS in Solid Samples (EPA Method		9/25/2025 1:35:00 PM	9/30/2025 5:43:00 AM
25092029-006A	2509511-006A			Percent Moisture by SM2540Mod			10/3/2025 6:00:00 PM
				PFAS in Solid Samples (EPA Method		9/25/2025 1:35:00 PM	9/29/2025 7:53:00 PM
				PFAS in Solid Samples (EPA Method		9/25/2025 1:35:00 PM	9/30/2025 5:57:00 AM
25092029-007A	2509511-007A			Percent Moisture by SM2540Mod			10/3/2025 6:00:00 PM
				PFAS in Solid Samples (EPA Method		9/25/2025 1:35:00 PM	9/30/2025 6:12:00 AM
				PFAS in Solid Samples (EPA Method		9/25/2025 1:35:00 PM	9/29/2025 8:07:00 PM

Original

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Accreditation Program Analytes Report

WO#: 25092029
06-Oct-25

Client: ATG - SEATTLE LAB
State: WA
Project:
Program: WA_DW_NPW_SCM_NELAP

Test Name	Matrix	Analyte	Status
Percent Moisture by SM2540Mod	Solid	Percent Moisture	N
PFAS in Solid Samples (EPA Method 1633)	Solid	11Cl-PF3OUdS	A
PFAS in Solid Samples (EPA Method 1633)	Solid	3:3 FTCA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	4:2 FTS	A
PFAS in Solid Samples (EPA Method 1633)	Solid	5:3 FTCA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	6:2 FTS	A
PFAS in Solid Samples (EPA Method 1633)	Solid	7:3 FTCA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	8:2 FTS	A
PFAS in Solid Samples (EPA Method 1633)	Solid	9CL-PF3ONS	A
PFAS in Solid Samples (EPA Method 1633)	Solid	ADONA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	HFPO-DA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	NEtFOSA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	NEtFOSAA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	NEtFOSE	A
PFAS in Solid Samples (EPA Method 1633)	Solid	NFDHA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	NMeFOSA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	NMeFOSAA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	NMeFOSE	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFBA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFBS	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFDA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFDoA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFDoS	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFDS	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFEESA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFHpA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFHpS	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFHxA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFMBA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFMPA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFNA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFNS	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFOA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFOS	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFOSA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFPeA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFPeS	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFTeDA	A

Accreditation (Acc.) Status Key
A: Accredited | N: Not Accredited
P: Provisional | U: Unavailable

Alliance Technical Group - Akron
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TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

Accreditation Program Analytes Report

WO#: 25092029
06-Oct-25

Client: ATG - SEATTLE LAB
Project:

State: WA
Program: WA_DW_NPW_SCM_NELAP

Test Name	Matrix	Analyte	Status
PFAS in Solid Samples (EPA Method 1633)	Solid	PFTrDA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFUnA	A

Accreditation (Acc.) Status Key	
A: Accredited	N: Not Accredited
P: Provisional	U: Unavailable

Alliance TECHNICAL GROUP

CHAIN OF CUSTODY RECORD

Omega COCID 2482

PAGE: 1 OF: 1

ADDRESS
Alliance Technical Group, LLC - Seattle
3600 Fremont Ave N
Seattle, WA 98103
TEL: 206-352-3790
FAX: 206-352-7178
Website: www.fremontanalytical.com

25092029

SUB CONTRATOR: **Alliance Akron** COMPANY: **Alliance Akron**
ADDRESS: **3310 Win St, Cuyahoga Falls**
CITY, STATE, ZIP: **Cuyahoga Falls, OH 44223**
PHONE: **(330) 253-8211** FAX: EMAIL:
ACCOUNT #:

SPECIAL INSTRUCTIONS / COMMENTS:
Standard TAT. Please email results to SEA.PM@alliancetg.com and invoices to both SEA.PM@alliancetg.com and ap@alliancetg.com.

ITEM #	SAMPLE ID	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	DATE COLLECTED	NUMBER OF CONTAINERS	COMMENTS Methanol Preserved Weights HOT Sample Notation, Additional Sample Description
1	2509511-001A SUB-PFAS-S-1633	PFAS 01-08	125 ML POLY U	Soil	9/22/2025	1	
2	2509511-002A SUB-PFAS-S-1633	PFAS 02-04	125 ML POLY U	Soil	9/22/2025	1	
3	2509511-003A SUB-PFAS-S-1633	PFAS 03-08	125 ML POLY U	Soil	9/22/2025	1	
4	2509511-004A SUB-PFAS-S-1633	PFAS 04-12	125 ML POLY U	Soil	9/22/2025	1	
5	2509511-005A SUB-PFAS-S-1633	PFAS 05-10	125 ML POLY U	Soil	9/22/2025	1	
6	2509511-006A SUB-PFAS-S-1633	PFAS 06-01	125 ML POLY U	Soil	9/22/2025	1	
7	2509511-007A SUB-PFAS-S-1633	PFAS 07-01	125 ML POLY U	Soil	9/22/2025	1	

Relinquished By	Date	Time	Received By	Date	Time
Jon Jack Hawthorne	9/23/25	1652		9/25/25	1030
Relinquished By	Date	Time	Received By	Date	Time
Relinquished By	Date	Time	Received By	Date	Time

TAT: Standard RUSH Next BD 2nd BD 3rd BD
Note: RUSH requests will incur surcharges!

REPORT TRANSMITTAL DESIRED:
HARDCOPY (extra cost) FAX EMAIL ONLINE

FOR LAB USE ONLY
Temp of samples 5.7+0.2= 5.9 °C Attempt to Cool?
Comments UPS Cooler/Ice

Alliance TECHNICAL GROUP

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TEL: (330) 253-8211 FAX: (330) 253-4489
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Sample Log-In Check List

Client Name: **FRE-WA-98103** Work Order Number: **25092029** RcptNo: 1

Logged by:	**Christina N. Gemma**	**9/25/2025 10:30:00 AM**
Completed By:	**Maggie M. Grmek**	**9/25/2025 1:21:40 PM**
Reviewed By:	**Brian J. Fackelman**	**9/29/2025 1:11:35 PM**

Chain of Custody

1. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2. How was the sample delivered?	UPS		

Log In

3. Coolers are present?	Yes ☑	No ☐	NA ☐
4. Shipping container/cooler in good condition?	Yes ☑	No ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☑ NA ☐
No. Seal Date:	Signed By:		
5. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
6. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
7. Sample(s) in proper container(s)?	Yes ☑	No ☐	
8. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
9. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
10. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
11. Is the headspace in the VOA vials less than 1/4 inch or 6 mm?	Yes ☐	No ☐	No VOA Vials ☑
12. Were any sample containers received broken?	Yes ☐	No ☑	
13. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
14. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
15. Is it clear what analyses were requested?	Yes ☑	No ☐	
16. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____
By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding: _____
Client Instructions: _____

18. Additional remarks:

Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	5.9	Good	Not Present			

Aerotech Environmental Consulting, Inc.
17837 First Avenue South, Suite No. 576
Normandy Park, Washington 98148
(360) 710-5899 / Alan@DirtyDirt. Us

TO: Mr. Tim Mullin, LHG
State of Washington Department of Ecology
Post Office Box 47775
Olympia, Washington 98504
(360) 999-9589 / tim.mullin@ecy.wa.gov

January 9, 2026

RE: **Pioneer Museum Property**
2301 - 23rd Avenue Southeast
Puyallup, Washington 98373
Facility / Site ID: 9490 / Cleanup Site ID: 11739
VCP Project No.: SW1846

Final Subsurface Soils
Investigation Submittal
Completed Soils Characterization for
Sunset Pointe Development
Drum Storage Area North of Museum Building

Rear Mr. Mullin;

Attached are Phase 2 Subsurface Investigations for the aforementioned *Pioneer Museum* Property. To facilitate your evaluation, the subject Property has been addressed as three areas based upon the anticipated types of Contaminants of Concern; (1) the *Former Museum Building* located in the southwestern corner of the subject Property; (2) the *Drum Storage Area* located adjoining the north side of the Museum Building; and (3) the *Horse Barn* adjoining the southern Property boundary east of the Museum Building.

Your *Opinion Letter* dated January 10, 2025, identified the following concerns that required additional investigation;

> "Aqueous non-film forming firefighting form (AFFF) may have been used to extinguish the fire, indicating a potential for per- and poly- fluoroalkyl substance (PFAS) to be present at the Site. (Opinion Letter dated January 10, 2025, p.4)."

This was part of the 2011 Arson Fire area as drums of chemicals that were stored north of the Museum Building was also including the Response Areas subject to applications of fire suppressing chemicals. At the time of the Arson Fire, this area had been cleared between the Museum Building on the south and the large storage barn on the north.

The former drum storage is 45 feet (east to west) and 60 feet (north to south)

On September 22, 2025, Aerotech personnel collected two (2) subsurface soil samples to depths of specifically for PFAS / PFOS at four (4) feet below ground surface ("bgs").

Boring location **#PFAS 06** was located thirty (30) feet north of the northeastern edge of Museum Building foundation and thirty (30) feet to the west. At this location the was covered with two-feet of wood debris, small pierced of charred wood, and forest duff, followed with eight (8) feet of brown clay with pebbles, followed by a light brown sand. Sample PFAS 06 was collected at four (4) feet below the surface.

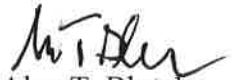
Boring location **#PFAS 07** was located twenty (20) east and fifteen (15) feet south of Boring Location 06. At this location the was covered with three-feet of wood debris, small pierced of charred wood, and forest duff, followed with eight (8) feet of brown clay with pebbles, followed by a light brown sand. Sample PFAS 07 was collected at four (4) feet below the surface.

PFAS / PFOS by EPA Method 1633 Analytical Results

Soil Sample #06 results were all below the PFOS Laboratory Limits of Detection
Soil Sample #07 contained PFOS of 0.439 ng/g - dry

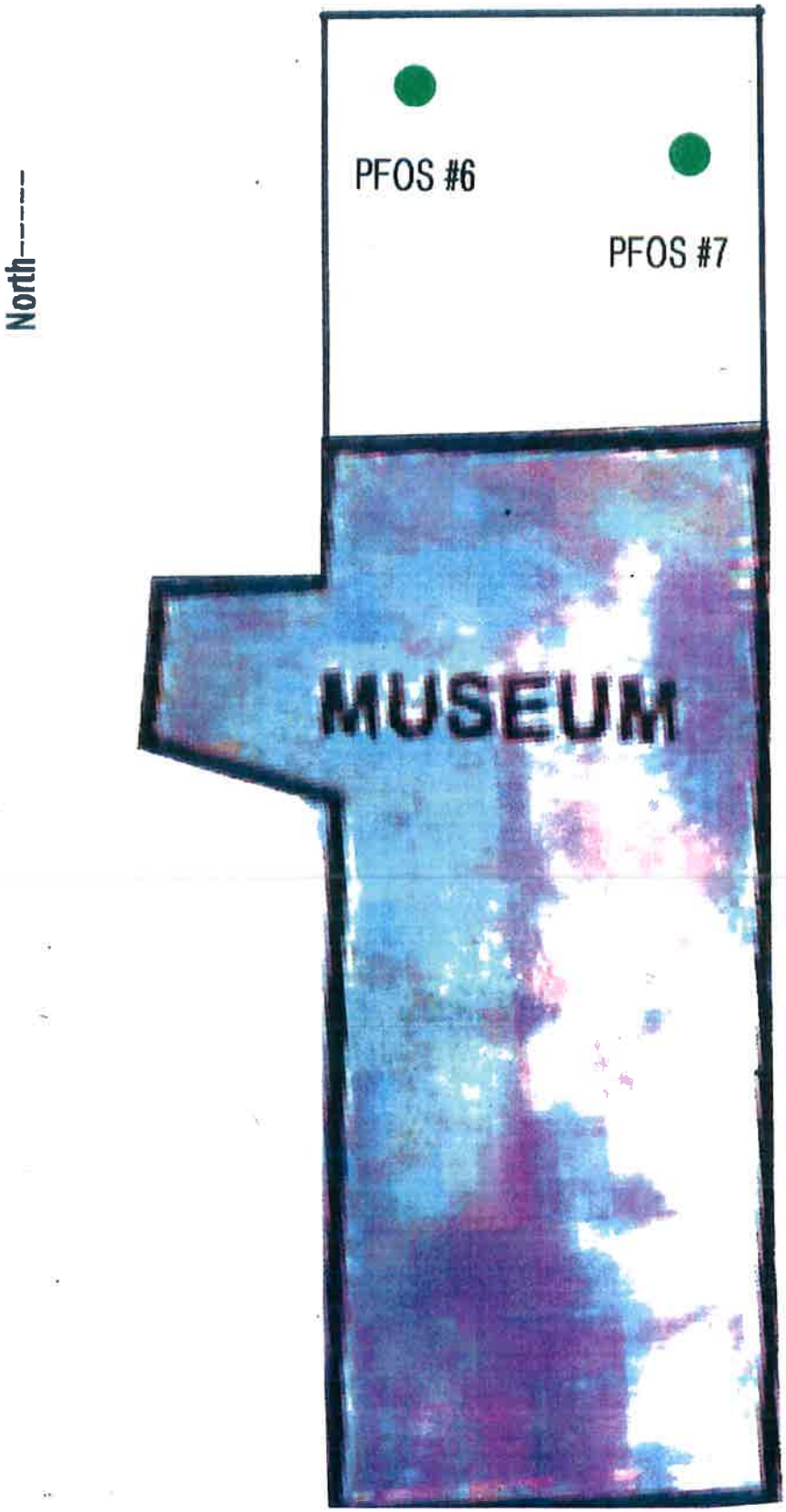
Thank you for your assistance in this matter. If I can answer any additional questions or be of further assistance, please do not hesitate to contact me at (360) 710-5899 or Alan@DirtyDirt.us.

Best Regards,



Alan T. Blotch

Exterior Drum Storage Area
(35'x 35')



Sunset Pointe
Puyallup, Washington
Exterior Drum Storage
Area

South side of sampling area

Soil sample

PFAS sample

Sunset Pointe
Puyallup, Washington
Exterior Drum Storage

Truck location

Condition of soils
underying the forest duff

Visual evidence of charred
underlying soils

Chain of Custody Record & Laboratory Services Agreement

Alliance TECHNICAL GROUP
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790

Date: 09-22-25 Page: 1 of: 1
Laboratory Project No (internal): 2509511
Project Name: SUNSET POINTE
Special Remarks:
Project No:
Collected by: A. BLOTCH
Location:
Report To (PM):
Disposal: Samples will be disposed in 30 days unless otherwise requested ☐ Retain volume (specify above) ☐ Return to client

Client: AEROTECH ENV CONSULTING INC
Address:
City, State, Zip: NORMANDY PL WA
Telephone: 360-710-5899
Email(s): ALAN @ DIRTY DIRT.NS

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	# of Cont.	VOCs (EPA 8260 / 624)	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8) Total (T) & Dissolved (D)	Anions (IC)***	EDB (8011)	Comments
1 PFAS 01-08	09-22		S	1												PFOS = 0.543
2 02-04																PFOS = 0.272
3 03-08																
4 04-12																
5 05-10																
6 06-01																
7 07-01																PFOS = 0.249
8																
9																
10																

PFAS Soil Sampling

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA 5 RCRA 8 Priority Pollutants Individual: Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Si Sn Ti Tl V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Turn-around Time: ☒ Standard ☐ Next Day ☐ 3 Day ☐ Same Day ☐ 2 Day (specify)

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above, that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x			x		
x		09/23 @ 10-20	x	Jack Hawthorne	9/23/25 1020

Alliance
TECHNICAL GROUP
3600 Fremont Ave N
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

Aerotech Environmental Consulting
Alan Blotch
17837 1st Ave S #556
Normandy Park, WA 98148

RE: Sunset Pointe,
Work Order Number: 2509511

October 07, 2025

Attention Alan Blotch:

Alliance Technical Group, LLC - Seattle received 7 sample(s) on 9/23/2025 for the analyses presented in the following report.

All analyses were performed according to our accredited Quality Assurance program. Please contact the laboratory if you should have any questions about the results.

Alliance Technical Group is committed to accuracy, speed, and customer service. Thank you for choosing Alliance Technical Group's Seattle laboratory team for your analytical needs. We appreciate this opportunity to serve you!

Sincerely,

Brianna Barnes
Project Manager

CC:
Hudson Gerkin

DoD-ELAP Accreditation #79636 by PJLA, ISO/IEC 17025:2017 and QSM 5.4 for Environmental Testing
ORELAP Certification: WA 100009 (NELAP Recognized) for Environmental Testing
Washington State Department of Ecology Accredited for Environmental Testing, Lab ID C910

Original

Alliance TECHNICAL GROUP

Date: *10/07/2025*

CLIENT: Aerotech Environmental Consulting
Project: Sunset Pointe
Work Order: 2509511

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2509511-001	PFAS 01-08	09/22/2025 12:00 AM	09/23/2025 10:20 AM
2509511-002	PFAS 02-04	09/22/2025 12:00 AM	09/23/2025 10:20 AM
2509511-003	PFAS 03-08	09/22/2025 12:00 AM	09/23/2025 10:20 AM
2509511-004	PFAS 04-12	09/22/2025 12:00 AM	09/23/2025 10:20 AM
2509511-005	PFAS 05-10	09/22/2025 12:00 AM	09/23/2025 10:20 AM
2509511-006	PFAS 06-01	09/22/2025 12:00 AM	09/23/2025 10:20 AM
2509511-007	PFAS 07-01	09/22/2025 12:00 AM	09/23/2025 10:20 AM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

Alliance TECHNICAL GROUP

Case Narrative

WO#: **2509511**
Date: **10/7/2025**

CLIENT: Aerotech Environmental Consulting
Project: Sunset Pointe

I. SAMPLE RECEIPT:
Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:
Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:
Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.
2509511-001A
SUB-PFAS-S-1633 has been Sub Contracted.
2509511-002A
SUB-PFAS-S-1633 has been Sub Contracted.
2509511-003A
SUB-PFAS-S-1633 has been Sub Contracted.
2509511-004A
SUB-PFAS-S-1633 has been Sub Contracted.
2509511-005A
SUB-PFAS-S-1633 has been Sub Contracted.
2509511-006A
SUB-PFAS-S-1633 has been Sub Contracted.
2509511-007A
SUB-PFAS-S-1633 has been Sub Contracted.

Alliance TECHNICAL GROUP

Sample Log-In Check List

Client Name: **AEROTE** Work Order Number: **2509511**

Logged by: **Lyann Rivera** Date Received: **9/23/2025 10:20:00 AM**

Chain of Custody

1. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2. How was the sample delivered?	Client		

Log In

3. Custody Seals present on shipping container/cooler? (Refer to comments for Custody Seals not intact)	Yes ☐	No ☐	Not Present ☑
4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all items received at a temperature of >2°C to 6°C *	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. Is there headspace in the VOA vials?	Yes ☐	No ☐	NA ☑
11. Did all samples containers arrive in good condition(unbroken)?	Yes ☑	No ☐	
12. Does paperwork match bottle labels?	Yes ☑	No ☐	
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all hold times (except field parameters, pH e.g.) able to be met?	Yes ☑	No ☐	

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

Item Information

Item #	Temp °C
Sample	2.0

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C

Original

Alliance Technical Group - Akron
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

October 06, 2025

PM
ATG - SEATTLE LAB
3600 Fremont Ave N.
Seattle, WA 98103
TEL: (206) 352-3790
FAX:

RE:

Dear PM: Order No.: 25092029

Alliance Technical Group - Akron received 7 sample(s) on 9/25/2025 for the analyses presented in the following report.

There were no problems with the analytical events associated with this report unless noted in the Case Narrative.

Quality control data is within laboratory defined or method specified acceptance limits except where noted.

If you have any questions regarding these tests results, please feel free to call the laboratory.

Sincerely,

Brian J. Fackelman
Project Manager, LIMS Administrator
3310 Win St.
Cuyahoga Falls, Ohio 44223

Arkansas 88-0735, California 2943, Colorado, Connecticut PH-0828, Florida NELAC E87688, Idaho OH00923, Illinois 200061, Indiana C-OH-13, ISO/IEC 17025:2017 119125 L22-544, Kansas E-10347, Kentucky (Underground Storage Tank) 3, Kentucky 90146, Maryland 339, Michigan 9988, Minnesota 1780279, Nevada OH009232020-1, New Hampshire 2996, New Jersey OH006, New York 11777, North Carolina 39705 and 631, North Dakota R-201, Ohio DW, Ohio VAP CL0052, Oklahoma 2019-155, Oregon OH200001, Pennsylvania 68-01335, Rhode Island LA000317, South Carolina 92016001, Texas T104704466-19-16, Utah OH009232020-12, Virginia VELAP 10381, West Virginia 9957C

Alliance Technical Group - Akron
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Case Narrative

WO#: **25092029**
Date: **10/6/2025**

CLIENT: ATG - SEATTLE LAB
Project:

WorkOrder Narrative:
25092029: This report in its entirety consists of the following documents: Cover Letter, Case Narrative, Analytical Results, QC Summary Report, Applicable Accreditation Information, Chain-of-Custody, Cooler Receipt Form, and other applicable forms as necessary. All documents contain the Alliance Technical Group Work Order Number assigned to this report.

Alliance Technical Group holds the accreditations/certifications listed at the bottom of the cover letter that may or may not pertain to this report. Please refer to the "Accreditation Program Analytes Report" for accredited analytes list.

The information contained in this analytical report is the sole property of Alliance Technical Group and that of the customer. It cannot be reproduced in any form without the consent of Alliance Technical Group or the customer for which this report was issued. The results contained in this report are only representative of the samples received. Conditions can vary at different times and at different sampling conditions. Alliance Technical Group is not responsible for use or interpretation of the data included herein.

All results for solid samples are reported on an "as received" or "wet weight" basis unless indicated as "dry weight" using the "-dry" designation on the reporting units.

This report is believed to meet all of the requirements of the accrediting agency, where applicable. Any comments or problems with the analytical events associated with this report are noted below.

Analytical Sequence Sample Notes:
25092029-(001A-006A) SVOC-EPA1633_S: Sample exhibited high recoveries for multiple IDAs. Potential low bias in associated analytes. Confirmed via reanalysis.

Alliance Technical Group - Akron
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Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

Workorder Sample Summary

WO#: **25092029**

06-Oct-25

CLIENT: ATG - SEATTLE LAB

Project:

Lab SampleID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
25092029-001	2509511-001A		9/22/2025	9/25/2025 10:30:00 AM	Solid
25092029-002	2509511-002A		9/22/2025	9/25/2025 10:30:00 AM	Solid
25092029-003	2509511-003A		9/22/2025	9/25/2025 10:30:00 AM	Solid
25092029-004	2509511-004A		9/22/2025	9/25/2025 10:30:00 AM	Solid
25092029-005	2509511-005A		9/22/2025	9/25/2025 10:30:00 AM	Solid
25092029-006	2509511-006A		9/22/2025	9/25/2025 10:30:00 AM	Solid
25092029-007	2509511-007A		9/22/2025	9/25/2025 10:30:00 AM	Solid

Alliance TECHNICAL GROUP

Alliance Technical Group - Akron
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Cuyahoga Falls, Ohio 44223
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Analytical Report

(consolidated)

WO#: **25092029**

Date Reported: **10/6/2025**

CLIENT: ATG - SEATTLE LAB

Collection Date: 9/22/2025

Project:

Lab ID: 25092029-001

Matrix: SOLID

Client Sample ID: 2509511-001A

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PFAS BY EPA 1633						
PFAS IN SOLID SAMPLES (EPA METHOD 1633)				E1633	E1633	Analyst: **AEH**
11Cl-PF3OUdS	ND	0.879		ng/g-dry	1	9/29/2025 6:39:00 PM
3:3 FTCA	ND	1.10		ng/g-dry	1	9/29/2025 6:39:00 PM
4:2 FTS	ND	0.879		ng/g-dry	1	9/29/2025 6:39:00 PM
5:3 FTCA	ND	5.49		ng/g-dry	1	9/29/2025 6:39:00 PM
6:2 FTS	ND	0.879		ng/g-dry	1	9/29/2025 6:39:00 PM
7:3 FTCA	ND	5.49		ng/g-dry	1	9/29/2025 6:39:00 PM
8:2 FTS	ND	0.879		ng/g-dry	1	9/29/2025 6:39:00 PM
9CL-PF3ONS	ND	0.879		ng/g-dry	1	9/29/2025 6:39:00 PM
ADONA	ND	0.879		ng/g-dry	1	9/29/2025 6:39:00 PM
HFPO-DA	ND	0.879		ng/g-dry	1	9/29/2025 6:39:00 PM
NEtFOSA	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
NEtFOSAA	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
NEtFOSE	ND	2.20		ng/g-dry	1	9/29/2025 6:39:00 PM
NFDHA	ND	0.440		ng/g-dry	1	9/29/2025 6:39:00 PM
NMeFOSA	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
NMeFOSAA	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
NMeFOSE	ND	2.20		ng/g-dry	1	9/29/2025 6:39:00 PM
PFBA	ND	0.879		ng/g-dry	1	9/29/2025 6:39:00 PM
PFBS	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
PFDA	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
PFDoA	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
PFDoS	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
PFDS	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
PFEESA	ND	0.440		ng/g-dry	1	9/29/2025 6:39:00 PM
PFHpA	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
PFHpS	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
PFHxA	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
PFHxS	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
PFMBA	ND	0.440		ng/g-dry	1	9/29/2025 6:39:00 PM
PFMPA	ND	0.440		ng/g-dry	1	9/29/2025 6:39:00 PM
PFNA	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
PFNS	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
PFOA	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
PFOS	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM

Qualifiers:

H Holding times for preparation or analysis exceeded
ND Not Detected
R RPD outside accepted recovery limits
W Sample container temperature is out of limit as specified at testcode
M Manual Integration used to determine area response
PL Permit Limit
RL Reporting Detection Limit

Original

Alliance TECHNICAL GROUP

Alliance Technical Group - Akron
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

Analytical Report

(consolidated)

WO#: **25092029**

Date Reported: **10/6/2025**

CLIENT: ATG - SEATTLE LAB **Collection Date:** 9/22/2025

Project:

Lab ID: 25092029-001 **Matrix:** SOLID

Client Sample ID: 2509511-001A

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PFAS BY EPA 1633				**E1633**	**E1633**	Analyst: **AEH**
PFAS IN SOLID SAMPLES (EPA METHOD 1633)						
PFOSA	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
PFPeA	ND	0.440		ng/g-dry	1	9/29/2025 6:39:00 PM
PFPeS	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
PFTeDA	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
PFTrDA	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
PFUnA	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
Surr: 13C2-PFDA	90.2	50 - 200		%Rec	1	9/29/2025 6:39:00 PM
Surr: 13C2-PFHxA	84.5	50 - 200		%Rec	1	9/29/2025 6:39:00 PM
Surr: 13C3-PFBA	81.3	50 - 200		%Rec	1	9/29/2025 6:39:00 PM
Surr: 13C4-PFOA	83.0	50 - 200		%Rec	1	9/29/2025 6:39:00 PM
Surr: 13C4-PFOS	91.5	50 - 200		%Rec	1	9/29/2025 6:39:00 PM
Surr: 13C5-PFNA	83.6	50 - 200		%Rec	1	9/29/2025 6:39:00 PM
Surr: 18O2-PFHxS	83.6	50 - 200		%Rec	1	9/29/2025 6:39:00 PM
PFAS BY EPA 1633				**A2540B**		Analyst: **DHF**
PERCENT MOISTURE BY SM2540MOD						
Percent Moisture	10.1	0.100		%	1	10/3/2025 6:00:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded
ND	Not Detected
R	RPD outside accepted recovery limits
W	Sample container temperature is out of limit as specified at testcode
M	Manual Integration used to determine area response
PL	Permit Limit
RL	Reporting Detection Limit

Original

Alliance Technical Group - Akron
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
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Analytical Report

(consolidated)

WO#: **25092029**

Date Reported: **10/6/2025**

CLIENT: ATG - SEATTLE LAB **Collection Date:** 9/22/2025

Project:

Lab ID: 25092029-002 **Matrix:** SOLID

Client Sample ID: 2509511-002A

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PFAS BY EPA 1633				**E1633**	**E1633**	Analyst: **AEH**
PFAS IN SOLID SAMPLES (EPA METHOD 1633)						
11Cl-PF3OUdS	ND	0.930		ng/g-dry	1	9/29/2025 6:54:00 PM
3:3 FTCA	ND	1.16		ng/g-dry	1	9/29/2025 6:54:00 PM
4:2 FTS	ND	0.930		ng/g-dry	1	9/29/2025 6:54:00 PM
5:3 FTCA	ND	5.81		ng/g-dry	1	9/29/2025 6:54:00 PM
6:2 FTS	ND	0.930		ng/g-dry	1	9/29/2025 6:54:00 PM
7:3 FTCA	ND	5.81		ng/g-dry	1	9/29/2025 6:54:00 PM
8:2 FTS	ND	0.930		ng/g-dry	1	9/29/2025 6:54:00 PM
9CL-PF3ONS	ND	0.930		ng/g-dry	1	9/29/2025 6:54:00 PM
ADONA	ND	0.930		ng/g-dry	1	9/29/2025 6:54:00 PM
HFPO-DA	ND	0.930		ng/g-dry	1	9/29/2025 6:54:00 PM
NEtFOSA	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
NEtFOSAA	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
NEtFOSE	ND	2.32		ng/g-dry	1	9/29/2025 6:54:00 PM
NFDHA	ND	0.465		ng/g-dry	1	9/29/2025 6:54:00 PM
NMeFOSA	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
NMeFOSAA	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
NMeFOSE	ND	2.32		ng/g-dry	1	9/29/2025 6:54:00 PM
PFBA	ND	0.930		ng/g-dry	1	9/29/2025 6:54:00 PM
PFBS	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
PFDA	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
PFDoA	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
PFDoS	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
PFDS	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
PFEESA	ND	0.465		ng/g-dry	1	9/29/2025 6:54:00 PM
PFHpA	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
PFHpS	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
PFHxA	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
PFHxS	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
PFMBA	ND	0.465		ng/g-dry	1	9/29/2025 6:54:00 PM
PFMPA	ND	0.465		ng/g-dry	1	9/29/2025 6:54:00 PM
PFNA	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
PFNS	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
PFOA	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
PFOS	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM

Qualifiers:

- H Holding times for preparation or analysis exceeded
- ND Not Detected
- R RPD outside accepted recovery limits
- W Sample container temperature is out of limit as specified at testcode
- M Manual Integration used to determine area response
- PL Permit Limit
- RL Reporting Detection Limit

Original

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Website: http://www.settek.com

Analytical Report

(consolidated)

WO#: **25092029**

Date Reported: **10/6/2025**

CLIENT: ATG - SEATTLE LAB

Collection Date: 9/22/2025

Project:

Lab ID: 25092029-002

Matrix: SOLID

Client Sample ID: 2509511-002A

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PFAS BY EPA 1633				**E1633**	**E1633**	Analyst: **AEH**
PFAS IN SOLID SAMPLES (EPA METHOD 1633)						
PFOSA	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
PFPeA	ND	0.465		ng/g-dry	1	9/29/2025 6:54:00 PM
PFPeS	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
PFTeDA	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
PFTrDA	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
PFUnA	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
Surr: 13C2-PFDA	82.5	50 - 200		%Rec	1	9/29/2025 6:54:00 PM
Surr: 13C2-PFHxA	81.0	50 - 200		%Rec	1	9/29/2025 6:54:00 PM
Surr: 13C3-PFBA	76.8	50 - 200		%Rec	1	9/29/2025 6:54:00 PM
Surr: 13C4-PFOA	78.6	50 - 200		%Rec	1	9/29/2025 6:54:00 PM
Surr: 13C4-PFOS	81.3	50 - 200		%Rec	1	9/29/2025 6:54:00 PM
Surr: 13C5-PFNA	82.0	50 - 200		%Rec	1	9/29/2025 6:54:00 PM
Surr: 18O2-PFHxS	71.4	50 - 200		%Rec	1	9/29/2025 6:54:00 PM
PFAS BY EPA 1633				**A2540B**		Analyst: **DHF**
PERCENT MOISTURE BY SM2540MOD						
Percent Moisture	15.3	0.100		%	1	10/3/2025 6:00:00 PM

Qualifiers:

- H Holding times for preparation or analysis exceeded
- ND Not Detected
- R RPD outside accepted recovery limits
- W Sample container temperature is out of limit as specified at testcode
- M Manual Integration used to determine area response
- PL Permit Limit
- RL Reporting Detection Limit

Original

Alliance Technical Group - Akron
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

Analytical Report

(consolidated)

WO#: **25092029**

Date Reported: **10/6/2025**

CLIENT: ATG - SEATTLE LAB **Collection Date:** 9/22/2025

Project:

Lab ID: 25092029-003 **Matrix:** SOLID

Client Sample ID: 2509511-003A

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PFAS BY EPA 1633				E1633	E1633	Analyst: AEH
PFAS IN SOLID SAMPLES (EPA METHOD 1633)						
11Cl-PF3OUdS	ND	0.869		ng/g-dry	1	9/29/2025 7:09:00 PM
3:3 FTCA	ND	1.09		ng/g-dry	1	9/29/2025 7:09:00 PM
4:2 FTS	ND	0.869		ng/g-dry	1	9/29/2025 7:09:00 PM
5:3 FTCA	ND	5.43		ng/g-dry	1	9/29/2025 7:09:00 PM
6:2 FTS	ND	0.869		ng/g-dry	1	9/29/2025 7:09:00 PM
7:3 FTCA	ND	5.43		ng/g-dry	1	9/29/2025 7:09:00 PM
8:2 FTS	ND	0.869		ng/g-dry	1	9/29/2025 7:09:00 PM
9CL-PF3ONS	ND	0.869		ng/g-dry	1	9/29/2025 7:09:00 PM
ADONA	ND	0.869		ng/g-dry	1	9/29/2025 7:09:00 PM
HFPO-DA	ND	0.869		ng/g-dry	1	9/29/2025 7:09:00 PM
NEtFOSA	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
NEtFOSAA	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
NEtFOSE	ND	2.17		ng/g-dry	1	9/29/2025 7:09:00 PM
NFDHA	ND	0.435		ng/g-dry	1	9/29/2025 7:09:00 PM
NMeFOSA	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
NMeFOSAA	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
NMeFOSE	ND	2.17		ng/g-dry	1	9/29/2025 7:09:00 PM
PFBA	ND	0.869		ng/g-dry	1	9/29/2025 7:09:00 PM
PFBS	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
PFDA	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
PFDoA	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
PFDoS	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
PFDS	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
PFEESA	ND	0.435		ng/g-dry	1	9/29/2025 7:09:00 PM
PFHpA	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
PFHpS	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
PFHxA	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
PFHxS	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
PFMBA	ND	0.435		ng/g-dry	1	9/29/2025 7:09:00 PM
PFMPA	ND	0.435		ng/g-dry	1	9/29/2025 7:09:00 PM
PFNA	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
PFNS	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
PFOA	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
PFOS	0.543	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM

Qualifiers:

- H Holding times for preparation or analysis exceeded
- ND Not Detected
- R RPD outside accepted recovery limits
- W Sample container temperature is out of limit as specified at testcode
- M Manual Integration used to determine area response
- PL Permit Limit
- RL Reporting Detection Limit

Original

Alliance TECHNICAL GROUP

Alliance Technical Group - Akron
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

Analytical Report

(consolidated)

WO#: **25092029**

Date Reported: **10/6/2025**

CLIENT: ATG - SEATTLE LAB **Collection Date:** 9/22/2025

Project:

Lab ID: 25092029-003 **Matrix:** SOLID

Client Sample ID: 2509511-003A

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PFAS BY EPA 1633				**E1633**	**E1633**	Analyst: **AEH**
PFAS IN SOLID SAMPLES (EPA METHOD 1633)						
PFOSA	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
PFPeA	ND	0.435		ng/g-dry	1	9/29/2025 7:09:00 PM
PFPeS	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
PFTeDA	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
PFTrDA	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
PFUnA	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
Surr: 13C2-PFDA	74.8	50 - 200		%Rec	1	9/29/2025 7:09:00 PM
Surr: 13C2-PFHxA	71.2	50 - 200		%Rec	1	9/29/2025 7:09:00 PM
Surr: 13C3-PFBA	65.8	50 - 200		%Rec	1	9/29/2025 7:09:00 PM
Surr: 13C4-PFOA	74.2	50 - 200		%Rec	1	9/29/2025 7:09:00 PM
Surr: 13C4-PFOS	79.4	50 - 200		%Rec	1	9/29/2025 7:09:00 PM
Surr: 13C5-PFNA	68.1	50 - 200		%Rec	1	9/29/2025 7:09:00 PM
Surr: 18O2-PFHxS	62.4	50 - 200		%Rec	1	9/29/2025 7:09:00 PM
PFAS BY EPA 1633				**A2540B**		Analyst: **DHF**
PERCENT MOISTURE BY SM2540MOD						
Percent Moisture	9.61	0.100		%	1	10/3/2025 6:00:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded
ND	Not Detected
R	RPD outside accepted recovery limits
W	Sample container temperature is out of limit as specified at testcode
M	Manual Integration used to determine area response
PL	Permit Limit
RL	Reporting Detection Limit

Original

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Analytical Report

(consolidated)

WO#: **25092029**

Date Reported: **10/6/2025**

CLIENT: ATG - SEATTLE LAB

Collection Date: 9/22/2025

Project:

Lab ID: 25092029-004

Matrix: SOLID

Client Sample ID: 2509511-004A

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PFAS BY EPA 1633				E1633	E1633	Analyst: **AEH**
PFAS IN SOLID SAMPLES (EPA METHOD 1633)						
11Cl-PF3OUdS	ND	0.899		ng/g-dry	1	9/29/2025 7:23:00 PM
3:3 FTCA	ND	1.12		ng/g-dry	1	9/29/2025 7:23:00 PM
4:2 FTS	ND	0.899		ng/g-dry	1	9/29/2025 7:23:00 PM
5:3 FTCA	ND	5.62		ng/g-dry	1	9/29/2025 7:23:00 PM
6:2 FTS	ND	0.899		ng/g-dry	1	9/29/2025 7:23:00 PM
7:3 FTCA	ND	5.62		ng/g-dry	1	9/29/2025 7:23:00 PM
8:2 FTS	ND	0.899		ng/g-dry	1	9/29/2025 7:23:00 PM
9CL-PF3ONS	ND	0.899		ng/g-dry	1	9/29/2025 7:23:00 PM
ADONA	ND	0.899		ng/g-dry	1	9/29/2025 7:23:00 PM
HFPO-DA	ND	0.899		ng/g-dry	1	9/29/2025 7:23:00 PM
NEtFOSA	ND	0.899		ng/g-dry	1	9/29/2025 7:23:00 PM
NEtFOSAA	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
NEtFOSE	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
NFDHA	ND	2.25		ng/g-dry	1	9/29/2025 7:23:00 PM
NMeFOSA	ND	0.449		ng/g-dry	1	9/29/2025 7:23:00 PM
NMeFOSAA	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
NMeFOSE	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
PFBA	ND	2.25		ng/g-dry	1	9/29/2025 7:23:00 PM
PFBS	ND	0.899		ng/g-dry	1	9/29/2025 7:23:00 PM
PFDA	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
PFDoA	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
PFDoS	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
PFDS	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
PFEESA	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
PFHpA	ND	0.449		ng/g-dry	1	9/29/2025 7:23:00 PM
PFHpS	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
PFHxA	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
PFHxS	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
PFMBA	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
PFMPA	ND	0.449		ng/g-dry	1	9/29/2025 7:23:00 PM
PFNA	ND	0.449		ng/g-dry	1	9/29/2025 7:23:00 PM
PFNS	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
PFOA	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
PFOS	0.272	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM

Qualifiers:

- H Holding times for preparation or analysis exceeded
- ND Not Detected
- R RPD outside accepted recovery limits
- W Sample container temperature is out of limit as specified at testcode
- M Manual Integration used to determine area response
- PL Permit Limit
- RL Reporting Detection Limit

Original

Alliance Technical Group - Akron
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

Analytical Report

(consolidated)

WO#: **25092029**

Date Reported: **10/6/2025**

CLIENT: ATG - SEATTLE LAB **Collection Date:** 9/22/2025

Project:

Lab ID: 25092029-004 **Matrix:** SOLID

Client Sample ID: 2509511-004A

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PFAS BY EPA 1633				**E1633**	**E1633**	Analyst: **AEH**
PFAS IN SOLID SAMPLES (EPA METHOD 1633)						
PFOSA	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
PFPeA	ND	0.449		ng/g-dry	1	9/29/2025 7:23:00 PM
PFPeS	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
PFTeDA	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
PFTrDA	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
PFUnA	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
Surr: 13C2-PFDA	73.8	50 - 200		%Rec	1	9/29/2025 7:23:00 PM
Surr: 13C2-PFHxA	74.4	50 - 200		%Rec	1	9/29/2025 7:23:00 PM
Surr: 13C3-PFBA	64.3	50 - 200		%Rec	1	9/29/2025 7:23:00 PM
Surr: 13C4-PFOA	68.0	50 - 200		%Rec	1	9/29/2025 7:23:00 PM
Surr: 13C4-PFOS	80.6	50 - 200		%Rec	1	9/29/2025 7:23:00 PM
Surr: 13C5-PFNA	70.5	50 - 200		%Rec	1	9/29/2025 7:23:00 PM
Surr: 18O2-PFHxS	69.8	50 - 200		%Rec	1	9/29/2025 7:23:00 PM
PFAS BY EPA 1633				**A2540B**		Analyst: **DHF**
PERCENT MOISTURE BY SM2540MOD						
Percent Moisture	11.3	0.100		%	1	10/3/2025 6:00:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded
ND	Not Detected
R	RPD outside accepted recovery limits
W	Sample container temperature is out of limit as specified at testcode
M	Manual Integration used to determine area response
PL	Permit Limit
RL	Reporting Detection Limit

Original

Alliance Technical Group - Akron
3310 Win St.
Cuyahoga Falls, Ohio 44223
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Website: http://www.settek.com

Analytical Report

(consolidated)

WO#: **25092029**

Date Reported: **10/6/2025**

CLIENT: ATG - SEATTLE LAB

Collection Date: 9/22/2025

Project:

Lab ID: 25092029-005

Matrix: SOLID

Client Sample ID: 2509511-005A

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PFAS BY EPA 1633				E1633	E1633	Analyst: **AEH**
PFAS IN SOLID SAMPLES (EPA METHOD 1633)						
11Cl-PF3OUdS	ND	0.972		ng/g-dry	1	9/29/2025 7:38:00 PM
3:3 FTCA	ND	1.22		ng/g-dry	1	9/29/2025 7:38:00 PM
4:2 FTS	ND	0.972		ng/g-dry	1	9/29/2025 7:38:00 PM
5:3 FTCA	ND	6.08		ng/g-dry	1	9/29/2025 7:38:00 PM
6:2 FTS	ND	0.972		ng/g-dry	1	9/29/2025 7:38:00 PM
7:3 FTCA	ND	6.08		ng/g-dry	1	9/29/2025 7:38:00 PM
8:2 FTS	ND	0.972		ng/g-dry	1	9/29/2025 7:38:00 PM
9CL-PF3ONS	ND	0.972		ng/g-dry	1	9/29/2025 7:38:00 PM
ADONA	ND	0.972		ng/g-dry	1	9/29/2025 7:38:00 PM
HFPO-DA	ND	0.972		ng/g-dry	1	9/29/2025 7:38:00 PM
NEtFOSA	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
NEtFOSAA	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
NEtFOSE	ND	2.43		ng/g-dry	1	9/29/2025 7:38:00 PM
NFDHA	ND	0.486		ng/g-dry	1	9/29/2025 7:38:00 PM
NMeFOSA	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
NMeFOSAA	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
NMeFOSE	ND	2.43		ng/g-dry	1	9/29/2025 7:38:00 PM
PFBA	ND	0.972		ng/g-dry	1	9/29/2025 7:38:00 PM
PFBS	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
PFDA	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
PFDoA	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
PFDoS	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
PFDS	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
PFEESA	ND	0.486		ng/g-dry	1	9/29/2025 7:38:00 PM
PFHpA	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
PFHpS	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
PFHxA	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
PFHxS	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
PFMBA	ND	0.486		ng/g-dry	1	9/29/2025 7:38:00 PM
PFMPA	ND	0.486		ng/g-dry	1	9/29/2025 7:38:00 PM
PFNA	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
PFNS	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
PFOA	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
PFOS	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM

Qualifiers:

- H Holding times for preparation or analysis exceeded
- ND Not Detected
- R RPD outside accepted recovery limits
- W Sample container temperature is out of limit as specified at testcode
- M Manual Integration used to determine area response
- PL Permit Limit
- RL Reporting Detection Limit

Original

Alliance TECHNICAL GROUP

Alliance Technical Group - Akron
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

Analytical Report

(consolidated)

WO#: **25092029**

Date Reported: **10/6/2025**

CLIENT: ATG - SEATTLE LAB

Collection Date: 9/22/2025

Project:

Lab ID: 25092029-005

Matrix: SOLID

Client Sample ID: 2509511-005A

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PFAS BY EPA 1633				**E1633**	**E1633**	Analyst: **AEH**
PFAS IN SOLID SAMPLES (EPA METHOD 1633)						
PFOSA	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
PFPeA	ND	0.486		ng/g-dry	1	9/29/2025 7:38:00 PM
PFPeS	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
PFTeDA	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
PFTrDA	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
PFUnA	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
Surr: 13C2-PFDA	95.6	50 - 200		%Rec	1	9/29/2025 7:38:00 PM
Surr: 13C2-PFHxA	84.7	50 - 200		%Rec	1	9/29/2025 7:38:00 PM
Surr: 13C3-PFBA	77.9	50 - 200		%Rec	1	9/29/2025 7:38:00 PM
Surr: 13C4-PFOA	86.8	50 - 200		%Rec	1	9/29/2025 7:38:00 PM
Surr: 13C4-PFOS	88.0	50 - 200		%Rec	1	9/29/2025 7:38:00 PM
Surr: 13C5-PFNA	88.8	50 - 200		%Rec	1	9/29/2025 7:38:00 PM
Surr: 18O2-PFHxS	82.7	50 - 200		%Rec	1	9/29/2025 7:38:00 PM
PFAS BY EPA 1633				**A2540B**		Analyst: **DHF**
PERCENT MOISTURE BY SM2540MOD						
Percent Moisture	18.4	0.100		%	1	10/3/2025 6:00:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded
ND	Not Detected
R	RPD outside accepted recovery limits
W	Sample container temperature is out of limit as specified at testcode
M	Manual Integration used to determine area response
PL	Permit Limit
RL	Reporting Detection Limit

Original

Alliance TECHNICAL GROUP

Alliance Technical Group - Akron
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Cuyahoga Falls, Ohio 44223
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Website: http://www.settek.com

Analytical Report

(consolidated)

WO#: **25092029**

Date Reported: **10/6/2025**

CLIENT: ATG - SEATTLE LAB

Collection Date: 9/22/2025

Project:

Lab ID: 25092029-006

Matrix: SOLID

Client Sample ID: 2509511-006A

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PFAS BY EPA 1633				E1633	E1633	Analyst: **AEH**
PFAS IN SOLID SAMPLES (EPA METHOD 1633)						
11Cl-PF3OUdS	ND	0.845		ng/g-dry	1	9/29/2025 7:53:00 PM
3:3 FTCA	ND	1.06		ng/g-dry	1	9/29/2025 7:53:00 PM
4:2 FTS	ND	0.845		ng/g-dry	1	9/29/2025 7:53:00 PM
5:3 FTCA	ND	5.28		ng/g-dry	1	9/29/2025 7:53:00 PM
6:2 FTS	ND	0.845		ng/g-dry	1	9/29/2025 7:53:00 PM
7:3 FTCA	ND	5.28		ng/g-dry	1	9/29/2025 7:53:00 PM
8:2 FTS	ND	0.845		ng/g-dry	1	9/29/2025 7:53:00 PM
9CL-PF3ONS	ND	0.845		ng/g-dry	1	9/29/2025 7:53:00 PM
ADONA	ND	0.845		ng/g-dry	1	9/29/2025 7:53:00 PM
HFPO-DA	ND	0.845		ng/g-dry	1	9/29/2025 7:53:00 PM
NEtFOSA	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
NEtFOSAA	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
NEtFOSE	ND	2.11		ng/g-dry	1	9/29/2025 7:53:00 PM
NFDHA	ND	0.422		ng/g-dry	1	9/29/2025 7:53:00 PM
NMeFOSA	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
NMeFOSAA	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
NMeFOSE	ND	2.11		ng/g-dry	1	9/29/2025 7:53:00 PM
PFBA	ND	0.845		ng/g-dry	1	9/29/2025 7:53:00 PM
PFBS	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
PFDA	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
PFDoA	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
PFDoS	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
PFDS	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
PFEESA	ND	0.422		ng/g-dry	1	9/29/2025 7:53:00 PM
PFHpA	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
PFHpS	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
PFHxA	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
PFHxS	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
PFMBA	ND	0.422		ng/g-dry	1	9/29/2025 7:53:00 PM
PFMPA	ND	0.422		ng/g-dry	1	9/29/2025 7:53:00 PM
PFNA	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
PFNS	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
PFOA	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
PFOS	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM

Qualifiers:

- H Holding times for preparation or analysis exceeded
- ND Not Detected
- R RPD outside accepted recovery limits
- W Sample container temperature is out of limit as specified at testcode
- M Manual Integration used to determine area response
- PL Permit Limit
- RL Reporting Detection Limit

Original

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Analytical Report

(consolidated)

WO#: **25092029**

Date Reported: **10/6/2025**

CLIENT: ATG - SEATTLE LAB

Collection Date: 9/22/2025

Project:

Lab ID: 25092029-006

Matrix: SOLID

Client Sample ID: 2509511-006A

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PFAS BY EPA 1633				**E1633**	**E1633**	Analyst: **AEH**
PFAS IN SOLID SAMPLES (EPA METHOD 1633)						
PFOSA	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
PFPeA	ND	0.422		ng/g-dry	1	9/29/2025 7:53:00 PM
PFPeS	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
PFTeDA	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
PFTrDA	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
PFUnA	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
Surr: 13C2-PFDA	85.8	50 - 200		%Rec	1	9/29/2025 7:53:00 PM
Surr: 13C2-PFHxA	79.7	50 - 200		%Rec	1	9/29/2025 7:53:00 PM
Surr: 13C3-PFBA	72.0	50 - 200		%Rec	1	9/29/2025 7:53:00 PM
Surr: 13C4-PFOA	76.2	50 - 200		%Rec	1	9/29/2025 7:53:00 PM
Surr: 13C4-PFOS	83.7	50 - 200		%Rec	1	9/29/2025 7:53:00 PM
Surr: 13C5-PFNA	73.9	50 - 200		%Rec	1	9/29/2025 7:53:00 PM
Surr: 18O2-PFHxS	75.9	50 - 200		%Rec	1	9/29/2025 7:53:00 PM
PFAS BY EPA 1633				**A2540B**		Analyst: **DHF**
PERCENT MOISTURE BY SM2540MOD						
Percent Moisture	7.32	0.100		%	1	10/3/2025 6:00:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded
ND	Not Detected
R	RPD outside accepted recovery limits
W	Sample container temperature is out of limit as specified at testcode
M	Manual Integration used to determine area response
PL	Permit Limit
RL	Reporting Detection Limit

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Analytical Report

(consolidated)

WO#: **25092029**

Date Reported: **10/6/2025**

CLIENT: ATG - SEATTLE LAB

Collection Date: 9/22/2025

Project:

Lab ID: 25092029-007

Matrix: SOLID

Client Sample ID: 2509511-007A

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PFAS BY EPA 1633				E1633	E1633	Analyst: AEH
PFAS IN SOLID SAMPLES (EPA METHOD 1633)						
11Cl-PF3OUdS	ND	0.871		ng/g-dry	1	9/29/2025 8:07:00 PM
3:3 FTCA	ND	1.09		ng/g-dry	1	9/29/2025 8:07:00 PM
4:2 FTS	ND	0.871		ng/g-dry	1	9/29/2025 8:07:00 PM
5:3 FTCA	ND	5.44		ng/g-dry	1	9/29/2025 8:07:00 PM
6:2 FTS	ND	0.871		ng/g-dry	1	9/29/2025 8:07:00 PM
7:3 FTCA	ND	5.44		ng/g-dry	1	9/29/2025 8:07:00 PM
8:2 FTS	ND	0.871		ng/g-dry	1	9/29/2025 8:07:00 PM
9CL-PF3ONS	ND	0.871		ng/g-dry	1	9/29/2025 8:07:00 PM
ADONA	ND	0.871		ng/g-dry	1	9/29/2025 8:07:00 PM
HFPO-DA	ND	0.871		ng/g-dry	1	9/29/2025 8:07:00 PM
NEtFOSA	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
NEtFOSAA	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
NEtFOSE	ND	2.18		ng/g-dry	1	9/29/2025 8:07:00 PM
NFDHA	ND	0.435		ng/g-dry	1	9/29/2025 8:07:00 PM
NMeFOSA	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
NMeFOSAA	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
NMeFOSE	ND	2.18		ng/g-dry	1	9/29/2025 8:07:00 PM
PFBA	ND	0.871		ng/g-dry	1	9/29/2025 8:07:00 PM
PFBS	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
PFDA	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
PFDoA	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
PFDoS	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
PFDS	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
PFEESA	ND	0.435		ng/g-dry	1	9/29/2025 8:07:00 PM
PFHpA	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
PFHpS	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
PFHxA	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
PFHxS	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
PFMBA	ND	0.435		ng/g-dry	1	9/29/2025 8:07:00 PM
PFMPA	ND	0.435		ng/g-dry	1	9/29/2025 8:07:00 PM
PFNA	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
PFNS	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
PFOA	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
PFOS	0.249	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM

Qualifiers:

- H Holding times for preparation or analysis exceeded
- ND Not Detected
- R RPD outside accepted recovery limits
- W Sample container temperature is out of limit as specified at testcode
- M Manual Integration used to determine area response
- PL Permit Limit
- RL Reporting Detection Limit

Original

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Analytical Report

(consolidated)

WO#: **25092029**

Date Reported: **10/6/2025**

CLIENT: ATG - SEATTLE LAB

Collection Date: 9/22/2025

Project:

Lab ID: 25092029-007

Matrix: SOLID

Client Sample ID: 2509511-007A

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PFAS BY EPA 1633				**E1633**	**E1633**	Analyst: **AEH**
PFAS IN SOLID SAMPLES (EPA METHOD 1633)						
PFOSA	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
PFPeA	ND	0.435		ng/g-dry	1	9/29/2025 8:07:00 PM
PFPeS	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
PFTeDA	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
PFTrDA	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
PFUnA	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
Surr: 13C2-PFDA	118	50 - 200		%Rec	1	9/29/2025 8:07:00 PM
Surr: 13C2-PFHxA	114	50 - 200		%Rec	1	9/29/2025 8:07:00 PM
Surr: 13C3-PFBA	107	50 - 200		%Rec	1	9/29/2025 8:07:00 PM
Surr: 13C4-PFOA	107	50 - 200		%Rec	1	9/29/2025 8:07:00 PM
Surr: 13C4-PFOS	132	50 - 200		%Rec	1	9/29/2025 8:07:00 PM
Surr: 13C5-PFNA	123	50 - 200		%Rec	1	9/29/2025 8:07:00 PM
Surr: 18O2-PFHxS	121	50 - 200		%Rec	1	9/29/2025 8:07:00 PM
PFAS BY EPA 1633				**A2540B**		Analyst: **DHF**
PERCENT MOISTURE BY SM2540MOD						
Percent Moisture	9.94	0.100		%	1	10/3/2025 6:00:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded
ND	Not Detected
R	RPD outside accepted recovery limits
W	Sample container temperature is out of limit as specified at testcode
M	Manual Integration used to determine area response
PL	Permit Limit
RL	Reporting Detection Limit

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QC SUMMARY REPORT

WO#: **25092029**
06-Oct-25

Client: ATG - SEATTLE LAB
Project:

BatchID: **87549**

Sample ID: MB-87549	SampType: MBLK	TestCode: SVOC-EPA16	Units: ng/g	Prep Date: 9/25/2025	RunNo: 217632
Client ID: BatchQC	Batch ID: 87549	TestNo: E1633	E1633	Analysis Date: 9/29/2025	SeqNo: 5801941

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
11Cl-PF3OUdS	ND	0.789									
3:3 FTCA	ND	0.986									
4:2 FTS	ND	0.789									
5:3 FTCA	ND	4.93									
6:2 FTS	ND	0.789									
7:3 FTCA	ND	4.93									
8:2 FTS	ND	0.789									
9CL-PF3ONS	ND	0.789									
ADONA	ND	0.789									
HFPO-DA	ND	0.789									
NEtFOSA	ND	0.197									
NEtFOSAA	ND	0.197									
NEtFOSE	ND	1.97									
NFDHA	ND	0.394									
NMeFOSA	ND	0.197									
NMeFOSAA	ND	0.197									
NMeFOSE	ND	1.97									
PFBA	ND	0.789									
PFBS	ND	0.197									
PFDA	ND	0.197									
PFDoA	ND	0.197									
PFDoS	ND	0.197									
PFDS	ND	0.197									
PFEESA	ND	0.394									
PFHpA	ND	0.197									
PFHpS	ND	0.197									

Qualifiers:

H	Holding times for preparation or analysis exceeded
PL	Permit Limit
W	Sample container temperature is out of limit as specified at testcode
M	Manual Integration used to determine area response
R	RPD outside accepted recovery limits
ND	Not Detected
RL	Reporting Detection Limit

Original

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QC SUMMARY REPORT

WO#: **25092029**
06-Oct-25

Client: ATG - SEATTLE LAB
Project:

BatchID: **87549**

Sample ID: **MB-87549**	SampType: **MBLK**	TestCode: **SVOC-EPA16**	Units: **ng/g**	Prep Date: **9/25/2025**	RunNo: **217632**
Client ID: **BatchQC**	Batch ID: **87549**	TestNo: **E1633**	**E1633**	Analysis Date: **9/29/2025**	SeqNo: **5801941**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
PFHxA	ND	0.197									
PFHxS	ND	0.197									
PFMBA	ND	0.394									
PFMPA	ND	0.394									
PFNA	ND	0.197									
PFNS	ND	0.197									
PFOA	ND	0.197									
PFOS	ND	0.197									
PFOSA	ND	0.197									
PFPeA	ND	0.394									
PFPeS	ND	0.197									
PFTeDA	ND	0.197									
PFTrDA	ND	0.197									
PFUnA	ND	0.197									
Surr: 13C2-PFDA	1.43		2.465		58.0	50	200				
Surr: 13C2-PFHxA	3.35		4.931		67.9	50	200				
Surr: 13C3-PFBA	6.26		9.862		63.4	50	200				
Surr: 13C4-PFOA	3.03		4.931		61.5	50	200				
Surr: 13C4-PFOS	3.27		4.724		69.3	50	200				
Surr: 13C5-PFNA	1.64		2.465		66.4	50	200				
Surr: 18O2-PFHxS	2.81		4.675		60.1	50	200				

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected
PL	Permit Limit	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
W	Sample container temperature is out of limit as specified at testcode				

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QC SUMMARY REPORT

WO#: **25092029**
06-Oct-25

Client: ATG - SEATTLE LAB
Project:

BatchID: **87549**

Sample ID: LCS-87549	SampType: LCS	TestCode: SVOC-EPA16	Units: ng/g	Prep Date: 9/25/2025	RunNo: 217632
Client ID: BatchQC	Batch ID: 87549	TestNo: E1633	E1633	Analysis Date: 9/29/2025	SeqNo: 5801942

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
11Cl-PF3OUdS	29.3	0.787	37.13	0	78.9	45	160				
3:3 FTCA	52.8	0.984	49.21	0	107	45	130				
4:2 FTS	32.5	0.787	36.89	0	88.0	60	150				
5:3 FTCA	221	4.92	246.1	0	89.9	60	130				
6:2 FTS	38.6	0.787	37.44	0	103	55	200				
7:3 FTCA	226	4.92	246.1	0	92.0	60	150				
8:2 FTS	38.0	0.787	37.80	0	101	70	150				
9CL-PF3ONS	28.1	0.787	36.73	0	76.5	70	150				
ADONA	31.2	0.787	37.20	0	83.8	70	160				
HFPO-DA	39.1	0.787	39.37	0	99.3	70	145				
NEtFOSA	9.89	0.197	9.843	0	100	70	140				
NEtFOSAA	8.31	0.197	9.843	0	84.5	65	165				
NEtFOSE	98.4	1.97	98.43	0	100	70	135				
NFDHA	17.1	0.394	19.69	0	86.8	60	155				
NMeFOSA	10.1	0.197	9.843	0	102	70	155				
NMeFOSAA	8.91	0.197	9.843	0	90.5	65	155				
NMeFOSE	103	1.97	98.43	0	104	70	140				
PFBA	39.3	0.787	39.37	0	99.8	70	140				
PFBS	8.31	0.197	8.740	0	95.1	65	145				
PFDA	10.7	0.197	9.843	0	108	70	155				
PFDoA	8.96	0.197	9.843	0	91.0	70	150				
PFDoS	8.94	0.197	9.528	0	93.8	25	160				
PFDS	9.66	0.197	9.488	0	102	40	155				
PFEESA	17.0	0.394	17.56	0	96.7	70	140				
PFHpA	10.5	0.197	9.843	0	107	65	145				
PFHpS	10.5	0.197	9.370	0	113	65	155				

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected
PL	Permit Limit	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
W	Sample container temperature is out of limit as specified at testcode				

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QC SUMMARY REPORT

WO#: **25092029**
06-Oct-25

Client: ATG - SEATTLE LAB
Project:

BatchID: **87549**

Sample ID: **LCS-87549**	SampType: **LCS**	TestCode: **SVOC-EPA16**	Units: **ng/g**	Prep Date: **9/25/2025**	RunNo: **217632**
Client ID: **BatchQC**	Batch ID: **87549**	TestNo: **E1633**	**E1633**	Analysis Date: **9/29/2025**	SeqNo: **5801942**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
PFHxA	9.94	0.197	9.843	0	101	65	140				
PFHxS	8.85	0.197	8.980	0	98.5	60	150				
PFMBA	19.1	0.394	19.69	0	96.9	60	150				
PFMPA	19.5	0.394	19.69	0	98.9	30	140				
PFNA	10.6	0.197	9.843	0	108	70	155				
PFNS	9.77	0.197	9.449	0	103	55	140				
PFOA	9.50	0.197	9.843	0	96.5	70	150				
PFOS	9.38	0.197	9.134	0	103	65	160				
PFOSA	9.39	0.197	9.843	0	95.4	70	140				
PFPeA	18.4	0.394	19.69	0	93.5	60	150				
PFPeS	9.57	0.197	9.252	0	103	55	160				
PFTeDA	9.10	0.197	9.843	0	92.5	65	150				
PFTrDA	8.77	0.197	9.843	0	89.1	65	150				
PFUnA	9.69	0.197	9.843	0	98.5	70	155				
Surr: 13C2-PFDA	2.06		2.461		83.7	50	200				
Surr: 13C2-PFHxA	3.94		4.921		80.1	50	200				
Surr: 13C3-PFBA	8.02		9.843		81.4	50	200				
Surr: 13C4-PFOA	4.17		4.921		84.7	50	200				
Surr: 13C4-PFOS	3.63		4.715		76.9	50	200				
Surr: 13C5-PFNA	2.16		2.461		87.8	50	200				
Surr: 18O2-PFHxS	3.66		4.665		78.4	50	200				

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected
PL	Permit Limit	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
W	Sample container temperature is out of limit as specified at testcode				

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QC SUMMARY REPORT

WO#: **25092029**
06-Oct-25

Client: ATG - SEATTLE LAB
Project:

BatchID: **R218039**

Sample ID: **MB-R218039**	SampType: **MBLK**	TestCode: **PctMoist_S(2**	Units: **%**	Prep Date:		RunNo: **218039**
Client ID: **BatchQC**	Batch ID: **R218039**	TestNo: **A2540B**		Analysis Date: **10/3/2025**		SeqNo: **5813234**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Percent Moisture	ND	0.100									

Sample ID: **25092341-001ADUP**	SampType: **DUP**	TestCode: **PctMoist_S(2**	Units: **%**	Prep Date:		RunNo: **218039**
Client ID: **BatchQC**	Batch ID: **R218039**	TestNo: **A2540B**		Analysis Date: **10/3/2025**		SeqNo: **5813254**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Percent Moisture	17.1	0.100						18.06	5.67	5	R

Sample ID: **25100357-001ADUP**	SampType: **DUP**	TestCode: **PctMoist_S(2**	Units: **%**	Prep Date:		RunNo: **218039**
Client ID: **BatchQC**	Batch ID: **R218039**	TestNo: **A2540B**		Analysis Date: **10/3/2025**		SeqNo: **5813255**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Percent Moisture	12.7	0.100						12.61	0.964	5	

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected
PL	Permit Limit	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
W	Sample container temperature is out of limit as specified at testcode				

Original

Alliance TECHNICAL GROUP

Alliance Technical Group - Akro
3310 Win S
Cuyahoga Falls, Ohio 4422
TEL: (330) 253-8211 FAX: (330) 253-448
Website: http://www.settek.co

Qualifiers and Acronyms

WO#: **25092029**
Date: **10/6/2025**

These commonly used Qualifiers and Acronyms may or may not be present in this report.

Qualifiers

U	The compound was analyzed for but was not detected above the MDL.
J	The reported value is greater than the Method Detection Limit but less than the Reporting Limit.
H	The hold time for sample preparation and/or analysis was exceeded. Not Clean Water Act compliant.
D	The result is reported from a dilution.
E	The result exceeded the linear range of the calibration or is estimated due to interference.
MC	The result is below the Minimum Compound Limit.
*	The result exceeds the Regulatory Limit or Maximum Contamination Limit.
m	Manual integration was used to determine the area response.
d	Manual integration in which peak was deleted
N	The result is presumptive based on a Mass Spectral library search assuming a 1:1 response.
P	The second column confirmation exceeded 25% difference.
C	The result has been confirmed by GC/MS.
X	The result was not confirmed when GC/MS Analysis was performed.
B	The analyte was detected in the Method Blank at a concentration greater than the RL.
MB+	The analyte was detected in the Method Blank at a concentration greater than the MDL.
G	The ICB or CCB contained reportable amounts of analyte.
QC-/+	The CCV recovery failed low (-) or high (+).
R/QDR	The RPD was outside of accepted recovery limits.
QL-/+	The LCS or LCSD recovery failed low (-) or high (+).
QLR	The LCS/LCSD RPD was outside of accepted recovery limits.
QM-/+	The MS or MSD recovery failed low (-) or high (+).
QMR	The MS/MSD RPD was outside of accepted recovery limits.
QV-/+	The ICV recovery failed low (-) or high (+).
S	The spike result was outside of accepted recovery limits.
W	Samples were received outside temperature limits (0° – 6° C). Not Clean Water Act compliant.
Z	Deviation; A deviation from the method was performed; Please refer to the Case Narrative for additional information

Acronyms

ND	Not Detected	**RL**	Reporting Limit
QC	Quality Control	**MDL**	Method Detection Limit
MB	Method Blank	**LOD**	Level of Detection
LCS	Laboratory Control Sample	**LOQ**	Level of Quantitation
LCSD	Laboratory Control Sample Duplicate	**PQL**	Practical Quantitation Limit
QCS	Quality Control Sample	**CRQL**	Contract Required Quantitation Limit
DUP	Duplicate	**PL**	Permit Limit
MS	Matrix Spike	**RegLvl**	Regulatory Limit
MSD	Matrix Spike Duplicate	**MCL**	Maximum Contamination Limit
RPD	Relative Percent Different	**MinCL**	Minimum Compound Limit
ICV	Initial Calibration Verification	**RA**	Reanalysis
ICB	Initial Calibration Blank	**RE**	Reextraction
CCV	Continuing Calibration Verification	**TIC**	Tentatively Identified Compound
CCB	Continuing Calibration Blank	**RT**	Retention Time
RLC	Reporting Limit Check	**CF**	Calibration Factor

This list of Qualifiers and Acronyms reflects the most commonly utilized Qualifiers and Acronyms for reporting. Please refer to the Analytical Notes in the Case Narrative for any Qualifiers or Acronyms that do not appear in this list or for additional information regarding the use of these Qualifiers on reported data.

Original

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Website: http://www.settek.com

DATES REPORT

WO#: **25092029**

06-Oct-25

Client: ATG - SEATTLE LAB
Project:

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
25092029-001A	2509511-001A	9/22/2025	Solid	Percent Moisture by SM2540Mod			10/3/2025 6:00:00 PM
				PFAS in Solid Samples (EPA Method		9/25/2025 1:35:00 PM	9/29/2025 6:39:00 PM
				PFAS in Solid Samples (EPA Method		9/25/2025 1:35:00 PM	9/30/2025 4:44:00 AM
25092029-002A	2509511-002A			Percent Moisture by SM2540Mod			10/3/2025 6:00:00 PM
				PFAS in Solid Samples (EPA Method		9/25/2025 1:35:00 PM	9/29/2025 6:54:00 PM
				PFAS in Solid Samples (EPA Method		9/25/2025 1:35:00 PM	9/30/2025 4:59:00 AM
25092029-003A	2509511-003A			Percent Moisture by SM2540Mod			10/3/2025 6:00:00 PM
				PFAS in Solid Samples (EPA Method		9/25/2025 1:35:00 PM	9/29/2025 7:09:00 PM
				PFAS in Solid Samples (EPA Method		9/25/2025 1:35:00 PM	9/30/2025 5:13:00 AM
25092029-004A	2509511-004A			Percent Moisture by SM2540Mod			10/3/2025 6:00:00 PM
				PFAS in Solid Samples (EPA Method		9/25/2025 1:35:00 PM	9/30/2025 5:28:00 AM
				PFAS in Solid Samples (EPA Method		9/25/2025 1:35:00 PM	9/29/2025 7:23:00 PM
25092029-005A	2509511-005A			Percent Moisture by SM2540Mod			10/3/2025 6:00:00 PM
				PFAS in Solid Samples (EPA Method		9/25/2025 1:35:00 PM	9/29/2025 7:38:00 PM
				PFAS in Solid Samples (EPA Method		9/25/2025 1:35:00 PM	9/30/2025 5:43:00 AM
25092029-006A	2509511-006A			Percent Moisture by SM2540Mod			10/3/2025 6:00:00 PM
				PFAS in Solid Samples (EPA Method		9/25/2025 1:35:00 PM	9/29/2025 7:53:00 PM
				PFAS in Solid Samples (EPA Method		9/25/2025 1:35:00 PM	9/30/2025 5:57:00 AM
25092029-007A	2509511-007A			Percent Moisture by SM2540Mod			10/3/2025 6:00:00 PM
				PFAS in Solid Samples (EPA Method		9/25/2025 1:35:00 PM	9/30/2025 6:12:00 AM
				PFAS in Solid Samples (EPA Method		9/25/2025 1:35:00 PM	9/29/2025 8:07:00 PM

Original

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Website: http://www.settek.com

Accreditation Program Analytes Report

WO#: 25092029
06-Oct-25

Client: ATG - SEATTLE LAB
Project:

State: WA
Program: WA_DW_NPW_SCM_NELAP

Test Name	Matrix	Analyte	Status
Percent Moisture by SM2540Mod	Solid	Percent Moisture	N
PFAS in Solid Samples (EPA Method 1633)	Solid	11Cl-PF3OUdS	A
PFAS in Solid Samples (EPA Method 1633)	Solid	3:3 FTCA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	4:2 FTS	A
PFAS in Solid Samples (EPA Method 1633)	Solid	5:3 FTCA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	6:2 FTS	A
PFAS in Solid Samples (EPA Method 1633)	Solid	7:3 FTCA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	8:2 FTS	A
PFAS in Solid Samples (EPA Method 1633)	Solid	9CL-PF3ONS	A
PFAS in Solid Samples (EPA Method 1633)	Solid	ADONA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	HFPO-DA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	NEtFOSA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	NEtFOSAA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	NEtFOSE	A
PFAS in Solid Samples (EPA Method 1633)	Solid	NFDHA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	NMeFOSA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	NMeFOSAA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	NMeFOSE	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFBA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFBS	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFDA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFDoA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFDoS	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFDS	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFEESA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFHpA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFHpS	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFHxA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFMBA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFMPA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFNA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFNS	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFOA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFOS	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFOSA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFPeA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFPeS	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFTeDA	A

Accreditation (Acc.) Status Key	
A: Accredited	N: Not Accredited
P: Provisional	U: Unavailable

Alliance Technical Group - Akron
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TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

Accreditation Program Analytes Report

WO#: **25092029**

06-Oct-25

Client: ATG - SEATTLE LAB

State: WA

Project:

Program: WA_DW_NPW_SCM_NELAP

Test Name	Matrix	Analyte	Status
PFAS in Solid Samples (EPA Method 1633)	Solid	PFTrDA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFUnA	A

Accreditation (Acc.) Status Key	
A: Accredited	N: Not Accredited
P: Provisional	U: Unavailable

Alliance TECHNICAL GROUP

CHAIN OF CUSTODY RECORD

Omega COCID 2482

PAGE: 1 OF: 1

ADDRESS
Alliance Technical Group, LLC - Seattle
3600 Fremont Ave N
Seattle, WA 98103
TEL: 206-352-3790
FAX: 206-352-7178
Website: www.fremontanalytical.com

2509 2029

SUB CONTRATOR **Alliance Akron** COMPANY **Alliance Akron**

ADDRESS **3310 Win St, Cuyahoga Falls**

CITY, STATE, ZIP **Cuyahoga Falls, OH 44223**

PHONE **(330) 253-8211** FAX EMAIL

ACCOUNT #

SPECIAL INSTRUCTIONS / COMMENTS:

Standard TAT. Please email results to SEA.PM@alliancetg.com and invoices to both SEA.PM@alliancetg.com and ap@alliancetg.com.

ITEM #	SAMPLE ID	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	DATE COLLECTED	NUMBER OF CONTAINERS	COMMENTS Methanol Preserved Weights HOT Sample Notation, Additional Sample Description
1	2509511-001A SUB-PFAS-S-1633	PFAS 01-08	125 ML POLY U	Soil	9/22/2025	1	
2	2509511-002A SUB-PFAS-S-1633	PFAS 02-04	125 ML POLY U	Soil	9/22/2025	1	
3	2509511-003A SUB-PFAS-S-1633	PFAS 03-08	125 ML POLY U	Soil	9/22/2025	1	
4	2509511-004A SUB-PFAS-S-1633	PFAS 04-12	125 ML POLY U	Soil	9/22/2025	1	
5	2509511-005A SUB-PFAS-S-1633	PFAS 05-10	125 ML POLY U	Soil	9/22/2025	1	
6	2509511-006A SUB-PFAS-S-1633	PFAS 06-01	125 ML POLY U	Soil	9/22/2025	1	
7	2509511-007A SUB-PFAS-S-1633	PFAS 07-01	125 ML POLY U	Soil	9/22/2025	1	

Relinquished By	Date	Time	Received By	Date	Time
Sam Jacklianthorne	9/23/25	1652		9/25/25	1030
Relinquished By	Date	Time	Received By	Date	Time
Relinquished By	Date	Time	Received By	Date	Time

TAT: Standard RUSH Next BD 2nd BD 3rd BD

Note: RUSH requests will incur surcharges!

REPORT TRANSMITTAL DESIRED

HARDCOPY (extra cost) FAX EMAIL ONLINE

FOR LAB USE ONLY

Temp of samples 5.7+0.2= 5.9 °C Attempt to Cool ?

Comments UPS COOLER/ICE

Alliance TECHNICAL GROUP

Alliance Technical Group - Akron
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

Sample Log-In Check List

Client Name: **FRE-WA-98103** Work Order Number: **25092029** RcptNo: 1

Logged by:	**Christina N. Gemma**	**9/25/2025 10:30:00 AM**
Completed By:	**Maggie M. Grmek**	**9/25/2025 1:21:40 PM**
Reviewed By:	**Brian J. Fackelman**	**9/29/2025 1:11:35 PM**

C. Gemma

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? UPS

Log In

3. Coolers are present? Yes ☑ No ☐ NA ☐
4. Shipping container/cooler in good condition? Yes ☑ No ☐
   Custody seals intact on shipping container/cooler? Yes ☐ No ☐ Not Present ☑ NA ☐
   No. Seal Date: Signed By:
5. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
6. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
7. Sample(s) in proper container(s)? Yes ☑ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
9. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
10. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
11. Is the headspace in the VOA vials less than 1/4 inch or 6 mm? Yes ☐ No ☐ No VOA Vials ☑
12. Were any sample containers received broken? Yes ☐ No ☑
13. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☑ No ☐
14. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
15. Is it clear what analyses were requested? Yes ☑ No ☐
16. Were all holding times able to be met? (If no, notify customer for authorization.) Yes ☑ No ☐

Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

18. Additional remarks:

Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	5.9	Good	Not Present			

Aerotech Environmental Consulting, Inc.
17837 First Avenue South, Suite No. 576
Normandy Park, Washington 98148
(360) 710-5899 / Alan@DirtyDirt. Us

TO: Mr. Tim Mullin, LHG
State of Washington Department of Ecology
Post Office Box 47775
Olympia, Washington 98504
(360) 999-9589 / tim.mullin@ecy.wa.gov

January 9, 2026

RE: **Pioneer Museum Property**
2301 - 23rd Avenue Southeast
Puyallup, Washington 98373
VCP Project No.: SW1846

Final Subsurface Soils
Investigation Submittal
Completed Soils Characterization for
Sunset Pointe Development
HORSE BARN

Rear Mr. Mullin;

Attached are Phase 2 Subsurface Investigations for the aforementioned *Pioneer Museum* Property. To facilitate your evaluation, the subject Property has been addressed as three areas based upon the anticipated types of Contaminants of Concern; (1) the *Former Museum Building* located in the southwestern corner of the subject Property; (2) the *Drum Storage Area* located adjoining the north side of the Museum Building; and (3) the *Horse Barn* adjoining the southern Property boundary east of the Museum Building.

Your *Opinion Letter* dated January 10, 2025, identified the following concerns that required additional investigation;

> **Footprint of the burned horse-barn.** "Former horse barn....Gasoline, ethylbenzene, total xylenes, cPAHs, metals, and pesticides were identified in the limited shallow soil samples collected. Aqueous non-film forming firefighting form (AFFF) may have been used to extinguish the fire, indicating a potential for per- and poly- fluoroalkyl substance (PFAS) to be present at the Site. (Opinion Letter dated January 10, 2025, p.4)."
>
> "To provide data to determine if any additional cleanup is needed with [sic] the footprint of the burned horse barn, Ecology recommends sampling shallow soils for dioxin / furans and PFAS at an interval of one location every 400 square feet. This would be about three soil samples within the former barn footprint [emphasis added]. " (Ibid., p.5)

The Horse Barn is located adjoining the southern Parcel boundary adjoining the east side of the former entrance to the *Pioneer Museum,* orientated east to west The Building was previously demolished; however the poured concrete foundation remains along with the concrete pad used for outside grooming and saddling. The Building foundation is 105 feet (east to west) by 50 feet (north to south) and the northern adjoining concrete pad is 40 feet (east to west) by 20 feet (north to south).

On September 22, 2025, Aerotech personnel collected three (3) subsurface soil samples to depths of specifically for PFAS / PFOS from three (3) to nine (9) below ground surface ("bgs").

Boring location **#PFAS 01** was located in the center of the Horse Barn nineteen (19) feet west of the eastern wall of the foundation in the center. At this location the subsurface was native brown clay to three (3) feet below ground surface ("bgs"), changing to brown sand intermingled with small to medium size rocks were intermingled to the termination depth of eighteen (18) below ground surface. The soil samples was collected at four (4) feet bgs.

Boring location **#PFAS 02** was located in the front entrance area of the barn, located thirty (30) feet east of the western wall (and front door), two feet south of the foundation. From the surface to two (2) feet bgs was light brown sand followed by yellow-orange clay to nine (9) feet bgs changing to gravelly grey clay. The soil sample was collected at a nine (9) feet bgs.

Boring location **#PFAS 03** was located sixteen (16) feet east of the western wall and three (3) feet south of the northern wall. At this location, brown clay to five (5) feet bgs was followed by gravelly grey clay to the boring termination at eighteen (18) feet bgs. The soil sample are collected at five (5) feet bgs.

PFAS / PFOS by EPA Method 1633 Analytical Results

Soil Sample #01 results were all below the PFOS Laboratory Limits of Detection
Soil Sample #02 results were all below the PFOS Laboratory Limits of Detection
Soil Sample #03 contained PFOS of 0.543 ng/g - dry

HORSE BARN SOIL SAMPLING
(August 04, 2025)

Total Metals:

Arsenic	2.88 mg/Kg
Lead	3.31 mg/Kg

Gasoline by NWTHP-Gx:
Gasoline range organics
All samples below Laboratory RL

Volatile Organic Compounds by EPA 8260D
All samples below Laboratory RL

Organochlorine Pesticides by EPA 8081B

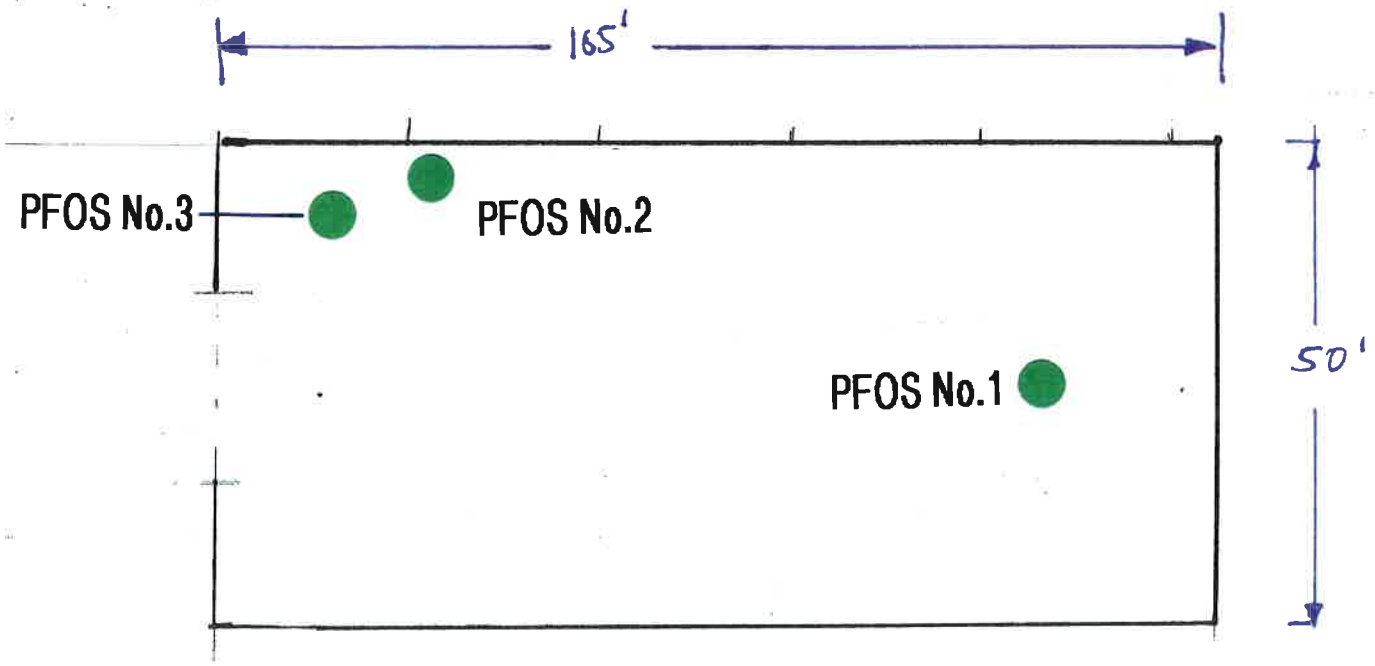
Methoxychor	0.0367 mg/Kg
Remaining twenty (20) pesticides	All samples below Laboratory RL

Thank you for your assistance in this matter. If I can answer any additional questions or be of further assistance, please do not hesitate to contact me at (360) 710-5899 or Alan@DirtyDirt.us.

Best Regards,

Alan T. Blotch

Horse Barn
(105' by 50')

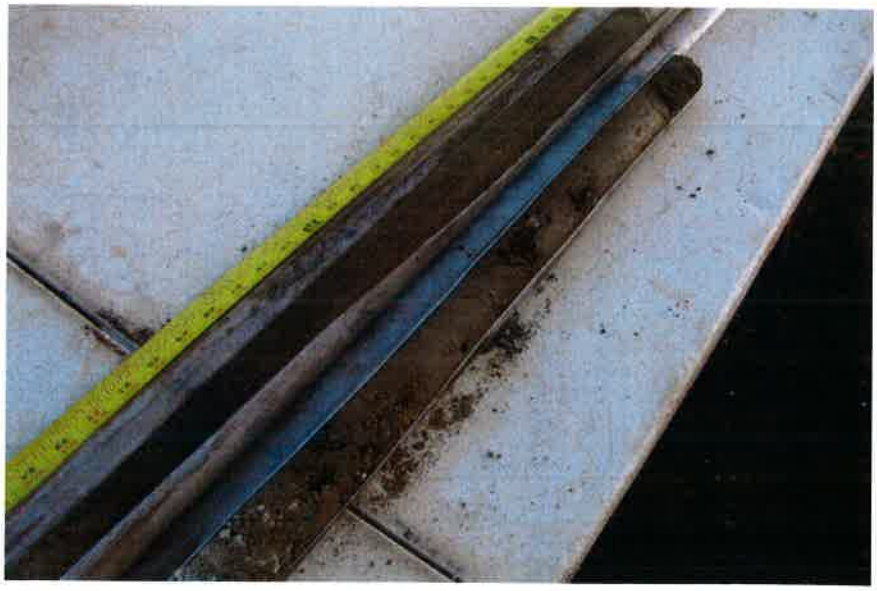


Boring Location No.1
Inside former Horse Barn
Puyallup, Washington

96 feet east of western barn wall

Typical vegetation (weed) density

Sample acquisition



Boring Location No.2
Inside Horse Barn
foundation

East of western wall four feet south of northern foundation wall

Adjoining northern foundation

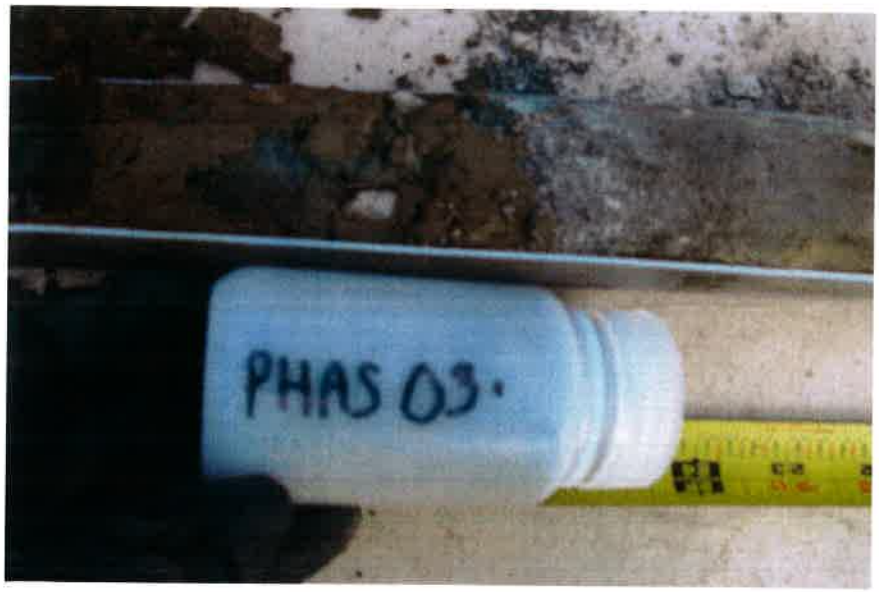
PFAS soil sample

Boring Location No.3
Inside former Horse Barn
Foundation

In former barn hallway directly adjoining stable entrance door

Adjoining interior wall

PFAS Sample 03



Alliance
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3600 Fremont Ave N
Seattle, WA 98103
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info@fremontanalytical.com

Aerotech Environmental Consulting
Alan Blotch
17837 1st Ave S #556
Normandy Park, WA 98148

RE: Sunset, Horse Barn
Work Order Number: 2509166

September 24, 2025

Attention Alan Blotch:

Alliance Technical Group, LLC - Seattle received 11 sample(s) on 9/8/2025 for the analyses presented in the following report.

Gasoline by NWTPH-Gx
Organochlorine Pesticides by EPA 8081B
Sample Moisture (Percent Moisture)
Total Metals by EPA 6020B
Volatile Organic Compounds by EPA 8260D

All analyses were performed according to our accredited Quality Assurance program. Please contact the laboratory if you should have any questions about the results.

Alliance Technical Group is committed to accuracy, speed, and customer service. Thank you for choosing Alliance Technical Group's Seattle laboratory team for your analytical needs. We appreciate this opportunity to serve you!

Sincerely,

Kelley Lovejoy
Project Manager

CC:
Hudson Gerkin

DoD-ELAP Accreditation #79636 by PJLA, ISO/IEC 17025:2017 and QSM 5.4 for Environmental Testing
ORELAP Certification: WA 100009 (NELAP Recognized) for Environmental Testing
Washington State Department of Ecology Accredited for Environmental Testing, Lab ID C910

Original

Alliance TECHNICAL GROUP

Date: *09/24/2025*

CLIENT: Aerotech Environmental Consulting
Project: Sunset
Work Order: 2509166

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2509166-001	CB01-01	08/04/2025 12:00 AM	09/08/2025 2:21 PM
2509166-002	CB01-02	08/04/2025 12:00 AM	09/08/2025 2:21 PM
2509166-003	CB01-03	08/04/2025 12:00 AM	09/08/2025 2:21 PM
2509166-004	CB01-04	08/04/2025 12:00 AM	09/08/2025 2:21 PM
2509166-005	CB01-05	08/04/2025 12:00 AM	09/08/2025 2:21 PM
2509166-006	CB01-06	08/04/2025 12:00 AM	09/08/2025 2:21 PM
2509166-007	B02-07	08/04/2025 12:00 AM	09/08/2025 2:21 PM
2509166-008	B02-08	08/04/2025 12:00 AM	09/08/2025 2:21 PM
2509166-009	B02-09	08/04/2025 12:00 AM	09/08/2025 2:21 PM
2509166-010	B03-10	08/04/2025 12:00 AM	09/08/2025 2:21 PM
2509166-011	B03-11	08/04/2025 12:00 AM	09/08/2025 2:21 PM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

Alliance TECHNICAL GROUP

Case Narrative

WO#: **2509166**
Date: **9/24/2025**

CLIENT: Aerotech Environmental Consulting
Project: Sunset

I. SAMPLE RECEIPT:
Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:
Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:
Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Qualifiers:

* - Flagged value is not within established control limits
B - Analyte detected in the associated Method Blank
D - Dilution was required
E - Value above quantitation range
H - Holding times for preparation or analysis exceeded
I - Analyte with an internal standard that does not meet established acceptance criteria
J - Analyte detected below Reporting Limit
N - Tentatively Identified Compound (TIC)
Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria
S - Spike recovery outside accepted recovery limits
ND - Not detected at the Reporting Limit
R - High relative percent difference observed

Acronyms:

%Rec - Percent Recovery
CCB - Continued Calibration Blank
CCV - Continued Calibration Verification
DF - Dilution Factor
DUP - Sample Duplicate
HEM - Hexane Extractable Material
ICV - Initial Calibration Verification
LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
MCL - Maximum Contaminant Level
MB or MBLANK - Method Blank
MDL - Method Detection Limit
MS/MSD - Matrix Spike / Matrix Spike Duplicate
PDS - Post Digestion Spike
Ref Val - Reference Value
REP - Sample Replicate
RL - Reporting Limit
RPD - Relative Percent Difference
SD - Serial Dilution
SGT - Silica Gel Treatment
SPK - Spike
Surr - Surrogate

CLIENT: Aerotech Environmental Consulting
Project: Sunset

Lab ID: 2509166-002 **Collection Date:** 8/4/2025
Client Sample ID: CB01-02 **Matrix:** Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA 6020B				Batch ID: 49251		Analyst: ME
Arsenic	2.88	0.209		mg/Kg-dry	1	9/19/2025 5:18:00 PM
Lead	3.21	0.209		mg/Kg-dry	1	9/19/2025 5:18:00 PM
Sample Moisture (Percent Moisture)				Batch ID: R10301		Analyst: MF
Percent Moisture	6.55	0.500		wt%	1	9/17/2025 9:45:27 AM

Lab ID: 2509166-003 **Collection Date:** 8/4/2025
Client Sample ID: CB01-03 **Matrix:** Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Gasoline by NWTPH-Gx				Batch ID: 49271		Analyst: RG
Gasoline Range Organics	ND	4.68	H	mg/Kg-dry	1	9/17/2025 6:01:18 PM
Surr: Toluene-d8	97.3	65 - 135	H	%Rec	1	9/17/2025 6:01:18 PM
Surr: 4-Bromofluorobenzene	95.4	65 - 135	H	%Rec	1	9/17/2025 6:01:18 PM
Volatile Organic Compounds by EPA 8260D				Batch ID: 49271		Analyst: RG
Benzene	ND	0.0112	H	mg/Kg-dry	1	9/17/2025 6:01:18 PM
Toluene	ND	0.0234	H	mg/Kg-dry	1	9/17/2025 6:01:18 PM
Ethylbenzene	ND	0.0234	H	mg/Kg-dry	1	9/17/2025 6:01:18 PM
m,p-Xylene	ND	0.0468	H	mg/Kg-dry	1	9/17/2025 6:01:18 PM
o-Xylene	ND	0.0234	H	mg/Kg-dry	1	9/17/2025 6:01:18 PM
Surr: Dibromofluoromethane	92.8	74.8 - 121	H	%Rec	1	9/17/2025 6:01:18 PM
Surr: Toluene-d8	100	79.6 - 120	H	%Rec	1	9/17/2025 6:01:18 PM
Surr: 1-Bromo-4-fluorobenzene	104	53 - 139	H	%Rec	1	9/17/2025 6:01:18 PM
Sample Moisture (Percent Moisture)				Batch ID: R10301		Analyst: MF
Percent Moisture	2.83	0.500		wt%	1	9/17/2025 9:45:27 AM

CLIENT: Aerotech Environmental Consulting
Project: Sunset

Lab ID: 2509166-010 **Collection Date:** 8/4/2025
Client Sample ID: B03-10 **Matrix:** Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Organochlorine Pesticides by EPA 8081B				Batch ID: 49268		Analyst: CO
Toxaphene	ND	0.106	H	mg/Kg-dry	1	9/18/2025 4:25:21 PM
Alpha BHC	ND	0.0106	H	mg/Kg-dry	1	9/18/2025 4:25:21 PM
Beta BHC	ND	0.0106	H	mg/Kg-dry	1	9/18/2025 4:25:21 PM
Gamma BHC (Lindane)	ND	0.0106	H	mg/Kg-dry	1	9/18/2025 4:25:21 PM
Delta BHC	ND	0.0106	H	mg/Kg-dry	1	9/18/2025 4:25:21 PM
Heptachlor	ND	0.0106	H	mg/Kg-dry	1	9/18/2025 4:25:21 PM
Aldrin	ND	0.0106	H	mg/Kg-dry	1	9/18/2025 4:25:21 PM
Heptachlor epoxide	ND	0.0106	H	mg/Kg-dry	1	9/18/2025 4:25:21 PM
gamma-Chlordane	ND	0.0106	H	mg/Kg-dry	1	9/18/2025 4:25:21 PM
Endosulfan I	ND	0.0106	H	mg/Kg-dry	1	9/18/2025 4:25:21 PM
alpha-Chlordane	ND	0.0106	H	mg/Kg-dry	1	9/18/2025 4:25:21 PM
Dieldrin	ND	0.0106	H	mg/Kg-dry	1	9/18/2025 4:25:21 PM
4,4'-DDE	ND	0.0106	H	mg/Kg-dry	1	9/18/2025 4:25:21 PM
Endrin	ND	0.0106	H	mg/Kg-dry	1	9/18/2025 4:25:21 PM
Endosulfan II	ND	0.0106	H	mg/Kg-dry	1	9/18/2025 4:25:21 PM
4,4'-DDD	ND	0.0106	H	mg/Kg-dry	1	9/18/2025 4:25:21 PM
Endrin aldehyde	ND	0.0106	H	mg/Kg-dry	1	9/18/2025 4:25:21 PM
Endosulfan sulfate	ND	0.0106	H	mg/Kg-dry	1	9/18/2025 4:25:21 PM
4,4'-DDT	ND	0.0106	H	mg/Kg-dry	1	9/18/2025 4:25:21 PM
Endrin ketone	ND	0.0106	H	mg/Kg-dry	1	9/18/2025 4:25:21 PM
Methoxychlor	0.0367	0.0106	H	mg/Kg-dry	1	9/18/2025 4:25:21 PM
Surr: Decachlorobiphenyl	120	42.9 - 200	H	%Rec	1	9/18/2025 4:25:21 PM
Surr: Tetrachloro-m-xylene	129	52.7 - 150	H	%Rec	1	9/18/2025 4:25:21 PM
Sample Moisture (Percent Moisture)				Batch ID: R10301		Analyst: MF
Percent Moisture	5.88	0.500		wt%	1	9/17/2025 9:45:27 AM

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Date: *9/24/2025*

Work Order: 2509166
CLIENT: Aerotech Environmental Consulting
Project: Sunset

QC SUMMARY REPORT

Total Metals by EPA 6020B

Sample ID: MB-49251	SampType: MBLK			Units: mg/Kg		Prep Date: 9/16/2025			RunNo: 103115		
Client ID: MBLKS	Batch ID: 49251					Analysis Date: 9/19/2025			SeqNo: 2151319		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.200									
Lead	ND	0.200									

Sample ID: LCS-49251	SampType: LCS			Units: mg/Kg		Prep Date: 9/16/2025			RunNo: 103115		
Client ID: LCSS	Batch ID: 49251					Analysis Date: 9/19/2025			SeqNo: 2151320		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	41.4	0.200	40.00	0	103	80	120				
Lead	21.4	0.200	20.00	0	107	80	120				

Sample ID: 2509287-001AMS	SampType: MS			Units: mg/Kg-dry		Prep Date: 9/16/2025			RunNo: 103115		
Client ID: BATCH	Batch ID: 49251					Analysis Date: 9/19/2025			SeqNo: 2151324		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	49.1	0.247	49.31	0.2118	99.2	75	125				
Lead	35.9	0.247	24.66	11.71	98.0	75	125				

Sample ID: 2509287-001AMSD	SampType: MSD			Units: mg/Kg-dry		Prep Date: 9/16/2025			RunNo: 103115		
Client ID: BATCH	Batch ID: 49251					Analysis Date: 9/19/2025			SeqNo: 2151326		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	47.0	0.237	47.39	0.2118	98.7	75	125	49.12	4.46	20	
Lead	34.0	0.237	23.69	11.71	94.1	75	125	35.86	5.28	20	

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Date: *9/24/2025*

Work Order: 2509166
CLIENT: Aerotech Environmental Consulting
Project: Sunset

QC SUMMARY REPORT

Organochlorine Pesticides by EPA 8081B

Sample ID: **LCS-49268**	SampType: **LCS**			Units: **mg/Kg**		Prep Date: **9/17/2025**		RunNo: **103211**		
Client ID: **LCSS**	Batch ID: **49268**					Analysis Date: **9/17/2025**		SeqNo: **2153074**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alpha BHC	0.218	0.0100	0.2000	0	109	62.4	134				
Beta BHC	0.216	0.0100	0.2000	0	108	63.9	138				
Gamma BHC (Lindane)	0.222	0.0100	0.2000	0	111	61.4	135				
Delta BHC	0.207	0.0100	0.2000	0	103	59	134				
Heptachlor	0.231	0.0100	0.2000	0	115	61.8	145				
Aldrin	0.231	0.0100	0.2000	0	116	59	141				
Heptachlor epoxide	0.232	0.0100	0.2000	0	116	59.1	144				
gamma-Chlordane	0.231	0.0100	0.2000	0	116	59.2	142				
Endosulfan I	0.240	0.0100	0.2000	0	120	59.9	146				
alpha-Chlordane	0.226	0.0100	0.2000	0	113	59.1	143				
Dieldrin	0.225	0.0100	0.2000	0	113	60.8	144				
4,4´-DDE	0.208	0.0100	0.2000	0	104	59.2	141				
Endrin	0.228	0.0100	0.2000	0	114	63.8	150				
Endosulfan II	0.225	0.0100	0.2000	0	113	60.8	143				
4,4´-DDD	0.212	0.0100	0.2000	0	106	57.3	145				
Endrin aldehyde	0.206	0.0100	0.2000	0	103	68.6	146				
Endosulfan sulfate	0.231	0.0100	0.2000	0	116	59.2	146				
4,4´-DDT	0.211	0.0100	0.2000	0	105	59.3	147				
Endrin ketone	0.238	0.0100	0.2000	0	119	61.4	145				
Methoxychlor	0.243	0.0100	0.2000	0	122	63.9	155				
Surr: Decachlorobiphenyl	0.255		0.2000		127	42.9	200				
Surr: Tetrachloro-m-xylene	0.204		0.2000		102	52.7	150				

Sample ID: **2509166-010AMS**	SampType: **MS**			Units: **mg/Kg-dry**		Prep Date: **9/17/2025**		RunNo: **103211**		
Client ID: **B03-10**	Batch ID: **49268**					Analysis Date: **9/17/2025**		SeqNo: **2153075**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alpha BHC	0.247	0.0106	0.2112	0	117	69.1	149				H
Beta BHC	0.262	0.0106	0.2112	0	124	80.1	146				H
Gamma BHC (Lindane)	0.250	0.0106	0.2112	0	118	69	150				H
Delta BHC	0.254	0.0106	0.2112	0	120	73.1	150				H

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Date: 9/24/2025

Work Order: 2509166
CLIENT: Aerotech Environmental Consulting
Project: Sunset

QC SUMMARY REPORT

Organochlorine Pesticides by EPA 8081B

Sample ID: 2509166-010AMS	SampType: MS			Units: mg/Kg-dry	Prep Date: 9/17/2025			RunNo: 103211		
Client ID: B03-10	Batch ID: 49268				Analysis Date: 9/17/2025			SeqNo: 2153075		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Heptachlor	0.261	0.0106	0.2112	0	123	69.2	157				H
Aldrin	0.260	0.0106	0.2112	0	123	66.7	152				H
Heptachlor epoxide	0.270	0.0106	0.2112	0	128	69.7	153				H
gamma-Chlordane	0.260	0.0106	0.2112	0	123	66.2	149				H
Endosulfan I	0.273	0.0106	0.2112	0	129	65.3	154				H
alpha-Chlordane	0.259	0.0106	0.2112	0	123	69.3	151				H
Dieldrin	0.265	0.0106	0.2112	0	126	70.9	153				H
4,4'-DDE	0.257	0.0106	0.2112	0	122	68.4	146				H
Endrin	0.273	0.0106	0.2112	0	129	71.5	160				H
Endosulfan II	0.284	0.0106	0.2112	0	135	56.2	160				H
4,4'-DDD	0.261	0.0106	0.2112	0	124	71.5	153				H
Endrin aldehyde	0.256	0.0106	0.2112	0	121	71.2	147				H
Endosulfan sulfate	0.288	0.0106	0.2112	0	136	48.7	160				H
4,4'-DDT	0.263	0.0106	0.2112	0	124	57.2	160				H
Endrin ketone	0.300	0.0106	0.2112	0	142	71.5	160				H
Methoxychlor	0.342	0.0106	0.2112	0.03674	144	66.7	160				H
Surr: Decachlorobiphenyl	0.304		0.2112		144	42.9	200				H
Surr: Tetrachloro-m-xylene	0.237		0.2112		112	52.7	150				H

Sample ID: 2509166-010AMSD	SampType: MSD			Units: mg/Kg-dry	Prep Date: 9/17/2025			RunNo: 103211		
Client ID: B03-10	Batch ID: 49268				Analysis Date: 9/17/2025			SeqNo: 2153076		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alpha BHC	0.253	0.0106	0.2119	0	119	69.1	149	0.2474	2.31	30	H
Beta BHC	0.279	0.0106	0.2119	0	132	80.1	146	0.2623	6.25	30	H
Gamma BHC (Lindane)	0.261	0.0106	0.2119	0	123	69	150	0.2497	4.44	30	H
Delta BHC	0.271	0.0106	0.2119	0	128	73.1	150	0.2538	6.44	30	H
Heptachlor	0.270	0.0106	0.2119	0	127	69.2	157	0.2606	3.47	30	H
Aldrin	0.272	0.0106	0.2119	0	128	66.7	152	0.2602	4.31	30	H
Heptachlor epoxide	0.285	0.0106	0.2119	0	134	69.7	153	0.2698	5.32	30	H
gamma-Chlordane	0.273	0.0106	0.2119	0	129	66.2	149	0.2598	5.07	30	H

Work Order: 2509166
CLIENT: Aerotech Environmental Consulting
Project: Sunset

QC SUMMARY REPORT

Organochlorine Pesticides by EPA 8081B

Sample ID: 2509166-010AMSD	SampType: MSD			Units: mg/Kg-dry		Prep Date: 9/17/2025		RunNo: 103211			
Client ID: B03-10	Batch ID: 49268					Analysis Date: 9/17/2025		SeqNo: 2153076			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Endosulfan I	0.287	0.0106	0.2119	0	135	65.3	154	0.2732	4.92	30	H
alpha-Chlordane	0.275	0.0106	0.2119	0	130	69.3	151	0.2588	5.99	30	H
Dieldrin	0.282	0.0106	0.2119	0	133	70.9	153	0.2654	6.17	30	H
4,4'-DDE	0.278	0.0106	0.2119	0	131	68.4	146	0.2575	7.64	30	H
Endrin	0.289	0.0106	0.2119	0	137	71.5	160	0.2732	5.75	30	H
Endosulfan II	0.302	0.0106	0.2119	0	143	56.2	160	0.2845	5.95	30	H
4,4'-DDD	0.280	0.0106	0.2119	0	132	71.5	153	0.2614	6.69	30	H
Endrin aldehyde	0.269	0.0106	0.2119	0	127	71.2	147	0.2558	5.01	30	H
Endosulfan sulfate	0.305	0.0106	0.2119	0	144	48.7	160	0.2877	5.76	30	H
4,4'-DDT	0.277	0.0106	0.2119	0	131	57.2	160	0.2626	5.27	30	H
Endrin ketone	0.313	0.0106	0.2119	0	148	71.5	160	0.3000	4.36	30	H
Methoxychlor	0.347	0.0106	0.2119	0.03674	146	66.7	160	0.3416	1.50	30	H
Surr: Decachlorobiphenyl	0.304		0.2119		143	42.9	200		0		H
Surr: Tetrachloro-m-xylene	0.236		0.2119		111	52.7	150		0		H

Sample ID: LCS2-49268	SampType: LCS			Units: mg/Kg		Prep Date: 9/17/2025		RunNo: 103211			
Client ID: LCSS	Batch ID: 49268					Analysis Date: 9/17/2025		SeqNo: 2153077			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Toxaphene	0.819	0.100	1.000	0	81.9	39	160				
Surr: Decachlorobiphenyl	0.247		0.2000		124	42.9	200				
Surr: Tetrachloro-m-xylene	0.202		0.2000		101	52.7	150				

Sample ID: LCS3-49268	SampType: LCS			Units: mg/Kg		Prep Date: 9/17/2025		RunNo: 103211			
Client ID: LCSS	Batch ID: 49268					Analysis Date: 9/17/2025		SeqNo: 2153090			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chlordane, Total (Technical)	1.32	0.100	1.000	0	132	55.9	160				
Surr: Decachlorobiphenyl	0.253		0.2000		126	42.9	200				
Surr: Tetrachloro-m-xylene	0.220		0.2000		110	52.7	150				

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Date: *9/24/2025*

Work Order: 2509166
CLIENT: Aerotech Environmental Consulting
Project: Sunset

QC SUMMARY REPORT

Organochlorine Pesticides by EPA 8081B

Sample ID: **MB-49268**	SampType: **MBLK**			Units: **mg/Kg**	Prep Date: **9/17/2025**		RunNo: **103211**		
Client ID: **MBLKS**	Batch ID: **49268**				Analysis Date: **9/18/2025**		SeqNo: **2153092**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Toxaphene	ND	0.100									
Alpha BHC	ND	0.0100									
Beta BHC	ND	0.0100									
Gamma BHC (Lindane)	ND	0.0100									
Delta BHC	ND	0.0100									
Heptachlor	ND	0.0100									
Aldrin	ND	0.0100									
Heptachlor epoxide	ND	0.0100									
gamma-Chlordane	ND	0.0100									
Endosulfan I	ND	0.0100									
alpha-Chlordane	ND	0.0100									
Dieldrin	ND	0.0100									
4,4'-DDE	ND	0.0100									
Endrin	ND	0.0100									
Endosulfan II	ND	0.0100									
4,4'-DDD	ND	0.0100									
Endrin aldehyde	ND	0.0100									
Endosulfan sulfate	ND	0.0100									
4,4'-DDT	ND	0.0100									
Endrin ketone	ND	0.0100									
Methoxychlor	ND	0.0100									
Chlordane, Total (Technical)	ND	0.100									
Surr: Decachlorobiphenyl	0.277		0.2000		138	42.9	200				
Surr: Tetrachloro-m-xylene	0.242		0.2000		121	52.7	150				

Alliance TECHNICAL GROUP

Date: *9/24/2025*

Work Order: 2509166
CLIENT: Aerotech Environmental Consulting
Project: Sunset

QC SUMMARY REPORT

Gasoline by NWTPH-Gx

Sample ID: LCS-49271	SampType: LCS			Units: mg/Kg		Prep Date: 9/17/2025		RunNo: 103208		
Client ID: LCSS	Batch ID: 49271					Analysis Date: 9/17/2025		SeqNo: 2153043		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics	22.5	5.00	25.00	0	89.8	65	135				
Surr: Toluene-d8	1.21		1.250		96.7	65	135				
Surr: 4-Bromofluorobenzene	1.21		1.250		96.5	65	135				

Sample ID: MB-49271	SampType: MBLK			Units: mg/Kg		Prep Date: 9/17/2025		RunNo: 103208		
Client ID: MBLKS	Batch ID: 49271					Analysis Date: 9/17/2025		SeqNo: 2153039		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics	ND	5.00									
Surr: Toluene-d8	1.26		1.250		101	65	135				
Surr: 4-Bromofluorobenzene	1.14		1.250		91.3	65	135				

Sample ID: 2509166-003BDUP	SampType: DUP			Units: mg/Kg-dry		Prep Date: 9/17/2025		RunNo: 103208		
Client ID: CB01-03	Batch ID: 49271					Analysis Date: 9/17/2025		SeqNo: 2153041		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics	ND	4.68						0		30	H
Surr: Toluene-d8	1.14		1.169		97.6	65	135		0		H
Surr: 4-Bromofluorobenzene	1.10		1.169		93.9	65	135		0		H

Alliance TECHNICAL GROUP

Date: *9/24/2025*

Work Order: 2509166
CLIENT: Aerotech Environmental Consulting
Project: Sunset

QC SUMMARY REPORT

Volatile Organic Compounds by EPA 8260D

Sample ID: LCS-49271	SampType: LCS			Units: µg/L		Prep Date: 9/17/2025		RunNo: 103096		
Client ID: LCSS	Batch ID: 49271					Analysis Date: 9/17/2025		SeqNo: 2150835		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	0.935	0.0120	1.000	0	93.5	80	120				
Toluene	0.942	0.0250	1.000	0	94.2	80	120				
Ethylbenzene	0.932	0.0250	1.000	0	93.2	80	120				
m,p-Xylene	1.84	0.0500	2.000	0	92.2	80	120				
o-Xylene	0.929	0.0250	1.000	0	92.9	80	120				
Surr: Dibromofluoromethane	1.29		1.250		103	74.8	121				
Surr: Toluene-d8	1.25		1.250		99.9	79.6	120				
Surr: 1-Bromo-4-fluorobenzene	1.24		1.250		99.5	53	139				

Sample ID: MB-49271	SampType: MBLK			Units: mg/Kg		Prep Date: 9/17/2025		RunNo: 103096		
Client ID: MBLKS	Batch ID: 49271					Analysis Date: 9/17/2025		SeqNo: 2150827		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.0120									
Toluene	ND	0.0250									
Ethylbenzene	ND	0.0250									
m,p-Xylene	ND	0.0500									
o-Xylene	ND	0.0250									
Surr: Dibromofluoromethane	1.17		1.250		93.5	79.5	124				
Surr: Toluene-d8	1.24		1.250		99.4	77.5	124				
Surr: 1-Bromo-4-fluorobenzene	1.25		1.250		100	60.5	139				

Sample ID: 2509166-003BDUP	SampType: DUP			Units: mg/Kg-dry		Prep Date: 9/17/2025		RunNo: 103096		
Client ID: CB01-03	Batch ID: 49271					Analysis Date: 9/17/2025		SeqNo: 2150829		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.0112						0		30	H
Toluene	ND	0.0234						0		30	H
Ethylbenzene	ND	0.0234						0		30	H
m,p-Xylene	ND	0.0468						0		30	H
o-Xylene	ND	0.0234						0		30	H

Work Order: 2509166
CLIENT: Aerotech Environmental Consulting
Project: Sunset

QC SUMMARY REPORT

Volatile Organic Compounds by EPA 8260D

Sample ID: **2509166-003BDUP**	SampType: **DUP**			Units: **mg/Kg-dry**	Prep Date: **9/17/2025**			RunNo: **103096**			
Client ID: **CB01-03**	Batch ID: **49271**				Analysis Date: **9/17/2025**			SeqNo: **2150829**			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	1.09		1.169		93.1	74.8	121		0		H
Surr: Toluene-d8	1.19		1.169		102	79.6	120		0		H
Surr: 1-Bromo-4-fluorobenzene	1.21		1.169		103	53	139		0		H

Alliance TECHNICAL GROUP

Sample Log-In Check List

Client Name:	**AEROTE**	Work Order Number:	**2509166**
Logged by:	**Morgan Wilson**	Date Received:	**9/8/2025 2:21:00 PM**

Chain of Custody

1. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2. How was the sample delivered?	Client		

Log In

3. Custody Seals present on shipping container/cooler? (Refer to comments for Custody Seals not intact)	Yes ☐	No ☐	Not Present ☑
4. Was an attempt made to cool the samples?	Yes ☐	No ☑	NA ☐
	Unknown prior to receipt.		
5. Were all items received at a temperature of >2°C to 6°C *	Yes ☐	No ☐	NA ☑
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☑	No ☐	NA ☐
			MeOH
10. Is there headspace in the VOA vials?	Yes ☐	No ☐	NA ☑
11. Did all samples containers arrive in good condition(unbroken)?	Yes ☑	No ☐	
12. Does paperwork match bottle labels?	Yes ☑	No ☐	
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all hold times (except field parameters, pH e.g.) able to be met?	Yes ☑	No ☐	

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☑ No ☐ NA ☐

Person Notified:	Alan Blotch	Date:	9/17/2025
By Whom:	Morgan Wilson	Via:	☑ eMail ☑ Phone ☐ Fax ☐ In Person
Regarding:	Hold Times		
Client Instructions:	Ok to Proceed OOH, remove PAHs		

17. Additional remarks:

Run per Alan Blotch 9/16/25

Item Information

Item #	Temp °C
Sample	21.8

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C

Original

Chain of Custody Record & Laboratory Services Agreement

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Date: 09-08-25 | Page: 1 of: 2

Laboratory Project No (internal): 2509166

Project Name: SUNSET

Special Remarks: edits 9/16/25 5pm per AB

Project No: HORSE BARN

Client: AEROTECH ENV. CONSULTING

Address:

Collected by:

City, State, Zip:

Location:

Telephone:

Report To (PM):

Sample Disposal: ☐ Return to client ☒ Disposal by lab (after 30 days)

Fax:

PM Email:

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T)	Dissolved (D)	Anions (IC)***	EDB (8011)	LEAD-BASENIC	CPAH	PESTICIDES	Comments
1	CB01-01	08-04		SOIL																		
2	" -02	"		"														X				
3	" -03	"		"		X	X															
4	" -04	"		"																		
5	" -05	"		"																		
6	" -06	"		"															X			
7	CB02-07																		X			
8	" -08																					
9	" -09																					
10	B03-10																				X	

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished	Date/Time	Received	Date/Time
x	09/09 7:21	x	9/8/25 1421
Relinquished	Date/Time	Received	Date/Time
x		x	

Turn-around Time:
- ☒ Standard
- ☐ 3 Day
- ☐ 2 Day
- ☐ Next Day
- Same Day _____

Chain of Custody Record & Laboratory Services Agreement

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Date: 09-08-25 | Page: 2 of 2 | Laboratory Project No (internal): 2509166

Client: AEROTECH ENV CONSULTING
Address:
City, State, Zip:
Telephone:
Fax:

Project Name: SUNSET
Project No: HORSE BARN
Collected by:
Location:
Report To (PM):
PM Email:

Special Remarks

Sample Disposal: ☐ Return to client ☒ Disposal by lab (after 30 days)

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T)	Dissolved (D)	Anions (IC)***	EDB (8011)	Comments
1	B03-11	08-04		S															
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA 8 Priority Pollutants TAL Individual: Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished	Date/Time	Received	Date/Time
x	09/08 @ 2:21	x	9/5/25 1441
Relinquished	Date/Time	Received	Date/Time
x		x	

Turn-around Time:
- ☒ Standard
- ☐ 3 Day
- ☐ 2 Day
- ☐ Next Day
- Same Day (rush)

Chain of Custody Record & Laboratory Services Agreement

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Date: 09-08-25 | Page: 1 of: 2

Laboratory Project No (internal): 2509166

Project Name: SUNSET

Special Remarks:
edits 9/16/25 5pm per AB
Updates per AB 9/17/25 -MW

Client: AEROTECH ENV. CONSULTING

Project No: HORSE BARN

Address:

Collected by:

City, State, Zip:

Location:

Telephone:

Report To (PM):

Sample Disposal: ☐ Return to client ☒ Disposal by lab (after 30 days)

Fax:

PM Email:

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) / Dissolved (D)	Anions (IC)***	EDB (8011)	LEAD - ARSENIC	CPAH	PESTICIDES	Comments
1	CB01-01	08-04		SOIL																	
2	" -02																X				
3	" -03					X	X														
4	" -04																				
5	" -05																				
6	" -06																	X			
7	CB02 -07																	X			
8	" -08																				
9	" -09																				
10	B03 -10																			X	

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Sc Sr Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished	Date/Time	Received	Date/Time
x	09/08 2:21	x	9/8/25 1421
Relinquished	Date/Time	Received	Date/Time
x		x	

Turn-around Time:
- ☒ Standard
- ☐ 3 Day
- ☐ 2 Day
- ☐ Next Day
- Same Day _____

Alliance TECHNICAL GROUP
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790

Chain of Custody Record & Laboratory Services Agreement

Date: 09-22-25 Page: 1 of: 1
Laboratory Project No (internal): 2509511
Project Name: SUNSET POINTE
Special Remarks:
Project No:
Collected by: A. BLOTCH
Location:
Report To (PM):
Disposal: Samples will be disposed in 30 days unless otherwise requested
☐ Retain volume (specify above) ☐ Return to client

Client: AEROTECH ENV CONSULTING INC
Address:
City, State, Zip: NORMANDY PL, WA
Telephone: 360-710-5899
Email(s): ALAN @ DIRTY DIRT.US

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	# of Cont.	VOCs (EPA 8260 / 624)	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T)	Dissolved (D)	Anions (IC)***	EDB (8011)	Comments
1	PFAS 01-08	09-22		S	1														PFOS = 0.543
2	02-04																		PFOS = 0.272
3	03-08																		
4	04-12																		
5	05-10																		
6	06-01																		
7	07-01																		PFOS = 0.249
8																			
9																			
10																			

PFAS Soil Sampling

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water
**Metals (Circle): MTCA-5 RCRA 8 Priority Pollutants Individual: Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Si Sn Ti Tl V Zn
***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Turn-around Time:
☒ Standard ☐ Next Day
☐ 3 Day ☐ Same Day
☐ 2 Day (specify)

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above, that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x			x		
x		09/23 @ 10:20	x	Jack Hawthorne	9/23/25 1020

Alliance
TECHNICAL GROUP
3600 Fremont Ave N
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

Aerotech Environmental Consulting
Alan Blotch
17837 1st Ave S #556
Normandy Park, WA 98148

RE: Sunset Pointe,
Work Order Number: 2509511

October 07, 2025

Attention Alan Blotch:

Alliance Technical Group, LLC - Seattle received 7 sample(s) on 9/23/2025 for the analyses presented in the following report.

All analyses were performed according to our accredited Quality Assurance program. Please contact the laboratory if you should have any questions about the results.

Alliance Technical Group is committed to accuracy, speed, and customer service. Thank you for choosing Alliance Technical Group's Seattle laboratory team for your analytical needs. We appreciate this opportunity to serve you!

Sincerely,

Brianna Barnes
Project Manager

CC:
Hudson Gerkin

DoD-ELAP Accreditation #79636 by PJLA, ISO/IEC 17025:2017 and QSM 5.4 for Environmental Testing
ORELAP Certification: WA 100009 (NELAP Recognized) for Environmental Testing
Washington State Department of Ecology Accredited for Environmental Testing, Lab ID C910

Original

Alliance TECHNICAL GROUP

Date: *10/07/2025*

CLIENT: Aerotech Environmental Consulting
Project: Sunset Pointe
Work Order: 2509511

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2509511-001	PFAS 01-08	09/22/2025 12:00 AM	09/23/2025 10:20 AM
2509511-002	PFAS 02-04	09/22/2025 12:00 AM	09/23/2025 10:20 AM
2509511-003	PFAS 03-08	09/22/2025 12:00 AM	09/23/2025 10:20 AM
2509511-004	PFAS 04-12	09/22/2025 12:00 AM	09/23/2025 10:20 AM
2509511-005	PFAS 05-10	09/22/2025 12:00 AM	09/23/2025 10:20 AM
2509511-006	PFAS 06-01	09/22/2025 12:00 AM	09/23/2025 10:20 AM
2509511-007	PFAS 07-01	09/22/2025 12:00 AM	09/23/2025 10:20 AM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

Alliance TECHNICAL GROUP

Case Narrative

WO#: **2509511**
Date: **10/7/2025**

CLIENT: Aerotech Environmental Consulting
Project: Sunset Pointe

I. SAMPLE RECEIPT:
Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:
Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:
Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.
2509511-001A
SUB-PFAS-S-1633 has been Sub Contracted.
2509511-002A
SUB-PFAS-S-1633 has been Sub Contracted.
2509511-003A
SUB-PFAS-S-1633 has been Sub Contracted.
2509511-004A
SUB-PFAS-S-1633 has been Sub Contracted.
2509511-005A
SUB-PFAS-S-1633 has been Sub Contracted.
2509511-006A
SUB-PFAS-S-1633 has been Sub Contracted.
2509511-007A
SUB-PFAS-S-1633 has been Sub Contracted.

Alliance TECHNICAL GROUP

Sample Log-In Check List

Client Name: **AEROTE** Work Order Number: **2509511**

Logged by: **Lyann Rivera** Date Received: **9/23/2025 10:20:00 AM**

Chain of Custody

1. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2. How was the sample delivered?	Client		

Log In

3. Custody Seals present on shipping container/cooler? (Refer to comments for Custody Seals not intact)	Yes ☐	No ☐	Not Present ☑
4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all items received at a temperature of >2°C to 6°C *	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. Is there headspace in the VOA vials?	Yes ☐	No ☐	NA ☑
11. Did all samples containers arrive in good condition(unbroken)?	Yes ☑	No ☐	
12. Does paperwork match bottle labels?	Yes ☑	No ☐	
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all hold times (except field parameters, pH e.g.) able to be met?	Yes ☑	No ☐	

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

Item Information

Item #	Temp °C
Sample	2.0

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C

Original

Alliance Technical Group - Akron
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

October 06, 2025

PM
ATG - SEATTLE LAB
3600 Fremont Ave N.
Seattle, WA 98103
TEL: (206) 352-3790
FAX:

RE:

Dear PM: Order No.: 25092029

Alliance Technical Group - Akron received 7 sample(s) on 9/25/2025 for the analyses presented in the following report.

There were no problems with the analytical events associated with this report unless noted in the Case Narrative.

Quality control data is within laboratory defined or method specified acceptance limits except where noted.

If you have any questions regarding these tests results, please feel free to call the laboratory.

Sincerely,

Brian J. Fackelman
Project Manager, LIMS Administrator
3310 Win St.
Cuyahoga Falls, Ohio 44223

Arkansas 88-0735, California 2943, Colorado, Connecticut PH-0828, Florida NELAC E87688, Idaho OH00923, Illinois 200061, Indiana C-OH-13, ISO/IEC 17025:2017 119125 L22-544, Kansas E-10347, Kentucky (Underground Storage Tank) 3, Kentucky 90146, Maryland 339, Michigan 9988, Minnesota 1780279, Nevada OH009232020-1, New Hampshire 2996, New Jersey OH006, New York 11777, North Carolina 39705 and 631, North Dakota R-201, Ohio DW, Ohio VAP CL0052, Oklahoma 2019-155, Oregon OH200001, Pennsylvania 68-01335, Rhode Island LA000317, South Carolina 92016001, Texas T104704466-19-16, Utah OH009232020-12, Virginia VELAP 10381, West Virginia 9957C

Alliance Technical Group - Akron
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

Case Narrative

WO#: **25092029**
Date: **10/6/2025**

CLIENT: ATG - SEATTLE LAB
Project:

WorkOrder Narrative:
25092029: This report in its entirety consists of the following documents: Cover Letter, Case Narrative, Analytical Results, QC Summary Report, Applicable Accreditation Information, Chain-of-Custody, Cooler Receipt Form, and other applicable forms as necessary. All documents contain the Alliance Technical Group Work Order Number assigned to this report.

Alliance Technical Group holds the accreditations/certifications listed at the bottom of the cover letter that may or may not pertain to this report. Please refer to the "Accreditation Program Analytes Report" for accredited analytes list.

The information contained in this analytical report is the sole property of Alliance Technical Group and that of the customer. It cannot be reproduced in any form without the consent of Alliance Technical Group or the customer for which this report was issued. The results contained in this report are only representative of the samples received. Conditions can vary at different times and at different sampling conditions. Alliance Technical Group is not responsible for use or interpretation of the data included herein.

All results for solid samples are reported on an "as received" or "wet weight" basis unless indicated as "dry weight" using the "-dry" designation on the reporting units.

This report is believed to meet all of the requirements of the accrediting agency, where applicable. Any comments or problems with the analytical events associated with this report are noted below.

Analytical Sequence Sample Notes:
25092029-(001A-006A) SVOC-EPA1633_S: Sample exhibited high recoveries for multiple IDAs. Potential low bias in associated analytes. Confirmed via reanalysis.

Original

Alliance Technical Group - Akron
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

Workorder Sample Summary

WO#: **25092029**

06-Oct-25

CLIENT: ATG - SEATTLE LAB

Project:

Lab SampleID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
25092029-001	2509511-001A		9/22/2025	9/25/2025 10:30:00 AM	Solid
25092029-002	2509511-002A		9/22/2025	9/25/2025 10:30:00 AM	Solid
25092029-003	2509511-003A		9/22/2025	9/25/2025 10:30:00 AM	Solid
25092029-004	2509511-004A		9/22/2025	9/25/2025 10:30:00 AM	Solid
25092029-005	2509511-005A		9/22/2025	9/25/2025 10:30:00 AM	Solid
25092029-006	2509511-006A		9/22/2025	9/25/2025 10:30:00 AM	Solid
25092029-007	2509511-007A		9/22/2025	9/25/2025 10:30:00 AM	Solid

Alliance TECHNICAL GROUP

Alliance Technical Group - Akron
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

Analytical Report

(consolidated)

WO#: **25092029**

Date Reported: **10/6/2025**

CLIENT: ATG - SEATTLE LAB

Collection Date: 9/22/2025

Project:

Lab ID: 25092029-001

Matrix: SOLID

Client Sample ID: 2509511-001A

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PFAS BY EPA 1633						
PFAS IN SOLID SAMPLES (EPA METHOD 1633)				E1633	E1633	Analyst: **AEH**
11Cl-PF3OUdS	ND	0.879		ng/g-dry	1	9/29/2025 6:39:00 PM
3:3 FTCA	ND	1.10		ng/g-dry	1	9/29/2025 6:39:00 PM
4:2 FTS	ND	0.879		ng/g-dry	1	9/29/2025 6:39:00 PM
5:3 FTCA	ND	5.49		ng/g-dry	1	9/29/2025 6:39:00 PM
6:2 FTS	ND	0.879		ng/g-dry	1	9/29/2025 6:39:00 PM
7:3 FTCA	ND	5.49		ng/g-dry	1	9/29/2025 6:39:00 PM
8:2 FTS	ND	0.879		ng/g-dry	1	9/29/2025 6:39:00 PM
9CL-PF3ONS	ND	0.879		ng/g-dry	1	9/29/2025 6:39:00 PM
ADONA	ND	0.879		ng/g-dry	1	9/29/2025 6:39:00 PM
HFPO-DA	ND	0.879		ng/g-dry	1	9/29/2025 6:39:00 PM
NEtFOSA	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
NEtFOSAA	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
NEtFOSE	ND	2.20		ng/g-dry	1	9/29/2025 6:39:00 PM
NFDHA	ND	0.440		ng/g-dry	1	9/29/2025 6:39:00 PM
NMeFOSA	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
NMeFOSAA	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
NMeFOSE	ND	2.20		ng/g-dry	1	9/29/2025 6:39:00 PM
PFBA	ND	0.879		ng/g-dry	1	9/29/2025 6:39:00 PM
PFBS	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
PFDA	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
PFDoA	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
PFDoS	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
PFDS	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
PFEESA	ND	0.440		ng/g-dry	1	9/29/2025 6:39:00 PM
PFHpA	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
PFHpS	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
PFHxA	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
PFHxS	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
PFMBA	ND	0.440		ng/g-dry	1	9/29/2025 6:39:00 PM
PFMPA	ND	0.440		ng/g-dry	1	9/29/2025 6:39:00 PM
PFNA	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
PFNS	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
PFOA	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
PFOS	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM

Qualifiers:

- H Holding times for preparation or analysis exceeded
- ND Not Detected
- R RPD outside accepted recovery limits
- W Sample container temperature is out of limit as specified at testcode
- M Manual Integration used to determine area response
- PL Permit Limit
- RL Reporting Detection Limit

Original

Alliance TECHNICAL GROUP

Alliance Technical Group - Akron
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Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

Analytical Report

(consolidated)

WO#: **25092029**

Date Reported: **10/6/2025**

CLIENT: ATG - SEATTLE LAB **Collection Date:** 9/22/2025

Project:

Lab ID: 25092029-001 **Matrix:** SOLID

Client Sample ID: 2509511-001A

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PFAS BY EPA 1633				**E1633**	**E1633**	Analyst: **AEH**
PFAS IN SOLID SAMPLES (EPA METHOD 1633)						
PFOSA	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
PFPeA	ND	0.440		ng/g-dry	1	9/29/2025 6:39:00 PM
PFPeS	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
PFTeDA	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
PFTrDA	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
PFUnA	ND	0.220		ng/g-dry	1	9/29/2025 6:39:00 PM
Surr: 13C2-PFDA	90.2	50 - 200		%Rec	1	9/29/2025 6:39:00 PM
Surr: 13C2-PFHxA	84.5	50 - 200		%Rec	1	9/29/2025 6:39:00 PM
Surr: 13C3-PFBA	81.3	50 - 200		%Rec	1	9/29/2025 6:39:00 PM
Surr: 13C4-PFOA	83.0	50 - 200		%Rec	1	9/29/2025 6:39:00 PM
Surr: 13C4-PFOS	91.5	50 - 200		%Rec	1	9/29/2025 6:39:00 PM
Surr: 13C5-PFNA	83.6	50 - 200		%Rec	1	9/29/2025 6:39:00 PM
Surr: 18O2-PFHxS	83.6	50 - 200		%Rec	1	9/29/2025 6:39:00 PM
PFAS BY EPA 1633				**A2540B**		Analyst: **DHF**
PERCENT MOISTURE BY SM2540MOD						
Percent Moisture	10.1	0.100		%	1	10/3/2025 6:00:00 PM

Qualifiers:

H	Holdmg times for preparation or analysis exceeded
ND	Not Detected
R	RPD outside accepted recovery limits
W	Sample container temperature is out of limit as specified at testcode
M	Manual Integration used to determine area response
PL	Permit Limit
RL	Reporting Detection Limit

Original

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Analytical Report

(consolidated)

WO#: **25092029**

Date Reported: **10/6/2025**

CLIENT: ATG - SEATTLE LAB **Collection Date:** 9/22/2025

Project:

Lab ID: 25092029-002 **Matrix:** SOLID

Client Sample ID: 2509511-002A

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PFAS BY EPA 1633				**E1633**	**E1633**	Analyst: **AEH**
PFAS IN SOLID SAMPLES (EPA METHOD 1633)						
11Cl-PF3OUdS	ND	0.930		ng/g-dry	1	9/29/2025 6:54:00 PM
3:3 FTCA	ND	1.16		ng/g-dry	1	9/29/2025 6:54:00 PM
4:2 FTS	ND	0.930		ng/g-dry	1	9/29/2025 6:54:00 PM
5:3 FTCA	ND	5.81		ng/g-dry	1	9/29/2025 6:54:00 PM
6:2 FTS	ND	0.930		ng/g-dry	1	9/29/2025 6:54:00 PM
7:3 FTCA	ND	5.81		ng/g-dry	1	9/29/2025 6:54:00 PM
8:2 FTS	ND	0.930		ng/g-dry	1	9/29/2025 6:54:00 PM
9CL-PF3ONS	ND	0.930		ng/g-dry	1	9/29/2025 6:54:00 PM
ADONA	ND	0.930		ng/g-dry	1	9/29/2025 6:54:00 PM
HFPO-DA	ND	0.930		ng/g-dry	1	9/29/2025 6:54:00 PM
NEtFOSA	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
NEtFOSAA	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
NEtFOSE	ND	2.32		ng/g-dry	1	9/29/2025 6:54:00 PM
NFDHA	ND	0.465		ng/g-dry	1	9/29/2025 6:54:00 PM
NMeFOSA	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
NMeFOSAA	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
NMeFOSE	ND	2.32		ng/g-dry	1	9/29/2025 6:54:00 PM
PFBA	ND	0.930		ng/g-dry	1	9/29/2025 6:54:00 PM
PFBS	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
PFDA	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
PFDoA	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
PFDoS	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
PFDS	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
PFEESA	ND	0.465		ng/g-dry	1	9/29/2025 6:54:00 PM
PFHpA	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
PFHpS	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
PFHxA	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
PFHxS	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
PFMBA	ND	0.465		ng/g-dry	1	9/29/2025 6:54:00 PM
PFMPA	ND	0.465		ng/g-dry	1	9/29/2025 6:54:00 PM
PFNA	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
PFNS	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
PFOA	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
PFOS	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM

Qualifiers:

- H Holding times for preparation or analysis exceeded
- ND Not Detected
- R RPD outside accepted recovery limits
- W Sample container temperature is out of limit as specified at testcode
- M Manual Integration used to determine area response
- PL Permit Limit
- RL Reporting Detection Limit

Original

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Website: http://www.settek.com

Analytical Report

(consolidated)

WO#: **25092029**

Date Reported: **10/6/2025**

CLIENT: ATG - SEATTLE LAB **Collection Date:** 9/22/2025

Project:

Lab ID: 25092029-002 **Matrix:** SOLID

Client Sample ID: 2509511-002A

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PFAS BY EPA 1633				**E1633**	**E1633**	Analyst: **AEH**
PFAS IN SOLID SAMPLES (EPA METHOD 1633)						
PFOSA	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
PFPeA	ND	0.465		ng/g-dry	1	9/29/2025 6:54:00 PM
PFPeS	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
PFTeDA	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
PFTrDA	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
PFUnA	ND	0.232		ng/g-dry	1	9/29/2025 6:54:00 PM
Surr: 13C2-PFDA	82.5	50 - 200		%Rec	1	9/29/2025 6:54:00 PM
Surr: 13C2-PFHxA	81.0	50 - 200		%Rec	1	9/29/2025 6:54:00 PM
Surr: 13C3-PFBA	76.8	50 - 200		%Rec	1	9/29/2025 6:54:00 PM
Surr: 13C4-PFOA	78.6	50 - 200		%Rec	1	9/29/2025 6:54:00 PM
Surr: 13C4-PFOS	81.3	50 - 200		%Rec	1	9/29/2025 6:54:00 PM
Surr: 13C5-PFNA	82.0	50 - 200		%Rec	1	9/29/2025 6:54:00 PM
Surr: 18O2-PFHxS	71.4	50 - 200		%Rec	1	9/29/2025 6:54:00 PM
PFAS BY EPA 1633				**A2540B**		Analyst: **DHF**
PERCENT MOISTURE BY SM2540MOD						
Percent Moisture	15.3	0.100		%	1	10/3/2025 6:00:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded
ND	Not Detected
R	RPD outside accepted recovery limits
W	Sample container temperature is out of limit as specified at testcode
M	Manual Integration used to determine area response
PL	Permit Limit
RL	Reporting Detection Limit

Original

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Analytical Report

(consolidated)

WO#: **25092029**

Date Reported: **10/6/2025**

CLIENT: ATG - SEATTLE LAB **Collection Date:** 9/22/2025

Project:

Lab ID: 25092029-003 **Matrix:** SOLID

Client Sample ID: 2509511-003A

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PFAS BY EPA 1633				E1633	E1633	Analyst: **AEH**
PFAS IN SOLID SAMPLES (EPA METHOD 1633)						
11Cl-PF3OUdS	ND	0.869		ng/g-dry	1	9/29/2025 7:09:00 PM
3:3 FTCA	ND	1.09		ng/g-dry	1	9/29/2025 7:09:00 PM
4:2 FTS	ND	0.869		ng/g-dry	1	9/29/2025 7:09:00 PM
5:3 FTCA	ND	5.43		ng/g-dry	1	9/29/2025 7:09:00 PM
6:2 FTS	ND	0.869		ng/g-dry	1	9/29/2025 7:09:00 PM
7:3 FTCA	ND	5.43		ng/g-dry	1	9/29/2025 7:09:00 PM
8:2 FTS	ND	0.869		ng/g-dry	1	9/29/2025 7:09:00 PM
9CL-PF3ONS	ND	0.869		ng/g-dry	1	9/29/2025 7:09:00 PM
ADONA	ND	0.869		ng/g-dry	1	9/29/2025 7:09:00 PM
HFPO-DA	ND	0.869		ng/g-dry	1	9/29/2025 7:09:00 PM
NEtFOSA	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
NEtFOSAA	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
NEtFOSE	ND	2.17		ng/g-dry	1	9/29/2025 7:09:00 PM
NFDHA	ND	0.435		ng/g-dry	1	9/29/2025 7:09:00 PM
NMeFOSA	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
NMeFOSAA	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
NMeFOSE	ND	2.17		ng/g-dry	1	9/29/2025 7:09:00 PM
PFBA	ND	0.869		ng/g-dry	1	9/29/2025 7:09:00 PM
PFBS	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
PFDA	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
PFDoA	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
PFDoS	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
PFDS	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
PFEESA	ND	0.435		ng/g-dry	1	9/29/2025 7:09:00 PM
PFHpA	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
PFHpS	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
PFHxA	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
PFHxS	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
PFMBA	ND	0.435		ng/g-dry	1	9/29/2025 7:09:00 PM
PFMPA	ND	0.435		ng/g-dry	1	9/29/2025 7:09:00 PM
PFNA	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
PFNS	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
PFOA	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
PFOS	0.543	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM

Qualifiers:

- H Holding times for preparation or analysis exceeded
- ND Not Detected
- R RPD outside accepted recovery limits
- W Sample container temperature is out of limit as specified at testcode
- M Manual Integration used to determine area response
- PL Permit Limit
- RL Reporting Detection Limit

Original

Alliance Technical Group - Akron
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Website: http://www.settek.com

Analytical Report

(consolidated)

WO#: **25092029**

Date Reported: **10/6/2025**

CLIENT: ATG - SEATTLE LAB **Collection Date:** 9/22/2025

Project:

Lab ID: 25092029-003 **Matrix:** SOLID

Client Sample ID: 2509511-003A

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PFAS BY EPA 1633				**E1633**	**E1633**	Analyst: **AEH**
PFAS IN SOLID SAMPLES (EPA METHOD 1633)						
PFOSA	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
PFPeA	ND	0.435		ng/g-dry	1	9/29/2025 7:09:00 PM
PFPeS	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
PFTeDA	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
PFTrDA	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
PFUnA	ND	0.217		ng/g-dry	1	9/29/2025 7:09:00 PM
Surr: 13C2-PFDA	74.8	50 - 200		%Rec	1	9/29/2025 7:09:00 PM
Surr: 13C2-PFHxA	71.2	50 - 200		%Rec	1	9/29/2025 7:09:00 PM
Surr: 13C3-PFBA	65.8	50 - 200		%Rec	1	9/29/2025 7:09:00 PM
Surr: 13C4-PFOA	74.2	50 - 200		%Rec	1	9/29/2025 7:09:00 PM
Surr: 13C4-PFOS	79.4	50 - 200		%Rec	1	9/29/2025 7:09:00 PM
Surr: 13C5-PFNA	68.1	50 - 200		%Rec	1	9/29/2025 7:09:00 PM
Surr: 18O2-PFHxS	62.4	50 - 200		%Rec	1	9/29/2025 7:09:00 PM
PFAS BY EPA 1633				**A2540B**		Analyst: **DHF**
PERCENT MOISTURE BY SM2540MOD						
Percent Moisture	9.61	0.100		%	1	10/3/2025 6:00:00 PM

Qualifiers:

- H Holding times for preparation or analysis exceeded
- ND Not Detected
- R RPD outside accepted recovery limits
- W Sample container temperature is out of limit as specified at testcode
- M Manual Integration used to determine area response
- PL Permit Limit
- RL Reporting Detection Limit

Original

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Analytical Report

(consolidated)

WO#: **25092029**

Date Reported: **10/6/2025**

CLIENT: ATG - SEATTLE LAB

Collection Date: 9/22/2025

Project:

Lab ID: 25092029-004

Matrix: SOLID

Client Sample ID: 2509511-004A

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PFAS BY EPA 1633				E1633	E1633	Analyst: **AEH**
PFAS IN SOLID SAMPLES (EPA METHOD 1633)						
11Cl-PF3OUdS	ND	0.899		ng/g-dry	1	9/29/2025 7:23:00 PM
3:3 FTCA	ND	1.12		ng/g-dry	1	9/29/2025 7:23:00 PM
4:2 FTS	ND	0.899		ng/g-dry	1	9/29/2025 7:23:00 PM
5:3 FTCA	ND	5.62		ng/g-dry	1	9/29/2025 7:23:00 PM
6:2 FTS	ND	0.899		ng/g-dry	1	9/29/2025 7:23:00 PM
7:3 FTCA	ND	5.62		ng/g-dry	1	9/29/2025 7:23:00 PM
8:2 FTS	ND	0.899		ng/g-dry	1	9/29/2025 7:23:00 PM
9CL-PF3ONS	ND	0.899		ng/g-dry	1	9/29/2025 7:23:00 PM
ADONA	ND	0.899		ng/g-dry	1	9/29/2025 7:23:00 PM
HFPO-DA	ND	0.899		ng/g-dry	1	9/29/2025 7:23:00 PM
NEtFOSA	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
NEtFOSAA	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
NEtFOSE	ND	2.25		ng/g-dry	1	9/29/2025 7:23:00 PM
NFDHA	ND	0.449		ng/g-dry	1	9/29/2025 7:23:00 PM
NMeFOSA	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
NMeFOSAA	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
NMeFOSE	ND	2.25		ng/g-dry	1	9/29/2025 7:23:00 PM
PFBA	ND	0.899		ng/g-dry	1	9/29/2025 7:23:00 PM
PFBS	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
PFDA	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
PFDoA	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
PFDoS	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
PFDS	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
PFEESA	ND	0.449		ng/g-dry	1	9/29/2025 7:23:00 PM
PFHpA	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
PFHpS	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
PFHxA	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
PFHxS	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
PFMBA	ND	0.449		ng/g-dry	1	9/29/2025 7:23:00 PM
PFMPA	ND	0.449		ng/g-dry	1	9/29/2025 7:23:00 PM
PFNA	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
PFNS	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
PFOA	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
PFOS	0.272	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM

Qualifiers:

- H Holding times for preparation or analysis exceeded
- ND Not Detected
- R RPD outside accepted recovery limits
- W Sample container temperature is out of limit as specified at testcode
- M Manual Integration used to determine area response
- PL Permit Limit
- RL Reporting Detection Limit

Original

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Website: http://www.settek.com

Analytical Report

(consolidated)

WO#: **25092029**

Date Reported: **10/6/2025**

CLIENT: ATG - SEATTLE LAB **Collection Date:** 9/22/2025

Project:

Lab ID: 25092029-004 **Matrix:** SOLID

Client Sample ID: 2509511-004A

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PFAS BY EPA 1633				**E1633**	**E1633**	Analyst: **AEH**
PFAS IN SOLID SAMPLES (EPA METHOD 1633)						
PFOSA	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
PFPeA	ND	0.449		ng/g-dry	1	9/29/2025 7:23:00 PM
PFPeS	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
PFTeDA	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
PFTrDA	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
PFUnA	ND	0.225		ng/g-dry	1	9/29/2025 7:23:00 PM
Surr: 13C2-PFDA	73.8	50 - 200		%Rec	1	9/29/2025 7:23:00 PM
Surr: 13C2-PFHxA	74.4	50 - 200		%Rec	1	9/29/2025 7:23:00 PM
Surr: 13C3-PFBA	64.3	50 - 200		%Rec	1	9/29/2025 7:23:00 PM
Surr: 13C4-PFOA	68.0	50 - 200		%Rec	1	9/29/2025 7:23:00 PM
Surr: 13C4-PFOS	80.6	50 - 200		%Rec	1	9/29/2025 7:23:00 PM
Surr: 13C5-PFNA	70.5	50 - 200		%Rec	1	9/29/2025 7:23:00 PM
Surr: 18O2-PFHxS	69.8	50 - 200		%Rec	1	9/29/2025 7:23:00 PM
PFAS BY EPA 1633				**A2540B**		Analyst: **DHF**
PERCENT MOISTURE BY SM2540MOD						
Percent Moisture	11.3	0.100		%	1	10/3/2025 6:00:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded
ND	Not Detected
R	RPD outside accepted recovery limits
W	Sample container temperature is out of limit as specified at testcode
M	Manual Integration used to determine area response
PL	Permit Limit
RL	Reporting Detection Limit

Original

Alliance Technical Group - Akron
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

Analytical Report

(consolidated)

WO#: **25092029**

Date Reported: **10/6/2025**

CLIENT: ATG - SEATTLE LAB **Collection Date:** 9/22/2025

Project:

Lab ID: 25092029-005 **Matrix:** SOLID

Client Sample ID: 2509511-005A

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PFAS BY EPA 1633				E1633	E1633	Analyst: **AEH**
PFAS IN SOLID SAMPLES (EPA METHOD 1633)						
11Cl-PF3OUdS	ND	0.972		ng/g-dry	1	9/29/2025 7:38:00 PM
3:3 FTCA	ND	1.22		ng/g-dry	1	9/29/2025 7:38:00 PM
4:2 FTS	ND	0.972		ng/g-dry	1	9/29/2025 7:38:00 PM
5:3 FTCA	ND	6.08		ng/g-dry	1	9/29/2025 7:38:00 PM
6:2 FTS	ND	0.972		ng/g-dry	1	9/29/2025 7:38:00 PM
7:3 FTCA	ND	6.08		ng/g-dry	1	9/29/2025 7:38:00 PM
8:2 FTS	ND	0.972		ng/g-dry	1	9/29/2025 7:38:00 PM
9CL-PF3ONS	ND	0.972		ng/g-dry	1	9/29/2025 7:38:00 PM
ADONA	ND	0.972		ng/g-dry	1	9/29/2025 7:38:00 PM
HFPO-DA	ND	0.972		ng/g-dry	1	9/29/2025 7:38:00 PM
NEtFOSA	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
NEtFOSAA	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
NEtFOSE	ND	2.43		ng/g-dry	1	9/29/2025 7:38:00 PM
NFDHA	ND	0.486		ng/g-dry	1	9/29/2025 7:38:00 PM
NMeFOSA	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
NMeFOSAA	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
NMeFOSE	ND	2.43		ng/g-dry	1	9/29/2025 7:38:00 PM
PFBA	ND	0.972		ng/g-dry	1	9/29/2025 7:38:00 PM
PFBS	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
PFDA	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
PFDoA	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
PFDoS	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
PFDS	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
PFEESA	ND	0.486		ng/g-dry	1	9/29/2025 7:38:00 PM
PFHpA	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
PFHpS	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
PFHxA	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
PFHxS	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
PFMBA	ND	0.486		ng/g-dry	1	9/29/2025 7:38:00 PM
PFMPA	ND	0.486		ng/g-dry	1	9/29/2025 7:38:00 PM
PFNA	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
PFNS	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
PFOA	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
PFOS	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM

Qualifiers:

- H Holding times for preparation or analysis exceeded
- ND Not Detected
- R RPD outside accepted recovery limits
- W Sample container temperature is out of limit as specified at testcode
- M Manual Integration used to determine area response
- PL Permit Limit
- RL Reporting Detection Limit

Original

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Analytical Report

(consolidated)

WO#: **25092029**

Date Reported: **10/6/2025**

CLIENT: ATG - SEATTLE LAB **Collection Date:** 9/22/2025

Project:

Lab ID: 25092029-005 **Matrix:** SOLID

Client Sample ID: 2509511-005A

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PFAS BY EPA 1633 PFAS IN SOLID SAMPLES (EPA METHOD 1633)				**E1633**	**E1633**	Analyst: **AEH**
PFOSA	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
PFPeA	ND	0.486		ng/g-dry	1	9/29/2025 7:38:00 PM
PFPeS	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
PFTeDA	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
PFTrDA	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
PFUnA	ND	0.243		ng/g-dry	1	9/29/2025 7:38:00 PM
Surr: 13C2-PFDA	95.6	50 - 200		%Rec	1	9/29/2025 7:38:00 PM
Surr: 13C2-PFHxA	84.7	50 - 200		%Rec	1	9/29/2025 7:38:00 PM
Surr: 13C3-PFBA	77.9	50 - 200		%Rec	1	9/29/2025 7:38:00 PM
Surr: 13C4-PFOA	86.8	50 - 200		%Rec	1	9/29/2025 7:38:00 PM
Surr: 13C4-PFOS	88.0	50 - 200		%Rec	1	9/29/2025 7:38:00 PM
Surr: 13C5-PFNA	88.8	50 - 200		%Rec	1	9/29/2025 7:38:00 PM
Surr: 18O2-PFHxS	82.7	50 - 200		%Rec	1	9/29/2025 7:38:00 PM
PFAS BY EPA 1633 PERCENT MOISTURE BY SM2540MOD				**A2540B**		Analyst: **DHF**
Percent Moisture	18.4	0.100		%	1	10/3/2025 6:00:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded
ND	Not Detected
R	RPD outside accepted recovery limits
W	Sample container temperature is out of limit as specified at testcode
M	Manual Integration used to determine area response
PL	Permit Limit
RL	Reporting Detection Limit

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Analytical Report

(consolidated)

WO#: **25092029**

Date Reported: **10/6/2025**

CLIENT: ATG - SEATTLE LAB **Collection Date:** 9/22/2025

Project:

Lab ID: 25092029-006 **Matrix:** SOLID

Client Sample ID: 2509511-006A

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PFAS BY EPA 1633				E1633	E1633	Analyst: **AEH**
PFAS IN SOLID SAMPLES (EPA METHOD 1633)						
11Cl-PF3OUdS	ND	0.845		ng/g-dry	1	9/29/2025 7:53:00 PM
3:3 FTCA	ND	1.06		ng/g-dry	1	9/29/2025 7:53:00 PM
4:2 FTS	ND	0.845		ng/g-dry	1	9/29/2025 7:53:00 PM
5:3 FTCA	ND	5.28		ng/g-dry	1	9/29/2025 7:53:00 PM
6:2 FTS	ND	0.845		ng/g-dry	1	9/29/2025 7:53:00 PM
7:3 FTCA	ND	5.28		ng/g-dry	1	9/29/2025 7:53:00 PM
8:2 FTS	ND	0.845		ng/g-dry	1	9/29/2025 7:53:00 PM
9CL-PF3ONS	ND	0.845		ng/g-dry	1	9/29/2025 7:53:00 PM
ADONA	ND	0.845		ng/g-dry	1	9/29/2025 7:53:00 PM
HFPO-DA	ND	0.845		ng/g-dry	1	9/29/2025 7:53:00 PM
NEtFOSA	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
NEtFOSAA	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
NEtFOSE	ND	2.11		ng/g-dry	1	9/29/2025 7:53:00 PM
NFDHA	ND	0.422		ng/g-dry	1	9/29/2025 7:53:00 PM
NMeFOSA	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
NMeFOSAA	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
NMeFOSE	ND	2.11		ng/g-dry	1	9/29/2025 7:53:00 PM
PFBA	ND	0.845		ng/g-dry	1	9/29/2025 7:53:00 PM
PFBS	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
PFDA	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
PFDoA	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
PFDoS	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
PFDS	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
PFEESA	ND	0.422		ng/g-dry	1	9/29/2025 7:53:00 PM
PFHpA	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
PFHpS	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
PFHxA	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
PFHxS	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
PFMBA	ND	0.422		ng/g-dry	1	9/29/2025 7:53:00 PM
PFMPA	ND	0.422		ng/g-dry	1	9/29/2025 7:53:00 PM
PFNA	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
PFNS	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
PFOA	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
PFOS	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM

Qualifiers:

- H Holding times for preparation or analysis exceeded
- ND Not Detected
- R RPD outside accepted recovery limits
- W Sample container temperature is out of limit as specified at testcode
- M Manual Integration used to determine area response
- PL Permit Limit
- RL Reporting Detection Limit

Original

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Analytical Report

(consolidated)

WO#: **25092029**

Date Reported: **10/6/2025**

CLIENT: ATG - SEATTLE LAB **Collection Date:** 9/22/2025

Project:

Lab ID: 25092029-006 **Matrix:** SOLID

Client Sample ID: 2509511-006A

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PFAS BY EPA 1633				**E1633**	**E1633**	Analyst: **AEH**
PFAS IN SOLID SAMPLES (EPA METHOD 1633)						
PFOSA	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
PFPeA	ND	0.422		ng/g-dry	1	9/29/2025 7:53:00 PM
PFPeS	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
PFTeDA	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
PFTrDA	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
PFUnA	ND	0.211		ng/g-dry	1	9/29/2025 7:53:00 PM
Surr: 13C2-PFDA	85.8	50 - 200		%Rec	1	9/29/2025 7:53:00 PM
Surr: 13C2-PFHxA	79.7	50 - 200		%Rec	1	9/29/2025 7:53:00 PM
Surr: 13C3-PFBA	72.0	50 - 200		%Rec	1	9/29/2025 7:53:00 PM
Surr: 13C4-PFOA	76.2	50 - 200		%Rec	1	9/29/2025 7:53:00 PM
Surr: 13C4-PFOS	83.7	50 - 200		%Rec	1	9/29/2025 7:53:00 PM
Surr: 13C5-PFNA	73.9	50 - 200		%Rec	1	9/29/2025 7:53:00 PM
Surr: 18O2-PFHxS	75.9	50 - 200		%Rec	1	9/29/2025 7:53:00 PM
PFAS BY EPA 1633				**A2540B**		Analyst: **DHF**
PERCENT MOISTURE BY SM2540MOD						
Percent Moisture	7.32	0.100		%	1	10/3/2025 6:00:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded
ND	Not Detected
R	RPD outside accepted recovery limits
W	Sample container temperature is out of limit as specified at testcode
M	Manual Integration used to determine area response
PL	Permit Limit
RL	Reporting Detection Limit

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Analytical Report

(consolidated)

WO#: **25092029**

Date Reported: **10/6/2025**

CLIENT: ATG - SEATTLE LAB

Collection Date: 9/22/2025

Project:

Lab ID: 25092029-007

Matrix: SOLID

Client Sample ID: 2509511-007A

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PFAS BY EPA 1633				**E1633**	**E1633**	Analyst: **AEH**
PFAS IN SOLID SAMPLES (EPA METHOD 1633)						
11Cl-PF3OUdS	ND	0.871		ng/g-dry	1	9/29/2025 8:07:00 PM
3:3 FTCA	ND	1.09		ng/g-dry	1	9/29/2025 8:07:00 PM
4:2 FTS	ND	0.871		ng/g-dry	1	9/29/2025 8:07:00 PM
5:3 FTCA	ND	5.44		ng/g-dry	1	9/29/2025 8:07:00 PM
6:2 FTS	ND	0.871		ng/g-dry	1	9/29/2025 8:07:00 PM
7:3 FTCA	ND	5.44		ng/g-dry	1	9/29/2025 8:07:00 PM
8:2 FTS	ND	0.871		ng/g-dry	1	9/29/2025 8:07:00 PM
9CL-PF3ONS	ND	0.871		ng/g-dry	1	9/29/2025 8:07:00 PM
ADONA	ND	0.871		ng/g-dry	1	9/29/2025 8:07:00 PM
HFPO-DA	ND	0.871		ng/g-dry	1	9/29/2025 8:07:00 PM
NEtFOSA	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
NEtFOSAA	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
NEtFOSE	ND	2.18		ng/g-dry	1	9/29/2025 8:07:00 PM
NFDHA	ND	0.435		ng/g-dry	1	9/29/2025 8:07:00 PM
NMeFOSA	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
NMeFOSAA	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
NMeFOSE	ND	2.18		ng/g-dry	1	9/29/2025 8:07:00 PM
PFBA	ND	0.871		ng/g-dry	1	9/29/2025 8:07:00 PM
PFBS	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
PFDA	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
PFDoA	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
PFDoS	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
PFDS	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
PFEESA	ND	0.435		ng/g-dry	1	9/29/2025 8:07:00 PM
PFHpA	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
PFHpS	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
PFHxA	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
PFHxS	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
PFMBA	ND	0.435		ng/g-dry	1	9/29/2025 8:07:00 PM
PFMPA	ND	0.435		ng/g-dry	1	9/29/2025 8:07:00 PM
PFNA	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
PFNS	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
PFOA	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
PFOS	0.249	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM

Qualifiers:

- H Holding times for preparation or analysis exceeded
- ND Not Detected
- R RPD outside accepted recovery limits
- W Sample container temperature is out of limit as specified at testcode
- M Manual Integration used to determine area response
- PL Permit Limit
- RL Reporting Detection Limit

Original

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Analytical Report

(consolidated)

WO#: **25092029**

Date Reported: **10/6/2025**

CLIENT: ATG - SEATTLE LAB

Collection Date: 9/22/2025

Project:

Lab ID: 25092029-007

Matrix: SOLID

Client Sample ID: 2509511-007A

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PFAS BY EPA 1633				**E1633**	**E1633**	Analyst: **AEH**
PFAS IN SOLID SAMPLES (EPA METHOD 1633)						
PFOSA	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
PFPeA	ND	0.435		ng/g-dry	1	9/29/2025 8:07:00 PM
PFPeS	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
PFTeDA	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
PFTrDA	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
PFUnA	ND	0.218		ng/g-dry	1	9/29/2025 8:07:00 PM
Surr: 13C2-PFDA	118	50 - 200		%Rec	1	9/29/2025 8:07:00 PM
Surr: 13C2-PFHxA	114	50 - 200		%Rec	1	9/29/2025 8:07:00 PM
Surr: 13C3-PFBA	107	50 - 200		%Rec	1	9/29/2025 8:07:00 PM
Surr: 13C4-PFOA	107	50 - 200		%Rec	1	9/29/2025 8:07:00 PM
Surr: 13C4-PFOS	132	50 - 200		%Rec	1	9/29/2025 8:07:00 PM
Surr: 13C5-PFNA	123	50 - 200		%Rec	1	9/29/2025 8:07:00 PM
Surr: 18O2-PFHxS	121	50 - 200		%Rec	1	9/29/2025 8:07:00 PM
PFAS BY EPA 1633				**A2540B**		Analyst: **DHF**
PERCENT MOISTURE BY SM2540MOD						
Percent Moisture	9.94	0.100		%	1	10/3/2025 6:00:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded
ND	Not Detected
R	RPD outside accepted recovery limits
W	Sample container temperature is out of limit as specified at testcode
M	Manual Integration used to determine area response
PL	Permit Limit
RL	Reporting Detection Limit

Original

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QC SUMMARY REPORT

WO#: 25092029
06-Oct-25

Client: ATG - SEATTLE LAB
Project:

BatchID: 87549

Sample ID: **MB-87549** SampType: **MBLK** TestCode: **SVOC-EPA16** Units: **ng/g** Prep Date: **9/25/2025** RunNo: **217632**
Client ID: **BatchQC** Batch ID: **87549** TestNo: **E1633** **E1633** Analysis Date: **9/29/2025** SeqNo: **5801941**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
11Cl-PF3OUdS	ND	0.789									
3:3 FTCA	ND	0.986									
4:2 FTS	ND	0.789									
5:3 FTCA	ND	4.93									
6:2 FTS	ND	0.789									
7:3 FTCA	ND	4.93									
8:2 FTS	ND	0.789									
9CL-PF3ONS	ND	0.789									
ADONA	ND	0.789									
HFPO-DA	ND	0.789									
NEtFOSA	ND	0.197									
NEtFOSAA	ND	0.197									
NEtFOSE	ND	1.97									
NFDHA	ND	0.394									
NMeFOSA	ND	0.197									
NMeFOSAA	ND	0.197									
NMeFOSE	ND	1.97									
PFBA	ND	0.789									
PFBS	ND	0.197									
PFDA	ND	0.197									
PFDoA	ND	0.197									
PFDoS	ND	0.197									
PFDS	ND	0.197									
PFEESA	ND	0.394									
PFHpA	ND	0.197									
PFHpS	ND	0.197									

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected
PL	Permit Limit	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
W	Sample container temperature is out of limit as specified at testcode				

Original

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Website: http://www.settek.com

QC SUMMARY REPORT

WO#: **25092029**
06-Oct-25

Client: ATG - SEATTLE LAB
Project:

BatchID: **87549**

Sample ID: **MB-87549**	SampType: **MBLK**	TestCode: **SVOC-EPA16**	Units: **ng/g**	Prep Date: **9/25/2025**	RunNo: **217632**
Client ID: **BatchQC**	Batch ID: **87549**	TestNo: **E1633**	**E1633**	Analysis Date: **9/29/2025**	SeqNo: **5801941**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
PFHxA	ND	0.197									
PFHxS	ND	0.197									
PFMBA	ND	0.394									
PFMPA	ND	0.394									
PFNA	ND	0.197									
PFNS	ND	0.197									
PFOA	ND	0.197									
PFOS	ND	0.197									
PFOSA	ND	0.197									
PFPeA	ND	0.394									
PFPeS	ND	0.197									
PFTeDA	ND	0.197									
PFTrDA	ND	0.197									
PFUnA	ND	0.197									
Surr: 13C2-PFDA	1.43		2.465		58.0	50	200				
Surr: 13C2-PFHxA	3.35		4.931		67.9	50	200				
Surr: 13C3-PFBA	6.26		9.862		63.4	50	200				
Surr: 13C4-PFOA	3.03		4.931		61.5	50	200				
Surr: 13C4-PFOS	3.27		4.724		69.3	50	200				
Surr: 13C5-PFNA	1.64		2.465		66.4	50	200				
Surr: 18O2-PFHxS	2.81		4.675		60.1	50	200				

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected
PL	Permit Limit	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
W	Sample container temperature is out of limit as specified at testcode				

Original

Alliance TECHNICAL GROUP

Alliance Technical Group - Akron
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

QC SUMMARY REPORT

WO#: **25092029**
06-Oct-25

Client: ATG - SEATTLE LAB
Project:

BatchID: **87549**

Sample ID: LCS-87549	SampType: LCS	TestCode: SVOC-EPA16	Units: ng/g	Prep Date: 9/25/2025	RunNo: 217632
Client ID: BatchQC	Batch ID: 87549	TestNo: E1633	E1633	Analysis Date: 9/29/2025	SeqNo: 5801942

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
11Cl-PF3OUdS	29.3	0.787	37.13	0	78.9	45	160				
3:3 FTCA	52.8	0.984	49.21	0	107	45	130				
4:2 FTS	32.5	0.787	36.89	0	88.0	60	150				
5:3 FTCA	221	4.92	246.1	0	89.9	60	130				
6:2 FTS	38.6	0.787	37.44	0	103	55	200				
7:3 FTCA	226	4.92	246.1	0	92.0	60	150				
8:2 FTS	38.0	0.787	37.80	0	101	70	150				
9CL-PF3ONS	28.1	0.787	36.73	0	76.5	70	150				
ADONA	31.2	0.787	37.20	0	83.8	70	160				
HFPO-DA	39.1	0.787	39.37	0	99.3	70	145				
NEtFOSA	9.89	0.197	9.843	0	100	70	140				
NEtFOSAA	8.31	0.197	9.843	0	84.5	65	165				
NEtFOSE	98.4	1.97	98.43	0	100	70	135				
NFDHA	17.1	0.394	19.69	0	86.8	60	155				
NMeFOSA	10.1	0.197	9.843	0	102	70	155				
NMeFOSAA	8.91	0.197	9.843	0	90.5	65	155				
NMeFOSE	103	1.97	98.43	0	104	70	140				
PFBA	39.3	0.787	39.37	0	99.8	70	140				
PFBS	8.31	0.197	8.740	0	95.1	65	145				
PFDA	10.7	0.197	9.843	0	108	70	155				
PFDoA	8.96	0.197	9.843	0	91.0	70	150				
PFDoS	8.94	0.197	9.528	0	93.8	25	160				
PFDS	9.66	0.197	9.488	0	102	40	155				
PFEESA	17.0	0.394	17.56	0	96.7	70	140				
PFHpA	10.5	0.197	9.843	0	107	65	145				
PFHpS	10.5	0.197	9.370	0	113	65	155				

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected
PL	Permit Limit	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
W	Sample container temperature is out of limit as specified at testcode				

Original

Alliance TECHNICAL GROUP

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Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

QC SUMMARY REPORT

WO#: **25092029**
06-Oct-25

Client: ATG - SEATTLE LAB
Project:

BatchID: **87549**

Sample ID: **LCS-87549** SampType: **LCS** TestCode: **SVOC-EPA16** Units: **ng/g** Prep Date: **9/25/2025** RunNo: **217632**
Client ID: **BatchQC** Batch ID: **87549** TestNo: **E1633** **E1633** Analysis Date: **9/29/2025** SeqNo: **5801942**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
PFHxA	9.94	0.197	9.843	0	101	65	140				
PFHxS	8.85	0.197	8.980	0	98.5	60	150				
PFMBA	19.1	0.394	19.69	0	96.9	60	150				
PFMPA	19.5	0.394	19.69	0	98.9	30	140				
PFNA	10.6	0.197	9.843	0	108	70	155				
PFNS	9.77	0.197	9.449	0	103	55	140				
PFOA	9.50	0.197	9.843	0	96.5	70	150				
PFOS	9.38	0.197	9.134	0	103	65	160				
PFOSA	9.39	0.197	9.843	0	95.4	70	140				
PFPeA	18.4	0.394	19.69	0	93.5	60	150				
PFPeS	9.57	0.197	9.252	0	103	55	160				
PFTeDA	9.10	0.197	9.843	0	92.5	65	150				
PFTrDA	8.77	0.197	9.843	0	89.1	65	150				
PFUnA	9.69	0.197	9.843	0	98.5	70	155				
Surr: 13C2-PFDA	2.06		2.461		83.7	50	200				
Surr: 13C2-PFHxA	3.94		4.921		80.1	50	200				
Surr: 13C3-PFBA	8.02		9.843		81.4	50	200				
Surr: 13C4-PFOA	4.17		4.921		84.7	50	200				
Surr: 13C4-PFOS	3.63		4.715		76.9	50	200				
Surr: 13C5-PFNA	2.16		2.461		87.8	50	200				
Surr: 18O2-PFHxS	3.66		4.665		78.4	50	200				

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected
PL	Permit Limit	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
W	Sample container temperature is out of limit as specified at testcode				

Original

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Website: http://www.settek.com

QC SUMMARY REPORT

WO#: **25092029**
06-Oct-25

Client: ATG - SEATTLE LAB
Project:

BatchID: **R218039**

Sample ID: MB-R218039	SampType: MBLK	TestCode: PctMoist_S(2	Units: %	Prep Date:	RunNo: 218039
Client ID: BatchQC	Batch ID: R218039	TestNo: A2540B		Analysis Date: 10/3/2025	SeqNo: 5813234

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Percent Moisture	ND	0.100									

Sample ID: 25092341-001ADUP	SampType: DUP	TestCode: PctMoist_S(2	Units: %	Prep Date:	RunNo: 218039
Client ID: BatchQC	Batch ID: R218039	TestNo: A2540B		Analysis Date: 10/3/2025	SeqNo: 5813254

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Percent Moisture	17.1	0.100						18.06	5.67	5	R

Sample ID: 25100357-001ADUP	SampType: DUP	TestCode: PctMoist_S(2	Units: %	Prep Date:	RunNo: 218039
Client ID: BatchQC	Batch ID: R218039	TestNo: A2540B		Analysis Date: 10/3/2025	SeqNo: 5813255

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Percent Moisture	12.7	0.100						12.61	0.964	5	

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected
PL	Permit Limit	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
W	Sample container temperature is out of limit as specified at testcode				

Original

Alliance TECHNICAL GROUP

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Cuyahoga Falls, Ohio 442
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Website: http://www.settek.co

Qualifiers and Acronyms

WO#: **25092029**
Date: **10/6/2025**

These commonly used Qualifiers and Acronyms may or may not be present in this report.

Qualifiers

U	The compound was analyzed for but was not detected above the MDL.
J	The reported value is greater than the Method Detection Limit but less than the Reporting Limit.
H	The hold time for sample preparation and/or analysis was exceeded. Not Clean Water Act compliant.
D	The result is reported from a dilution.
E	The result exceeded the linear range of the calibration or is estimated due to interference.
MC	The result is below the Minimum Compound Limit.
*****	The result exceeds the Regulatory Limit or Maximum Contamination Limit.
m	Manual integration was used to determine the area response.
d	Manual integration in which peak was deleted
N	The result is presumptive based on a Mass Spectral library search assuming a 1:1 response.
P	The second column confirmation exceeded 25% difference.
C	The result has been confirmed by GC/MS.
X	The result was not confirmed when GC/MS Analysis was performed.
B	The analyte was detected in the Method Blank at a concentration greater than the RL.
MB+	The analyte was detected in the Method Blank at a concentration greater than the MDL.
G	The ICB or CCB contained reportable amounts of analyte.
QC-/+	The CCV recovery failed low (-) or high (+).
R/QDR	The RPD was outside of accepted recovery limits.
QL-/+	The LCS or LCSD recovery failed low (-) or high (+).
QLR	The LCS/LCSD RPD was outside of accepted recovery limits.
QM-/+	The MS or MSD recovery failed low (-) or high (+).
QMR	The MS/MSD RPD was outside of accepted recovery limits.
QV-/+	The ICV recovery failed low (-) or high (+).
S	The spike result was outside of accepted recovery limits.
W	Samples were received outside temperature limits (0° – 6° C). Not Clean Water Act compliant.
Z	Deviation; A deviation from the method was performed; Please refer to the Case Narrative for additional information

Acronyms

ND	Not Detected	**RL**	Reporting Limit
QC	Quality Control	**MDL**	Method Detection Limit
MB	Method Blank	**LOD**	Level of Detection
LCS	Laboratory Control Sample	**LOQ**	Level of Quantitation
LCSD	Laboratory Control Sample Duplicate	**PQL**	Practical Quantitation Limit
QCS	Quality Control Sample	**CRQL**	Contract Required Quantitation Limit
DUP	Duplicate	**PL**	Permit Limit
MS	Matrix Spike	**RegLvl**	Regulatory Limit
MSD	Matrix Spike Duplicate	**MCL**	Maximum Contamination Limit
RPD	Relative Percent Different	**MinCL**	Minimum Compound Limit
ICV	Initial Calibration Verification	**RA**	Reanalysis
ICB	Initial Calibration Blank	**RE**	Reextraction
CCV	Continuing Calibration Verification	**TIC**	Tentatively Identified Compound
CCB	Continuing Calibration Blank	**RT**	Retention Time
RLC	Reporting Limit Check	**CF**	Calibration Factor

This list of Qualifiers and Acronyms reflects the most commonly utilized Qualifiers and Acronyms for reporting. Please refer to the Analytical Notes in the Case Narrative for any Qualifiers or Acronyms that do not appear in this list or for additional information regarding the use of these Qualifiers on reported data.

Original

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DATES REPORT

WO#: **25092029**

06-Oct-25

Client: ATG - SEATTLE LAB
Project:

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
25092029-001A	2509511-001A	9/22/2025	Solid	Percent Moisture by SM2540Mod			10/3/2025 6:00:00 PM
				PFAS in Solid Samples (EPA Method		9/25/2025 1:35:00 PM	9/29/2025 6:39:00 PM
				PFAS in Solid Samples (EPA Method		9/25/2025 1:35:00 PM	9/30/2025 4:44:00 AM
25092029-002A	2509511-002A			Percent Moisture by SM2540Mod			10/3/2025 6:00:00 PM
				PFAS in Solid Samples (EPA Method		9/25/2025 1:35:00 PM	9/29/2025 6:54:00 PM
				PFAS in Solid Samples (EPA Method		9/25/2025 1:35:00 PM	9/30/2025 4:59:00 AM
25092029-003A	2509511-003A			Percent Moisture by SM2540Mod			10/3/2025 6:00:00 PM
				PFAS in Solid Samples (EPA Method		9/25/2025 1:35:00 PM	9/29/2025 7:09:00 PM
				PFAS in Solid Samples (EPA Method		9/25/2025 1:35:00 PM	9/30/2025 5:13:00 AM
25092029-004A	2509511-004A			Percent Moisture by SM2540Mod			10/3/2025 6:00:00 PM
				PFAS in Solid Samples (EPA Method		9/25/2025 1:35:00 PM	9/30/2025 5:28:00 AM
				PFAS in Solid Samples (EPA Method		9/25/2025 1:35:00 PM	9/29/2025 7:23:00 PM
25092029-005A	2509511-005A			Percent Moisture by SM2540Mod			10/3/2025 6:00:00 PM
				PFAS in Solid Samples (EPA Method		9/25/2025 1:35:00 PM	9/29/2025 7:38:00 PM
				PFAS in Solid Samples (EPA Method		9/25/2025 1:35:00 PM	9/30/2025 5:43:00 AM
25092029-006A	2509511-006A			Percent Moisture by SM2540Mod			10/3/2025 6:00:00 PM
				PFAS in Solid Samples (EPA Method		9/25/2025 1:35:00 PM	9/29/2025 7:53:00 PM
				PFAS in Solid Samples (EPA Method		9/25/2025 1:35:00 PM	9/30/2025 5:57:00 AM
25092029-007A	2509511-007A			Percent Moisture by SM2540Mod			10/3/2025 6:00:00 PM
				PFAS in Solid Samples (EPA Method		9/25/2025 1:35:00 PM	9/30/2025 6:12:00 AM
				PFAS in Solid Samples (EPA Method		9/25/2025 1:35:00 PM	9/29/2025 8:07:00 PM

Original

Alliance Technical Group - Akron
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

Accreditation Program Analytes Report

WO#: 25092029
06-Oct-25

Client: ATG - SEATTLE LAB
State: WA
Project:
Program: WA_DW_NPW_SCM_NELAP

Test Name	Matrix	Analyte	Status
Percent Moisture by SM2540Mod	Solid	Percent Moisture	N
PFAS in Solid Samples (EPA Method 1633)	Solid	11Cl-PF3OUdS	A
PFAS in Solid Samples (EPA Method 1633)	Solid	3:3 FTCA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	4:2 FTS	A
PFAS in Solid Samples (EPA Method 1633)	Solid	5:3 FTCA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	6:2 FTS	A
PFAS in Solid Samples (EPA Method 1633)	Solid	7:3 FTCA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	8:2 FTS	A
PFAS in Solid Samples (EPA Method 1633)	Solid	9CL-PF3ONS	A
PFAS in Solid Samples (EPA Method 1633)	Solid	ADONA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	HFPO-DA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	NEtFOSA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	NEtFOSAA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	NEtFOSE	A
PFAS in Solid Samples (EPA Method 1633)	Solid	NFDHA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	NMeFOSA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	NMeFOSAA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	NMeFOSE	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFBA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFBS	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFDA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFDoA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFDoS	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFDS	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFEESA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFHpA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFHpS	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFHxA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFMBA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFMPA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFNA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFNS	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFOA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFOS	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFOSA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFPeA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFPeS	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFTeDA	A

Accreditation (Acc.) Status Key	
A: Accredited	N: Not Accredited
P: Provisional	U: Unavailable

Alliance Technical Group - Akron
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Website: http://www.settek.com

Accreditation Program Analytes Report

WO#: 25092029
06-Oct-25

Client: ATG - SEATTLE LAB
Project:

State: WA
Program: WA_DW_NPW_SCM_NELAP

Test Name	Matrix	Analyte	Status
PFAS in Solid Samples (EPA Method 1633)	Solid	PFTrDA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFUnA	A

Accreditation (Acc.) Status Key	
A: Accredited	N: Not Accredited
P: Provisional	U: Unavailable

Alliance TECHNICAL GROUP

CHAIN OF CUSTODY RECORD

Omega COCID 2482

PAGE: 1 OF: 1

ADDRESS
Alliance Technical Group, LLC - Seattle
3600 Fremont Ave N
Seattle, WA 98103
TEL: 206-352-3790
FAX: 206-352-7178
Website: www.fremontanalytical.com

2509 2029

SUB CONTRATOR: Alliance Akron COMPANY: Alliance Akron
ADDRESS: 3310 Win St, Cuyahoga Falls
CITY, STATE, ZIP: Cuyahoga Falls, OH 44223
PHONE: (330) 253-8211 FAX: EMAIL:
ACCOUNT #:

SPECIAL INSTRUCTIONS / COMMENTS:
Standard TAT. Please email results to SEA.PM@alliancetg.com and invoices to both SEA.PM@alliancetg.com and ap@alliancetg.com.

ITEM #	SAMPLE ID	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	DATE COLLECTED	NUMBER OF CONTAINERS	COMMENTS Methanol Preserved Weights HOT Sample Notation, Additional Sample Description
1	2509511-001A SUB-PFAS-S-1633	PFAS 01-08	125 ML POLY U	Soil	9/22/2025	1	
2	2509511-002A SUB-PFAS-S-1633	PFAS 02-04	125 ML POLY U	Soil	9/22/2025	1	
3	2509511-003A SUB-PFAS-S-1633	PFAS 03-08	125 ML POLY U	Soil	9/22/2025	1	
4	2509511-004A SUB-PFAS-S-1633	PFAS 04-12	125 ML POLY U	Soil	9/22/2025	1	
5	2509511-005A SUB-PFAS-S-1633	PFAS 05-10	125 ML POLY U	Soil	9/22/2025	1	
6	2509511-006A SUB-PFAS-S-1633	PFAS 06-01	125 ML POLY U	Soil	9/22/2025	1	
7	2509511-007A SUB-PFAS-S-1633	PFAS 07-01	125 ML POLY U	Soil	9/22/2025	1	

Relinquished By	Date	Time	Received By	Date	Time
Jim Jack Hawthorne	9/23/25	1652		9/25/25	1030
Relinquished By	Date	Time	Received By	Date	Time
Relinquished By	Date	Time	Received By	Date	Time

TAT: Standard RUSH Next BD 2nd BD 3rd BD
Note: RUSH requests will incur surcharges!

REPORT TRANSMITTAL DESIRED:
HARDCOPY (extra cost) FAX EMAIL ONLINE

FOR LAB USE ONLY
Temp of samples 5.7+0.2= 5.9 °C Attempt to Cool?
Comments: UPS COOLER/ICE

Alliance TECHNICAL GROUP

Alliance Technical Group - Akron
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

Sample Log-In Check List

Client Name: **FRE-WA-98103** Work Order Number: **25092029** RcptNo: **1**

Logged by: **Christina N. Gemma** **9/25/2025 10:30:00 AM** C. Gemma

Completed By: **Maggie M. Grmek** **9/25/2025 1:21:40 PM**

Reviewed By: **Brian J. Fackelman** **9/29/2025 1:11:35 PM**

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? UPS

Log In

3. Coolers are present? Yes ☑ No ☐ NA ☐
4. Shipping container/cooler in good condition? Yes ☑ No ☐
   Custody seals intact on shipping container/cooler? Yes ☐ No ☐ Not Present ☑ NA ☐
   No. Seal Date: Signed By:
5. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
6. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
7. Sample(s) in proper container(s)? Yes ☑ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
9. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
10. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
11. Is the headspace in the VOA vials less than 1/4 inch or 6 mm? Yes ☐ No ☐ No VOA Vials ☑
12. Were any sample containers received broken? Yes ☐ No ☑
13. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☑ No ☐
14. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
15. Is it clear what analyses were requested? Yes ☑ No ☐
16. Were all holding times able to be met? (If no, notify customer for authorization.) Yes ☑ No ☐

Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

18. Additional remarks:

Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	5.9	Good	Not Present			

Limited & Targeted
Phase II-2
Subsurface Investigation
Subject Property:
Sunset Pointe Development
2301 - 23rd Avenue Southeast
Puyallup, Washington 98372
August 7, 2025

AEROTECH
Environmental Consulting Inc.

Anchorage Seattle Portland

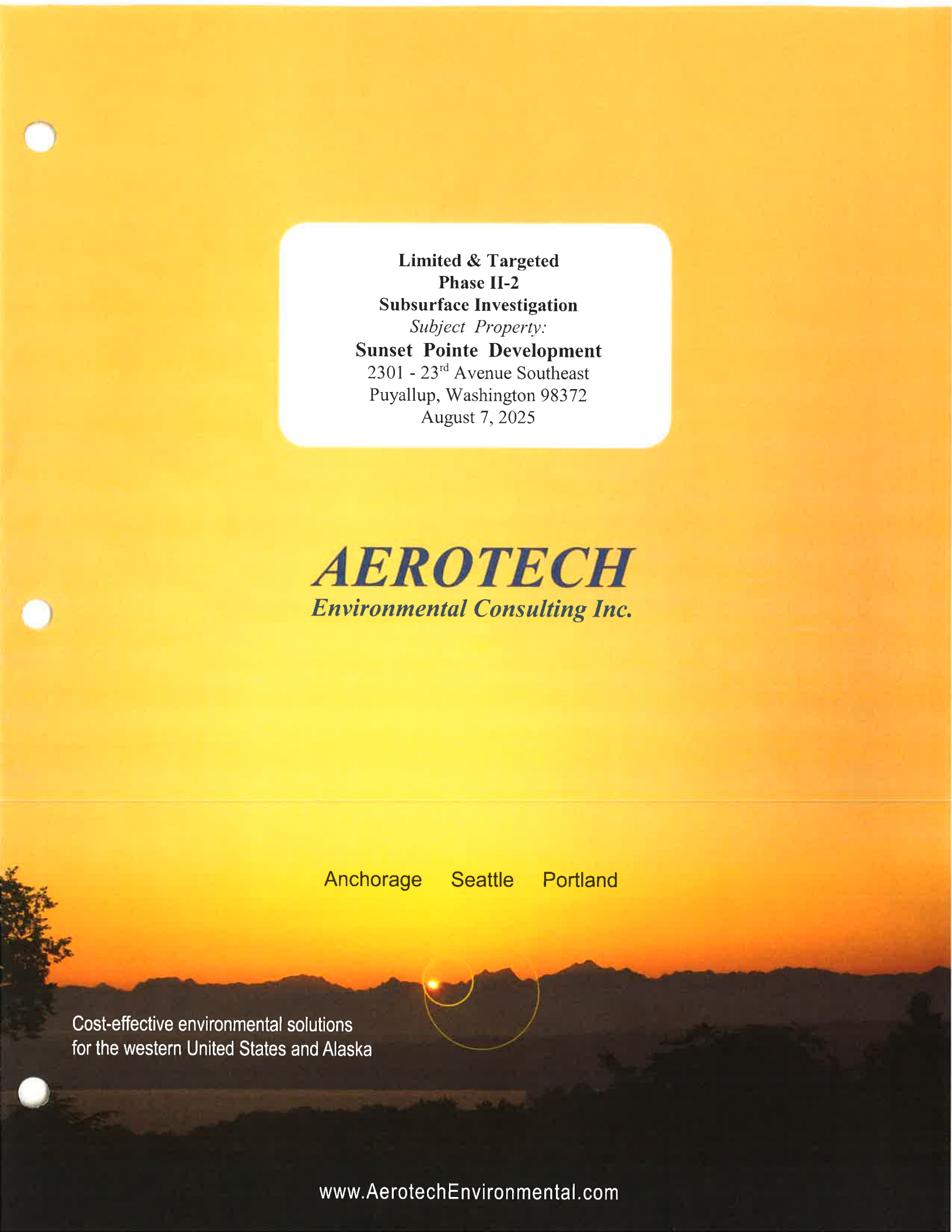

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Table of Contents

Section 1:	Project Summery Letter
Section 2:	Ecology Opinion Letter (January 10, 2025)
Section 2:	Analytical Results: Horse Barn
Section 4:	Analytical Results: Drum Fire Area (North of former Museum Building)
Section 5:	Analytical Results: Southwestern Corner of Property

Further Action at a Contaminated Site:
Pioneer Museum
Department of Ecology
January 10,2025

August 7, 2025

RE: **Pioneer Museum**
2301 - 23rd Avenue Southeast
Puyallup, Washington 98244-1038

On January 10, 2025, the Department of Ecology Southwest Region ("WDOE") issued an opinion letter for the aforementioned Property, *Further Action at the Following Site: Pioneer Museum*. This review, received by Aerotech Environmental Consulting, Inc. ("Aerotech") after submitting a *Phase I Environmental Site Assessment* and *Phase II Targeted and Limited Subsurface Investigation* dated May 22, 2024.

The WDOE opinion identified the two arson fires of June 27 and June 28, 2010 as the source of a significant environmental impact at the Site. Additionally the WDOE stated the following issues that have been addressed to the satisfaction of the WDOE:

– The site has not been impacted by the *Tacoma Smelter Plume* footprint as determined by both Pierce County and the WDOE.

– The WDOE identified the following Areas / Contaminants of Concern that existed at the Site prior to the investigations conducted by Aerotech: Museum Building; original barn; horse barn; former retaining wall constructed of automotive batteries; and the results of the two arson fires.

– "Generally soil and groundwater have been evaluated consistent with WAC §173-340-900 Table 830-1."

– "Pesticides were collected in the former Museum Building did not appear to exceed MTCA direct contact cleanup levels."

– "There are no mapped wetlands or priority species habitats at the Site."

– "**Surface water, in the form of a stormwater holding pond, and thus sediment, does not appear to have been impacted by any release of contamination at the Site**. [emphasis in the WDOE original opinion].

– "Surface water, in the form of a stormwater holding pond, was evaluated for petroleum, arsenic, cadium,, pesticides, and herbicides. No contaminates were detected...."

– "Ecology has determined the cleanup levels and points of compliance you set for the Dote will likely meet the requirement of MTCA.

Ecology identified the following Areas of Concern ("AOC"), which require additional investigation and/or explanation of Site conditions:

1. Footprint of the burned horse-barn. "Former horse barn....Gasoline, ethylbenzene, total xylenes, cPAHs, metals, and pesticides were identified in the limited shallow soil samples collected. Aqueous non-film forming firefighting form (AFFF) may have been used to extinguish the fire, indicating a potential for per- and poly- fluoroalkyl substance (PFAS) to be present at the Site. (Ibid, p.4)."

2. Shallow Soil Associated with the former drum areas. "Additional soil sampling within the former footprint of the burned horse barn [currently a poured concrete pad] collecting a few samples for: dioxins and furans, cPAHs, and PFAS."

"To provide data to determine if any additional cleanup is needed with [sic] the footprint of the burned horse barn, Ecology recommends sampling shallow soils for dioxin / furans and PFAS at an interval of one location every 400 square feet. This would be about three soil samples within the former barn footprint [emphasis added]. " [Ibid., p.5]

3. Former Museum Building Interior. "Ecology recommends confirming current concentrations for pesticides at locations S1, S2, and S3 [performed by Pierce County Environmental Health Specialist, Sharon Bell) recommended sampling both soil and one groundwater sample be collected to show that groundwater was not impacted. The groundwater sample can be collected by using either a hydropunch / grab form method or from a permanent monitoring well." [Ibid, p6.]

4. **Site-wide Groundwater Evaluation**. "Ecology recommends collecting at least one hydropunch / grab groundwater sample within each area of concern to determine Site groundwater quality." [Ibid.]

* * * * *

Upon the approval of the Subject Property Owner, Dr. Peter Y. Chen, Aerotech Environmental Professions will address each of above WDOE issues and complete the required investigation report (a *Phase 2-2 Subsurface Investigation*) within sixty days from the date of Client engagement. Upon completion, this Report will be submitted to the WDOE with the goal of obtaining a *No Further Action Determination (without environmental covenants).*

Best regards,

Alan T. Blotch

AEROTECH ENVIRONMENTAL CONSULTING, INC.
17837 First Avenue South. Suite No. 556
Normandy Park, Washington 98166
Alan@DirtyDirt.US
(360) 710-5899

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
Southwest Region Office
PO Box 47775 • Olympia, Washington 98504-7775 • 360-407-6300

January 10, 2025

Dr. Peter Y. Chen
Property Owner
4709 Memory Ln W
University Place, WA 98466-1038
yiping10@hotmail.com

Re: Further Action at the following Contaminated Site:

Site name:	Pioneer Museum
Site address:	2301 23rd Ave SE, Puyallup, WA 98372
Facility/Site ID:	9490
Cleanup Site ID:	11739
VCP Project No.:	SW1846

Dear Dr. Chen:

The Washington State Department of Ecology (Ecology) received your request on October 14, 2024, for an opinion regarding the sufficiency of your independent cleanup of the Pioneer Museum (Site) under the Voluntary Cleanup Program (VCP).[1] Acceptance of electronic Site data into Ecology's Environmental Information Management (EIM) database is still pending. This letter provides our opinion and analysis. We are providing this opinion under the authority of the Model Toxics Control Act (MTCA), chapter 70A.305 RCW.[2]

[1] https://ecology.wa.gov/Spills-Cleanup/Contamination-cleanup/Voluntary-Cleanup-Program
[2] https://app.leg.wa.gov/RCW/default.aspx?cite=70A.305

Opinion

Ecology has determined that further action is necessary for this cleanup. Please carefully review the recommendations presented in this letter to continue to move this cleanup site towards closure.

Ecology bases this opinion on an analysis of whether the remedial action meets the substantive requirements of MTCA and its implementing regulations, which are specified in chapter 70A.305 RCW and chapter 173-340 WAC[3] (collectively called "MTCA").

Site Description

This opinion applies only to the Site described below. The Site is defined by the nature and extent of contamination associated with the following release(s):

- Total petroleum hydrocarbons (TPH) as gasoline in the soil.
- TPH as heavy oil in the soil.
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX) in soil.
- Pesticides and herbicides into soil.
- Arsenic into soil and stormwater retention pond surface water.
- Barium, cadmium, chromium (trivalent and hexavalent), and lead into soil.

Enclosure A includes a Site description and brief Site history.

A parcel of real property can be affected by multiple sites. At this time, we have no information that the parcel(s) associated with this Site are affected by other sites.

[3] https://apps.leg.wa.gov/WAC/default.aspx?cite=173-340

Basis for the Opinion

Ecology bases this opinion on the information contained in the following documents:

1. Aerotech Environmental Consulting, Inc. (Aerotech), Limited Phase II Targeted Subsurface Investigation, May 22, 2024.
2. Aerotech, Pioneer Museum, Limited Phase I Environmental Site Assessment, May 6, 2024.
3. Tacoma Pierce County Health Department, Initial Investigation Field Report, May 27, 2011.
4. Environmental Associates, Inc. (EAI), Phase I Environmental Audit, January 14, 2005.

You can request these documents by filing a records request.[4] For help making a request, contact the Public Records Officer at publicrecordsofficer@ecy.wa.gov or call 360-407-6040. Before making a request, check whether the documents are available on Ecology's Cleanup Site Search web page.[5]

This opinion is void if any of the information contained in the documents is materially false or misleading.

Analysis of the Cleanup

Ecology has concluded that **further remedial action** is necessary to clean up contamination at the Site. Ecology bases its conclusion on the following analysis:

Characterizing the Site

Ecology has determined your completed Site characterization is not sufficient for setting cleanup standards and selecting a cleanup action.

Interim Actions Are Encouraged

Interim actions, consistent with WAC 173-340-430, help reduce contaminant concentrations in the environment and protect human health. Removing contamination also helps prepare the property for future re-development and productive use. Ecology supports considering interim actions at this Site. An example of an interim action would be to remove contaminated soil by

[4] https://ecology.wa.gov/About-us/Accountability-transparency/Public-records-requests
[5] https://apps.ecology.wa.gov/cleanupsearch/site/11739

excavation with disposal at a permitted facility (landfill). Excavation with off-Site disposal at a permitted facility is also currently considered a permanent cleanup solution.

An example of where an interim action would be immediately beneficial is excavation at B20, to a depth of at least 5 feet below ground surface (bgs), to remove heavy oil in soil at up to 4 feet bgs. Contaminant concentrations in soil at B20 at 1 and 3 feet bgs currently exceeded the diesel and heavy oil in soil cleanup level protective of ecological receptors (460 mg/kg). The additional benefit of excavation at B20 would likely delineate contamination in soil along the southwest corner of the Property.

Initial Investigation and Phase II ESA results

The Site is **not** located within the Tacoma Smelter Plume footprint.

Two arson related fires were reported and extinguished at the Property on June 27, and June 28, 2010.

On May 11, 2011, Tacoma Pierce County Health Department (TPCHD), on behalf of Ecology, responded after a fire that destroyed the former Site horse barn. Additionally, drums of pesticides were reported as stored in the former horse barn as part of that same initial investigation. Gasoline, ethylbenzene, total xylenes, cPAHs, metals, and pesticides were identified in the limited shallow soil samples collected. Aqueous non-film forming firefighting foam (AFFF) may have been used to extinguish the fire, indicating a potential for per- and poly-fluoroalkyl substance (PFAS) to be present at the Site.

In order to meet City of Puyallup permitting requirements, in January 2024, 36 soil borings and one surface water sample were collected to assess current Property conditions. Additional soil sampling was completed in March 2024 at another 33 sampling locations to further characterize Site soils.

Areas of concern evaluated during the cumulative Phase II ESA included the (buildings all now removed): Pioneer Museum, the original barn, the horse barn, and stormwater retention pond. The retention pond area also included a (now removed) former retaining wall made of battery casings. A previous property owner received reportedly empty battery casings from a neighbor to build the retaining wall, reportedly sometime in the 1960s.

Thank you for responding to Ecology's email on November 4, 2024[6]. Electronic copies of the Phase I ESA and Phase II ESA were submitted to Ecology by email on December 11, 2024. **Please also provide any boring logs for the Phase II ESA borings.**

Recommended Areas of Further Evaluation

Based on available documentation, Ecology recommends additional assessment at the Site in the following areas.

1) The footprint of the burned horse-barn.
2) The shallow soil associated with the former drum areas.
3) The stormwater retention pond.
4) Groundwater for the Site.
5) The vicinity of boring B20.

Site Hazardous Substances

Generally, soil and groundwater have been evaluated consistent with WAC 173-340-900, Table 830-1. Soils were also tested for pesticides and herbicides at one location.

Based on the available data, Site hazardous substances appear to be gasoline, BTEX, heavy oil, arsenic, barium, cadmium, chromium, and lead.

Additional soil sampling is recommended within the former footprint of the burned horse barn, collecting a few samples for: dioxins and furans, cPAHs, and PFAS.

Recommended Additional Soil Sampling

Based on the figures provided to Ecology, it does not appear that confirmatory soil samples were collected within the former horse barn footprint at TPCHD's 2011 soil sampling locations: S1, S2, and S3. To provide data to determine if any additional cleanup is needed with the footprint of the burned horse barn, Ecology recommends sampling shallow soils for dioxin/furans and PFAS at an interval of one location approximately every 400 square feet. This would be about three shallow soil samples within the former barn footprint. Ecology recommends at least one additional shallow soil sample to screen for residual pesticides at the location of the former drums.

---

[6] Tim Mullin of Ecology to Alan Blotch of Aerotech Environmental.

The locations of the former drums were sampled, in 2011 (samples S-1, S-2, S-3), and lindane was identified in shallow soil at the MTCA cleanup level at the time. Other pesticides were detected in soil but did not appear to exceed MTCA direct contact cleanup levels. Gasoline, ethylbenzene, and total xylenes in soil exceeded the MTCA Method A cleanup levels at S2. Heavy oil petroleum hydrocarbons were also detected at S1 and S3 in soil based on the HCID analysis. Ecology recommends confirming current concentrations for pesticides at locations S1, S2, and S3 with both soil with at least one groundwater sample collected to show that groundwater was not impacted. the groundwater sample can be collected by using either a hydropunch/grab method or from a permanent monitoring well).

Groundwater Evaluation

As the Site is within the 10-year wellhead protection zone of the Well #13, AEF202, Ecology recommends collecting at least one hydropunch/grab groundwater sample within each area of concern to determine Site groundwater quality. Based on the surface water elevation in the stormwater pond, groundwater at the Site is expected to be shallow, at approximately 10 feet below ground surface (bgs).

Alternatively, the installation of at least three monitoring wells that are sampled using a low flow groundwater sampling methodology is an option.

Surface Water and Sediment Evaluation

There are no mapped wetlands or priority species habitats at the Site. The Site is located approximately equidistant (0.6 miles to the west and 0.55 miles to the east) between two unnamed perennial streams. Additionally, there is an unnamed pond located 0.1 miles southwest of the Site.

Surface water, in the form of a stormwater holding pond, was evaluated for petroleum, arsenic, cadmium, pesticides, and herbicides. No contaminants were detected, except arsenic at 0.99 µg/L, which was less than the MTCA cleanup level for groundwater (8 µg/L) and for freshwater surface water (10 µg/L). **Surface water, and thus sediment, does not appear to have been impacted by any release of contamination at the Site.**

Air Pathway

Contaminant concentrations to date have not exceeded the MTCA Method A or B cleanup levels. These cleanup levels are generally protective of the soil or groundwater to vapor pathway. There are currently no structures on the Site, and nearby houses are more than 30 feet away from the Site. However, the current property re-development plan, as Ecology understands it, is to develop parcel 0420353027 into residential (houses).

The air/soil vapor pathway at the Site is currently incomplete, unless new soil and/or groundwater data suggest otherwise.

Cultural Resources Evaluation

The Property is in east-central Puyallup in a largely developed urban area. The cleanup does not require additional cultural resources evaluation, based on WAC 173-340-815(3). Ecology can provide additional cultural resources consultation upon request.

Terrestrial Ecological Evaluation (TEE)

The Property was partially developed and is currently generally overgrown. There does not appear to be more than 10 acres of native vegetation within 500 feet of the Site.

Ecology recommends completing a simplified TEE for this Site and use Table 749-2 to screen contaminant concentrations. For most potential contaminants, either MTCA Method A or Method B cleanup levels (protective of the vadose zone) will be the most stringent cleanup values for Site soil. However, screening/cleanup levels protective of ecological receptors for diesel and heavy oil in soil should be screened against 460 mg/kg, and lead in soil against 220 mg/kg.

With your next deliverable, please provide the TEE, the TEE form[7], and a figure showing the 500-foot radius for the TEE around the Site. Completion of the TEE form alone is not sufficient to document the evaluation.

Environmental Data

In accordance with WAC 173-340-840 and TCP Policy 840,[8] all Site data collected since August 1, 2005, will need to be confirmed as uploaded, accepted, and approved in Ecology's Environmental Information Management (EIM) database prior to issuing a no further action

[7] https://apps.ecology.wa.gov/publications/SummaryPages/ECY090300.html
[8] https://apps.ecology.wa.gov/publications/SummaryPages/1609050

(NFA) determination. Please continue to work with your EIM data coordinator to finalize your submittal.

Setting Cleanup Standards

Ecology has determined the cleanup levels and points of compliance you set for the Site will likely meet the requirements of MTCA.

Previous soil and pond water concentrations at the Site were screened against the MTCA Method A cleanup levels illustrated in the table below.

Ecology concurs with these points of compliance as they apply to the Site:

Media	Points of Compliance
Soil-Direct Contact	Based on human exposure via direct contact, the standard point of compliance is throughout the Site from ground surface to fifteen feet below the ground surface. *WAC 173-340-740 (6)(d)* **Not met – pending additional evaluation or interim actions.**
Soil- Protection of Groundwater	Based on the protection of groundwater, the standard point of compliance is throughout the Site. *WAC 173-340-740(6)(b)* **Not met -- pending additional evaluation.**
Soil- Protection of Ecological Receptors	Based on the protection of groundwater, the standard point of compliance is throughout the Site. *WAC 173-340-740(6)(b)* **Not met – additional evaluation or interim actions needed.**
Groundwater	Based on the protection of groundwater quality, the standard point of compliance is throughout the site from the uppermost level of the saturated zone extending vertically to the lowest most depth which could potentially be affected by the Site. *WAC 173-340-720(8)(b)* **Not met – pending additional evaluation.**

The standard points of compliance for soil and groundwater apply at the Site. The air/soil vapor and sediment pathways appear to be incomplete for the Site. Based on sampling data, the surface water pathway at the Site appears to be incomplete.

Unless new data suggest more stringent cleanup levels are needed, Ecology concurs with the following cleanup levels for the Site:

Hazardous Substance[9]	MTCA Soil Cleanup Level (mg/kg)	MTCA Groundwater Cleanup Level (µg/L)
TPH as gasoline	30	800
TPH as diesel and heavy oil	460	500
Benzene	0.03	5
Ethylbenzene	6	700
Toluene	7	1,000
Total Xylenes	9	1,000
Arsenic	20	8
Cadmium	2	2
Barium	1,600	2,000
Trivalent chromium	2,000	50
Hexavalent chromium	19	50
Lead	220	15
Lindane	0.01	0.08
cPAHs (as benzo[a]pyrene)	0.1	0.1

Other contaminants (dioxin/furans, PFAS) may require Site cleanup levels to be established, depending on sampling results. The arsenic in groundwater cleanup level is protective of groundwater for the Pierce County area, established by Ecology.[10]

No adjustments to the cleanup standards were needed based on consideration of applicable state and federal laws.[11]

Selecting and Implementing the Cleanup Action

Ecology has determined the cleanup completed to date does not meet the substantive requirements of MTCA.

As an interim action consistent with WAC 173-340-430, excavation with off-Site disposal at a permitted facility (landfill) is recommended to remediate contaminated soils at the Site.

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[9] Based on exceedance of screening or cleanup level identified at the Site, per data collected to date.
[10] Ecology publication no. 14-09-044, Natural Background Groundwater Arsenic Concentrations in Washington State, January 2022. https://apps.ecology.wa.gov/publications/documents/1409044.pdf
[11] Generally, the Toxics Cleanup Program does not regulate asbestos under MTCA. Typically, HWTR or Solid Waste Management Programs do that at Ecology, and the local regional clean air agency. https://ecology.wa.gov/regulations-permits/guidance-technical-assistance/dangerous-waste-guidance/common-dangerous-waste/asbestos

Excavation with off-Site disposal at a landfill as an interim or cleanup action, is a permanent cleanup solution to the maximum extent practicable. Likely, excavation with disposal at a landfill would be the most practicable approach. Alternately, you can consider completing a feasibility study with disproportionate cost analysis to evaluate cleanup remedies for the Site.

As the property may be re-developed in the future, Ecology recommends that a contaminated media management plan (CMMP) be developed to manage any potentially contaminated soils encountered during any property re-development. Please note that the re-use of petroleum contaminated soils under section 12 (Tables 12.1 and 12.2) in the *Guidance for Remediation of Petroleum Contaminated Sites*[12], are more stringent than the MTCA Method A cleanup levels.

Limitations of the Opinion

Opinion does not settle liability with the state

Liable persons are strictly liable, jointly and severally, for all remedial action costs and for all natural resource damages resulting from the release or releases of hazardous substances at the Site. This opinion **does not**:

- Resolve or alter a person's liability to the state.
- Protect liable persons from contribution claims by third parties.

To settle liability with the state and obtain protection from contribution claims, a person must enter into a consent decree with Ecology under RCW 70A.305.040 4).[13]

Opinion does not constitute a determination of substantial equivalence

To recover remedial action costs from other liable persons under MTCA, one must demonstrate that the action is the substantial equivalent of an Ecology-conducted or Ecology-supervised action. This opinion does not determine whether the action you performed is substantially equivalent. Courts make that determination. See RCW 70A.305.080[14] and WAC 173-340-545.

[12] Ecology publication 10-09-057, revised June 2016.
[13] https://app.leg.wa.gov/RCW/default.aspx?cite=70A.305.040
[14] https://app.leg.wa.gov/RCW/default.aspx?cite=70A.305.080

[15]State is immune from liability

The state, Ecology, and its officers and employees are immune from all liability, and no cause of action of any nature may arise from any act or omission in providing this opinion. See RCW 70A.305.170(6).

Questions

If you have any questions about this opinion, please contact me at 360-999-9589 or tim.mullin@ecy.wa.gov.

Sincerely,

Tim Mullin, LHG
Toxics Cleanup Program
Southwest Region Office

TCM: at

Enclosure: A – Site Description and Brief Site History

cc by email: Alan Blotch, Aerotech Environmental Consulting Inc; alan@dirtydirt.us
Dawn Sinagra, CES-NW, Inc.; dsinagra@cesnwinc.com
Chris Beale, AICP, City of Puyallup; CBeale@PuyallupWA.gov
Marian Abbett, PE, Ecology; marian.abbett@ecy.wa.gov
Ecology Site file

[15] https://apps.leg.wa.gov/WAC/default.aspx?cite=173-340-545

Enclosure A

Site Description and Brief Site History

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Site Description

The Site is located at 2301 23rd Ave SE, Puyallup, Washington 98372. The Site appears to be contained with Pierce County parcel 0420353027, which is 9.09 acres in size.

Property History and Current Use: The property is currently vacant, and reportedly being prepared for re-development as residences. The Pioneer Museum used to occupy the southern end of the Property before being demolished.

Property Vicinity: The Site is located in east-central Puyallup, an urban area of Pierce County. Surrounding properties are residential.

Soils and Geology: To the maximum depth explored of approximately 22 feet below ground surface (bgs), soils are generally dark gray to brown and comprised of sand with silts and clays.

Groundwater: Site groundwater is estimated at approximately 14-16 feet below ground surface. The facility is located within the 10-year wellhead travel time zone for City of Puyallup supply well #13, AEF202. The supply well is located about 0.9 miles northwest of the Site. The New Haven W System Group A/B wells are closer to the Site, at about 0.5 miles northwest; however, the Site is not located within a wellhead protection zone for this well group.

Surface/Storm Water/Septic Systems/Wetlands: No mapped wetlands are present at the Site, but there is an unpermitted stormwater retention pond. Stormwater at the Site and Property is managed in that unpermitted stormwater retention pond. After development, stormwater management is expected to follow City of Puyallup requirements. The property is expected to be connected to municipal water and sewer upon development.

Environmental Justice/Environmental Health Disparities: Per the revised MTCA rule effective January 1, 2024, WAC 173-340-815, Ecology evaluated the location of the cleanup Site. Based on EPA's EJ Screen Environmental Justice tool, census track 53053073406 has a moderately high environmental justice score. Based on the Washington State Department of Health's Environmental Health Disparities (EHD) map, census track 53053073406 has a score of 8. Vulnerable populations, as defined under the Washington State HEAL Act[16], would benefit from the removal of contaminants from the environment and reduced pollution in their neighborhood.

[16] RCW 70A.02

SHARP: Ecology has completed a site hazard assessment ranking process (SHARP) analysis as a part of this cleanup. The evaluation concluded that the overall rank of the Site is Low signifying the risk to human health and the environment is not imminent or immediate.

Brief Site History: EAI completed a Phase I Environmental Site Assessment (ESA) in 2005. Recognized environmental conditions (RECs) were:

Tacoma Pierce County Health Department, on behalf of Ecology, completed an initial investigation on May 10, 2011, under ERTS 620837. Three soil samples collected around drums identified in a burned down horse barn, identified petroleum, metals, and pesticides in soil.

In January and March 2024, Aerotech completed a Phase II ESA at the property. A total of 33 soil borings were sampled and one surface water sample was collected. Analyses varied depending on the area of concern, though the Table 830-1 sampling requirements were generally met.

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Sunset Pointe Residential Development

HORSE BARN

(Exterior north and west sides)

Drilling: March 20, 2025

Laboratory Analytical Results:

Sample No.	Sample Location	Sample Depth:	Sampler Recovery	Gas / BTEX	Diesel Heavy Oil	VOC Method 8260	Arsenic[1]	Lead[2]
H-01	**No.1** corner barn door	0-1'	20"					
H-02	**Lab No. H-15**	1-2'	10"	ND	ND	All > C/U levels	2.74 ppm	3.75 ppm
H-03	"	2'-6'	35" Brn sand					
H-04	"	6-9.5"	Refusal @ 9.5					
H-05	**No.2**: 2' N of #1 **Lab No. H-05**	0-3'	25"	ND	ND			4.59 ppm
H-06	"	0-4'	20" Fill					
H-07	"	4-6'	18" Gry clay					
H-08	"	6-9'	Brn clay					
H-09	"	8-12'	Brn clay					
H-10	**No.3**: 2' N pf #2	0-4'						
H-11		0.4'						
H-12	"	4-8'	32"					

[1] Washington Cleanup Levels / Table 740-1 *Unrestricted land Use* – 20 mg/kg

[2] Washington Cleanup Levels / WDOE Communication (01/10/25) - 220 mg/kg

Sample No.	Sample Location	Sample Depth:	Sampler Recovery and Soils	Gas / BTEX	Diesel Heavy Oil	VOC Method 8260	Arsenic	Lead
H-13	**No.4**: 4' N of #3	0-4'	36"					
H-14	"	4-8'	30"					
H-15 H32(8)	**No.5** NW of pad	0-2.5'	35"	ND	ND	ND		3.75 ppm
H-16	"	1-4'	Duff					
H-17	"	4-8'	36" Sand					
H-18	"	8-10'	Sticky clay					
H-19	"	10-11'						
H-20	"	10-12'						
H-21			Probe Refusal					
H-22	"	10-12'						
H-23	No.6	1-2'						
H-24	"	2-4'						
H-25	"	4-6'						
H-26	"	6-7'						
H-27	"	7-8'						
H-28	"	8-9'						
H-29	"	9-10'						
H-30	"	1-11'						
H-31	"	11-12'						
H-32	NW corner **Loc. #7**	0-4 '	Duff					

Sample No.	Sample Location	Sample Depth:	Sampler Recovery	Gas / BTEX	Diesel Heavy Oil	VOC Method 8260	Arsenic	Lead
H-50	**Loc #12 West of barn**	0-4'	Duff					
H-51		4-8'	Gray clay					
H-52		8-10'	Refusal					
H-53	Loc #13	1-4'	Duff					
H-53		4-8"	Gray clay					
H-54	"	4 - 9"	Refusal					

Laboratory Analytical Results

HORSE BARN

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Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

Aerotech
Alan Blotch
17837 1st Ave S #556
Normandy Park, WA 98148

RE: Sunset Horse Barn,
Work Order Number: 2503474

Sunset Horse Barn

April 10, 2025

Attention Alan Blotch:

Alliance Technical Group, LLC - Seattle received 58 sample(s) on 3/24/2025 for the analyses presented in the following report.

Diesel and Heavy Oil by NWTPH-Dx
Gasoline by NWTPH-Gx
Sample Moisture (Percent Moisture)
Total Metals by EPA 6020B
Volatile Organic Compounds by EPA 8260D

All analyses were performed according to our accredited Quality Assurance program. Please contact the laboratory if you should have any questions about the results.

Alliance Technical Group is committed to accuracy, speed, and customer service. Thank you for choosing Alliance Technical Group's Seattle laboratory team for your analytical needs. We appreciate this opportunity to serve you!

Sincerely,

Brianna Barnes
Project Manager

DoD-ELAP Accreditation #79636 by PJLA, ISO/IEC 17025:2017 and QSM 5.4 for Environmental Testing
ORELAP Certification: WA 100009 (NELAP Recognized) for Environmental Testing
Washington State Department of Ecology Accredited for Environmental Testing, Lab ID C910

Original

Alliance TECHNICAL GROUP

Date: *04/10/2025*

CLIENT: Aerotech
Project: Sunset Horse Barn
Work Order: 2503474

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2503474-001	H-01	03/21/2025 12:00 AM	03/24/2025 4:31 PM
2503474-002	H-02	03/21/2025 12:00 AM	03/24/2025 4:31 PM
2503474-003	H-03	03/21/2025 12:00 AM	03/24/2025 4:31 PM
2503474-004	H-04	03/21/2025 12:00 AM	03/24/2025 4:31 PM
2503474-005	H-05	03/21/2025 12:00 AM	03/24/2025 4:31 PM
2503474-006	H-06	03/21/2025 12:00 AM	03/24/2025 4:31 PM
2503474-007	H-07	03/21/2025 12:00 AM	03/24/2025 4:31 PM
2503474-008	H-08	03/21/2025 12:00 AM	03/24/2025 4:31 PM
2503474-009	H-09	03/21/2025 12:00 AM	03/24/2025 4:31 PM
2503474-010	H-10	03/21/2025 12:00 AM	03/24/2025 4:31 PM
2503474-011	H-11	03/21/2025 12:00 AM	03/24/2025 4:31 PM
2503474-012	H-12	03/21/2025 12:00 AM	03/24/2025 4:31 PM
2503474-013	H-13	03/21/2025 12:00 AM	03/24/2025 4:31 PM
2503474-014	H-14	03/21/2025 12:00 AM	03/24/2025 4:31 PM
2503474-015	H-15	03/21/2025 12:00 AM	03/24/2025 4:31 PM
2503474-016	H-16	03/21/2025 12:00 AM	03/24/2025 4:31 PM
2503474-017	H-17	03/21/2025 12:00 AM	03/24/2025 4:31 PM
2503474-018	H-18	03/21/2025 12:00 AM	03/24/2025 4:31 PM
2503474-019	H-19	03/21/2025 12:00 AM	03/24/2025 4:31 PM
2503474-020	H-20	03/21/2025 12:00 AM	03/24/2025 4:31 PM
2503474-021	H-21	03/21/2025 12:00 AM	03/24/2025 4:31 PM
2503474-022	H-22	03/21/2025 12:00 AM	03/24/2025 4:31 PM
2503474-023	H-23	03/21/2025 12:00 AM	03/24/2025 4:31 PM
2503474-024	H-24	03/21/2025 12:00 AM	03/24/2025 4:31 PM
2503474-025	H-25	03/21/2025 12:00 AM	03/24/2025 4:31 PM
2503474-026	H-26	03/21/2025 12:00 AM	03/24/2025 4:31 PM
2503474-027	H-27 (H7)	03/21/2025 12:00 AM	03/24/2025 4:31 PM
2503474-028	H-28 (H7)	03/21/2025 12:00 AM	03/24/2025 4:31 PM
2503474-029	H-29 (H7)	03/21/2025 12:00 AM	03/24/2025 4:31 PM
2503474-030	H-30 (H7)	03/21/2025 12:00 AM	03/24/2025 4:31 PM
2503474-031	H-31 (8)	03/21/2025 12:00 AM	03/24/2025 4:31 PM
2503474-032	H-32 (8)	03/21/2025 12:00 AM	03/24/2025 4:31 PM
2503474-033	H-33 (8)	03/21/2025 12:00 AM	03/24/2025 4:31 PM
2503474-034	H-34 (8)	03/21/2025 12:00 AM	03/24/2025 4:31 PM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

CLIENT:	Aerotech
Project:	Sunset Horse Barn
Work Order:	2503474

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2503474-035	H-35	03/21/2025 12:00 AM	03/24/2025 4:31 PM
2503474-036	H-36	03/21/2025 12:00 AM	03/24/2025 4:31 PM
2503474-037	H-37	03/21/2025 12:00 AM	03/24/2025 4:31 PM
2503474-038	H-38	03/21/2025 12:00 AM	03/24/2025 4:31 PM
2503474-039	H-39	03/21/2025 12:00 AM	03/24/2025 4:31 PM
2503474-040	H-40 (10)	03/21/2025 12:00 AM	03/24/2025 4:31 PM
2503474-041	H-41 (10)	03/21/2025 12:00 AM	03/24/2025 4:31 PM
2503474-042	H-42 (10)	03/21/2025 12:00 AM	03/24/2025 4:31 PM
2503474-043	H-43 (10)	03/21/2025 12:00 AM	03/24/2025 4:31 PM
2503474-044	H-44 (11)	03/21/2025 12:00 AM	03/24/2025 4:31 PM
2503474-045	H-45 (11)	03/21/2025 12:00 AM	03/24/2025 4:31 PM
2503474-046	H-46 (11)	03/21/2025 12:00 AM	03/24/2025 4:31 PM
2503474-047	H-45 (12)	03/21/2025 12:00 AM	03/24/2025 4:31 PM
2503474-048	H-46 (12)	03/21/2025 12:00 AM	03/24/2025 4:31 PM
2503474-049	H-47 (12)	03/21/2025 12:00 AM	03/24/2025 4:31 PM
2503474-050	H-48 (12)	03/21/2025 12:00 AM	03/24/2025 4:31 PM
2503474-051	H-47 (13)	03/21/2025 12:00 AM	03/24/2025 4:31 PM
2503474-052	H-48 (13)	03/21/2025 12:00 AM	03/24/2025 4:31 PM
2503474-053	H-49 (13)	03/21/2025 12:00 AM	03/24/2025 4:31 PM
2503474-054	H-50 (13)	03/21/2025 12:00 AM	03/24/2025 4:31 PM
2503474-055	H-51 (14)	03/21/2025 12:00 AM	03/24/2025 4:31 PM
2503474-056	H-52 (14)	03/21/2025 12:00 AM	03/24/2025 4:31 PM
2503474-057	H-53 (14)	03/21/2025 12:00 AM	03/24/2025 4:31 PM
2503474-058	H-54 (14)	03/21/2025 12:00 AM	03/24/2025 4:31 PM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

Alliance TECHNICAL GROUP

Case Narrative

WO#: **2503474**
Date: **4/10/2025**

CLIENT: Aerotech
Project: Sunset Horse Barn

I. SAMPLE RECEIPT:
Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:
Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:
Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Qualifiers:

* - Flagged value is not within established control limits
B - Analyte detected in the associated Method Blank
D - Dilution was required
E - Value above quantitation range
H - Holding times for preparation or analysis exceeded
I - Analyte with an internal standard that does not meet established acceptance criteria
J - Analyte detected below Reporting Limit
N - Tentatively Identified Compound (TIC)
Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria
S - Spike recovery outside accepted recovery limits
ND - Not detected at the Reporting Limit
R - High relative percent difference observed

Acronyms:

%Rec - Percent Recovery
CCB - Continued Calibration Blank
CCV - Continued Calibration Verification
DF - Dilution Factor
DUP - Sample Duplicate
HEM - Hexane Extractable Material
ICV - Initial Calibration Verification
LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
MCL - Maximum Contaminant Level
MB or MBLANK - Method Blank
MDL - Method Detection Limit
MS/MSD - Matrix Spike / Matrix Spike Duplicate
PDS - Post Digestion Spike
Ref Val - Reference Value
REP - Sample Replicate
RL - Reporting Limit
RPD - Relative Percent Difference
SD - Serial Dilution
SGT - Silica Gel Treatment
SPK - Spike
Surr - Surrogate

Alliance TECHNICAL GROUP

Analytical Report

Work Order: **2503474**
Date Reported: **4/10/2025**

Client: Aerotech
Project: Sunset Horse Barn
Lab ID: 2503474-005
Client Sample ID: **H-05**

Collection Date: 3/21/2025
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Diesel and Heavy Oil by NWTPH-Dx				Batch ID: 47241		Analyst: ZD
Diesel Range Organics	ND	59.4		mg/Kg-dry	1	4/3/2025 7:39:17 PM
Heavy Oil	ND	119		mg/Kg-dry	1	4/3/2025 7:39:17 PM
Total Petroleum Hydrocarbons	ND	178		mg/Kg-dry	1	4/3/2025 7:39:17 PM
Surr: 2-Fluorobiphenyl	64.0	50 - 150		%Rec	1	4/3/2025 7:39:17 PM
Surr: o-Terphenyl	70.3	50 - 150		%Rec	1	4/3/2025 7:39:17 PM
Total Metals by EPA 6020B				Batch ID: 47273		Analyst: ME
Lead	4.59	0.247		mg/Kg-dry	1	4/7/2025 6:21:00 PM
Sample Moisture (Percent Moisture)				Batch ID: R98685		Analyst: PC
Percent Moisture	19.0	0.500		wt%	1	4/3/2025 9:39:32 AM

Alliance TECHNICAL GROUP

Analytical Report

Work Order: **2503474**
Date Reported: **4/10/2025**

Client: Aerotech
Project: Sunset Horse Barn
Lab ID: 2503474-015
Client Sample ID: **H-15**

Collection Date: 3/21/2025
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Diesel and Heavy Oil by NWTPH-Dx				Batch ID: 47241		Analyst: ZD
Diesel Range Organics	ND	60.8		mg/Kg-dry	1	4/3/2025 7:51:08 PM
Heavy Oil	ND	122		mg/Kg-dry	1	4/3/2025 7:51:08 PM
Total Petroleum Hydrocarbons	ND	182		mg/Kg-dry	1	4/3/2025 7:51:08 PM
Surr: 2-Fluorobiphenyl	87.5	50 - 150		%Rec	1	4/3/2025 7:51:08 PM
Surr: o-Terphenyl	85.8	50 - 150		%Rec	1	4/3/2025 7:51:08 PM
Gasoline by NWTPH-Gx				Batch ID: 47320		Analyst: KJ
Gasoline Range Organics	ND	6.31	H	mg/Kg-dry	1	4/9/2025 3:17:43 PM
Surr: Toluene-d8	95.0	65 - 135	H	%Rec	1	4/9/2025 3:17:43 PM
Surr: 4-Bromofluorobenzene	99.0	65 - 135	H	%Rec	1	4/9/2025 3:17:43 PM
Volatile Organic Compounds by EPA 8260D				Batch ID: 47278		Analyst: FG
Benzene	ND	0.0151	H	mg/Kg-dry	1	4/8/2025 4:32:09 PM
Toluene	ND	0.0315	H	mg/Kg-dry	1	4/8/2025 4:32:09 PM
Ethylbenzene	ND	0.0315	H	mg/Kg-dry	1	4/8/2025 4:32:09 PM
m,p-Xylene	ND	0.0631	H	mg/Kg-dry	1	4/8/2025 4:32:09 PM
o-Xylene	ND	0.0315	H	mg/Kg-dry	1	4/8/2025 4:32:09 PM
Surr: Dibromofluoromethane	96.1	74.8 - 121	H	%Rec	1	4/8/2025 4:32:09 PM
Surr: Toluene-d8	97.7	79.6 - 120	H	%Rec	1	4/8/2025 4:32:09 PM
Surr: 1-Bromo-4-fluorobenzene	97.7	53 - 139	H	%Rec	1	4/8/2025 4:32:09 PM
Total Metals by EPA 6020B				Batch ID: 47273		Analyst: ME
Arsenic	2.74	0.254		mg/Kg-dry	1	4/7/2025 6:25:00 PM
Cadmium	0.0911	0.0254		mg/Kg-dry	1	4/7/2025 6:25:00 PM
Chromium	33.0	0.636		mg/Kg-dry	1	4/7/2025 6:25:00 PM
Lead	3.75	0.254		mg/Kg-dry	1	4/7/2025 6:25:00 PM
Mercury	ND	0.0509		mg/Kg-dry	1	4/7/2025 6:25:00 PM
Sample Moisture (Percent Moisture)				Batch ID: R98685		Analyst: PC
Percent Moisture	20.1			wt%	1	4/3/2025 9:39:32 AM

Alliance TECHNICAL GROUP

Analytical Report

Work Order: **2503474**
Date Reported: **4/10/2025**

Client: Aerotech
Project: Sunset Horse Barn
Lab ID: 2503474-032
Client Sample ID: **H-32 (8)**

Collection Date: 3/21/2025
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Diesel and Heavy Oil by NWTPH-Dx				Batch ID: 47241		Analyst: ZD
Diesel Range Organics	ND	57.7		mg/Kg-dry	1	4/3/2025 8:02:59 PM
Heavy Oil	ND	115		mg/Kg-dry	1	4/3/2025 8:02:59 PM
Total Petroleum Hydrocarbons	ND	173		mg/Kg-dry	1	4/3/2025 8:02:59 PM
Surr: 2-Fluorobiphenyl	88.0	50 - 150		%Rec	1	4/3/2025 8:02:59 PM
Surr: o-Terphenyl	88.7	50 - 150		%Rec	1	4/3/2025 8:02:59 PM
Total Metals by EPA 6020B				Batch ID: 47273		Analyst: ME
Arsenic	4.54	0.251		mg/Kg-dry	1	4/7/2025 6:28:00 PM
Lead	4.02	0.251		mg/Kg-dry	1	4/7/2025 6:28:00 PM
Sample Moisture (Percent Moisture)				Batch ID: R98685		Analyst: PC
Percent Moisture	20.4	0.500		wt%	1	4/3/2025 9:39:32 AM

Alliance TECHNICAL GROUP

Analytical Report

Work Order: **2503474**
Date Reported: **4/10/2025**

Client: Aerotech
Project: Sunset Horse Barn
Lab ID: 2503474-036
Client Sample ID: **H-36**

Collection Date: 3/21/2025
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Diesel and Heavy Oil by NWTPH-Dx				Batch ID: 47241		Analyst: ZD
Diesel Range Organics	ND	57.6		mg/Kg-dry	1	4/3/2025 8:14:51 PM
Heavy Oil	ND	115		mg/Kg-dry	1	4/3/2025 8:14:51 PM
Total Petroleum Hydrocarbons	ND	173		mg/Kg-dry	1	4/3/2025 8:14:51 PM
Surr: 2-Fluorobiphenyl	108	50 - 150		%Rec	1	4/3/2025 8:14:51 PM
Surr: o-Terphenyl	105	50 - 150		%Rec	1	4/3/2025 8:14:51 PM
Total Metals by EPA 6020B				Batch ID: 47273		Analyst: ME
Arsenic	1.48	0.239		mg/Kg-dry	1	4/7/2025 6:31:00 PM
Lead	2.21	0.239		mg/Kg-dry	1	4/7/2025 6:31:00 PM
Sample Moisture (Percent Moisture)				Batch ID: R98685		Analyst: PC
Percent Moisture	17.8	0.500		wt%	1	4/3/2025 9:39:32 AM

Alliance TECHNICAL GROUP

Analytical Report

Work Order: **2503474**
Date Reported: **4/10/2025**

Client: Aerotech
Project: Sunset Horse Barn
Lab ID: 2503474-041
Client Sample ID: **H-41 (10)**

Collection Date: 3/21/2025
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Diesel and Heavy Oil by NWTPH-Dx				Batch ID: 47241		Analyst: ZD
Diesel Range Organics	ND	51.0		mg/Kg-dry	1	4/3/2025 8:26:41 PM
Heavy Oil	ND	102		mg/Kg-dry	1	4/3/2025 8:26:41 PM
Total Petroleum Hydrocarbons	ND	153		mg/Kg-dry	1	4/3/2025 8:26:41 PM
Surr: 2-Fluorobiphenyl	62.2	50 - 150		%Rec	1	4/3/2025 8:26:41 PM
Surr: o-Terphenyl	65.7	50 - 150		%Rec	1	4/3/2025 8:26:41 PM
Total Metals by EPA 6020B				Batch ID: 47273		Analyst: ME
Arsenic	3.43	0.245		mg/Kg-dry	1	4/7/2025 6:34:00 PM
Lead	3.31	0.245		mg/Kg-dry	1	4/7/2025 6:34:00 PM
Sample Moisture (Percent Moisture)				Batch ID: R98685		Analyst: PC
Percent Moisture	14.2	0.500		wt%	1	4/3/2025 9:39:32 AM

Alliance TECHNICAL GROUP

Date: *4/10/2025*

Work Order: 2503474
CLIENT: Aerotech
Project: Sunset Horse Barn

QC SUMMARY REPORT

Total Metals by EPA 6020B

Sample ID: MB-47273	SampType: MBLK			Units: mg/Kg		Prep Date: 4/7/2025		RunNo: 98806		
Client ID: MBLKS	Batch ID: 47273					Analysis Date: 4/7/2025		SeqNo: 2058028		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.200									
Cadmium	ND	0.0200									
Chromium	ND	0.500									
Lead	ND	0.200									
Mercury	ND	0.0400									

Sample ID: LCS-47273	SampType: LCS			Units: mg/Kg		Prep Date: 4/7/2025		RunNo: 98806		
Client ID: LCSS	Batch ID: 47273					Analysis Date: 4/7/2025		SeqNo: 2058029		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	36.9	0.200	40.00	0	92.2	80	120				
Cadmium	1.83	0.0200	2.000	0	91.4	80	120				
Chromium	37.5	0.500	40.00	0	93.8	80	120				
Lead	18.4	0.200	20.00	0	91.9	80	120				
Mercury	0.912	0.0400	1.000	0	91.2	80	120				

Sample ID: 2503473-001AMS	SampType: MS			Units: mg/Kg-dry		Prep Date: 4/7/2025		RunNo: 98806		
Client ID: BATCH	Batch ID: 47273					Analysis Date: 4/7/2025		SeqNo: 2058031		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	39.3	0.205	41.05	2.482	89.8	75	125				
Cadmium	2.06	0.0205	2.052	0.07865	96.6	75	125				
Chromium	53.3	0.513	41.05	26.38	65.5	75	125				S
Lead	21.8	0.205	20.52	2.647	93.4	75	125				
Mercury	1.01	0.0410	1.026	0.03015	95.8	75	125				

NOTES:
S - Spiked amount was low relative to sample concentration. Outlying spike recoveries may be expected.

Alliance TECHNICAL GROUP

Date: *4/10/2025*

Work Order: 2503474
CLIENT: Aerotech
Project: Sunset Horse Barn

QC SUMMARY REPORT

Total Metals by EPA 6020B

Sample ID: **2503473-001AMSD**	SampType: **MSD**			Units: **mg/Kg-dry**		Prep Date: **4/7/2025**		RunNo: **98806**			
Client ID: **BATCH**	Batch ID: **47273**					Analysis Date: **4/7/2025**		SeqNo: **2058033**			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	42.6	0.213	42.66	2.482	94.0	75	125	39.34	7.89	20	
Cadmium	2.16	0.0213	2.133	0.07865	97.5	75	125	2.062	4.52	20	
Chromium	54.7	0.533	42.66	26.38	66.3	75	125	53.26	2.61	20	S
Lead	22.7	0.213	21.33	2.647	94.2	75	125	21.81	4.17	20	
Mercury	1.07	0.0427	1.067	0.03015	97.3	75	125	1.013	5.27	20	

NOTES:
S - Spiked amount was low relative to sample concentration. Outlying spike recoveries may be expected.

Sample ID: **2503473-001APDS**	SampType: **PDS**			Units: **mg/Kg-dry**		Prep Date: **4/7/2025**		RunNo: **98806**			
Client ID: **BATCH**	Batch ID: **47273**					Analysis Date: **4/8/2025**		SeqNo: **2058718**			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	226	1.09	218	2.48	102	75	125				D
Cadmium	11.2	0.109	10.9	0.0786	102	75	125				D
Chromium	247	2.73	218	26.4	101	75	125				D
Lead	118	1.09	109	2.65	105	75	125				D
Mercury	5.48	0.218	5.46	0.0302	99.8	75	125				D

Alliance TECHNICAL GROUP

Date: *4/10/2025*

Work Order: 2503474
CLIENT: Aerotech
Project: Sunset Horse Barn

QC SUMMARY REPORT

Diesel and Heavy Oil by NWTPH-Dx

Sample ID: 2503473-001AMS	SampType: MS			Units: mg/Kg-dry		Prep Date: 4/3/2025		RunNo: 98731			
Client ID: BATCH	Batch ID: 47241					Analysis Date: 4/3/2025		SeqNo: 2056586			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Petroleum Hydrocarbons	447	159	528.6	0	84.6	40.5	159				H
Surr: 2-Fluorobiphenyl	8.13		10.57		76.9	50	150				H
Surr: o-Terphenyl	9.65		10.57		91.3	50	150				H

Sample ID: 2503473-001AMSD	SampType: MSD			Units: mg/Kg-dry		Prep Date: 4/3/2025		RunNo: 98731			
Client ID: BATCH	Batch ID: 47241					Analysis Date: 4/3/2025		SeqNo: 2056587			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Petroleum Hydrocarbons	313	156	521.5	0	60.0	40.5	159	447.0	35.4	30	H
Surr: 2-Fluorobiphenyl	7.66		10.43		73.5	50	150		0		H
Surr: o-Terphenyl	8.71		10.43		83.5	50	150		0		H

Sample ID: 2503473-004ADUP	SampType: DUP			Units: mg/Kg-dry		Prep Date: 4/3/2025		RunNo: 98731			
Client ID: BATCH	Batch ID: 47241					Analysis Date: 4/3/2025		SeqNo: 2056590			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics	ND	52.3						0		30	H
Heavy Oil	ND	105						0		30	H
Total Petroleum Hydrocarbons	ND	157						0		30	H
Surr: 2-Fluorobiphenyl	13.9		10.47		133	50	150		0		H
Surr: o-Terphenyl	14.2		10.47		136	50	150		0		H

Sample ID: MB-47241	SampType: MBLK			Units: mg/Kg		Prep Date: 4/3/2025		RunNo: 98731			
Client ID: MBLKS	Batch ID: 47241					Analysis Date: 4/4/2025		SeqNo: 2056614			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics	ND	50.0									
Heavy Oil	ND	100									
Total Petroleum Hydrocarbons	ND	150									
Surr: 2-Fluorobiphenyl	17.9		20.00		89.6	50	150				

Alliance TECHNICAL GROUP

Date: *4/10/2025*

Work Order: 2503474
CLIENT: Aerotech
Project: Sunset Horse Barn

QC SUMMARY REPORT

Diesel and Heavy Oil by NWTPH-Dx

Sample ID: **MB-47241**	SampType: **MBLK**			Units: **mg/Kg**		Prep Date: **4/3/2025**		RunNo: **98731**		
Client ID: **MBLKS**	Batch ID: **47241**					Analysis Date: **4/4/2025**		SeqNo: **2056614**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: o-Terphenyl	18.0		20.00		89.8	50	150				

Sample ID: **LCS-47241**	SampType: **LCS**			Units: **mg/Kg**		Prep Date: **4/3/2025**		RunNo: **98731**		
Client ID: **LCSS**	Batch ID: **47241**					Analysis Date: **4/4/2025**		SeqNo: **2056616**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Petroleum Hydrocarbons	917	150	1,000	0	91.7	67.1	134				
Surr: 2-Fluorobiphenyl	19.3		20.00		96.3	50	150				
Surr: o-Terphenyl	22.6		20.00		113	50	150				

Alliance TECHNICAL GROUP

Date: *4/10/2025*

Work Order: 2503474
CLIENT: Aerotech
Project: Sunset Horse Barn

QC SUMMARY REPORT

Gasoline by NWTPH-Gx

Sample ID: LCS-47320	SampType: LCS			Units: mg/Kg		Prep Date: 4/9/2025		RunNo: 98880			
Client ID: LCSS	Batch ID: 47320					Analysis Date: 4/9/2025		SeqNo: 2059687			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics	24.6	5.00	25.00	0	98.4	65	135				
Surr: Toluene-d8	1.20		1.250		96.2	65	135				
Surr: 4-Bromofluorobenzene	1.23		1.250		98.2	65	135				

Sample ID: MB-47320	SampType: MBLK			Units: mg/Kg		Prep Date: 4/9/2025		RunNo: 98880			
Client ID: MBLKS	Batch ID: 47320					Analysis Date: 4/9/2025		SeqNo: 2059671			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics	ND	5.00									
Surr: Toluene-d8	1.19		1.250		95.3	65	135				
Surr: 4-Bromofluorobenzene	1.22		1.250		97.4	65	135				

Sample ID: 2503473-002BDUP	SampType: DUP			Units: mg/Kg-dry		Prep Date: 4/9/2025		RunNo: 98880			
Client ID: BATCH	Batch ID: 47320					Analysis Date: 4/9/2025		SeqNo: 2059674			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics	ND	5.86						0		30	H
Surr: Toluene-d8	1.41		1.465		95.9	65	135		0		H
Surr: 4-Bromofluorobenzene	1.45		1.465		99.3	65	135		0		H

Sample ID: 2504238-002BDUP	SampType: DUP			Units: mg/Kg-dry		Prep Date: 4/9/2025		RunNo: 98880			
Client ID: BATCH	Batch ID: 47320					Analysis Date: 4/10/2025		SeqNo: 2059684			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics	ND	4.75						0		30	
Surr: Toluene-d8	1.14		1.187		95.6	65	135		0		
Surr: 4-Bromofluorobenzene	1.18		1.187		99.3	65	135		0		

Work Order: 2503474
CLIENT: Aerotech
Project: Sunset Horse Barn

QC SUMMARY REPORT

Gasoline by NWTPH-Gx

Sample ID: 2503475-001BMS	SampType: MS			Units: mg/Kg-dry		Prep Date: 4/9/2025		RunNo: 98880			
Client ID: BATCH	Batch ID: 47320					Analysis Date: 4/10/2025		SeqNo: 2059685			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics	24.8	5.21	26.07	0.8691	91.9	65	135				H
Surr: Toluene-d8	1.23		1.303		94.5	65	135				H
Surr: 4-Bromofluorobenzene	1.28		1.303		98.6	65	135				H

Work Order: 2503474
CLIENT: Aerotech
Project: Sunset Horse Barn

QC SUMMARY REPORT

Volatile Organic Compounds by EPA 8260D

Sample ID: LCS-47278	SampType: LCS			Units: µg/L		Prep Date: 4/7/2025		RunNo: 98850		
Client ID: LCSS	Batch ID: 47278					Analysis Date: 4/8/2025		SeqNo: 2058998		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	0.968	0.0120	1.000	0	96.8	80	120				
Toluene	0.980	0.0250	1.000	0	98.0	80	120				
Ethylbenzene	0.983	0.0250	1.000	0	98.3	80	120				
m,p-Xylene	1.98	0.0500	2.000	0	98.9	80	120				
o-Xylene	0.978	0.0250	1.000	0	97.8	80	120				
Surr: Dibromofluoromethane	1.24		1.250		99.5	74.8	121				
Surr: Toluene-d8	1.25		1.250		100	79.6	120				
Surr: 1-Bromo-4-fluorobenzene	1.25		1.250		100	53	139				

Sample ID: MB-47278	SampType: MBLK			Units: mg/Kg		Prep Date: 4/7/2025		RunNo: 98850		
Client ID: MBLKS	Batch ID: 47278					Analysis Date: 4/8/2025		SeqNo: 2058994		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.0120									
Toluene	ND	0.0250									
Ethylbenzene	ND	0.0250									
m,p-Xylene	ND	0.0500									
o-Xylene	ND	0.0250									
Surr: Dibromofluoromethane	1.23		1.250		98.3	79.5	124				
Surr: Toluene-d8	1.19		1.250		95.3	77.5	124				
Surr: 1-Bromo-4-fluorobenzene	1.24		1.250		99.4	60.5	139				

Sample ID: 2503473-001BDUP	SampType: DUP			Units: mg/Kg-dry		Prep Date: 4/7/2025		RunNo: 98850		
Client ID: BATCH	Batch ID: 47278					Analysis Date: 4/8/2025		SeqNo: 2058995		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.0128						0		30	H
Toluene	ND	0.0267						0		30	H
Ethylbenzene	ND	0.0267						0		30	H
m,p-Xylene	ND	0.0534						0		30	H
o-Xylene	ND	0.0267						0		30	H

Work Order: 2503474
CLIENT: Aerotech
Project: Sunset Horse Barn

QC SUMMARY REPORT

Volatile Organic Compounds by EPA 8260D

Sample ID: **2503473-001BDUP**	SampType: **DUP**			Units: **mg/Kg-dry**	Prep Date: **4/7/2025**			RunNo: **98850**		
Client ID: **BATCH**	Batch ID: **47278**				Analysis Date: **4/8/2025**			SeqNo: **2058995**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	1.27		1.336		95.4	74.8	121		0		H
Surr: Toluene-d8	1.30		1.336		97.0	79.6	120		0		H
Surr: 1-Bromo-4-fluorobenzene	1.33		1.336		99.7	53	139		0		H

Sample ID: **2503473-002BMS**	SampType: **MS**			Units: **mg/Kg-dry**	Prep Date: **4/7/2025**			RunNo: **98850**		
Client ID: **BATCH**	Batch ID: **47278**				Analysis Date: **4/8/2025**			SeqNo: **2058996**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	0.833	0.0141	1.172	0	71.1	64.8	130				H
Toluene	0.843	0.0293	1.172	0	71.9	64.5	127				H
Ethylbenzene	0.858	0.0293	1.172	0	73.2	68.7	122				H
m,p-Xylene	1.75	0.0586	2.345	0	74.4	69.1	122				H
o-Xylene	0.869	0.0293	1.172	0	74.1	72.4	118				H
Surr: Dibromofluoromethane	1.45		1.465		99.3	74.8	121				H
Surr: Toluene-d8	1.45		1.465		99.2	79.6	120				H
Surr: 1-Bromo-4-fluorobenzene	1.48		1.465		101	53	139				H

Alliance TECHNICAL GROUP

Sample Log-In Check List

Client Name:	AEROTE	Work Order Number:	2503474
Logged by:	Morgan Wilson	Date Received:	3/24/2025 4:31:00 PM

Chain of Custody

1. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2. How was the sample delivered?	Client		

Log In

3. Custody Seals present on shipping container/cooler? (Refer to comments for Custody Seals not intact)	Yes ☐	No ☐	Not Present ☑
4. Was an attempt made to cool the samples?	Yes ☐	No ☑	NA ☐
	Unknown prior to receipt.		
5. Were all items received at a temperature of >2°C to 6°C *	Yes ☐	No ☐	NA ☑
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☑	No ☐	NA ☐
			MeOH
10. Is there headspace in the VOA vials?	Yes ☐	No ☐	NA ☑
11. Did all samples containers arrive in good condition(unbroken)?	Yes ☑	No ☐	
12. Does paperwork match bottle labels?	Yes ☑	No ☐	
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all hold times (except field parameters, pH e.g.) able to be met?	Yes ☑	No ☐	

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order?	Yes ☑	No ☐	NA ☐

Person Notified:	Alan Blotch	Date:	4/2/2025
By Whom:	Morgan Wilson, Clare Grig	Via:	☑ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:	Samples 47-50 Not Received, Hold Time		
Client Instructions:			

17. Additional remarks:

Item Information

Item #	Temp °C
Sample	21.0

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Chain of Custody Record & Laboratory Services Agreement

Date: | Page: 1 of: 6 | Laboratory Project No (internal): 2503474

Project Name: SUNSET HORSE BARN | Special Remarks:

Client: AEROTECH | Project No:

Address: | Collected by: A. BLOTCH

City, State, Zip: | Location: HORSE BARN

Telephone: | Report To (PM): ALAN BLOTCH | Sample Disposal: ☐ Return to client ☐ Disposal by lab (after 30 days)

Fax: | PM Email:

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T)	Dissolved (D)	Anions (IC)***	EDB (8011)	Comments
1	H-01	03/2		S															
2	02																		
3	03																		
4	04																		
5	05																		
6	06																		
7	07																		
8	08																		
9	09																		
10	10																		

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL Individual Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Si Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Turn-around Time:
- ☐ Standard
- ☐ 3 Day
- ☐ 2 Day
- ☐ Next Day
- Same Day _____ (specify)

Relinquished	Date/Time	Received	Date/Time
x		x	
Relinquished	Date/Time	Received	Date/Time
x		x	

Edward Chien 3/24/25 1631

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Chain of Custody Record & Laboratory Services Agreement

Date: | Page: 2 of: 6 | Laboratory Project No (internal): 2503474

Project Name: SUNSET – MORSE BARN | Special Remarks:

Client: | Project No:

Address: | Collected by:

City, State, Zip: | Location:

Telephone: | Report To (PM):

Fax: | PM Email:

Sample Disposal: ☐ Return to client ☐ Disposal by lab (after 30 days)

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) / Dissolved (D)	Anions (IC)***	EDB (8011)					Comments
1	M - 11																					
2	12																					
3	13																					
4	14																					
5	15																					
6	16																					
7	17																					
8	18																					
9	19																					
10	20																					

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL Individual Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Sc Sr Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Turn-around Time:
☐ Standard
☐ 3 Day
☐ 2 Day
☐ Next Day
Same Day _____ (specify)

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished	Date/Time	Received	Date/Time
x		x Edward Chien	Edward Chien 3/24/25 1631
Relinquished	Date/Time	Received	Date/Time
x		x	

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Chain of Custody Record & Laboratory Services Agreement

Date: | Page: 3 of: 6 | Laboratory Project No (internal): 2503474

Project Name: SUNSET — HORSE BARN | Special Remarks:

Client: | Project No: | Collected by: | Location: | Report To (PM): | Sample Disposal: ☐ Return to client ☐ Disposal by lab (after 30 days) | PM Email:

Address: | City, State, Zip: | Telephone: | Fax:

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T)	Dissolved (D)	Anions (IC)***	EDB (8011)				Comments
1	H-21																					
2	22																					
3	23																					
4	24																					
5	25																					
6	26																					
7	27 (H7)																					
8	28 (H7)																					
9	29 (H7)																					
10	30 (H7)																					

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL Individual Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished	Date/Time	Received	Date/Time
x		x Joseph Chien Edward Chien	3/24/25 1631
Relinquished	Date/Time	Received	Date/Time
x		x	

Turn-around Time:
☐ Standard
☐ 3 Day
☐ 2 Day
☐ Next Day
Same Day _____ (specify)

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Chain of Custody Record & Laboratory Services Agreement

Date: | Page: 4 of: 6 | Laboratory Project No (Internal): 2503474

Project Name: SUNSET — HOUSE | Special Remarks:

Client: | Project No:

Address: | Collected by:

City, State, Zip: | Location:

Telephone: | Report To (PM): | Sample Disposal: ☐ Return to client ☐ Disposal by lab (after 30 days)

Fax: | PM Email:

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEx	BTEx	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T)	Dissolved (D)	Anions (IC)***	EDB (8011)	Comments
1	H-31																		
2	32																		
3	33																		
4	34																		
5	35																		
6	36																		
7	37																		
8	38																		
9	39																		
10	40 (10)																		

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA 8 Priority Pollutants TAL Individual Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Si Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

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Relinquished	Date/Time	Received	Date/Time
x		x Edward Chien	Edward Chien 3/24/25 1631
Relinquished	Date/Time	Received	Date/Time
x		x	

Turn-around Time:
- ☐ Standard
- ☐ 3 Day
- ☐ 2 Day
- ☐ Next Day
- Same Day (Specify)

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Chain of Custody Record & Laboratory Services Agreement

Date: | Page: 5 of 86 | Laboratory Project No (internal): 2503474

Project Name: SUNSET HORSE BARN | Special Remarks:

Client: | Project No: | Page 24 of 31

Address: | Collected by:

City, State, Zip: | Location:

Telephone: | Report To (PM): | Sample Disposal: ☐ Return to client ☐ Disposal by lab (after 30 days)

Fax: | PM Email:

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T)	Dissolved (D)	Anions (IC)***	EDB (8011)	Comments
1	H-41 (10)																		
2	H-42 ↓																		
3	H-43 ↓																		
4	44 ↑																		
5	45 (11)																		
6	46 ↓																		
7	45 ↑																		
8	46 ↑																		
9	47 (12)																		
10	48 ↓																		

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Si Sn Ti Tl Li V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

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Relinquished	Date/Time	Received	Date/Time
x		x Edward Chien	Edward Chien 3/24/25 1631
Relinquished	Date/Time	Received	Date/Time
x		x	

Turn-around Time:

- ☐ Standard
- ☐ 3 Day
- ☐ 2 Day
- ☐ Next Day
- Same Day _____ (specify)

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Chain of Custody Record & Laboratory Services Agreement

Date: | Page: 6 of: 6 | Laboratory Project No (internal): 2503474

Project Name: SUNSET - HORSE BARN | Special Remarks:

Client: | Project No:

Address: | Collected by:

City, State, Zip: | Location:

Telephone: | Report To (PM): | Sample Disposal: ☐ Return to client ☐ Disposal by lab (after 30 days)

Fax: | PM Email:

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T)	Dissolved (D)	Anions (IC)***	EDB (8011)	Comments
1	H - 47																		
2	48 (13)																		
3	49																		
4	50																		
5	51																		
6	52																		
7	53 (14)																		
8	54																		
9																			
10																			

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn

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Relinquished	Date/Time	Received	Date/Time
x		x Bayoh Chion Edward Chion	3/24/25 1431
Relinquished	Date/Time	Received	Date/Time
x		x	

Turn-around Time:

- ☐ Standard
- ☐ 3 Day
- ☐ 2 Day
- ☐ Next Day
- Same Day _____ (specify)

Chain of Custody Record & Laboratory Services Agreement

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Date: | Page: 1 of: 6 | Laboratory Project No (internal): 250474

Project Name: SUNSET HORSE BARN

Project No:

Collected by: A. BLOTCH

Location: HORSE BARN

Report To (PM): ALAN BLOTCH

PM Email:

Special Remarks:
Off hold per AB 4/2/25 -cg

Sample Disposal: [ ] Return to client [X] Disposal by lab (after 30 days)

Client: AEROTECH

Address:

City, State, Zip:

Telephone:

Fax:

#	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GRO(C7-C12)	BTEX	Gasoline Range Organics (GRO)	Hydrocarbon Identification (HCID)	Diesel/Motor Oil Range Organics (DRO)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total Cr	Total Fe	Anions (IC)***	EDB (8011)	LEAD	LEAD + ARSENIC	Comments
1	H-01	03/2		S																	
2	02	"		"																	
3	03																				
4	04																				
5	05								X									X			
6	06																				
7	07																				
8	08.																				
9	09																				
10	10	"		"																	

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL Individual: Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Si Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Turn-around Time:
[X] Standard
[ ] 3 Day
[ ] 2 Day
[ ] Next Day
[ ] Same Day (Specify)

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished	Date/Time	Received	Date/Time
1		1 Edward Chien	Edward Chien 3/24/25 1631
Relinquished	Date/Time	Received	Date/Time
2		2	

Fremont

3600 Fremont Ave N
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Chain of Custody Record & Laboratory Services Agreement

Date: Page: 2 of: 6

Laboratory Project No (internal): 125 0613-4

Project Name: SUNSET - MORSE BARN

Project No:

Collected by:

Location:

Report To (PM):

PM Email:

Client:

Address:

City, State, Zip:

Telephone:

Fax:

Special Instructions:

Sample Disposal: ☐ Return to Client ☐ Disposal by lab (after 30 days)

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOC (EPA 8260/624)	BTEX	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	Stoddard Solvent (EPA 8015)	Pest (EPA 8270 SIM)	PCB (EPA 8082 / 608)	Metals (EPA 6020 / 200.8)	Total (T) Dissolved (D)	Anions (F, Cl, NO3, SO4)	Lab (60013)	Comments
11	M - 11															
12	12															
13	13															
14	14															
15	15				X			X				X				
16	16															
17	17															
18	18															
19	19															
20	20															

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL Individual Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Si Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished	Date/Time	Received	Date/Time
[signature]		[signature] Edward Chien	3/29/25 16:31
Relinquished	Date/Time	Received	Date/Time

Turn-around Time:
☐ Standard
☐ 3 Day
☐ 2 Day
☐ Next Day
☐ Same Day Time: _____

Fremont

3600 Fremont Ave N
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352 7178

Chain of Custody Record & Laboratory Services Agreement

Date: Page: 3 of 6

Project Name: SUNSET — HORSE BARN

Project No:

Collected by:

Location:

Report To (PM):

PM Email:

Laboratory Project No (internal): 25C 5[illegible]74-1

Special Instructions:

Client:

Address:

City, State, Zip:

Telephone:

Fax:

Sample Disposal: Return to client: X Disposal by lab (after 30 days)

	Sample Name	Sample Date	Sample Time	Sample Type (matrix)*	NWTPH-Gx (Gasoline Range) (WDOE)	NWTPH-Dx (Diesel Range) (WDOE)	NWTPH-Dx (Oil Range) (WDOE)	Volatile Halogenated Organics (EPA 8260)	Volatile Aromatic Organics (EPA 8260)	Volatile Oxygenated Organics (EPA 8260)	Volatile Organics (EPA 8260)	Semivolatile Organics (EPA 8270)	Polycyclic Aromatic Hydrocarbons (EPA 8270)	Total Petroleum Hydrocarbons (EPA 418.1)	Comments
1	H-21														
2	22														
3	23														
4	24														
5	25														
6	26														
7	27 (H7)														
8	28 (H7)														
9	29 (H7)														
10	30 (H7)														

*Matrix: A = Air AQ = Aqueous B = Bulk O = Other P = Product S = Soil SD = Sediment SL = Solid W = Water DW = Drinking Water GW = Ground Water SW = Storm Water WW = Waste Water

**Metals (Circle): MTCA 5 RCRA 8 Priority Pollutants TAL [illegible] Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sn Sr Ti Tl V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide Orthophosphate Fluoride Nitrate+Nitrite

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished	Date/Time	Received	Date/Time
[signature]		[signature] Edward Chen	3/24/25 1631
Relinquished	Date/Time	Received	Date/Time

Turn-around Time:

X Standard

1 Day

2 Day

Next Day

Same Day

Chain of Custody Record & Laboratory Services Agreement

Fremont
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Date: | Page: 4 of: 6 | Laboratory Project No (internal): 25C-[illegible]

Project Name: SUNSET - MOL

Special Remarks:

Client:

Address:

City, State, Zip:

Telephone:

Fax:

Project No:

Collected by:

Location:

Report To (PM):

PM Email:

Sample Disposal: ☐ Return to Client ☒ Disposal by lab (after 30 days)

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	260/524.2 (VOA)	8260/624 (VOA)	8151	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Heavy Oil Range Organics (HOR)	8270/625 (SVOC)	PAHs/EPA 8270 (SIM)	PCBs/EPA 8082 / 608	Metals** - RCRA 8 / 6010	Metals** - Dissolved (D)	Metals** - Total (T)	Cyanide (CN)	CAM (6010)	LEAD + ARSENIC	Comments
1 M-31																			
2 32									X								X		
3 33																			
4 34																			
5 35																			
6 36									X								X		
7 37																			
8 38																			
9 39																			
10 40 (10)																			

*Matrix: A - Air, AQ - Aqueous, B - Bulk, O - Other, P - Product, S - Soil, SD - Sediment, SL - Solid, W - Water, DW - Drinking Water, GW - Ground Water, SW - Storm Water, WW - Waste Water

**Metals (Circle): RCRA 8 RCRA 13 Priority Pollutants TAL Hazardous Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Si Sn Sr Ti Tl V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate-Nitrite

Turn-around Time:
☒ Standard
☐ 3 Day
☐ 2 Day
☐ Next Day
Same Day

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished: [signature] Date/Time:

Relinquished: Date/Time:

Received: [signature] Date/Time: Edward Chen 3/24/25 1631

Received: Date/Time:

Fremont

3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Chain of Custody Record & Laboratory Services Agreement

Date: Page 5 of 16

Laboratory Project No (internal): 2504174

Project Name: JUNIE HORSE BARN

Project No.:

Collected by:

Location:

Report To (PM):

PM Email:

Special Remarks:

Sample disposal: ( ) Return to client (X) Disposal by lab (after 30 days)

Client:

Address:

City, State, Zip:

Telephone:

Fax:

Sample Name	Container Size	Container Type	Matrix*	PCB's (EPA 8082)	Dioxins	VOC's	Conventional Soil Chemistry (6)	Organochlorine Pesticides (8)	Organophosphorus Pesticides (8)	Semi-VOA's (EPA 8270)	Total Petroleum Hydrocarbons (NWTPH-Dx)	Gasoline Range Organics (NWTPH-Gx)	Volatile Petroleum Hydrocarbons (VPH)	Extractable Petroleum Hydrocarbons (EPH)	Metals (6)	LEAD + ARSENIC	Total Metals (RCRA 8)	Dissolved Metals (RCRA 8)	Comments
H-41 (10)																X			X
H-42 ↓																			
H-43 ↓																			
44 ↑																			
45 (11)																			
46 ↓																			
45 ↑																			Not Received
46																			Not Received
47 (12)																			Not Received
48 ↓																			Not Received

*Matrix: A = Air, Aq = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Sludge, W = Water, GW = Groundwater, GS = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): with 6 | with 8 | Priority Pollutants | As | Individual: Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sn Sr Ti Tl V Zn

***Anions (Circle): Nitrate | Nitrite | Chloride | Sulfate | Bromide | Ortho-Phosphate | Fluoride | Alkalinity/Hardness

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished: [signature] Date/Time:

Received: Edward Chan 3/24/25 1031 Date/Time:

Turn-around Time*

X Standard

3 Day

2 Day

Next Day

Same Day

Chain of Custody Record & Laboratory Services Agreement

Fremont
3600 Fremont Ave N
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Date: Page: 6 of 6

Laboratory Project No (internal): 25C-5474

Project Name: SUNSET - HORSE BARN

Special Instructions:

Client

Project No

Address:

Collected by:

City, State, Zip:

Location:

Telephone:

Report To (PM):

Sample Disposal: ☐ Return to Client ☒ Dispose at Fremont (after 30 days)

Fax:

PM Email:

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	Number of Containers	NWTPH-Gx (Gasoline)	NWTPH-Dx	BTEX	Halogenated VOCs (8260)	Volatile Organic Compounds (8260)	Semivolatile Organic Compounds (8270)	NWTPH-Dx with Silica Gel Cleanup	Polycyclic Aromatic Hydrocarbons (8270 SIM)	PCBs (8082)	Metals** (6020 / 200.8)	Dissolved Metals (6020 / 200.8)	Arsenic Speciation	Total Petroleum Hydrocarbons	Comments
1	H-47																	
2	48																	
3	49																	
4	50																	
5	51																	
6	52																	
7	53																	
8	54																	
9																		
10																		

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA 5 RCRA 8 Priority Pollutants TAL Organics Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Si Sn Sr Ti Tl V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Turn around Time:
- ☑ Standard
- ☐ 7 Day
- ☐ 3 Day
- ☐ Next Day
- ☐ Same Day

Relinquished	Date/Time	Received	Date/Time
		Edward Chan	3/24/25 1631

Sunset Pointe Residential Development

DRUM FIRE AREA

(Between former Museum Building & former Storage Barn)

Drilling: March 20, 2025

Laboratory Analytical Results:

Sample Location	Sample Number	Sample Depth:	Sampler Recovery	Gas / BTEX	Diesel / Heavy Oil	VOC Method 8260	Arsenic[1] Method A 20 ppm	Lead
C-01	C-01	4'	32"	ND/ND		All ND		
C-02	C-02	4'	41"					
"	C-03	8'	34"					
C-03	C-04	4'	32"					
"	C-05	8'	38"					
"	C-06	12'	43"					
C-04	C-07	4'	38"	ND	ND			
"	C-08	8'	43"					4.81 ppm
"	C-09	11.5'	32"					
"	37	6'	PFAS					
D-11	D-11	4'		ND	ND			
D-12	D-12	8'			ND			
"	D-13	12'						
D-13	D-14	4'	PFAS					
"	D-15	8'						
D-14	D-17	4'	44"	ND				

[1] Washington Cleanup Levels / Table 740-1 *Unrestricted Land Use* – 20 mg/kg

D-17	D-17	4'	44"		ND	All ND		3.2 ppm
Sample Location	Sample Number	Sample Depth:	Sampler Recovery	Gas / BTEX	Diesel / Heavy Oil	Method 8260	Arsenic	Lead
"	D-18	8'	32"					
"	D-47	12'	38"					
D-17	D-17	4'	44"					3.2 ppm
"	D-49	8'						
"	D-50	11.5'	39"					
F-01	F-21	4'	11"					
"	F-22	8'	12"					
"	F-23	12'	22"					
F-02	F-24	4'	33"					
"	F-25	8'	25"					
F-03	F-26	4'	31"					
"	F-27	8'	22"					
"	F-28	11'	24"					
F-04	F-29	4'	40"					
"	F-30	8'	36"					
"	F-31	12'	29"					
F-26				ND	ND	All ND		6.28 ppm
F-29				ND	ND			3.87 ppm
F-30				ND all	ND			

Sunset Pointe Analytical Results
Drum Fire Area North Side of Museum

DRUM FIRE AREA

Laboratory Analytical Results:

Sample No.001	**Sample Location:**	**Sample Depth:**	**Lab Results:**	
	Center east	6' bgs		
PFOS			ND	
PFOSA			ND	
PFPeA			ND	
PFPeS			ND	
PFTeDA			ND	
PFTrDA			ND	
PFUnA			ND	
Sample No.002	**Sample Location**	Sample Depth:	Lab Results:	
	Southwest corner	4" bgs		
PFOS[1]	**.001460 mg/kg**			
PFOSA			ND[1]	
PFPeA			ND	
PFPeS			ND	
PFTeDA			ND	
PFTrDA			ND	
PFUnA			ND	

[1] U.S. EPA Method Residential Soil Screening Level = 6.3 mg/kg

1

Alliance
TECHNICAL GROUP
3600 Fremont Ave N
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

Aerotech
Alan Blotch
17837 1st Ave S #556
Normandy Park, WA 98148

RE: Sunset Pointe,
Work Order Number: 2504125

Sunset Drum Fire Area: PFAS

Attention Alan Blotch:

Alliance Technical Group, LLC - Seattle received 2 sample(s) on 4/3/2025 for the analyses presented in the following report.

All analyses were performed according to our accredited Quality Assurance program. Please contact the laboratory if you should have any questions about the results.

Alliance Technical Group is committed to accuracy, speed, and customer service. Thank you for choosing Alliance Technical Group's Seattle laboratory team for your analytical needs. We appreciate this opportunity to serve you!

Sincerely,

Kelley Lovejoy

Kelley Lovejoy
Project Manager

DoD-ELAP Accreditation #79636 by PJLA, ISO/IEC 17025:2017 and QSM 5.4 for Environmental Testing
ORELAP Certification: WA 100009 (NELAP Recognized) for Environmental Testing
Washington State Department of Ecology Accredited for Environmental Testing, Lab ID C910

Original

Alliance TECHNICAL GROUP

Date: *04/21/2025*

CLIENT: Aerotech
Project: Sunset Pointe
Work Order: 2504125

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2504125-001	#37	04/01/2025 12:00 AM	04/03/2025 4:39 PM
2504125-002	D-14	04/01/2025 12:00 AM	04/03/2025 4:39 PM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

Original

Alliance TECHNICAL GROUP

Case Narrative

WO#: **2504125**

Date:

CLIENT: Aerotech
Project: Sunset Pointe

I. SAMPLE RECEIPT:
Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:
Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:
Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

2504125-001A
SUB-PFAS-S-1633 has been Sub Contracted.
2504125-002A
SUB-PFAS-S-1633 has been Sub Contracted.

Alliance TECHNICAL GROUP

Sample Log-In Check List

Client Name:	AEROTE	Work Order Number:	2504125
Logged by:	Morgan Wilson	Date Received:	4/3/2025 4:39:00 PM

Chain of Custody

1.	Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2.	How was the sample delivered?	Client		

Log In

3.	Custody Seals present on shipping container/cooler? (Refer to comments for Custody Seals not intact)	Yes ☐	No ☐	Not Present ☑
4.	Was an attempt made to cool the samples?	Yes ☐	No ☑	NA ☐
		Unknown prior to receipt.		
5.	Were all items received at a temperature of >2°C to 6°C *	Yes ☐	No ☐	NA ☑
6.	Sample(s) in proper container(s)?	Yes ☐	No ☑	
7.	Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8.	Are samples properly preserved?	Yes ☑	No ☐	
9.	Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10.	Is there headspace in the VOA vials?	Yes ☐	No ☐	NA ☑
11.	Did all samples containers arrive in good condition(unbroken)?	Yes ☑	No ☐	
12.	Does paperwork match bottle labels?	Yes ☑	No ☐	
13.	Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
14.	Is it clear what analyses were requested?	Yes ☑	No ☐	
15.	Were all hold times (except field parameters, pH e.g.) able to be met?	Yes ☑	No ☐	

Special Handling (if applicable)

16.	Was client notified of all discrepancies with this order?	Yes ☐	No ☐	NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

Item Information

Item #	Temp °C
Sample	14.6

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C

Original

Chain of Custody Record & Laboratory Services Agreement

Alliance
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790

Date: 04-03-25 Page: 1 of: 1

Laboratory Project No (internal): 2504125

Project Name: SUNSET POINTE

Special Remarks:

Client: AERO TECH

Project No:

Address:

Collected by: ALAIN BLOTCH

City, State, Zip:

Location:

Telephone:

Report To (PM):

Disposal: Samples will be disposed in 30 days unless otherwise requested.
☒ Retain volume (specify above) ☐ Return to client

Email(s):

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	# of Cont.	VOCs (EPA 8260 / 624)	BTEX	Gasoline Range Organics (GX)	Hydrocarbon identification (HCID)	Diesel/Heavy Oil Range Organics (Dx)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)		PFAS	Comments
1	#37	04-01		S															X	1633
2	D-14	"		S															X	1633
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA 5 RCRA 8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Turn-around Time:
☒ Standard ☐ Next Day
☐ 3 Day ☐ Same Day
☐ 2 Day ____ (specify)

I represent that I am authorized to enter into this Agreement with Alliance Technical Group LLC on behalf of the Client named above, that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x	ALAIN BLOTCH	04/03	x		
Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x				Jack Hawthorne	1639 4/3/25

DRUM FIRE AREA

Laboratory Analytical Results:

Sample No.001	**Sample Location:**	**Sample Depth:**	**Lab Results:**	
	Center east	6' bgs		
PFOS			ND	
PFOSA			ND	
PFPeA			ND	
PFPeS			ND	
PFTeDA			ND	
PFTrDA			ND	
PFUnA			ND	
Sample No.002	**Sample Location**	Sample Depth:	Lab Results:	
	Southwest corner	4" bgs		
PFOS[1]	**.001460 mg/kg**			
PFOSA			ND[1]	
PFPeA			ND	
PFPeS			ND	
PFTeDA			ND	
PFTrDA			ND	
PFUnA			ND	

[1] U.S. EPA Method Residential Soil Screening Level = 6.3 mg/kg

Alliance Technical Group - Akron
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

April 21, 2025

PM
ATG - SEATTLE LAB
3600 Fremont Ave N.
Seattle, WA 98103
TEL: (206) 352-3790
FAX:

PFAS - Drum Fire Area

RE: 2504125

Dear PM:

Order No.: 25040773

Alliance Technical Group - Akron received 2 sample(s) on 4/9/2025 for the analyses presented in the following report.

There were no problems with the analytical events associated with this report unless noted in the Case Narrative.

Quality control data is within laboratory defined or method specified acceptance limits except where noted.

If you have any questions regarding these tests results, please feel free to call the laboratory.

Sincerely,

Salwa Najjar

Project Manager

3310 Win St.
Cuyahoga Falls, Ohio 44223

Arkansas 88-0735, California 2943, Colorado, Connecticut PH-0108, Florida NELAC E87688, Idaho OH00923, Illinois 200061, Indiana C-OH-13, ISO/IEC 17025:2017 119125 L22-544, Kansas E-10347, Kentucky (Underground Storage Tank) 3, Kentucky 90146, Maryland 339, Michigan 9988, Minnesota 1780279, Nevada OH009232020-1, New Hampshire 2996, New Jersey OH006, New York 11777, North Carolina 39705 and 631, North Dakota R-201, Ohio DW, Ohio VAP CL0052, Oklahoma 2019-155, Oregon OH200001, Pennsylvania 68-01335, Rhode Island LA000317, South Carolina 92016001, Texas T104704466-19-16, Utah OH009232020-12, Virginia VELAP 10381, West Virginia 9957C

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Case Narrative

WO#: **25040773**
Date: **4/21/2025**

CLIENT: ATG - SEATTLE LAB
Project: 2504125

WorkOrder Narrative:
25040773: This report in its entirety consists of the following documents: Cover Letter, Case Narrative, Analytical Results, QC Summary Report, Applicable Accreditation Information, Chain-of-Custody, Cooler Receipt Form, and other applicable forms as necessary. All documents contain the Alliance Technical Group Work Order Number assigned to this report.

Alliance Technical Group holds the accreditations/certifications listed at the bottom of the cover letter that may or may not pertain to this report. Please refer to the "Accreditation Program Analytes Report" for accredited analytes list.

The information contained in this analytical report is the sole property of Alliance Technical Group and that of the customer. It cannot be reproduced in any form without the consent of Alliance Technical Group or the customer for which this report was issued. The results contained in this report are only representative of the samples received. Conditions can vary at different times and at different sampling conditions. Alliance Technical Group is not responsible for use or interpretation of the data included herein.

All results for solid samples are reported on an "as received" or "wet weight" basis unless indicated as "dry weight" using the "-dry" designation on the reporting units.

This report is believed to meet all of the requirements of the accrediting agency, where applicable. Any comments or problems with the analytical events associated with this report are noted below.

Analytical Sequence Sample Notes:
25040773-002A SVOC-EPA1633_S: CCV exhibited high recoveries for 7:3 FTCA and 9CL-PF3ONS, indicating possible high bias. Sample is non-detect for these analytes.

25040773-001A SVOC-EPA1633_S: CCV exhibited high recoveries for 7:3 FTCA and 9CL-PF3ONS, indicating possible high bias. Sample is non-detect for these analytes.

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Workorder Sample Summary

WO#: **25040773**

21-Apr-25

CLIENT: ATG - SEATTLE LAB
Project: 2504125

Lab SampleID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
25040773-001	2504125-001A		4/1/2025	4/9/2025 10:00:00 AM	Solid
25040773-002	2504125-002A		4/1/2025	4/9/2025 10:00:00 AM	Solid

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Analytical Report

(consolidated)

WO#: **25040773**

Date Reported: **4/21/2025**

CLIENT: ATG - SEATTLE LAB **Collection Date:** 4/1/2025

Project: 2504125

Lab ID: 25040773-001 **Matrix:** SOLID

Client Sample ID: 2504125-001A

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PFAS BY EPA 1633 PFAS IN SOLID SAMPLES (EPA METHOD 1633)			**EPA 1633**		**EPA 1633 DRAFT - REV. 4**	Analyst: **JJF**
11Cl-PF3OUdS	ND	881		ng/kg-dry	1	4/16/2025 12:50:00 AM
3:3 FTCA	ND	1100		ng/kg-dry	1	4/16/2025 12:50:00 AM
4:2 FTS	ND	881		ng/kg-dry	1	4/16/2025 12:50:00 AM
5:3 FTCA	ND	5510		ng/kg-dry	1	4/16/2025 12:50:00 AM
6:2 FTS	ND	881		ng/kg-dry	1	4/16/2025 12:50:00 AM
7:3 FTCA	ND	5510	QC+	ng/kg-dry	1	4/16/2025 12:50:00 AM
8:2 FTS	ND	881		ng/kg-dry	1	4/16/2025 12:50:00 AM
9CL-PF3ONS	ND	881	QC+	ng/kg-dry	1	4/16/2025 12:50:00 AM
ADONA	ND	881		ng/kg-dry	1	4/16/2025 12:50:00 AM
HFPO-DA	ND	881		ng/kg-dry	1	4/16/2025 12:50:00 AM
NEtFOSA	ND	220		ng/kg-dry	1	4/16/2025 12:50:00 AM
NEtFOSAA	ND	220		ng/kg-dry	1	4/16/2025 12:50:00 AM
NEtFOSE	ND	2200		ng/kg-dry	1	4/16/2025 12:50:00 AM
NFDHA	ND	440		ng/kg-dry	1	4/16/2025 12:50:00 AM
NMeFOSA	ND	220		ng/kg-dry	1	4/16/2025 12:50:00 AM
NMeFOSAA	ND	220		ng/kg-dry	1	4/16/2025 12:50:00 AM
NMeFOSE	ND	2200		ng/kg-dry	1	4/16/2025 12:50:00 AM
PFBA	ND	881		ng/kg-dry	1	4/16/2025 12:50:00 AM
PFBS	ND	220		ng/kg-dry	1	4/16/2025 12:50:00 AM
PFDA	ND	220		ng/kg-dry	1	4/16/2025 12:50:00 AM
PFDoA	ND	220		ng/kg-dry	1	4/16/2025 12:50:00 AM
PFDoS	ND	220		ng/kg-dry	1	4/16/2025 12:50:00 AM
PFDS	ND	220		ng/kg-dry	1	4/16/2025 12:50:00 AM
PFEESA	ND	440		ng/kg-dry	1	4/16/2025 12:50:00 AM
PFHpA	ND	220		ng/kg-dry	1	4/16/2025 12:50:00 AM
PFHpS	ND	220		ng/kg-dry	1	4/16/2025 12:50:00 AM
PFHxA	ND	220		ng/kg-dry	1	4/16/2025 12:50:00 AM
PFHxS	ND	220		ng/kg-dry	1	4/16/2025 12:50:00 AM
PFMBA	ND	440		ng/kg-dry	1	4/16/2025 12:50:00 AM
PFMPA	ND	440		ng/kg-dry	1	4/16/2025 12:50:00 AM
PFNA	ND	220		ng/kg-dry	1	4/16/2025 12:50:00 AM
PFNS	ND	220		ng/kg-dry	1	4/16/2025 12:50:00 AM
PFOA	ND	220		ng/kg-dry	1	4/16/2025 12:50:00 AM

Qualifiers:

- H Holding times for preparation or analysis exceeded
- ND Not Detected
- R RPD outside accepted recovery limits
- W Sample container temperature is out of limit as specified at testcode
- M Manual Integration used to determine area response
- PL Permit Limit
- RL Reporting Detection Limit

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Analytical Report

(consolidated)

WO#: **25040773**

Date Reported: **4/21/2025**

CLIENT: ATG - SEATTLE LAB **Collection Date:** 4/1/2025

Project: 2504125

Lab ID: 25040773-001 **Matrix:** SOLID

Client Sample ID: 2504125-001A

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PFAS BY EPA 1633 **PFAS IN SOLID SAMPLES (EPA METHOD 1633)**			**EPA 1633**		**EPA 1633 DRAFT - REV. 4**	Analyst: **JJF**
PFOS	ND	220		ng/kg-dry	1	4/16/2025 12:50:00 AM
PFOSA	ND	220		ng/kg-dry	1	4/16/2025 12:50:00 AM
PFPeA	ND	440		ng/kg-dry	1	4/16/2025 12:50:00 AM
PFPeS	ND	220		ng/kg-dry	1	4/16/2025 12:50:00 AM
PFTeDA	ND	220		ng/kg-dry	1	4/16/2025 12:50:00 AM
PFTrDA	ND	220		ng/kg-dry	1	4/16/2025 12:50:00 AM
PFUnA	ND	220		ng/kg-dry	1	4/16/2025 12:50:00 AM
Surr: 13C2-PFDA	92.8	50-200		%Rec	1	4/16/2025 12:50:00 AM
Surr: 13C2-PFHxA	78.9	50-200		%Rec	1	4/16/2025 12:50:00 AM
Surr: 13C3-PFBA	81.7	50-200		%Rec	1	4/16/2025 12:50:00 AM
Surr: 13C4-PFOA	93.4	50-200		%Rec	1	4/16/2025 12:50:00 AM
Surr: 13C4-PFOS	110	50-200		%Rec	1	4/16/2025 12:50:00 AM
Surr: 13C5-PFNA	87.9	50-200		%Rec	1	4/16/2025 12:50:00 AM
Surr: 18O2-PFHxS	100	50-200		%Rec	1	4/16/2025 12:50:00 AM
PFAS BY EPA 1633 **PERCENT MOISTURE BY SM2540MOD**					**SM 2540**	Analyst: **DHF**
Percent Moisture	11.3	0.200		%	1	4/14/2025 12:52:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded
ND	Not Detected
R	RPD outside accepted recovery limits
W	Sample container temperature is out of limit as specified at testcode
M	Manual Integration used to determine area response
PL	Permit Limit
RL	Reporting Detection Limit

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Analytical Report

(consolidated)

WO#: **25040773**

Date Reported: **4/21/2025**

CLIENT: ATG - SEATTLE LAB **Collection Date:** 4/1/2025

Project: 2504125

Lab ID: 25040773-002 **Matrix:** SOLID

Client Sample ID: 2504125-002A

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PFAS BY EPA 1633			**EPA 1633**		**EPA 1633**	Analyst: **JJF**
PFAS IN SOLID SAMPLES (EPA METHOD 1633)					**DRAFT - REV. 4**	
11Cl-PF3OUdS	ND	1010		ng/kg-dry	1	4/16/2025 1:22:00 AM
3:3 FTCA	ND	1270		ng/kg-dry	1	4/16/2025 1:22:00 AM
4:2 FTS	ND	1010		ng/kg-dry	1	4/16/2025 1:22:00 AM
5:3 FTCA	ND	6340		ng/kg-dry	1	4/16/2025 1:22:00 AM
6:2 FTS	ND	1010		ng/kg-dry	1	4/16/2025 1:22:00 AM
7:3 FTCA	ND	6340	QC+	ng/kg-dry	1	4/16/2025 1:22:00 AM
8:2 FTS	ND	1010		ng/kg-dry	1	4/16/2025 1:22:00 AM
9CL-PF3ONS	ND	1010	QC+	ng/kg-dry	1	4/16/2025 1:22:00 AM
ADONA	ND	1010		ng/kg-dry	1	4/16/2025 1:22:00 AM
HFPO-DA	ND	1010		ng/kg-dry	1	4/16/2025 1:22:00 AM
NEtFOSA	ND	254		ng/kg-dry	1	4/16/2025 1:22:00 AM
NEtFOSAA	ND	254		ng/kg-dry	1	4/16/2025 1:22:00 AM
NEtFOSE	ND	2540		ng/kg-dry	1	4/16/2025 1:22:00 AM
NFDHA	ND	507		ng/kg-dry	1	4/16/2025 1:22:00 AM
NMeFOSA	ND	254		ng/kg-dry	1	4/16/2025 1:22:00 AM
NMeFOSAA	ND	254		ng/kg-dry	1	4/16/2025 1:22:00 AM
NMeFOSE	ND	2540		ng/kg-dry	1	4/16/2025 1:22:00 AM
PFBA	ND	1010		ng/kg-dry	1	4/16/2025 1:22:00 AM
PFBS	ND	254		ng/kg-dry	1	4/16/2025 1:22:00 AM
PFDA	ND	254		ng/kg-dry	1	4/16/2025 1:22:00 AM
PFDoA	ND	254		ng/kg-dry	1	4/16/2025 1:22:00 AM
PFDoS	ND	254		ng/kg-dry	1	4/16/2025 1:22:00 AM
PFDS	ND	254		ng/kg-dry	1	4/16/2025 1:22:00 AM
PFEESA	ND	507		ng/kg-dry	1	4/16/2025 1:22:00 AM
PFHpA	ND	254		ng/kg-dry	1	4/16/2025 1:22:00 AM
PFHpS	ND	254		ng/kg-dry	1	4/16/2025 1:22:00 AM
PFHxA	ND	254		ng/kg-dry	1	4/16/2025 1:22:00 AM
PFHxS	ND	254		ng/kg-dry	1	4/16/2025 1:22:00 AM
PFMBA	ND	507		ng/kg-dry	1	4/16/2025 1:22:00 AM
PFMPA	ND	507		ng/kg-dry	1	4/16/2025 1:22:00 AM
PFNA	ND	254		ng/kg-dry	1	4/16/2025 1:22:00 AM
PFNS	ND	254		ng/kg-dry	1	4/16/2025 1:22:00 AM
PFOA	ND	254		ng/kg-dry	1	4/16/2025 1:22:00 AM

Qualifiers:

- H Holding times for preparation or analysis exceeded
- ND Not Detected
- R RPD outside accepted recovery limits
- W Sample container temperature is out of limit as specified at testcode
- M Manual Integration used to determine area response
- PL Permit Limit
- RL Reporting Detection Limit

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Analytical Report

(consolidated)

WO#: **25040773**

Date Reported: **4/21/2025**

CLIENT: ATG - SEATTLE LAB **Collection Date:** 4/1/2025

Project: 2504125

Lab ID: 25040773-002 **Matrix:** SOLID

Client Sample ID: 2504125-002A

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
PFAS BY EPA 1633 **PFAS IN SOLID SAMPLES (EPA METHOD 1633)**			**EPA 1633**		**EPA 1633** **DRAFT - REV. 4**	Analyst: **JJF**
PFOS	1460	254		ng/kg-dry	1	4/16/2025 1:22:00 AM
PFOSA	ND	254		ng/kg-dry	1	4/16/2025 1:22:00 AM
PFPeA	ND	507		ng/kg-dry	1	4/16/2025 1:22:00 AM
PFPeS	ND	254		ng/kg-dry	1	4/16/2025 1:22:00 AM
PFTeDA	ND	254		ng/kg-dry	1	4/16/2025 1:22:00 AM
PFTrDA	ND	254		ng/kg-dry	1	4/16/2025 1:22:00 AM
PFUnA	ND	254		ng/kg-dry	1	4/16/2025 1:22:00 AM
Surr: 13C2-PFDA	79.7	50-200		%Rec	1	4/16/2025 1:22:00 AM
Surr: 13C2-PFHxA	70.2	50-200		%Rec	1	4/16/2025 1:22:00 AM
Surr: 13C3-PFBA	73.8	50-200		%Rec	1	4/16/2025 1:22:00 AM
Surr: 13C4-PFOA	75.4	50-200		%Rec	1	4/16/2025 1:22:00 AM
Surr: 13C4-PFOS	94.8	50-200		%Rec	1	4/16/2025 1:22:00 AM
Surr: 13C5-PFNA	79.3	50-200		%Rec	1	4/16/2025 1:22:00 AM
Surr: 18O2-PFHxS	105	50-200		%Rec	1	4/16/2025 1:22:00 AM
PFAS BY EPA 1633 **PERCENT MOISTURE BY SM2540MOD**					**SM 2540**	Analyst: **DHF**
Percent Moisture	22.5	0.200		%	1	4/14/2025 12:52:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response
ND	Not Detected	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
W	Sample container temperature is out of limit as specified at testcode		

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QC SUMMARY REPORT

WO#: **25040773**

21-Apr-25

Client: ATG - SEATTLE LAB
Project: 2504125

BatchID: **83637**

Sample ID: **MB-83637**	SampType: **MBLK**	TestCode: **SVOC-EPA16**	Units: **mg/Kg**	Prep Date: **4/14/2025**	RunNo: **207053**
Client ID: **BatchQC**	Batch ID: **83637**	TestNo: **E1633**	**E1633**	Analysis Date: **4/15/2025**	SeqNo: **5541838**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
11Cl-PF3OUdS	ND	0.000795									
3:3 FTCA	ND	0.000994									
4:2 FTS	ND	0.000795									
5:3 FTCA	ND	0.00497									
6:2 FTS	ND	0.000795									
7:3 FTCA	ND	0.00497									
8:2 FTS	ND	0.000795									
9Cl-PF3ONS	ND	0.000795									
ADONA	ND	0.000795									
HFPO-DA	ND	0.000795									
NEtFOSA	ND	0.000199									
NEtFOSAA	ND	0.000199									
NEtFOSE	ND	0.00199									
NFDHA	ND	0.000398									
NMeFOSA	ND	0.000199									
NMeFOSAA	ND	0.000199									
NMeFOSE	ND	0.00199									
PFBA	ND	0.000795									
PFBS	ND	0.000199									
PFDA	ND	0.000199									
PFDoA	ND	0.000199									
PFDoS	ND	0.000199									
PFDS	ND	0.000199									
PFEESA	ND	0.000398									
PFHpA	ND	0.000199									
PFHpS	ND	0.000199									

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected
PL	Permit Limit	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified at testcode		

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QC SUMMARY REPORT

WO#: **25040773**

21-Apr-25

Client: ATG - SEATTLE LAB
Project: 2504125

BatchID: **83637**

Sample ID: **MB-83637**	SampType: **MBLK**	TestCode: **SVOC-EPA16**	Units: **mg/Kg**	Prep Date: **4/14/2025**	RunNo: **207053**
Client ID: **BatchQC**	Batch ID: **83637**	TestNo: **E1633**	**E1633**	Analysis Date: **4/15/2025**	SeqNo: **5541838**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
PFHxA	ND	0.000199									
PFHxS	ND	0.000199									
PFMBA	ND	0.000398									
PFMPA	ND	0.000398									
PFNA	ND	0.000199									
PFNS	ND	0.000199									
PFOA	ND	0.000199									
PFOS	ND	0.000199									
PFOSA	ND	0.000199									
PFPeA	ND	0.000398									
PFPeS	ND	0.000199									
PFTeDA	ND	0.000199									
PFTrDA	ND	0.000199									
PFUnA	ND	0.000199									
Surr: 13C2-PFDA	2.41		2.485		96.8	50	200				
Surr: 13C2-PFHxA	4.24		4.970		85.3	50	200				
Surr: 13C3-PFBA	8.43		9.940		84.8	50	200				
Surr: 13C4-PFOA	4.40		4.970		88.5	50	200				
Surr: 13C4-PFOS	4.84		4.761		102	50	200				
Surr: 13C5-PFNA	2.03		2.485		81.8	50	200				
Surr: 18O2-PFHxS	4.37		4.712		92.7	50	200				

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected
PL	Permit Limit	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified at testcode		

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QC SUMMARY REPORT

WO#: **25040773**

21-Apr-25

Client: ATG - SEATTLE LAB
Project: 2504125

BatchID: **83637**

Sample ID: **LCS-83637** SampType: **LCS** TestCode: **SVOC-EPA16** Units: **mg/Kg** Prep Date: **4/14/2025** RunNo: **207053**
Client ID: **BatchQC** Batch ID: **83637** TestNo: **E1633** **E1633** Analysis Date: **4/16/2025** SeqNo: **5541843**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
11Cl-PF3OUdS	0.0408	0.000791	0.0373	0	109	45	160				
3:3 FTCA	0.0537	0.000988	0.0494	0	109	45	130				
4:2 FTS	0.0356	0.000791	0.0370	0	96.2	60	150				
5:3 FTCA	0.248	0.00494	0.247	0	100	60	130				
6:2 FTS	0.0389	0.000791	0.0376	0	104	55	200				
7:3 FTCA	0.286	0.00494	0.247	0	116	60	150				
8:2 FTS	0.0363	0.000791	0.0379	0	95.7	70	150				
9CL-PF3ONS	0.0436	0.000791	0.0369	0	118	70	150				
ADONA	0.0381	0.000791	0.0374	0	102	70	160				
HFPO-DA	0.0365	0.000791	0.0395	0	92.4	70	145				
NEtFOSA	0.00878	0.000198	0.00988	0	88.8	70	140				
NEtFOSAA	0.0100	0.000198	0.00988	0	102	65	165				
NEtFOSE	0.0904	0.00198	0.0988	0	91.5	70	135				
NFDHA	0.0192	0.000395	0.0198	0	97.0	60	155				
NMeFOSA	0.00955	0.000198	0.00988	0	96.6	70	155				
NMeFOSAA	0.00939	0.000198	0.00988	0	95.0	65	155				
NMeFOSE	0.0988	0.00198	0.0988	0	100	70	140				
PFBA	0.0385	0.000791	0.0395	0	97.3	70	140				
PFBS	0.00904	0.000198	0.00877	0	103	65	145				
PFDA	0.0105	0.000198	0.00988	0	106	70	155				
PFDoA	0.00846	0.000198	0.00988	0	85.6	70	150				
PFDoS	0.00746	0.000198	0.00957	0	78.0	25	160				
PFDS	0.00856	0.000198	0.00953	0	89.9	40	155				
PFEESA	0.0200	0.000395	0.0176	0	113	70	140				
PFHpA	0.00953	0.000198	0.00988	0	96.5	65	145				
PFHpS	0.00962	0.000198	0.00941	0	102	65	155				

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected
PL	Permit Limit	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified at testcode		

Original

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QC SUMMARY REPORT

WO#: **25040773**

21-Apr-25

Client: ATG - SEATTLE LAB
Project: 2504125

BatchID: **83637**

Sample ID: **LCS-83637** SampType: **LCS** TestCode: **SVOC-EPA16** Units: **mg/Kg** Prep Date: **4/14/2025** RunNo: **207053**
Client ID: **BatchQC** Batch ID: **83637** TestNo: **E1633** **E1633** Analysis Date: **4/16/2025** SeqNo: **5541843**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
PFHxA	0.00897	0.000198	0.00988	0	90.8	65	140				
PFHxS	0.00816	0.000198	0.00902	0	90.5	60	150				
PFMBA	0.0186	0.000395	0.0198	0	94.3	60	150				
PFMPA	0.0204	0.000395	0.0198	0	103	30	140				
PFNA	0.00955	0.000198	0.00988	0	96.7	70	155				
PFNS	0.00771	0.000198	0.00949	0	81.2	55	140				
PFOA	0.00895	0.000198	0.00988	0	90.6	70	150				
PFOS	0.00852	0.000198	0.00917	0	92.9	65	160				
PFOSA	0.00950	0.000198	0.00988	0	96.1	70	140				
PFPeA	0.0184	0.000395	0.0198	0	92.9	60	150				
PFPeS	0.00762	0.000198	0.00929	0	82.1	55	160				
PFTeDA	0.00946	0.000198	0.00988	0	95.8	65	150				
PFTrDA	0.0107	0.000198	0.00988	0	108	65	150				
PFUnA	0.00947	0.000198	0.00988	0	95.8	70	155				
Surr: 13C2-PFDA	2.00		2.470		81.0	50	200				
Surr: 13C2-PFHxA	3.30		4.941		66.8	50	200				
Surr: 13C3-PFBA	7.21		9.881		72.9	50	200				
Surr: 13C4-PFOA	3.75		4.941		75.8	50	200				
Surr: 13C4-PFOS	4.25		4.733		89.8	50	200				
Surr: 13C5-PFNA	1.90		2.470		77.0	50	200				
Surr: 18O2-PFHxS	4.59		4.684		98.1	50	200				

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected
PL	Permit Limit	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified at testcode		

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Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

QC SUMMARY REPORT

WO#: **25040773**

21-Apr-25

Client: ATG - SEATTLE LAB
Project: 2504125

BatchID: **R206974**

Sample ID: **MB-R206974**	SampType: **MBLK**	TestCode: **PctMoist_S(2**	Units: **%**	Prep Date:	RunNo: **206974**
Client ID: **BatchQC**	Batch ID: **R206974**	TestNo: **A2540B**		Analysis Date: **4/14/2025**	SeqNo: **5539358**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Percent Moisture	ND	0.200									

Sample ID: **25041004-002ADUP**	SampType: **DUP**	TestCode: **PctMoist_S(2**	Units: **%**	Prep Date:	RunNo: **206974**
Client ID: **BatchQC**	Batch ID: **R206974**	TestNo: **A2540B**		Analysis Date: **4/14/2025**	SeqNo: **5539379**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Percent Moisture	10.8	0.200						10.89	0.688	5	

Sample ID: **25040896-009ADUP**	SampType: **DUP**	TestCode: **PctMoist_S(2**	Units: **%**	Prep Date:	RunNo: **206974**
Client ID: **BatchQC**	Batch ID: **R206974**	TestNo: **A2540B**		Analysis Date: **4/14/2025**	SeqNo: **5539380**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Percent Moisture	3.70	0.200						5.185	33.5	5	R

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Manual Integration used to determine area response	ND	Not Detected
PL	Permit Limit	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits	W	Sample container temperature is out of limit as specified at testcode		

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Cuyahoga Falls, Ohio 442
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Website: http://www.settek.co

Qualifiers and Acronyms

WO#: **25040773**
Date: **4/21/2025**

These commonly used Qualifiers and Acronyms may or may not be present in this report.

Qualifiers

U	The compound was analyzed for but was not detected above the MDL.
J	The reported value is greater than the Method Detection Limit but less than the Reporting Limit.
H	The hold time for sample preparation and/or analysis was exceeded. Not Clean Water Act compliant.
D	The result is reported from a dilution.
E	The result exceeded the linear range of the calibration or is estimated due to interference.
MC	The result is below the Minimum Compound Limit.
*	The result exceeds the Regulatory Limit or Maximum Contamination Limit.
m	Manual integration was used to determine the area response.
d	Manual integration in which peak was deleted
N	The result is presumptive based on a Mass Spectral library search assuming a 1:1 response.
P	The second column confirmation exceeded 25% difference.
C	The result has been confirmed by GC/MS.
X	The result was not confirmed when GC/MS Analysis was performed.
B	The analyte was detected in the Method Blank at a concentration greater than the RL.
MB+	The analyte was detected in the Method Blank at a concentration greater than the MDL.
G	The ICB or CCB contained reportable amounts of analyte.
QC-/+	The CCV recovery failed low (-) or high (+).
R/QDR	The RPD was outside of accepted recovery limits.
QL-/+	The LCS or LCSD recovery failed low (-) or high (+).
QLR	The LCS/LCSD RPD was outside of accepted recovery limits.
QM-/+	The MS or MSD recovery failed low (-) or high (+).
QMR	The MS/MSD RPD was outside of accepted recovery limits.
QV-/+	The ICV recovery failed low (-) or high (+).
S	The spike result was outside of accepted recovery limits.
W	Samples were received outside temperature limits (0° – 6° C). Not Clean Water Act compliant.
Z	Deviation; A deviation from the method was performed; Please refer to the Case Narrative for additional information

Acronyms

ND	Not Detected	**RL**	Reporting Limit
QC	Quality Control	**MDL**	Method Detection Limit
MB	Method Blank	**LOD**	Level of Detection
LCS	Laboratory Control Sample	**LOQ**	Level of Quantitation
LCSD	Laboratory Control Sample Duplicate	**PQL**	Practical Quantitation Limit
QCS	Quality Control Sample	**CRQL**	Contract Required Quantitation Limit
DUP	Duplicate	**PL**	Permit Limit
MS	Matrix Spike	**RegLvl**	Regulatory Limit
MSD	Matrix Spike Duplicate	**MCL**	Maximum Contamination Limit
RPD	Relative Percent Different	**MinCL**	Minimum Compound Limit
ICV	Initial Calibration Verification	**RA**	Reanalysis
ICB	Initial Calibration Blank	**RE**	Reextraction
CCV	Continuing Calibration Verification	**TIC**	Tentatively Identified Compound
CCB	Continuing Calibration Blank	**RT**	Retention Time
RLC	Reporting Limit Check	**CF**	Calibration Factor

This list of Qualifiers and Acronyms reflects the most commonly utilized Qualifiers and Acronyms for reporting. Please refer to the Analytical Notes in the Case Narrative for any Qualifiers or Acronyms that do not appear in this list or for additional information regarding the use of these Qualifiers on reported data.

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DATES REPORT

WO#: **25040773**

21-Apr-25

Client: ATG - SEATTLE LAB
Project: 2504125

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
25040773-001A	2504125-001A	4/1/2025	Solid	Percent Moisture by SM2540Mod			4/14/2025 12:52:00 PM
				PFAS in Solid Samples (EPA Method		4/14/2025 11:52:22 AM	4/16/2025 12:50:00 AM
				PFAS in Solid Samples (EPA Method		4/14/2025 11:52:22 AM	4/16/2025 1:06:00 AM
25040773-002A	2504125-002A			Percent Moisture by SM2540Mod			4/14/2025 12:52:00 PM
				PFAS in Solid Samples (EPA Method		4/14/2025 11:52:22 AM	4/16/2025 1:37:00 AM
				PFAS in Solid Samples (EPA Method		4/14/2025 11:52:22 AM	4/16/2025 1:22:00 AM

Original

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Accreditation Program Analytes Report

WO#: **25040773**

21-Apr-25

Client: ATG - SEATTLE LAB
Project: 2504125

State: WA
Program Name: WA_DW_NPW_S

Test Name	Matrix	Analyte	Status
Percent Moisture by SM2540Mod	Solid	Percent Moisture	N
PFAS in Solid Samples (EPA Method 1633)	Solid	11Cl-PF3OUdS	A
PFAS in Solid Samples (EPA Method 1633)	Solid	3:3 FTCA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	4:2 FTS	A
PFAS in Solid Samples (EPA Method 1633)	Solid	5:3 FTCA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	6:2 FTS	A
PFAS in Solid Samples (EPA Method 1633)	Solid	7:3 FTCA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	8:2 FTS	A
PFAS in Solid Samples (EPA Method 1633)	Solid	9CL-PF3ONS	A
PFAS in Solid Samples (EPA Method 1633)	Solid	ADONA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	HFPO-DA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	NEtFOSA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	NEtFOSAA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	NEtFOSE	A
PFAS in Solid Samples (EPA Method 1633)	Solid	NFDHA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	NMeFOSA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	NMeFOSAA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	NMeFOSE	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFBA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFBS	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFDA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFDoA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFDoS	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFDS	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFEESA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFHpA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFHpS	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFHxA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFMBA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFMPA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFNA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFNS	A

AL	U	Unavailable	AR	N	Not Accredited	A-NELA	N	Not Accredited
CO	U	Unavailable	CT	N	Not Accredited	L-NELAI	A	Accredited
L-NELAI	N	Not Accredited	GA	N	Not Accredited	HI-DW	U	Unavailable
IA	A	Accredited	IA	N	Not Accredited	ID	U	Unavailable
L-NELAI	A	Accredited	L-NELAI	N	Not Accredited	IN_DW	U	Unavailable

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Accreditation Program Analytes Report

WO#: **25040773**

21-Apr-25

Client: ATG - SEATTLE LAB
Project: 2504125

State: WA
Program Name: WA_DW_NPW_S

Test Name	Matrix	Analyte	Status
PFAS in Solid Samples (EPA Method 1633)	Solid	PFOA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFOS	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFOSA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFPeA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFPeS	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFTeDA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFTrDA	A
PFAS in Solid Samples (EPA Method 1633)	Solid	PFUnA	A

AL	U	Unavailable	AR	N	Not Accredited	'A-NELA	N	Not Accredited	
CO	U	Unavailable	CT	N	Not Accredited	'L-NELAI	A	Accredited	
'L-NELAI	N	Not Accredited	GA	N	Not Accredited	HI-DW	U	Unavailable	Version #2
IA	A	Accredited	IA	N	Not Accredited	ID	U	Unavailable	
L-NELAI	A	Accredited	L-NELAI	N	Not Accredited	IN_DW	U	Unavailable	

Alliance TECHNICAL GROUP

CHAIN OF CUSTODY REC[illegible]D

Omega COCID 2327 | PAGE: 1 | OF: 1

2504073

ADDRESS
Alliance Technical Group, LLC - Seattle
3600 Fremont Ave N
Seattle, WA 98103
TEL: 206-352-3790
FAX: 206-352-7178
Website: www.fremontanalytical.com

SUB CONTRATOR: **Alliance Akron** COMPANY: **Alliance Akron**

ADDRESS: **3310 Win St, Cuyahoga Falls**

CITY, STATE, ZIP: **Cuyahoga Falls, OH 44223**

PHONE: **(330) 253-8211** FAX: EMAIL:

ACCOUNT #:

SPECIAL INSTRUCTIONS / COMMENTS:

Standard TAT. Please email results to SEA_PM@alliancetg.com and invoices to both SEA_PM@alliancetg.com and ap@alliancetg.com.

ITEM #	SAMPLE ID	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	DATE COLLECTED	NUMBER OF CONTAINERS	COMMENTS: Methanol Preserved Weights HOT Sample Notation, Additional Sample Description
1	2504125-001A	#37	125 ML POLY U	Soil	4/1/2025	1	PFAS 1633
	SUB-PFAS-S-1633						
2	2504125-002A	D-14	125 ML POLY U	Soil	4/1/2025	1	PFAS 1633
	SUB-PFAS-S-1633						

Relinquished By	Date	Time	Received By	Date	Time
[signature]	4/7/25	1525	[signature]	04/09/25	1000
Relinquished By	Date	Time	Received By	Date	Time
Relinquished By	Date	Time	Received By	Date	Time

TAT: Standard ☐ RUSH Next BD ☐ 2nd BD ☐ 3rd BD ☐

Note: RUSH requests will incur surcharges.

REPORT TRANSMITTAL DESIRED:

☐ HARDCOPY (extra cost) ☐ FAX ☐ EMAIL ☐ ONLINE

FOR LAB USE ONLY

Temp of samples 1.0-0.2=1.8 °C Attempt to Cool ?

Comments: UPS cooler

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Website: http://www.settek.com

Sample Log-In Check List

Client Name: FRE-WA-98103 Work Order Number: 25040773 RcptNo: 1

Logged by:	Spencer M. Hartwell	4/9/2025 10:00:00 AM	Spencer M. Hartwell
Completed By:	Spencer M. Hartwell	4/9/2025 4:39:48 PM	Spencer M. Hartwell
Reviewed By:	Salwa Najjar	4/10/2025 2:37:21 PM	Salwa Najjar

Chain of Custody

1. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2. How was the sample delivered?	UPS		

Log In

3. Coolers are present?	Yes ☑	No ☐	NA ☐
4. Shipping container/cooler in good condition?	Yes ☑	No ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☑
No. Seal Date:	Signed By:		
5. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
6. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
7. Sample(s) in proper container(s)?	Yes ☑	No ☐	
8. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
9. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
10. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
11. Is the headspace in the VOA vials less than 1/4 inch or 6 mm?	Yes ☐	No ☐	No VOA Vials ☑
12. Were any sample containers received broken?	Yes ☐	No ☑	
13. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
14. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
15. Is it clear what analyses were requested?	Yes ☑	No ☐	
16. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

Special Handling (if applicable)

17. Was client notified of all discrepancies with this order?	Yes ☐	No ☐	NA ☑

Person Notified: _____ Date: _____
By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding: _____
Client Instructions: _____

18. Additional remarks:

Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1	Good	Not Present			

Sunset Pointe Residential Development

Southwestern Corner of Property

(Adjoining south side of former Museum Building)

Drilling: March 19, 2025

Laboratory Analytical Results:

Sample Location	Sample Number	Sample Depth:	Sampler Recovery	Gas / BTEX	Diesel / Heavy Oil	SVOC	Arsenic[1]	Lead[2]
A-01	A-01	4'	32"	ND	ND			2.65 ppm
"	A-02	8'	25"					
A-02	A-03	4'	34"	ND	ND			2.08 ppm
"	A-04	2'	24"		ND			2.78 ppm
A-03	A-05	4"	34"					
"	A-06	8'	19"					
A-04	A-07	4'	38"					
"	A-08	8'	32"					
A-05-3	A-08/1	4'	31"	ND	ND		2.24 ppm	2.75 ppm
"	A-09	8'	27"					
A-06	A-10	4'	27'					
"	A-11	8'	26"					
A-07	A-13	4'	27"	ND	ND			2.74 ppm
"	A-14	4'	29"					
A-08	A-15	4'	26"					
"	A-16	4'	26"					
A-9	A-17	4'	27"					
"	A-18	8'	47"					
A-10	A-19	4'	36"					

[1] Washington Cleanup Levels / Table 740-1 *Unrestricted Land Use* – 20 mg/kg.

[2] Washington Cleanup Levels / WDOE Communication (01/10/25) – 220 mg/kg

"	A-20	4'	22"					
Sample Location	Sample Number	Sample Depth:	Sampler Recovery	Gas / BTEX	Diesel / Heavy Oil	SVOC	Arsenic	Lead
B-11	B-21	4'	21"					
"	B-22	8'	39"					
B-12	B-23	4'	23"					
"	B-24	8"	23"					
B-13	B-25	4'	14" Saturated					
"	B-26	8'	11"					
B-14	B-27	4'	26"					
"	B-28	8'	39"					
B-15	B-29	4'	32"					
"	B-30	8'	31"					
B-16	B-31	4'	30"					
"	B-32	8'	15"					
B-17	B-33	4'	31"					
"	B-34	8'	38"	ND	ND			3.58 ppm
B-18	B-35							
B-19	B-36							
B-25-13		10"						4.10 ppm
B-26-13		10"						3.49 ppm
C-20	C-37							
C-21	C-38							
C-22	C-40							

Alliance
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F: (206) 352-7178
info@fremontanalytical.com

Aerotech
Alan Blotch
17837 1st Ave S #556
Normandy Park, WA 98148

RE: Sunset SW Corner,
Work Order Number: 2503473

Southwest Property Corner

April 10, 2025

Attention Alan Blotch:

Alliance Technical Group, LLC - Seattle received 38 sample(s) on 3/24/2025 for the analyses presented in the following report.

Diesel and Heavy Oil by NWTPH-Dx
Gasoline by NWTPH-Gx
Sample Moisture (Percent Moisture)
Total Metals by EPA 6020B
Volatile Organic Compounds by EPA 8260D

All analyses were performed according to our accredited Quality Assurance program. Please contact the laboratory if you should have any questions about the results.

Alliance Technical Group is committed to accuracy, speed, and customer service. Thank you for choosing Alliance Technical Group's Seattle laboratory team for your analytical needs. We appreciate this opportunity to serve you!

Sincerely,

Brianna Barnes
Project Manager

DoD-ELAP Accreditation #79636 by PJLA, ISO/IEC 17025:2017 and QSM 5.4 for Environmental Testing
ORELAP Certification: WA 100009 (NELAP Recognized) for Environmental Testing
Washington State Department of Ecology Accredited for Environmental Testing, Lab ID C910

Original

Alliance TECHNICAL GROUP

Date: *04/10/2025*

CLIENT: Aerotech
Project: Sunset SW Corner
Work Order: 2503473

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2503473-001	A-01-1	03/19/2025 12:00 AM	03/24/2025 4:30 PM
2503473-002	A-02-1	03/19/2025 12:00 AM	03/24/2025 4:30 PM
2503473-003	A-03-2	03/19/2025 12:00 AM	03/24/2025 4:30 PM
2503473-004	A-04-2	03/19/2025 12:00 AM	03/24/2025 4:30 PM
2503473-005	A-05-3	03/19/2025 12:00 AM	03/24/2025 4:30 PM
2503473-006	A-06-3	03/19/2025 12:00 AM	03/24/2025 4:30 PM
2503473-007	A-07-4	03/19/2025 12:00 AM	03/24/2025 4:30 PM
2503473-008	A-08-4	03/19/2025 12:00 AM	03/24/2025 4:30 PM
2503473-009	A-08/1-5	03/19/2025 12:00 AM	03/24/2025 4:30 PM
2503473-010	A-09-5	03/19/2025 12:00 AM	03/24/2025 4:30 PM
2503473-011	A-10-6	03/19/2025 12:00 AM	03/24/2025 4:30 PM
2503473-012	A-11-6	03/19/2025 12:00 AM	03/24/2025 4:30 PM
2503473-013	A-13-7	03/19/2025 12:00 AM	03/24/2025 4:30 PM
2503473-014	A-14-7	03/19/2025 12:00 AM	03/24/2025 4:30 PM
2503473-015	A-15-8	03/19/2025 12:00 AM	03/24/2025 4:30 PM
2503473-016	A-16-8	03/19/2025 12:00 AM	03/24/2025 4:30 PM
2503473-017	A-17-9	03/19/2025 12:00 AM	03/24/2025 4:30 PM
2503473-018	A-18-9	03/19/2025 12:00 AM	03/24/2025 4:30 PM
2503473-019	A-19-10	03/19/2025 12:00 AM	03/24/2025 4:30 PM
2503473-020	A-20-10	03/19/2025 12:00 AM	03/24/2025 4:30 PM
2503473-021	B-25-13	03/19/2025 12:00 AM	03/24/2025 4:30 PM
2503473-022	B-26-13	03/19/2025 12:00 AM	03/24/2025 4:30 PM
2503473-023	B-27-14	03/19/2025 12:00 AM	03/24/2025 4:30 PM
2503473-024	B-28-14	03/19/2025 12:00 AM	03/24/2025 4:30 PM
2503473-025	B-29-15	03/19/2025 12:00 AM	03/24/2025 4:30 PM
2503473-026	B-30-15	03/19/2025 12:00 AM	03/24/2025 4:30 PM
2503473-027	B-31-16	03/19/2025 12:00 AM	03/24/2025 4:30 PM
2503473-028	B-32-16	03/19/2025 12:00 AM	03/24/2025 4:30 PM
2503473-029	B-33-17	03/19/2025 12:00 AM	03/24/2025 4:30 PM
2503473-030	B-34-17	03/19/2025 12:00 AM	03/24/2025 4:30 PM
2503473-031	B-35-19	03/19/2025 12:00 AM	03/24/2025 4:30 PM
2503473-032	B-36-19	03/19/2025 12:00 AM	03/24/2025 4:30 PM
2503473-033	B-21-11	03/19/2025 12:00 AM	03/24/2025 4:30 PM
2503473-034	B-22-11	03/19/2025 12:00 AM	03/24/2025 4:30 PM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

CLIENT:	Aerotech
Project:	Sunset SW Corner
Work Order:	2503473

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2503473-035	B-23-12	03/19/2025 12:00 AM	03/24/2025 4:30 PM
2503473-036	B-24-12	03/19/2025 12:00 AM	03/24/2025 4:30 PM
2503473-037	B-35-18	03/19/2025 12:00 AM	03/24/2025 4:30 PM
2503473-038	B-36-18	03/19/2025 12:00 AM	03/24/2025 4:30 PM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

Alliance TECHNICAL GROUP

Case Narrative

WO#: **2503473**
Date: **4/10/2025**

CLIENT: Aerotech
Project: Sunset SW Corner

I. SAMPLE RECEIPT:
Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:
Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:
Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Qualifiers:

* - Flagged value is not within established control limits
B - Analyte detected in the associated Method Blank
D - Dilution was required
E - Value above quantitation range
H - Holding times for preparation or analysis exceeded
I - Analyte with an internal standard that does not meet established acceptance criteria
J - Analyte detected below Reporting Limit
N - Tentatively Identified Compound (TIC)
Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria
S - Spike recovery outside accepted recovery limits
ND - Not detected at the Reporting Limit
R - High relative percent difference observed

Acronyms:

%Rec - Percent Recovery
CCB - Continued Calibration Blank
CCV - Continued Calibration Verification
DF - Dilution Factor
DUP - Sample Duplicate
HEM - Hexane Extractable Material
ICV - Initial Calibration Verification
LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
MCL - Maximum Contaminant Level
MB or MBLANK - Method Blank
MDL - Method Detection Limit
MS/MSD - Matrix Spike / Matrix Spike Duplicate
PDS - Post Digestion Spike
Ref Val - Reference Value
REP - Sample Replicate
RL - Reporting Limit
RPD - Relative Percent Difference
SD - Serial Dilution
SGT - Silica Gel Treatment
SPK - Spike
Surr - Surrogate

Alliance TECHNICAL GROUP

Analytical Report

Work Order: **2503473**
Date Reported: **4/10/2025**

Client: Aerotech
Project: Sunset SW Corner
Lab ID: 2503473-001
Client Sample ID: **A-01-1**

Collection Date: 3/19/2025
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Diesel and Heavy Oil by NWTPH-Dx				Batch ID: 47241		Analyst: ZD
Diesel Range Organics	ND	52.4	H	mg/Kg-dry	1	4/3/2025 5:28:55 PM
Heavy Oil	ND	105	H	mg/Kg-dry	1	4/3/2025 5:28:55 PM
Total Petroleum Hydrocarbons	ND	157	H	mg/Kg-dry	1	4/3/2025 5:28:55 PM
Surr: 2-Fluorobiphenyl	62.3	50 - 150	H	%Rec	1	4/3/2025 5:28:55 PM
Surr: o-Terphenyl	72.0	50 - 150	H	%Rec	1	4/3/2025 5:28:55 PM
Gasoline by NWTPH-Gx				Batch ID: 47320		Analyst: KJ
Gasoline Range Organics	ND	5.34	H	mg/Kg-dry	1	4/9/2025 1:58:36 PM
Surr: Toluene-d8	95.7	65 - 135	H	%Rec	1	4/9/2025 1:58:36 PM
Surr: 4-Bromofluorobenzene	98.6	65 - 135	H	%Rec	1	4/9/2025 1:58:36 PM
Volatile Organic Compounds by EPA 8260D				Batch ID: 47278		Analyst: FG
Benzene	ND	0.0128	H	mg/Kg-dry	1	4/8/2025 3:06:22 PM
Toluene	ND	0.0267	H	mg/Kg-dry	1	4/8/2025 3:06:22 PM
Ethylbenzene	ND	0.0267	H	mg/Kg-dry	1	4/8/2025 3:06:22 PM
m,p-Xylene	ND	0.0534	H	mg/Kg-dry	1	4/8/2025 3:06:22 PM
o-Xylene	ND	0.0267	H	mg/Kg-dry	1	4/8/2025 3:06:22 PM
Surr: Dibromofluoromethane	95.9	74.8 - 121	H	%Rec	1	4/8/2025 3:06:22 PM
Surr: Toluene-d8	96.7	79.6 - 120	H	%Rec	1	4/8/2025 3:06:22 PM
Surr: 1-Bromo-4-fluorobenzene	100	53 - 139	H	%Rec	1	4/8/2025 3:06:22 PM
Total Metals by EPA 6020B				Batch ID: 47273		Analyst: ME
Lead	2.65	0.218		mg/Kg-dry	1	4/7/2025 5:36:00 PM
Sample Moisture (Percent Moisture)				Batch ID: R98685		Analyst: PC
Percent Moisture	7.71	0.500		wt%	1	4/3/2025 9:39:32 AM

Alliance TECHNICAL GROUP

Analytical Report

Work Order: **2503473**
Date Reported: **4/10/2025**

Client: Aerotech
Project: Sunset SW Corner
Lab ID: 2503473-002
Client Sample ID: **A-02-1**

Collection Date: 3/19/2025
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Diesel and Heavy Oil by NWTPH-Dx				Batch ID: 47241		Analyst: ZD
Diesel Range Organics	ND	59.2	H	mg/Kg-dry	1	4/3/2025 6:04:35 PM
Heavy Oil	ND	118	H	mg/Kg-dry	1	4/3/2025 6:04:35 PM
Total Petroleum Hydrocarbons	ND	178	H	mg/Kg-dry	1	4/3/2025 6:04:35 PM
Surr: 2-Fluorobiphenyl	88.7	50 - 150	H	%Rec	1	4/3/2025 6:04:35 PM
Surr: o-Terphenyl	89.4	50 - 150	H	%Rec	1	4/3/2025 6:04:35 PM
Gasoline by NWTPH-Gx				Batch ID: 47320		Analyst: KJ
Gasoline Range Organics	ND	5.86	H	mg/Kg-dry	1	4/9/2025 2:24:58 PM
Surr: Toluene-d8	94.7	65 - 135	H	%Rec	1	4/9/2025 2:24:58 PM
Surr: 4-Bromofluorobenzene	98.3	65 - 135	H	%Rec	1	4/9/2025 2:24:58 PM
Volatile Organic Compounds by EPA 8260D				Batch ID: 47278		Analyst: FG
Benzene	ND	0.0141	H	mg/Kg-dry	1	4/8/2025 4:03:31 PM
Toluene	ND	0.0293	H	mg/Kg-dry	1	4/8/2025 4:03:31 PM
Ethylbenzene	ND	0.0293	H	mg/Kg-dry	1	4/8/2025 4:03:31 PM
m,p-Xylene	ND	0.0586	H	mg/Kg-dry	1	4/8/2025 4:03:31 PM
o-Xylene	ND	0.0293	H	mg/Kg-dry	1	4/8/2025 4:03:31 PM
Surr: Dibromofluoromethane	95.2	74.8 - 121	H	%Rec	1	4/8/2025 4:03:31 PM
Surr: Toluene-d8	97.7	79.6 - 120	H	%Rec	1	4/8/2025 4:03:31 PM
Surr: 1-Bromo-4-fluorobenzene	99.6	53 - 139	H	%Rec	1	4/8/2025 4:03:31 PM
Total Metals by EPA 6020B				Batch ID: 47273		Analyst: ME
Arsenic	2.33	0.259		mg/Kg-dry	1	4/7/2025 5:52:00 PM
Lead	2.08	0.259		mg/Kg-dry	1	4/7/2025 5:52:00 PM
Sample Moisture (Percent Moisture)				Batch ID: R98685		Analyst: PC
Percent Moisture	21.0	0.500		wt%	1	4/3/2025 9:39:32 AM

Alliance TECHNICAL GROUP

Analytical Report

Work Order: **2503473**
Date Reported: **4/10/2025**

Client: Aerotech
Project: Sunset SW Corner
Lab ID: 2503473-004
Client Sample ID: **A-04-2**

Collection Date: 3/19/2025
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Diesel and Heavy Oil by NWTPH-Dx				Batch ID: 47241		Analyst: ZD
Diesel Range Organics	ND	52.9	H	mg/Kg-dry	1	4/3/2025 6:16:24 PM
Heavy Oil	ND	106	H	mg/Kg-dry	1	4/3/2025 6:16:24 PM
Total Petroleum Hydrocarbons	ND	159	H	mg/Kg-dry	1	4/3/2025 6:16:24 PM
Surr: 2-Fluorobiphenyl	110	50 - 150	H	%Rec	1	4/3/2025 6:16:24 PM
Surr: o-Terphenyl	114	50 - 150	H	%Rec	1	4/3/2025 6:16:24 PM
Total Metals by EPA 6020B				Batch ID: 47273		Analyst: ME
Lead	2.78	0.237		mg/Kg-dry	1	4/7/2025 5:56:00 PM
Sample Moisture (Percent Moisture)				Batch ID: R98685		Analyst: PC
Percent Moisture	12.7	0.500		wt%	1	4/3/2025 9:39:32 AM

Client: Aerotech
Project: Sunset SW Corner
Lab ID: 2503473-005
Client Sample ID: **A-05-3**

Collection Date: 3/19/2025
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Diesel and Heavy Oil by NWTPH-Dx				Batch ID: 47241		Analyst: ZD
Diesel Range Organics	ND	56.5	H	mg/Kg-dry	1	4/3/2025 7:03:44 PM
Heavy Oil	ND	113	H	mg/Kg-dry	1	4/3/2025 7:03:44 PM
Total Petroleum Hydrocarbons	ND	169	H	mg/Kg-dry	1	4/3/2025 7:03:44 PM
Surr: 2-Fluorobiphenyl	132	50 - 150	H	%Rec	1	4/3/2025 7:03:44 PM
Surr: o-Terphenyl	125	50 - 150	H	%Rec	1	4/3/2025 7:03:44 PM
Total Metals by EPA 6020B				Batch ID: 47273		Analyst: ME
Arsenic	2.44	0.232		mg/Kg-dry	1	4/7/2025 5:59:00 PM
Lead	2.75	0.232		mg/Kg-dry	1	4/7/2025 5:59:00 PM
Sample Moisture (Percent Moisture)				Batch ID: R98685		Analyst: PC
Percent Moisture	11.5	0.500		wt%	1	4/3/2025 9:39:32 AM

Alliance TECHNICAL GROUP

Analytical Report

Work Order: **2503473**
Date Reported: **4/10/2025**

Client: Aerotech
Project: Sunset SW Corner
Lab ID: 2503473-007
Client Sample ID: **A-07-4**

Collection Date: 3/19/2025
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Diesel and Heavy Oil by NWTPH-Dx				Batch ID: 47241		Analyst: ZD
Diesel Range Organics	ND	53.5	H	mg/Kg-dry	1	4/3/2025 7:15:35 PM
Heavy Oil	ND	107	H	mg/Kg-dry	1	4/3/2025 7:15:35 PM
Total Petroleum Hydrocarbons	ND	161	H	mg/Kg-dry	1	4/3/2025 7:15:35 PM
Surr: 2-Fluorobiphenyl	98.5	50 - 150	H	%Rec	1	4/3/2025 7:15:35 PM
Surr: o-Terphenyl	97.8	50 - 150	H	%Rec	1	4/3/2025 7:15:35 PM
Total Metals by EPA 6020B				Batch ID: 47273		Analyst: ME
Lead	2.47	0.240		mg/Kg-dry	1	4/7/2025 6:08:00 PM
Sample Moisture (Percent Moisture)				Batch ID: R98685		Analyst: PC
Percent Moisture	13.2	0.500		wt%	1	4/3/2025 9:39:32 AM

Alliance TECHNICAL GROUP

Analytical Report

Work Order: **2503473**
Date Reported: **4/10/2025**

Client: Aerotech
Project: Sunset SW Corner
Lab ID: 2503473-017
Client Sample ID: **A-17-9**

Collection Date: 3/19/2025
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Diesel and Heavy Oil by NWTPH-Dx				Batch ID: 47241		Analyst: ZD
Diesel Range Organics	ND	53.1	H	mg/Kg-dry	1	4/3/2025 7:27:25 PM
Heavy Oil	ND	106	H	mg/Kg-dry	1	4/3/2025 7:27:25 PM
Total Petroleum Hydrocarbons	ND	159	H	mg/Kg-dry	1	4/3/2025 7:27:25 PM
Surr: 2-Fluorobiphenyl	88.0	50 - 150	H	%Rec	1	4/3/2025 7:27:25 PM
Surr: o-Terphenyl	85.1	50 - 150	H	%Rec	1	4/3/2025 7:27:25 PM
Total Metals by EPA 6020B				Batch ID: 47273		Analyst: ME
Lead	3.58	0.246		mg/Kg-dry	1	4/7/2025 6:12:00 PM
Sample Moisture (Percent Moisture)				Batch ID: R98685		Analyst: PC
Percent Moisture	17.2	0.500		wt%	1	4/3/2025 9:39:32 AM

Alliance TECHNICAL GROUP

Analytical Report

Work Order: **2503473**
Date Reported: **4/10/2025**

Client: Aerotech
Project: Sunset SW Corner
Lab ID: 2503473-021
Client Sample ID: **B-25-13**

Collection Date: 3/19/2025
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA 6020B				Batch ID: 47273		Analyst: ME
Lead	4.10	0.224		mg/Kg-dry	1	4/7/2025 6:15:00 PM
Sample Moisture (Percent Moisture)				Batch ID: R98685		Analyst: PC
Percent Moisture	10.9	0.500		wt%	1	4/3/2025 9:39:32 AM

Alliance TECHNICAL GROUP

Analytical Report

Work Order: **2503473**
Date Reported: **4/10/2025**

Client: Aerotech
Project: Sunset SW Corner
Lab ID: 2503473-022
Client Sample ID: **B-26-13**

Collection Date: 3/19/2025
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA 6020B				Batch ID: 47273		Analyst: ME
Lead	3.49	0.239		mg/Kg-dry	1	4/7/2025 6:18:00 PM
Sample Moisture (Percent Moisture)				Batch ID: R98685		Analyst: PC
Percent Moisture	16.2	0.500		wt%	1	4/3/2025 9:39:32 AM

Alliance TECHNICAL GROUP

Date: *4/10/2025*

Work Order: 2503473
CLIENT: Aerotech
Project: Sunset SW Corner

QC SUMMARY REPORT

Total Metals by EPA 6020B

Sample ID: **MB-47273**	SampType: **MBLK**			Units: **mg/Kg**		Prep Date: **4/7/2025**		RunNo: **98806**			
Client ID: **MBLKS**	Batch ID: **47273**					Analysis Date: **4/7/2025**		SeqNo: **2058028**			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.200									
Lead	ND	0.200									

Sample ID: **LCS-47273**	SampType: **LCS**			Units: **mg/Kg**		Prep Date: **4/7/2025**		RunNo: **98806**			
Client ID: **LCSS**	Batch ID: **47273**					Analysis Date: **4/7/2025**		SeqNo: **2058029**			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	36.9	0.200	40.00	0	92.2	80	120				
Lead	18.4	0.200	20.00	0	91.9	80	120				

Sample ID: **2503473-001AMS**	SampType: **MS**			Units: **mg/Kg-dry**		Prep Date: **4/7/2025**		RunNo: **98806**			
Client ID: **A-01-1**	Batch ID: **47273**					Analysis Date: **4/7/2025**		SeqNo: **2058031**			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	39.3	0.205	41.05	2.482	89.8	75	125				
Lead	21.8	0.205	20.52	2.647	93.4	75	125				

Sample ID: **2503473-001AMSD**	SampType: **MSD**			Units: **mg/Kg-dry**		Prep Date: **4/7/2025**		RunNo: **98806**			
Client ID: **A-01-1**	Batch ID: **47273**					Analysis Date: **4/7/2025**		SeqNo: **2058033**			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	42.6	0.213	42.66	2.482	94.0	75	125	39.34	7.89	20	
Lead	22.7	0.213	21.33	2.647	94.2	75	125	21.81	4.17	20	

Work Order: 2503473
CLIENT: Aerotech
Project: Sunset SW Corner

QC SUMMARY REPORT

Diesel and Heavy Oil by NWTPH-Dx

Sample ID: **2503473-001AMS**	SampType: **MS**			Units: **mg/Kg-dry**		Prep Date: **4/3/2025**		RunNo: **98731**			
Client ID: **A-01-1**	Batch ID: **47241**					Analysis Date: **4/3/2025**		SeqNo: **2056586**			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Petroleum Hydrocarbons	447	159	528.6	0	84.6	40.5	159				H
Surr: 2-Fluorobiphenyl	8.13		10.57		76.9	50	150				H
Surr: o-Terphenyl	9.65		10.57		91.3	50	150				H

Sample ID: **2503473-001AMSD**	SampType: **MSD**			Units: **mg/Kg-dry**		Prep Date: **4/3/2025**		RunNo: **98731**			
Client ID: **A-01-1**	Batch ID: **47241**					Analysis Date: **4/3/2025**		SeqNo: **2056587**			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Petroleum Hydrocarbons	313	156	521.5	0	60.0	40.5	159	447.0	35.4	30	H
Surr: 2-Fluorobiphenyl	7.66		10.43		73.5	50	150		0		H
Surr: o-Terphenyl	8.71		10.43		83.5	50	150		0		H

Sample ID: **2503473-004ADUP**	SampType: **DUP**			Units: **mg/Kg-dry**		Prep Date: **4/3/2025**		RunNo: **98731**			
Client ID: **A-04-2**	Batch ID: **47241**					Analysis Date: **4/3/2025**		SeqNo: **2056590**			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics	ND	52.3						0		30	H
Heavy Oil	ND	105						0		30	H
Total Petroleum Hydrocarbons	ND	157						0		30	H
Surr: 2-Fluorobiphenyl	13.9		10.47		133	50	150		0		H
Surr: o-Terphenyl	14.2		10.47		136	50	150		0		H

Sample ID: **MB-47241**	SampType: **MBLK**			Units: **mg/Kg**		Prep Date: **4/3/2025**		RunNo: **98731**			
Client ID: **MBLKS**	Batch ID: **47241**					Analysis Date: **4/4/2025**		SeqNo: **2056614**			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics	ND	50.0									
Heavy Oil	ND	100									
Total Petroleum Hydrocarbons	ND	150									
Surr: 2-Fluorobiphenyl	17.9		20.00		89.6	50	150				

Work Order: 2503473
CLIENT: Aerotech
Project: Sunset SW Corner

QC SUMMARY REPORT

Diesel and Heavy Oil by NWTPH-Dx

Sample ID: **MB-47241**	SampType: **MBLK**			Units: **mg/Kg**		Prep Date: **4/3/2025**		RunNo: **98731**		
Client ID: **MBLKS**	Batch ID: **47241**					Analysis Date: **4/4/2025**		SeqNo: **2056614**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: o-Terphenyl	18.0		20.00		89.8	50	150				

Sample ID: **LCS-47241**	SampType: **LCS**			Units: **mg/Kg**		Prep Date: **4/3/2025**		RunNo: **98731**		
Client ID: **LCSS**	Batch ID: **47241**					Analysis Date: **4/4/2025**		SeqNo: **2056616**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Petroleum Hydrocarbons	917	150	1,000	0	91.7	67.1	134				
Surr: 2-Fluorobiphenyl	19.3		20.00		96.3	50	150				
Surr: o-Terphenyl	22.6		20.00		113	50	150				

Work Order: 2503473
CLIENT: Aerotech
Project: Sunset SW Corner

QC SUMMARY REPORT

Gasoline by NWTPH-Gx

Sample ID: **LCS-47320**	SampType: **LCS**			Units: **mg/Kg**		Prep Date: **4/9/2025**		RunNo: **98880**			
Client ID: **LCSS**	Batch ID: **47320**					Analysis Date: **4/9/2025**		SeqNo: **2059687**			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics	24.6	5.00	25.00	0	98.4	65	135				
Surr: Toluene-d8	1.20		1.250		96.2	65	135				
Surr: 4-Bromofluorobenzene	1.23		1.250		98.2	65	135				

Sample ID: **MB-47320**	SampType: **MBLK**			Units: **mg/Kg**		Prep Date: **4/9/2025**		RunNo: **98880**			
Client ID: **MBLKS**	Batch ID: **47320**					Analysis Date: **4/9/2025**		SeqNo: **2059671**			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics	ND	5.00									
Surr: Toluene-d8	1.19		1.250		95.3	65	135				
Surr: 4-Bromofluorobenzene	1.22		1.250		97.4	65	135				

Sample ID: **2503473-002BDUP**	SampType: **DUP**			Units: **mg/Kg-dry**		Prep Date: **4/9/2025**		RunNo: **98880**			
Client ID: **A-02-1**	Batch ID: **47320**					Analysis Date: **4/9/2025**		SeqNo: **2059674**			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics	ND	5.86						0		30	H
Surr: Toluene-d8	1.41		1.465		95.9	65	135		0		H
Surr: 4-Bromofluorobenzene	1.45		1.465		99.3	65	135		0		H

Sample ID: **2504238-002BDUP**	SampType: **DUP**			Units: **mg/Kg-dry**		Prep Date: **4/9/2025**		RunNo: **98880**			
Client ID: **BATCH**	Batch ID: **47320**					Analysis Date: **4/10/2025**		SeqNo: **2059684**			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics	ND	4.75						0		30	
Surr: Toluene-d8	1.14		1.187		95.6	65	135		0		
Surr: 4-Bromofluorobenzene	1.18		1.187		99.3	65	135		0		

Alliance TECHNICAL GROUP

Date: *4/10/2025*

Work Order: 2503473
CLIENT: Aerotech
Project: Sunset SW Corner

QC SUMMARY REPORT

Gasoline by NWTPH-Gx

Sample ID: **2503475-001BMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **4/9/2025** RunNo: **98880**
Client ID: **BATCH** Batch ID: **47320** Analysis Date: **4/10/2025** SeqNo: **2059685**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics	24.8	5.21	26.07	0.8691	91.9	65	135				H
Surr: Toluene-d8	1.23		1.303		94.5	65	135				H
Surr: 4-Bromofluorobenzene	1.28		1.303		98.6	65	135				H

Alliance TECHNICAL GROUP

Date: *4/10/2025*

Work Order: 2503473
CLIENT: Aerotech
Project: Sunset SW Corner

QC SUMMARY REPORT

Volatile Organic Compounds by EPA 8260D

Sample ID: **LCS-47278**	SampType: **LCS**			Units: **µg/L**		Prep Date: **4/7/2025**		RunNo: **98850**		
Client ID: **LCSS**	Batch ID: **47278**					Analysis Date: **4/8/2025**		SeqNo: **2058998**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	0.968	0.0120	1.000	0	96.8	80	120				
Toluene	0.980	0.0250	1.000	0	98.0	80	120				
Ethylbenzene	0.983	0.0250	1.000	0	98.3	80	120				
m,p-Xylene	1.98	0.0500	2.000	0	98.9	80	120				
o-Xylene	0.978	0.0250	1.000	0	97.8	80	120				
Surr: Dibromofluoromethane	1.24		1.250		99.5	74.8	121				
Surr: Toluene-d8	1.25		1.250		100	79.6	120				
Surr: 1-Bromo-4-fluorobenzene	1.25		1.250		100	53	139				

Sample ID: **MB-47278**	SampType: **MBLK**			Units: **mg/Kg**		Prep Date: **4/7/2025**		RunNo: **98850**		
Client ID: **MBLKS**	Batch ID: **47278**					Analysis Date: **4/8/2025**		SeqNo: **2058994**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.0120									
Toluene	ND	0.0250									
Ethylbenzene	ND	0.0250									
m,p-Xylene	ND	0.0500									
o-Xylene	ND	0.0250									
Surr: Dibromofluoromethane	1.23		1.250		98.3	79.5	124				
Surr: Toluene-d8	1.19		1.250		95.3	77.5	124				
Surr: 1-Bromo-4-fluorobenzene	1.24		1.250		99.4	60.5	139				

Sample ID: **2503473-001BDUP**	SampType: **DUP**			Units: **mg/Kg-dry**		Prep Date: **4/7/2025**		RunNo: **98850**		
Client ID: **A-01-1**	Batch ID: **47278**					Analysis Date: **4/8/2025**		SeqNo: **2058995**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.0128						0		30	H
Toluene	ND	0.0267						0		30	H
Ethylbenzene	ND	0.0267						0		30	H
m,p-Xylene	ND	0.0534						0		30	H
o-Xylene	ND	0.0267						0		30	H

Work Order: 2503473
CLIENT: Aerotech
Project: Sunset SW Corner

QC SUMMARY REPORT

Volatile Organic Compounds by EPA 8260D

Sample ID: **2503473-001BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **4/7/2025** RunNo: **98850**
Client ID: **A-01-1** Batch ID: **47278** Analysis Date: **4/8/2025** SeqNo: **2058995**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	1.27		1.336		95.4	74.8	121		0		H
Surr: Toluene-d8	1.30		1.336		97.0	79.6	120		0		H
Surr: 1-Bromo-4-fluorobenzene	1.33		1.336		99.7	53	139		0		H

Sample ID: **2503473-002BMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **4/7/2025** RunNo: **98850**
Client ID: **A-02-1** Batch ID: **47278** Analysis Date: **4/8/2025** SeqNo: **2058996**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	0.833	0.0141	1.172	0	71.1	64.8	130				H
Toluene	0.843	0.0293	1.172	0	71.9	64.5	127				H
Ethylbenzene	0.858	0.0293	1.172	0	73.2	68.7	122				H
m,p-Xylene	1.75	0.0586	2.345	0	74.4	69.1	122				H
o-Xylene	0.869	0.0293	1.172	0	74.1	72.4	118				H
Surr: Dibromofluoromethane	1.45		1.465		99.3	74.8	121				H
Surr: Toluene-d8	1.45		1.465		99.2	79.6	120				H
Surr: 1-Bromo-4-fluorobenzene	1.48		1.465		101	53	139				H

Alliance TECHNICAL GROUP

Sample Log-In Check List

Client Name:	AEROTE	Work Order Number:	2503473
Logged by:	Clare Griggs	Date Received:	3/24/2025 4:30:00 PM

Chain of Custody

1.	Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2.	How was the sample delivered?	Client		

Log In

3.	Custody Seals present on shipping container/cooler? (Refer to comments for Custody Seals not intact)	Yes ☐	No ☐	Not Present ☑
4.	Was an attempt made to cool the samples?	Yes ☐	No ☑	NA ☐
5.	Were all items received at a temperature of >2°C to 6°C *	Yes ☐	No ☐	NA ☑
6.	Sample(s) in proper container(s)?	Yes ☑	No ☐	
7.	Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8.	Are samples properly preserved?	Yes ☑	No ☐	
9.	Was preservative added to bottles?	Yes ☑	No ☐	NA ☐ MeOH
10.	Is there headspace in the VOA vials?	Yes ☐	No ☐	NA ☑
11.	Did all samples containers arrive in good condition(unbroken)?	Yes ☑	No ☐	
12.	Does paperwork match bottle labels?	Yes ☑	No ☐	
13.	Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
14.	Is it clear what analyses were requested?	Yes ☑	No ☐	
15.	Were all hold times (except field parameters, pH e.g.) able to be met?	Yes ☐	No ☑	

Special Handling (if applicable)

16.	Was client notified of all discrepancies with this order?	Yes ☐	No ☐	NA ☑

Person Notified:	Alan Blotch	Date:	4/2/2025
By Whom:	Clare Griggs / Morgan Wil	Via:	☐ eMail ☑ Phone ☐ Fax ☐ In Person
Regarding:	Hold time & COC/sample discrepancies		
Client Instructions:	Do the best we can		

17. Additional remarks:

Sample date pulled from jars. Any sample received not written on COC was added to COC and placed on hold.

Item Information

Item #	Temp °C
Sample	19.1

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Chain of Custody Record & Laboratory Services Agreement

Date: 03-24-25 Page: 1 of: 4

Laboratory Project No (internal): 250-3473

Project Name: SUNSET SW CORNER

Special Remarks:

Client: AEROTECH ENV. CONSULTING

Project No:

Address:

Collected by: ALAM BLOTCH

City, State, Zip:

Location:

Telephone:

Report To (PM):

Sample Disposal: ☐ Return to client ☐ Disposal by lab (after 30 days)

Fax:

PM Email:

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) / Dissolved (D)	Anions (IC)***	EDB (8011)	Comments
1	A-01																	1)
2	02																	
3	03																	2)
4	04																	
5	05																	3
6	06																	
7	07																	4
8	08																	
9	08/1																	5
10	9 NA ~~Blank~~																	

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA 5 RCRA 8 Priority Pollutants TAL Individual: Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Turn-around Time:

- ☐ Standard
- ☐ 3 Day
- ☐ 2 Day
- ☐ Next Day
- Same Day _____ (specify)

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished	Date/Time	Received	Date/Time
x		x	3/24/25 4:30PM
Relinquished	Date/Time	Received	Date/Time
x		x	

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Chain of Custody Record & Laboratory Services Agreement

Date: | Page: 2 of: 4 | Laboratory Project No (internal): 2503473

Project Name: SUNSET SW CORNER | Special Remarks:

Client: | Project No:

Address: | Collected by:

City, State, Zip: | Location:

Telephone: | Report To (PM): | Sample Disposal: ☐ Return to client ☐ Disposal by lab (after 30 days)

Fax: | PM Email:

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	# of Cont.	VOCs (EPA 8260 / 624)	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T)	Dissolved (D)	Anions (IC)***	EDB (8011)	Comments
1	A-10 76																		
2	-11																		
3	-13 77																		
4	-14																		
5	15 78																		
6	16																		
7	17 79																		
8	18																		
9	19 710																		
10	20																		

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Turn-around Time:
☐ Standard ☐ Next Day
☐ 3 Day ☐ Same Day
☐ 2 Day (specify)

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above, that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x			x [signature]	gina gerrard	3/24/25 4:30PM
Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x			x		

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Chain of Custody Record & Laboratory Services Agreement

Date: | Page: 3 of: 4 | Laboratory Project No (internal): 2503473

Project Name: | Special Remarks:

Client: | Project No:

Address: | Collected by:

City, State, Zip: | Location:

Telephone: | Report To (PM): | Sample Disposal: ☐ Return to client ☐ Disposal by lab (after 30 days)

Fax: | PM Email:

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	# of Cont.	VOCs (EPA 8260 / 624)	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T)	Dissolved (D)	Anions (IC)***	EDB (8011)	Comments
1	B-25 713																		
2	26																		
3	27 714																		
4	28																		
5	29 715																		
6	30																		
7	31 716																		
8	32																		
9	33 717																		
10	34																		

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Turn-around Time:
☐ Standard ☐ Next Day
☐ 3 Day ☐ Same Day
☐ 2 Day ____ (specify)

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above, that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x			x	gina gerrard	3/24/25 4:30PM
x			x		

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Chain of Custody Record & Laboratory Services Agreement

Date: | Page: 4 of: 4 | Laboratory Project No (internal): 2503473

Project Name: | Special Remarks:

Client: | Project No:

Address: | Collected by:

City, State, Zip: | Location:

Telephone: | Report To (PM): | Sample Disposal: ☐ Return to client ☐ Disposal by lab (after 30 days)

Fax: | PM Email:

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	# of Cont.	VOCs (EPA 8260 / 624)	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8) Total (T) / Dissolved (D)	Anions (IC)***	EDB (8011)	Comments
1	B-35 719																
2	-36																
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Turn-around Time:
☐ Standard ☐ Next Day
☐ 3 Day ☐ Same Day
☐ 2 Day ☐ _____ (specify)

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above, that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x			x	gina gerrard	3/24/25 4:30PM
Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x			x		

Fremont

3600 Fremont Ave N
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Chain of Custody Record & Laboratory Services Agreement

Date: 03-24-25 Page 1 of 4

Laboratory Project No (internal): 25-3473

Project Name: SUNSET SW CORNER

Project No:

Collected by: ALAN BUSTCH

Location:

Report To (PM):

PM Email:

Special Remarks:
Off hold per AB 4/2/25 -cg

Sample Disposal: [ ] Return to client [X] Dispose at Fremont (after 30 days)

Client: AEROTECH ENV. CONSULTING

Address:

City, State, Zip:

Telephone:

Fax:

	Sample Name	Sample Date	Sample Time	Matrix (Soil/Water)	PAH (8270D-SIM)	CVOCs (8260D)	BTEX (8260D)	Diesel/Oil Range Organics (NWTPH-Dx)	Gasoline Range Organics (NWTPH-Gx)	Semi-Volatile Organic Compounds (8270D)	Polychlorinated Biphenyls (PCBs) (8082A)	Organochlorine Pesticides (8081B)	Organophosphorus Pesticides (8141B)	Chlorinated Herbicides (8151A)	Total Petroleum Hydrocarbons (TPH)	RCRA 8 Metals	LEAD	LEAD + ARSENIC	Comments
1	A-01				X			X							X				
2	02				X			X									X		
3	03																		
4	04							X							X				
5	05							X									X		
6	06																		
7	07							X							X				
8	08																		
9	08/1																		
10	9 WA																		

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Sludge, W = Water, DW = Drinking Water, GW = Groundwater, WW = Storm Water, WW/S = Waste Water

**Metals (Circle): MTCA 5 RCRA 8 Priority Pollutants TAL Sb As Ba Be Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag Na Tl V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Sulfide O-Phosphate Fluoride Total Alkalinity/CaCO3

Turn-around Time:
[X] Standard
[ ] 1 Day
[ ] 2 Day
[ ] Next Day
[ ] Other

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished	Date/Time	Received	Date/Time
			3/24/25 4:30PM
Relinquished	Date/Time	Received	Date/Time

Chain of Custody Record & Laboratory Services Agreement

Fremont
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Date: | Page: 2 of: 4 | Laboratory Project No (internal): 2506213

Client: AEROTECH | Project Name: SUNSET SW CORNER | Special Remarks:

Address: | Project No.:

City, State, Zip: | Collected By:

Telephone: | Location:

Fax: | Report To (PM):

PM Email:

Sample Disposal: ☐ Return to Client ☒ Disposal by Lab (after 30 days)

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	# of Cont	TOC (Lloyd Kahn) (SW)	BTEX	Gasoline Range Organics (GRO) (NWTPH-Gx)	Diesel Range Organics (DRO) (NWTPH-Dx) (Acid/Silica Gel Cleanup)	Diesel Range Organics (DRO) (NWTPH-Dx) (Acid/Silica Gel Cleanup)	PAHs (EPA 8270 / 8310) (SIM)	PCBs (EPA 608.1 / 8082)	Metals** (RCRA 8) Dissolved (D)	Total (T) Dissolved (D)	Barium (Ba)***	Lead (Pb)	LEAD	LEAD + ARSNIC	Comments
1	A-10	7:40																
2	-11																	
3	-12	7:7																
4	-14																	
5	15	7:8																
6	16																	
7	17	7:9								X					X			
8	18																	
9	19	7:10																
10	20																	

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA 5 RCRA 8 Priority Pollutants TAL Individual: Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Si Sn Sr Ti Tl V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above, that I have verified Client's agreement to each of the terms on the front and backside of this Agreement

Turn-around Times:
☒ Standard ☐ Next Day
☐ 3 Day ☐ Same Day
☐ 2 Day (surcharge)

Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
[signature]			[signature]	[illegible]	3/24/25 4:30PM
Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time

Chain of Custody Record & Laboratory Services Agreement

Fremont
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Date: Page: 2 of: 4

Laboratory Project No (internal): 458477

Project Name:

Special Remarks:

Project No:

Collected by:

Client: AEROTECH

Address:

City, State, Zip:

Location:

Telephone:

Report To (PM):

Sample Disposal: Return to client X Disposal by lab (after 30 days)

Fax:

PM Email:

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	# of Cont.	VOCs (EPA 8260)	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Sub-Identification (HCID)	Oil/Mineral/Animal/Vegetable (MVO)	TPH-D (EPA 8270 / 625)	PAHs (EPA 8270 / 625)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) / Dissolved (D)	Analyte(s)***	TCLP (1311)	LEAD	LEAD + ARSENIC	Comments
1 B-25	7/3																X		
2 24	/																X		
3 27	7/4																		
4 28	/																		
5 29	7/5																		
6 30	/																		
7 31	7/6																		
8 32	/																		
9 33	7/7																		
10 34	/																		

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL Individual Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Mg K Mn Mo Ni Na Pb Sb Se Sr Sn Ti Tl V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O Phosphate Fluoride Nitrate+Nitrite

Turn-around Time:
X Standard Next Day
3 Day Same Day
2 Day (specify)

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above, that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
X					3/24/25 4:30 PM
Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name 2	Date/Time
X					

Chain of Custody Record & Laboratory Services Agreement

Fremont
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Date: | Page: 4 of: 4 | Laboratory Project No (internal): 25-3473

Client: AEROTECH | Project Name: | Special Remarks:

Address: | Project No: |

City, State, Zip: | Collected by: |

Telephone: | Location: | Sample Disposal: ☐ Return to client ☒ Disposal by lab (after 30 days)

Fax: | Report To (PM): |

PM Email:

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	# of Cont.	VOCs (EPA 8260 / 624)	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8) Total (T)	Dissolved (D)	Anions (IC)***	EDB (8011)	Comments
1	B-35 719																	
2	-36																	
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Turn-around Time:
☒ Standard ☐ Next Day ☐ 3 Day ☐ Same Day ☐ 2 Day ____ (specify)

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above, that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x			x	gina gerrard	3/24/25 4:30PM
Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x			x		

Fremont

3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Chain of Custody Record & Laboratory Services Agreement

Date: 03-24-25 Page: 1 of: 4

Laboratory Project No (internal): 25-0473

Project Name: SUNSET SW CORNER

Special Instructions: Off hold per AB 4/2/25 -cg

Client: AEROTECH ENV. CONSULTING

Project No:

Address:

Collected by: ALAN BLOTCH

City, State, Zip:

Location

Telephone:

Report To (PM):

Fax:

PM Email:

Sample Disposal: Return to client [X] Dispose after 30 days

Sample Name	Sample Date	Sample Time	Matrix	LEAD	LEAD + ARSENIC
A-01	3/19/25		Soil	X	X
02				X	X
03					
04				X	X
05				X	X
06					
07				X	X
08					
08/1					
9 WA					

*Matrix: A - Air, AQ - Aqueous, B - Bulk, O - Other, P - Product, SO - Soil, SD - Sediment, SL - Sludge, W - Water, DW - Drinking Water, GW - Ground Water, SW - Surface Water, WW - Wastewater

**Metals (Circle): 6010A/B 6020A/B Priority Pollutants TAL Hardness Ag Al As B Ba Be Ca Cd Co Cr Cu Fe K Mg Mn Mo Na Ni Pb Sb Se Si Sn Sr Ti Tl V Zn

***Anions (Circle) Nitrate Nitrite Chloride Sulfate Bromide Orthophosphate Fluoride Total Alkalinity

Turn-around Time:
[X] Standard
[ ] 1 Day
[ ] 2 Day
[ ] Next Day
[ ] Other
Specify

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished	Date/Time	Received	Date/Time
			3/24/25 4:30PM
Relinquished	Date/Time	Received	Date/Time

Fremont
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Chain of Custody Record & Laboratory Services Agreement

Date: | Page: 2 of 4 | Laboratory Project No (internal): 251-3617

Project Name: SUNSET SW CORNER | Special Remarks:

Client: AEROTECH

Address:

City, State, Zip

Telephone:

Fax:

Project No:

Collected by:

Location:

Report To (PM):

PM Email:

Sample at cost: ☐ Return to client: ☒ Disposal by lab (after 30 days)

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	# of Cont.	TPH (Dx 8260 / 8270)	BTEX	Halogenated Organics (EPA 8260 / 8270)	Polynuclear Aromatics (PAH)	Organochlorine Pesticides (EPA 8081)	PCBs (EPA 8082 / 8270)	PAH (EPA 8270 / 8310)	PCBs (EPA 8082 / 8270)	Metals** (EPA 6010 / 7000 Series)	Total (T) / Dissolved (D)	Arsenic (T)***	EDB (8011)	LEAD	LEAD + ARSNIC	Comments
A-10	3/19/25	7:6	S																
-11																			
-12		7:7																	
-14																			
15		7:8																	
16																			
17		7:9													X		X		
18																			
19		7:10																	
20																			

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA 5 RCRA 8 Priority Pollutants TAL Individual Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Si Sn Ti Tl V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide Phosphate Fluoride Alkalinity/CaCO3

Turn-around Time:
☒ Standard ☐ Next Day
☐ 3 Day ☐ Same Day
☐ 2 Day (circle)

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above, that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
					3/24/25 4:30PM
Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time

Fremont

3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Chain of Custody Record & Laboratory Services Agreement

Client: AEROTECH

Address:

City, State, Zip:

Telephone:

Fax:

Date: Page: 2 of: 4

Project Name:

Project No:

Collected by:

Location:

Report To (PM):

PM Email:

Laboratory Project No (internal): 250347 3

Special Remarks:

Sample Disposal: ☐ Return to client ☒ Disposal by lab (after 30 days)

#	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	# of Cont.	LEAD	LEAD + ARSENIC	Comments
1	B-25 713	3/19/25		S		X		
2	26 713					X		
3	27 714							
4	28 714							
5	29 715							
6	30 715							
7	31 716							
8	32 716							
9	33 717							
10	34 717							

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA 5 RCRA 8 Priority Pollutants TAL Individual Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Turn-around Time:
☒ Standard ☐ Next Day
☐ 3 Day ☐ Same Day
☐ 2 Day (specify)

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Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
					3/24/25 @ 4:36 PM
Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time

Fremont

3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Chain of Custody Record & Laboratory Services Agreement

Date: | Page: 4 of: 4 | Laboratory Project No (Internal): 256473

Client: AEROTECH | Project Name: | Special Remarks:

Address: | Project No: |

City, State, Zip: | Collected by: |

Telephone: | Location: | Sample Disposal: ☐ Return to client ☒ Disposal by lab (after 30 days)

Fax: | Report To (PM): |

PM Email:

edits 4/2/25 -cg

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	# of Cont.	VOCs (EPA 8260 / 624)	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T)	Dissolved (D)	Anions (IC)***	EDB (8011)	Comments
1	B-35 719	3/2925		S															
2	-36			S															
3	B21-11																		
4	B22-11																		
5	B23-12																		
6	B24-12																		
7	B35-18																		
8	B36-18																		
9																			
10																			

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Turn-around Time:
☒ Standard ☐ Next Day
☐ 3 Day ☐ Same Day
☐ 2 Day (specify)

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Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x			x	gina gerrard	3/24/25 4:30PM
Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x			x		

LIMITED PHASE II
Targeted Subsurface Investigation
Performed at:
SUNSET POINTE DEVELOPMENT
2301 - 23rd Street Southeast
(aka) 2102 - 23rd Street Place Southeast
Puyallup, Washington 98372

May 22, 2024

AEROTECH
Environmental Consulting Inc.

Anchorage Seattle Portland

Cost-effective environmental solutions
for the western United States and Alaska

www.AerotechEnvironmental.com

LIMITED PHASE II
Targeted Subsurface Investigation

Performed at:

SUNSET POINTE DEVELOPMENT
2301 - 23rd Street Southeast
(aka) 2102 - 23rd Street Place Southeast
Puyallup, Washington 98372

May 22, 2024

Performed by:
Aerotech Environmental Consulting, Inc.
12474-R Ambaum Boulevard Southwest
Burien, Washington 98166

Alan@DirtyDirt.Us
(360) 710-5899

Providing Service to:
• Anchorage •Portland • Seattle •
for over 44 years!

LIMITED PHASE II
TARGETED SUBSURFACE INVESTIGATION

performed for:

SUNSET POINTE DEVELOPMENT
2301 - 23rd Street Southeast
Puyallup, Washington 98372

Client(s):	Dr. Peter Chen 4709 Memory Lane West University Place, Washington 98466 (253) 906-1634 / yiping10@HotMail.com
Point of Contact:	Dr. Peter Chen
Subject Property	Sunset Pointe Development (aka) **Pioneer Museum** 2301 - 23rd Street Southeast (aka - southern) 2102 - 23rd Street Place Southeast (aka - northern) 2100 - 19th Avenue Southeast Puyallup, Washington 98372
Pierce County Assessor:	No. 0420-35-3027 9.090-acres / 395,960 square feet No. 0420-35-7011 / 0.098-acres 0.090-acres / 4,256 square feet
Key Site Manager:	Peter Chen
Property Classification:	NAICS Code 487.110 Vacant undeveloped land
Environmental Professional:	Alan T. Blotch
Washington Licensed Geologist:	Justin F. Foslien
Project Number:	No. 24-0219
Report Date:	May 22, 2024

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CONCLUSIONS / RECOMMENDATIONS

Aerotech Investigation Strategy

■ Aerotech Environmental Consulting, Inc., completed a *Near Surface Soil Investigation* of the subject Property in January through April. A total of 84 discrete areas (eighty three soil and one water locations) areas were sampled and were submitted to *Freemont Analytical Laboratories* for selected chemical analyses.

■ Areas of Concern Fully Investigated

Aerotech reviewed the volume of documents available concerning the history of the subject Property and the environmental requirements of (1) the City of Puyallup in order to issue a Building Permit; and (2) the interactions with the *Tacoma-Pierce County Health Department*; and (3) the actions and investigations necessary to obtain a *No Further Action Determination* from State of Washington Department of Ecology.

Aerotech identified and grouped the areas of concern based upon their similarities: (1) Retention Pond north side wall and impacts to the standing water in the Pond; (2) former drum storage identified by the Central Pierce Fire Department, and (3) Horse Barn and Original Storage Barn as areas that may have released the Contaminants of Concern which were generically labeled as:

(1) Retention Pond Wall and Water
(2) Museum Building - Former Drum Storage; and;
(3) Horse Barn and Original Storage Barn

Retention Pond - Batteries Removal and Impact

Buried Battery Casings and Contents Release. In 1965, the Owner of the subject Property obtained spent automotive batteries from a friend in the battery[1] recycling business. The battery interiors were reportedly clean by the recycler before delivery to the subject Property. When the batteries were received at the subject Property, available excess soils were used to fill the batteries. The batteries were then stacked on the northeastern corner of the Retention Pond to provide a sturdy wall.

In 2018, all of the remaining structures were demolished and general cleanup was completed which included "an old house, barns, out buildings, **battery casings,** tires and all miscellaneous debris found on the Property [emphasis added].[2]"

From January to March of 2024, Aerotech completed a Phase II activities included investigations the northeast edge of the wall. Three borings to a depth of 16 feet below surface – terminating two feet below the Pond water level – did not encounter any battery casings. The evidence indicates that the batteries were previously removed. No contaminated soil[3] or pond water is present, and **no further action is required.**

---

[1] Batteries can contain: cadmium, lead, and mercury.

[2] Description of waste materials disposed of in 2023 by D.M. Disposal Co., Inc, in their *Letter of Disposal* dated September 15, 2023

[3] All tested soil pH is withnin the range required by Pierce County. See, *Development Engineering Handout 9 Soil Amendment*, Development Engineering Inspection Team, May 28, 2015.

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Removal and Disposal of Waste Materials

In 2010, arson fires set on two consecutive days destroyed the *Western Washington Pioneer Museum* building, and damaged oils and chemicals stored inside and adjoining the building. Mr. Tanner, a previous Property owner, had operated a business that include "treating wood for fencing" and the drums contained waste liquids from his associated business activities[4]. The drums stored inside contained the accumulated liquid wastes of those business operations[5].

■ Demolition of Structures & Consolidation of Waste Materials

Asbestos-Containing Materials: Removal & Disposed.

The Parcel cleanup was initially started by ***Tacoma Abatement Company, LLC.*** They removed the asbestos-containing building materials ("ACBM") from the residences and associated accessory buildings. The ACBM wastes were properly bagged and transported to a landfill approved to accept ACBM waste materials.

Demolition of Structures and Consolidation of Materials.

Following asbestos abatement, **DP Excavation** was engaged to perform "load out of demolition debris. Photographs on the DP Excavation website include photos of DP equipment performing the the the demolition activities and piling the waste. The demolition debris consisting primarily of wood building materials – estimated by the disposal contractor to be 275 tons of debris. During these activities, *Tacoma Abatement Company* performed airborne asbestos sampling, and bagged all materials as "asbestos-containing".

This bagging – which likely included non-asbestos containing waste – was not necessary. However, the Property Owner, Dr. Peter Chen, incurred additional cost with this handling, but he did so in an abundance of caution.

Waste Transport and Final Disposal.

During the demolition activities, **Waste Connections** transported 15 loads / 125.66 tons of "possible" asbestos containing materials to the *LRI Landfill – Pierce County* for final disposal. The entire subject Property is free of all above-ground building materials, only the concrete pads remain. **No further action is required.**

---

[4] *See*, Interview by Ron Holcomb (Department of Ecology Southwest Region) ERTS No.620837 with Sharon Tanner, who stated she had inherited the Property from her mother Grace Ardell Greeley, approximately 15 years ago when she passed away. Washington Department of Ecology Environmental Tracking System ("ERTS") Report number 620837, May 04, 2012, page 5 of 7.

[5] *Ibid.* Statement of Joshua Gunia, grandson of Mr. Tanner.

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■ **Waste Removal & Disposal**

Upon completion of demolition, **D.M. Disposal Co., Inc. (aka) Waste Connections**, was engaged to dispose of the on-site demolition waste. Their September 15, 2023 *Letter of Disposal* stated:

> "This is to confirm with you that in July 2018, we hauled all of the demolition debris and clean up of your property. The entire job was classified as asbestos, and every load was wrapped and processed according to code, and disposed of at the LRI Landfill.
>
> The debris consisted of an old house, barns, out buildings, **battery casings,** tires, and all miscellaneous debris found on the property [emphasis added]."

The D.M. Disposal *Proposed Contact* invoice was for 15 loads and 125.66 tons.

CONTAMINANTS of CONCERN

The identified Contaminants of Concern ("COCs") were previously identified by the Tacoma Pierce County Heath Department ("TPCHD") under contract and direction of the Department of Ecology to complete a Site Investigation and prepare the WDOE Form *Initial Investigation Field Report.* The Field Report was completed by TPCHD Investigator, Ms. Sharon Bell on May 10, 2011.

Aerotech identified, sampled, and had analyzed additional Contaminants of Concern primarily related to the possible contamination resulting from the use of battery casings for the Retention Pond northeastern wall.

The laboratory analysis included:

Gasoline by NWTPH-Gx
Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.

Volatile Organic Compounds by EPA Method 8260D
Polyaromatic Hydrocarbons ("PAH") by EPA Method 8270 (SIM)

Metals (EPA 6020B) with TCLP Extraction (EPA 1311)
Metals (Soil Total) by EPA Method 6020
Metals (Water) by EPA Method 200.8

Arsenic (Water) by EPA Method 200.8
Cadmium (Water) by EPA Method 200.8
Chromium (Hexavalent) by EPA Method 7196

Moisture (Soil) Percent (wt%)

Pesticides (Organochlorine) by EPA Method 8081
Pesticides (Organochlorine) with Lindane by EPA Method 8081A
Herbicies by EPA Method 8151A (GC/MS)

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SUMMARY of SITE HISTORY

The following is a brief summary of the activities that have occurred at the subject Property:

Date of Work	Information Source	Development and/or Activity
xx/xx/1924	Pierce County Records	Construction of a 912 square foot residence on the northern portion of the Property
xx/xx/1928	Pierce County Records	Construction of a 1,104 square foot residence
— 1940 —		
xx/xx/1940	Pierce County Records	Construction of 10,000 square foot wood sided pole "horse" barn
xx/xx/1940	Pierce County Records	Construction of 1,092 square foot concrete block two-story detached garage
— 1950 —		
xx/xx/1950	Pierce Country Records	Construction of 4,480 square foot single story, wood pole and framed storage barn
xx/xx/1950	Pierce County Records	Construction of an approximately 10,000 square foot one-story wood pole and framed single-story barn, future location of *Western Washington Pioneer Museum*
xx/xx.1950	Pierce County Records	Construction of 4,000 square-foot utility barn / storage building.
— 1960 —		
xx/xx/1965		Retention Pond walls are constructed with soil spoils from the Property, and "cleaned" vehicle batteries filled with sand are used for a wall on the northwestern side of the Pond.
— 2000 —		
01/14/2004	Desert Creek, LLC	Reportedly[6] tested pond wall battery interiors for lead; reported levels below cleanup levels
— 2010 —		
06/27/2010	Central Fire District	Arson fire in vacant Pioneer Museum buildings
06/28/ 2010	Central Fire District	Arson fire in vacant Pioneer Museum buildings

[6] Information from *Phase I Environmental Audit*, Environmental Associate, January 14, 2005, page 12.

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07/07/2010	Department of Ecology	Letter to Cleanup Drums and Other Containers
– 2011 —		
05/10/2011	Tacoma-Pierce County Health Department	On-site to collection soil samples at 3 location on the south side of the former Museum building. Elevated levels of contaminants reported
05/24/2011	On Site Environmental	Analytical results of (3) soil samples
12-07-2011	Department of Ecology	Property is placed on the *Confirmed and Suspected Contaminated Sites Listing*
12/03/2011	Pierce County Office of the Clerk	Ottinger, Sharon sale to Peter Chen, four Assessor parcels
12/2111 - 2012	• Cost: $17,336.97	Big Dog Demolition - Removal north residences
03/12/2018	City of Puyallup	Submittal of *City of Puyallup Environmental Checklist*
08/03-09/ 2018	DP Excavation • Cost: $15.000.00	"Clean up all garbage and asbestos materials" Did not include removal, only surface scraping and piling of materials
08/03-09/ 2018	Tacoma Abatement Company • Cost: $16,166.29	"Clean and clear work area. including general debris. Removal of asbestos Containing materials. Air sampling as required by Washington State."
08/03-09/ 2018	DM Recycling and Waste Connections • Cost: $49,700.00	**Waste Removal**: excavation and disposal of 125.66 tons of mixed media, including "Battery Casings" all handled and disposed of as assumed asbestos contaminated materials to *LRI Landfill Pierce County*
09/21/2018	Habitat Technologies	*Preparation of Critical Areas Assessment*
10/26/2020	City of Puyallup	Revision and resubmittal of of *City of Puyallup :Environmental Checklist*
---- 2024 —		
January 19, 2024	Dr. Peter Chen	Dr. Chen engages Aerotech to complete a *Targeted Subsurface Investigation* at the subject Property
01/25 to 28/2024	Aerotech Environmental Consulting, Inc.	Phase II Investigation is completed by Aerotech. Work included borings at 36 locations and laboratory analysis of 75 individual samples.
03/2024	Aerotech Environmental Consulting, Inc.	Phase II Investigation, Site-wide soil background sampling: 38 sample locations, 52 lab analysis
02/29/2024	Aerotech Environmental Consulting, Inc.	Completion and delivery of *Phase II Investigation* Report

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TABLE of CONTENTS

Page Number:

CONCLUSIONS / RECOMMENDATIONS 4

CONTAMINANTS of CONCERN 6

SUMMARY of SITE HISTORY 7

SUBJECT PROPERTY OVERVIEW 11
- Property: Surface Development 11
- Property: Structural Development 11
- Battery Wall Construction 11
- Battery Wall Removal: 11
- Arson Fire Destruction: 12

INTRODUCTION 13

PROJECT SCOPE OF WORK 13

SITE DESCRIPTION 13
- Site Exterior Description 13
- Site Development History 14
- Subsurface Soils Overview 14
- Wetlands Delineation 15
- Property: Structural Development 15

HISTORICAL USAGE 17
- Standard Historical Resources 17
- Fifty-Year Complete Standard Historical Source Summary: 17
- Aerial Photograph Review 17
- City and Telephone Directories 19
- County Permit/Inspection Department 19
- Recorded Land Title Records 20
- Topographical (Historical) Maps 20
- Previously Recognized Environmental Conditions 22

FIELD WORK 24
- Notifications - "Public" Utilities 24
- Site Service Providers 24
- Magnetometer Investigation 25
- Ground Penetrating Radar Investigation 25

COLLECTION OF SOIL & WATER SAMPLES 25
- Sampling Soil Collection Methodology 25
- Soil Sample Collection Methodology 25
- Sample Screening 26
- Equipment Decontamination 26
- Site Boring Location Restoration 27

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SUMMARY OF SAMPLE ACQUISITION 27

ANALYTICAL RESULTS 30
Petroleum Constituents 30
Gasoline & BTEX Constituents 30
Diesel & Oils Constituents 30
Pesticides / Herbicides / "Old" Roundup 30

APPLICABLE ANALYTICAL METHODOLOGIES AND PARAMETERS 31
Analytical Methodology 31

STATEMENT OF WASHINGTON LICENSED PROFESSIONAL 32

STATEMENT OF THE ENVIRONMENTAL PROFESSIONAL 33

DEFINITIONS SPECIFIC TO TARGETED PHASE II ASSESSMENT 34

ENDNOTES & COMMENTS 35

APPENDIX 36

ENVIRONMENTAL CONTRACTOR'S CERTIFICATION 39

APPENDIX: SUMMARY of DOCUMENTS 40

SAMPLING LOCATIONS MAP 41

SOIL SAMPLING PHOTOGRAPHIC DOCUMENTATION 42

LABORATORY ANALYTICAL RESULTS: TABLES 43

LABORATORY ANALYTICAL RESULTS: REPORTS 44

RETENTION POND INVESTIGATION 45

PRELIMINARY MAJOR PLAT REVIEW: CITY of PUYALLUP 46

CRITICAL AREAS ASSESSMENT: SUNSET POINTE 47

INTERACTIONS WITH DEPARTMENT of ECOLOGY 48

ARSON FIRE: SITE INVESTIGATION 49

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SUBJECT PROPERTY OVERVIEW

The subject Property is an approximately rectangular-shaped Parcel comprised of two contiguous Pierce County Assessor parcels that total approximately 10.07-acres (400,216 square feet) located adjoining 23rd Street Southeast on the south and 19th Avenue Southeast near *Wildwood Park* in Puyallup, Washington.

The subject Property surface is level with the grade of 23rd Street Southeast on the south side and remains level through the approximately center of the Property. In this portion of the Property are the remaining foundations of the *Western Washington Pioneer Museum*, a horse barn, two single-family residences, and a storage building.

The Property elevation is 390 feet above mean sea level ("MSL") decreasing by twenty feet in the center to the center of the Property, occupied by a large natural Retention Pond with the water level at 361 feet MSL. To the east and north of the Detention Pond the elevation increase to approximately 380 feet MSL.

Property: Surface Development:

The subject Property is generally slightly sloped to the north - northwest. A ravine crosses through the Property from the western to eastern boundary. This ravine has been identified as a seasonal stream that originates off-site to the south.

The on-site ravine had undergone prior development actions to include the excavation and creation of three ornamental ponds. These ponds appear to have been created through the excavation of material within the ravine and through the placement of material within the ravine, and through the placement of the excavated material to establish two internal corridors crossing the ravine generally north to south.

Hydrology control structures and culverts installed to intentionally control surface water ponding are currently in-place. At the Property boundary the surface water within this corridor is captured within a buried drainage system installed as part of the development of the adjacent residential community. This drainage appears to lead to a tributary of the Deer Creek System.

Property: Structural Development:

The subject Property was originally undeveloped wooded land; initially developed in the early 1920s with two small residences. In 1940, a detected garage and 10,000 square foot horse barn were constructed. In 1950, two approximately 4,000 square foot storage barns were constructed. The current Retention Pond was "constructed" in an area of lower elevation and natural runoff.

Battery Wall Construction: In approximately 1965, the Property owner obtained empty battery casings from the local battery recycler, who had cleaned the casing insides prior to being transported to the subject Property, where they were filled with Site soils. The casings were then stacked along the northern edge of the Retention Pond. The battery casing were removed from the edge of the pond in 1995 and replaced with a soil berm.

Battery Wall Removal: Beginning in January of 2024, Aerotech was engaged to complete an environmental evaluation of the *Sunset Pointe Development* for the Owner, Dr. Peter Chen. During the initial round of drilling, soil borings were completed in the former casing location, that had rebuilt with a non-native clayey fill. No boing refusals were enountered at drill depths of at 4, 8, 12, and16 foot depths, which strongly indicate the casings were removed. Additionally, soil and Pond water sampling confirmed that neither media was impacted with contamation.

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Arson Fire Destruction:

In 2010, two arson fires destroyed the *Western Washington Pioneer Museum* building, and damaged oils and chemicals stored inside and adjoining the building. Mr. Tanner, a previous Property owner, operated a business that include "treating wood for fencing" and the drums contained waste liquids from his associated business activities[7]. The drums contained the accumulated liquid wastes of those business operations[8]. Following the fire, in 2011 the Property was placed on the State of *Washington Confirmed and Suspected Sites List* as "contaminated." (Copies of the County and WDOE documents are include in the Appendix of this Assessment

In 2018, all of the remaining structures were demolished and general cleanup was completed which included "an old house, barns, out buildings, battery casings, tires and all miscellaneous debris found on the Property.[9]" In 2023, all of the accumulated materials and debris were hauled off site for appropriate disposal by *Waste Connections*. Approximately 28 forty-yard roll off container loads of debris and material – 275 tons – were disposed of at the LRI Landfill[10].

Previously Identified Contamination.

Following the 2010 fire damage, in 2011 an environmental evaluation was completed the Tacoma-Pierce County Health Department for the State Department of Ecology. Elevated levels of NWTPH-gas, NWTPH-diesel / heavy oils, Organochlorine Pesticides, and Herbicides. As a result, in December of 2011, Ecology classified the Property as a "Contaminated Site."

City of Puyuallup Development Requirements

On March 15, 2018, CES NW, Inc. – on behalf of the Owner Dr. Peter Chen – submitted a *Preliminary Major Plat* to the Planning Division of the City of Puyallup. A Planning Review response by Mr. Chris Beale with a Staff Updated Comment (July 28, 2023) stated:

> "We will require pollution in the environment be cleaned up in compliance with WAC 173-340 before allowing any grading, filling, or other construction activities at the site, or an independent cleanup conducted under WAC 173-340-515, the cleanup would be complete when a no further action opinion (NFA) letter is issued under WAC 173-340-515(5)(b). [page 4 of 28]"

NOTE: The Ecology sections reference in this response – Washington Administrative Code § 173-340-515 sections – were amended in effective January 1, 2024.

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[7] *See*, Interview by Ron Holcomb (Department of Ecology Southwest Region) ERTS No.620837 with Sharon Tanner, who stated she had inherited the Property from her mother Grace Ardell Greeley, approximately 15 years ago when she passed away. Washington Department of Ecology Environmental Tracking System ("ERTS") Report number 620837, May 04, 2012, page 5 of 7.

[8] *Ibid.* Statement of Joshua Gunia, grandson of Mr. Tanner.

[9] Description of waste materials disposed of in 2023 by D.M. Disposal Co., Inc, in their *Letter of Disposal* dated September 15, 2023

[10] "LRI" is the landfill of Pierce County Recycling, Composting, and Disposal, LLC (dba) "LRI."

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INTRODUCTION

On January 19, 2024, Dr. Peter Chen engaged Aerotech Environmental Consulting ("Aerotech") to complete a *Limited Phase II Targeted Subsurface Investigation for the subject Property Sunset Pointe Development*. The objective of this Investigation was to evaluate the condition of the subsurface soils for the Recognized Environmental Conditions in generalized areas: (1) the Retention Pond northeastern side; (2) the former *Western Washington Pioneer Museum* building; and (3) the former drum storage horse barn and adjoining paved pads.

PROJECT SCOPE OF WORK

The Project Scope of Work was performed approximating the Scope of Work as delineated in the Aerotech Environmental Consulting, Inc., Contractual Agreement dated January 19, 2024, entitled *Professional Service Agreement Near Surface Soil Investigation at Areas of Concern.*

The areas addressed in the Aerotech Environmental Consulting, Inc. Professional Service Agreement Scope of Work included: (1) the Retention Pond northeastern side; (2) the former Western Washington Pioneer Museum building; and (3) the former drum storage horse barn. Particular Contaminants of Concern included Lindane®[11] and "Original" Roundup®[12]."

SECTION I.
SITE DESCRIPTION

Site Exterior Description:

The subject Property is an approximately rectangular-shaped Parcel comprised of two contiguous Pierce County Assessor parcels that total approximately 10.07-acres (400,216 square feet) located adjoining 23rd Street Southeast on the south and 19th Avenue Southeast near *Wildwood Park* in Puyallup, Washington. One-quarter of a mile to the south is 23rd Avenue Southeast; Shaw Road East is one-half of a mile to the east; and Meridian Avenue East (State Route WA-161) is one and one-quarter of a mile to the west.

The subject Property surface is level with the grade of 23rd Street Southeast on the south side and remains level through the approximately center of the Property. In this portion of the Property are the remaining foundations of the *Western Washington Pioneer Museum*, a horse barn, two single-family residences, and a storage building.

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[11] *Lindane*® is a organochlorine chemical and an isomer of hexachlorocyclohexane, a commonly applied and very effective agricultural insecticide that is both bio-accumulative and shown to be toxic to humans.

[12] "Original Roundup" was a commonly applied and very effective herbicide used is agricultural as a crop desiccsnt to help speed the drying of crops before harvest, in order to improve the yields. One of the primary components of Old Roundup is glyphosate. It is a systemic herbicide meaning it is absorbed into the plant rather than just sticking to the outside. The U.S. EPA has stated the Acceptable Daily Intake ("ADI") glyphosate is 0.5 milligrams per kilogram of body weight per day, i.e., 0.5 mg/kg/day. The U.S. production of Old Roundup was terminated in 2010. Currently, the manufacturer of glyphosate, is facing billions of dollars in class action suits.

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The Property elevation is 390 feet above mean sea level ("MSL") decreasing by twenty feet in the center to the center of the Property, occupied by a large natural Detention Pond with the water level at 361 feet MSL. To the east and north of the Retention Pond the elevation increase to approximately 380 feet MSL along the north and east sides. The northern corner of the Parcel has driveway access to the north at the intersection of 19th Avenue Southeast and 21st Street Southeast.

Site Development History

Wetlands Areas.

"Wetlands have been created through excavation of material within the ravine and via placement of the material to establish the wetland. The control of the flow of the wetlands stream is via culverts which have been installed[13]"

Excavated Ponds.

Three intentionally excavated ponds are located on the subject Property. They were apparently created with material excavated from the north to south ravine. This excavation also created the two internal roadways crossing the ravine generally north to south.

Subsurface Soils Overview:

The subject Property soils are dominated by soil that exhibits a silty loam texture and coloration typical of the *Kitsap Series*. The surficial soils in the graded areas is black to very dark gray to a depth of 8 to 20 inches below ground surface ("bgs"). The subsoil to a depth of 20 to 24 inches was very dark gray to gray and exhibited prominent redoximorphic ("RMF) features[14].

Aerotech conducted near-suface and subsurface testing of the Property soils to determine if an battery acid contamination was present on the Parcel. All of the ten soil sample analytical results were between 6.24 pH and 7.26 pH. Pierce County lists[15] the criteria for "Class A Compost" as between 6.0 - 8.0 pH.

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[13] *See*, as provided by Dr. Chen, *City of Pullaup Environmental Checklist*, Revised October 26, 2020.

[14] Redoximorphic ("RMF")features consist of color patterns in a soil that are caused by a loss (depletion) or gain (concentration)of pigment compared to the matrix color, formed by oxidation / reduction of iron and/or manganese – controlled by the presence of iron. The composition and responsible formation process for a soil color or pattern must be known or inferred before it can be described as an RMF

[15] Pierce County Development Engineering Inspection Team, *Development Engineering Handout 9, Soil Amendment*, May 28, 2015.

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Wetlands Delineation:

Wetland exhibit three essential characteristics, all of which must be present in an area in order to meet the established criteria (United States Army Corps of Engineers, 1987 and United States Army Corps of Engineers, 2010. These essential characteristics are:

> **Hydrophytic Vegetation**: The assemblage that occurs in areas where inundation to influence or soil saturation is either permanent or of sufficient frequency and duration to influence plan occurrence. Hydrophytic vegetation is present when the plant community is dominated by species that require or can tolerate prolonged inundation or soil saturation during the growing season.
>
> **Hydric Soil**: A soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper parts. Most hydric soils exhibit characteristic morphologies that result from repented periods of saturation or inundation. These processes result in distinctive characteristics that persist in the soil during both west and dry periods.
>
> **Wetland Hydrology**: Permanent or periodic inundation, or surface soil saturation, at least seasonally. Wetland hydrology indicators are used in combination with indicators of hydric soil and hydrophytic vegetation to define the area, Wetland hydrology indicators provide evidence that the site has continuing wetland hydrology regime. Where hydrology has not been altered vegetation and soils provide strong evidence that wetland hydrology is present.
>
> Wetland hydrology can include fish and wildlife habitat areas necessary for maintaining the specific species in suitable habitats within their natural geographic distribution of wetlands areas. Additionally, wetlands may become habitats of local importance, not limited to areas designated as priority habitat by the Department of Fish and Wildlife.

A *Critical Areas Assessment* was performed by *Habitat Technologies* dated Revised September 21, 2018 for the "Sunset Pointe Residential Community." Their Report stated:

> "Wetland determination was based on observations of hydrophytic vegetation, hydric soils, and wetland hydrology in accordance with the Corps of Engineers Wetland Delineation Manual ... Based on these methods no area within the project site was identified within the project site to exhibit all three of the established wetland criteria."
>
> (Ibid, pp 9-10).

Property: Structural Development:

The subject Property was originally undeveloped wooded land; initially developed in the early 1920s with two small residences. In 1940, a detected garage and 10,000 square foot horse barn. In 1950, two approximately 4,000 square foot storage barns were constructed. The current Retention Pond was constructed in an area of lower elevation.

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In 1965[16], the current Retention Pond was constructed in an area of lower elevation. At that time, the Property owner obtained empty battery casings from the local battery recycler, which were transported to the Site and filled with soil. The casings were then stacked along the northern edge of the Retention Pond. The battery casing were reportedly removed from the edge of the pond in the 1990s and replaced with a soil berm. Aerotech borings confirmed the statements of removal.

Arson Fires – 2010

In 2010, arson fires set on two consecutive days destroyed the *Western Washington Pioneer Museum* building, and damaged oils and chemicals stored inside and adjoining the building. Mr. Tanner, a previous Property owner, operated a business that include "treating wood for fencing" and the drums contained waste liquids from his associated business activities[17]. The drums contained the accumulated liquid wastes of those business operations[18].

Site Demolition and Cleanup – 2018 & 2023

In 2018, all of the remaining structures were demolished and removed from the Property, and a general cleanup was completed.

Initially, **Tacoma Abatement Company, LLC** removed the asbestos-containing building materials ("ACBM") from the residences and associated accessory buildings. The ACBM wastes were properly bagged and transported to a landfill approved to accept ACBM waste materials.

Following asbestos abatement, **DP Excavation** was engaged to perform "load out of demolition debris. Photographs in the DP Excavation website include photos of DP during the the demolition activities and resulting piles of demolition debris consisting primarily of wood building materials – estimated by the disposal contractor to be 275 tons of debris.

Upon completion of demolition, **D.M. Disposal Co., Inc. (aka) Waste Connections**, was engaged to dispose of the on-site demolition waste. Their September 15, 2023 *Letter of Disposal* stated:

> "This is to confirm with you that in July 2018, we hauled all of the demolition debris and clean up of your property. The entire job was classified as asbestos, and every load was wrapped and processed according to code, and disposed of at the LRI Landfill.
>
> The debris consisted of an old house, barns, out buildings, **battery casings,** tires, and all miscellaneous debris found on the property."

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[16] Statement of Ms. Pat Tanner, the Owner of the subject Property in 2005, that the batteries were transported and filled on Site in approximately 1965. *See*, Phase "1" Environmental Audit", Environmental Associates, Inc., date January 14, 2005, page 12.

[17] *See*, Interview by Ron Holcomb (Department of Ecology Southwest Region) ERTS No.620837 with Sharon Tanner, who stated she had inherited the Property from her mother Grace Ardell Greeley, approximately 15 years ago when she passed away. Washington Department of Ecology Environmental Tracking System ("ERTS") Report number 620837, May 04, 2012, page 5 of 7.

[18] *Ibid.* Statement of Joshua Gunia, grandson of Mr. Tanner.

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The D.M. Disposal *Proposed Contact* included providing a 40 cubic yard roll off container, to address an estimated 275 tons of material which would require 28 hauls to the landfill. The total estimated cost was $49,700.

SITE HISTORICAL USAGE

Standard Historical Resources:

"The following historical resources shall be reviewed if, based upon local customary practice and the judgement of the environmental professional, they are reasonably ascertainable: (i) aerial photographs, (ii) fire insurance maps, (iii) local street directories, and (iv) historical topographic maps." ASTM E1527-21 § 8.3.2. "Data, imagery, documents, records, and other resources that typically provide useful information about the historical uses of properties. Standard Historical Resources include: aerial photographs, fire insurance maps, local street directories, building department records, interviews, topographic maps, and property tax files." ASTM E1527-21 § 3.2.89

Fifty-Year Complete Standard Historical Source Summary:

The subject Property was originally undeveloped wooded land; initially developed in the early 1920s with two small residences. In 1940, a detected garage and 10,000 square foot horse barn. In 1950, two approximately 4,000 square foot storage barns were constructed. The current Retention Pond constructed in the early 1960s. In 2010, two arson fires destroyed the Western Washington Pioneer building, and damaged oils and chemicals stored inside and adjoining the building. In 2018, all of the remaining structures were demolished and removed from the Property, and a general cleanup was completed. In 2011, following the fire, the subject Property was classified as a Contaminated Site. All on-site buildings were demolished in 2018 and the waste materials removed in 2023.

Aerial Photograph Review:

Originally performed under government contracts, aerial photographs of the general area are available beginning with the 1940's. The scales for these aerials can range from 1"=1667' to 1"= 2500'; aerials taken by private contractors were generally taken at lower altitudes and provide a larger scale. Depending upon the resolution, the photographs can provide valuable information on land use and site development of both the subject and adjoining properties. Ultimately, the scale, clarity, and resolution serves as the limitations on visual interpretation. Aerial photographs for the subject Property were reviewed as available from numerous sources, including but not limited to, the Natural Resources Conservation Service District Offices; NETOonline[19] ("NETR"); U.S. Air Force ("USAF"); US Geological Service ("USGS");

Date:	*Source:*	*Development:*
1941	USDA	The subject Property is developed with a small structure on the north end; substantially undeveloped wooded land. A roadway starts at the intersection of 19th Avenue Southeast and 21st Street Southeast and extends to the southeast past a small residence to the eastern ridge and

[19] The NETR library include photographic collections that vary by state, county, and locality, and are all cited as "NET"R sources without referenced to the particular source collection.

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		then extends to the south to terminate at a residence with farm building. To the south 23rd Avenue is not present.
1943	USDA	The subject Property is developed with a small structure on the north end; substantially undeveloped wooded land. A roadway starts at the intersection of 19th Avenue Southeast and 21st Street Southeast and extends to the southeast past a small residence to the eastern ridge and then extends to the south to terminate at a residence with farm building. To the south 23rd Avenue is not present. A gravel pit is adjoining to the south and southwest.
1957	USDA	The subject Property is developed on the north side by two small residences; to the south are two residences, a small, and a large barn. To the south is an adjoining is a gravel pit. A roadway starts at the intersection of 19th Avenue Southeast and 21st Street Southeast and extends to the southeast past a small residence to the eastern ridge and then extends to the south to intersect 23rd Avenue. A gravel pit is adjoining to the south and southwest.
1968	USDA	The subject Property is developed on the north side by two small residences; to the south are two residences, a small, and a large barn. To the south is an adjoining is a gravel pit. A roadway starts at the intersection of 19th Avenue Southeast and 21st Street Southeast and extends to the southeast past a small residence to the eastern ridge and then extends to the south to intersect 23rd Avenue. A gravel pit is adjoining to the south and southwest.
1980	USGS	The subject Property is developed on the north side by two small residences; to the south are two residences, a small, and a large barn. To the east is wooded land. To the south is an adjoining is a gravel pit. A roadway starts at the intersection of 19th Avenue Southeast and 21st Street Southeast and extends to the southeast past a small residence to the eastern ridge and then extends to the south to intersect 23rd Avenue. A gravel pit is adjoining to the south and southwest.
1990	USGS	The subject Property is developed on the north side by two small residences; to the south are two residences, a small, and a large barn. The large pond is visible at the northern curve of the driveway. To the east is a large parcel of cleared and graded land. To the south is an adjoining is a gravel pit. A roadway starts at the intersection of 19th Avenue Southeast and 21st Street Southeast and extends to the southeast past a small residence to the eastern ridge and then extends to the south to intersect 23rd Avenue. A gravel pit is adjoining to the south and southwest.

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2006	USGS	The subject Property is primarily wooded land developed on the north side by two small residences; to the south are two residences, a small, and a large barn. The large pond is visible at the northern curve of the driveway. To the south, east, and west are large residential developments. To the north is a long strip of undeveloped partially wooded land.

City and Telephone Directories:

Local directories based upon physical surveys of residents have been compiled since the late 1880's for use as city planning and marketing database tools. Commonly referred to as "reverse directories" or "city directories," these directories are generally maintained at public libraries. The historical reverse directories complied by the Cole and Polk Companies were reviewed.

The northern portion of the subject Property is addressed as 2100 - 19th Avenue Southeast in Puyallup and 2102 - 23rd Street Place Southeast, Puyllup

Date:	*Address:*	*Occupant:*
2005	2104 - 23rd St.Pl.SE 2104 - 23rd St.Pl.SE	Starr, Ron Ottesen, Jeffrey L.
1998	2105 - 23rd St.Pl.SE	Ottensen Jeffrey
1998	2105 - 23rd St.Pl.SE	No listing

County Permit/Inspection Department - Permit Review:

The Property is located in Puyallup. All building activity is regulated by the Municipal Building. Due the time required to obtain building department records via Freedom of Information requests ("FOIA"), this method of research was deemed to be reasonably ascertainable[1]. As such, documents were requested and reviewed at the offices of the Building Services Division. The no substantive information was available.

Date:	*Permit:*	*Description:*
1924		Construction of 912 square foot wood framed and sided one-story residence, with pitched composite shingles
1928		Construction of 1,104 square foot wood framed and sided one story residence, with pitched composite shingles.
1940		Construction of one-story, wood pole framed barn building, approximately 10,000 square feet.
1940		Construction of 1,092 square foot, concrete block two-story detached garage.
1950		Construction of 4,480 square foot wood pole framed "utility / storage" single-story barn

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1950	Construction of 4,000 square foot wood pole framed single-story storage building

Recorded Land Title Records:

"Real Estate transaction routinely involve the purchase of title insurance *title insurance*; inherent in which is an offer to provide title insurance generally referred to aa a *Title Commitment* or preliminary *Title Report* provided by a *Title Company*. ... Such title insurance documentation reliably identifies an AUL, environment liens, usage controls, and environmental access and/or monitoring requirements." ASTM E1527-21 § 5.4.1.1

In addition to environmental information found in a Title Insurance (or Preliminary Title Insurance), the Land Title records will broadly capture more specifically-named AULs, such as '– environmental covenants – ' or 'Environmental easements', 'land use covenants, "declaration of use covenants [and/or] agreements', or 'declaration of land use restrictions'. 'environmental land use controls', and other similarly worded documents." ASTM E1527-21 § 5.4.1.2.2.

Recorded land titles are records usually maintained by the municipal clerk or county recorder of deeds which detail ownership fees, leases, land contracts, easements, liens, deficiencies, and other encumbrances attached to or recorded against the subject property in the local jurisdiction having control for or reporting responsibility to the subject Property.

Due to state land trust regulations and laws, land title records will often only provide trust names, bank trust numbers, owner's names, or easement holders, and not information concerning previous uses or occupants of the subject Property. Additionally, environmental liens recorded against the subject Property are considered outside the scope of recorded land title records. For these reasons, this Environmental Site Assessment has relied upon other information sources assumed to be either more accurate or informative than recorded land titles.

With an abundance of caution, the Site tax records at the Office of the Pierce County Assessor were accessed from review. The reasonably ascertainable records contained the following information:

Date:	*Excise Number:*	*Action:*
03/28/2019		Pierce County Assessor On Site Physical Property Inspection.
12/03/2011	4274495	Sharon Ottinger Grantor to: Peter Y and Liu Beth Chen, Statutory Warranty Deed – four assessor Parcels, Sale: $632,000.

Topographical (Historical) Maps:

A topographic map is a flat representation of the curved surface of the surface of the earth. As a result, a topographic map shows the contours, which makes is possible to accurately place geological features and measure elevations. In addition, the maps contain symbols that represent features such as: streets, buildings, streams, vegetation, and actual occupancy or usage of particular areas. As areas become more developed, additional map symbols were added to represent: built-up roads, types of highways, areas of intermittent drainage, waterway descriptions, water retention and detention, seasonally submerged areas, and descriptions of areas of disturbed soils. This attention to accuracy and detail makes the use of historical topographic maps a reliance source of the historical development of an area or property.

The United States Geological Survey ("USGS") has been the primary civilian mapping agency of the United States since 1879. The USGS topographic maps ("topo") maps have been published at many scales, but 1:24,000 (also referred to as a 7.5-minute quadrangle) has been the

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standard topographic map scale since 1947. Since 2009, the new computer-generated maps have been published every three years).

The USGS Historical Map Collection contains the USGS topographic maps published from 1884 through 2006. The goal of the USGS National Map's *Historical Topographic Map Collection* ("HTMC") is to provide a digital repository of USGS 1:250,000 scale and larger maps printed between 1884 and 2006. The following topographic maps were reviewed

Date:	*Source:*	*Description:*
1949	USGS	The subject Property is developed with four parcels; two residences, a storage barn, and horse barn. No ponds are identified on the Property. A small "gravel pit" is identified to the southwest.
1956	USGS	The subject Property is developed with four parcels; two residences, a storage barn, and horse barn. No ponds are identified on the Property. Directly to the west is a small "gravel pit"; to the east is undeveloped land.
1968	USGS	The subject Property is developed with four parcels; two residences, a storage barn, and horse barn. No ponds are identified on the Property. Two ponds are located in their current location. Directly to the west is a small "gravel pit"; to the east is undeveloped land.
1973	USGS	The subject Property is developed with four parcels; two residences, a storage barn, and horse barn. No ponds are identified on the Property. Directly to the west is a large "gravel pit"; to the east is undeveloped land.
1981	USGS	The subject Property is developed with four parcels; two residences, a storage barn, and horse barn. No ponds are identified on the Property. Directly to the west is a large "gravel pit"; to the east is undeveloped land.
1993	USGS	The subject Property is developed with four parcels; two residences, a storage barn, and horse barn. Two ponds are located in their current location. Directly to the west is a large "gravel pit"; to the east is undeveloped land.

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Previously Recognized Environmental Conditions:

Fire on Subject Property.

On June 27, 2010, an arson fire occurred at the subject Property Pioneer Museum at 4:00 am, and extinguished by Central Pierce Fire and Rescue. On the following day (Sunday) at 2:00 am a second fire was called in, and subsequently extinguished. Both fires were suspected arson.

Cleanup of Fire Debris.

State of Washington Department of Ecology ("WDOE") personnel accompanied by Tacoma-Pierce County Department of Health Department ("TPCHD") conducted a Site inspection and identified 27 containers from 5-gallon pails to 55-gallon drums. The WDOE personnel noted during their inspection:

> "A number of the containers were not sealed and/or were badly corroded. Some spillage of petroleum product was evident on the gravel floor of the building [Pioneer Museum]. Although Ecology temporarily secured the drums covering ten with tarps and surrounding then with caution tape, the material poses a threat to the environment and public health."
>
> * * * * *
>
> As a property owner, it is your responsibility to identify and properly dispose of the waste material in the containers and to remove any contaminated soil that exceeds state cleanup standards. Failure to properly address this situation could lead to the property being listed on the state's contaminated site list."

(Ibid., *Drums and other Containers on parcel #0420353027*, State of Washington Department of Ecology, dated July 7, 2010].

Tacoma-Pierce County Health Department Site Sampling (2011).

On May 10, 2011, Ms. Sharon Bell, Tacoma-Pierce County Health Department ("TPCHD") *Environmental Health Specialists*, collected soil samples from "three different areas." Ms. Bell stated in the WDOE *Initial Investigation Field Report*, submitted May 27, 2011 by Sharon Bell (TPCHD):

> "I returned to the property on 05.10.11 and collected three soil samples. All three samples were packed and submitted for HCID, Total RCRA metals, SVOCs, and PCB analyses. Netal and SVOC results were below MTCA CULs; PCBs were non-detect. HCID results indicated oil present in all three samples and gasoline present in S2. Further analysis with NWTPH-dx and NWTPH-gx found oil present in all three samples, ranging from 3100 to 37,000 mg/kg. Gasoline range organics were detected in S2 at 1,900 mg/kg and were noted by the lab to be similar to mineral spirits.
>
> The S1 sample was also tested for the presence of chlorinated herbicides, and well as organophosphorus pesticides were detected, with a laboratory PQL of 0.22 mg/kg (MCTA CUL 0.01). Lindane an organochlorine pesticide, was detected above the cleanup level.
>
> Summary: lube oil and gasoline range organics were found in concentrations exceeding MTCA Method A CULs. A variety of pesticides and herbicides were also detected; lindane was found in concentrations equaling the CUL. Further Assessment of the site for the presence of lindane and other chemicals is warranted."

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TPCHD Site Sampling Locations (2011).

Based upon the photos and captions taken by TPCHD *Health Specialists* Ms. Sharon Bell during the on-site sampling of May 10, 2011. Based upon the photograph taken by Ms. Bell on May 10, 2011, all three samples were collected in the fire debris area on the south side of the Pioneer Museum wall. The three samples were collected from the south side "storage area" with S1 adjoining the east wall; S2 approximately six feet to the northwest; and S3 six feet northwest of S2.

Sample S1-00-051011	collected near the wall of the southern drum storage area south of the center door within six feet on the interior in a grassy area with scattered fire debris. The area appeared to be stained with a dark substance.
Sample S2-00-051011	the area sampled was adjoining a group of six drums covered by wood and tarps. The location photo caption stated: "Sample location of S2-00-051011, in the stained area adjacent to a leaking drum in the SE corner of the drum group. Note the material hardened on the side of the drum and emanated from a hole now plugged." The area sampled shows visible staining and small pieces of fire debris.
Sample S3-00-051011	area sampled was six feet northwest of S2 near the northern metal wall of the storage shed. The sample location was adjoining a group of four drums covered by a trap and scraps of wood. Sample was one foot from the drums is an area of black and rust brown staining

Summary of Sampling Locations.

The previous sampling of the Site was performed by Ms. Sharon Bell (*Environmental Specialist*, Tacoma-Pierce County Health Department). This investigation reported:

> "The results indicated the presence of gasoline range hydrocarbons (GRO), likely mineral spirits, and lube oil in concentrations significantly above the state's cleanup levels: GRO [gasoline] was detected at 1900 ppm (state cleanup level is 100 ppm); lube oil ranged from 3100 to 37,000 ppm (state cleanup level is 2000 ppm). A variety of pesticides and herbicides were also detected," [electronic communication by Sharon Bell to Joshua Gunia (Ms. Tanner grandson), "Drums at 2301 23rd St E" dated May 10, 2011"].

All of the samples were near-surface, at locations that visually contained: (1) fire debris visible on the ground; (2) within one foot of leaking drums, and (3) visual evidence of black staining typical of surficial staining of petroleum products. A second area of concern was the north-northeastern edge of the Retention Pond.

WDOE Early Notice Letter (2011)

On December 7, 2011, the Department of Ecology issues an *Early Notice Letter Regarding the Release of Hazardous Substances at the Site Name: Former Pioneer Museum* which stated:

> "This site has been added to our database because soil contaminated with Petroleum Hydrocarbons and agricultural products has been confirmed on this Property. Our report indicates that contaminated soils were found during an arson fire investigation."

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IDENTIFICATION:
CONTAMINANTS of CONCERN

The identified Contaminants of Concern ("COCs") were previously identified by the Tacoma Pierce County Heath Department ("TPCHD") under contract and direction of the Department of Ecology to complete a Site Investigation and prepare the WDOE Form *Initial Investigation Field Report.* The Field Report was completed by TPCHD Investigator, Ms. Sharon Bell on May 10, 2011.

Ms. Bell collected three soil samples in the storage shed attached to the south side of the Western Washington Pioneer Museum. Ms. Bell likely concentrated on this area due to concentration of the number storage drum, amount of fire damaged debris in the area, and obvious visual presence of stained soils.

The laboratory analysis included:	Analytical Results:
NWTPH-gas	S2
NWTPH-HCID - Oil	S1, S2. S3
BTEX	Non-detect
NWTPH-diesel / heavy oils	S1, S2, S3
RCRA 8 Metals by EPA 6010B/7471A	Non-detect
Total Mercury by EPA 7471A	Non-detect
PCB by EPA 8082	Non-detect
Semivolatiles by EPA 8270D/SIM	Non-detect
Organochlorine Pesticides by EPA 8081A	Lindane (at CUL: 0.01 mg/kg)
Organophosphorus Pesticides by EPA 8270D/SIM	Present < MTCA CUL
Chlorinated Acid Herbicides by EPA 8151A	Present / No MTCA CUL

SECTION II.
FIELD WORK

Notifications - "Public" Utilities:

Based upon the representation of the Property development and condition by the Key Site Manager, a public utilities notification was not performed.

Site Service Providers:

The *Limited and Targeted Phase II Subsurface Investigation* was performed on January 25 and 26, 2024, under contract with Aerotech Environmental Consulting, Inc. All the work was performed during normal business hours. No unusual or unforeseen circumstances occurred during the Site activities.

The subsurface excavations were performed under by drilling equipment owned and operated by *B&W Standard Probe, LLC* in Lacey, Washington

The most of the laboratory analytical services were performed by *Fremont Analytical Laboratories, Inc.*, of Seattle, Washington. Analysis of specialized herbicides and pesticides was performed by *Pacific Agricultural Laboratory* of Sherwood, Oregon.

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Magnetometer Investigation:

Due to the nature of the anticipated Constituents of Concern, and lack of reported Site history of underground storage tanks use, or buried drums or containers, a magnetometer investigation was performed prior to the initiation of the Site subsurface investigation by *B&J Standard Probe, LLC*, was conducted of the north and northeast side of the Retention Pond to confirm the prior removal of the empty battery casings originally used as a retaining wall in 1960 by the then current Property owner.

Ground Penetrating Radar Investigation:

A Ground Penetrating Radar ("GPR") Study is a geophysical methodology which uses radar pulses to reflect off of subsurface structures and thus provide an image of the subsurface conditions and the possible presence of subsurface metallic objects. The depth of GPR Survey is determined by the electrical conductivity of the ground and the survey equipment transmitting frequency, and is generally limited to eight to thirteen feet below ground surface. However, the presence of significant subsurface obstructions or concrete rebar may limit the depth and/or effectiveness of the accuracy of the object identification. Additionally, surficial obstructions may limit the depth or effectiveness of the accuracy of the object identification. If a GPR Study identifies a "suspected" underground storage tank, the Study can provide an "estimate" of the size of the tank. However, this estimate is based upon the presence of detectible metal in the subsurface, and as such, the GRP Study can easily under or over estimate the size of the suspected tank. As a result, tank size estimates provided pursuant to the GRP Study should not be considered as absolutes – and are not a guarantee of the actual size of any suspected underground tank.

The study is performed with a GSSI Model SIR-3000 ground penetrating radar system employing a 400 MHz antenna. Additionally, a radio detection device capable of detecting any live power or data signals was is used when indicated.

A Ground Penetrating Radar Study was not performed in the Areas of Concern.

COLLECTION OF SOIL & WATER SAMPLES

Sampling Soil Collection Methodology:

The subsurface borings were conducted using a Geo-Probe© Limited Access Direct Push hydraulically powered drill. Soil samples were collected using a four-foot long hollow stem steel sampling rod open at the down gradient end with an inner acetate liner.

All of the down hole sampling equipment was decontaminated prior to use by washing in a Liquinox solution followed by a tap water rinse

Soil Sample Collection Methodology:

Soils collected from each boring location were physically observed for composition and odor while still inside the acetate liner. The soil color, texture and size were compared to the general accepted industry standard *Geotechnical Gauge* manufactured by W.F. McCollough Company of Beltsville, Maryland. Selected portions of the soils collected inside the clear acetate inner liner were placed in laboratory-supplied sterile four-ounce jars with teflon sealed lids. Each sample was given a unique identifier number and placed in an iced cooler for sample preservation. A Chain of Custody recorded the collection and handling of every sample.

Samples were collected at locations and at depths as identified and directed by Aerotech

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on-site personnel. Samples were collected from 1.5 to 22 foot depths

In some situations the upper elevation sample was analyzed as being the most representative of surficial and subsurface conditions – considering the most likely source of possible contamination was likely surficial storage releases. In other locations, lower elevation samples were collected as representative of the assumed Site conditions.

All sampling equipment for soil sampling, drive rods, and probes were decontaminated after each sampling point by washing with Liquinox solution of distilled water and rinsing with distilled water. The inner acetate liner was only used once. Additionally, all surfaces are wiped with clean paper towels, and plastic tubing is used only once.

As a result of the Site observations and recorded data, discrete soil and water samples were selected for laboratory analysis. The remaining soil samples were retained by the laboratory for analysis in the event that the groundwater or soil samples selected for laboratory analysis revealed elevated levels of constituents.

Sample Screening:

The soil samples are typically collected from each excavation location and screened with a calibrated Perkin-Elmer Photo Ionization Detector ("PID") Model No. 2020 PID (Serial No. 001688), to determine if detectable levels of diesel range petroleum hydrocarbons were present in the samples. The collected samples were screened on-site for photoionizable compounds. The PID was calibrated with Isobutylene gas and a specific response factor capable of detecting and accurately quantifying diesel range organics.

The soil samples were placed in clean, resealable polyethylene bags. Each bag was sealed, and the sample was allowed to equilibrate for approximately five minutes after which a small opening was made in the bag. The probe of the PID as then inserted into the bag, and the air space above the soil sample was analyzed for organic vapors of diesel range petroleum concentrations. As such, organic vapor screening provides an immediate field level indication of the presence or absence of the targeted compound

This information was recorded, and then used to identify the discrete sample at each investigation location that potentially contained the greatest concentrations of petroleum constituents.

Due to the limited Scope of the sampling, and accelerated time requirements, PID sample was not performed for sampling acquisition.

Groundwater Sample Collection Methodology:

Once the soil sampling had identified the depth to groundwater, the drill rod was withdrawn from the bore hole and a 3/4-inch diameter temporary well was installed. The well was constructed of ten foot long sections of PVC piping, either solid-walled or factory slotted to allow the entry of groundwater. The slotted PVC was initially placed in the hole with the sold piping threaded above the slotted.

A new 3/8-inch diameter polyethylene tubing was inserted and connected to a powered extraction pump. The groundwater samples were then pumped into hydrochloric acid-preserved containers (with no head space for air) of different sizes and compositions, depending upon the type of chemical being analyzed by the laboratory. The samples were labeled with individual identification numbers and place in an iced cooler.

Equipment Decontamination:

All sample acquisition equipment was decontaminated before and after each boring to

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eliminate the potential for cross-contamination between borings, as required. Since sample media was primarily collected by virgin polyurethane tubes and clean latex gloves, sample equipment decontamination was not required; and all sampling equipment was single-use only.

Site Boring Location Restoration:

Upon completion of the sampling for each bore hole, each boring location was filled with bentonite slurry mixture as specified by the State of Washington Department of Ecology, with the upper six to eight inches were filled with "cold patch" asphalt – a quick set asphalt that matched the surrounding surficial conditions.

SUMMARY OF SAMPLE ACQUISITION

SAMPLING by AREAS OF CONCERN

Area of Concern	Sample Number	Location	Sample Depth	Total Depth
Pioneer Museum[20]	B20-01 B20-02 B20-03 B20-04	southwest corner	2 feet bgs 4 feet bgs 6 feet bgs 8 feet bgs	8 feet
Pioneer Museum	B21-01	southeast side	6 feet bgs	6 feet
Pioneer Museum	B22-01 B22-02	east side southern corner	3 feet bgs 6 feet bgs	6 feet
Pioneer Museum	B23-02	east side southern corner of original doors	Pesticides Herbicides	2 feet
Pioneer Museum	B24-01 B24-02	east side northern corner of original doors	3 feet bgs 5 feet bgs	5 feet
Pioneer Museum	B25-01 B25-02	northeast corner north side	3 feet bgs 5 feet bgs	5 feet
Pioneer Museum	B26-01 B26-02	north side near center door	2 feet bgs 4 feet bgs	4 feet
Original Barn[21]	B27-01 B27-02	southwest corner - south	2 feet bgs 6 feet bgs	6 feet

[20] Western Washington Pioneer Museum; originally constructed in 1950 as a 4,000 square foot storage barn, only the foundation remaining.

[21] "Original Barn" (north of Pioneer Museum) 4,000 square feet constructed in 1950, only the foundation remaining.

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Area of Concern	Sample Number	Location	Sample Depth	Total Depth
Original Barn	B28-01 B28-02	southwest corner - west	2 feet bgs 6 feet bgs	6 feet
Original Barn	B29-01	northwest corner	3 feet bgs	3 feet
Original Barn	B30-01 B30-02	northeast corner	2 feet bgs 4 feet bgs	4 feet
Original Barn	B31-01 B31-02	east side center	2 feet bgs 4 feet bgs	4 feet
Original Barn	B32-01 B32-03	southeast corner	2 feet bgs 4 feet bgs	4 feet
Horse Barn[22]	B10-01	west door 3' east	3 feet	3 feet
Horse Barn	B11-01 B11-02	west door 2' west	2 feet 6 feet	6 feet
Horse Barn	B12-01	west side between door and northwest building corner	3 feet	3 feet
Horse Barn	B13-01 B13-02	auger refusal at 2'	3 feet	3 feet
Horse Barn	B14-01 B14-02	northwest corner, west side	3 feet 6 feet	6 feet
Horse Barn	B15-01 B15-02 B15-03	northwest corner, north side	3 feet 6 feet 12 feet	12 feet
Horse Barn	B16-01 B16-02	north wall 8' from NW corner	2 feet 4 feet	4 feet
Horse Barn	B17-01 B17-02	southwest corner west side	2 feet 4 feet	4 feet
Horse Barn	B18-01 B18-02 B18-03 B18-04	southwest corner south side	2 feet 4 feet 8 feet 12 feet	12 feet
Horse Barn	B19-01 B19-02	south wall 8' from corner	2 feet 4 feet	4 feet
Horse Barn	R19-01 R19-02	east of horse barn along Parcel east side fence line	4 feet 8 feet	8 feet

[22] Horse Barn (directly east of Pioneer Museum) 10,000 square feet constructed in 1940.

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Area of Concern	Sample Number	Location	Sample Depth	Total Depth
Retention Pond[23]	B1-1 B1-2	north side of entrance up incline 18 ' northeast	4 feet bgs 8 feet bgs	Feet from surface to fill material Pond water level:
Retention Pond	B2-1	north side of entrance 6' northeast	4 feet bgs	12 feet to surface
Retention Pond	B3-1 B3-2 B3-3	on northeast edge of pond 10' northwest of center line	4 feet bgs 8 feet bgs 12 feet bgs	7 feet to surface
Retention Pond	B4-1 B4-2	on edge of pond at centerline	8 feet bgs 16 feet bgs	7 feet to surface
Retention Pond	B5-1 B5-2 B5-3	on edge on pond at 6' southeast of centerline	4 feet bgs 12 feet bgs 16 feet bgs	7 feet to surface
Retention Pond	B6-1	on edge of pond 15' southeast of centerline		
Retention Pond	B7-1 B7-2 B7-3 B7-4	south side of entrance 10' north of pond edge	4 feet bgs 8 feet bgs 12 feet bgs 16 feet bgs	12 feet to surface
Retention Pond	B8-1 B8-2	north corner of center 10' north of pond edge	12 feet bgs 16 feet bgs	12 feet to surface
Retention Pond	B9-1 B9-1 B9-3 B9-4	on center line 20' northeast of edge of pond	4 feet bgs 8 feet bgs 12 feet bgs 16 feet bgs	12 feet to surface
Retention Pond	Water 1	northeastern side of pond	6 inches below surface	

Pond Elevation: the approximate elevation of the Retention Pond is 361 above Mean Sea Level ("MSL"). The lower "ledge" of the non-native fill is 368 MSL and the ground level surface of the Parcel extending to the east is 374 MSL. Based upon the elevation readings, six of the boring depths would have reported refusal if the batteries were still along the northeastern edge of the Retention Pond - as such, the battery casings were removed as previously reported.

[23] "Retention Pond" created in 1962 by the then Owner to prevent the seasonal water flow and resulting flooding across the northern adjoining driveway. The northeastern pond wall was constructed of empty battery casings filled with native soils.

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SECTION III.
ANALYTICAL RESULTS

Petroleum Constituents

All samples were below the most stringent State of Washington Model Toxics Control Act Method "A" Residential Unrestricted Use cleanup levels.

All samples were below the minimum laboratory limits of detection.

Gasoline & BTEX Constituents:

All samples were below the most stringent State of Washington Model Toxics Control Act Method "A" Residential Unrestricted Use cleanup levels.

All samples were below the minimum laboratory limits of detection.

Diesel & Oils Constituents:

All samples were below the most stringent State of Washington Model Toxics Control Act Method "A" Residential Unrestricted Use cleanup levels.

Pesticides / Herbicides / "Old" Roundup:

All samples were below the most stringent State of Washington Model Toxics Control Act Method "A" Residential Unrestricted Use cleanup levels.

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APPLICABLE ANALYTICAL METHODOLOGIES AND PARAMETERS

The analysis parameters requested were chosen to provide a comprehensive characterization of the subsurface soils and/or water present at the Site Areas of Concern and to comply with State of Washington recommended analysis parameters.

Analytical Methodology:

Gasoline Range Organics

Northwest Total Petroleum Hydrocarbons (Method NWTPH-Gx)

Diesel & Oil Range Organics

State of Washington NWTPH-Dx/Dx Extended

Residual Range Organics

State of Washington NWTPH-Dx/Dx Extended

Volatile Organic Compounds

EPA Method 8260B

Semivolatile Organic Compounds

EPA Method 8270D

Halogenated Volatile Compounds

EPA Methos 8260B

RCRA Total Metals

EPA Method 6020

Laboratory Analysis:

Laboratory analysis was provided by:

Fremont Analytical Services Laboratories, Inc.
3600 Fremont Avenue North
Seattle, Washington 98103

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STATEMENT OF WASHINGTON LICENSED PROFESSIONAL

The following ASTM E1903-19 *Standard Practice* definitions as quoted below is the Practice "...intended to meet the business community's need for a written, practical reference describing a scientifically sound approach to investigating a *property* to evaluate the *presence of a substance* or likely *presence* of a *substance*." (ASTM E1903-19 § 4.1.2)

"Elimination of Uncertainty – No *Phase II ESA* [Environmental Site Assessment} can eliminate all uncertainty. Furthermore, any sample, either surface or subsurface, taken for *chemical testing* may or may not be representative of a larger population. Professional judgment and interpretation are inherent in the process, and even when exercised in accordance with objective scientific principles, uncertainty is inevitable." (ASTM E1903-19 § 4.1.2)

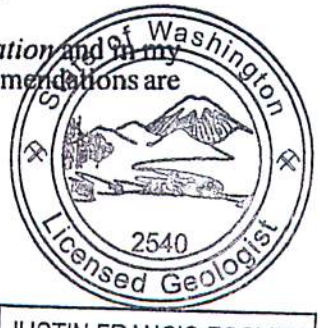
"Failure to Detect – Even when *Phase II* work is executed competently and in accordance with this practice, it must be recognized that certain conditions present especially difficult target analyte detection problems. Such conditions may include, but are not limited to, complex geological settings, unusual or generally poorly understood behavior and fate characteristics of certain substances, complex discontinuous, random, dynamic, or spotty distributions of existing *target analytes*, physical impediments to investigation imposed by the location of utilities and other man-made objects, and the inherent limitations of assessment technologies." (ASTM E1903-19 § 4.2.1.2)

"Level of Assessment – *Phase II ESAs* do not generally require an exhaustive assessment of the environmental conditions of a property. There is a point at which the cost of information obtained and the time required to obtain it outweigh the benefit of the information and, in the context of private transactions and contractual responsibilities, may become a material detriment to the orderly conduct of business. If the presence of *target analytes* is confirmed on a *property*, the extent of further assessment is a function of the degree of confidence required and the degree of uncertainty acceptable, in relation to the objectives of the assessment. " (ASTM E1903-19 § 4.2.2)

Any and/or all of the preceding statements regarding the performance of this Investigation may be applicable to the work performed by Aerotech.

I have reviewed this *Limited Phase II Targeted Subsurface Investigation* and in my professional opinion the observations, results, conclusions, and recommendations are reasonable and prudent.

Justin F. Foslien
Washington Licensed Geologist
No. 2540



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STATEMENT OF THE ENVIRONMENTAL PROFESSIONAL

The objective of this Limited Phase II Targeted Subsurface Investigation was to ascertain the potential presence or absence of environmental releases or threatened releases that could impact the subject Property, as delineated by the Scope of Work, for the exclusive use of the designated Clients. The procedure was to perform reasonable steps in accordance with the existing regulations, currently available technology, and generally accepted engineering practices in order to accomplish the stated objective.

The Scope of this Assessment does not purport to encompass every report, record, or other form of documentation relevant to the Property being evaluated. To the best of my knowledge, this Limited Phase II Targeted Subsurface Investigation has been performed in compliance with the Aerotech Environmental Consulting, Inc., Scope of Work applicable to this Project.

I have performed this Limited Phase II Targeted Subsurface Investigation in accordance with generally accepted environmental practices and procedures, as of the date of this Report. I have employed the degree of care and skill ordinarily exercised under similar circumstances by reputable environmental technologists practicing in this area. The conclusions contained within this Investigation are based upon site conditions I readily observed or were reasonably ascertainable and present at the time of the Site activities.

The conclusions and recommendations stated in this Report are based upon personal observations made by myself and other employees of Aerotech Environmental Consulting, Inc., information and analysis provided by third-party analytical laboratories, and also upon information provided by others. I have no reason to suspect or believe that the information provided is inaccurate.

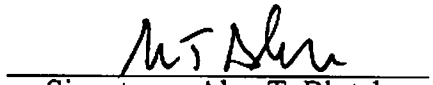
This Assessment has been performed in accordance with generally accepted environmental practices and procedures, as of the date of the Report. All services have been performed employing that degree of care and skill ordinarily exercised under similar circumstances by reputable environmental technologists practicing in this, or similar localities. No other warranty or guarantee, expressed or implied, is made or offered.

Limitations. The conclusions and recommendations stated in this Report are based upon observations made by employees of Aerotech Environmental Consulting, Inc. and also upon information provided by others. We have no reason to suspect or believe that the information provided is inaccurate. However, we cannot be held responsible for the accuracy of the information provided to us by others. The Scope of this Assessment does not purport to encompass every report, record, or other form of documentation relevant to the Property being evaluated.

The observations contained within this Assessment are based upon site conditions readily visible and present at the time of our Site inspection. These site observations are unable to specifically address conditions of subsurface soil, groundwater, or underground storage tanks, unless specifically mentioned. This Phase I Environmental Assessment does not attempt to address the past or forecast the future Site conditions.

Reliance Upon Report. This Report is prepared for the exclusive use and reliance upon by the named Client(s) in this Report. Only Aerotech, with the written approval of the Client(s), can assign the Reliance Interest for this Report to parties other than the named Client(s). Any use of, or reliance upon the Report by a party other than those specifically named in this Report, shall be solely at the risk of such third party and without recourse against Aerotech, or its affiliates or subsidiaries, or their respective employees, officers, or directories, regardless of whether the action in which recover of damages is sought is based upon contract, tort, (including the sole, concurrent, or other negligence and strict liability of Aerotech), statute, or otherwise. This Report shall not be used by a party that does not agree to be bound by the above statement.

Signature of Aerotech Consulting, Inc.
Environmental Professional:



Signature - Alan T. Blotch

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DEFINITIONS SPECIFIC TO TARGETED PHASE II ASSESSMENT

Background Concentration..... the concentration of a target analyte in groundwater, surface water, air, soil gas, sediment, or soil at a referenced location near a release or potential release area under investigation, which is not attributable to the release under investigation. Background samples may contain the target analyte, due to either naturally occurring or manade sources, but not due to the release(s) in question. (See, E 1903-97, § 3.1.3).

Phase II Environmental Site Assessment.... This practice (ASTM E 1903-97, Reapproved 2002) defines a commercially practical process for sound Phase II investigation that includes sampling and chemical testing. Such Phase II investigation is performed, at a minimum, to confirm the actual presence of contamination in environmental media at a property where prior assessment had indicated that contaminants may occur due to releases or potential releases of substances to the environment at the property, or to demonstrate prior to property acquisition that contamination by targeted analytes is absent. (See, E 1903-97, § 1.1.1).

Phase II Environmental Site Assessment Limitations..... "This practice [ASTM E1903-97, Reapproved 2002] recognizes that the *Phase II ESA* process can be applied either to an overall assessment of a property with respect to all releases and potential releases at the property, or to an evaluation targeted to a specific release or potential release. It a property-wide assessment is not necessary to meet the particular *User* objective, then the Phase II investigation process described herein should be applied to generate sound information regarding the specific question of problem to be resolved. If a Phase II investigation does not address all releases and potential releases identified at a property, the report of the assessment must be denoted as a *"Targeted Phase II" Environmental Site Assessment*. [E 1903-97, § 1.1.3]"

Phase II Targeted Environmental Site Assessment.... This Phase II Site Assessment is "targeted" as defined by the ASTM *Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process*, Designation E 1903-97 (Reapproved 2002); "an assessment performed in accordance with the process described in this [E 1903-97] practice, which addresses only certain *releases* or potential *releases*, or certain *target analytes*, at a property as selcted by the *User* but which does not address all *releases*, potential *releases*, and *target analytes*.[E 1903-97, § 3.1.43]"

Prior Knowledge.... "This Standard Practice [ASTM E 1903-97, Reapproved 2002] assumes ... that all reasonably ascertainable information, including but not limited to prior Phase I Environmental Site Assessment Reports, will be considered in conducting a Phase II ESA and interpreting its results. [E 1903-97, § 1.1.2]."

Targeted Analytes.... substances that have been released or potentially have been released to environmental media at the site, and which are of interest in the context of the particular Phase II ESA and its objectives, the presence of which will be sought and concentrations of which will be quantified through field screening or chemical testing. (See, E 1903-97, § 3.1.63).

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ENVIRONMENTAL CONTRACTOR'S CERTIFICATION

SUNSET POINTE DEVELOPMENT
2301 - 23rd Street Southwest
(aka) 2102 - 23rd Street Place Southeast
Puyallup, Washington 98372

1. Contractor's Name: Aerotech Environmental Consulting, Inc.

2. Contractor's Address: 14247 Ambaum Boulevard Southwest Rear, Burien, Washington 98166

3. Name and title of person completing this certification: Alan T. Blotch / President

4. Answer the following questions about each employee that contractor will have perform the assessment or prepare the report showing the results of the inspection:

   a. Name and Title of Employee: Alan T. Blotch – Environmental Professional

   b. Length of experience doing environmental assessments: 45 years

   c. Education degrees received: Masters of Business Administration
   Juris Doctor Environmental Law

   d. Relevant training received: ASTM E50 Environmental Assessment Committee Meetings

5. Identify any certifications and approvals issued to contractor pursuant to an official Federal, State of local program or policy to conduct environmental assessments: Registered Environmental Assessor
   Issued by State of California

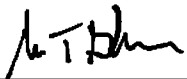
6. Describe the generally recognized standards which the contractor will use to perform the assessment. *Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process* (ASTM E 1903)

7. Disclose the nature of any previous environmental inspections contractor has ever performed for the Owner of the property: None

8. Disclose the nature of any affiliation or association contractor now has, or ever had, with the above referenced seller of the property, of the above referenced buyer of the property: None

9. Describe the liability insurance carried by contractor to cover claims in the event that ir fails to discover adverse environmental conditions during an environmental inspection.
   Professional Errors & Omissions Coverage $1,000,000 / claim and $1,000,000 aggregate liability

THE UNDERSIGNED HEREBY CERTIFIES, UNDER PENALTY OF THE CRIMINAL AND/OR CIVIL PENALTIES IN 18 U.S.C. § 1001 FOR FALSE STATEMENTS TO THE UNITED STATES GOVERNMENT, THAT THE ABOVE INFORMATION IS TRUE AND CORRECT.



Signature

05 | 22 | 24
Date

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Tab No.7

Subject Property:

State of Washington
Department of Ecology

REGULATORY INTERACTIONS

From: Smith, Sandy B. (ECY) <sasm461@ECY.WA.GOV>
Sent: Wednesday, July 26, 2023 2:40 PM
To: Chris Beale <CBeale@PuyallupWA.gov>
Cc: Lawson, Rebecca (ECY) <rlaw461@ECY.WA.GOV>; Lambiotte, Jerome (ECY) <jela461@ECY.WA.GOV>
Subject: RE: Pioneer Museum clean up site ID 11739 | 2301 23RD AVE SE

You don't often get email from sasm461@ecy.wa.gov. Learn why this is important

CAUTION: This is an External Email. Do not click links or open attachments unless you are expecting them.

Hello Chris,

Thank you for reaching out to Ecology Toxics Cleanup Program regarding the Pioneer Museum cleanup site. I have looked at Ecology's site file, 2018 SEPA records, and pages from the Phase I Environmental Site Assessment of the site by Earth Solutions NW that you provided by email.

Based on my review of the documents, cleanup of the Pioneer Museum may be required by Ecology under the Model Toxics Control Act, Chapter 70A.305 RCW, and implementing regulations contained in Chapter 173-340 WAC. We recommend that the City of Puyallup require pollution in the environment be cleaned up in compliance with WAC 173-340 before allowing any grading, filling, or other construction activities at the site, and while contaminated soil and groundwater are still easily accessible. For an independent cleanup conducted under WAC 173-340-515, the cleanup would be complete when a no further action opinion (NFA) letter is issued under WAC 173-340-515(5)(b).

The project applicant may want to consider entering Ecology's Voluntary Cleanup Program (VCP) or expedited VCP. Under the VCP, Ecology works with customers by reviewing and providing technical opinions on cleanup work required by the Model Toxics Control Act (MTCA), which is Washington's environmental cleanup law. Jerome Lambiotte (cc'd here) is the VCP supervisor for the southwest region, which includes Puyallup. He can answer your questions about the VCP and what next steps would be under that program.

We recommend the following steps with regard to the Pioneer Museum site:

- Request the applicant submit the Phase I ESA to Ecology. The applicant also should submit documentation of the disposition of the approximately 50 drums and containers of waste material formerly present on the property.
- Include mitigation measures in the SEPA Determination to require site cleanup before any site disturbance or development of the property. Many cities in southwest Washington do require cleanup of known sites before development.
- Request the project applicant work with Ecology to clean up the site, such as through the VCP, and obtain an NFA. This typically involves the applicant hiring an environmental consultant familiar with cleanup in Washington State to assist the applicant through the steps in the cleanup process.

If you have questions or want to discuss the site in more detail, please don't hesitate to contact me.

Sincerely, Sandy Smith

Sandy Smith

Cleanup Project Manager
Southwest Regional Office – Toxics Cleanup Program
Washington State Department of Ecology
sandy.smith@ecy.wa.gov
Mobile: 360.999.9588

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
PO Box 47775 • Olympia, Washington 98504-7775 • (360) 407-6300

December 7, 2011

Ms. Sharon Tanner
11907 240th Street NE
Arlington WA 98223

Dear Ms. Tanner:

RE: Early Notice Letter Regarding the Release of Hazardous Substance at the
Site Name: Former Pioneer Museum (site name),
Location: 2301 23rd Street SE, Puyallup, Washington 98373.
Facility Site Identification Number: 9490
ISIS Cleanup Site ID No.: 11739

Under Chapter 70.105D Revised Code of Washington (RCW) the Department of Ecology (Ecology) is required to conduct an Initial Investigation, of properties where we have received a report that there has been a release or threatened release of hazardous substance that could pose a threat to human health or the environment.

Ecology maintains a list of sites where an initial investigation has found that further testing and possible cleanup is needed. We call this our "database of Confirmed or Suspected Contaminated Sites". As a result of the initial investigation conducted by the Tacoma Pierce County Health Department, this property has been added to the database as a State Cleanup Site. The Facility Site Identification number assigned to this site is 18536 (existing site number). Please note that inclusion in this database does not mean Ecology has determined you liable for cleanup of the site, as that is a separate determination under the law.

This site has been added to our database because soil contaminated with Petroleum Hydrocarbons and agricultural products has been confirmed on this property. Our report indicates that contaminated soils were found during an arson fire investigation. Many drums containing hazardous substances were found at the site. We are aware the property was historically used as a farm and museum. We understand you inherited the property and designated your grandson as point of contact for issues involving the property and the fire. County staff talked to your grandson and were informed that it would take time for you to take care of the problem and that you were trying to sell the property. After months and no follow-up or cleanup activity our investigator collected samples which confirmed contamination and the property was listed. The purpose of the initial investigation is to confirm or deny the possibility of contamination on site.

In the future, Ecology may conduct a more detailed inspection of this property including testing for possible contamination. This inspection is called a "Site Hazard Assessment". At that time, Ecology will assess whether action will be needed and if necessary establish a priority for the work.

Ecology's policy is to work cooperatively with individuals to accomplish prompt and effective cleanups. Your cooperation with Ecology in planning or conducting a remedial action is not an admission of guilt or liability. Please be aware of state laws that must be adhered to if you decide to proceed with cleanup work on your own. The primary law is Chapter 70.105D RCW and the implementing regulations, the Model Toxics Control Act Cleanup Regulation (MTCA or Chapter 173-340 WAC). These laws can be found at Ecology's Toxics Cleanup Program website, http://www.ecy.wa.gov/toxicscleanup/policy .

If you would like a printed copy of the MTCA regulations or if you have questions call me at (360) 407-6240. These rules and how they impact each site can be confusing and complicated. There are Environmental Consultants that can be employed to assist property owners with the cleanup and site assessment process.

Ecology's Voluntary Cleanup Program is designed to provide technical assistance, for a fee, to cleanup sites that qualify. If you would like additional information regarding this program you can find information on our website at http://www.ecy.wa.gov/programs/tcp/vcp/vcpmain.htm or you can contact Scott Rose at 360-407-6347.

Sincerely,

Kim Cross
Toxics Cleanup Program
Southwest Regional Office

ksc:ENL 12072011 Former Pioneer Museum

by certified mail: (7010 0780 0002 3403 2803)

cc: Joshua Gunia
Sharon Bell, Department of Ecology
Cris Matthews, Department of Ecology

INITIAL INVESTIGATION FIELD REPORT

ERTS Number: 620837
Parcel #: 0420353027
COUNTY: PIERCE

SITE INFORMATION

Site Name (e.g., Co. name over door):	Site Address (including City and Zip+4):	Site Phone:
Pioneer Museum former	2301 23rd St SE Puyallup, WA 98373	none
Site Contact and Title: Joshua Gunia, grandson of owner	Site Contact Address (including City and Zip+4): 11603 Canyon Road E. Puyallup 98373	Site Contact Phone: 253/435-9999
Site Owner: Sharon Tanner	Site Owner Address (including City and Zip+4): 11907 240th St NE Arlington, WA 98223	Site Owner Phone: 360/474-1829
Site Owner Contact:	Site Owner Contact Address (including City and Zip+4):	Owner Contact Phone:
Alternate Site Name(s):	Comments:	Is property > 10 acres? Yes ☒ No ☐
Previous Site Owner(s):	Comments:	

Location: Quarter-Quarter: 3-4 Section: 35 Township: 20N Range: 04E
Latitude: Degrees: 47 Minutes: 10 Seconds: 19.6 N
Longitude: Degrees: 122 Minutes: 15 Seconds: 54.8 W

INSPECTION INFORMATION

Inspection Date: 11.16.10	Inspection Time: 10 am	Entry Notice: Announced ☒	Unannounced ☐
Photographs	Yes ☒ No ☐	Weather: Clear ☒ Rain ☐	Temperature: ~50 ° F
Samples	Yes ☒ No ☐	Wind Direction:	Wind Speed:

RECOMMENDATION

No Further Action (Indicate NFA in box below):		LIST on ISIS (Indicate in box below):	
Release or threatened release does not pose a threat	☐	Site Hazard Assessment	☒
No release or threatened release	☐	Interim Action	☐
Educational mailing	☐	Emergency Action	☐
Refer to program/agency (Name: _____)	☐	Independent Cleanup Action In progress	☐
Independent Cleanup Action Completed (i.e., contam, removed)	☐		

COMPLAINT (Brief Summary of ERTS):
Leaking drums

SITE STATUS (Brief Summary of site condition(s) after investigation):
Soil in vicinity of a cluster of stored drums is contaminated with petroleum hydrocarbons and agricultural chemicals.

Investigator: S. Bell Date Submitted: 05.27.11

OBSERVATIONS

Description:

This property is about 20 acres in size, and encompasses three parcels. Two parcels list the taxpayer as Grace Ardell Greeley. A third parcel lists a separate taxpayer, Sharon Ottinger, with the same listed mailing address as the Greeley parcels. The Ottinger parcel is a half acre in size and forms the northwest corner of the southern Greeley parcel. Sharon Tanner currently owns all three parcels and is the daughter of Grace Greeley; Ottinger was her maiden name. The property was used as a farm and a museum until approximately 5 years ago when all activity ceased. The property was referred to as the Pioneer Museum, not to be confused with the Pioneer Farm Museum in Eatonville.

An arson fire occurred on the southern parcel, 0420353027, in late June 2010. The Fire Department encountered a number of unaffected drums in a burned structure on the property and contacted Ecology. Ron Holcomb with Ecology's Spill Response conducted an assessment of the drums and other containers. Subsequent information collected by Ron indicated the listed taxpayer, Grace Ardell Greely, had been dead for a number of years and the property had been inherited by her daughter, Sharon Tanner. Ms. Tanner designated her grandson, Joshua Gunia, as the point of contact regarding issues at the site. Spill Response referred the site to the Toxics Cleanup Program in November 2010 for follow up regarding soil contamination due to spillage from some of the drums.

I contacted Joshua Gunia and set up an appointment to meet him at the site on 11.16.10. We walked the site together, concentrating on the large storage building where the drums were located. The southern half of the building was destroyed in the fire. The remaining half is in poor condition, lacking a roof and exposing the drums stored inside to weather conditions. The drums were stored together and covered with tarps. Soil staining was apparent around the drums and in several other areas. I spoke with Joshua about the need for his family to hire an environmental professional to delineate the extent and type of contamination on the property due to the leaks and/or spills from the drums, and we also spoke about the need to properly dispose of the drum and their contents. He told me that it would require several months for the family to be able to coordinate that, and that they were trying to sell the property. I told Joshua that an interested buyer might be willing to conduct a Phase II Environmental Site Assessment.

No progress was made in assessing or remediating the soil contamination at this property. I eventually coordinated an approved site visit through Joshua to collect soil samples at the subject property. I returned to the property on 05.10.11 and collected three soil samples. All three samples were jar packed and submitted for HCID, Total RCRA metals, SVOCs, and PCB analyses. Metal and SVOC results were below MTCA CULs; PCBs were non-detect. HCID results indicated oil present in all three samples and gasoline present in S2. Further analysis with NWTPH-dx and NWTPH-gx found oil present in all three samples, ranging from 3100 to 37,000 mg/kg. Gasoline range organics were detected in S2 at 1,900 mg/kg and were noted by the lab to be similar to mineral spirits.

The S1 sample was also tested for the presence of chlorinated herbicides, as well as organochlorine and organophosphorus pesticides. All of the detected herbicide compounds are in the phenoxy chemical family. No organophosphorus pesticides were detected, with a reported laboratory PQL of 0.22 mg/kg. Lindane, an organochlorine pesticide, was detected at the cleanup level. The pesticide and herbicide compounds detected are tabulated below; only one has a MTCA Method A CUL (lindane). For those compounds found in CLARC, the Method B mg/kg values are also provided.

S1 results for pesticides and herbicides; measurement units are mg/kg

Method	Analyte Group	Detects	Concentration	MTCA CUL	CLARC
8081A	Organochlorine pesticides	Beta-BHC (lindane)	0.01	0.01	0.0769
		Methoxychlor	0.019	---	400
8151A	Chlorinated acid herbicides	MCPP	36	---	---
		MCPA	15	---	---
		Dichlorprop	1.1	---	---
		Pentachlorophenol	0.0035	---	8.33
		2,4,5-TP (Silvex)	0.094	---	640
		2,4-DB	0.037	---	640
		Dinoseb	0.011	---	80

Soil samples were jar packed, stored in a sample refrigerator, and transported on ice. GRO/VOCs were not anticipated as contaminants of concern. HCID results indicated the need to run S2 for gasoline and BTEX; the analytical results for these parameters should be considered estimates, with potential negative bias in the results as 5035A sample collection methods were not used and the sample preparation occurred past the recommended holding times. Also, matrix interference resulted in potential negative bias for the methoxychlor results; actual concentrations could be greater.

Summary: lube oil and gasoline range organics were found in concentrations exceeding MTCA Method A CULs. A variety of pesticides and herbicides were also detected; lindane was found in concentrations equaling the CUL. Further assessment of the site

for the presence of lindane and other agricul al chemicals is warranted. Note: EDB was no ted for.

The TPCHD recommends listing this property as contaminated.

Description of past practices likely to be responsible for contamination:
Overflowing drums, leaking drums, spillage associated with storage of products in drums.

ACTIVITIES OR PRACTICES RESPONSIBLE FOR CONTAMINATION:

Spill	☒	LUST	☐
Pesticide disposal	☐	Tank	☐
Landfill	☐	Improper handling	☐
Drums	☐	Improper disposal	☐
Other – Describe:			

Are discharges permitted (if yes, describe): No ☒ Yes ☐

Standard Industrial Code(s)

CONTAMINANT(S)

AFFECTED MEDIA	CONTAMINANTS (#1-16: See contaminants key) Enter letter designating status of contaminant: C = Confirmed (above cleanup levels); S = Suspected; R= Remediated															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ground Water		S				S	S									
Surface Water																
Drinking Water																
Soil		C				C	C									
Sediment																
Air																

1 Base/neutral organics
2 Halogenated organic compounds
3 Metals - Priority pollutants
4 Metals - Other
5 Polychlorinated biPhenyls (PCBs)
6 Pesticides
7 Petroleum products
8 Phenolic compounds
9 Non-halogenated solvents
10 Dioxin
11 Polynuclear aromatic hydrocarbons (PAHs)
12 Reactive wastes
13 Corrosive wastes
14 Radioactive wastes
15 Conventional contaminants, organic
16 Conventional contaminants, inorganic

SITE INFORMATION

Soil type 13B Everett gravelly sandy loan and 20B, 20C Kitsap silt loam

Slope Level

Site vegetation/cover present:

Forest	☒	Pasture/open field	☒
Bare soil	☒	Wetlands	☐
Brush	☒	Pavement	☐
Landscaped	☐	Surface water	☐

Other – Describe:

Are there any drinking water systems affected?	☐ Yes	☐ No
Municipal, private, or both? (Circle one)		
How many people are estimated to be affected? _____		
Is there a potential for a release or threatened release to affect a drinking water source?	☐ Yes	☐ No
Are there monitoring wells in the vicinity?	☐ Yes	☐ No
Are there dry wells in the vicinity?	☐ Yes	☐ No

CONTAMINANT PATHWAYS AND TARGETS

	Ingestion	Inhalation	Contact
Ground Water	x	x	x
Surface Water	x	x	x
Drinking Water	x	x	x
Soil	x	x	x
Sediment			
Air		x	

Targets possible:

Human, adult	☒	Residential	☒
Human, children	☒	Industrial	☐
		Commercial	☐

Sensitive environments (See WARM Scoring Manual for definition):

☒ Yes ☐ No If yes, describe:

This site overlies the Central Pierce County Sole Source Aquifer. A pond/wetland is present on the site. Within two miles are multiple wetlands, parks and streams.

General Comments:

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

May 23, 2011

Sharon Bell
Tacoma-Pierce County Health Department
3629 South "D" Street
Tacoma, WA 98418-6813

Re: Analytical Data for Project 620837
Laboratory Reference No. 1105-092

Dear Sharon:

Enclosed are the analytical results and associated quality control data for samples submitted on May 11, 2011.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

Case Narrative

Samples were collected on May 10, 2011 and received by the laboratory on May 11, 2011. They were maintained at the laboratory at a temperature of 2°C to 6°C.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

Organochlorine Pesticides by EPA 8081A Analysis

Due to negative effects of the matrix on the instrument, values for 4,4'-DDT and Methoxychlor in the continuing calibration verification standards (CCVs) were low. Therefore, values can be greater than reported. Since the degradation of the CCV standards was reproducible after re-injecting the sample extracts, the CCV degradation problem was attributed to the matrix of these samples.

Any other QA/QC issues associated with this extraction and analysis will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.

Semivolatiles EPA 8270D/SIM Analysis

Some MTCA cleanup levels are non-achievable for samples S1-00-051011, S2-00-051011, and S3-00-051011 due to the necessary dilutions of the samples.

Surrogate recovery data is not available for sample S2-00-051011 due to the necessary dilution of the sample coupled with sample matrix effects.

Organophosphorus Pesticides by EPA 8270D/SIM Analysis

The surrogate recovery for Triphenyl phosphate is not available due to sample matrix interference.

NWTPH Gx/BTEX Analysis

Method 5035 VOA vials were not provided for sample S2-00-051011. The sample was therefore extracted from a 4-ounce jar for analysis.

The chromatogram for sample S2-00-051011 is similar to mineral spirits.

Please note that any other QA/QC issues associated with these extractions and analyses will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

NWTPH-HCID
(with acid/silica gel clean-up)

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	S1-00-051011					
Laboratory ID:	05-092-01					
Gasoline Range Organics	ND	33	NWTPH-HCID	5-11-11	5-11-11	U1
Diesel Range Organics	ND	6800	NWTPH-HCID	5-11-11	5-11-11	U1
Lube Oil	Detected	110	NWTPH-HCID	5-11-11	5-11-11	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*117*	*50-150*				
Client ID:	S2-00-051011					
Laboratory ID:	05-092-02					
Gasoline Range Organics	Detected	110	NWTPH-HCID	5-11-11	5-12-11	
Diesel Range Organics	ND	530	NWTPH-HCID	5-11-11	5-12-11	U1
Lube Oil	Detected	540	NWTPH-HCID	5-11-11	5-12-11	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*121*	*50-150*				
Client ID:	S3-00-051011					
Laboratory ID:	05-092-03					
Gasoline Range Organics	ND	21	NWTPH-HCID	5-11-11	5-11-11	
Diesel Range Organics	ND	5600	NWTPH-HCID	5-11-11	5-11-11	U1
Lube Oil	Detected	110	NWTPH-HCID	5-11-11	5-11-11	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*117*	*50-150*				

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

NWTPH-HCID
QUALITY CONTROL
(with acid/silica gel clean-up)

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0511S1					
Gasoline Range Organics	ND	20	NWTPH-HCID	5-11-11	5-11-11	
Diesel Range Organics	ND	50	NWTPH-HCID	5-11-11	5-11-11	
Lube Oil Range Organics	ND	100	NWTPH-HCID	5-11-11	5-11-11	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*118*	*50-150*				

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

SEMIVOLATILES by EPA 8270D/SIM
page 1 of 2

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	S1-00-051011					
Laboratory ID:	05-092-01					
n-Nitrosodimethylamine	ND	1.9	EPA 8270	5-16-11	5-18-11	
Pyridine	ND	19	EPA 8270	5-16-11	5-18-11	
Phenol	ND	1.9	EPA 8270	5-16-11	5-18-11	
Aniline	ND	1.9	EPA 8270	5-16-11	5-18-11	
bis(2-Chloroethyl)ether	ND	1.9	EPA 8270	5-16-11	5-18-11	
2-Chlorophenol	ND	1.9	EPA 8270	5-16-11	5-18-11	
1,3-Dichlorobenzene	ND	1.9	EPA 8270	5-16-11	5-18-11	
1,4-Dichlorobenzene	ND	1.9	EPA 8270	5-16-11	5-18-11	
Benzyl alcohol	ND	1.9	EPA 8270	5-16-11	5-18-11	
1,2-Dichlorobenzene	ND	1.9	EPA 8270	5-16-11	5-18-11	
2-Methylphenol (o-Cresol)	ND	1.9	EPA 8270	5-16-11	5-18-11	
bis(2-Chloroisopropyl)ether	ND	1.9	EPA 8270	5-16-11	5-18-11	
(3+4)-Methylphenol (m,p-Cresol)	ND	1.9	EPA 8270	5-16-11	5-18-11	
n-Nitroso-di-n-propylamine	ND	1.9	EPA 8270	5-16-11	5-18-11	
Hexachloroethane	ND	1.9	EPA 8270	5-16-11	5-18-11	
Nitrobenzene	ND	1.9	EPA 8270	5-16-11	5-18-11	
Isophorone	ND	1.9	EPA 8270	5-16-11	5-18-11	
2-Nitrophenol	ND	1.9	EPA 8270	5-16-11	5-18-11	
2,4-Dimethylphenol	ND	19	EPA 8270	5-16-11	5-18-11	
bis(2-Chloroethoxy)methane	ND	1.9	EPA 8270	5-16-11	5-18-11	
2,4-Dichlorophenol	ND	1.9	EPA 8270	5-16-11	5-18-11	
1,2,4-Trichlorobenzene	ND	1.9	EPA 8270	5-16-11	5-18-11	
Naphthalene	ND	0.015	EPA 8270/SIM	5-16-11	5-20-11	
4-Chloroaniline	ND	1.9	EPA 8270	5-16-11	5-18-11	
Hexachlorobutadiene	ND	1.9	EPA 8270	5-16-11	5-18-11	
4-Chloro-3-methylphenol	ND	1.9	EPA 8270	5-16-11	5-18-11	
2-Methylnaphthalene	ND	0.015	EPA 8270/SIM	5-16-11	5-20-11	
1-Methylnaphthalene	ND	0.015	EPA 8270/SIM	5-16-11	5-20-11	
Hexachlorocyclopentadiene	ND	1.9	EPA 8270	5-16-11	5-18-11	
2,4,6-Trichlorophenol	ND	1.9	EPA 8270	5-16-11	5-18-11	
2,3-Dichloroaniline	ND	1.9	EPA 8270	5-16-11	5-18-11	
2,4,5-Trichlorophenol	ND	1.9	EPA 8270	5-16-11	5-18-11	
2-Chloronaphthalene	ND	1.9	EPA 8270	5-16-11	5-18-11	
2-Nitroaniline	ND	1.9	EPA 8270	5-16-11	5-18-11	
1,4-Dinitrobenzene	ND	1.9	EPA 8270	5-16-11	5-18-11	
Dimethylphthalate	ND	1.9	EPA 8270	5-16-11	5-18-11	
1,3-Dinitrobenzene	ND	1.9	EPA 8270	5-16-11	5-18-11	
2,6-Dinitrotoluene	ND	1.9	EPA 8270	5-16-11	5-18-11	
1,2-Dinitrobenzene	ND	1.9	EPA 8270	5-16-11	5-18-11	
Acenaphthylene	ND	0.015	EPA 8270/SIM	5-16-11	5-20-11	
3-Nitroaniline	ND	1.9	EPA 8270	5-16-11	5-18-11	

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

SEMIVOLATILES by EPA 8270D/SIM
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	S1-00-051011					
Laboratory ID:	05-092-01					
2,4-Dinitrophenol	ND	9.3	EPA 8270	5-16-11	5-18-11	
Acenaphthene	0.019	0.015	EPA 8270/SIM	5-16-11	5-20-11	
4-Nitrophenol	ND	1.9	EPA 8270	5-16-11	5-18-11	
2,4-Dinitrotoluene	ND	1.9	EPA 8270	5-16-11	5-18-11	
Dibenzofuran	ND	1.9	EPA 8270	5-16-11	5-18-11	
2,3,5,6-Tetrachlorophenol	ND	1.9	EPA 8270	5-16-11	5-18-11	
2,3,4,6-Tetrachlorophenol	ND	1.9	EPA 8270	5-16-11	5-18-11	
Diethylphthalate	ND	9.3	EPA 8270	5-16-11	5-18-11	
4-Chlorophenyl-phenylether	ND	1.9	EPA 8270	5-16-11	5-18-11	
4-Nitroaniline	ND	1.9	EPA 8270	5-16-11	5-18-11	
Fluorene	ND	0.015	EPA 8270/SIM	5-16-11	5-20-11	
4,6-Dinitro-2-methylphenol	ND	9.3	EPA 8270	5-16-11	5-18-11	
n-Nitrosodiphenylamine	ND	1.9	EPA 8270	5-16-11	5-18-11	
1,2-Diphenylhydrazine	ND	1.9	EPA 8270	5-16-11	5-18-11	
4-Bromophenyl-phenylether	ND	1.9	EPA 8270	5-16-11	5-18-11	
Hexachlorobenzene	ND	1.9	EPA 8270	5-16-11	5-18-11	
Pentachlorophenol	ND	9.3	EPA 8270	5-16-11	5-18-11	
Phenanthrene	ND	0.015	EPA 8270/SIM	5-16-11	5-20-11	
Anthracene	ND	0.015	EPA 8270/SIM	5-16-11	5-20-11	
Carbazole	ND	1.9	EPA 8270	5-16-11	5-18-11	
Di-n-butylphthalate	ND	1.9	EPA 8270	5-16-11	5-18-11	
Fluoranthene	ND	0.015	EPA 8270/SIM	5-16-11	5-20-11	
Benzidine	ND	19	EPA 8270	5-16-11	5-18-11	
Pyrene	ND	0.015	EPA 8270/SIM	5-16-11	5-20-11	
Butylbenzylphthalate	ND	19	EPA 8270	5-16-11	5-18-11	
bis-2-Ethylhexyladipate	ND	1.9	EPA 8270	5-16-11	5-18-11	
3,3'-Dichlorobenzidine	ND	19	EPA 8270	5-16-11	5-18-11	
Benzo[a]anthracene	ND	0.015	EPA 8270/SIM	5-16-11	5-20-11	
Chrysene	ND	0.015	EPA 8270/SIM	5-16-11	5-20-11	
bis(2-Ethylhexyl)phthalate	ND	1.9	EPA 8270	5-16-11	5-18-11	
Di-n-octylphthalate	ND	1.9	EPA 8270	5-16-11	5-18-11	
Benzo[b]fluoranthene	0.029	0.015	EPA 8270/SIM	5-16-11	5-20-11	
Benzo(j,k)fluoranthene	0.040	0.015	EPA 8270/SIM	5-16-11	5-20-11	
Benzo[a]pyrene	0.13	0.015	EPA 8270/SIM	5-16-11	5-20-11	
Indeno[1,2,3-cd]pyrene	ND	0.015	EPA 8270/SIM	5-16-11	5-20-11	
Dibenz[a,h]anthracene	ND	0.015	EPA 8270/SIM	5-16-11	5-20-11	
Benzo[g,h,i]perylene	ND	0.015	EPA 8270/SIM	5-16-11	5-20-11	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorophenol	*73*	*30 - 97*				
Phenol-d6	*87*	*40 - 104*				
Nitrobenzene-d5	*75*	*35 - 102*				
2-Fluorobiphenyl	*91*	*44 - 97*				
2,4,6-Tribromophenol	*91*	*41 - 110*				
Terphenyl-d14	*86*	*53 - 107*				

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

SEMIVOLATILES by EPA 8270D/SIM
page 1 of 2

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	S2-00-051011					
Laboratory ID:	05-092-02					
n-Nitrosodimethylamine	ND	3.6	EPA 8270	5-16-11	5-19-11	
Pyridine	ND	36	EPA 8270	5-16-11	5-19-11	
Phenol	ND	3.6	EPA 8270	5-16-11	5-19-11	
Aniline	ND	3.6	EPA 8270	5-16-11	5-19-11	
bis(2-Chloroethyl)ether	ND	3.6	EPA 8270	5-16-11	5-19-11	
2-Chlorophenol	ND	3.6	EPA 8270	5-16-11	5-19-11	
1,3-Dichlorobenzene	ND	3.6	EPA 8270	5-16-11	5-19-11	
1,4-Dichlorobenzene	ND	3.6	EPA 8270	5-16-11	5-19-11	
Benzyl alcohol	ND	3.6	EPA 8270	5-16-11	5-19-11	
1,2-Dichlorobenzene	ND	3.6	EPA 8270	5-16-11	5-19-11	
2-Methylphenol (o-Cresol)	ND	3.6	EPA 8270	5-16-11	5-19-11	
bis(2-Chloroisopropyl)ether	ND	3.6	EPA 8270	5-16-11	5-19-11	
(3+4)-Methylphenol (m,p-Cresol)	ND	3.6	EPA 8270	5-16-11	5-19-11	
n-Nitroso-di-n-propylamine	ND	3.6	EPA 8270	5-16-11	5-19-11	
Hexachloroethane	ND	3.6	EPA 8270	5-16-11	5-19-11	
Nitrobenzene	ND	3.6	EPA 8270	5-16-11	5-19-11	
Isophorone	ND	3.6	EPA 8270	5-16-11	5-19-11	
2-Nitrophenol	ND	3.6	EPA 8270	5-16-11	5-19-11	
2,4-Dimethylphenol	ND	36	EPA 8270	5-16-11	5-19-11	
bis(2-Chloroethoxy)methane	ND	3.6	EPA 8270	5-16-11	5-19-11	
2,4-Dichlorophenol	ND	3.6	EPA 8270	5-16-11	5-19-11	
1,2,4-Trichlorobenzene	ND	3.6	EPA 8270	5-16-11	5-19-11	
Naphthalene	0.55	0.036	EPA 8270/SIM	5-16-11	5-20-11	
4-Chloroaniline	ND	3.6	EPA 8270	5-16-11	5-19-11	
Hexachlorobutadiene	ND	3.6	EPA 8270	5-16-11	5-19-11	
4-Chloro-3-methylphenol	ND	3.6	EPA 8270	5-16-11	5-19-11	
2-Methylnaphthalene	0.095	0.036	EPA 8270/SIM	5-16-11	5-20-11	
1-Methylnaphthalene	0.055	0.036	EPA 8270/SIM	5-16-11	5-20-11	
Hexachlorocyclopentadiene	ND	3.6	EPA 8270	5-16-11	5-19-11	
2,4,6-Trichlorophenol	ND	3.6	EPA 8270	5-16-11	5-19-11	
2,3-Dichloroaniline	ND	3.6	EPA 8270	5-16-11	5-19-11	
2,4,5-Trichlorophenol	ND	3.6	EPA 8270	5-16-11	5-19-11	
2-Chloronaphthalene	ND	3.6	EPA 8270	5-16-11	5-19-11	
2-Nitroaniline	ND	3.6	EPA 8270	5-16-11	5-19-11	
1,4-Dinitrobenzene	ND	3.6	EPA 8270	5-16-11	5-19-11	
Dimethylphthalate	ND	3.6	EPA 8270	5-16-11	5-19-11	
1,3-Dinitrobenzene	ND	3.6	EPA 8270	5-16-11	5-19-11	
2,6-Dinitrotoluene	ND	3.6	EPA 8270	5-16-11	5-19-11	
1,2-Dinitrobenzene	ND	3.6	EPA 8270	5-16-11	5-19-11	
Acenaphthylene	ND	0.036	EPA 8270/SIM	5-16-11	5-20-11	
3-Nitroaniline	ND	3.6	EPA 8270	5-16-11	5-19-11	

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

SEMIVOLATILES by EPA 8270D/SIM
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	S2-00-051011					
Laboratory ID:	05-092-02					
2,4-Dinitrophenol	ND	18	EPA 8270	5-16-11	5-19-11	
Acenaphthene	ND	0.036	EPA 8270/SIM	5-16-11	5-20-11	
4-Nitrophenol	ND	3.6	EPA 8270	5-16-11	5-19-11	
2,4-Dinitrotoluene	ND	3.6	EPA 8270	5-16-11	5-19-11	
Dibenzofuran	ND	3.6	EPA 8270	5-16-11	5-19-11	
2,3,5,6-Tetrachlorophenol	ND	3.6	EPA 8270	5-16-11	5-19-11	
2,3,4,6-Tetrachlorophenol	ND	3.6	EPA 8270	5-16-11	5-19-11	
Diethylphthalate	ND	18	EPA 8270	5-16-11	5-19-11	
4-Chlorophenyl-phenylether	ND	3.6	EPA 8270	5-16-11	5-19-11	
4-Nitroaniline	ND	3.6	EPA 8270	5-16-11	5-19-11	
Fluorene	ND	0.036	EPA 8270/SIM	5-16-11	5-20-11	
4,6-Dinitro-2-methylphenol	ND	18	EPA 8270	5-16-11	5-19-11	
n-Nitrosodiphenylamine	ND	3.6	EPA 8270	5-16-11	5-19-11	
1,2-Diphenylhydrazine	ND	3.6	EPA 8270	5-16-11	5-19-11	
4-Bromophenyl-phenylether	ND	3.6	EPA 8270	5-16-11	5-19-11	
Hexachlorobenzene	ND	3.6	EPA 8270	5-16-11	5-19-11	
Pentachlorophenol	ND	18	EPA 8270	5-16-11	5-19-11	
Phenanthrene	0.060	0.036	EPA 8270/SIM	5-16-11	5-20-11	
Anthracene	ND	0.036	EPA 8270/SIM	5-16-11	5-20-11	
Carbazole	ND	3.6	EPA 8270	5-16-11	5-19-11	
Di-n-butylphthalate	ND	3.6	EPA 8270	5-16-11	5-19-11	
Fluoranthene	ND	0.036	EPA 8270/SIM	5-16-11	5-20-11	
Benzidine	ND	36	EPA 8270	5-16-11	5-19-11	
Pyrene	0.051	0.036	EPA 8270/SIM	5-16-11	5-20-11	
Butylbenzylphthalate	ND	36	EPA 8270	5-16-11	5-19-11	
bis-2-Ethylhexyladipate	ND	3.6	EPA 8270	5-16-11	5-19-11	
3,3'-Dichlorobenzidine	ND	36	EPA 8270	5-16-11	5-19-11	
Benzo[a]anthracene	0.076	0.036	EPA 8270/SIM	5-16-11	5-20-11	
Chrysene	0.17	0.036	EPA 8270/SIM	5-16-11	5-20-11	
bis(2-Ethylhexyl)phthalate	ND	3.6	EPA 8270	5-16-11	5-19-11	
Di-n-octylphthalate	ND	3.6	EPA 8270	5-16-11	5-19-11	
Benzo[b]fluoranthene	0.037	0.036	EPA 8270/SIM	5-16-11	5-20-11	
Benzo(j,k)fluoranthene	ND	0.036	EPA 8270/SIM	5-16-11	5-20-11	
Benzo[a]pyrene	0.038	0.036	EPA 8270/SIM	5-16-11	5-20-11	
Indeno[1,2,3-cd]pyrene	ND	0.036	EPA 8270/SIM	5-16-11	5-20-11	
Dibenz[a,h]anthracene	ND	0.036	EPA 8270/SIM	5-16-11	5-20-11	
Benzo[g,h,i]perylene	ND	0.036	EPA 8270/SIM	5-16-11	5-20-11	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorophenol	.--	*30 - 97*				S
Phenol-d6	.--	*40 - 104*				S
Nitrobenzene-d5	.--	*35 - 102*				S
2-Fluorobiphenyl	.--	*44 - 97*				S
2,4,6-Tribromophenol	.--	*41 - 110*				S
Terphenyl-d14	.--	*53 - 107*				S

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

SEMIVOLATILES by EPA 8270D/SIM
page 1 of 2

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	S3-00-051011					
Laboratory ID:	05-092-03					
n-Nitrosodimethylamine	ND	1.8	EPA 8270	5-16-11	5-19-11	
Pyridine	ND	18	EPA 8270	5-16-11	5-19-11	
Phenol	ND	1.8	EPA 8270	5-16-11	5-19-11	
Aniline	ND	1.8	EPA 8270	5-16-11	5-19-11	
bis(2-Chloroethyl)ether	ND	1.8	EPA 8270	5-16-11	5-19-11	
2-Chlorophenol	ND	1.8	EPA 8270	5-16-11	5-19-11	
1,3-Dichlorobenzene	ND	1.8	EPA 8270	5-16-11	5-19-11	
1,4-Dichlorobenzene	ND	1.8	EPA 8270	5-16-11	5-19-11	
Benzyl alcohol	ND	1.8	EPA 8270	5-16-11	5-19-11	
1,2-Dichlorobenzene	ND	1.8	EPA 8270	5-16-11	5-19-11	
2-Methylphenol (o-Cresol)	ND	1.8	EPA 8270	5-16-11	5-19-11	
bis(2-Chloroisopropyl)ether	ND	1.8	EPA 8270	5-16-11	5-19-11	
(3+4)-Methylphenol (m,p-Cresol)	ND	1.8	EPA 8270	5-16-11	5-19-11	
n-Nitroso-di-n-propylamine	ND	1.8	EPA 8270	5-16-11	5-19-11	
Hexachloroethane	ND	1.8	EPA 8270	5-16-11	5-19-11	
Nitrobenzene	ND	1.8	EPA 8270	5-16-11	5-19-11	
Isophorone	ND	1.8	EPA 8270	5-16-11	5-19-11	
2-Nitrophenol	ND	1.8	EPA 8270	5-16-11	5-19-11	
2,4-Dimethylphenol	ND	18	EPA 8270	5-16-11	5-19-11	
bis(2-Chloroethoxy)methane	ND	1.8	EPA 8270	5-16-11	5-19-11	
2,4-Dichlorophenol	ND	1.8	EPA 8270	5-16-11	5-19-11	
1,2,4-Trichlorobenzene	ND	1.8	EPA 8270	5-16-11	5-19-11	
Naphthalene	ND	0.014	EPA 8270/SIM	5-16-11	5-19-11	
4-Chloroaniline	ND	1.8	EPA 8270	5-16-11	5-19-11	
Hexachlorobutadiene	ND	1.8	EPA 8270	5-16-11	5-19-11	
4-Chloro-3-methylphenol	ND	1.8	EPA 8270	5-16-11	5-19-11	
2-Methylnaphthalene	ND	0.014	EPA 8270/SIM	5-16-11	5-19-11	
1-Methylnaphthalene	ND	0.014	EPA 8270/SIM	5-16-11	5-19-11	
Hexachlorocyclopentadiene	ND	1.8	EPA 8270	5-16-11	5-19-11	
2,4,6-Trichlorophenol	ND	1.8	EPA 8270	5-16-11	5-19-11	
2,3-Dichloroaniline	ND	1.8	EPA 8270	5-16-11	5-19-11	
2,4,5-Trichlorophenol	ND	1.8	EPA 8270	5-16-11	5-19-11	
2-Chloronaphthalene	ND	1.8	EPA 8270	5-16-11	5-19-11	
2-Nitroaniline	ND	1.8	EPA 8270	5-16-11	5-19-11	
1,4-Dinitrobenzene	ND	1.8	EPA 8270	5-16-11	5-19-11	
Dimethylphthalate	ND	1.8	EPA 8270	5-16-11	5-19-11	
1,3-Dinitrobenzene	ND	1.8	EPA 8270	5-16-11	5-19-11	
2,6-Dinitrotoluene	ND	1.8	EPA 8270	5-16-11	5-19-11	
1,2-Dinitrobenzene	ND	1.8	EPA 8270	5-16-11	5-19-11	
Acenaphthylene	ND	0.014	EPA 8270/SIM	5-16-11	5-19-11	
3-Nitroaniline	ND	1.8	EPA 8270	5-16-11	5-19-11	

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

SEMIVOLATILES by EPA 8270D/SIM
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	S3-00-051011					
Laboratory ID:	05-092-03					
2,4-Dinitrophenol	ND	8.9	EPA 8270	5-16-11	5-19-11	
Acenaphthene	0.015	0.014	EPA 8270/SIM	5-16-11	5-19-11	
4-Nitrophenol	ND	1.8	EPA 8270	5-16-11	5-19-11	
2,4-Dinitrotoluene	ND	1.8	EPA 8270	5-16-11	5-19-11	
Dibenzofuran	ND	1.8	EPA 8270	5-16-11	5-19-11	
2,3,5,6-Tetrachlorophenol	ND	1.8	EPA 8270	5-16-11	5-19-11	
2,3,4,6-Tetrachlorophenol	ND	1.8	EPA 8270	5-16-11	5-19-11	
Diethylphthalate	ND	8.9	EPA 8270	5-16-11	5-19-11	
4-Chlorophenyl-phenylether	ND	1.8	EPA 8270	5-16-11	5-19-11	
4-Nitroaniline	ND	1.8	EPA 8270	5-16-11	5-19-11	
Fluorene	ND	0.014	EPA 8270/SIM	5-16-11	5-19-11	
4,6-Dinitro-2-methylphenol	ND	8.9	EPA 8270	5-16-11	5-19-11	
n-Nitrosodiphenylamine	ND	1.8	EPA 8270	5-16-11	5-19-11	
1,2-Diphenylhydrazine	ND	1.8	EPA 8270	5-16-11	5-19-11	
4-Bromophenyl-phenylether	ND	1.8	EPA 8270	5-16-11	5-19-11	
Hexachlorobenzene	ND	1.8	EPA 8270	5-16-11	5-19-11	
Pentachlorophenol	ND	8.9	EPA 8270	5-16-11	5-19-11	
Phenanthrene	0.052	0.014	EPA 8270/SIM	5-16-11	5-19-11	
Anthracene	ND	0.014	EPA 8270/SIM	5-16-11	5-19-11	
Carbazole	ND	1.8	EPA 8270	5-16-11	5-19-11	
Di-n-butylphthalate	ND	1.8	EPA 8270	5-16-11	5-19-11	
Fluoranthene	ND	0.014	EPA 8270/SIM	6-16-11	5-19-11	
Benzidine	ND	18	EPA 8270	5-16-11	5-19-11	
Pyrene	ND	0.014	EPA 8270/SIM	5-16-11	5-19-11	
Butylbenzylphthalate	ND	18	EPA 8270	5-16-11	5-19-11	
bis-2-Ethylhexyladipate	ND	1.8	EPA 8270	5-16-11	5-19-11	
3,3'-Dichlorobenzidine	ND	18	EPA 8270	5-16-11	5-19-11	
Benzo[a]anthracene	ND	0.014	EPA 8270/SIM	5-16-11	5-19-11	
Chrysene	ND	0.014	EPA 8270/SIM	5-16-11	5-19-11	
bis(2-Ethylhexyl)phthalate	ND	1.8	EPA 8270	5-16-11	5-19-11	
Di-n-octylphthalate	ND	1.8	EPA 8270	5-16-11	5-19-11	
Benzo[b]fluoranthene	0.057	0.014	EPA 8270/SIM	5-16-11	5-19-11	
Benzo[j,k]fluoranthene	0.23	0.014	EPA 8270/SIM	5-16-11	5-19-11	
Benzo[a]pyrene	0.044	0.014	EPA 8270/SIM	5-16-11	5-19-11	
Indeno[1,2,3-cd]pyrene	ND	0.014	EPA 8270/SIM	5-16-11	5-19-11	
Dibenz[a,h]anthracene	ND	0.014	EPA 8270/SIM	5-16-11	5-19-11	
Benzo[g,h,i]perylene	ND	0.014	EPA 8270/SIM	5-16-11	5-19-11	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorophenol	*83*	*30 - 97*				
Phenol-d6	*96*	*40 - 104*				
Nitrobenzene-d5	*94*	*35 - 102*				
2-Fluorobiphenyl	*89*	*44 - 97*				
2,4,6-Tribromophenol	*87*	*41 - 110*				
Terphenyl-d14	*92*	*53 - 107*				

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

SEMIVOLATILES by EPA 8270D/SIM
METHOD BLANK QUALITY CONTROL
page 1 of 2

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0516S3					
n-Nitrosodimethylamine	ND	0.033	EPA 8270	5-16-11	5-17-11	
Pyridine	ND	0.33	EPA 8270	5-16-11	5-17-11	
Phenol	ND	0.033	EPA 8270	5-16-11	5-17-11	
Aniline	ND	0.033	EPA 8270	5-16-11	5-17-11	
bis(2-Chloroethyl)ether	ND	0.033	EPA 8270	5-16-11	5-17-11	
2-Chlorophenol	ND	0.033	EPA 8270	5-16-11	5-17-11	
1,3-Dichlorobenzene	ND	0.033	EPA 8270	5-16-11	5-17-11	
1,4-Dichlorobenzene	ND	0.033	EPA 8270	5-16-11	5-17-11	
Benzyl alcohol	ND	0.033	EPA 8270	5-16-11	5-17-11	
1,2-Dichlorobenzene	ND	0.033	EPA 8270	5-16-11	5-17-11	
2-Methylphenol (o-Cresol)	ND	0.033	EPA 8270	5-16-11	5-17-11	
bis(2-Chloroisopropyl)ether	ND	0.033	EPA 8270	5-16-11	5-17-11	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.033	EPA 8270	5-16-11	5-17-11	
n-Nitroso-di-n-propylamine	ND	0.033	EPA 8270	5-16-11	5-17-11	
Hexachloroethane	ND	0.033	EPA 8270	5-16-11	5-17-11	
Nitrobenzene	ND	0.033	EPA 8270	5-16-11	5-17-11	
Isophorone	ND	0.033	EPA 8270	5-16-11	5-17-11	
2-Nitrophenol	ND	0.033	EPA 8270	5-16-11	5-17-11	
2,4-Dimethylphenol	ND	0.33	EPA 8270	5-16-11	5-17-11	
bis(2-Chloroethoxy)methane	ND	0.033	EPA 8270	5-16-11	5-17-11	
2,4-Dichlorophenol	ND	0.033	EPA 8270	5-16-11	5-17-11	
1,2,4-Trichlorobenzene	ND	0.033	EPA 8270	5-16-11	5-17-11	
Naphthalene	ND	0.0067	EPA 8270/SIM	5-16-11	5-19-11	
4-Chloroaniline	ND	0.033	EPA 8270	5-16-11	5-17-11	
Hexachlorobutadiene	ND	0.033	EPA 8270	5-16-11	5-17-11	
4-Chloro-3-methylphenol	ND	0.033	EPA 8270	5-16-11	5-17-11	
2-Methylnaphthalene	ND	0.0067	EPA 8270/SIM	5-16-11	5-19-11	
1-Methylnaphthalene	ND	0.0067	EPA 8270/SIM	5-16-11	5-19-11	
Hexachlorocyclopentadiene	ND	0.033	EPA 8270	5-16-11	5-17-11	
2,4,6-Trichlorophenol	ND	0.033	EPA 8270	5-16-11	5-17-11	
2,3-Dichloroaniline	ND	0.033	EPA 8270	5-16-11	5-17-11	
2,4,5-Trichlorophenol	ND	0.033	EPA 8270	5-16-11	5-17-11	
2-Chloronaphthalene	ND	0.033	EPA 8270	5-16-11	5-17-11	
2-Nitroaniline	ND	0.033	EPA 8270	5-16-11	5-17-11	
1,4-Dinitrobenzene	ND	0.033	EPA 8270	5-16-11	5-17-11	
Dimethylphthalate	ND	0.033	EPA 8270	5-16-11	5-17-11	
1,3-Dinitrobenzene	ND	0.033	EPA 8270	5-16-11	5-17-11	
2,6-Dinitrotoluene	ND	0.033	EPA 8270	5-16-11	5-17-11	
1,2-Dinitrobenzene	ND	0.033	EPA 8270	5-16-11	5-17-11	
Acenaphthylene	ND	0.0067	EPA 8270/SIM	5-16-11	5-19-11	
3-Nitroaniline	ND	0.033	EPA 8270	5-16-11	5-17-11	

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

SEMIVOLATILES by EPA 8270D/SIM
METHOD BLANK QUALITY CONTROL
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0516S3					
2,4-Dinitrophenol	ND	0.17	EPA 8270	5-16-11	5-17-11	
Acenaphthene	ND	0.0067	EPA 8270/SIM	5-16-11	5-19-11	
4-Nitrophenol	ND	0.033	EPA 8270	5-16-11	5-17-11	
2,4-Dinitrotoluene	ND	0.033	EPA 8270	5-16-11	5-17-11	
Dibenzofuran	ND	0.033	EPA 8270	5-16-11	5-17-11	
2,3,5,6-Tetrachlorophenol	ND	0.033	EPA 8270	5-16-11	5-17-11	
2,3,4,6-Tetrachlorophenol	ND	0.033	EPA 8270	5-16-11	5-17-11	
Diethylphthalate	ND	0.17	EPA 8270	5-16-11	5-17-11	
4-Chlorophenyl-phenylether	ND	0.033	EPA 8270	5-16-11	5-17-11	
4-Nitroaniline	ND	0.033	EPA 8270	5-16-11	5-17-11	
Fluorene	ND	0.0067	EPA 8270/SIM	5-16-11	5-19-11	
4,6-Dinitro-2-methylphenol	ND	0.17	EPA 8270	5-16-11	5-17-11	
n-Nitrosodiphenylamine	ND	0.033	EPA 8270	5-16-11	5-17-11	
1,2-Diphenylhydrazine	ND	0.033	EPA 8270	5-16-11	5-17-11	
4-Bromophenyl-phenylether	ND	0.033	EPA 8270	5-16-11	5-17-11	
Hexachlorobenzene	ND	0.033	EPA 8270	5-16-11	5-17-11	
Pentachlorophenol	ND	0.17	EPA 8270	5-16-11	5-17-11	
Phenanthrene	ND	0.0067	EPA 8270/SIM	5-16-11	5-19-11	
Anthracene	ND	0.0067	EPA 8270/SIM	5-16-11	5-19-11	
Carbazole	ND	0.033	EPA 8270	5-16-11	5-17-11	
Di-n-butylphthalate	ND	0.33	EPA 8270	5-16-11	5-17-11	
Fluoranthene	ND	0.0067	EPA 8270/SIM	5-16-11	5-19-11	
Benzidine	ND	0.33	EPA 8270	5-16-11	5-17-11	
Pyrene	ND	0.0067	EPA 8270/SIM	5-16-11	5-19-11	
Butylbenzylphthalate	ND	0.33	EPA 8270	5-16-11	5-17-11	
bis-2-Ethylhexyladipate	ND	0.033	EPA 8270	5-16-11	5-17-11	
3,3'-Dichlorobenzidine	ND	0.33	EPA 8270	5-16-11	5-17-11	
Benzo[a]anthracene	ND	0.0067	EPA 8270/SIM	5-16-11	5-19-11	
Chrysene	ND	0.0067	EPA 8270/SIM	5-16-11	5-19-11	
bis(2-Ethylhexyl)phthalate	ND	0.033	EPA 8270	5-16-11	5-17-11	
Di-n-octylphthalate	ND	0.033	EPA 8270	5-16-11	5-17-11	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270/SIM	5-16-11	5-19-11	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270/SIM	5-16-11	5-19-11	
Benzo[a]pyrene	ND	0.0067	EPA 8270/SIM	5-16-11	5-19-11	
Indeno[1,2,3-cd]pyrene	ND	0.0067	EPA 8270/SIM	5-16-11	5-19-11	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270/SIM	5-16-11	5-19-11	
Benzo[g,h,i]perylene	ND	0.0067	EPA 8270/SIM	5-16-11	5-19-11	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorophenol	*58*	*30 - 97*				
Phenol-d6	*64*	*40 - 104*				
Nitrobenzene-d5	*60*	*35 - 102*				
2-Fluorobiphenyl	*66*	*44 - 97*				
2,4,6-Tribromophenol	*71*	*41 - 110*				
Terphenyl-d14	*74*	*53 - 107*				

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

SEMIVOLATILES by EPA 8270D/SIM
SB/SBD QUALITY CONTROL

Matrix: Soil
Units: mg/Kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0516S3									
	SB	SBD	SB	SBD	SB	SBD				
Phenol	0.695	1.04	1.33	1.33	67	78	31 - 111	15	34	
2-Chlorophenol	0.899	1.03	1.33	1.33	68	77	29 - 112	14	37	
1,4-Dichlorobenzene	0.421	0.488	0.667	0.667	63	73	24 - 100	15	37	
n-Nitroso-di-n-propylamine	0.435	0.491	0.667	0.667	65	74	35 - 104	12	32	
1,2,4-Trichlorobenzene	0.420	0.472	0.667	0.667	63	71	29 - 94	12	35	
4-Chloro-3-methylphenol	0.957	1.06	1.33	1.33	73	80	53 - 104	9	25	
Acenaphthene	0.462	0.505	0.667	0.667	69	76	50 - 95	9	23	
4-Nitrophenol	1.06	1.14	1.33	1.33	80	86	42 - 126	7	30	
2,4-Dinitrotoluene	0.486	0.565	0.667	0.667	74	85	53 - 103	13	31	
Pentachlorophenol	0.971	1.06	1.33	1.33	73	80	50 - 116	9	30	
Pyrene	0.495	0.531	0.667	0.667	74	80	57 - 108	7	27	
Surrogate:										
2-Fluorophenol					*62*	*71*	*30 - 97*			
Phenol-d6					*69*	*80*	*40 - 104*			
Nitrobenzene-d5					*70*	*77*	*35 - 102*			
2-Fluorobiphenyl					*72*	*76*	*44 - 97*			
2,4,6-Tribromophenol					*74*	*80*	*41 - 110*			
Terphenyl-d14					*75*	*81*	*53 - 107*			

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

PCBs by EPA 8082

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	S1-00-051011					
Laboratory ID:	05-092-01					
Aroclor 1016	ND	0.056	EPA 8082	5-11-11	5-12-11	
Aroclor 1221	ND	0.056	EPA 8082	5-11-11	5-12-11	
Aroclor 1232	ND	0.056	EPA 8082	5-11-11	5-12-11	
Aroclor 1242	ND	0.056	EPA 8082	5-11-11	5-12-11	
Aroclor 1248	ND	0.056	EPA 8082	5-11-11	5-12-11	
Aroclor 1254	ND	0.056	EPA 8082	5-11-11	5-12-11	
Aroclor 1260	ND	0.056	EPA 8082	5-11-11	5-12-11	
Surrogate:	*Percent Recovery*	*Control Limits*				
DCB	*72*	*42-123*				
Client ID:	S2-00-051011					
Laboratory ID:	05-092-02					
Aroclor 1016	ND	0.054	EPA 8082	5-11-11	5-12-11	
Aroclor 1221	ND	0.054	EPA 8082	5-11-11	5-12-11	
Aroclor 1232	ND	0.054	EPA 8082	5-11-11	5-12-11	
Aroclor 1242	ND	0.054	EPA 8082	5-11-11	5-12-11	
Aroclor 1248	ND	0.054	EPA 8082	5-11-11	5-12-11	
Aroclor 1254	ND	0.054	EPA 8082	5-11-11	5-12-11	
Aroclor 1260	ND	0.054	EPA 8082	5-11-11	5-12-11	
Surrogate:	*Percent Recovery*	*Control Limits*				
DCB	*71*	*42-123*				
Client ID:	S3-00-051011					
Laboratory ID:	05-092-03					
Aroclor 1016	ND	0.053	EPA 8082	5-11-11	5-12-11	
Aroclor 1221	ND	0.053	EPA 8082	5-11-11	5-12-11	
Aroclor 1232	ND	0.053	EPA 8082	5-11-11	5-12-11	
Aroclor 1242	ND	0.053	EPA 8082	5-11-11	5-12-11	
Aroclor 1248	ND	0.053	EPA 8082	5-11-11	5-12-11	
Aroclor 1254	ND	0.053	EPA 8082	5-11-11	5-12-11	
Aroclor 1260	ND	0.053	EPA 8082	5-11-11	5-12-11	
Surrogate:	*Percent Recovery*	*Control Limits*				
DCB	*75*	*42-123*				

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

PCBs by EPA 8082
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0511S1					
Aroclor 1016	ND	0.050	EPA 8082	5-11-11	5-12-11	
Aroclor 1221	ND	0.050	EPA 8082	5-11-11	5-12-11	
Aroclor 1232	ND	0.050	EPA 8082	5-11-11	5-12-11	
Aroclor 1242	ND	0.050	EPA 8082	5-11-11	5-12-11	
Aroclor 1248	ND	0.050	EPA 8082	5-11-11	5-12-11	
Aroclor 1254	ND	0.050	EPA 8082	5-11-11	5-12-11	
Aroclor 1260	ND	0.050	EPA 8082	5-11-11	5-12-11	
Surrogate:	*Percent Recovery*	*Control Limits*				
DCB	*81*	*42-123*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
MATRIX SPIKES											
Laboratory ID:	05-078-01										
	MS	MSD	MS	MSD		MS	MSD				
Aroclor 1260	0.468	0.461	0.500	0.500	ND	94	92	44-125	2	15	
Surrogate:											
DCB						*77*	*75*	*42-123*			

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

ORGANOCHLORINE PESTICIDES by EPA 8081A

Matrix: Soil
Units: ug/Kg (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	S1-00-051011					
Laboratory ID:	05-092-01					
alpha-BHC	ND	5.6	EPA 8081	5-12-11	5-13-11	
gamma-BHC	ND	5.6	EPA 8081	5-12-11	5-13-11	
beta-BHC	10	5.6	EPA 8081	5-12-11	5-13-11	P
delta-BHC	ND	5.6	EPA 8081	5-12-11	5-13-11	
Heptachlor	ND	5.6	EPA 8081	5-12-11	5-13-11	
Aldrin	ND	5.6	EPA 8081	5-12-11	5-13-11	
Heptachlor Epoxide	ND	5.6	EPA 8081	5-12-11	5-13-11	
gamma-Chlordane	ND	11	EPA 8081	5-12-11	5-13-11	
alpha-Chlordane	ND	11	EPA 8081	5-12-11	5-13-11	
4,4'-DDE	ND	11	EPA 8081	5-12-11	5-13-11	
Endosulfan I	ND	5.6	EPA 8081	5-12-11	5-13-11	
Dieldrin	ND	11	EPA 8081	5-12-11	5-13-11	
Endrin	ND	11	EPA 8081	5-12-11	5-13-11	
4,4'-DDD	ND	11	EPA 8081	5-12-11	5-13-11	
Endosulfan II	ND	11	EPA 8081	5-12-11	5-13-11	
4,4'-DDT	ND	11	EPA 8081	5-12-11	5-13-11	
Endrin Aldehyde	ND	11	EPA 8081	5-12-11	5-13-11	
Methoxychlor	19	11	EPA 8081	5-12-11	5-13-11	P
Endosulfan Sulfate	ND	11	EPA 8081	5-12-11	5-13-11	
Endrin Ketone	ND	11	EPA 8081	5-12-11	5-13-11	
Toxaphene	ND	56	EPA 8081	5-12-11	5-13-11	
Surrogate:	*Percent Recovery*	*Control Limits*				
TCMX	*74*	*30-111*				
DCB	*64*	*33-119*				

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

ORGANOCHLORINE PESTICIDES by EPA 8081A METHOD BLANK QUALITY CONTROL

Matrix: Soil
Units: ug/Kg (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0512S1					
alpha-BHC	ND	5.0	EPA 8081	5-12-11	5-13-11	
gamma-BHC	ND	5.0	EPA 8081	5-12-11	5-13-11	
beta-BHC	ND	5.0	EPA 8081	5-12-11	5-13-11	
delta-BHC	ND	5.0	EPA 8081	5-12-11	5-13-11	
Heptachlor	ND	5.0	EPA 8081	5-12-11	5-13-11	
Aldrin	ND	5.0	EPA 8081	5-12-11	5-13-11	
Heptachlor Epoxide	ND	5.0	EPA 8081	5-12-11	5-13-11	
gamma-Chlordane	ND	10	EPA 8081	5-12-11	5-13-11	
alpha-Chlordane	ND	10	EPA 8081	5-12-11	5-13-11	
4,4'-DDE	ND	10	EPA 8081	5-12-11	5-13-11	
Endosulfan I	ND	5.0	EPA 8081	5-12-11	5-13-11	
Dieldrin	ND	10	EPA 8081	5-12-11	5-13-11	
Endrin	ND	10	EPA 8081	5-12-11	5-13-11	
4,4'-DDD	ND	10	EPA 8081	5-12-11	5-13-11	
Endosulfan II	ND	10	EPA 8081	5-12-11	5-13-11	
4,4'-DDT	ND	10	EPA 8081	5-12-11	5-13-11	
Endrin Aldehyde	ND	10	EPA 8081	5-12-11	5-13-11	
Methoxychlor	ND	10	EPA 8081	5-12-11	5-13-11	
Endosulfan Sulfate	ND	10	EPA 8081	5-12-11	5-13-11	
Endrin Ketone	ND	10	EPA 8081	5-12-11	5-13-11	
Toxaphene	ND	50	EPA 8081	5-12-11	5-13-11	
Surrogate:	*Percent Recovery*	*Control Limits*				
TCMX	*83*	*30-111*				
DCB	*81*	*33-119*				

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620637

ORGANOCHLORINE PESTICIDES by EPA 8081A MS/MSD QUALITY CONTROL

Matrix: Soil
Units: ug/Kg (ppb)

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
MATRIX SPIKES											
Laboratory ID:	05-092-01										
	MS	MSD	MS	MSD		MS	MSD				
gamma-BHC	33.4	34.6	50.0	50.0	ND	67	69	32-96	4	10	
Heptachlor	33.8	35.0	50.0	50.0	ND	68	70	29-101	3	13	
Aldrin	37.4	36.1	50.0	50.0	ND	75	72	27-99	4	10	
Dieldrin	90.3	93.3	125	125	ND	72	75	33-92	3	10	
Endrin	90.0	91.8	125	125	ND	72	73	29-101	2	11	
4,4'-DDT	84.6	83.6	125	125	ND	68	67	21-114	1	15	
Surrogate:											
TCMX						*77*	*84*	*30-111*			
DCB						*73*	*78*	*33-119*			

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

CHLORINATED ACID HERBICIDES by EPA 8151A

Matrix: Soil
Units: ug/Kg (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	S1-00-051011					
Laboratory ID:	05-092-01					
Dalapon	ND	260	EPA 8151	5-12-11	5-19-11	
Dicamba	ND	11	EPA 8151	5-12-11	5-19-11	
MCPP	36000	10000	EPA 8151	5-12-11	5-19-11	
MCPA	15000	10000	EPA 8151	5-12-11	5-19-11	P
Dichlorprop	1100	790	EPA 8151	5-12-11	5-19-11	
2,4-D	ND	11	EPA 8151	5-12-11	5-19-11	
Pentachlorophenol	3.5	1.1	EPA 8151	5-12-11	5-19-11	P
2,4,5-TP (Silvex)	94	11	EPA 8151	5-12-11	5-19-11	
2,4,5-T	ND	11	EPA 8151	5-12-11	5-19-11	
2,4-DB	37	11	EPA 8151	5-12-11	5-19-11	
Dinoseb	11	11	EPA 8151	5-12-11	5-19-11	P
Surrogate:	*Percent Recovery*	*Control Limits*				
DCAA	*57*	*30-96*				

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

CHLORINATED ACID HERBICIDES by EPA 8151A QUALITY CONTROL

Matrix: Soil
Units: ug/Kg (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0512S1					
Dalapon	ND	230	EPA 8151	5-12-11	5-18-11	
Dicamba	ND	9.4	EPA 8151	5-12-11	5-18-11	
MCPP	ND	940	EPA 8151	5-12-11	5-18-11	
MCPA	ND	940	EPA 8151	5-12-11	5-18-11	
Dichlorprop	ND	71	EPA 8151	5-12-11	5-18-11	
2,4-D	ND	9.4	EPA 8151	5-12-11	5-18-11	
Pentachlorophenol	ND	0.95	EPA 8151	5-12-11	5-18-11	
2,4,5-TP (Silvex)	ND	9.5	EPA 8151	5-12-11	5-18-11	
2,4,5-T	ND	9.5	EPA 8151	5-12-11	5-18-11	
2,4-DB	ND	9.5	EPA 8151	5-12-11	5-18-11	
Dinoseb	ND	9.5	EPA 8151	5-12-11	5-18-11	
Surrogate:	*Percent Recovery*	*Control Limits*				
DCAA	*47*	*30-96*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
MATRIX SPIKES											
Laboratory ID:	05-092-01										
	MS	MSD	MS	MSD		MS	MSD				
Dicamba	60.4	58.1	100	100	ND	60	58	25-101	4	30	
2,4-D	49.5	54.7	100	100	ND	49	55	25-84	10	28	
Pentachlorophenol	7.52	7.79	10.0	10.0	3.13	44	47	27-86	4	26	
2,4,5-T	53.0	54.0	100	100	ND	53	54	25-94	2	20	
2,4-DB	67.2	76.0	100	100	33.4	34	43	25-117	12	27	
Surrogate:											
DCAA						*79*	*56*	*30-96*			

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

TOTAL METALS
EPA 6010B/7471A

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-092-01					
Client ID:	S1-00-051011					
Arsenic	ND	11	6010B	5-13-11	5-13-11	
Barium	210	2.8	6010B	5-13-11	5-13-11	
Cadmium	ND	0.56	6010B	5-13-11	5-13-11	
Chromium	25	0.56	6010B	5-13-11	5-13-11	
Lead	79	5.6	6010B	5-13-11	5-13-11	
Mercury	ND	0.28	7471A	5-11-11	5-11-11	
Selenium	ND	11	6010B	5-13-11	5-13-11	
Silver	ND	0.56	6010B	5-13-11	5-13-11	
Lab ID:	05-092-02					
Client ID:	S2-00-051011					
Arsenic	ND	11	6010B	5-13-11	5-13-11	
Barium	130	2.7	6010B	5-13-11	5-13-11	
Cadmium	ND	0.54	6010B	5-13-11	5-13-11	
Chromium	28	0.54	6010B	5-13-11	5-13-11	
Lead	13	5.4	6010B	5-13-11	5-13-11	
Mercury	ND	0.27	7471A	5-11-11	5-11-11	
Selenium	ND	11	6010B	5-13-11	5-13-11	
Silver	ND	0.54	6010B	5-13-11	5-13-11	

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

TOTAL METALS
EPA 6010B/7471A

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-092-03					
Client ID:	S3-00-051011					
Arsenic	ND	11	6010B	5-13-11	5-13-11	
Barium	91	2.7	6010B	5-13-11	5-13-11	
Cadmium	ND	0.53	6010B	5-13-11	5-13-11	
Chromium	18	0.53	6010B	5-13-11	5-13-11	
Lead	10	5.3	6010B	5-13-11	5-13-11	
Mercury	ND	0.27	7471A	5-11-11	5-11-11	
Selenium	ND	11	6010B	5-13-11	5-13-11	
Silver	ND	0.53	6010B	5-13-11	5-13-11	

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

TOTAL METALS
EPA 6010B
METHOD BLANK QUALITY CONTROL

Date Extracted:	5-13-11
Date Analyzed:	5-13-11
Matrix:	Soil
Units:	mg/kg (ppm)
Lab ID:	MB0513S1

Analyte	Method	Result	PQL
Arsenic	6010B	ND	10
Barium	6010B	ND	2.5
Cadmium	6010B	ND	0.50
Chromium	6010B	ND	0.50
Lead	6010B	ND	5.0
Selenium	6010B	ND	10
Silver	6010B	ND	0.50

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

TOTAL MERCURY
EPA 7471A
METHOD BLANK QUALITY CONTROL

Date Extracted:	5-11-11
Date Analyzed:	5-11-11
Matrix:	Soil
Units:	mg/kg (ppm)
Lab ID:	MB0511S1

Analyte	Method	Result	PQL
Mercury	7471A	ND	0.25

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

TOTAL METALS
EPA 6010B
DUPLICATE QUALITY CONTROL

Date Extracted: 5-13-11
Date Analyzed: 5-13-11

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 05-090-01

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Arsenic	ND	ND	NA	10	
Barium	67.1	71.8	7	2.5	
Cadmium	ND	ND	NA	0.50	
Chromium	40.5	43.0	6	0.50	
Lead	9.79	9.83	0	5.0	
Selenium	ND	ND	NA	10	
Silver	ND	ND	NA	0.50	

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

TOTAL MERCURY
EPA 7471A
DUPLICATE QUALITY CONTROL

Date Extracted: 5-11-11
Date Analyzed: 5-11-11

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 05-081-13

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Mercury	ND	ND	NA	0.25	

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

TOTAL METALS
EPA 6010B
MS/MSD QUALITY CONTROL

Date Extracted: 5-13-11
Date Analyzed: 5-13-11

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 05-090-01

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Arsenic	100	92.6	93	92.8	93	0	
Barium	100	176	109	168	101	5	
Cadmium	50.0	48.4	97	47.6	95	2	
Chromium	100	137	97	132	92	4	
Lead	250	240	92	237	91	1	
Selenium	100	96.0	96	94.9	95	1	
Silver	25.0	22.3	89	22.0	88	2	

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

TOTAL MERCURY
EPA 7471A
MS/MSD QUALITY CONTROL

Date Extracted: 5-11-11
Date Analyzed: 5-11-11

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 05-081-13

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Mercury	ND	ND	NA	0.25	

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

ORGANOPHOSPHORUS PESTICIDES by EPA 8270D/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	S1-00-051011					
Laboratory ID:	05-092-01					
Dichlorvos(DDVP)	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
Mevinphos/Phosdrin	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
Ethoprophos	ND	0.56	EPA 8270/SIM	5-16-11	5-17-11	
Monocrotophos	ND	0.56	EPA 8270/SIM	5-16-11	5-17-11	
Naled	ND	0.56	EPA 8270/SIM	5-16-11	5-17-11	
Sulfotepp	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
Phorate	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
Dimethoate	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
Demeton-S	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
Diazinon	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
Disulfoton	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
Parathion-methyl	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
Fenchlorphos/Ronnel	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
Malathion	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
Fenthion	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
Parathion-ethyl	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
Chlorpyrifos/Dursban	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
Trichloronate	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
Merphos&Merphos-oxone	ND	0.56	EPA 8270/SIM	5-16-11	5-17-11	
Stirofos/Tetrachlorvinphos	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
Tokuthion/Prothiofos	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
Fensulfothion	ND	0.56	EPA 8270/SIM	5-16-11	5-17-11	
Bolstar/Sulprofos	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
EPN	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
Azinphos-methyl/Guthion	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
Coumaphos	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
Surrogate:	*Percent Recovery*	*Control Limits*				
Tributyl phosphate	*106*	*28 - 109*				
Triphenyl phosphate	*--*	*37 - 118*				F

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

ORGANOPHOSPHORUS PESTICIDES by EPA 8270D/SIM METHOD BLANK QUALITY CONTROL

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0516S1					
Dichlorvos(DDVP)	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
Mevinphos/Phosdrin	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
Ethoprophos	ND	0.050	EPA 8270/SIM	5-16-11	5-16-11	
Monocrotophos	ND	0.050	EPA 8270/SIM	5-16-11	5-16-11	
Naled	ND	0.050	EPA 8270/SIM	5-16-11	5-16-11	
Sulfotepp	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
Phorate	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
Dimethoate	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
Demeton-S	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
Diazinon	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
Disulfoton	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
Parathion-methyl	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
Fenchlorphos/Ronnel	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
Malathion	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
Fenthion	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
Parathion-ethyl	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
Chlorpyrifos/Dursban	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
Trichloronate	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
Merphos&Merphos-oxone	ND	0.050	EPA 8270/SIM	5-16-11	5-16-11	
Stirofos/Tetrachlorvinphos	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
Tokuthion/Prothiofos	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
Fensulfothion	ND	0.050	EPA 8270/SIM	5-16-11	5-16-11	
Bolstar/Sulprofos	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
EPN	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
Azinphos-methyl/Guthion	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
Coumaphos	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
Surrogate:	*Percent Recovery*	*Control Limits*				
Tributyl phosphate	*65*	*28 - 109*				
Triphenyl phosphate	*80*	*37 - 118*				

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

ORGANOPHOSPHORUS PESTICIDES by EPA 8270D/SIM SB/SBD QUALITY CONTROL

Matrix: Soil
Units: mg/Kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0516S1									
	SB	SBD	SB	SBD	SB	SBD				
Dichlorvos(DDVP)	0.0585	0.0612	0.100	0.100	59	61	45 - 110	5	30	
Mevinphos/Phosdrin	0.0543	0.0590	0.100	0.100	54	59	50 - 110	8	30	
Ethoprophos	0.0741	0.0817	0.100	0.100	74	82	50 - 110	10	30	
Sulfotepp	0.0798	0.0856	0.100	0.100	80	86	45 - 110	7	30	
Phorate	0.0784	0.0849	0.100	0.100	78	85	50 - 110	8	30	
Dimethoate	0.0780	0.0863	0.100	0.100	78	86	50 - 110	10	30	
Demeton-S	0.0713	0.0813	0.100	0.100	71	81	45 - 110	13	30	
Diazinon	0.0739	0.0814	0.100	0.100	74	81	50 - 110	10	30	
Disulfoton	0.0790	0.0885	0.100	0.100	79	87	50 - 110	9	30	
Parathion-methyl	0.0708	0.0803	0.100	0.100	71	80	60 - 120	13	30	
Fenchlorphos/Ronnel	0.0879	0.0963	0.100	0.100	88	96	50 - 110	9	30	
Malathion	0.109	0.119	0.100	0.100	109	119	50 - 120	9	30	
Fenthion	0.0872	0.0949	0.100	0.100	87	95	50 - 110	8	30	
Parathion-ethyl	0.0679	0.0767	0.100	0.100	68	77	45 - 110	12	30	
Chlorpyrifos/Dursban	0.0850	0.0919	0.100	0.100	85	92	50 - 110	8	30	
Trichloronate	0.0872	0.0930	0.100	0.100	87	93	50 - 110	6	30	
Stirofos/Tetrachlorvinphos	0.139	0.153	0.100	0.100	139	153	80 - 160	10	30	
Tokuthion/Prothiofos	0.0790	0.0880	0.100	0.100	79	88	50 - 110	11	30	
Fensulfothion	0.0801	0.0985	0.100	0.100	80	97	45 - 110	19	30	
Bolstar/Sulprofos	0.0817	0.0919	0.100	0.100	82	92	50 - 110	12	30	
EPN	0.0700	0.0792	0.100	0.100	70	79	50 - 110	12	30	
Azinphos-methyl/Guthion	0.127	0.139	0.100	0.100	127	139	70 - 140	9	30	
Coumaphos	0.0728	0.0860	0.100	0.100	73	86	60 - 120	17	30	
Surrogate:										
Tributyl phosphate					*68*	*71*	*28 - 109*			
Triphenyl phosphate					*78*	*86*	*37 - 118*			

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

NWTPH-Gx/BTEX

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	S2-00-051011					
Laboratory ID:	05-092-02					
Benzene	ND	0.023	EPA 8021	5-13-11	5-16-11	
Toluene	0.60	0.12	EPA 8021	5-13-11	5-16-11	
Ethyl Benzene	27	2.9	EPA 8021	5-13-11	5-17-11	
m,p-Xylene	160	2.9	EPA 8021	5-13-11	5-17-11	
o-Xylene	31	2.9	EPA 8021	5-13-11	5-17-11	
Gasoline	1900	280	NWTPH-Gx	5-13-11	5-17-11	Z
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*92*	*68-124*				

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Tab No.8

Sunset Pointe Development

ARSON FIRE
SITE INVESTIGATION
(2010 - 2011)

– *Fire Department Site Photographs*
Central Pierce Fire & Rescue, June 20, 2010

Department of Ecology - Environmental Report Tracking System

ERTS # 620837

Initial Report

External Reference #

Caller Information

	First	Last
Name	Lt.	Neally
Busines Name	Tacoma Fire Department	
Street Address		
Other Address		
City	State WA	Zip
E-mail		Confidential_FL ☐

Phone	Ext	Type
(253) 591-5733		Business

Where did it happen

Berth		Anchorage	
Location Name			
Street Address	1900 blk 22nd Place		
Other Address			
City/Place	PUYALLUP	State WA	Zip
County - Region	PIERCE	SWRO	FS ID
WIRA #			
Waterway		Type	
Latitude	47.172051	Longitude	122.26551
Topo Quad 1:24:000	PUYALLUP		

Direction/Landmark (mile post, cross roads, township/range)
200 feet by 200 feet museum. 2140 22nd St SE, house next door

What happened

Spills Program Oil Spill? N

Incident Date	6/27/2010	Received Date	6/27/2010 5:55
Medium	BUILDING/STRUCTURE		
Material	UNKNOWN		

Quantity	Unit
15	DRUM

Source	UNKNOWN
Cause	UNKNOWN
Incident Type	
Activity	UNKNOWN
Impact	POTENTIAL POLLUTION/RELEASE
Vessel Name	
Hull Number	

Primary Potentially Responsible Party Information

	First	Last
Name		Unknown
Business Name		
Street Address		
Other Address		
City	State WA	Zip
Phone	Ext	Type
E-mail		

Additional Contact Information

Name	Phone	Ext	Type
, Greg	(253) 377-6854		Business

More Information

Fire has discovered 15 drums of unknown contents and a scene of an abandoned warehouse fire.

Entry Person Baxter, Susan Entry Date 6/28/2010

ERTS # 620837

Referral

Referral # 134886

Referral Method
- ○ E-mail ERTS number
- ○ E-mail attachment
- ○ Print
- ◉ Telephone

Person Referred to BROOKS, NANNETTE — Primary ☐
Phone (360) 407-6242 Fax (360) 407-6305
E-mail nbro461@ecy.wa.gov
Program/Organization SPILLS, PREVENTION, PREPAREDNESS AND RESPONSE
Address PO BOX 47775
City OLYMPIA WA 98504-
Region/Location SWRO
Referral Date 6/27/2010

Referral # 138717

Referral Method
- ○ E-mail ERTS number
- ◉ E-mail attachment
- ○ Print
- ○ Telephone

Person Referred to BELL, SHARON — Primary ☐
Phone (253) 798-2891 Fax
E-mail erts@tpchd.org
Program/Organization TOXICS CLEANUP
Address TPCHD
City TACOMA WA
Region/Location swro
Referral Date 11/1/2010

*** The Initial report contains only information provided to Ecology from the complainant.

ERTS # 620837

Followup

Followup #1

Inspector Information

Referral # 134886
☐ Lead Inspector BROOKS, NANNETTE
Program/Organization SPILLS, PREVENTION, PREPAREDNESS AND RESPONSE
* Region/Location SWRO
# of Ecology Staff 2 Overtime ☑

Action

	Start Date	End Date
TELEPHONE - TECHNICAL ASSISTANCE	6/27/2010	6/27/2010

Where did it happen

Berth Anchorage
Location Name
Street Address 1900 blk 22nd Place
Other Address
City/Place PUYALLUP State WA Zip
County PIERCE Region SWRO FS ID
Waterway Type
WRIA #
Latitude 47.172051 Longitude 122.26551
Topo Quad 1:24,000 PUYALLUP
Direction/Landmark (mile post, cross roads, township/range)

What happened

Spills Program Oil Spill? N
Incident Date 6/27/2010
Medium
BUILDING/STRUCTURE
Material
UNKNOWN

Quantity	Unit	Est
15	DRUM	☑

Source Regulated? ☐
UNKNOWN
Cause
UNKNOWN
Incident Type
Activity
UNKNOWN
Impact
POTENTIAL POLLUTION/RELEASE
Vessel

Potentially Responsible Party Information

Check if the primary PRP provided notice to Ecology ☐

Narrative

I (Nannette Brooks) contacted the Fire Company. Greg from Engine Company 72, on scene. He told me that Engine 72 responded to a fire at the location and discovered the drums in an unaffected part of the building. The drums are not compromised at this time. They are in various states of fullness-some of the 55 gallon drums are full and some are closer to empty. When Fire leaves the scene, they will not be posting a fire watch and neither will the police department. The area is residential. Ecology assistance requested.

I briefed my duty partner, Ron Holcomb. We decided I should contact Regional Supervisor Jim Sachet at 06:17 hrs. Due to the stability of the drums and the need to contact property owner, this response will be conducted during regular business hours.

I briefed Fire at 06:27.

I updated Ron Holcomb at 06:31.

Entry Person: Baxter, Susan Entry Date 6/28/2010

Followup #2

Inspector Information

Referral # 134886
☑ Lead Inspector HOLCOMB, RON
Program/Organization SPILLS, PREVENTION, PREPAREDNESS AND RESPONSE
* Region/Location SWRO
# of Ecology Staff 2 Overtime ☐

Action

	Start Date	End Date
FIELD RESPONSE - INVESTIGATION	6/28/2010	6/28/2010

Where did it happen

Berth Anchorage
Location Name
Street Address 1900 blk 22nd Place
Other Address
City/Place PUYALLUP State WA Zip
County PIERCE Region SWRO FS ID
Waterway Type
WRIA #

*** The Initial report contains only information provided to Ecology from the complainant.

ERTS # 620837

What happened Spills Program Oil Spill? Y

Incident Date 6/27/2010

Medium
Land

Material
Oily Water Mixture ☐ Sheen Only

Quantity	To Water	To Imperm	Recover	NRDA	Est
1051	0	0	1051		☐

Source Regulated? ☐
Leaking Drum or Container
Type Private Property Primary ☑

Cause
Other - External Conditions
Type External Conditions Primary ☑

Incident Type
Oil Spill

Activity
Other

Impact
SOIL CONTAMINATION

Vessel

Latitude 47.172113 Longitude 122.265218
Topo Quad 1:24,000 PUYALLUP
Direction/Landmark (mile post, cross roads, township/range)

Potentially Responsible Party Information

Check if the primary PRP provided notice to Ecology ☐

Primary ☑ First Last
Name Sharon Tanner
Business Name
Street Address 25518 - 133rde Ave. NE
Other Address
City ARLINGTON State WA Zip 98225-
Phone (360) 435-6469 Ext Type Home
E-mail

Primary ☐ First Last
Name Joshua Gunia
Business Name
Street Address 15714 44th Avenue Ct. E.
Other Address
City TACOMA State WA Zip 98446-
Phone (253) 579-6769 Ext Type Mobile
E-mail gunlagroup@comcast.net

Narrative

On 6/27/10 I (Ron Holcomb) was contacted by after-hours spill responder Nannette Brooks to discuss the initial information provided by Central Pierce Fire & Rescue regarding a number of abandoned drums discovered while dealing with a fire at the old Western Washington Pioneer Museum in Puyallup. I advised Nannette to check with SWRO Regional Spill Response Unit Supervisor Jim Sachet to determine whether we should assess the situation today. Nannette called back and said Jim wanted to hold off until Monday (6/28/10).

On 6/28/10 Doug Stolz and I responded to Puyallup and met with CPF&R at Station #2. We then followed Engine 72 to the property and conducted a site inspection (see photos in file).

We initially checked an old horse barn and identified numerous (~25 - 30) empty 55-gallon drums (metal and fiber). No other chemicals were observed in this building that was not involved in the fire.

We then proceeded to the burned building and did some basic assessment of the drums and other containers. Following is a summary of what was identified:

Container Type	Total	# Empty	# Full/Partially Full	Total Maximum Capacity
55-gallon drums	22	4	18	990 gallons
15/30-gallon drums	3	1	2	45 gallons
5-gallon containers	3	0	3	15 gallons
< 1-gallon container	4	0	4	1 gallon
Total	32	5	27	1,051 gallon

We used a TIP meter on several open drums and one gave an indication of a flammable material. Others appeared to have waste oil or grease and others were sealed and unknown.

The empty drums and containers were marked `MT` and the others were numbered and dated. We placed several tarps over the drums/containers and used caution tape to mark them off (see photos).

CPF&R did provide some property ownership information but no telephone numbers.

On 6/30/10 I left a message with the CF&R Fire Marshall about property owner contact information.

A check of the Pierce County Assessor`s web site on 7/1/10 identified the property owner as:

Grace Ardell Greeley
25518 - 133rd Ave. NE

Arlington, WA 98225

The address of the 8.99 acre property is listed as:

2301 - 23rd Street E.
Puyallup, WA

See file for additional details on the property.

No call-back from Fire Marshall as of 7/6/10.

On 7/7/10 I issued a letter to the property owner (Grace Ardell Greeley) regarding the drums and requesting contact with Ecology (see file).

On July 9, 2010 I received a call from Sharon Tanner and she explained that she inherited the property from her mother (Grace Ardell Greeley) some 15 years ago when she passed away. I advised her that the Pierce county property records had not been changed or updated.

Ms. Tanner went on the explain that she was aware of the drums and that they had been stored in the `museum` building. The drums were from her father`s work over the years that include treating wood for fencing. I explained that there was some spillage and that the drums were not marked. I advised her that it would be in her interest to have the drums properly tested and the waste disposed of by an environmental contractor especially since the property was unoccupied and someone had likely set the fire that destroyed the building which had housed the Pioneer Museum.

I also noted that there were two large fuel tanks on the property. Ms. Tanner said the elevated tank at the south end of the property had been used for gasoline but had been empty for many years. She did not seem to be aware of the second tank I observed at the southwest corner of the burned building.

I then explained that I would be sending another letter and would include a list of environmental contractors. I also encouraged her to have her grandson contact me as she said he was helping with trying to sell the property. I further advised her that I was available to provide advice and guidance to assist her, but if she chose not to do anything that I would have to refer this site to Ecology`s Toxic Cleanup Program and that her property would likely be listed as a contaminated site.

On July 13, 2010 I issued a second letter with the contractor list and photos of the drums. I requested that she inform me within 14 days of how she would be proceeding with the situation.

On 8/20/10 I contacted Ms. Tanner to check on the status of the property and she stated that her grandsons were directly involved with the situation and she provided their names and contact information:

Joshua Gunia (253) 579-6769
Jeremey Gunia (253) 273-4612

At approximately 1420, I was able to contact Joshua Gunia who confirmed that he was Ms. Tanner`s grandson and was working on selling the property and dealing with city officials regarding the burned structures. He said he was aware of the drums and would work on that issue also (he said he was not aware of the fact that Ecology had been communicating with his grandmother on this issue). Mr. Gunia asked me to email him the information I had provided to his grandmother at guniagroup@comcast.net. I said I would and that I would be available to help him as he proceeds with the cleanup.

The two letters, photos and contractor list were sent on 8/20/10 via email:

Joshua,
Attached are the photos and two letters that I sent to your grandmother.

Also, following is a link to Ecology`s list of environmental cleanup contractors (although you can choose any qualified contractor you want even if they are not on Ecology`s list):

http://www.ecy.wa.gov/programs/spills/response/Hazmat_Spill_Contractor_List.pdf

Please respond back to let me know that you received this information and also provide a mailing address where I can send correspondence to you.

Please feel free to contact me by phone or email if you have any questions.

Thank you and good luck with your efforts to sell the property.

Ron Holcomb
Hazardous Materials Specialist
Department of Ecology
Southwest Region
(360) 407-6373
Ron.Holcomb@ecy.wa.gov

I received the following reply from Joshua:

ERTS # 620837

Hi Ron . Thank you for the email and also for working with us on this. my mailing address is 15714 44th ave ct e Tacoma WA 98446. Have a great weekend.
Joshua Gunla, Vice President
A Advanced Septic Services, Inc.
253-435-9999 Office
253-579-6769Cell
joshua@gunlagroup.com

aadvancedservices.com

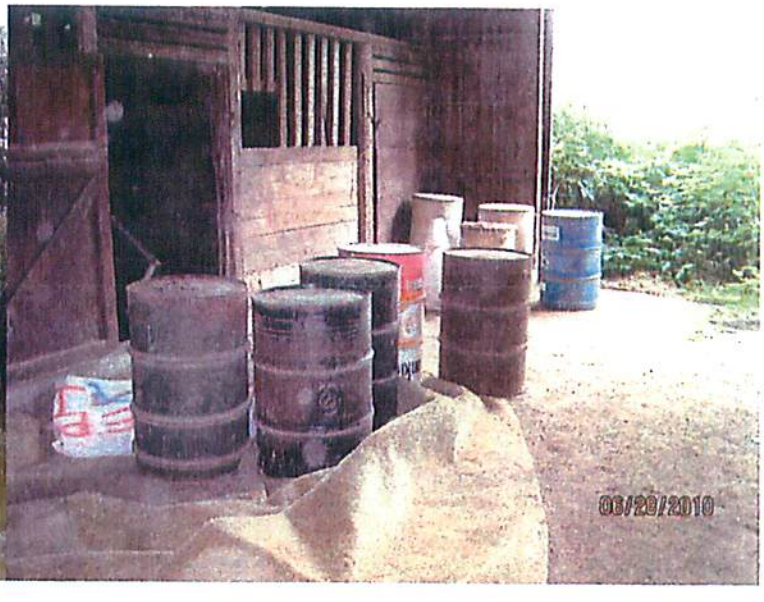
'The Guys To Know When You Gotta Go!'

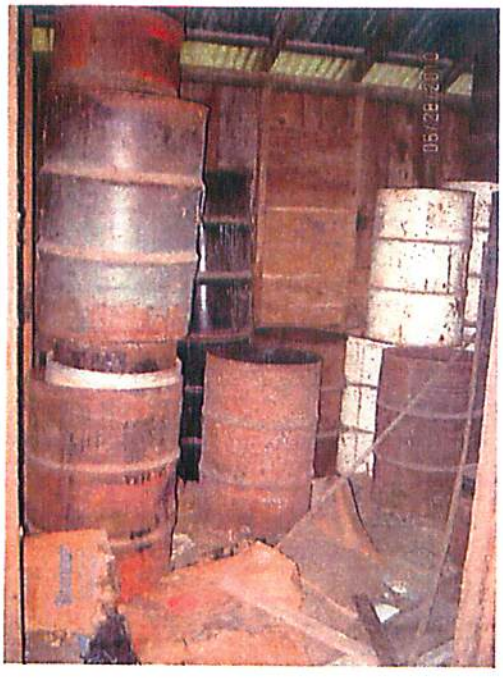
Because the SWRO Spill Response Unit has not received any information regarding the progress of the cleanup at this site, it will be referred to the Toxic Cleanup Program.

Referral to TCP (Sharon Bell, Tacoma-Pierce County Health Department) was made on 11/1/10.

Entry Person: HOLCOMB, RON Entry Date 6/29/2010

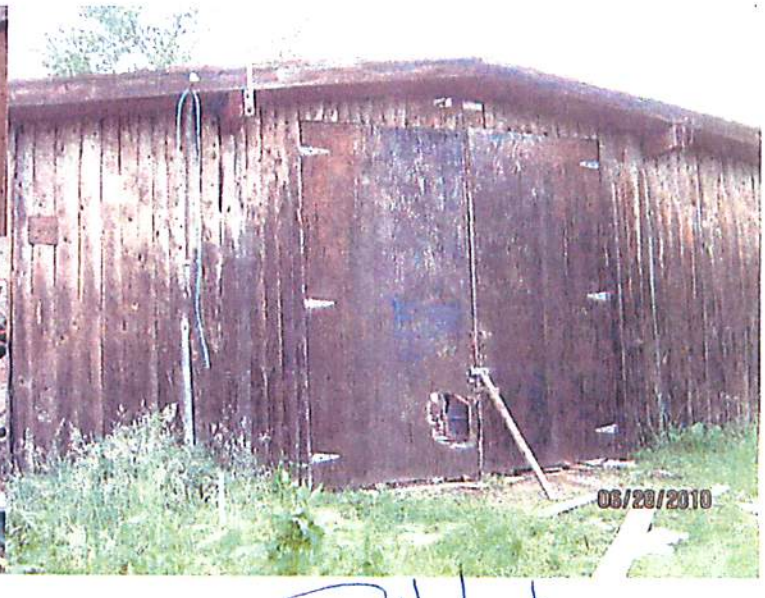
West-WA Pioneer Museum Five 620837





R. Holcomb

Western Washington Pioneer Museum Fire 620837



R. Holcomb

Sunset Pointe Development

ARSON FIRE
SITE INVESTIGATION
(2010 - 2011)

– *Initial Investigation: Site Photographs*
Tacoma-Pierce County Health Department, May 10, 2011

INITIAL INVESTIGATION FIELD REPORT

WASHINGTON STATE DEPARTMENT OF ECOLOGY

ERTS Number: 620837
Parcel #: 0420353027
COUNTY: PIERCE

SITE INFORMATION

Site Name (e.g., Co. name over door):	Site Address (including City and Zip+4):	Site Phone:
Pioneer Museum Former	2301 23rd St SE Puyallup, WA 98373	none
Site Contact and Title: Joshua Gunia, grandson of owner	Site Contact Address (including City and Zip+4): 11603 Canyon Road E. Puyallup 98373	Site Contact Phone: 253/435-9999
Site Owner: Sharon Tanner	Site Owner Address (including City and Zip+4): 11907 240th St NE Arlington, WA 98223	Site Owner Phone: 360/474-1829
Site Owner Contact:	Site Owner Contact Address (including City and Zip+4):	Owner Contact Phone:
Alternate Site Name(s):	Comments:	Is property > 10 acres? Yes ☒ No ☐
Previous Site Owner(s):	Comments:	

Location: Quarter-Quarter: 3-4 Section: 35 Township: 20N Range: 04E
Latitude: Degrees: 47 Minutes: 10 Seconds: 19.6 N
Longitude: Degrees: 122 Minutes: 15 Seconds: 54.8 W

INSPECTION INFORMATION

Inspection Date: 11.16.10	Inspection Time: 10 am	Entry Notice: Announced ☒ Unannounced ☐	
Photographs	Yes ☒ No ☐	Weather: Clear ☒ Rain ☐	Temperature: ~50 ° F
Samples	Yes ☒ No ☐	Wind Direction:	Wind Speed:

RECOMMENDATION

No Further Action (Indicate NFA in box below):		LIST on ISIS (Indicate in box below):	
Release or threatened release does not pose a threat	☐	Site Hazard Assessment	☒
No release or threatened release	☐	Interim Action	☐
Educational mailing	☐	Emergency Action	☐
Refer to program/agency (Name: _____)	☐	Independent Cleanup Action In progress	☐
Independent Cleanup Action Completed (i.e., contam, removed)	☐		

COMPLAINT (Brief Summary of ERTS):
Leaking drums

SITE STATUS (Brief Summary of site condition(s) after investigation):
Soil in vicinity of a cluster of stored drums is contaminated with petroleum hydrocarbons and agricultural chemicals.

Investigator: S. Bell	Date Submitted: 05.27.11

OBSERVATIONS

Description:

This property is about 20 acres in size, and encompasses three parcels. Two parcels list the taxpayer as Grace Ardell Greeley. A third parcel lists a separate taxpayer, Sharon Ottinger, with the same listed mailing address as the Greeley parcels. The Ottinger parcel is a half acre in size and forms the northwest corner of the southern Greeley parcel. Sharon Tanner currently owns all three parcels and is the daughter of Grace Greeley; Ottinger was her maiden name. The property was used as a farm and a museum until approximately 5 years ago when all activity ceased. The property was referred to as the Pioneer Museum, not to be confused with the Pioneer Farm Museum in Eatonville.

An arson fire occurred on the southern parcel, 0420353027, in late June 2010. The Fire Department encountered a number of unaffected drums in a burned structure on the property and contacted Ecology. Ron Holcomb with Ecology's Spill Response conducted an assessment of the drums and other containers. Subsequent information collected by Ron indicated the listed taxpayer, Grace Ardell Greely, had been dead for a number of years and the property had been inherited by her daughter, Sharon Tanner. Ms. Tanner designated her grandson, Joshua Gunia, as the point of contact regarding issues at the site. Spill Response referred the site to the Toxics Cleanup Program in November 2010 for follow up regarding soil contamination due to spillage from some of the drums.

I contacted Joshua Gunia and set up an appointment to meet him at the site on 11.16.10. We walked the site together, concentrating on the large storage building where the drums were located. The southern half of the building was destroyed in the fire. The remaining half is in poor condition, lacking a roof and exposing the drums stored inside to weather conditions. The drums were stored together and covered with tarps. Soil staining was apparent around the drums and in several other areas. I spoke with Joshua about the need for his family to hire an environmental professional to delineate the extent and type of contamination on the property due to the leaks and/or spills from the drums, and we also spoke about the need to properly dispose of the drum and their contents. He told me that it would require several months for the family to be able to coordinate that, and that they were trying to sell the property. I told Joshua that an interested buyer might be willing to conduct a Phase II Environmental Site Assessment.

No progress was made in assessing or remediating the soil contamination at this property. I eventually coordinated an approved site visit through Joshua to collect soil samples at the subject property. I returned to the property on 05.10.11 and collected three soil samples. All three samples were jar packed and submitted for HCID, Total RCRA metals, SVOCs, and PCB analyses. Metal and SVOC results were below MTCA CULs; PCBs were non-detect. HCID results indicated oil present in all three samples and gasoline present in S2. Further analysis with NWTPH-dx and NWTPH-gx found oil present in all three samples, ranging from 3100 to 37,000 mg/kg. Gasoline range organics were detected in S2 at 1,900 mg/kg and were noted by the lab to be similar to mineral spirits.

The S1 sample was also tested for the presence of chlorinated herbicides, as well as organochlorine and organophosphorus pesticides. All of the detected herbicide compounds are in the phenoxy chemical family. No organophosphorus pesticides were detected, with a reported laboratory PQL of 0.22 mg/kg. Lindane, an organochlorine pesticide, was detected at the cleanup level. The pesticide and herbicide compounds detected are tabulated below; only one has a MTCA Method A CUL (lindane). For those compounds found in CLARC, the Method B mg/kg values are also provided.

S1 results for pesticides and herbicides; measurement units are mg/kg

Method	Analyte Group	Detects	Concentration	MTCA CUL	CLARC
8081A	Organochlorine pesticides	Beta-BHC (lindane)	**0.01**	**0.01**	0.0769
		Methoxychlor	0.019	---	400
8151A	Chlorinated acid herbicides	MCPP	36	---	---
		MCPA	15	---	---
		Dichlorprop	1.1	---	---
		Pentachlorophenol	0.0035	---	8.33
		2,4,5-TP (Silvex)	0.094	---	640
		2,4-DB	0.037	---	640
		Dinoseb	0.011	---	80

Soil samples were jar packed, stored in a sample refrigerator, and transported on ice. GRO/VOCs were not anticipated as contaminants of concern. HCID results indicated the need to run S2 for gasoline and BTEX; the analytical results for these parameters should be considered estimates, with potential negative bias in the results as 5035A sample collection methods were not used and the sample preparation occurred past the recommended holding times. Also, matrix interference resulted in potential negative bias for the methoxychlor results; actual concentrations could be greater.

Summary: lube oil and gasoline range organics were found in concentrations exceeding MTCA Method A CULs. A variety of pesticides and herbicides were also detected; lindane was found in concentrations equaling the CUL. Further assessment of the site

for the presence of lindane and other agricul al chemicals is warranted. Note: EDB was no ted for.

The TPCHD recommends listing this property as contaminated.

Description of past practices likely to be responsible for contamination:
Overflowing drums, leaking drums, spillage associated with storage of products in drums.

ACTIVITIES OR PRACTICES RESPONSIBLE FOR CONTAMINATION:

Spill	☒	LUST	☐
Pesticide disposal	☐	Tank	☐
Landfill	☐	Improper handling	☐
Drums	☐	Improper disposal	☐
Other – Describe:			

Are discharges permitted (if yes, describe): No ☒ Yes ☐

Standard Industrial Code(s)

CONTAMINANT(S)

AFFECTED MEDIA	CONTAMINANTS (#1-16: See contaminants key) Enter letter designating status of contaminant: C = Confirmed (above cleanup levels); S = Suspected; R= Remediated															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ground Water		S				S	S									
Surface Water																
Drinking Water																
Soil		C				C	C									
Sediment																
Air																

1 Base/neutral organics
2 Halogenated organic compounds
3 Metals - Priority pollutants
4 Metals - Other
5 Polychlorinated biPhenyls (PCBs)
6 Pesticides
7 Petroleum products
8 Phenolic compounds
9 Non-halogenated solvents
10 Dioxin
11 Polynuclear aromatic hydrocarbons (PAHs)
12 Reactive wastes
13 Corrosive wastes
14 Radioactive wastes
15 Conventional contaminants, organic
16 Conventional contaminants, inorganic

SITE INFORMATION

Soil type 13B Everett gravelly sandy loan and 20B, 20C Kitsap silt loam

Slope Level

Site vegetation/cover present:

Forest	☒	Pasture/open field	☒
Bare soil	☒	Wetlands	☐
Brush	☒	Pavement	☐
Landscaped	☐	Surface water	☐

Other – Describe:

Are there any drinking water systems affected?	☐ Yes	☐ No
Municipal, private, or both? (Circle one)		
How many people are estimated to be affected? _____		
Is there a potential for a release or threatened release to affect a drinking water source?	☐ Yes	☐ No
Are there monitoring wells in the vicinity?	☐ Yes	☐ No
Are there dry wells in the vicinity?	☐ Yes	☐ No

CONTAMINANT PATHWAYS AND TARGETS

	Ingestion	Inhalation	Contact
Ground Water	x	x	x
Surface Water	x	x	x
Drinking Water	x	x	x
Soil	x	x	x
Sediment			
Air		x	

Targets possible:

Human, adult	☒	Residential	☒
Human, children	☒	Industrial	☐
		Commercial	☐

Sensitive environments (See WARM Scoring Manual for definition):

☒ Yes ☐ No If yes, describe:

This site overlies the Central Pierce County Sole Source Aquifer. A pond/wetland is present on the site. Within two miles are multiple wetlands, parks and streams.

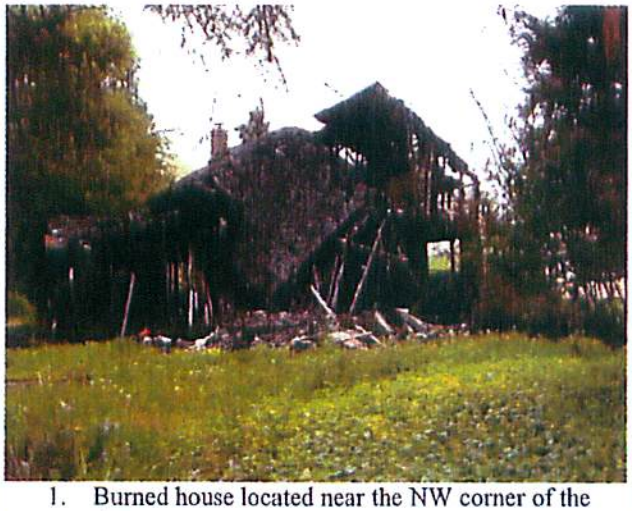
General Comments:

Sunset Pointe Development

ARSON FIRE
SITE INVESTIGATION
(2010 - 2011)

– *Initial Investigation: Site Photographs*
Tacoma-Pierce County Health Department, May 10, 2011

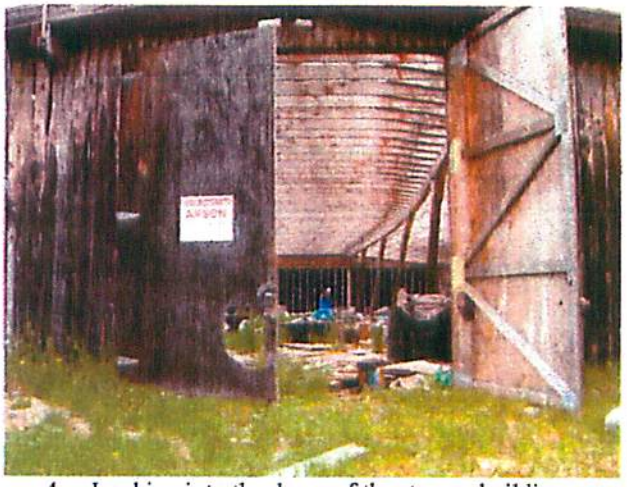
ERTS 620837, Pioneer Museum
Photos taken by S. Bell, 05.10.11



1. Burned house located near the NW corner of the site.

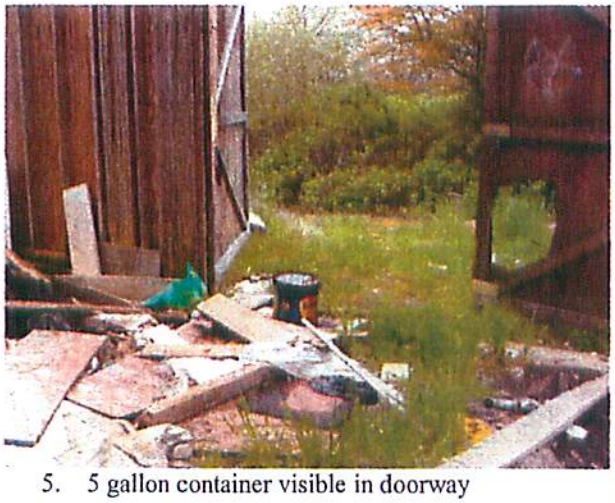
2. Storage building where drums are located.

3. Inside the storage building, view towards the SW corner of the former building footprint.

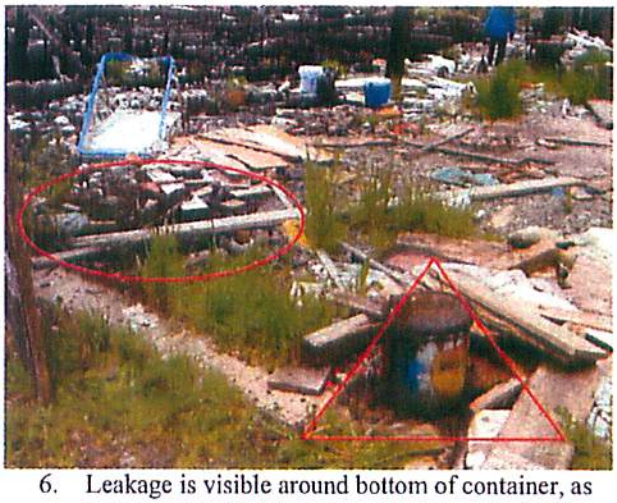


4. Looking into the doors of the storage building; drums are visible on the right, with a 5 gallon container visible in the entrance. Doors are located on the east side of the building.

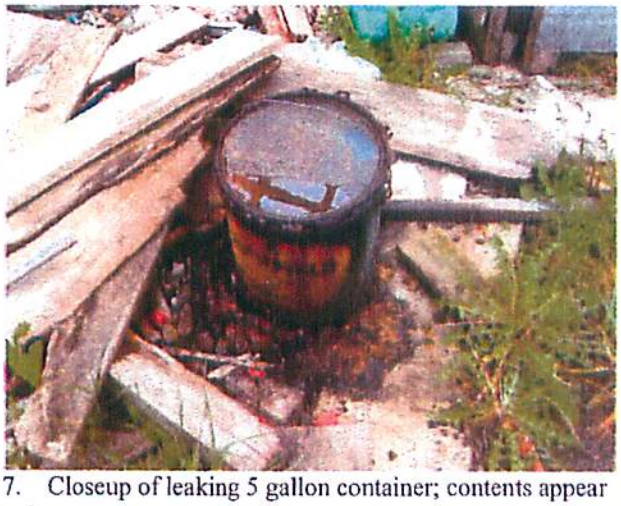
ERTS 620837, Pioneer Museum
Photos taken by S. Bell, 05.10.11



5. 5 gallon container visible in doorway



6. Leakage is visible around bottom of container, as well as a heavily stained area to the south (left)..



7. Closeup of leaking 5 gallon container; contents appear to be grease.

8. Closeup of stained area south of drum, on the inside of the doors to the building.

ERTS 620837, Pioneer Museum
Photos taken by S. Bell, 05.10.11

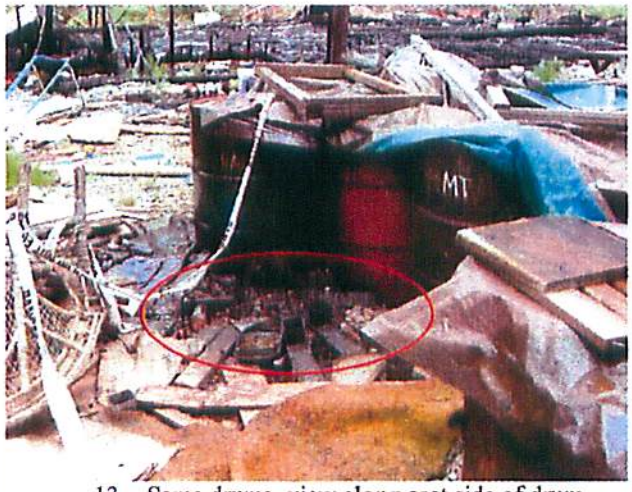
9. Drums stored inside building, view to north

10. Same drums, view towards northwest corner of building.

11. Same drums, view towards northeast corner of building.

12. Same drums, view towards east/southeast; note doors to building in background.

ERTS 620837, Pioneer Museum
Photos taken by S. Bell, 05.10.11



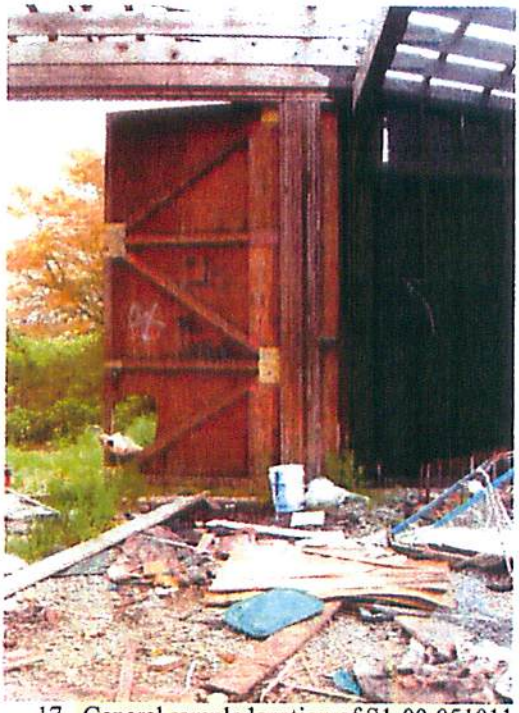
13. Same drums, view along east side of drum storage towards the south; note stained area on ground around drums.

14. Same group of drums; this photo shows a drum with the top cut off, exposed to rain, overflowing, located in the SW corner of the group of drums..

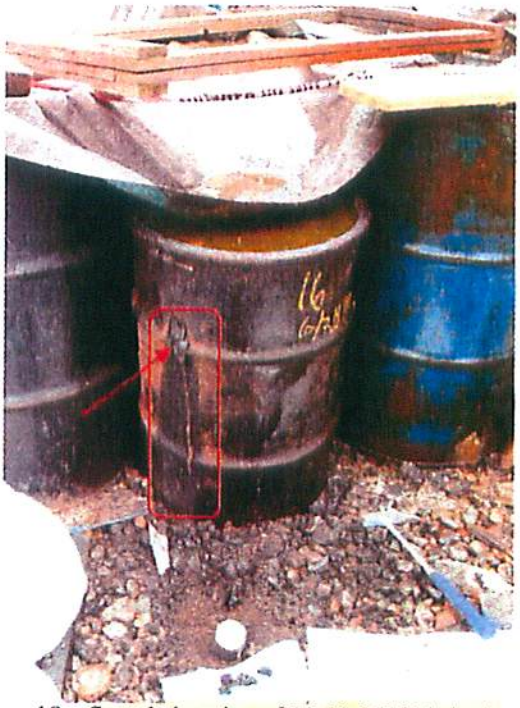
15. Sample locations are noted. View is looking towards the drums from the interior of the building, with the north wall in the background.

16. Sample S1-00-051011 collected near the east wall, and the interior edge of the south door.

ERTS 620837, Pioneer Museum
Photos taken by S. Bell, 05.10.11



17. General sample location of S1-00-051011 indicated by the 5 gallon bucket.



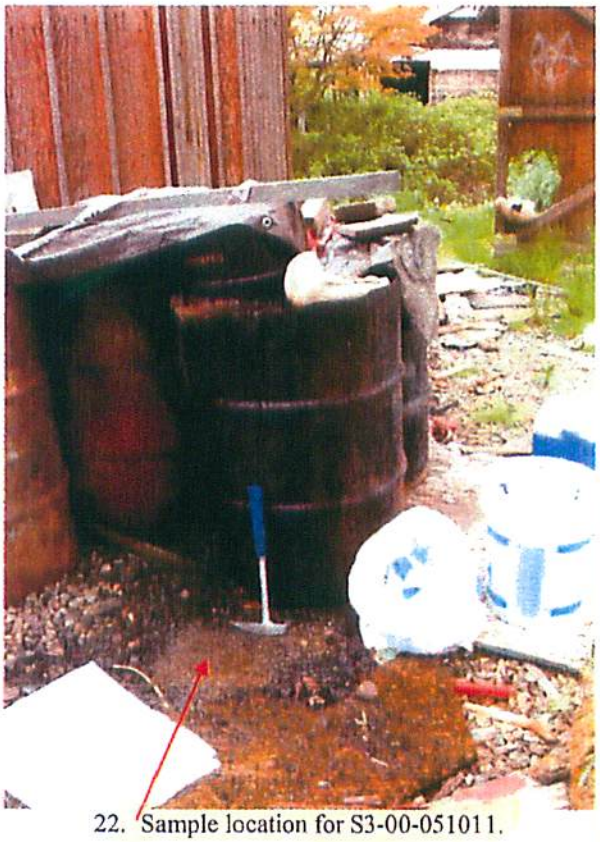
18. Sample location of S2-00-051011, in the stained area adjacent to a leaking drum in the SE corner of the drum group. Note the material hardened on the side of the drum and emanating from a hole now plugged.

19. Photo depicts surface soil held together by sticky material at this location.

20. General sample location for S2-00-051011.

ERTS 620837, Pioneer Museum
Photos taken by S. Bell, 05.10.11

21. General sample location for sample S3-00-051011.



22. Sample location for S3-00-051011.

On Site Environmental, Inc.

Laboratory Analytical Results
May 23, 2011

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

May 23, 2011

Sharon Bell
Tacoma-Pierce County Health Department
3629 South "D" Street
Tacoma, WA 98418-6813

Re: Analytical Data for Project 620837
Laboratory Reference No. 1105-092

Dear Sharon:

Enclosed are the analytical results and associated quality control data for samples submitted on May 11, 2011.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

Case Narrative

Samples were collected on May 10, 2011 and received by the laboratory on May 11, 2011. They were maintained at the laboratory at a temperature of 2°C to 6°C.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

Organochlorine Pesticides by EPA 8081A Analysis

Due to negative effects of the matrix on the instrument, values for 4,4'-DDT and Methoxychlor in the continuing calibration verification standards (CCVs) were low. Therefore, values can be greater than reported. Since the degradation of the CCV standards was reproducible after re-injecting the sample extracts, the CCV degradation problem was attributed to the matrix of these samples.

Any other QA/QC issues associated with this extraction and analysis will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.

Semivolatiles EPA 8270D/SIM Analysis

Some MTCA cleanup levels are non-achievable for samples S1-00-051011, S2-00-051011, and S3-00-051011 due to the necessary dilutions of the samples.

Surrogate recovery data is not available for sample S2-00-051011 due to the necessary dilution of the sample coupled with sample matrix effects.

Organophosphorus Pesticides by EPA 8270D/SIM Analysis

The surrogate recovery for Triphenyl phosphate is not available due to sample matrix interference.

NWTPH Gx/BTEX Analysis

Method 5035 VOA vials were not provided for sample S2-00-051011. The sample was therefore extracted from a 4-ounce jar for analysis.

The chromatogram for sample S2-00-051011 is similar to mineral spirits.

Please note that any other QA/QC issues associated with these extractions and analyses will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

NWTPH-HCID
(with acid/silica gel clean-up)

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**S1-00-051011**					
Laboratory ID:	05-092-01					
Gasoline Range Organics	**ND**	33	NWTPH-HCID	5-11-11	5-11-11	U1
Diesel Range Organics	**ND**	6800	NWTPH-HCID	5-11-11	5-11-11	U1
Lube Oil	**Detected**	110	NWTPH-HCID	5-11-11	5-11-11	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*117*	*50-150*				
Client ID:	**S2-00-051011**					
Laboratory ID:	05-092-02					
Gasoline Range Organics	**Detected**	110	NWTPH-HCID	5-11-11	5-12-11	
Diesel Range Organics	**ND**	530	NWTPH-HCID	5-11-11	5-12-11	U1
Lube Oil	**Detected**	540	NWTPH-HCID	5-11-11	5-12-11	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*121*	*50-150*				
Client ID:	**S3-00-051011**					
Laboratory ID:	05-092-03					
Gasoline Range Organics	**ND**	21	NWTPH-HCID	5-11-11	5-11-11	
Diesel Range Organics	**ND**	5600	NWTPH-HCID	5-11-11	5-11-11	U1
Lube Oil	**Detected**	110	NWTPH-HCID	5-11-11	5-11-11	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*117*	*50-150*				

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

NWTPH-HCID
QUALITY CONTROL
(with acid/silica gel clean-up)

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0511S1					
Gasoline Range Organics	**ND**	20	NWTPH-HCID	5-11-11	5-11-11	
Diesel Range Organics	**ND**	50	NWTPH-HCID	5-11-11	5-11-11	
Lube Oil Range Organics	**ND**	100	NWTPH-HCID	5-11-11	5-11-11	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*118*	*50-150*				

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

SEMIVOLATILES by EPA 8270D/SIM
page 1 of 2

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**S1-00-051011**					
Laboratory ID:	05-092-01					
n-Nitrosodimethylamine	ND	1.9	EPA 8270	5-16-11	5-18-11	
Pyridine	ND	19	EPA 8270	5-16-11	5-18-11	
Phenol	ND	1.9	EPA 8270	5-16-11	5-18-11	
Aniline	ND	1.9	EPA 8270	5-16-11	5-18-11	
bis(2-Chloroethyl)ether	ND	1.9	EPA 8270	5-16-11	5-18-11	
2-Chlorophenol	ND	1.9	EPA 8270	5-16-11	5-18-11	
1,3-Dichlorobenzene	ND	1.9	EPA 8270	5-16-11	5-18-11	
1,4-Dichlorobenzene	ND	1.9	EPA 8270	5-16-11	5-18-11	
Benzyl alcohol	ND	1.9	EPA 8270	5-16-11	5-18-11	
1,2-Dichlorobenzene	ND	1.9	EPA 8270	5-16-11	5-18-11	
2-Methylphenol (o-Cresol)	ND	1.9	EPA 8270	5-16-11	5-18-11	
bis(2-Chloroisopropyl)ether	ND	1.9	EPA 8270	5-16-11	5-18-11	
(3+4)-Methylphenol (m,p-Cresol)	ND	1.9	EPA 8270	5-16-11	5-18-11	
n-Nitroso-di-n-propylamine	ND	1.9	EPA 8270	5-16-11	5-18-11	
Hexachloroethane	ND	1.9	EPA 8270	5-16-11	5-18-11	
Nitrobenzene	ND	1.9	EPA 8270	5-16-11	5-18-11	
Isophorone	ND	1.9	EPA 8270	5-16-11	5-18-11	
2-Nitrophenol	ND	1.9	EPA 8270	5-16-11	5-18-11	
2,4-Dimethylphenol	ND	19	EPA 8270	5-16-11	5-18-11	
bis(2-Chloroethoxy)methane	ND	1.9	EPA 8270	5-16-11	5-18-11	
2,4-Dichlorophenol	ND	1.9	EPA 8270	5-16-11	5-18-11	
1,2,4-Trichlorobenzene	ND	1.9	EPA 8270	5-16-11	5-18-11	
Naphthalene	ND	0.015	EPA 8270/SIM	5-16-11	5-20-11	
4-Chloroaniline	ND	1.9	EPA 8270	5-16-11	5-18-11	
Hexachlorobutadiene	ND	1.9	EPA 8270	5-16-11	5-18-11	
4-Chloro-3-methylphenol	ND	1.9	EPA 8270	5-16-11	5-18-11	
2-Methylnaphthalene	ND	0.015	EPA 8270/SIM	5-16-11	5-20-11	
1-Methylnaphthalene	ND	0.015	EPA 8270/SIM	5-16-11	5-20-11	
Hexachlorocyclopentadiene	ND	1.9	EPA 8270	5-16-11	5-18-11	
2,4,6-Trichlorophenol	ND	1.9	EPA 8270	5-16-11	5-18-11	
2,3-Dichloroaniline	ND	1.9	EPA 8270	5-16-11	5-18-11	
2,4,5-Trichlorophenol	ND	1.9	EPA 8270	5-16-11	5-18-11	
2-Chloronaphthalene	ND	1.9	EPA 8270	5-16-11	5-18-11	
2-Nitroaniline	ND	1.9	EPA 8270	5-16-11	5-18-11	
1,4-Dinitrobenzene	ND	1.9	EPA 8270	5-16-11	5-18-11	
Dimethylphthalate	ND	1.9	EPA 8270	5-16-11	5-18-11	
1,3-Dinitrobenzene	ND	1.9	EPA 8270	5-16-11	5-18-11	
2,6-Dinitrotoluene	ND	1.9	EPA 8270	5-16-11	5-18-11	
1,2-Dinitrobenzene	ND	1.9	EPA 8270	5-16-11	5-18-11	
Acenaphthylene	ND	0.015	EPA 8270/SIM	5-16-11	5-20-11	
3-Nitroaniline	ND	1.9	EPA 8270	5-16-11	5-18-11	

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

SEMIVOLATILES by EPA 8270D/SIM
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**S1-00-051011**					
Laboratory ID:	05-092-01					
2,4-Dinitrophenol	ND	9.3	EPA 8270	5-16-11	5-18-11	
Acenaphthene	0.019	0.015	EPA 8270/SIM	5-16-11	5-20-11	
4-Nitrophenol	ND	1.9	EPA 8270	5-16-11	5-18-11	
2,4-Dinitrotoluene	ND	1.9	EPA 8270	5-16-11	5-18-11	
Dibenzofuran	ND	1.9	EPA 8270	5-16-11	5-18-11	
2,3,5,6-Tetrachlorophenol	ND	1.9	EPA 8270	5-16-11	5-18-11	
2,3,4,6-Tetrachlorophenol	ND	1.9	EPA 8270	5-16-11	5-18-11	
Diethylphthalate	ND	9.3	EPA 8270	5-16-11	5-18-11	
4-Chlorophenyl-phenylether	ND	1.9	EPA 8270	5-16-11	5-18-11	
4-Nitroaniline	ND	1.9	EPA 8270	5-16-11	5-18-11	
Fluorene	ND	0.015	EPA 8270/SIM	5-16-11	5-20-11	
4,6-Dinitro-2-methylphenol	ND	9.3	EPA 8270	5-16-11	5-18-11	
n-Nitrosodiphenylamine	ND	1.9	EPA 8270	5-16-11	5-18-11	
1,2-Diphenylhydrazine	ND	1.9	EPA 8270	5-16-11	5-18-11	
4-Bromophenyl-phenylether	ND	1.9	EPA 8270	5-16-11	5-18-11	
Hexachlorobenzene	ND	1.9	EPA 8270	5-16-11	5-18-11	
Pentachlorophenol	ND	9.3	EPA 8270	5-16-11	5-18-11	
Phenanthrene	ND	0.015	EPA 8270/SIM	5-16-11	5-20-11	
Anthracene	ND	0.015	EPA 8270/SIM	5-16-11	5-20-11	
Carbazole	ND	1.9	EPA 8270	5-16-11	5-18-11	
Di-n-butylphthalate	ND	1.9	EPA 8270	5-16-11	5-18-11	
Fluoranthene	ND	0.015	EPA 8270/SIM	5-16-11	5-20-11	
Benzidine	ND	19	EPA 8270	5-16-11	5-18-11	
Pyrene	ND	0.015	EPA 8270/SIM	5-16-11	5-20-11	
Butylbenzylphthalate	ND	19	EPA 8270	5-16-11	5-18-11	
bis-2-Ethylhexyladipate	ND	1.9	EPA 8270	5-16-11	5-18-11	
3,3'-Dichlorobenzidine	ND	19	EPA 8270	5-16-11	5-18-11	
Benzo[a]anthracene	ND	0.015	EPA 8270/SIM	5-16-11	5-20-11	
Chrysene	ND	0.015	EPA 8270/SIM	5-16-11	5-20-11	
bis(2-Ethylhexyl)phthalate	ND	1.9	EPA 8270	5-16-11	5-18-11	
Di-n-octylphthalate	ND	1.9	EPA 8270	5-16-11	5-18-11	
Benzo[b]fluoranthene	0.029	0.015	EPA 8270/SIM	5-16-11	5-20-11	
Benzo(j,k)fluoranthene	0.040	0.015	EPA 8270/SIM	5-16-11	5-20-11	
Benzo[a]pyrene	0.13	0.015	EPA 8270/SIM	5-16-11	5-20-11	
Indeno[1,2,3-cd]pyrene	ND	0.015	EPA 8270/SIM	5-16-11	5-20-11	
Dibenz[a,h]anthracene	ND	0.015	EPA 8270/SIM	5-16-11	5-20-11	
Benzo[g,h,i]perylene	ND	0.015	EPA 8270/SIM	5-16-11	5-20-11	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorophenol	*73*	*30 - 97*				
Phenol-d6	*87*	*40 - 104*				
Nitrobenzene-d5	*75*	*35 - 102*				
2-Fluorobiphenyl	*91*	*44 - 97*				
2,4,6-Tribromophenol	*91*	*41 - 110*				
Terphenyl-d14	*86*	*53 - 107*				

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

SEMIVOLATILES by EPA 8270D/SIM
page 1 of 2

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**S2-00-051011**					
Laboratory ID:	05-092-02					
n-Nitrosodimethylamine	ND	3.6	EPA 8270	5-16-11	5-19-11	
Pyridine	ND	36	EPA 8270	5-16-11	5-19-11	
Phenol	ND	3.6	EPA 8270	5-16-11	5-19-11	
Aniline	ND	3.6	EPA 8270	5-16-11	5-19-11	
bis(2-Chloroethyl)ether	ND	3.6	EPA 8270	5-16-11	5-19-11	
2-Chlorophenol	ND	3.6	EPA 8270	5-16-11	5-19-11	
1,3-Dichlorobenzene	ND	3.6	EPA 8270	5-16-11	5-19-11	
1,4-Dichlorobenzene	ND	3.6	EPA 8270	5-16-11	5-19-11	
Benzyl alcohol	ND	3.6	EPA 8270	5-16-11	5-19-11	
1,2-Dichlorobenzene	ND	3.6	EPA 8270	5-16-11	5-19-11	
2-Methylphenol (o-Cresol)	ND	3.6	EPA 8270	5-16-11	5-19-11	
bis(2-Chloroisopropyl)ether	ND	3.6	EPA 8270	5-16-11	5-19-11	
(3+4)-Methylphenol (m,p-Cresol)	ND	3.6	EPA 8270	5-16-11	5-19-11	
n-Nitroso-di-n-propylamine	ND	3.6	EPA 8270	5-16-11	5-19-11	
Hexachloroethane	ND	3.6	EPA 8270	5-16-11	5-19-11	
Nitrobenzene	ND	3.6	EPA 8270	5-16-11	5-19-11	
Isophorone	ND	3.6	EPA 8270	5-16-11	5-19-11	
2-Nitrophenol	ND	3.6	EPA 8270	5-16-11	5-19-11	
2,4-Dimethylphenol	ND	36	EPA 8270	5-16-11	5-19-11	
bis(2-Chloroethoxy)methane	ND	3.6	EPA 8270	5-16-11	5-19-11	
2,4-Dichlorophenol	ND	3.6	EPA 8270	5-16-11	5-19-11	
1,2,4-Trichlorobenzene	ND	3.6	EPA 8270	5-16-11	5-19-11	
Naphthalene	0.55	0.036	EPA 8270/SIM	5-16-11	5-20-11	
4-Chloroaniline	ND	3.6	EPA 8270	5-16-11	5-19-11	
Hexachlorobutadiene	ND	3.6	EPA 8270	5-16-11	5-19-11	
4-Chloro-3-methylphenol	ND	3.6	EPA 8270	5-16-11	5-19-11	
2-Methylnaphthalene	0.095	0.036	EPA 8270/SIM	5-16-11	5-20-11	
1-Methylnaphthalene	0.055	0.036	EPA 8270/SIM	5-16-11	5-20-11	
Hexachlorocyclopentadiene	ND	3.6	EPA 8270	5-16-11	5-19-11	
2,4,6-Trichlorophenol	ND	3.6	EPA 8270	5-16-11	5-19-11	
2,3-Dichloroaniline	ND	3.6	EPA 8270	5-16-11	5-19-11	
2,4,5-Trichlorophenol	ND	3.6	EPA 8270	5-16-11	5-19-11	
2-Chloronaphthalene	ND	3.6	EPA 8270	5-16-11	5-19-11	
2-Nitroaniline	ND	3.6	EPA 8270	5-16-11	5-19-11	
1,4-Dinitrobenzene	ND	3.6	EPA 8270	5-16-11	5-19-11	
Dimethylphthalate	ND	3.6	EPA 8270	5-16-11	5-19-11	
1,3-Dinitrobenzene	ND	3.6	EPA 8270	5-16-11	5-19-11	
2,6-Dinitrotoluene	ND	3.6	EPA 8270	5-16-11	5-19-11	
1,2-Dinitrobenzene	ND	3.6	EPA 8270	5-16-11	5-19-11	
Acenaphthylene	ND	0.036	EPA 8270/SIM	5-16-11	5-20-11	
3-Nitroaniline	ND	3.6	EPA 8270	5-16-11	5-19-11	

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

SEMIVOLATILES by EPA 8270D/SIM
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**S2-00-051011**					
Laboratory ID:	05-092-02					
2,4-Dinitrophenol	ND	18	EPA 8270	5-16-11	5-19-11	
Acenaphthene	ND	0.036	EPA 8270/SIM	5-16-11	5-20-11	
4-Nitrophenol	ND	3.6	EPA 8270	5-16-11	5-19-11	
2,4-Dinitrotoluene	ND	3.6	EPA 8270	5-16-11	5-19-11	
Dibenzofuran	ND	3.6	EPA 8270	5-16-11	5-19-11	
2,3,5,6-Tetrachlorophenol	ND	3.6	EPA 8270	5-16-11	5-19-11	
2,3,4,6-Tetrachlorophenol	ND	3.6	EPA 8270	5-16-11	5-19-11	
Diethylphthalate	ND	18	EPA 8270	5-16-11	5-19-11	
4-Chlorophenyl-phenylether	ND	3.6	EPA 8270	5-16-11	5-19-11	
4-Nitroaniline	ND	3.6	EPA 8270	5-16-11	5-19-11	
Fluorene	ND	0.036	EPA 8270/SIM	5-16-11	5-20-11	
4,6-Dinitro-2-methylphenol	ND	18	EPA 8270	5-16-11	5-19-11	
n-Nitrosodiphenylamine	ND	3.6	EPA 8270	5-16-11	5-19-11	
1,2-Diphenylhydrazine	ND	3.6	EPA 8270	5-16-11	5-19-11	
4-Bromophenyl-phenylether	ND	3.6	EPA 8270	5-16-11	5-19-11	
Hexachlorobenzene	ND	3.6	EPA 8270	5-16-11	5-19-11	
Pentachlorophenol	ND	18	EPA 8270	5-16-11	5-19-11	
Phenanthrene	0.060	0.036	EPA 8270/SIM	5-16-11	5-20-11	
Anthracene	ND	0.036	EPA 8270/SIM	5-16-11	5-20-11	
Carbazole	ND	3.6	EPA 8270	5-16-11	5-19-11	
Di-n-butylphthalate	ND	3.6	EPA 8270	5-16-11	5-19-11	
Fluoranthene	ND	0.036	EPA 8270/SIM	5-16-11	5-20-11	
Benzidine	ND	36	EPA 8270	5-16-11	5-19-11	
Pyrene	0.051	0.036	EPA 8270/SIM	5-16-11	5-20-11	
Butylbenzylphthalate	ND	36	EPA 8270	5-16-11	5-19-11	
bis-2-Ethylhexyladipate	ND	3.6	EPA 8270	5-16-11	5-19-11	
3,3'-Dichlorobenzidine	ND	36	EPA 8270	5-16-11	5-19-11	
Benzo[a]anthracene	0.076	0.036	EPA 8270/SIM	5-16-11	5-20-11	
Chrysene	0.17	0.036	EPA 8270/SIM	5-16-11	5-20-11	
bis(2-Ethylhexyl)phthalate	ND	3.6	EPA 8270	5-16-11	5-19-11	
Di-n-octylphthalate	ND	3.6	EPA 8270	5-16-11	5-19-11	
Benzo[b]fluoranthene	0.037	0.036	EPA 8270/SIM	5-16-11	5-20-11	
Benzo(j,k)fluoranthene	ND	0.036	EPA 8270/SIM	5-16-11	5-20-11	
Benzo[a]pyrene	0.038	0.036	EPA 8270/SIM	5-16-11	5-20-11	
Indeno[1,2,3-cd]pyrene	ND	0.036	EPA 8270/SIM	5-16-11	5-20-11	
Dibenz[a,h]anthracene	ND	0.036	EPA 8270/SIM	5-16-11	5-20-11	
Benzo[g,h,i]perylene	ND	0.036	EPA 8270/SIM	5-16-11	5-20-11	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorophenol	.--	*30 - 97*				S
Phenol-d6	.--	*40 - 104*				S
Nitrobenzene-d5	.--	*35 - 102*				S
2-Fluorobiphenyl	.--	*44 - 97*				S
2,4,6-Tribromophenol	.--	*41 - 110*				S
Terphenyl-d14	.--	*53 - 107*				S

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

SEMIVOLATILES by EPA 8270D/SIM
page 1 of 2

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**S3-00-051011**					
Laboratory ID:	05-092-03					
n-Nitrosodimethylamine	ND	1.8	EPA 8270	5-16-11	5-19-11	
Pyridine	ND	18	EPA 8270	5-16-11	5-19-11	
Phenol	ND	1.8	EPA 8270	5-16-11	5-19-11	
Aniline	ND	1.8	EPA 8270	5-16-11	5-19-11	
bis(2-Chloroethyl)ether	ND	1.8	EPA 8270	5-16-11	5-19-11	
2-Chlorophenol	ND	1.8	EPA 8270	5-16-11	5-19-11	
1,3-Dichlorobenzene	ND	1.8	EPA 8270	5-16-11	5-19-11	
1,4-Dichlorobenzene	ND	1.8	EPA 8270	5-16-11	5-19-11	
Benzyl alcohol	ND	1.8	EPA 8270	5-16-11	5-19-11	
1,2-Dichlorobenzene	ND	1.8	EPA 8270	5-16-11	5-19-11	
2-Methylphenol (o-Cresol)	ND	1.8	EPA 8270	5-16-11	5-19-11	
bis(2-Chloroisopropyl)ether	ND	1.8	EPA 8270	5-16-11	5-19-11	
(3+4)-Methylphenol (m,p-Cresol)	ND	1.8	EPA 8270	5-16-11	5-19-11	
n-Nitroso-di-n-propylamine	ND	1.8	EPA 8270	5-16-11	5-19-11	
Hexachloroethane	ND	1.8	EPA 8270	5-16-11	5-19-11	
Nitrobenzene	ND	1.8	EPA 8270	5-16-11	5-19-11	
Isophorone	ND	1.8	EPA 8270	5-16-11	5-19-11	
2-Nitrophenol	ND	1.8	EPA 8270	5-16-11	5-19-11	
2,4-Dimethylphenol	ND	18	EPA 8270	5-16-11	5-19-11	
bis(2-Chloroethoxy)methane	ND	1.8	EPA 8270	5-16-11	5-19-11	
2,4-Dichlorophenol	ND	1.8	EPA 8270	5-16-11	5-19-11	
1,2,4-Trichlorobenzene	ND	1.8	EPA 8270	5-16-11	5-19-11	
Naphthalene	ND	0.014	EPA 8270/SIM	5-16-11	5-19-11	
4-Chloroaniline	ND	1.8	EPA 8270	5-16-11	5-19-11	
Hexachlorobutadiene	ND	1.8	EPA 8270	5-16-11	5-19-11	
4-Chloro-3-methylphenol	ND	1.8	EPA 8270	5-16-11	5-19-11	
2-Methylnaphthalene	ND	0.014	EPA 8270/SIM	5-16-11	5-19-11	
1-Methylnaphthalene	ND	0.014	EPA 8270/SIM	5-16-11	5-19-11	
Hexachlorocyclopentadiene	ND	1.8	EPA 8270	5-16-11	5-19-11	
2,4,6-Trichlorophenol	ND	1.8	EPA 8270	5-16-11	5-19-11	
2,3-Dichloroaniline	ND	1.8	EPA 8270	5-16-11	5-19-11	
2,4,5-Trichlorophenol	ND	1.8	EPA 8270	5-16-11	5-19-11	
2-Chloronaphthalene	ND	1.8	EPA 8270	5-16-11	5-19-11	
2-Nitroaniline	ND	1.8	EPA 8270	5-16-11	5-19-11	
1,4-Dinitrobenzene	ND	1.8	EPA 8270	5-16-11	5-19-11	
Dimethylphthalate	ND	1.8	EPA 8270	5-16-11	5-19-11	
1,3-Dinitrobenzene	ND	1.8	EPA 8270	5-16-11	5-19-11	
2,6-Dinitrotoluene	ND	1.8	EPA 8270	5-16-11	5-19-11	
1,2-Dinitrobenzene	ND	1.8	EPA 8270	5-16-11	5-19-11	
Acenaphthylene	ND	0.014	EPA 8270/SIM	5-16-11	5-19-11	
3-Nitroaniline	ND	1.8	EPA 8270	5-16-11	5-19-11	

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Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

SEMIVOLATILES by EPA 8270D/SIM
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**S3-00-051011**					
Laboratory ID:	05-092-03					
2,4-Dinitrophenol	ND	8.9	EPA 8270	5-16-11	5-19-11	
Acenaphthene	0.015	0.014	EPA 8270/SIM	5-16-11	5-19-11	
4-Nitrophenol	ND	1.8	EPA 8270	5-16-11	5-19-11	
2,4-Dinitrotoluene	ND	1.8	EPA 8270	5-16-11	5-19-11	
Dibenzofuran	ND	1.8	EPA 8270	5-16-11	5-19-11	
2,3,5,6-Tetrachlorophenol	ND	1.8	EPA 8270	5-16-11	5-19-11	
2,3,4,6-Tetrachlorophenol	ND	1.8	EPA 8270	5-16-11	5-19-11	
Diethylphthalate	ND	8.9	EPA 8270	5-16-11	5-19-11	
4-Chlorophenyl-phenylether	ND	1.8	EPA 8270	5-16-11	5-19-11	
4-Nitroaniline	ND	1.8	EPA 8270	5-16-11	5-19-11	
Fluorene	ND	0.014	EPA 8270/SIM	5-16-11	5-19-11	
4,6-Dinitro-2-methylphenol	ND	8.9	EPA 8270	5-16-11	5-19-11	
n-Nitrosodiphenylamine	ND	1.8	EPA 8270	5-16-11	5-19-11	
1,2-Diphenylhydrazine	ND	1.8	EPA 8270	5-16-11	5-19-11	
4-Bromophenyl-phenylether	ND	1.8	EPA 8270	5-16-11	5-19-11	
Hexachlorobenzene	ND	1.8	EPA 8270	5-16-11	5-19-11	
Pentachlorophenol	ND	8.9	EPA 8270	5-16-11	5-19-11	
Phenanthrene	0.052	0.014	EPA 8270/SIM	5-16-11	5-19-11	
Anthracene	ND	0.014	EPA 8270/SIM	5-16-11	5-19-11	
Carbazole	ND	1.8	EPA 8270	5-16-11	5-19-11	
Di-n-butylphthalate	ND	1.8	EPA 8270	5-16-11	5-19-11	
Fluoranthene	ND	0.014	EPA 8270/SIM	5-16-11	5-19-11	
Benzidine	ND	18	EPA 8270	5-16-11	5-19-11	
Pyrene	ND	0.014	EPA 8270/SIM	5-16-11	5-19-11	
Butylbenzylphthalate	ND	18	EPA 8270	5-16-11	5-19-11	
bis-2-Ethylhexyladipate	ND	1.8	EPA 8270	5-16-11	5-19-11	
3,3'-Dichlorobenzidine	ND	18	EPA 8270	5-16-11	5-19-11	
Benzo[a]anthracene	ND	0.014	EPA 8270/SIM	5-16-11	5-19-11	
Chrysene	ND	0.014	EPA 8270/SIM	5-16-11	5-19-11	
bis(2-Ethylhexyl)phthalate	ND	1.8	EPA 8270	5-16-11	5-19-11	
Di-n-octylphthalate	ND	1.8	EPA 8270	5-16-11	5-19-11	
Benzo[b]fluoranthene	0.057	0.014	EPA 8270/SIM	5-16-11	5-19-11	
Benzo(j,k)fluoranthene	0.23	0.014	EPA 8270/SIM	5-16-11	5-19-11	
Benzo[a]pyrene	0.044	0.014	EPA 8270/SIM	5-16-11	5-19-11	
Indeno[1,2,3-cd]pyrene	ND	0.014	EPA 8270/SIM	5-16-11	5-19-11	
Dibenz[a,h]anthracene	ND	0.014	EPA 8270/SIM	5-16-11	5-19-11	
Benzo[g,h,i]perylene	ND	0.014	EPA 8270/SIM	5-16-11	5-19-11	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorophenol	*83*	*30 - 97*				
Phenol-d6	*96*	*40 - 104*				
Nitrobenzene-d5	*94*	*35 - 102*				
2-Fluorobiphenyl	*89*	*44 - 97*				
2,4,6-Tribromophenol	*87*	*41 - 110*				
Terphenyl-d14	*92*	*53 - 107*				

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

SEMIVOLATILES by EPA 8270D/SIM
METHOD BLANK QUALITY CONTROL
page 1 of 2

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0516S3					
n-Nitrosodimethylamine	ND	0.033	EPA 8270	5-16-11	5-17-11	
Pyridine	ND	0.33	EPA 8270	5-16-11	5-17-11	
Phenol	ND	0.033	EPA 8270	5-16-11	5-17-11	
Aniline	ND	0.033	EPA 8270	5-16-11	5-17-11	
bis(2-Chloroethyl)ether	ND	0.033	EPA 8270	5-16-11	5-17-11	
2-Chlorophenol	ND	0.033	EPA 8270	5-16-11	5-17-11	
1,3-Dichlorobenzene	ND	0.033	EPA 8270	5-16-11	5-17-11	
1,4-Dichlorobenzene	ND	0.033	EPA 8270	5-16-11	5-17-11	
Benzyl alcohol	ND	0.033	EPA 8270	5-16-11	5-17-11	
1,2-Dichlorobenzene	ND	0.033	EPA 8270	5-16-11	5-17-11	
2-Methylphenol (o-Cresol)	ND	0.033	EPA 8270	5-16-11	5-17-11	
bis(2-Chloroisopropyl)ether	ND	0.033	EPA 8270	5-16-11	5-17-11	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.033	EPA 8270	5-16-11	5-17-11	
n-Nitroso-di-n-propylamine	ND	0.033	EPA 8270	5-16-11	5-17-11	
Hexachloroethane	ND	0.033	EPA 8270	5-16-11	5-17-11	
Nitrobenzene	ND	0.033	EPA 8270	5-16-11	5-17-11	
Isophorone	ND	0.033	EPA 8270	5-16-11	5-17-11	
2-Nitrophenol	ND	0.033	EPA 8270	5-16-11	5-17-11	
2,4-Dimethylphenol	ND	0.33	EPA 8270	5-16-11	5-17-11	
bis(2-Chloroethoxy)methane	ND	0.033	EPA 8270	5-16-11	5-17-11	
2,4-Dichlorophenol	ND	0.033	EPA 8270	5-16-11	5-17-11	
1,2,4-Trichlorobenzene	ND	0.033	EPA 8270	5-16-11	5-17-11	
Naphthalene	ND	0.0067	EPA 8270/SIM	5-16-11	5-19-11	
4-Chloroaniline	ND	0.033	EPA 8270	5-16-11	5-17-11	
Hexachlorobutadiene	ND	0.033	EPA 8270	5-16-11	5-17-11	
4-Chloro-3-methylphenol	ND	0.033	EPA 8270	5-16-11	5-17-11	
2-Methylnaphthalene	ND	0.0067	EPA 8270/SIM	5-16-11	5-19-11	
1-Methylnaphthalene	ND	0.0067	EPA 8270/SIM	5-16-11	5-19-11	
Hexachlorocyclopentadiene	ND	0.033	EPA 8270	5-16-11	5-17-11	
2,4,6-Trichlorophenol	ND	0.033	EPA 8270	5-16-11	5-17-11	
2,3-Dichloroaniline	ND	0.033	EPA 8270	5-16-11	5-17-11	
2,4,5-Trichlorophenol	ND	0.033	EPA 8270	5-16-11	5-17-11	
2-Chloronaphthalene	ND	0.033	EPA 8270	5-16-11	5-17-11	
2-Nitroaniline	ND	0.033	EPA 8270	5-16-11	5-17-11	
1,4-Dinitrobenzene	ND	0.033	EPA 8270	5-16-11	5-17-11	
Dimethylphthalate	ND	0.033	EPA 8270	5-16-11	5-17-11	
1,3-Dinitrobenzene	ND	0.033	EPA 8270	5-16-11	5-17-11	
2,6-Dinitrotoluene	ND	0.033	EPA 8270	5-16-11	5-17-11	
1,2-Dinitrobenzene	ND	0.033	EPA 8270	5-16-11	5-17-11	
Acenaphthylene	ND	0.0067	EPA 8270/SIM	5-16-11	5-19-11	
3-Nitroaniline	ND	0.033	EPA 8270	5-16-11	5-17-11	

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

SEMIVOLATILES by EPA 8270D/SIM
METHOD BLANK QUALITY CONTROL
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0516S3					
2,4-Dinitrophenol	ND	0.17	EPA 8270	5-16-11	5-17-11	
Acenaphthene	ND	0.0067	EPA 8270/SIM	5-16-11	5-19-11	
4-Nitrophenol	ND	0.033	EPA 8270	5-16-11	5-17-11	
2,4-Dinitrotoluene	ND	0.033	EPA 8270	5-16-11	5-17-11	
Dibenzofuran	ND	0.033	EPA 8270	5-16-11	5-17-11	
2,3,5,6-Tetrachlorophenol	ND	0.033	EPA 8270	5-16-11	5-17-11	
2,3,4,6-Tetrachlorophenol	ND	0.033	EPA 8270	5-16-11	5-17-11	
Diethylphthalate	ND	0.17	EPA 8270	5-16-11	5-17-11	
4-Chlorophenyl-phenylether	ND	0.033	EPA 8270	5-16-11	5-17-11	
4-Nitroaniline	ND	0.033	EPA 8270	5-16-11	5-17-11	
Fluorene	ND	0.0067	EPA 8270/SIM	5-16-11	5-19-11	
4,6-Dinitro-2-methylphenol	ND	0.17	EPA 8270	5-16-11	5-17-11	
n-Nitrosodiphenylamine	ND	0.033	EPA 8270	5-16-11	5-17-11	
1,2-Diphenylhydrazine	ND	0.033	EPA 8270	5-16-11	5-17-11	
4-Bromophenyl-phenylether	ND	0.033	EPA 8270	5-16-11	5-17-11	
Hexachlorobenzene	ND	0.033	EPA 8270	5-16-11	5-17-11	
Pentachlorophenol	ND	0.17	EPA 8270	5-16-11	5-17-11	
Phenanthrene	ND	0.0067	EPA 8270/SIM	5-16-11	5-19-11	
Anthracene	ND	0.0067	EPA 8270/SIM	5-16-11	5-19-11	
Carbazole	ND	0.033	EPA 8270	5-16-11	5-17-11	
Di-n-butylphthalate	ND	0.33	EPA 8270	5-16-11	5-17-11	
Fluoranthene	ND	0.0067	EPA 8270/SIM	5-16-11	5-19-11	
Benzidine	ND	0.33	EPA 8270	5-16-11	5-17-11	
Pyrene	ND	0.0067	EPA 8270/SIM	5-16-11	5-19-11	
Butylbenzylphthalate	ND	0.33	EPA 8270	5-16-11	5-17-11	
bis-2-Ethylhexyladipate	ND	0.033	EPA 8270	5-16-11	5-17-11	
3,3'-Dichlorobenzidine	ND	0.33	EPA 8270	5-16-11	5-17-11	
Benzo[a]anthracene	ND	0.0067	EPA 8270/SIM	5-16-11	5-19-11	
Chrysene	ND	0.0067	EPA 8270/SIM	5-16-11	5-19-11	
bis(2-Ethylhexyl)phthalate	ND	0.033	EPA 8270	5-16-11	5-17-11	
Di-n-octylphthalate	ND	0.033	EPA 8270	5-16-11	5-17-11	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270/SIM	5-16-11	5-19-11	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270/SIM	5-16-11	5-19-11	
Benzo[a]pyrene	ND	0.0067	EPA 8270/SIM	5-16-11	5-19-11	
Indeno[1,2,3-cd]pyrene	ND	0.0067	EPA 8270/SIM	5-16-11	5-19-11	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270/SIM	5-16-11	5-19-11	
Benzo[g,h,i]perylene	ND	0.0067	EPA 8270/SIM	5-16-11	5-19-11	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorophenol	*58*	*30 - 97*				
Phenol-d6	*64*	*40 - 104*				
Nitrobenzene-d5	*60*	*35 - 102*				
2-Fluorobiphenyl	*66*	*44 - 97*				
2,4,6-Tribromophenol	*71*	*41 - 110*				
Terphenyl-d14	*74*	*53 - 107*				

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

SEMIVOLATILES by EPA 8270D/SIM
SB/SBD QUALITY CONTROL

Matrix: Soil
Units: mg/Kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0516S3									
	SB	SBD	SB	SBD	SB	SBD				
Phenol	0.895	1.04	1.33	1.33	67	78	31 - 111	15	34	
2-Chlorophenol	0.899	1.03	1.33	1.33	68	77	29 - 112	14	37	
1,4-Dichlorobenzene	0.421	0.488	0.667	0.667	63	73	24 - 100	15	37	
n-Nitroso-di-n-propylamine	0.435	0.491	0.667	0.667	65	74	35 - 104	12	32	
1,2,4-Trichlorobenzene	0.420	0.472	0.667	0.667	63	71	29 - 94	12	35	
4-Chloro-3-methylphenol	0.967	1.06	1.33	1.33	73	80	53 - 104	9	25	
Acenaphthene	0.462	0.505	0.667	0.667	69	76	50 - 95	9	23	
4-Nitrophenol	1.06	1.14	1.33	1.33	80	86	42 - 126	7	30	
2,4-Dinitrotoluene	0.496	0.565	0.667	0.667	74	85	53 - 103	13	31	
Pentachlorophenol	0.971	1.06	1.33	1.33	73	80	50 - 116	9	30	
Pyrene	0.495	0.531	0.667	0.667	74	80	57 - 108	7	27	
Surrogate:										
2-Fluorophenol					*62*	*71*	*30 - 97*			
Phenol-d6					*69*	*80*	*40 - 104*			
Nitrobenzene-d5					*70*	*77*	*35 - 102*			
2-Fluorobiphenyl					*72*	*76*	*44 - 97*			
2,4,6-Tribromophenol					*74*	*80*	*41 - 110*			
Terphenyl-d14					*75*	*81*	*53 - 107*			

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

PCBs by EPA 8082

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**S1-00-051011**					
Laboratory ID:	05-092-01					
Aroclor 1016	ND	0.056	EPA 8082	5-11-11	5-12-11	
Aroclor 1221	ND	0.056	EPA 8082	5-11-11	5-12-11	
Aroclor 1232	ND	0.056	EPA 8082	5-11-11	5-12-11	
Aroclor 1242	ND	0.056	EPA 8082	5-11-11	5-12-11	
Aroclor 1248	ND	0.056	EPA 8082	5-11-11	5-12-11	
Aroclor 1254	ND	0.056	EPA 8082	5-11-11	5-12-11	
Aroclor 1260	ND	0.056	EPA 8082	5-11-11	5-12-11	
Surrogate:	*Percent Recovery*	*Control Limits*				
DCB	*72*	*42-123*				
Client ID:	**S2-00-051011**					
Laboratory ID:	05-092-02					
Aroclor 1016	ND	0.054	EPA 8082	5-11-11	5-12-11	
Aroclor 1221	ND	0.054	EPA 8082	5-11-11	5-12-11	
Aroclor 1232	ND	0.054	EPA 8082	5-11-11	5-12-11	
Aroclor 1242	ND	0.054	EPA 8082	5-11-11	5-12-11	
Aroclor 1248	ND	0.054	EPA 8082	5-11-11	5-12-11	
Aroclor 1254	ND	0.054	EPA 8082	5-11-11	5-12-11	
Aroclor 1260	ND	0.054	EPA 8082	5-11-11	5-12-11	
Surrogate:	*Percent Recovery*	*Control Limits*				
DCB	*71*	*42-123*				
Client ID:	**S3-00-051011**					
Laboratory ID:	05-092-03					
Aroclor 1016	ND	0.053	EPA 8082	5-11-11	5-12-11	
Aroclor 1221	ND	0.053	EPA 8082	5-11-11	5-12-11	
Aroclor 1232	ND	0.053	EPA 8082	5-11-11	5-12-11	
Aroclor 1242	ND	0.053	EPA 8082	5-11-11	5-12-11	
Aroclor 1248	ND	0.053	EPA 8082	5-11-11	5-12-11	
Aroclor 1254	ND	0.053	EPA 8082	5-11-11	5-12-11	
Aroclor 1260	ND	0.053	EPA 8082	5-11-11	5-12-11	
Surrogate:	*Percent Recovery*	*Control Limits*				
DCB	*75*	*42-123*				

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

PCBs by EPA 8082
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0511S1					
Aroclor 1016	ND	0.050	EPA 8082	5-11-11	5-12-11	
Aroclor 1221	ND	0.050	EPA 8082	5-11-11	5-12-11	
Aroclor 1232	ND	0.050	EPA 8082	5-11-11	5-12-11	
Aroclor 1242	ND	0.050	EPA 8082	5-11-11	5-12-11	
Aroclor 1248	ND	0.050	EPA 8082	5-11-11	5-12-11	
Aroclor 1254	ND	0.050	EPA 8082	5-11-11	5-12-11	
Aroclor 1260	ND	0.050	EPA 8082	5-11-11	5-12-11	
Surrogate:	*Percent Recovery*	*Control Limits*				
DCB	*81*	*42-123*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
MATRIX SPIKES											
Laboratory ID:	05-078-01										
	MS	MSD	MS	MSD		MS	MSD				
Aroclor 1260	**0.468**	**0.461**	0.500	0.500	ND	**94**	**92**	44-125	2	15	
Surrogate:											
DCB						*77*	*75*	*42-123*			

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

ORGANOCHLORINE PESTICIDES by EPA 8081A

Matrix: Soil
Units: ug/Kg (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**S1-00-051011**					
Laboratory ID:	05-092-01					
alpha-BHC	ND	5.6	EPA 8081	5-12-11	5-13-11	
gamma-BHC	ND	5.6	EPA 8081	5-12-11	5-13-11	
beta-BHC	10	5.6	EPA 8081	5-12-11	5-13-11	P
delta-BHC	ND	5.6	EPA 8081	5-12-11	5-13-11	
Heptachlor	ND	5.6	EPA 8081	5-12-11	5-13-11	
Aldrin	ND	5.6	EPA 8081	5-12-11	5-13-11	
Heptachlor Epoxide	ND	5.6	EPA 8081	5-12-11	5-13-11	
gamma-Chlordane	ND	11	EPA 8081	5-12-11	5-13-11	
alpha-Chlordane	ND	11	EPA 8081	5-12-11	5-13-11	
4,4'-DDE	ND	11	EPA 8081	5-12-11	5-13-11	
Endosulfan I	ND	5.6	EPA 8081	5-12-11	5-13-11	
Dieldrin	ND	11	EPA 8081	5-12-11	5-13-11	
Endrin	ND	11	EPA 8081	5-12-11	5-13-11	
4,4'-DDD	ND	11	EPA 8081	5-12-11	5-13-11	
Endosulfan II	ND	11	EPA 8081	5-12-11	5-13-11	
4,4'-DDT	ND	11	EPA 8081	5-12-11	5-13-11	
Endrin Aldehyde	ND	11	EPA 8081	5-12-11	5-13-11	
Methoxychlor	19	11	EPA 8081	5-12-11	5-13-11	P
Endosulfan Sulfate	ND	11	EPA 8081	5-12-11	5-13-11	
Endrin Ketone	ND	11	EPA 8081	5-12-11	5-13-11	
Toxaphene	ND	56	EPA 8081	5-12-11	5-13-11	
Surrogate:	*Percent Recovery*	*Control Limits*				
TCMX	*74*	*30-111*				
DCB	*64*	*33-119*				

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

ORGANOCHLORINE PESTICIDES by EPA 8081A METHOD BLANK QUALITY CONTROL

Matrix: Soil
Units: ug/Kg (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0512S1					
alpha-BHC	ND	5.0	EPA 8081	5-12-11	5-13-11	
gamma-BHC	ND	5.0	EPA 8081	5-12-11	5-13-11	
beta-BHC	ND	5.0	EPA 8081	5-12-11	5-13-11	
delta-BHC	ND	5.0	EPA 8081	5-12-11	5-13-11	
Heptachlor	ND	5.0	EPA 8081	5-12-11	5-13-11	
Aldrin	ND	5.0	EPA 8081	5-12-11	5-13-11	
Heptachlor Epoxide	ND	5.0	EPA 8081	5-12-11	5-13-11	
gamma-Chlordane	ND	10	EPA 8081	5-12-11	5-13-11	
alpha-Chlordane	ND	10	EPA 8081	5-12-11	5-13-11	
4,4'-DDE	ND	10	EPA 8081	5-12-11	5-13-11	
Endosulfan I	ND	5.0	EPA 8081	5-12-11	5-13-11	
Dieldrin	ND	10	EPA 8081	5-12-11	5-13-11	
Endrin	ND	10	EPA 8081	5-12-11	5-13-11	
4,4'-DDD	ND	10	EPA 8081	5-12-11	5-13-11	
Endosulfan II	ND	10	EPA 8081	5-12-11	5-13-11	
4,4'-DDT	ND	10	EPA 8081	5-12-11	5-13-11	
Endrin Aldehyde	ND	10	EPA 8081	5-12-11	5-13-11	
Methoxychlor	ND	10	EPA 8081	5-12-11	5-13-11	
Endosulfan Sulfate	ND	10	EPA 8081	5-12-11	5-13-11	
Endrin Ketone	ND	10	EPA 8081	5-12-11	5-13-11	
Toxaphene	ND	50	EPA 8081	5-12-11	5-13-11	
Surrogate:	*Percent Recovery*	*Control Limits*				
TCMX	*83*	*30-111*				
DCB	*81*	*33-119*				

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

ORGANOCHLORINE PESTICIDES by EPA 8081A MS/MSD QUALITY CONTROL

Matrix: Soil
Units: ug/Kg (ppb)

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
MATRIX SPIKES											
Laboratory ID:	05-092-01										
	MS	MSD	MS	MSD		MS	MSD				
gamma-BHC	33.4	34.6	50.0	50.0	ND	67	69	32-96	4	10	
Heptachlor	33.8	35.0	50.0	50.0	ND	68	70	29-101	3	13	
Aldrin	37.4	36.1	50.0	50.0	ND	75	72	27-99	4	10	
Dieldrin	90.3	93.3	125	125	ND	72	75	33-92	3	10	
Endrin	90.0	91.8	125	125	ND	72	73	29-101	2	11	
4,4'-DDT	84.6	83.6	125	125	ND	68	67	21-114	1	15	
Surrogate:											
TCMX						*77*	*84*	*30-111*			
DCB						*73*	*78*	*33-119*			

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

CHLORINATED ACID HERBICIDES by EPA 8151A

Matrix: Soil
Units: ug/Kg (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**S1-00-051011**					
Laboratory ID:	05-092-01					
Dalapon	ND	260	EPA 8151	5-12-11	5-19-11	
Dicamba	ND	11	EPA 8151	5-12-11	5-19-11	
MCPP	36000	10000	EPA 8151	5-12-11	5-19-11	
MCPA	15000	10000	EPA 8151	5-12-11	5-19-11	P
Dichlorprop	1100	790	EPA 8151	5-12-11	5-19-11	
2,4-D	ND	11	EPA 8151	5-12-11	5-19-11	
Pentachlorophenol	3.5	1.1	EPA 8151	5-12-11	5-19-11	P
2,4,5-TP (Silvex)	94	11	EPA 8151	5-12-11	5-19-11	
2,4,5-T	ND	11	EPA 8151	5-12-11	5-19-11	
2,4-DB	37	11	EPA 8151	5-12-11	5-19-11	
Dinoseb	11	11	EPA 8151	5-12-11	5-19-11	P
Surrogate:	*Percent Recovery*	*Control Limits*				
DCAA	*57*	*30-96*				

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

CHLORINATED ACID HERBICIDES by EPA 8151A QUALITY CONTROL

Matrix: Soil
Units: ug/Kg (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0512S1					
Dalapon	ND	230	EPA 8151	5-12-11	5-18-11	
Dicamba	ND	9.4	EPA 8151	5-12-11	5-18-11	
MCPP	ND	940	EPA 8151	5-12-11	5-18-11	
MCPA	ND	940	EPA 8151	5-12-11	5-18-11	
Dichlorprop	ND	71	EPA 8151	5-12-11	5-18-11	
2,4-D	ND	9.4	EPA 8151	5-12-11	5-18-11	
Pentachlorophenol	ND	0.95	EPA 8151	5-12-11	5-18-11	
2,4,5-TP (Silvex)	ND	9.5	EPA 8151	5-12-11	5-18-11	
2,4,5-T	ND	9.5	EPA 8151	5-12-11	5-18-11	
2,4-DB	ND	9.5	EPA 8151	5-12-11	5-18-11	
Dinoseb	ND	9.5	EPA 8151	5-12-11	5-18-11	
Surrogate:	*Percent Recovery*	*Control Limits*				
DCAA	*47*	*30-96*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
MATRIX SPIKES											
Laboratory ID:	05-092-01										
	MS	MSD	MS	MSD		MS	MSD				
Dicamba	60.4	58.1	100	100	ND	60	58	25-101	4	30	
2,4-D	49.5	54.7	100	100	ND	49	55	25-84	10	28	
Pentachlorophenol	7.52	7.79	10.0	10.0	3.13	44	47	27-96	4	26	
2,4,5-T	53.0	54.0	100	100	ND	53	54	25-94	2	20	
2,4-DB	67.2	76.0	100	100	33.4	34	43	25-117	12	27	
Surrogate:											
DCAA						*79*	*56*	*30-96*			

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

TOTAL METALS
EPA 6010B/7471A

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-092-01					
Client ID:	**S1-00-051011**					
Arsenic	ND	11	6010B	5-13-11	5-13-11	
Barium	210	2.8	6010B	5-13-11	5-13-11	
Cadmium	ND	0.56	6010B	5-13-11	5-13-11	
Chromium	25	0.56	6010B	5-13-11	5-13-11	
Lead	79	5.6	6010B	5-13-11	5-13-11	
Mercury	ND	0.28	7471A	5-11-11	5-11-11	
Selenium	ND	11	6010B	5-13-11	5-13-11	
Silver	ND	0.56	6010B	5-13-11	5-13-11	
Lab ID:	05-092-02					
Client ID:	**S2-00-051011**					
Arsenic	ND	11	6010B	5-13-11	5-13-11	
Barium	130	2.7	6010B	5-13-11	5-13-11	
Cadmium	ND	0.54	6010B	5-13-11	5-13-11	
Chromium	28	0.54	6010B	5-13-11	5-13-11	
Lead	13	5.4	6010B	5-13-11	5-13-11	
Mercury	ND	0.27	7471A	5-11-11	5-11-11	
Selenium	ND	11	6010B	5-13-11	5-13-11	
Silver	ND	0.54	6010B	5-13-11	5-13-11	

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

TOTAL METALS
EPA 6010B/7471A

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-092-03					
Client ID:	**S3-00-051011**					
Arsenic	ND	11	6010B	5-13-11	5-13-11	
Barium	91	2.7	6010B	5-13-11	5-13-11	
Cadmium	ND	0.53	6010B	5-13-11	5-13-11	
Chromium	18	0.53	6010B	5-13-11	5-13-11	
Lead	10	5.3	6010B	5-13-11	5-13-11	
Mercury	ND	0.27	7471A	5-11-11	5-11-11	
Selenium	ND	11	6010B	5-13-11	5-13-11	
Silver	ND	0.53	6010B	5-13-11	5-13-11	

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

TOTAL METALS
EPA 6010B
METHOD BLANK QUALITY CONTROL

Date Extracted:	5-13-11
Date Analyzed:	5-13-11
Matrix:	Soil
Units:	mg/kg (ppm)
Lab ID:	MB0513S1

Analyte	Method	Result	PQL
Arsenic	6010B	ND	10
Barium	6010B	ND	2.5
Cadmium	6010B	ND	0.50
Chromium	6010B	ND	0.50
Lead	6010B	ND	5.0
Selenium	6010B	ND	10
Silver	6010B	ND	0.50

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

TOTAL MERCURY
EPA 7471A
METHOD BLANK QUALITY CONTROL

Date Extracted:	5-11-11
Date Analyzed:	5-11-11
Matrix:	Soil
Units:	mg/kg (ppm)
Lab ID:	MB0511S1

Analyte	Method	Result	PQL
Mercury	7471A	ND	0.25

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

TOTAL METALS
EPA 6010B
DUPLICATE QUALITY CONTROL

Date Extracted: 5-13-11
Date Analyzed: 5-13-11

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 05-090-01

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Arsenic	ND	ND	NA	10	
Barium	67.1	71.8	7	2.5	
Cadmium	ND	ND	NA	0.50	
Chromium	40.5	43.0	6	0.50	
Lead	9.79	9.83	0	5.0	
Selenium	ND	ND	NA	10	
Silver	ND	ND	NA	0.50	

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

TOTAL MERCURY
EPA 7471A
DUPLICATE QUALITY CONTROL

Date Extracted: 5-11-11
Date Analyzed: 5-11-11

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 05-081-13

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Mercury	**ND**	**ND**	NA	0.25	

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

TOTAL METALS
EPA 6010B
MS/MSD QUALITY CONTROL

Date Extracted: 5-13-11
Date Analyzed: 5-13-11

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 05-090-01

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Arsenic	100	**92.6**	93	**92.8**	93	0	
Barium	100	**176**	109	**168**	101	5	
Cadmium	50.0	**48.4**	97	**47.6**	95	2	
Chromium	100	**137**	97	**132**	92	4	
Lead	250	**240**	92	**237**	91	1	
Selenium	100	**96.0**	96	**94.9**	95	1	
Silver	25.0	**22.3**	89	**22.0**	88	2	

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

TOTAL MERCURY
EPA 7471A
MS/MSD QUALITY CONTROL

Date Extracted: 5-11-11
Date Analyzed: 5-11-11

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 05-081-13

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Mercury	**ND**	**ND**	NA	0.25	

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

ORGANOPHOSPHORUS PESTICIDES by EPA 8270D/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**S1-00-051011**					
Laboratory ID:	05-092-01					
Dichlorvos(DDVP)	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
Mevinphos/Phosdrin	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
Ethoprophos	ND	0.56	EPA 8270/SIM	5-16-11	5-17-11	
Monocrotophos	ND	0.56	EPA 8270/SIM	5-16-11	5-17-11	
Naled	ND	0.56	EPA 8270/SIM	5-16-11	5-17-11	
Sulfotepp	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
Phorate	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
Dimethoate	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
Demeton-S	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
Diazinon	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
Disulfoton	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
Parathion-methyl	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
Fenchlorphos/Ronnel	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
Malathion	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
Fenthion	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
Parathion-ethyl	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
Chlorpyrifos/Dursban	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
Trichloronate	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
Merphos&Merphos-oxone	ND	0.56	EPA 8270/SIM	5-16-11	5-17-11	
Stirofos/Tetrachlorvinphos	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
Tokuthion/Prothiofos	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
Fensulfothion	ND	0.56	EPA 8270/SIM	5-16-11	5-17-11	
Bolstar/Sulprofos	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
EPN	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
Azinphos-methyl/Guthion	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
Coumaphos	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
Surrogate:	*Percent Recovery*	*Control Limits*				
Tributyl phosphate	*106*	*28 - 109*				
Triphenyl phosphate	*.--*	*37 - 118*				F

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

ORGANOPHOSPHORUS PESTICIDES by EPA 8270D/SIM METHOD BLANK QUALITY CONTROL

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0516S1					
Dichlorvos(DDVP)	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
Mevinphos/Phosdrin	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
Ethoprophos	ND	0.050	EPA 8270/SIM	5-16-11	5-16-11	
Monocrotophos	ND	0.050	EPA 8270/SIM	5-16-11	5-16-11	
Naled	ND	0.050	EPA 8270/SIM	5-16-11	5-16-11	
Sulfotepp	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
Phorate	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
Dimethoate	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
Demeton-S	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
Diazinon	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
Disulfoton	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
Parathion-methyl	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
Fenchlorphos/Ronnel	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
Malathion	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
Fenthion	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
Parathion-ethyl	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
Chlorpyrifos/Dursban	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
Trichloronate	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
Merphos&Merphos-oxone	ND	0.050	EPA 8270/SIM	5-16-11	5-16-11	
Stirofos/Tetrachlorvinphos	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
Tokuthion/Prothiofos	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
Fensulfothion	ND	0.050	EPA 8270/SIM	5-16-11	5-16-11	
Bolstar/Sulprofos	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
EPN	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
Azinphos-methyl/Guthion	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
Coumaphos	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
Surrogate:	*Percent Recovery*	*Control Limits*				
Tributyl phosphate	*65*	*28 - 109*				
Triphenyl phosphate	*80*	*37 - 118*				

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

ORGANOPHOSPHORUS PESTICIDES by EPA 8270D/SIM SB/SBD QUALITY CONTROL

Matrix: Soil
Units: mg/Kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0516S1									
	SB	SBD	SB	SBD	SB	SBD				
Dichlorvos(DDVP)	0.0585	0.0612	0.100	0.100	59	61	45 - 110	5	30	
Mevinphos/Phosdrin	0.0543	0.0590	0.100	0.100	54	59	50 - 110	8	30	
Ethoprophos	0.0741	0.0817	0.100	0.100	74	82	50 - 110	10	30	
Sulfotepp	0.0798	0.0856	0.100	0.100	80	86	45 - 110	7	30	
Phorate	0.0784	0.0849	0.100	0.100	78	85	50 - 110	8	30	
Dimethoate	0.0780	0.0863	0.100	0.100	78	86	50 - 110	10	30	
Demeton-S	0.0713	0.0813	0.100	0.100	71	81	45 - 110	13	30	
Diazinon	0.0739	0.0814	0.100	0.100	74	81	50 - 110	10	30	
Disulfoton	0.0790	0.0865	0.100	0.100	79	87	50 - 110	9	30	
Parathion-methyl	0.0708	0.0803	0.100	0.100	71	80	60 - 120	13	30	
Fenchlorphos/Ronnel	0.0879	0.0963	0.100	0.100	88	96	50 - 110	9	30	
Malathion	0.109	0.119	0.100	0.100	109	119	50 - 120	9	30	
Fenthion	0.0872	0.0949	0.100	0.100	87	95	50 - 110	8	30	
Parathion-ethyl	0.0679	0.0767	0.100	0.100	68	77	45 - 110	12	30	
Chlorpyrifos/Dursban	0.0850	0.0919	0.100	0.100	85	92	50 - 110	8	30	
Trichloronate	0.0872	0.0930	0.100	0.100	87	93	50 - 110	6	30	
Stirofos/Tetrachlorvinphos	0.139	0.153	0.100	0.100	139	153	80 - 160	10	30	
Tokuthion/Prothiofos	0.0790	0.0880	0.100	0.100	79	88	50 - 110	11	30	
Fensulfothion	0.0801	0.0965	0.100	0.100	80	97	45 - 110	19	30	
Bolstar/Sulprofos	0.0817	0.0919	0.100	0.100	82	92	50 - 110	12	30	
EPN	0.0700	0.0792	0.100	0.100	70	79	50 - 110	12	30	
Azinphos-methyl/Guthion	0.127	0.139	0.100	0.100	127	139	70 - 140	9	30	
Coumaphos	0.0728	0.0860	0.100	0.100	73	86	60 - 120	17	30	
Surrogate:										
Tributyl phosphate					*68*	*71*	*28 - 109*			
Triphenyl phosphate					*78*	*86*	*37 - 118*			

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

NWTPH-Gx/BTEX

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**S2-00-051011**					
Laboratory ID:	05-092-02					
Benzene	**ND**	0.023	EPA 8021	5-13-11	5-16-11	
Toluene	**0.60**	0.12	EPA 8021	5-13-11	5-16-11	
Ethyl Benzene	**27**	2.9	EPA 8021	5-13-11	5-17-11	
m,p-Xylene	**180**	2.9	EPA 8021	5-13-11	5-17-11	
o-Xylene	**31**	2.9	EPA 8021	5-13-11	5-17-11	
Gasoline	**1900**	290	NWTPH-Gx	5-13-11	5-17-11	Z
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*92*	*68-124*				

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

NWTPH-Gx/BTEX
QUALITY CONTROL

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0513S2					
Benzene	ND	0.020	EPA 8021	5-13-11	5-13-11	
Toluene	ND	0.050	EPA 8021	5-13-11	5-13-11	
Ethyl Benzene	ND	0.050	EPA 8021	5-13-11	5-13-11	
m,p-Xylene	ND	0.050	EPA 8021	5-13-11	5-13-11	
o-Xylene	ND	0.050	EPA 8021	5-13-11	5-13-11	
Gasoline	ND	5.0	NWTPH-Gx	5-13-11	5-13-11	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*91*	*68-124*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	05-094-20										
	ORIG	DUP									
Benzene	ND	ND	NA	NA		NA		NA	NA	30	
Toluene	ND	ND	NA	NA		NA		NA	NA	30	
Ethyl Benzene	ND	ND	NA	NA		NA		NA	NA	30	
m,p-Xylene	ND	ND	NA	NA		NA		NA	NA	30	
o-Xylene	ND	ND	NA	NA		NA		NA	NA	30	
Gasoline	ND	ND	NA	NA		NA		NA	NA	30	
Surrogate:											
Fluorobenzene						*110*	*104*	*68-124*			
SPIKE BLANKS											
Laboratory ID:	SB0513S1										
	SB	SBD	SB	SBD		SB	SBD				
Benzene	1.02	0.986	1.00	1.00		102	99	77-114	3	9	
Toluene	1.07	1.05	1.00	1.00		107	105	80-115	2	9	
Ethyl Benzene	1.13	1.12	1.00	1.00		113	112	80-118	1	9	
m,p-Xylene	1.01	0.993	1.00	1.00		101	99	82-118	2	9	
o-Xylene	1.00	0.970	1.00	1.00		100	97	82-116	3	9	
Surrogate:											
Fluorobenzene						*93*	*89*	*68-124*			

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

NWTPH-Dx
(with acid/silica gel clean-up)

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**S1-00-051011**					
Laboratory ID:	05-092-01					
Diesel Range Organics	**ND**	12000	NWTPH-Dx	5-18-11	5-18-11	U1
Lube Oil	**37000**	1100	NWTPH-Dx	5-18-11	5-18-11	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*129*	*50-150*				
Client ID:	**S2-00-051011**					
Laboratory ID:	05-092-02					
Diesel Range Organics	**ND**	540	NWTPH-Dx	5-18-11	5-18-11	
Lube Oil	**3100**	1100	NWTPH-Dx	5-18-11	5-18-11	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*107*	*50-150*				
Client ID:	**S3-00-051011**					
Laboratory ID:	05-092-03					
Diesel Range Organics	**ND**	7800	NWTPH-Dx	5-18-11	5-18-11	U1
Lube Oil	**25000**	1100	NWTPH-Dx	5-18-11	5-18-11	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*123*	*50-150*				

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

NWTPH-Dx
QUALITY CONTROL
(with acid/silica gel clean-up)

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0518S1					
Diesel Range Organics	ND	25	NWTPH-Dx	5-18-11	5-18-11	
Lube Oil Range Organics	ND	50	NWTPH-Dx	5-18-11	5-18-11	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*122*	*50-150*				

Analyte	Result		Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE							
Laboratory ID:	05-098-03						
	ORIG	DUP					
Diesel Range Organics	ND	ND			NA	NA	
Lube Oil Range Organics	ND	ND			NA	NA	
Surrogate:							
o-Terphenyl			*116* *108*	*50-150*			

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

% MOISTURE

Date Analyzed: 5-11-11

Client ID	Lab ID	% Moisture
S1-00-051011	05-092-01	11
S2-00-051011	05-092-02	7
S3-00-051011	05-092-03	6

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-napthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

Y - Sample extract treated with an acid/silica gel cleanup procedure.

Z - The sample chromatogram is similar to mineral spirits.

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Chain of Custody

OnSite Environmental Inc.
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • Fax: (425) 885-4603

Laboratory Number: 05-092

Company: TPCHD
Project Number: 020837
Project Name: GUOIA
Project Manager: S Bell
Sampled by: S Bell

Turnaround Request (in working days)

(Check One)

- ☐ Same Day
- ☐ 1 Day
- ☐ 2 Day
- ☐ 3 Day
- ☑ Standard (7 working days)
- ☑ (TPH analysis 5 working days)
- ☐ _____ (other)

Requested Analyses

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	# of Cont.	NWTPH-HCID *	NWTPH-Gx/BTEX	NWTPH-Dx	Volatiles by 8260B	Halogenated Volatiles by 8260B	Semivolatiles by 8270C	PAHs by 8270C / SIM	PCBs by 8082	Pesticides by 8081A	Herbicides by 8151A	Total RCRA Metals (8)	TCLP Metals	HEM by 1664	VPH	EPH	8021B 8260B (8260B)				% Moisture
1	S1-00-051011	5/10/11	10:45	Soil	3	✓		⊗			✓		✓	✓	✓	✓					✓				X
2	S2-00-051011	↓	11:15	↓	2	✓	⊗	⊗			✓		✓			✓									↓
3	S3-00-051011	↓	11:30	↓	2	✓		⊗			✓		✓			✓									↓

	Signature	Company	Date	Time	Comments/Special Instructions
Relinquished by	S Bell	TPCHD	5-11-11	8:40	* If HCID indicates presence of DRO, quantify c NWTPH-Dx
Received by	Van	Speedy	5-11-11	8:40	
Relinquished by	Van	Speedy	5-11-11	1155	⊗ Added 5/12/11. DB (STA)
Received by			5/11/11	1155	
Relinquished by					
Received by					
Reviewed by/Date		Reviewed by/Date			Chromatograms with final report ☐

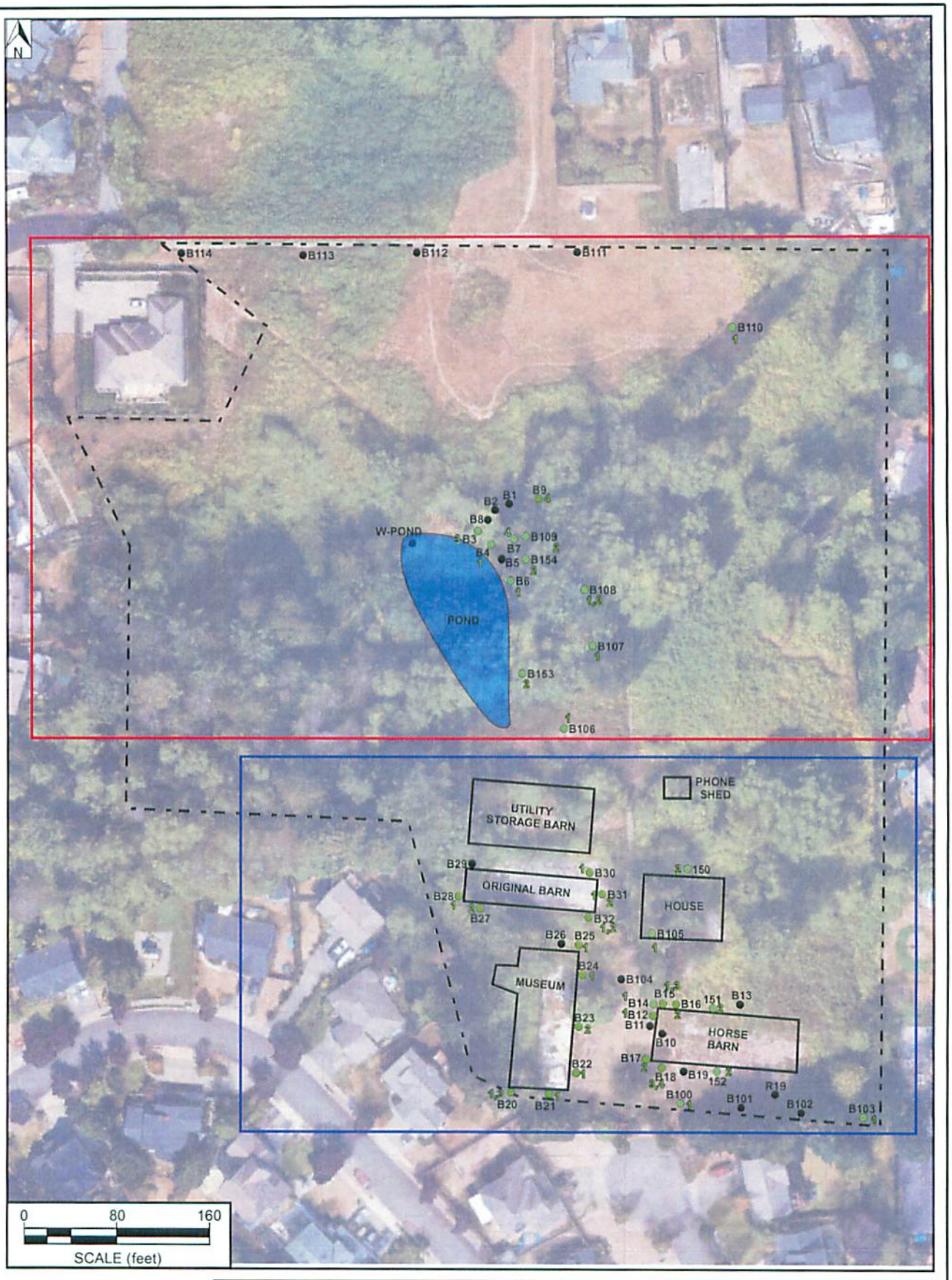
DISTRIBUTION LEGEND: White - OnSite Copy Yellow - Report Copy Pink - Client Copy

TABULAR
TABLE of CONTENTS

- Tab Number 1 — Site Maps
- Tab Number 2 — Site Photographs
- Tab Number 3 — Retention Pond Investigations
- Tab Number 4 — Laboratory Analytical Results: Tables and Laboratory documents
- Tab Number 5 — *Preliminary Major Plat Review* City of Puyallup; March 15, 2018
- Tab Number 6 — Property Demolition & Cleanup
  – Big Dog Demolition (2011 - 2012)
  – Tacoma Abatement Company (2018)
  – DP Excavation (August 2018)
  – DM Disposal & Waste Connections (2018)
- Tab Number 7 — Washington Department of Ecology: Communications & Interactions
- Tab Number 8 — *Arson Fire Investigation*
  – Central Pierce Fire & Rescue: *Initial Incident Report*, June 28, 2010
  – Department of Ecology: *Site Investigation*

Tab Number 1

Site Maps



Green numbers and symbols indicate soil concentrations below the MTCA Method A Cleanup Levels

Blue numbers and symbols indicate groundwater concentrations below the MTCA Method A Cleanup Levels

Red numbers and symbols indicate concentrations above the MTCA Method A Cleanup Levels

EXPLANATION

B6 Soil Boring Location

Property Boundary

Extent of Figure 2 Northern Area

Extent of Figure 3 Southern Area

AEROTECH ENVIRONMENTAL CONSULTING

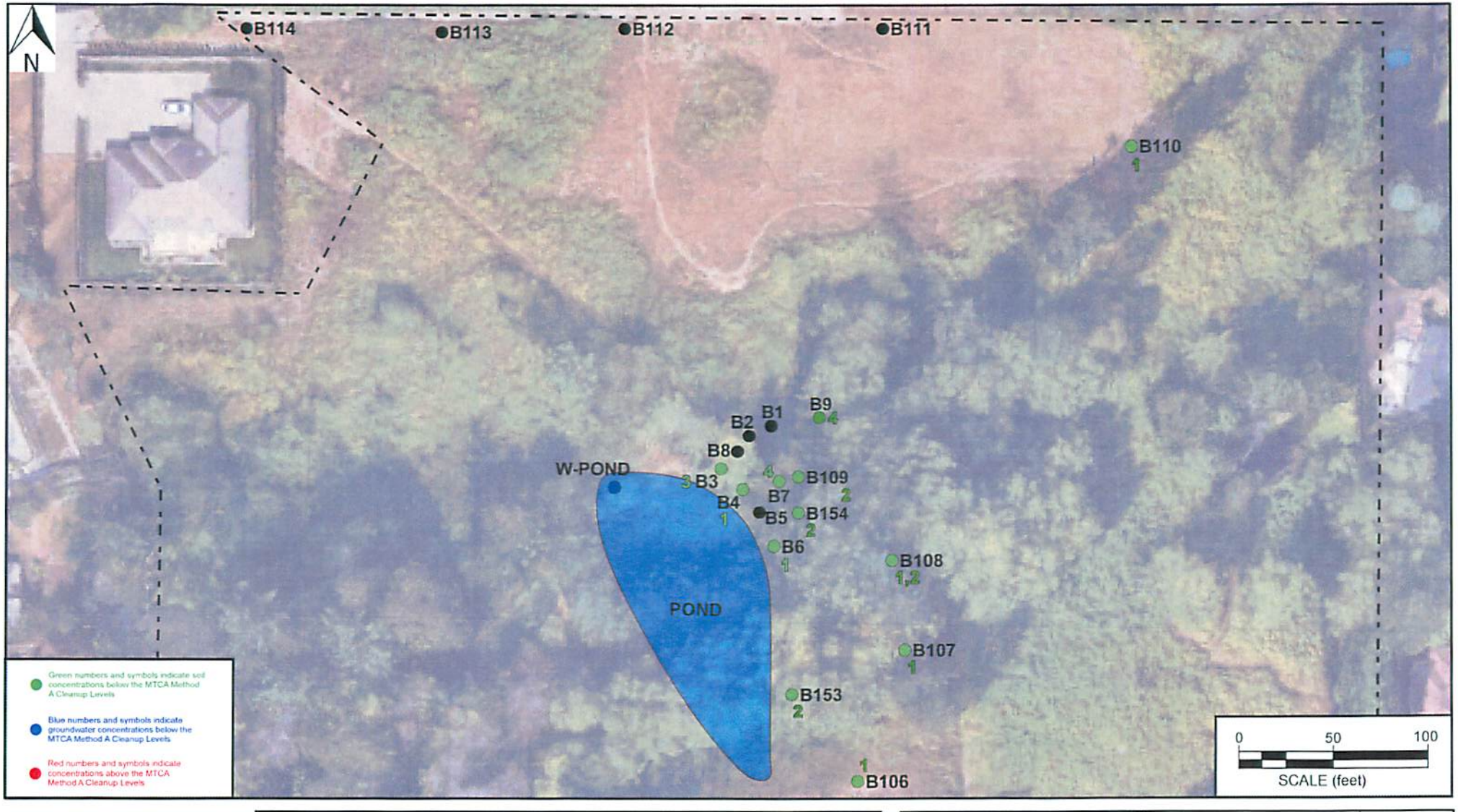
SOIL LABORATORY ANALYTICAL RESULTS

Sunset Pointe
2301 23rd Street Southeast
Puyallup, Washington

Date: 04/22/24

By: Nick Gerkin

Figure: 1



AEROTECH
ENVIRONMENTAL CONSULTING

EXPLANATION

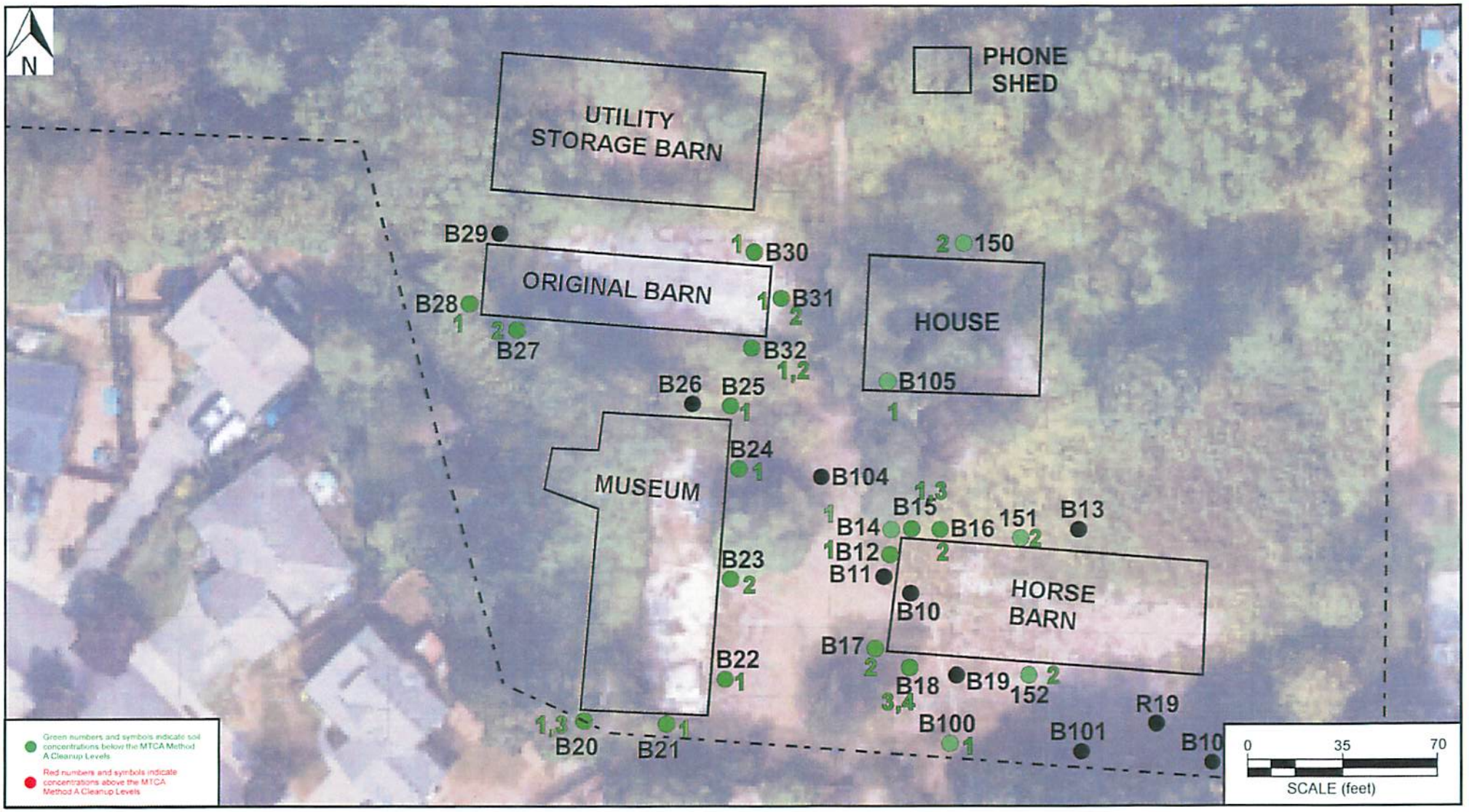
B6 Soil Boring Location

Property Boundary

SOIL LABORATORY ANALYTICAL RESULTS NORTHERN AREA

Sunset Pointe
2301 23rd Street Southeast
Puyallup, Washington

Date: 04/22/24
By: Nick Gerkin
Figure: 2



EXPLANATION

B6 Soil Boring Location

Property Boundary

AEROTECH ENVIRONMENTAL CONSULTING

SOIL LABORATORY ANALYTICAL RESULTS SOUTHERN AREA

Sunset Pointe
2301 23rd Street Southeast
Puyallup, Washington

Date: 04/22/24
By: Nick Gerkin
Figure: 3

Tab No.2

SOIL SAMPLING PHOTOGRAPHIC DOCUMENTATION

Pond Area Sampling
(January 26, 2024)

Remaining Building Foundations:
Horse Barn
Museum Building
Utility Barn
Residence Main House
(January 27, 2024)

Area-Wide Background Metals Sampling
(March 21, 2024)

Soil Sampling Photographic Documentation

Pond Area Sampling

January 26, 2024

Sunset Pointe
Pond Area Sampling

On-Site: January 26, 2024

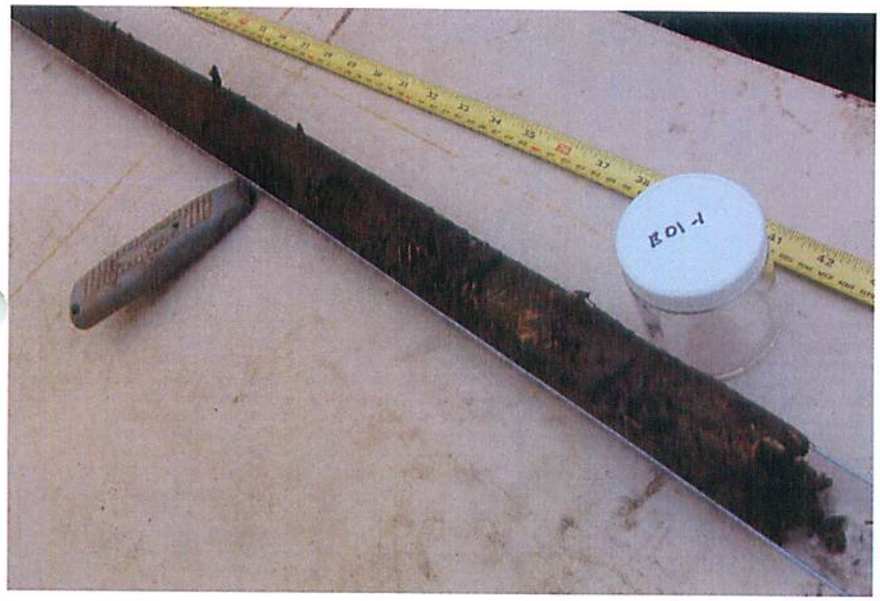
North side slope

Center of testing area
(likely battery wall former
location)

Sampling area south slope

Sunset Pointe
Pond Area Sampling

Boring location B-01



Sampling sleeve

Soils: one to four feet

Boring location B-02

Sampling sleeve

Soils at eight feet depth

Sampling location B-3

Note location slope

Sampling sleeves

Boring location B-4

Sampling sleeve (1-4 feet)

Sampling sleeves

Boring location B-05
(moved due to slippage)

Boring location B-6
Sampling sleeves

Boring Located B-06

Boring location B-07

Sampling sleeves

Boring location B-08

Boring location B-09

Sample sleeves

Boring location B-10
(northeastern edge of Pond)

Soil Sampling Photographic Documentation

Remaining Building Foundations:
Horse Barn
Museum Building
Utility Barn (4,000 sqft)
Residence (main house)

January 27, 2024

Sunset Pointe
Horse Barn Foundation

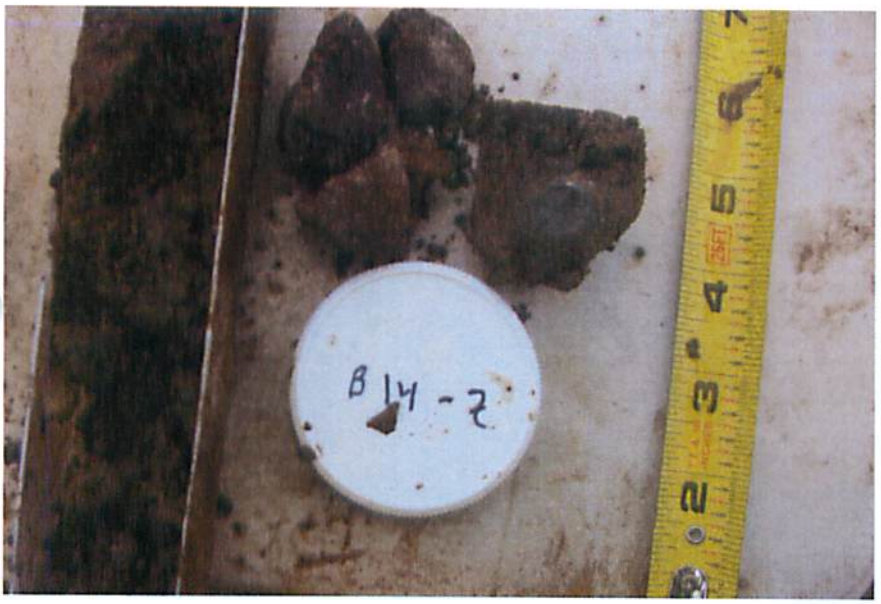
On Site January 27, 2024

Boring location B-11

Soil sampling sleeve

Boring location B-13

Boring location B14



Rocks above confining layer

Boring location B17
Southeastern corner of Property

Boring location B17

Boring location B18

Boring location B-19

Boring location B20
Depth sampling

Surface of Museum foundation

Boring location B22

Boring location B-23

Boring location B-24

Boring location B-25

Blring location B-26

Boring B-25
Soil sampling sleeves

Boring location B-27

Boring B-28

Boring location B-29

Soil boring B-30

Boring location B-31

Boring location B-32

Boring B-32
Soil sampling sleeves

Soil Sampling Photographic Documentation

AREA-WIDE METALS BACKGROUND

March 21, 2024

Sunset Pointe
Puyallup, Washington
Aditional Metals Sampling

On-site: March 21, 2024

Sample B-150
South 12 feet of NW corner
Horse Barn

Sample B-151
East 15 feet of NW corner
edge of foundation Horse Barn

North side of Horse Barn

Sunset Pointe
Puyallup, Washington
Additional Metals Sapling

Sample B-152
East side of Retention Pond

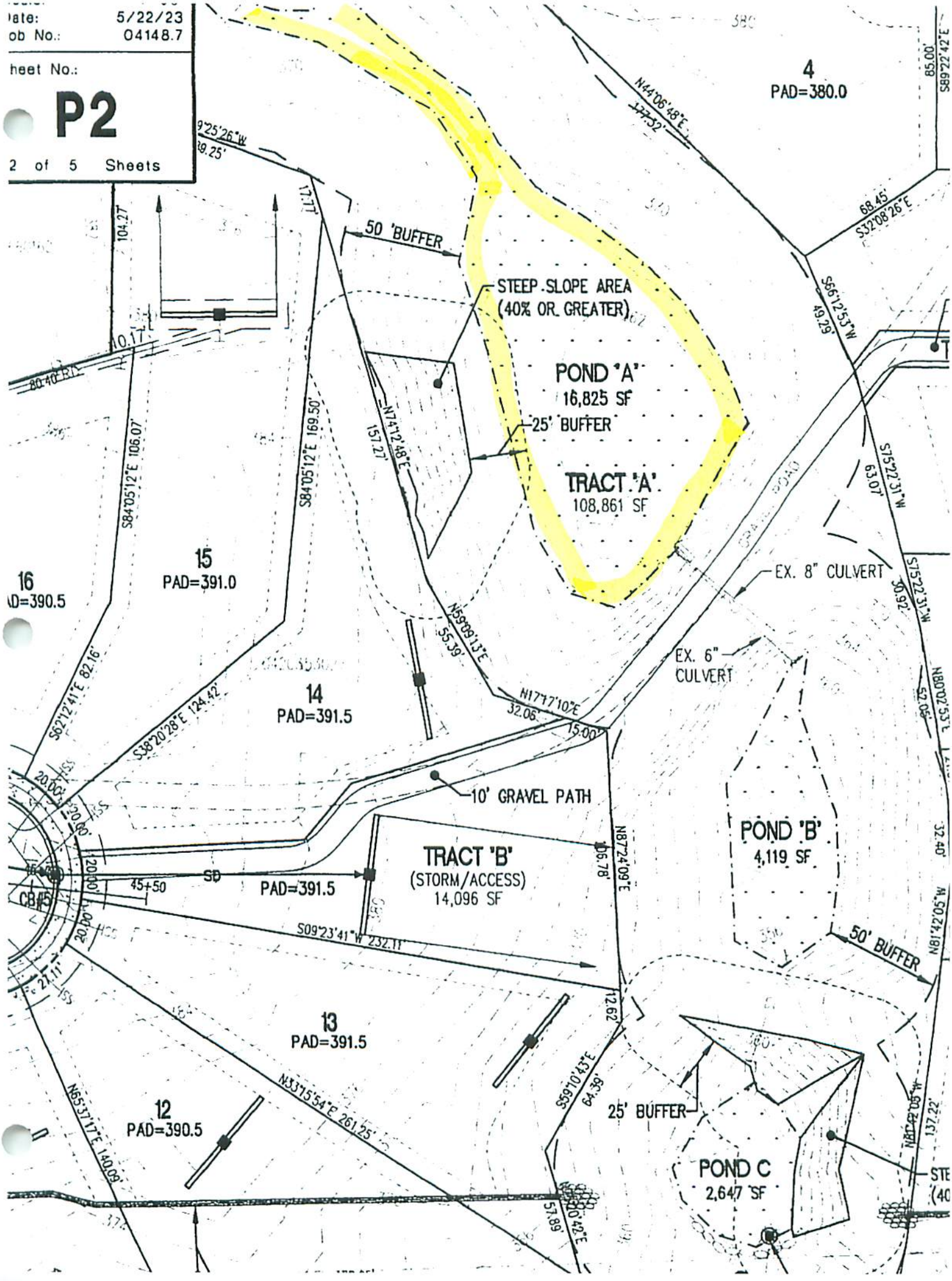
Area of Sample B-153

Sample B-153
NE edge of Pond
East of clay overburden

Tab No.3

Sunset Pointe Development

RENTENTION POND INVESTIGATION

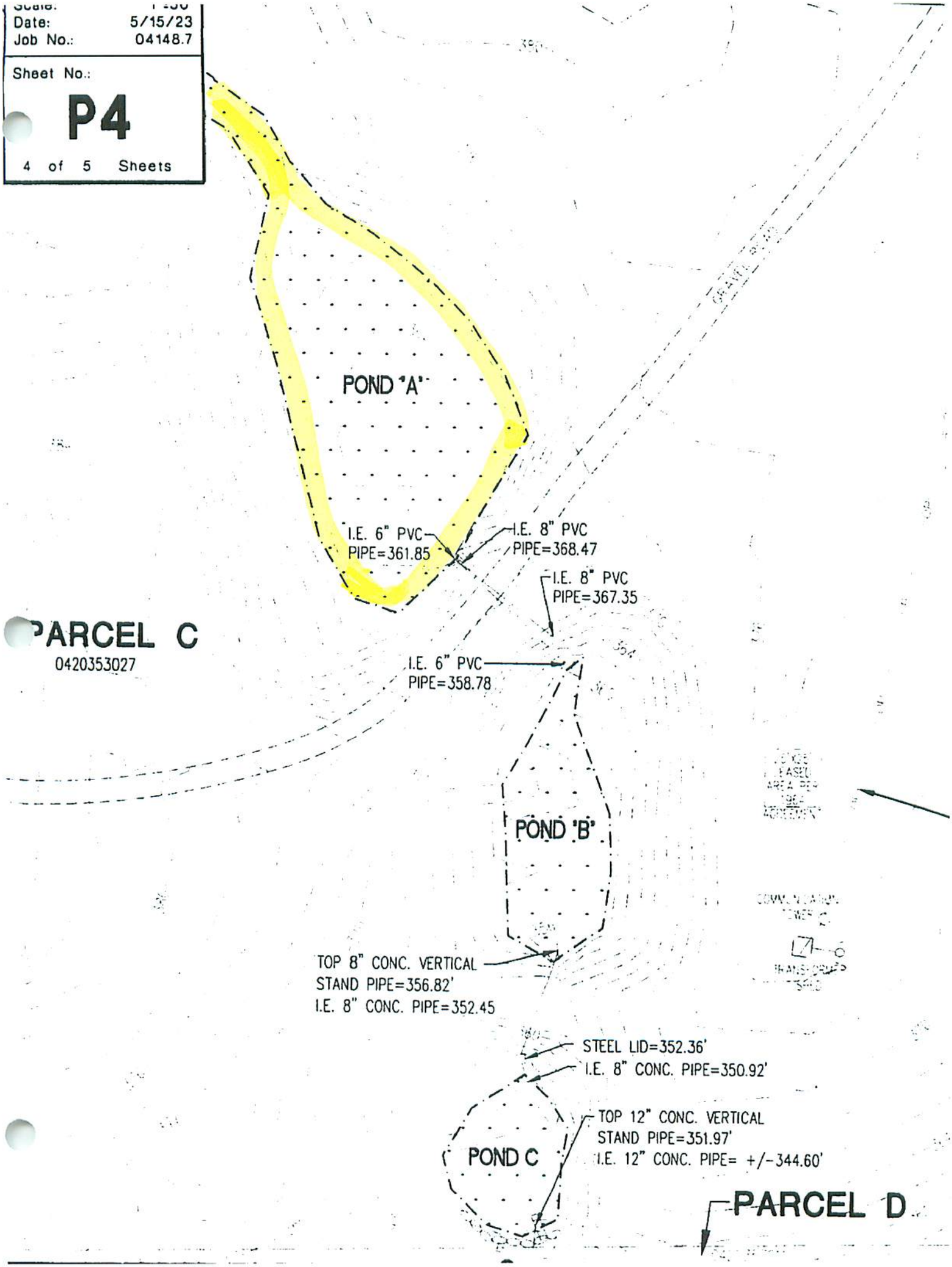

Date: 5/22/23
Job No.: 04148.7
Sheet No.:
P2
2 of 5 Sheets
4
PAD=380.0
50 'BUFFER
STEEP SLOPE AREA
(40% OR GREATER)
POND "A"
16,825 SF
25' BUFFER
TRACT 'A'
108,861 SF
15
PAD=391.0
16
PAD=390.5
14
PAD=391.5
EX. 8" CULVERT
EX. 6"
CULVERT
10' GRAVEL PATH
TRACT 'B'
(STORM/ACCESS)
14,096 SF
PAD=391.5
POND "B"
4,119 SF
50' BUFFER
13
PAD=391.5
12
PAD=390.5
25' BUFFER
POND C
2,647 SF
S84°05'12"E 169.50'
S84°05'12"E 106.07'
N74°12'48"E
157.27'
N59°09'13"E
55.39'
N17°17'10"E
32.06'
15.00'
S62°12'41"E 82.16'
S38°20'28"E 124.42'
N87°24'09"E
106.78'
S09°23'41"W 232.11'
N33°15'54"E 261.25'
N65°37'17"E 140.09'
S59°10'43"E
64.39'
N80°00'42"E
57.89'
N44°06'48"E
177.52'
S66°12'53"W
49.29'
S75°22'31"W
63.07'
S75°22'31"W
30.92'
N80°02'53"E
52.05'
N50°24'18"W
137.22'
S89°22'42"E
85.00'
S32°08'26"E
68.45'
S29°25'26"W
89.25'
80-40' RT
104.27'
10.17'
11.77'
32.40'
CB#5
SD
45+50
20.00'
120.00'
21.11'

Scale: 1"=50'
Date: 5/15/23
Job No.: 04148.7

Sheet No.:

P4

4 of 5 Sheets



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(907) 575-6661

5319 SW Westgate Dr., Suite 24D
Portland, Oregon 97221

2916 NW Bucklin Hill Road, Suite 126
Silverdale, Washington 98383

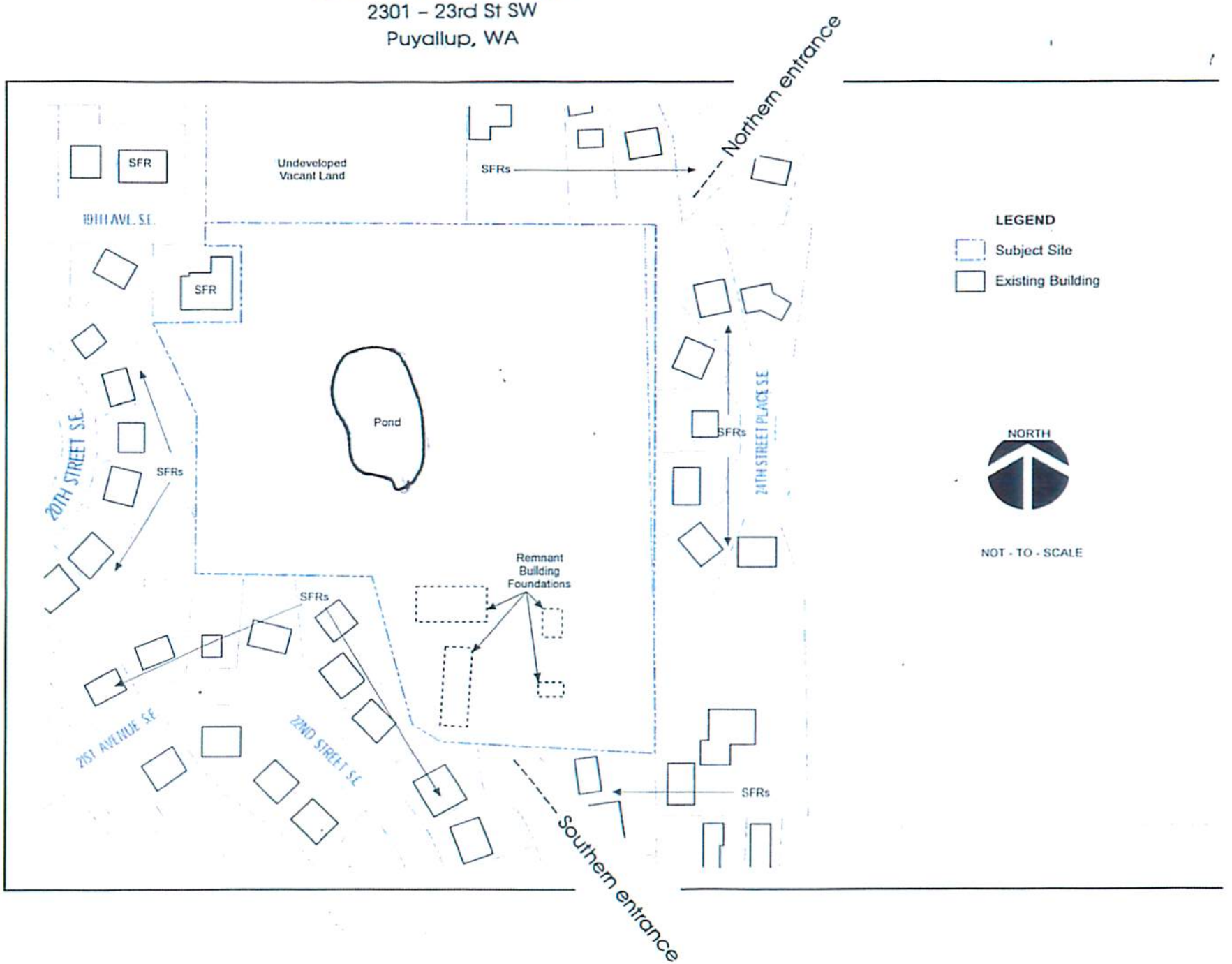
January 2, 2024

RE: SUNSET POINTE DEVELOPMENT
2301 - 23rd Street Southwest
Puyallup, Washington

Land Clearing for Access of North Site of Pond Wall
Removal of debris not required

Alan T. Blotch
AEROTECH ENVIRONMENTAL
(360) 710-5899
Alan@DirtyDirt.us

Sunset Pointe Development
2301 – 23rd St SW
Puyallup, WA



Sunset Pointe Pond
Puyallup, Washington

NE Corner of Parcel
19th Ave SE & 21st St SE

NE Corner entrance

North side of Parcel

Northern side of Parcel

North Pond "wall"
(primary area of soil
investigation)

South side runoff slope and
swale discharge into Pond

West side access to Pond
(20' elevation drop)

View of Pond
twenty foot elevation drop
(eastern view from west side)

West side surface access to Pond

Southern entrance to Parcel

Southern entrance driveway

North side of Pond

Sunset Pointe
Directions to Pond

Entrance located at corner of
19th Ave SE
and 22 st SE in Puyallup

Entrance on the right

Address of 2013 - 19th Ave SE,
Puyallup is the house across the
street

Down the long path

Down this long path to the south

This is the right turn onto the western path

Sunset Pointe
Entrance to edge of Pond

At this point you are just about on the east edge of the pond.
To the left is the access to the east side of the pond.
To the right is the path to the north side access.

Here is the east side assess point.
About 25-30 feet above the pond

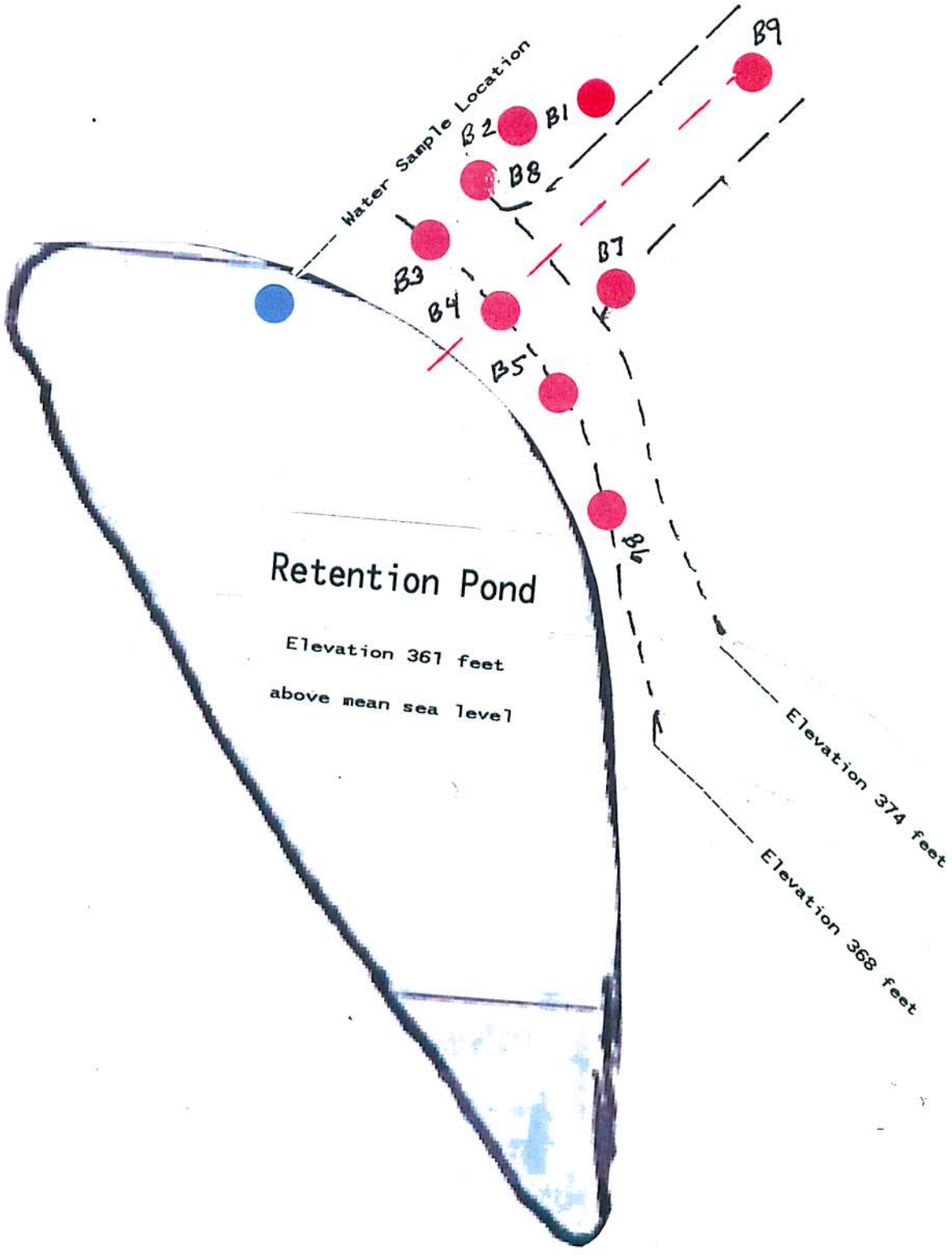
The parth to the north access.
This is where it starts getting muddy
Had to make cuts into the soils in order to remove the very thick blackberries.

Path doen to the north side.
This access point is at water level.
May have to hand sample one location here.

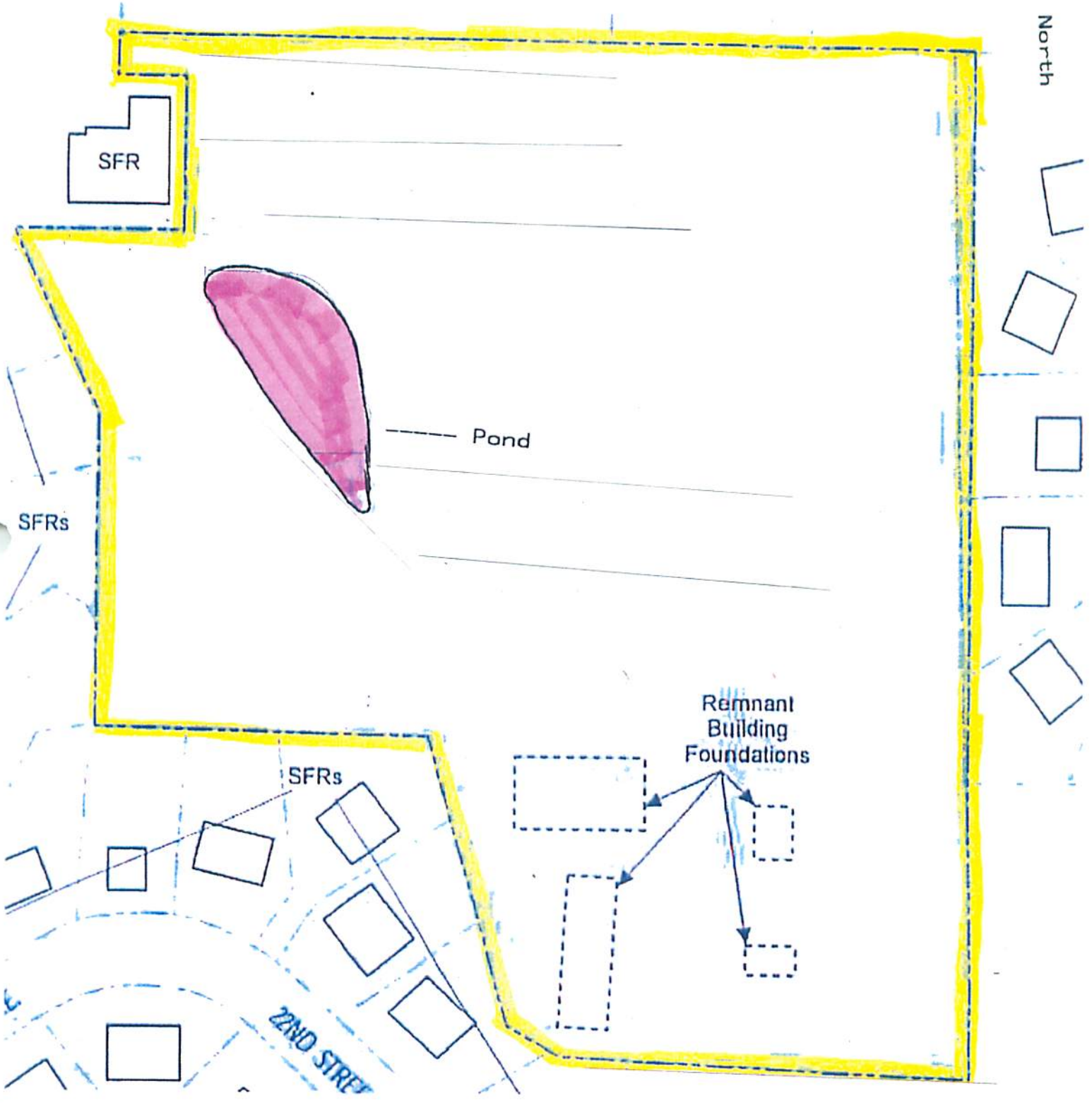
Slope up from the pond.
This is the main issue; will the LAR
be able to got up in muddy conditions?

The north edge of the pond.
Above water level 8-10 feet

Sunset Pointe Development
2301 – 23rd Street SE
Puyallup, Washington



Sunset Pointe Development
2301 – 23rd Street SE
Puyallup, Washington



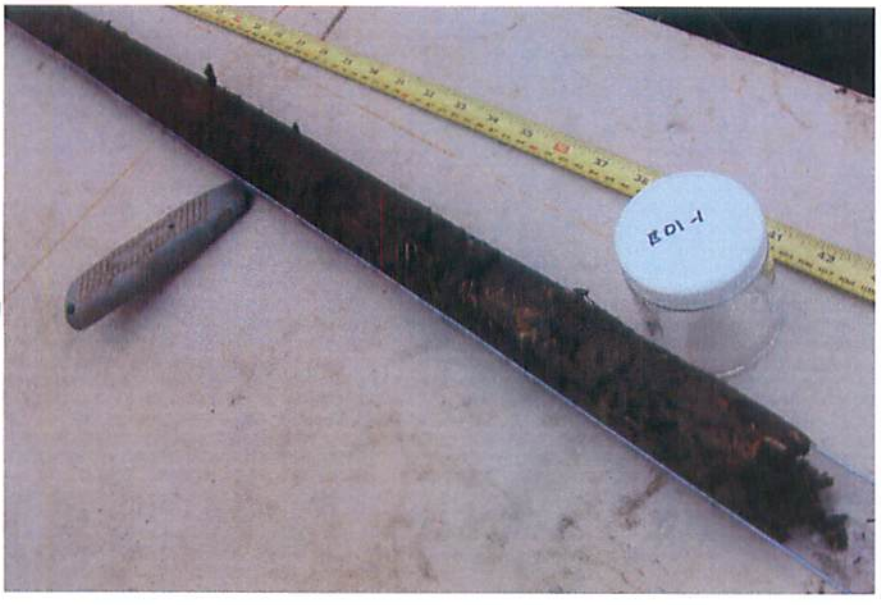
Drawings not to scale

North side slope

Center of testing area
(likely battery wall former
location)

Sampling area south slope

Boring location B-01



Sampling sleeve

Soils: one to four feet

Boring location B-02

Sampling sleeve

Soils at eight feet depth

Sampling location B-3

Note location slope

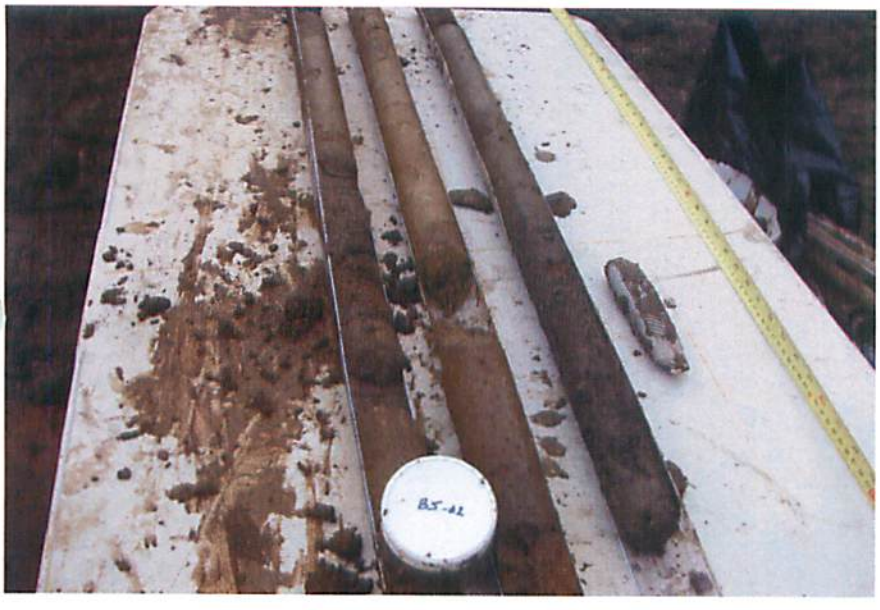
Sampling sleeves

Boring location B-4

Sampling sleeve (1-4 feet)

Sampling sleeves

Boring location B-05
(moved due to slippage)



Boring location B-6
Sampling sleeves

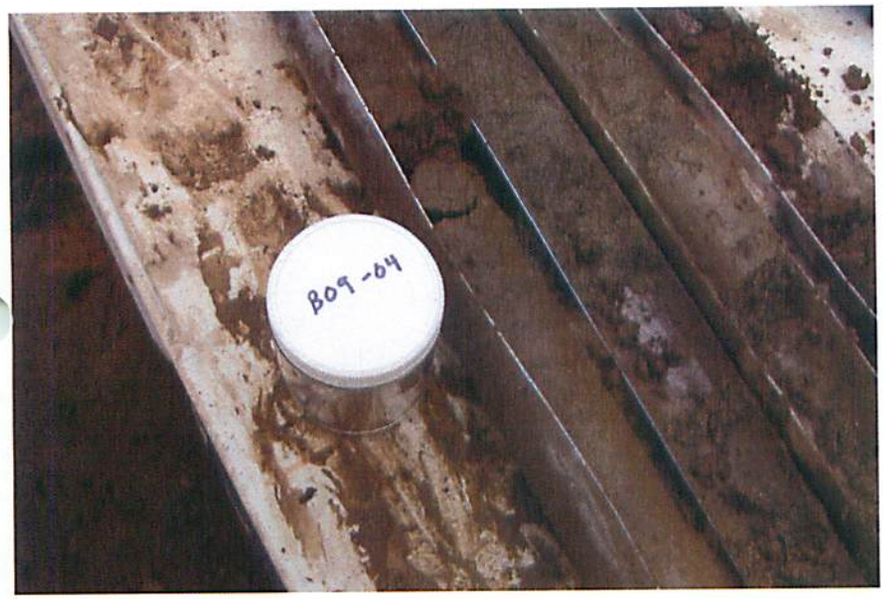
Boring Located B-06

Boring location B-07

Sampling sleeves

Boring location B-08

Boring location B-09



Sample sleeves

Boring location B-10
(northeastern edge of Pond)

Tab No.4

LABORATORY ANALYTICAL RESULTS: TABLES

(Tables 1-4)

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TABLE 1
SOIL ANALYTICAL RESULTS
Petroleum & Pesticides
Sunset Pointe Development
2301 23rd Street Southeast
Puyallup, Washington

Aerotech Environmental Consulting, Inc. - Phase II Limited & Targeted Subsurface Assessment

Sample ID	Soil Boring/Point Well ID	Sampling Date	Sample Depth	Percent Moisture	TPHg	TPHd	TPHo	Benzene	Toluene	Ethyl-benzene	Xylenes	PAHs	Toxaphene	4,4'-DDD	4,4'-DDT	Metho-oxychlor
			Feet BGS	%	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B3-3	B3	01/27/24	3	19.7	<6.08	<61.6	<123	<0.0213	<0.0365	<0.0304	<0.0912	--	--	--	--	--
B4-1	B4	01/27/24	8	18.9	--	<61.0	<122	--	--	--	--	--	--	--	--	--
B6-1	B6	01/27/24	12	15.6	--	<54.8	<110	--	--	--	--	--	--	--	--	--
B7-4	B7	01/27/24	4	24.6	--	<64.7	<129	--	--	--	--	--	--	--	--	--
B9-04	B9	01/27/24	16	21.2	--	--	--	--	--	--	--	--	--	--	--	--
B12-01	B12	01/30/24	1	14.1	--	--	--	--	--	--	--	--	--	--	--	--
B14-01	B14	01/30/24	1	21.4	--	<59.6	<119	--	--	--	--	--	--	--	--	--
B15-01	B15	01/30/24	1	10.4	--	--	--	--	--	--	--	--	--	--	--	--
B15-03	B15	01/30/24	3	14.0	<5.69	--	--	<0.0199	<0.0341	<0.0284	<0.0853	--	--	--	--	--
B16-02	B16	01/30/24	2	9.29	--	--	--	--	--	--	--	--	--	--	--	--
B17-02	B17	01/30/24	2	13.9	--	--	--	--	--	--	--	--	--	--	--	--
B18-03	B18	01/30/24	3	18.1	--	--	--	--	--	--	--	--	--	--	--	--
B18-04	B18	01/30/24	4	19.8	<6.46	--	--	<0.0226	<0.0387	<0.0323	<0.0969	--	--	--	--	--
B19-01	B19	01/30/24	1	--	--	--	--	--	--	--	--	--	--	--	--	--
B20-01	B20	01/30/24	1	26.0	--	<70.3	1,870	--	--	--	--	--	--	--	--	--
B20-02	B20	01/30/24	2	12.7	--	<54.7	115	--	--	--	--	--	--	--	--	--
B20-03	B20	01/30/24	3	11.2	--	<54.0	968	--	--	--	--	--	--	--	--	--
B20-04	B20	01/30/24	4	13.8	--	<56.6	<113	--	--	--	--	--	--	--	--	--
B21-01	B20	01/30/24	1	8.75	--	<78.8	<158	--	--	--	--	--	--	--	--	--
B22-01	B22	01/30/24	1	10.3	--	--	--	--	--	--	--	--	--	--	--	--
B23-02	B23	01/30/24	2	14.6	--	--	--	--	--	--	--	ND	<1.10	<0.0110	<0.0110	<0.0110
B24-01	B24	01/30/24	1	7.87	--	--	--	--	--	--	--	--	--	--	--	--
B24-02	B24	01/30/24	2	7.80	--	<53.6	<107	--	--	--	--	--	--	--	--	--
B25-01	B25	01/30/24	1	14.5	--	--	--	--	--	--	--	--	--	--	--	--
B25-02	B25	01/30/24	2	10.2	--	<53.5	<107	--	--	--	--	--	--	--	--	--
B27-02	B27	01/30/24	2	30.0	--	--	--	--	--	--	--	--	--	--	--	--
B28-01	B28	01/30/24	1	10.8	--	--	--	--	--	--	--	--	--	--	--	--
B30-01	B30	01/30/24	1	39.2	--	--	--	--	--	--	--	--	--	--	--	--
B31-02	B31	01/30/24	2	21.4	--	--	--	--	--	--	--	--	--	--	--	--
B32-01	B32	01/30/24	1	29.8	--	--	--	--	--	--	--	--	--	--	--	--
B32-02	B32	01/30/04	2	21.9	--	--	--	--	--	--	--	--	--	--	--	--
B100-01	B100	03/14/24	1	22.2	--	--	--	--	--	--	--	--	--	--	--	--
B103-01	B103	03/14/24	1	28.1	--	--	--	--	--	--	--	--	--	--	--	--
B105-01	B105	03/14/24	1	38.5	--	--	--	--	--	--	--	--	--	--	--	--
B106-01	B106	03/14/24	1	11.8	--	--	--	--	--	--	--	--	--	--	--	--
B107-01	B107	03/14/24	1	25.8	--	--	--	--	--	--	--	--	--	--	--	--
MTCA Method A Cleanup Levels					30	2000		0.03	7	6	6	0.10	7.20	2.90	3.00	--

TABLE 1
SOIL ANALYTICAL RESULTS
Petroleum & Pesticides
Sunset Pointe Development
2301 23rd Street Southeast
Puyallup, Washington

Aerotech Environmental Consulting, Inc. - Phase II Limited & Targeted Subsurface Assessment (contined)

Sample ID	Soil Boring/Point Well ID	Sampling Date	Sample Depth	Percent Moisture	TPHg	TPHd	TPHo	Benzene	Toluene	Ethyl-benzene	Xylenes	PAHs	Toxaphene	4,4' -DDD	4,4' -DDT	Metho-oxychlor
			Feet BGS	%	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B108-01	B108	03/14/24	1	16.4	--	--	--	--	--	--	--	--	--	--	--	--
B108-02	B108	03/14/24	2	16.4	--	--	--	--	--	--	--	--	--	--	--	--
B109-02	B109	03/14/24	2	21.3	--	--	--	--	--	--	--	--	--	--	--	--
B110-01	B110	03/14/24	1	30.6	--	--	--	--	--	--	--	--	--	--	--	--
B150-2	B150	03/21/24	2	7.4	--	--	--	--	--	--	--	--	--	--	--	--
B151-2	B151	03/21/24	2	25.2	--	--	--	--	--	--	--	--	--	--	--	--
B152-2	B152	03/21/24	2	22.5	--	--	--	--	--	--	--	--	--	--	--	--
B153-2	B153	03/21/24	2	34.0	--	--	--	--	--	--	--	--	--	--	--	--
B154-2	B154	03/21/24	2	23.9	--	--	--	--	--	--	--	--	--	--	--	--
MTCA Method A Cleanup Levels					30	2000		0.03	7	6	6	0.10	7.20	2.90	3.00	--

EXPLANATION

MTCA = Model Toxic Control Act Cleanup Level (WAC173-340-900)
BGS = Below Ground Surface mg/kg = milligram of analyte per kilogram of soil
< = not detected at indicated Laboratory Detection Limits -- = not analyzed
Benzene , Toluene, Ethylbenzene, Xylenes by EPA Method 8260D
PAHs - Polycyclic Aromatic hydrocarbons by EPA Method 8270 SIM
TPHg - Total Petroleum Hydrocarbons - Gasoline by NWTPH-Gx
TPHd - Total Petroleum Hydrocarbons - Diesel by NWTPH-Dx
TPHo - Total Petroleum Hydrocarbons - Motor Oil by NWTPH-Dx extended
Glyphosate by Monsanto Method
Toxaphene; 4,4 '-DDE; 4,4 -DDT; and Methyoxychlor 'Organochlorine Pesticides by EPA Method 8081A
Dicamba and Bentazon Herbicides by EPA Method 8151A(GC/MS)
Bolded numbers and red-shaded cells denote concentrations above the MTCA Method A Cleanup Levels for soil
^ = Cleanup Level taken from CLARC Ecology Spreadsheet - Soil Protective of Groundwater in Vadose @13 degrees C (Eq. 747-1)
ND=Not Detected above Laboratory Reportig Limit, see the laboratory reports for the varying Reporting Limts
H=Holding times for preparation or analysis exceeded

TABLE 2
SOIL ANALYTICAL RESULTS
pH & Metals
Sunset Pointe Development
2301 23rd Street Southeast
Puyallup, Washington

Aerotech Environmental Consulting, Inc. - Phase II Limited & Targeted Subsurface Assessment

Sample ID	Soil Boring/Point Wall ID	Sampling Date	Sample Depth	Percent Moisture	pH	Arsenic	Cadmium	Chromium	Hexavalent Chromium	Lead	Mercury
			Feet BGS	%	unitless	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B3-3	B3	01/27/24	3	19.7	6.99H	--	--	--	--	--	--
B4-1	B4	01/27/24	1	18.9	6.24H	--	--	--	--	--	--
B6-1	B6	01/27/24	1	15.6	6.69H	--	--	--	--	--	--
B7-4	B7	01/27/24	4	24.6	6.80H	--	--	--	--	--	--
B9-04	B9	01/27/24	4	21.2	--	4.42	0.0416	--	--	--	--
B12-01	B12	01/30/24	1	14.1	6.95	2.77	0.0591	--	--	--	--
B14-01	B14	01/30/24	1	21.4	--	--	--	25.3	--	12.8	<0.268
B15-01	B15	01/30/24	1	10.4	--	2.87	0.0457	--	--	--	--
B15-03	B15	01/30/24	3	14.0	--	2.73	0.0503	--	--	--	--
B16-02	B16	01/30/24	2	9.29	--	4.25	0.0542	--	--	--	--
B17-02	B17	01/30/24	2	13.9	--	2.37	0.0536	--	--	--	--
B18-03	B18	01/30/24	3	18.1	--	1.97	0.0630	--	--	--	--
B18-04	B18	01/30/24	4	19.8	--	2.81	0.0948	--	--	--	--
B19-01	B19	01/30/24	1	--	6.98H	--	--	--	--	--	--
B20-01	B20	01/30/24	1	26.0	--	2.99	0.312	--	--	--	--
B20-02	B20	01/30/24	2	12.7	--	--	--	--	--	--	--
B20-03	B20	01/30/24	3	11.2	6.67	--	--	--	--	--	--
B20-04	B20	01/30/24	4	13.8	--	--	--	--	--	--	--
B21-01	B20	01/30/24	1	8.75	--	1.62	0.0420	--	--	--	--
B22-01	B22	01/30/24	1	10.3	--	3.28	0.140	--	--	--	--
B23-02	B23	01/30/24	2	14.6	6.53	2.33	0.0500	--	--	--	--
B24-01	B24	01/30/24	1	7.87	--	3.16	0.190	--	--	--	--
B24-02	B24	01/30/24	2	7.80	7.07	--	--	--	--	--	--
B25-01	B25	01/30/24	1	14.5	--	4.72	0.746	--	--	--	--
B25-02	B25	01/30/24	2	10.2	--	--	--	--	--	--	--
B27-02	B27	01/30/24	2	30.0	7.26	4.59	0.216	--	--	--	--
B28-01	B28	01/30/24	1	10.8	--	3.20	0.0352	--	--	--	--
B30-01	B30	01/30/24	1	39.2	--	2.99	0.445	--	--	--	--
B31-02	B31	01/30/24	2	21.4	--	3.45	0.0291	--	--	--	--
B32-01	B32	01/30/24	1	29.8	--	1.86	0.215	--	--	--	--
B32-02	B32	01/30/04	2	21.9	--	1.83	0.0625	33.7	1.63	3.98	<0.199
B100-01	B100	03/14/24	1	22.2	--	5.39	0.117	--	--	--	--
B103-01	B103	03/14/24	1	28.1	--	3.59	0.150	--	--	--	--
B105-01	B105	03/14/24	1	38.5	--	3.60	0.532	--	--	--	--
B106-01	B106	03/14/24	1	11.8	--	2.23	0.132	--	--	--	--
B107-01	B107	03/14/24	1	25.8	--	2.72	0.121	--	--	--	--
B108-01	B108	03/14/24	1	16.4	--	2.88	0.102	--	--	--	--
B108-02	B108	03/14/24	2	16.4	--	3.38	0.109	--	--	--	--
B109-02	B109	03/14/24	2	21.3	--	4.37	0.0685	--	--	--	--
B110-01	B110	03/14/24	1	30.6	--	3.78	0.175	--	--	--	--
B150-2	B150	03/21/24	2	7.4	--	2.96	0.150	--	--	--	--
B151-2	B151	03/21/24	2	25.2	--	2.80	0.251	--	--	--	--
B152-2	B152	03/21/24	2	22.5	--	3.63	0.0900	--	--	--	--
B153-2	B153	03/21/24	2	34.0	--	3.96	0.120	--	--	--	--
B154-2	B154	03/21/24	2	23.9	--	4.41	0.127	--	--	--	--
MTCA Method A Cleanup Levels					--	20	2	2,000	19	250	2

EXPLANATION

MTCA = Model Toxic Control Act Cleanup Level (WAC173-340-900)
BGS = Below Ground Surface mg/kg = milligram of analyte per kilogram of soil
< = not detected at indicated Laboratory Detection Limits -- = not analyzed
Metals by EPA Method 6020
Bolded numbers and red-shaded cells denote concentrations above the MTCA Method A Cleanup Levels for soil
^ = Cleanup Level taken from CLARC Ecology Spreadsheet - Soil Protective of Groundwater in Vadose @13 degrees C (Eq. 747-1)
ND=Not Detected above Laboratory Reportig Limit, see the laboratory reports for the varying Reporting Limts
H=Holding times for preparation or analysis exceeded

TABLE 3
TCLP SOIL ANALYTICAL RESULTS
Sunset Pointe Development
2301 23rd Street Southeast
Puyallup, Washington

Aerotech Environmental Consulting, Inc. - Limited Phase II - Retention Pond Investigation

Sample ID	Soil Boring/Point Well ID	Sampling Date	Sample Depth	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
			Feet BGS	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
B14-01	B14	01/30/24	surface	<0.100	<0.500	<0.100	<0.200	<0.200	<0.020	<0.100	<0.200
RCRA Hazard Levels - Toxicity Characteristic Leaching Procedure (TCLP)				**5.0**	**100.0**	**1.0**	**5.0**	**5.0**	**0.2**	**1.0**	**5.0**

EXPLANATION

MTCA = Model Toxic Control Act Cleanup Level (WAC173-340-900)
BGS = Below Ground Surface µg/L = microgram of analyte per liter of water
< = not detected at indicated Laboratory Detection Limits -- = not analyzed
Metals by 6020 with EPA Method 1311 TCLP Extraction
Bolded numbers and red-shaded cells denote concentrations above the MTCA Method A Cleanup Levels for soil

TABLE 4
GRAB SURFACE WATER ANALYTICAL RESULTS
Sunset Pointe Development
2301 23rd Street Southeast
Puyallup, Washington

Aerotech Environmental Consulting, Inc. - Limited Phase II - Retention Pond Investigation

Sample ID	Soil Boring/Point Well ID	Sampling Date	Sample Depth	Toxaphene	alpha-BHC	beta-BHC	Gamma-BHC (Lindane)	delta-BHC	Heptachlor	Aldrin	Heptachlor epoxide	gamma-Chlordane	Endosulfan I	alpha-Chlordane
			Feet BGS	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Pond Water	Retention Pond	12/09/23	surface	<0.152	<0.0304	<0.0304	<0.0304	<0.0304	<0.0405	<0.0253	<0.0304	<0.0304	<0.0304	<0.0304
MTCA Method A GW Cleanup Levels				--	--	--	--	--	--	--	--	--	--	--
MTCA Method B GW Cleanup Levels				--	--	--	--	--	--	--	--	--	--	--

Sample ID	Soil Boring/Point Well ID	Sampling Date	Sample Depth	Dieldrin	4,4'-DDE	Endrin	Endosulfan II	4,4'-DDD	Endrin aldehyde	Endosulfan sulfate	4,4'-DDT	Endrin ketone	Methoxychlor
			Feet BGS	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Pond Water	Retention Pond	12/09/23	surface	<0.0304	<0.0304	<0.0405	<0.0405	<0.0304	<0.0405	<0.0405	<0.0405	<0.0405	<0.0506
MTCA Method A GW Cleanup Levels				--	--	--	--	--	--	--	--	--	--
MTCA Method B GW Cleanup Levels				--	--	480	480	--	480	18	41	490	--

Sample ID	Soil Boring/Point Well ID	Sampling Date	Sample Depth	Arsenic	Cadmium
			Feet BGS	µg/L	µg/L
Pond Water	Retention Pond	03/18/24	surface	0.99	<0.100
MTCA Method A GW Cleanup Levels				5	5
MTCA Method B GW Cleanup Levels				4.8	8

EXPLANATION

MTCA = Model Toxic Control Act Cleanup Level (WAC173-340-900)
BGS = Below Ground Surface µg/L = microgram of analyte per liter of water
< = not detected at indicated Laboratory Detection Limits -- = not analyzed
Glyphosate by Modified EPA Method 547
Organochlorine Pesticides by EPA Method 8081
Metals by EPA Method 6020
ND = Not Detected (minimum detection limit unknown)
Bolded numbers and red-shaded cells denote concentrations above the MTCA Method A Cleanup Levels for soil
*= No Method A Cleanup Level, Method B Protection of Groundwater Non Cancer Cleanup Level is presented in table

Tab No.5

LABORATORY ANALYTICAL RESULTS: REPORTS

Initial Sampling in Areas of Concern
(Analytical Report dated: February 26, 2024)

Initial Sampling in Areas of Concern
(Analytical Report dated: April 17, 2024)

Area-Wide Soil Metals Background Levels
(Report dated: March 25, 2024)

Pond Water Testing
(Report dated: March 22, 2024)

LABORATORY ANALYTICAL RESULTS: REPORTS

Initial Sampling in Areas of Concern
(Analytical Report dated: February 26, 2024)

Fremont Analytical
An Alliance Technical Group Company
3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

Aerotech
Alan Blotch
14220 Interurban Ave S, Ste. 116
Tukwila, WA 98168

RE: Sunset Pointe
Work Order Number: 2401550

February 26, 2024

Attention Alan Blotch:

Fremont Analytical, Inc. received 26 sample(s) on 1/30/2024 for the analyses presented in the following report.

Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.
Gasoline by NWTPH-Gx
Herbicides by EPA Method 8151A (GC/MS)
Organochlorine Pesticides by EPA Method 8081
pH by EPA Method 9045
pH by SM 4500H+B
Sample Moisture (Percent Moisture)
Volatile Organic Compounds by EPA Method 8260D

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

DoD-ELAP Accreditation #79636 by PJLA, ISO/IEC 17025:2017 and QSM 5.4 for Environmental Testing
ORELAP Certification: WA 100009 (NELAP Recognized) for Environmental Testing
Washington State Department of Ecology Accredited for Environmental Testing, Lab ID C910

Fremont Analytical
An Alliance Technical Group Company

Date: *02/26/2024*

CLIENT: Aerotech
Project: Sunset Pointe
Work Order: 2401550

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2401550-001	B1-1	01/27/2024 12:00 AM	01/30/2024 3:15 PM
2401550-002	B1-2	01/27/2024 12:00 AM	01/30/2024 3:15 PM
2401550-003	B2-1	01/27/2024 12:00 AM	01/30/2024 3:15 PM
2401550-004	B2-2	01/27/2024 12:00 AM	01/30/2024 3:15 PM
2401550-005	B3-1	01/27/2024 12:00 AM	01/30/2024 3:15 PM
2401550-006	B3-2	01/27/2024 12:00 AM	01/30/2024 3:15 PM
2401550-007	B3-3	01/27/2024 12:00 AM	01/30/2024 3:15 PM
2401550-008	B4-1	01/27/2024 12:00 AM	01/30/2024 3:15 PM
2401550-009	B4-2	01/27/2024 12:00 AM	01/30/2024 3:15 PM
2401550-010	B5-1	01/27/2024 12:00 AM	01/30/2024 3:15 PM
2401550-011	B5-2	01/27/2024 12:00 AM	01/30/2024 3:15 PM
2401550-012	B5-3	01/27/2024 12:00 AM	01/30/2024 3:15 PM
2401550-013	B7-1	01/27/2024 12:00 AM	01/30/2024 3:15 PM
2401550-014	B7-2	01/27/2024 12:00 AM	01/30/2024 3:15 PM
2401550-015	B7-3	01/27/2024 12:00 AM	01/30/2024 3:15 PM
2401550-016	B7-4	01/27/2024 12:00 AM	01/30/2024 3:15 PM
2401550-017	B8-1	01/27/2024 12:00 AM	01/30/2024 3:15 PM
2401550-018	B8-2	01/27/2024 12:00 AM	01/30/2024 3:15 PM
2401550-019	B9-1	01/27/2024 12:00 AM	01/30/2024 3:15 PM
2401550-020	B9-2	01/27/2024 12:00 AM	01/30/2024 3:15 PM
2401550-021	B9-03	01/27/2024 12:00 AM	01/30/2024 3:15 PM
2401550-022	B9-04	01/27/2024 12:00 AM	01/30/2024 3:15 PM
2401550-023	B10-01	01/27/2024 12:00 AM	01/30/2024 3:15 PM
2401550-024	B6-1	01/27/2024 12:00 AM	01/30/2024 3:15 PM
2401550-025	Pond Sample	01/30/2024 1:00 PM	01/30/2024 3:15 PM
2401550-026	Trip Blank	01/25/2024 9:01 AM	01/30/2024 3:15 PM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

Brianna Barnes
Project Manager

Case Narrative

WO#: **2401550**
Date: **2/26/2024**

CLIENT: Aerotech
Project: Sunset Pointe

I. SAMPLE RECEIPT:
Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:
Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:
Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.
2401550-025E
TEST_SUB has been Sub Contracted.

Rev1: Additional analysis requested by the client.

Qualifiers:

* - Flagged value is not within established control limits
B - Analyte detected in the associated Method Blank
D - Dilution was required
E - Value above quantitation range
H - Holding times for preparation or analysis exceeded
I - Analyte with an internal standard that does not meet established acceptance criteria
J - Analyte detected below Reporting Limit
N - Tentatively Identified Compound (TIC)
Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria
S - Spike recovery outside accepted recovery limits
ND - Not detected at the Reporting Limit
R - High relative percent difference observed

Acronyms:

%Rec - Percent Recovery
CCB - Continued Calibration Blank
CCV - Continued Calibration Verification
DF - Dilution Factor
DUP - Sample Duplicate
HEM - Hexane Extractable Material
ICV - Initial Calibration Verification
LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
MCL - Maximum Contaminant Level
MB or MBLANK - Method Blank
MDL - Method Detection Limit
MS/MSD - Matrix Spike / Matrix Spike Duplicate
PDS - Post Digestion Spike
Ref Val - Reference Value
REP - Sample Replicate
RL - Reporting Limit
RPD - Relative Percent Difference
SD - Serial Dilution
SGT - Silica Gel Treatment
SPK - Spike
Surr - Surrogate

Client: Aerotech
Project: Sunset Pointe
Lab ID: 2401550-007
Client Sample ID: B3-3

Collection Date: 1/27/2024
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.				Batch ID: 42780		Analyst: AP
Diesel Range Organics	ND	61.6		mg/Kg-dry	1	2/1/2024 5:31:06 PM
Heavy Oil	ND	123		mg/Kg-dry	1	2/1/2024 5:31:06 PM
Total Petroleum Hydrocarbons	ND	185		mg/Kg-dry	1	2/1/2024 5:31:06 PM
Surr: 2-Fluorobiphenyl	128	50 - 150		%Rec	1	2/1/2024 5:31:06 PM
Surr: o-Terphenyl	129	50 - 150		%Rec	1	2/1/2024 5:31:06 PM
Gasoline by NWTPH-Gx				Batch ID: 42778		Analyst: KJ
Gasoline Range Organics	ND	6.08		mg/Kg-dry	1	2/1/2024 8:30:28 AM
Surr: Toluene-d8	99.8	65 - 135		%Rec	1	2/1/2024 8:30:28 AM
Surr: 4-Bromofluorobenzene	98.7	65 - 135		%Rec	1	2/1/2024 8:30:28 AM
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 42778		Analyst: KJ
Benzene	ND	0.0213		mg/Kg-dry	1	2/1/2024 8:30:28 AM
Toluene	ND	0.0365		mg/Kg-dry	1	2/1/2024 8:30:28 AM
Ethylbenzene	ND	0.0304		mg/Kg-dry	1	2/1/2024 8:30:28 AM
m,p-Xylene	ND	0.0608		mg/Kg-dry	1	2/1/2024 8:30:28 AM
o-Xylene	ND	0.0304		mg/Kg-dry	1	2/1/2024 8:30:28 AM
Surr: Dibromofluoromethane	101	79.2 - 123		%Rec	1	2/1/2024 8:30:28 AM
Surr: Toluene-d8	99.9	77.6 - 126		%Rec	1	2/1/2024 8:30:28 AM
Surr: 1-Bromo-4-fluorobenzene	98.7	72 - 131		%Rec	1	2/1/2024 8:30:28 AM
Sample Moisture (Percent Moisture)				Batch ID: R89306		Analyst: BS
Percent Moisture	19.7	0.500		wt%	1	1/31/2024 10:32:28 AM
pH by EPA Method 9045				Batch ID: R89429		Analyst: AM
Hydrogen Ion (pH)	6.99		H	pH	1	2/5/2024 10:20:00 AM

Client: Aerotech
Collection Date: 1/27/2024
Project: Sunset Pointe
Lab ID: 2401550-008
Matrix: Soil
Client Sample ID: B4-1

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.				Batch ID: 42780		Analyst: AP
Diesel Range Organics	ND	61.0		mg/Kg-dry	1	2/1/2024 5:41:59 PM
Heavy Oil	ND	122		mg/Kg-dry	1	2/1/2024 5:41:59 PM
Total Petroleum Hydrocarbons	ND	183		mg/Kg-dry	1	2/1/2024 5:41:59 PM
Surr: 2-Fluorobiphenyl	68.2	50 - 150		%Rec	1	2/1/2024 5:41:59 PM
Surr: o-Terphenyl	62.1	50 - 150		%Rec	1	2/1/2024 5:41:59 PM
Sample Moisture (Percent Moisture)				Batch ID: R89306		Analyst: BS
Percent Moisture	18.9	0.500		wt%	1	1/31/2024 10:32:28 AM
pH by EPA Method 9045				Batch ID: R89429		Analyst: AM
Hydrogen Ion (pH)	6.24		H	pH	1	2/5/2024 10:20:00 AM

Client: Aerotech
Collection Date: 1/27/2024
Project: Sunset Pointe
Lab ID: 2401550-016
Matrix: Soil
Client Sample ID: B7-4

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.				Batch ID: 42780		Analyst: AP
Diesel Range Organics	ND	64.7		mg/Kg-dry	1	2/1/2024 5:52:53 PM
Heavy Oil	ND	129		mg/Kg-dry	1	2/1/2024 5:52:53 PM
Total Petroleum Hydrocarbons	ND	194		mg/Kg-dry	1	2/1/2024 5:52:53 PM
Surr: 2-Fluorobiphenyl	100	50 - 150		%Rec	1	2/1/2024 5:52:53 PM
Surr: o-Terphenyl	103	50 - 150		%Rec	1	2/1/2024 5:52:53 PM
Sample Moisture (Percent Moisture)				Batch ID: R89306		Analyst: BS
Percent Moisture	24.6	0.500		wt%	1	1/31/2024 10:32:28 AM
pH by EPA Method 9045				Batch ID: R89429		Analyst: AM
Hydrogen Ion (pH)	6.80		H	pH	1	2/5/2024 10:20:00 AM

Client: Aerotech
Collection Date: 1/27/2024
Project: Sunset Pointe
Lab ID: 2401550-024
Matrix: Soil
Client Sample ID: B6-1

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.				Batch ID: 42780		Analyst: AP
Diesel Range Organics	ND	54.8		mg/Kg-dry	1	2/1/2024 6:03:47 PM
Heavy Oil	ND	110		mg/Kg-dry	1	2/1/2024 6:03:47 PM
Total Petroleum Hydrocarbons	ND	165		mg/Kg-dry	1	2/1/2024 6:03:47 PM
Surr: 2-Fluorobiphenyl	139	50 - 150		%Rec	1	2/1/2024 6:03:47 PM
Surr: o-Terphenyl	139	50 - 150		%Rec	1	2/1/2024 6:03:47 PM
Sample Moisture (Percent Moisture)				Batch ID: R89306		Analyst: BS
Percent Moisture	15.6	0.500		wt%	1	1/31/2024 10:32:28 AM
pH by EPA Method 9045				Batch ID: R89429		Analyst: AM
Hydrogen Ion (pH)	6.69		H	pH	1	2/5/2024 10:20:00 AM

Client: Aerotech
Project: Sunset Pointe
Lab ID: 2401550-025
Client Sample ID: **Pond Sample**

Collection Date: 1/30/2024 1:00:00 PM
Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Organochlorine Pesticides by EPA Method 8081				Batch ID: 42806		Analyst: SK
Toxaphene	ND	0.152		µg/L	1	2/5/2024 4:37:25 PM
alpha-BHC	ND	0.0304		µg/L	1	2/5/2024 4:37:25 PM
beta-BHC	ND	0.0304		µg/L	1	2/5/2024 4:37:25 PM
Gamma BHC (Lindane)	ND	0.0304		µg/L	1	2/5/2024 4:37:25 PM
delta-BHC	ND	0.0304		µg/L	1	2/5/2024 4:37:25 PM
Heptachlor	ND	0.0405		µg/L	1	2/5/2024 4:37:25 PM
Aldrin	ND	0.0253		µg/L	1	2/5/2024 4:37:25 PM
Heptachlor epoxide	ND	0.0304		µg/L	1	2/5/2024 4:37:25 PM
gamma-Chlordane	ND	0.0304		µg/L	1	2/5/2024 4:37:25 PM
Endosulfan I	ND	0.0304		µg/L	1	2/5/2024 4:37:25 PM
alpha-Chlordane	ND	0.0304		µg/L	1	2/5/2024 4:37:25 PM
Dieldrin	ND	0.0304		µg/L	1	2/5/2024 4:37:25 PM
4,4´-DDE	ND	0.0304		µg/L	1	2/5/2024 4:37:25 PM
Endrin	ND	0.0405		µg/L	1	2/5/2024 4:37:25 PM
Endosulfan II	ND	0.0405		µg/L	1	2/5/2024 4:37:25 PM
4,4´-DDD	ND	0.0405		µg/L	1	2/5/2024 4:37:25 PM
Endrin aldehyde	ND	0.0405		µg/L	1	2/5/2024 4:37:25 PM
Endosulfan sulfate	ND	0.0405		µg/L	1	2/5/2024 4:37:25 PM
4,4´-DDT	ND	0.0405		µg/L	1	2/5/2024 4:37:25 PM
Endrin ketone	ND	0.0405		µg/L	1	2/5/2024 4:37:25 PM
Methoxychlor	ND	0.0506		µg/L	1	2/5/2024 4:37:25 PM
Surr: Decachlorobiphenyl	55.8	8.55 - 155		%Rec	1	2/5/2024 4:37:25 PM
Surr: Tetrachloro-m-xylene	68.8	16.9 - 96.4		%Rec	1	2/5/2024 4:37:25 PM
Herbicides by EPA Method 8151A (GC/MS)				Batch ID: 42994		Analyst: SH
Dicamba	ND	0.944	H	µg/L	1	2/26/2024 10:20:29 AM
2,4-D	ND	0.944	H	µg/L	1	2/26/2024 10:20:29 AM
2,4-DP	ND	0.944	H	µg/L	1	2/26/2024 10:20:29 AM
2,4,5-TP (Silvex)	ND	0.944	H	µg/L	1	2/26/2024 10:20:29 AM
2,4,5-T	ND	0.944	H	µg/L	1	2/26/2024 10:20:29 AM
Dinoseb	ND	0.944	H	µg/L	1	2/26/2024 10:20:29 AM
Dalapon	ND	3.78	H	µg/L	1	2/26/2024 10:20:29 AM
2,4-DB	ND	0.944	H	µg/L	1	2/26/2024 10:20:29 AM
MCPP	ND	4.72	H	µg/L	1	2/26/2024 10:20:29 AM
MCPA	ND	4.72	H	µg/L	1	2/26/2024 10:20:29 AM
Picloram	ND	0.944	H	µg/L	1	2/26/2024 10:20:29 AM
Bentazon	ND	0.944	H	µg/L	1	2/26/2024 10:20:29 AM
Chloramben	ND	0.944	H	µg/L	1	2/26/2024 10:20:29 AM

Client: Aerotech
Collection Date: 1/30/2024 1:00:00 PM
Project: Sunset Pointe
Lab ID: 2401550-025
Matrix: Water
Client Sample ID: Pond Sample

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Herbicides by EPA Method 8151A (GC/MS)				Batch ID: 42994		Analyst: SH
Acifluorfen	ND	4.72	H	µg/L	1	2/26/2024 10:20:29 AM
3,5-Dichlorobenzoic acid	ND	0.944	H	µg/L	1	2/26/2024 10:20:29 AM
4-Nitrophenol	ND	4.72	H	µg/L	1	2/26/2024 10:20:29 AM
Dacthal (DCPA)	ND	4.72	H	µg/L	1	2/26/2024 10:20:29 AM
Surr: 2,4-Dichlorophenylacetic acid	89.3	67.1 - 123	H	%Rec	1	2/26/2024 10:20:29 AM
pH by SM 4500H+B				Batch ID: R89373		Analyst: NK
Hydrogen Ion (pH)	7.33		H	pH	1	1/31/2024 2:45:00 PM

Work Order: 2401550
CLIENT: Aerotech
Project: Sunset Pointe

QC SUMMARY REPORT

pH by EPA Method 9045

Sample ID: MB-R89429	SampType: MBLK			Units: pH		Prep Date: 2/5/2024		RunNo: 89429		
Client ID: MBLKS	Batch ID: R89429					Analysis Date: 2/5/2024		SeqNo: 1867194		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hydrogen Ion (pH)	6.17										

Sample ID: LCS-R89429	SampType: LCS			Units: pH		Prep Date: 2/5/2024		RunNo: 89429		
Client ID: LCSS	Batch ID: R89429					Analysis Date: 2/5/2024		SeqNo: 1867195		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hydrogen Ion (pH)	7.19		7.000	0	103	95	105				

Sample ID: 2402027-036ADUP	SampType: DUP			Units: pH		Prep Date: 2/5/2024		RunNo: 89429		
Client ID: BATCH	Batch ID: R89429					Analysis Date: 2/5/2024		SeqNo: 1867200		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hydrogen Ion (pH)	7.14							7.260	1.67	10	

Work Order: 2401550
CLIENT: Aerotech
Project: Sunset Pointe

QC SUMMARY REPORT

pH by SM 4500H+B

Sample ID: **MB-R89373**	SampType: **MBLK**			Units: **pH**		Prep Date: **1/31/2024**		RunNo: **89373**		
Client ID: **MBLKW**	Batch ID: **R89373**					Analysis Date: **1/31/2024**		SeqNo: **1866154**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hydrogen Ion (pH)	7.69										

Sample ID: **LCS-R89373**	SampType: **LCS**			Units: **pH**		Prep Date: **1/31/2024**		RunNo: **89373**		
Client ID: **LCSW**	Batch ID: **R89373**					Analysis Date: **1/31/2024**		SeqNo: **1866155**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hydrogen Ion (pH)	7.17		7.000	0	102	95	105				

Sample ID: **2401550-025CDUP**	SampType: **DUP**			Units: **pH**		Prep Date: **1/31/2024**		RunNo: **89373**		
Client ID: **Pond Sample**	Batch ID: **R89373**					Analysis Date: **1/31/2024**		SeqNo: **1866157**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hydrogen Ion (pH)	7.39							7.330	0.815	10	H

Work Order: 2401550
CLIENT: Aerotech
Project: Sunset Pointe

QC SUMMARY REPORT

Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.

Sample ID: **MB-42780**	SampType: **MBLK**			Units: **mg/Kg**		Prep Date: **1/31/2024**		RunNo: **89357**		
Client ID: **MBLKS**	Batch ID: **42780**					Analysis Date: **2/1/2024**		SeqNo: **1865873**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics	ND	50.0									
Heavy Oil	ND	100									
Total Petroleum Hydrocarbons	ND	150									
Surr: 2-Fluorobiphenyl	10.3		10.00		103	50	150				
Surr: o-Terphenyl	10.0		10.00		100	50	150				

Sample ID: **LCS-42780**	SampType: **LCS**			Units: **mg/Kg**		Prep Date: **1/31/2024**		RunNo: **89357**		
Client ID: **LCSS**	Batch ID: **42780**					Analysis Date: **2/1/2024**		SeqNo: **1865874**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Petroleum Hydrocarbons	511	150	500.0	0	102	80.8	118				
Surr: 2-Fluorobiphenyl	10.0		10.00		100	50	150				
Surr: o-Terphenyl	12.1		10.00		121	50	150				

Sample ID: **LCSD-42780**	SampType: **LCSD**			Units: **mg/Kg**		Prep Date: **1/31/2024**		RunNo: **89357**		
Client ID: **LCSS02**	Batch ID: **42780**					Analysis Date: **2/1/2024**		SeqNo: **1865875**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Petroleum Hydrocarbons	488	150	500.0	0	97.5	80.8	118	511.2	4.72	30	
Surr: 2-Fluorobiphenyl	9.47		10.00		94.7	50	150		0		
Surr: o-Terphenyl	11.4		10.00		114	50	150		0		

Sample ID: **2401579-002AMS**	SampType: **MS**			Units: **mg/Kg-dry**		Prep Date: **1/31/2024**		RunNo: **89357**		
Client ID: **BATCH**	Batch ID: **42780**					Analysis Date: **2/1/2024**		SeqNo: **1865882**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Petroleum Hydrocarbons	915	176	588.1	0	156	43.5	147				S
Surr: 2-Fluorobiphenyl	15.2		11.76		129	50	150				
Surr: o-Terphenyl	19.2		11.76		163	50	150				S

Work Order: 2401550
CLIENT: Aerotech
Project: Sunset Pointe

QC SUMMARY REPORT

Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.

Sample ID: **2401579-002AMS**	SampType: **MS**			Units: **mg/Kg-dry**	Prep Date: **1/31/2024**			RunNo: **89357**		
Client ID: **BATCH**	Batch ID: **42780**				Analysis Date: **2/1/2024**			SeqNo: **1865882**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

NOTES:
S - Outlying spike recovery(ies) observed. A duplicate analysis was performed and recovered within range.
S - Outlying surrogate recovery(ies) observed. A duplicate analysis was performed and recovered within range.

Sample ID: **2401579-002AMSD**	SampType: **MSD**			Units: **mg/Kg-dry**	Prep Date: **1/31/2024**			RunNo: **89357**		
Client ID: **BATCH**	Batch ID: **42780**				Analysis Date: **2/1/2024**			SeqNo: **1865883**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Petroleum Hydrocarbons	450	174	580.8	0	77.5	43.5	147	914.9	68.1	30	
Surr: 2-Fluorobiphenyl	7.95		11.62		68.4	50	150		0		
Surr: o-Terphenyl	10.1		11.62		87.3	50	150		0		

Work Order: 2401550
CLIENT: Aerotech
Project: Sunset Pointe

QC SUMMARY REPORT

Herbicides by EPA Method 8151A (GC/MS)

Sample ID: **MB-42994**	SampType: **MBLK**	Units: **µg/L**	Prep Date: **2/21/2024**	RunNo: **89820**
Client ID: **MBLKW**	Batch ID: **42994**		Analysis Date: **2/26/2024**	SeqNo: **1874604**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dicamba	ND	0.961									
2,4-D	ND	0.961									
2,4-DP	ND	0.961									
2,4,5-TP (Silvex)	ND	0.961									
2,4,5-T	ND	0.961									
Dinoseb	ND	0.961									
Dalapon	ND	3.84									
2,4-DB	ND	0.961									
MCPP	ND	4.80									
MCPA	ND	4.80									
Picloram	ND	0.961									
Bentazon	ND	0.961									
Chloramben	ND	0.961									
Acifluorfen	ND	4.80									
3,5-Dichlorobenzoic acid	ND	0.961									
4-Nitrophenol	ND	4.80									
Dacthal (DCPA)	ND	4.80									
Surr: 2,4-Dichlorophenylacetic acid	13.8		19.22		71.6	62.9	132				

Sample ID: **LCS-42994**	SampType: **LCS**	Units: **µg/L**	Prep Date: **2/21/2024**	RunNo: **89820**
Client ID: **LCSW**	Batch ID: **42994**		Analysis Date: **2/26/2024**	SeqNo: **1874605**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dicamba	2.82	0.968	3.873	0	72.9	52.4	153				
2,4-D	3.14	0.968	3.873	0	81.1	49.2	171				
2,4-DP	2.88	0.968	3.873	0	74.4	48.4	155				
2,4,5-TP (Silvex)	2.99	0.968	3.873	0	77.3	52.7	161				
2,4,5-T	3.14	0.968	3.873	0	81.0	50.2	164				
Dinoseb	1.96	0.968	3.873	0	50.7	17.8	148				
Dalapon	13.8	3.87	19.36	0	71.4	29.6	105				
2,4-DB	2.56	0.968	3.873	0	66.1	38.5	163				

Work Order: 2401550
CLIENT: Aerotech
Project: Sunset Pointe

QC SUMMARY REPORT

Herbicides by EPA Method 8151A (GC/MS)

Sample ID: **LCS-42994**	SampType: **LCS**			Units: **µg/L**		Prep Date: **2/21/2024**		RunNo: **89820**			
Client ID: **LCSW**	Batch ID: **42994**					Analysis Date: **2/26/2024**		SeqNo: **1874605**			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
MCPP	21.2	4.84	19.36	0	110	66	133				
MCPA	22.0	4.84	19.36	0	113	70	132				
Picloram	2.02	0.968	3.873	0	52.3	13.6	144				
Bentazon	3.51	0.968	3.873	0	90.7	39.7	167				
Chloramben	0.714	0.968	3.873	0	18.4	5	126				
Acifluorfen	2.35	4.84	3.873	0	60.8	22.5	159				
3,5-Dichlorobenzoic acid	3.37	0.968	3.873	0	87.0	45.2	138				
4-Nitrophenol	0.685	4.84	3.873	0	17.7	5	116				
Dacthal (DCPA)	1.38	4.84	3.873	0	35.7	14	82.9				
Surr: 2,4-Dichlorophenylacetic acid	22.9		19.36		118	67.1	123				

Sample ID: **2401550-025BMS**	SampType: **MS**			Units: **µg/L**		Prep Date: **2/21/2024**		RunNo: **89820**			
Client ID: **Pond Sample**	Batch ID: **42994**					Analysis Date: **2/26/2024**		SeqNo: **1874607**			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dicamba	3.29	0.937	3.746	0	87.8	59.6	136				H
2,4-D	3.70	0.937	3.746	0	98.6	52.5	166				H
2,4-DP	3.42	0.937	3.746	0	91.3	52.7	147				H
2,4,5-TP (Silvex)	3.55	0.937	3.746	0	94.8	60.2	149				H
2,4,5-T	3.84	0.937	3.746	0	103	58.8	150				H
Dinoseb	2.29	0.937	3.746	0	61.1	21.2	133				H
Dalapon	14.1	3.75	18.73	0	75.2	29.7	94.2				H
2,4-DB	3.09	0.937	3.746	0	82.4	41.6	159				H
MCPP	25.2	4.68	18.73	0	135	55.1	139				H
MCPA	25.5	4.68	18.73	0	136	56.2	139				H
Picloram	3.45	0.937	3.746	0	92.1	16.6	132				H
Bentazon	4.39	0.937	3.746	0	117	45.6	158				H
Chloramben	1.35	0.937	3.746	0	36.0	7.42	100				H
Acifluorfen	2.68	4.68	3.746	0	71.5	16	149				H
3,5-Dichlorobenzoic acid	3.85	0.937	3.746	0	103	49.3	137				H
4-Nitrophenol	1.50	4.68	3.746	0	40.0	5	116				H

Work Order: 2401550
CLIENT: Aerotech
Project: Sunset Pointe

QC SUMMARY REPORT

Herbicides by EPA Method 8151A (GC/MS)

Sample ID: **2401550-025BMS** SampType: **MS** Units: **µg/L** Prep Date: **2/21/2024** RunNo: **89820**
Client ID: **Pond Sample** Batch ID: **42994** Analysis Date: **2/26/2024** SeqNo: **1874607**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dacthal (DCPA)	1.26	4.68	3.746	0	33.7	5	79.4				H
Surr: 2,4-Dichlorophenylacetic acid	28.6		18.73		153	67.1	123				SH

NOTES:
S - Outlying surrogate recovery(ies) observed.

Work Order: 2401550
CLIENT: Aerotech
Project: Sunset Pointe

QC SUMMARY REPORT

Organochlorine Pesticides by EPA Method 8081

Sample ID: **MB-42806** SampType: **MBLK** Units: **µg/L** Prep Date: **2/2/2024** RunNo: **89450**
Client ID: **MBLKW** Batch ID: **42806** Analysis Date: **2/5/2024** SeqNo: **1867482**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Toxaphene	ND	0.149									
alpha-BHC	ND	0.0299									
beta-BHC	ND	0.0299									
Gamma BHC (Lindane)	ND	0.0299									
delta-BHC	ND	0.0299									
Heptachlor	ND	0.0398									
Aldrin	ND	0.0249									
Heptachlor epoxide	ND	0.0299									
gamma-Chlordane	ND	0.0299									
Endosulfan I	ND	0.0299									
alpha-Chlordane	ND	0.0299									
Dieldrin	ND	0.0299									
4,4´-DDE	ND	0.0299									
Endrin	ND	0.0398									
Endosulfan II	ND	0.0398									
4,4´-DDD	ND	0.0398									
Endrin aldehyde	ND	0.0398									
Endosulfan sulfate	ND	0.0398									
4,4´-DDT	ND	0.0398									
Endrin ketone	ND	0.0398									
Methoxychlor	ND	0.0498									
Surr: Decachlorobiphenyl	0.275		0.3981		69.0	8.55	155				
Surr: Tetrachloro-m-xylene	0.265		0.3981		66.6	16.9	96.4				

Sample ID: **LCS1-42806** SampType: **LCS** Units: **µg/L** Prep Date: **2/2/2024** RunNo: **89450**
Client ID: **LCSW** Batch ID: **42806** Analysis Date: **2/5/2024** SeqNo: **1867483**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
alpha-BHC	0.324	0.0301	0.4017	0	80.6	26.8	106				
beta-BHC	0.354	0.0301	0.4017	0	88.2	52.9	101				
Gamma BHC (Lindane)	0.327	0.0301	0.4017	0	81.5	30	110				

Work Order: 2401550
CLIENT: Aerotech
Project: Sunset Pointe

QC SUMMARY REPORT

Organochlorine Pesticides by EPA Method 8081

Sample ID: **LCS1-42806**	SampType: **LCS**	Units: **µg/L**	Prep Date: **2/2/2024**	RunNo: **89450**
Client ID: **LCSW**	Batch ID: **42806**		Analysis Date: **2/5/2024**	SeqNo: **1867483**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
delta-BHC	0.333	0.0301	0.4017	0	82.8	37.9	123				
Heptachlor	0.326	0.0402	0.4017	0	81.3	25.8	106				
Aldrin	0.313	0.0251	0.4017	0	77.9	22.2	105				
Heptachlor epoxide	0.339	0.0301	0.4017	0	84.3	41.2	110				
gamma-Chlordane	0.324	0.0301	0.4017	0	80.8	28.8	123				
Endosulfan I	0.366	0.0301	0.4017	0	91.2	40.9	108				
alpha-Chlordane	0.346	0.0301	0.4017	0	86.2	38.4	117				
Dieldrin	0.341	0.0301	0.4017	0	84.9	48.7	111				
4,4´-DDE	0.350	0.0301	0.4017	0	87.2	36.9	121				
Endrin	0.369	0.0402	0.4017	0	92.0	38.9	128				
Endosulfan II	0.350	0.0402	0.4017	0	87.1	36.9	125				
4,4´-DDD	0.352	0.0402	0.4017	0	87.6	39.5	127				
Endrin aldehyde	0.295	0.0402	0.4017	0	73.5	43.8	107				
Endosulfan sulfate	0.354	0.0402	0.4017	0	88.2	52.5	115				
4,4´-DDT	0.370	0.0402	0.4017	0	92.0	39.8	127				
Endrin ketone	0.364	0.0402	0.4017	0	90.6	47.2	131				
Methoxychlor	0.413	0.0502	0.4017	0	103	47.1	123				
Surr: Decachlorobiphenyl	0.299		0.4017		74.4	8.55	155				
Surr: Tetrachloro-m-xylene	0.249		0.4017		62.0	16.9	96.4				

Sample ID: **LCS1D-42806**	SampType: **LCSD**	Units: **µg/L**	Prep Date: **2/2/2024**	RunNo: **89450**
Client ID: **LCSW02**	Batch ID: **42806**		Analysis Date: **2/5/2024**	SeqNo: **1867484**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
alpha-BHC	0.308	0.0300	0.4000	0	76.9	26.8	106	0.3238	5.09	30	
beta-BHC	0.345	0.0300	0.4000	0	86.2	52.9	101	0.3542	2.73	30	
Gamma BHC (Lindane)	0.314	0.0300	0.4000	0	78.4	30	110	0.3273	4.27	30	
delta-BHC	0.327	0.0300	0.4000	0	81.7	37.9	123	0.3326	1.74	30	
Heptachlor	0.309	0.0400	0.4000	0	77.2	25.8	106	0.3265	5.60	30	
Aldrin	0.292	0.0250	0.4000	0	73.1	22.2	105	0.3128	6.72	30	
Heptachlor epoxide	0.323	0.0300	0.4000	0	80.8	41.2	110	0.3386	4.60	30	

Work Order: 2401550
CLIENT: Aerotech
Project: Sunset Pointe

QC SUMMARY REPORT

Organochlorine Pesticides by EPA Method 8081

Sample ID: **LCS1D-42806**	SampType: **LCSD**			Units: **µg/L**		Prep Date: **2/2/2024**		RunNo: **89450**		
Client ID: **LCSW02**	Batch ID: **42806**					Analysis Date: **2/5/2024**		SeqNo: **1867484**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
gamma-Chlordane	0.305	0.0300	0.4000	0	76.3	28.8	123	0.3245	6.09	30	
Endosulfan I	0.334	0.0300	0.4000	0	83.4	40.9	108	0.3663	9.33	30	
alpha-Chlordane	0.320	0.0300	0.4000	0	80.1	38.4	117	0.3463	7.78	30	
Dieldrin	0.317	0.0300	0.4000	0	79.2	48.7	111	0.3411	7.45	30	
4,4´-DDE	0.319	0.0300	0.4000	0	79.8	36.9	121	0.3502	9.25	30	
Endrin	0.342	0.0400	0.4000	0	85.5	38.9	128	0.3695	7.77	30	
Endosulfan II	0.318	0.0400	0.4000	0	79.5	36.9	125	0.3498	9.51	30	
4,4´-DDD	0.314	0.0400	0.4000	0	78.5	39.5	127	0.3518	11.4	30	
Endrin aldehyde	0.280	0.0400	0.4000	0	69.9	43.8	107	0.2954	5.48	30	
Endosulfan sulfate	0.314	0.0400	0.4000	0	78.6	52.5	115	0.3542	11.9	30	
4,4´-DDT	0.328	0.0400	0.4000	0	82.0	39.8	127	0.3696	11.9	30	
Endrin ketone	0.319	0.0400	0.4000	0	79.6	47.2	131	0.3639	13.3	30	
Methoxychlor	0.356	0.0500	0.4000	0	89.0	47.1	123	0.4125	14.7	30	
Surr: Decachlorobiphenyl	0.231		0.4000		57.9	8.55	155		0		
Surr: Tetrachloro-m-xylene	0.235		0.4000		58.8	16.9	96.4		0		

Sample ID: **LCS2-42806**	SampType: **LCS**			Units: **µg/L**		Prep Date: **2/2/2024**		RunNo: **89450**		
Client ID: **LCSW**	Batch ID: **42806**					Analysis Date: **2/5/2024**		SeqNo: **1867485**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Toxaphene	1.59	0.149	1.993	0	79.7	41.7	133				
Surr: Decachlorobiphenyl	0.262		0.3986		65.8	8.55	155				
Surr: Tetrachloro-m-xylene	0.230		0.3986		57.6	16.9	96.4				

Sample ID: **LCS3-42806**	SampType: **LCS**			Units: **µg/L**		Prep Date: **2/2/2024**		RunNo: **89450**		
Client ID: **LCSW**	Batch ID: **42806**					Analysis Date: **2/5/2024**		SeqNo: **1867486**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chlordane, Total (Technical)	1.52	0.249	1.995	0	76.3	47	136				
Surr: Decachlorobiphenyl	0.241		0.3990		60.4	8.55	155				
Surr: Tetrachloro-m-xylene	0.245		0.3990		61.4	16.9	96.4				

Fremont Analytical
An Alliance Technical Group Company

Date: *2/26/2024*

Work Order: 2401550
CLIENT: Aerotech
Project: Sunset Pointe

QC SUMMARY REPORT

Organochlorine Pesticides by EPA Method 8081

Sample ID: **LCS3-42806**	SampType: **LCS**			Units: **µg/L**		Prep Date: **2/2/2024**			RunNo: **89450**			
Client ID: **LCSW**	Batch ID: **42806**					Analysis Date: **2/5/2024**			SeqNo: **1867486**			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Work Order: 2401550
CLIENT: Aerotech
Project: Sunset Pointe

QC SUMMARY REPORT

Gasoline by NWTPH-Gx

Sample ID: LCS-42778	SampType: LCS			Units: mg/Kg		Prep Date: 1/31/2024		RunNo: 89359		
Client ID: LCSS	Batch ID: 42778					Analysis Date: 2/1/2024		SeqNo: 1865918		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics	21.2	5.00	25.00	0	84.6	65	135				
Surr: Toluene-d8	1.28		1.250		103	65	135				
Surr: 4-Bromofluorobenzene	1.27		1.250		101	65	135				

Sample ID: MB-42778	SampType: MBLK			Units: mg/Kg		Prep Date: 1/31/2024		RunNo: 89359		
Client ID: MBLKS	Batch ID: 42778					Analysis Date: 2/1/2024		SeqNo: 1865908		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics	ND	5.00									
Surr: Toluene-d8	1.26		1.250		101	65	135				
Surr: 4-Bromofluorobenzene	1.23		1.250		98.6	65	135				

Sample ID: 2401579-001BDUP	SampType: DUP			Units: mg/Kg-dry		Prep Date: 1/31/2024		RunNo: 89359		
Client ID: BATCH	Batch ID: 42778					Analysis Date: 2/1/2024		SeqNo: 1865912		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics	ND	6.09						0		30	
Surr: Toluene-d8	1.53		1.523		100	65	135		0		
Surr: 4-Bromofluorobenzene	1.48		1.523		97.0	65	135		0		

Sample ID: 2401579-003BMS	SampType: MS			Units: mg/Kg-dry		Prep Date: 1/31/2024		RunNo: 89359		
Client ID: BATCH	Batch ID: 42778					Analysis Date: 2/1/2024		SeqNo: 1865916		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics	21.2	5.05	25.25	0	84.1	65	135				
Surr: Toluene-d8	1.22		1.263		96.7	65	135				
Surr: 4-Bromofluorobenzene	1.26		1.263		100	65	135				

Work Order: 2401550
CLIENT: Aerotech
Project: Sunset Pointe

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-42778**	SampType: **LCS**			Units: **µg/L**		Prep Date: **1/31/2024**		RunNo: **89354**		
Client ID: **LCSS**	Batch ID: **42778**					Analysis Date: **2/1/2024**		SeqNo: **1865826**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	0.992	0.0175	1.000	0	99.2	80	120				
Toluene	1.05	0.0300	1.000	0	105	80	120				
Ethylbenzene	1.01	0.0250	1.000	0	101	80	120				
m,p-Xylene	1.98	0.0500	2.000	0	98.8	80	120				
o-Xylene	1.03	0.0250	1.000	0	103	80	120				
Surr: Dibromofluoromethane	1.27		1.250		102	79.2	123				
Surr: Toluene-d8	1.29		1.250		103	77.6	126				
Surr: 1-Bromo-4-fluorobenzene	1.24		1.250		99.4	72	131				

Sample ID: **MB-42778**	SampType: **MBLK**			Units: **mg/Kg**		Prep Date: **1/31/2024**		RunNo: **89354**		
Client ID: **MBLKS**	Batch ID: **42778**					Analysis Date: **2/1/2024**		SeqNo: **1865817**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.0175									
Toluene	ND	0.0300									
Ethylbenzene	ND	0.0250									
m,p-Xylene	ND	0.0500									
o-Xylene	ND	0.0250									
Surr: Dibromofluoromethane	1.25		1.250		99.9	79.5	124				
Surr: Toluene-d8	1.26		1.250		101	77.5	124				
Surr: 1-Bromo-4-fluorobenzene	1.23		1.250		98.4	60.5	139				

Sample ID: **2401579-001BDUP**	SampType: **DUP**			Units: **mg/Kg-dry**		Prep Date: **1/31/2024**		RunNo: **89354**		
Client ID: **BATCH**	Batch ID: **42778**					Analysis Date: **2/1/2024**		SeqNo: **1865821**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.0213						0		30	
Toluene	ND	0.0366						0		30	
Ethylbenzene	ND	0.0305						0		30	
m,p-Xylene	ND	0.0609						0		30	
o-Xylene	ND	0.0305						0		30	

Work Order: 2401550
CLIENT: Aerotech
Project: Sunset Pointe

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2401579-001BDUP**	SampType: **DUP**			Units: **mg/Kg-dry**		Prep Date: **1/31/2024**		RunNo: **89354**		
Client ID: **BATCH**	Batch ID: **42778**					Analysis Date: **2/1/2024**		SeqNo: **1865821**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	1.54		1.523		101	79.2	123		0		
Surr: Toluene-d8	1.52		1.523		99.9	77.6	126		0		
Surr: 1-Bromo-4-fluorobenzene	1.48		1.523		97.1	72	131		0		

Sample ID: **2401579-002BMS**	SampType: **MS**			Units: **mg/Kg-dry**		Prep Date: **1/31/2024**		RunNo: **89354**		
Client ID: **BATCH**	Batch ID: **42778**					Analysis Date: **2/1/2024**		SeqNo: **1865825**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	1.27	0.0220	1.260	0	100	73	136				
Toluene	1.25	0.0378	1.260	0	99.1	79.3	131				
Ethylbenzene	1.27	0.0315	1.260	0	101	82.3	122.3				
m,p-Xylene	2.48	0.0630	2.520	0	98.5	81.6	121.6				
o-Xylene	1.29	0.0315	1.260	0	102	79.6	123				
Surr: Dibromofluoromethane	1.62		1.575		103	79.2	123				
Surr: Toluene-d8	1.59		1.575		101	77.6	126				
Surr: 1-Bromo-4-fluorobenzene	1.57		1.575		99.7	72	131				

Fremont Analytical
An Alliance Technical Group Company

Sample Log-In Check List

Client Name:	AEROTE	Work Order Number:	2401550
Logged by:	Morgan Wilson	Date Received:	1/30/2024 3:15:00 PM

Chain of Custody

1.	Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2.	How was the sample delivered?	Client		

Log In

3.	Custody Seals present on shipping container/cooler? (Refer to comments for Custody Seals not intact)	Yes ☐	No ☐	Not Present ☑
4.	Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5.	Were all items received at a temperature of >2°C to 6°C *	Yes ☑	No ☐	NA ☐
6.	Sample(s) in proper container(s)?	Yes ☑	No ☐	
7.	Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8.	Are samples properly preserved?	Yes ☑	No ☐	
9.	Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10.	Is there headspace in the VOA vials?	Yes ☐	No ☐	NA ☑
11.	Did all samples containers arrive in good condition(unbroken)?	Yes ☑	No ☐	
12.	Does paperwork match bottle labels?	Yes ☑	No ☐	
13.	Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
14.	Is it clear what analyses were requested?	Yes ☑	No ☐	
15.	Were all hold times (except field parameters, pH e.g.) able to be met?	Yes ☑	No ☐	

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☑ No ☐ NA ☐

Person Notified:	Alan Blotch	Date:	1/31/2024
By Whom:	Morgan Wilson	Via:	☑ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:	Sampling Dates/Times, Metals Bottle Received, Sub Glyphosate		
Client Instructions:	See updated COC, okay to sub		

17. Additional remarks:

Item Information

Item #	Temp °C
Sample	5.6

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C

Fremont Analytical
An Alliance Technical Group Company
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790

Chain of Custody Record & Laboratory Services Agreement

Date: 01/27/24 Page: 1 of: 3

Laboratory Project No (internal): 2401550

Project Name: SUNSET POINTE

Special Remarks:

Client: AEROTECH ENV.

Project No:

Address: 14247 AMBAUM BL SW - REAR

Collected by: A. BLOTCH

City, State, Zip: BURIEN

Location:

Telephone: 360-710-5899

Report To (PM): A. BLOTCH

Disposal: Samples will be disposed in 30 days unless otherwise requested.
☐ Retain volume (specify above) ☐ Return to client

Email(s): ALAN @ DIRTY DIRT . US

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	# of Cont.	VOCs (EPA 8260 / 624)	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8) Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)	SOIL PH				Comments
1 B1 -1	01-27		SOIL																	
2 B1 -2																				
3 B2 -1																				
4 B2 -2																				
5 B3 -1																				
6 -2																				
7 -3						X	X		X							X				
8 B4 -1									X							X				
9 -2																				
10 B5 -1																				

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Turn-around Time:
☒ Standard ☐ Next Day
☐ 3 Day ☐ Same Day
☐ 2 Day ☐ _____ (specify)

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above, that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x	ALAN T. BLOTCH		x BH	Britton Stone	1/30/24 15:15
Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x			x		

Fremont Analytical
An Alliance Technical Group Company
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790

Chain of Custody Record & Laboratory Services Agreement

Date: 01/27/24 Page: 2 of: 3

Laboratory Project No (internal): Z401550

Project Name: SUNSET POINTE

Special Remarks:

Client: AEROTECH

Project No:

Address:

Collected by:

City, State, Zip:

Location:

Telephone:

Report To (PM):

Disposal: Samples will be disposed in 30 days unless otherwise requested.
☐ Retain volume (specify above) ☐ Return to client

Email(s):

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	# of Cont.	VOCs (EPA 8260 / 624)	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8) Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)	SOIL PH			Comments
1	B5-2	01.27		SOIL																
2	" -3																			
3	B7-1																			
4	" -2																			
5	" -3																			
6	" -4								X							X				
7	B8-1																			
8	" -2																			
9	B9-1																			
10	" -2																			

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Turn-around Time:
☒ Standard ☐ Next Day
☐ 3 Day ☐ Same Day
☐ 2 Day ☐ _____ (specify)

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above, that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x	ALAN T. BLOTCH		x	Britton Stone	1/30/24 15:15
Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x					

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Chain of Custody Record & Laboratory Services Agreement

Date: 01/27/24 Page: 3 of: 3

Laboratory Project No (internal): 2401550

Project Name: SUNSET POINTE

Special Remarks:

Client: AEROTECH

Project No:

Address:

Collected by:

City, State, Zip:

Location:

Telephone:

Report To (PM):

Sample Disposal: ☐ Return to client ☒ Disposal by lab (after 30 days)

Fax:

PM Email:

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	# of Cont.	VOCs (EPA 8260 / 624)	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8) Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)	SOIL PH			Comments
1 B9-03																			
2 " 04																			
3 B10-01																			
4																			
5 BL-1								X							X				
6																			
7 POND SAMPLE																			PEST | HERB | PH
8																			
9																			LINDANE | ROUND-UP
10																			

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

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***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

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☐ 3 Day ☐ Same Day
☐ 2 Day (specify)

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x	ALAN T. BLOTCH		x	Britton Stone	1/30/24 15:15
Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x			x		

Fremont Analytical
An Alliance Technical Group Company
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790

Chain of Custody Record & Laboratory Services Agreement

Date: 01/27/24 Page: 1 of: 3

Laboratory Project No (internal): 2401550

Project Name: SUNSET POINTE

Special Remarks:

Client: AEROTECH ENV.

Project No:

Address: 14247 AMBAUM BL SW - REAR

Collected by: A. BLOTCH

City, State, Zip: BURIEN

Location:

Telephone: 360-710-5899

Report To (PM): A. BLOTCH

Disposal: Samples will be disposed in 30 days unless otherwise requested.
☐ Retain volume (specify above) ☐ Return to client

Email(s): ALAN @ DIRTY DIRT . US

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	# of Cont.	VOCs (EPA 8260 / 624)	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8270 - SIM)	Metals** (EPA 6020 / 200.8) Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)	SOIL PH			Comments
1 B1 -1	01-27		SOIL																
2 B1 -2																			
3 B2 -1																			
4 B2 -2																			
5 B3 -1																			
6 -2																			
7 -3						X	X		X							X				
8 B4 -1									X							X			
9 -2																			
10 B5 -1																			

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

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x	ALAN T. BLOTCH		x	Britton Stone	1/30/24 15:15
Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x			x		

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An Alliance Technical Group Company
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790

Chain of Custody Record & Laboratory Services Agreement

Date: 01/27/24 Page: 2 of: 3

Laboratory Project No (internal): 2401550

Project Name: SUNSET POINTE

Special Remarks:

Client: AEROTECH

Project No:

Address:

Collected by:

City, State, Zip:

Location:

Telephone:

Report To (PM):

Disposal: Samples will be disposed in 30 days unless otherwise requested.
☐ Retain volume (specify above) ☐ Return to client

Email(s):

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	# of Cont.	VOCs (EPA 8260 / 624)	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)	SOIL PH			Comments
1	B5-2	01.27		SOIL																	
2	" -3																				
3	B7-1																				
4	" -2																				
5	" -3																				
6	" -4								X								X				
7	B8-1																				
8	" -2																				
9	B9-1																				
10	" -2																				

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

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Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x			x		

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Chain of Custody Record & Laboratory Services Agreement

Date: 01/27/24 Page: 3 of: 3

Laboratory Project No (internal): 2401550

Project Name: SUNSET POINTE

Special Remarks: Update per AB -mw 1/31/24

Client: AEROTECH

Project No:

Address:

Collected by:

City, State, Zip:

Location:

Telephone:

Report To (PM):

Sample Disposal: ☐ Return to client ☒ Disposal by lab (after 30 days)

Fax:

PM Email:

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	# of Cont.	VOCs (EPA 8260 / 624)	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)	SOIL PH			Comments
1 B9-03	1/27/24		S																	
2 " 04																				
3 B10-01																				
4																				
5 BL-1								X								X				
6																				
7 POND SAMPLE	1/30/24	13:00	W																	PEST | HERB | PH
8																				
9																				LINDALE | ROUND-UP
10																				

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

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x	ALAN T. BLOTCH		x	Britton Stone	1/30/24 15:15
Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x			x		

LABORATORY ANALYTICAL RESULTS: REPORTS

Initial Sampling in Areas of Concern
(Analytical Report dated: April 17, 2024)

Fremont Analytical
An Alliance Technical Group Company
3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

Aerotech
Alan Blotch
14220 Interurban Ave S, Ste. 116
Tukwila, WA 98168

RE: Sunset Point Development
Work Order Number: 2402027

April 17, 2024

Attention Alan Blotch:

Fremont Analytical, Inc, an Alliance Technical Group company, received 48 sample(s) on 2/1/2024 for the analyses presented in the following report.

Diesel and Heavy Oil by NWTPH-Dx
Gasoline by NWTPH-Gx
Hexavalent Chromium by EPA Method 7196
Metals (EPA 6020B) with TCLP Extraction (EPA 1311)
Organochlorine Pesticides by EPA Method 8081A
PAHs by EPA Method 8270E SIM
pH by EPA Method 9045
Sample Moisture (Percent Moisture)
Total Metals by EPA 6020B
Volatile Organic Compounds by EPA Method 8260D

All analyses were performed according to our accredited Quality Assurance program. Please contact the laboratory if you should have any questions about the results.

Please note, while the appearance of our logo and branding will update, our commitment to accuracy, speed, and customer service remain values celebrated and shared by Alliance Technical Group. Thank you for the opportunity to serve you.

Sincerely,

Brianna Barnes
Project Manager

DoD-ELAP Accreditation #79636 by PJLA, ISO/IEC 17025:2017 and QSM 5.4 for Environmental Testing
ORELAP Certification: WA 100009 (NELAP Recognized) for Environmental Testing
Washington State Department of Ecology Accredited for Environmental Testing, Lab ID C910

Fremont Analytical
An Alliance Technical Group Company

Date: *04/17/2024*

CLIENT: Aerotech
Project: Sunset Point Development
Work Order: 2402027

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2402027-001	B11-01	01/30/2024 12:00 AM	02/01/2024 3:30 PM
2402027-002	B11-02	01/30/2024 12:00 AM	02/01/2024 3:30 PM
2402027-003	B12-01	01/30/2024 12:00 AM	02/01/2024 3:30 PM
2402027-004	B13-01	01/30/2024 12:00 AM	02/01/2024 3:30 PM
2402027-005	B13-02	01/30/2024 12:00 AM	02/01/2024 3:30 PM
2402027-006	B14-01	01/30/2024 12:00 AM	02/01/2024 3:30 PM
2402027-007	B14-02	01/30/2024 12:00 AM	02/01/2024 3:30 PM
2402027-008	B15-01	01/30/2024 12:00 AM	02/01/2024 3:30 PM
2402027-009	B15-02	01/30/2024 12:00 AM	02/01/2024 3:30 PM
2402027-010	B15-03	01/30/2024 12:00 AM	02/01/2024 3:30 PM
2402027-011	B16-01	01/30/2024 12:00 AM	02/01/2024 3:30 PM
2402027-012	B16-02	01/30/2024 12:00 AM	02/01/2024 3:30 PM
2402027-013	B17-01	01/30/2024 12:00 AM	02/01/2024 3:30 PM
2402027-014	B17-02	01/30/2024 12:00 AM	02/01/2024 3:30 PM
2402027-015	B18-01	01/30/2024 12:00 AM	02/01/2024 3:30 PM
2402027-016	B18-02	01/30/2024 12:00 AM	02/01/2024 3:30 PM
2402027-017	B18-03	01/30/2024 12:00 AM	02/01/2024 3:30 PM
2402027-018	B18-04	01/30/2024 12:00 AM	02/01/2024 3:30 PM
2402027-019	B19-01	01/30/2024 12:00 AM	02/01/2024 3:30 PM
2402027-020	B19-02	01/30/2024 12:00 AM	02/01/2024 3:30 PM
2402027-021	B20-01	01/30/2024 12:00 AM	02/01/2024 3:30 PM
2402027-022	B20-02	01/30/2024 12:00 AM	02/01/2024 3:30 PM
2402027-023	B20-03	01/30/2024 12:00 AM	02/01/2024 3:30 PM
2402027-024	B20-04	01/30/2024 12:00 AM	02/01/2024 3:30 PM
2402027-025	B21-01	01/30/2024 12:00 AM	02/01/2024 3:30 PM
2402027-026	B22-01	01/30/2024 12:00 AM	02/01/2024 3:30 PM
2402027-027	B22-02	01/30/2024 12:00 AM	02/01/2024 3:30 PM
2402027-028	B23-02	01/30/2024 12:00 AM	02/01/2024 3:30 PM
2402027-029	B24-01	01/30/2024 12:00 AM	02/01/2024 3:30 PM
2402027-030	B24-02	01/30/2024 12:00 AM	02/01/2024 3:30 PM
2402027-031	B25-01	01/30/2024 12:00 AM	02/01/2024 3:30 PM
2402027-032	B25-02	01/30/2024 12:00 AM	02/01/2024 3:30 PM
2402027-033	B26-01	01/30/2024 12:00 AM	02/01/2024 3:30 PM
2402027-034	B26-02	01/30/2024 12:00 AM	02/01/2024 3:30 PM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

Revision v3

CLIENT: Aerotech
Project: Sunset Point Development
Work Order: 2402027

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2402027-035	B27-01	01/30/2024 12:00 AM	02/01/2024 3:30 PM
2402027-036	B27-02	01/30/2024 12:00 AM	02/01/2024 3:30 PM
2402027-037	B28-01	01/30/2024 12:00 AM	02/01/2024 3:30 PM
2402027-038	B28-02	01/30/2024 12:00 AM	02/01/2024 3:30 PM
2402027-039	B29-01	01/30/2024 12:00 AM	02/01/2024 3:30 PM
2402027-040	B30-01	01/30/2024 12:00 AM	02/01/2024 3:30 PM
2402027-041	B30-02	01/30/2024 12:00 AM	02/01/2024 3:30 PM
2402027-042	B31-01	01/30/2024 12:00 AM	02/01/2024 3:30 PM
2402027-043	B31-02	01/30/2024 12:00 AM	02/01/2024 3:30 PM
2402027-044	B32-01	01/30/2024 12:00 AM	02/01/2024 3:30 PM
2402027-045	B32-02	01/30/2024 12:00 AM	02/01/2024 3:30 PM
2402027-046	B33-01	01/30/2024 12:00 AM	02/01/2024 3:30 PM
2402027-047	B33-02	01/30/2024 12:00 AM	02/01/2024 3:30 PM
2402027-048	B34-01	01/30/2024 12:00 AM	02/01/2024 3:30 PM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

CLIENT: Aerotech
Project: Sunset Point Development

I. SAMPLE RECEIPT:
Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:
Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:
Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.
2402027-028B
TEST_SUB has been Sub Contracted.

3/1/2024: Rev1 includes subcontracted data.
3/18/2024: Rev2 includes additional data per client request.
4/16/2024: Rev3 includes additional data per client request.

Qualifiers:

* - Flagged value is not within established control limits
B - Analyte detected in the associated Method Blank
D - Dilution was required
E - Value above quantitation range
H - Holding times for preparation or analysis exceeded
I - Analyte with an internal standard that does not meet established acceptance criteria
J - Analyte detected below Reporting Limit
N - Tentatively Identified Compound (TIC)
Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria
S - Spike recovery outside accepted recovery limits
ND - Not detected at the Reporting Limit
R - High relative percent difference observed

Acronyms:

%Rec - Percent Recovery
CCB - Continued Calibration Blank
CCV - Continued Calibration Verification
DF - Dilution Factor
DUP - Sample Duplicate
HEM - Hexane Extractable Material
ICV - Initial Calibration Verification
LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
MCL - Maximum Contaminant Level
MB or MBLANK - Method Blank
MDL - Method Detection Limit
MS/MSD - Matrix Spike / Matrix Spike Duplicate
PDS - Post Digestion Spike
Ref Val - Reference Value
REP - Sample Replicate
RL - Reporting Limit
RPD - Relative Percent Difference
SD - Serial Dilution
SGT - Silica Gel Treatment
SPK - Spike
Surr - Surrogate

Client: Aerotech
Collection Date: 1/30/2024
Project: Sunset Point Development
Lab ID: 2402027-003
Matrix: Soil
Client Sample ID: B12-01

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA 6020B				Batch ID: 43204		Analyst: ME
Arsenic	2.77	0.270		mg/Kg-dry	1	3/14/2024 12:13:00 PM
Cadmium	0.0591	0.0216		mg/Kg-dry	1	3/14/2024 12:13:00 PM
Sample Moisture (Percent Moisture)				Batch ID: R90179		Analyst: MP
Percent Moisture	14.1	0.500		wt%	1	3/13/2024 8:19:44 AM
pH by EPA Method 9045				Batch ID: R89429		Analyst: AM
Hydrogen Ion (pH)	6.95			pH	1	2/5/2024 10:20:00 AM

Client: Aerotech
Collection Date: 1/30/2024
Project: Sunset Point Development
Lab ID: 2402027-006
Matrix: Soil
Client Sample ID: B14-01

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Diesel and Heavy Oil by NWTPH-Dx				Batch ID: 42819		Analyst: AP
Diesel Range Organics	ND	59.6		mg/Kg-dry	1	2/5/2024 5:15:07 PM
Heavy Oil	ND	119		mg/Kg-dry	1	2/5/2024 5:15:07 PM
Total Petroleum Hydrocarbons	ND	179		mg/Kg-dry	1	2/5/2024 5:15:07 PM
Surr: 2-Fluorobiphenyl	132	50 - 150		%Rec	1	2/5/2024 5:15:07 PM
Surr: o-Terphenyl	127	50 - 150		%Rec	1	2/5/2024 5:15:07 PM
Metals (EPA 6020B) with TCLP Extraction (EPA 1311)				Batch ID: 43587		Analyst: ME
Arsenic	ND	0.100		mg/L	1	4/16/2024 3:10:00 PM
Barium	ND	0.500		mg/L	1	4/16/2024 3:10:00 PM
Cadmium	ND	0.100		mg/L	1	4/16/2024 3:10:00 PM
Chromium	ND	0.200		mg/L	1	4/16/2024 3:10:00 PM
Lead	ND	0.200		mg/L	1	4/16/2024 3:10:00 PM
Mercury	ND	0.0200		mg/L	1	4/16/2024 3:10:00 PM
Selenium	ND	0.100		mg/L	1	4/16/2024 3:10:00 PM
Silver	ND	0.200		mg/L	1	4/16/2024 3:10:00 PM
Sample Moisture (Percent Moisture)				Batch ID: R89408		Analyst: YL
Percent Moisture	21.4	0.500		wt%	1	2/5/2024 11:01:33 AM

Client: Aerotech
Collection Date: 1/30/2024
Project: Sunset Point Development
Lab ID: 2402027-008
Matrix: Soil
Client Sample ID: B15-01

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA 6020B				Batch ID: 43204		Analyst: ME
Arsenic	2.87	0.264		mg/Kg-dry	1	3/14/2024 12:29:00 PM
Cadmium	0.0457	0.0211		mg/Kg-dry	1	3/14/2024 12:29:00 PM
Sample Moisture (Percent Moisture)				Batch ID: R90179		Analyst: MP
Percent Moisture	10.4	0.500		wt%	1	3/13/2024 8:19:44 AM

Client: Aerotech
Collection Date: 1/30/2024
Project: Sunset Point Development
Lab ID: 2402027-010
Matrix: Soil
Client Sample ID: B15-03

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Gasoline by NWTPH-Gx				Batch ID: 42809		Analyst: CC
Gasoline Range Organics	ND	5.69		mg/Kg-dry	1	2/3/2024 8:34:09 AM
Surr: Toluene-d8	86.9	65 - 135		%Rec	1	2/3/2024 8:34:09 AM
Surr: 4-Bromofluorobenzene	107	65 - 135		%Rec	1	2/3/2024 8:34:09 AM
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 42809		Analyst: CC
Benzene	ND	0.0199		mg/Kg-dry	1	2/3/2024 8:34:09 AM
Toluene	ND	0.0341		mg/Kg-dry	1	2/3/2024 8:34:09 AM
Ethylbenzene	ND	0.0284		mg/Kg-dry	1	2/3/2024 8:34:09 AM
m,p-Xylene	ND	0.0569		mg/Kg-dry	1	2/3/2024 8:34:09 AM
o-Xylene	ND	0.0284		mg/Kg-dry	1	2/3/2024 8:34:09 AM
Surr: Dibromofluoromethane	109	79.2 - 123		%Rec	1	2/3/2024 8:34:09 AM
Surr: Toluene-d8	125	77.6 - 126		%Rec	1	2/3/2024 8:34:09 AM
Surr: 1-Bromo-4-fluorobenzene	105	72 - 131		%Rec	1	2/3/2024 8:34:09 AM
Total Metals by EPA 6020B				Batch ID: 43204		Analyst: ME
Arsenic	2.73	0.286		mg/Kg-dry	1	3/14/2024 12:32:00 PM
Cadmium	0.0503	0.0229		mg/Kg-dry	1	3/14/2024 12:32:00 PM
Sample Moisture (Percent Moisture)				Batch ID: R89408		Analyst: YL
Percent Moisture	14.0	0.500		wt%	1	2/5/2024 11:01:33 AM

Client: Aerotech
Collection Date: 1/30/2024
Project: Sunset Point Development
Lab ID: 2402027-012
Matrix: Soil
Client Sample ID: B16-02

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA 6020B				Batch ID: 43204		Analyst: ME
Arsenic	4.25	0.278		mg/Kg-dry	1	3/14/2024 12:34:00 PM
Cadmium	0.0542	0.0222		mg/Kg-dry	1	3/14/2024 12:34:00 PM
Sample Moisture (Percent Moisture)				Batch ID: R90179		Analyst: MP
Percent Moisture	9.29	0.500		wt%	1	3/13/2024 8:19:44 AM

Client: Aerotech
Collection Date: 1/30/2024
Project: Sunset Point Development
Lab ID: 2402027-014
Matrix: Soil
Client Sample ID: B17-02

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA 6020B				Batch ID: 43204		Analyst: ME
Arsenic	2.37	0.277		mg/Kg-dry	1	3/14/2024 12:37:00 PM
Cadmium	0.0536	0.0222		mg/Kg-dry	1	3/14/2024 12:37:00 PM
Sample Moisture (Percent Moisture)				Batch ID: R90179		Analyst: MP
Percent Moisture	13.9	0.500		wt%	1	3/13/2024 8:19:44 AM

Client: Aerotech
Collection Date: 1/30/2024
Project: Sunset Point Development
Lab ID: 2402027-017
Matrix: Soil
Client Sample ID: B18-03

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA 6020B				Batch ID: 43204		Analyst: ME
Arsenic	1.97	0.318		mg/Kg-dry	1	3/14/2024 12:39:00 PM
Cadmium	0.0630	0.0254		mg/Kg-dry	1	3/14/2024 12:39:00 PM
Sample Moisture (Percent Moisture)				Batch ID: R90179		Analyst: MP
Percent Moisture	18.1	0.500		wt%	1	3/13/2024 8:19:44 AM

Client: Aerotech
Collection Date: 1/30/2024
Project: Sunset Point Development
Lab ID: 2402027-018
Matrix: Soil
Client Sample ID: B18-04

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Gasoline by NWTPH-Gx				Batch ID: 42809		Analyst: CC
Gasoline Range Organics	ND	6.46		mg/Kg-dry	1	2/3/2024 9:34:28 AM
Surr: Toluene-d8	86.1	65 - 135		%Rec	1	2/3/2024 9:34:28 AM
Surr: 4-Bromofluorobenzene	106	65 - 135		%Rec	1	2/3/2024 9:34:28 AM
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 42809		Analyst: CC
Benzene	ND	0.0226		mg/Kg-dry	1	2/3/2024 9:34:28 AM
Toluene	ND	0.0387		mg/Kg-dry	1	2/3/2024 9:34:28 AM
Ethylbenzene	ND	0.0323		mg/Kg-dry	1	2/3/2024 9:34:28 AM
m,p-Xylene	ND	0.0646		mg/Kg-dry	1	2/3/2024 9:34:28 AM
o-Xylene	ND	0.0323		mg/Kg-dry	1	2/3/2024 9:34:28 AM
Surr: Dibromofluoromethane	111	79.2 - 123		%Rec	1	2/3/2024 9:34:28 AM
Surr: Toluene-d8	126	77.6 - 126	S	%Rec	1	2/3/2024 9:34:28 AM
Surr: 1-Bromo-4-fluorobenzene	104	72 - 131		%Rec	1	2/3/2024 9:34:28 AM
Total Metals by EPA 6020B				Batch ID: 43204		Analyst: ME
Arsenic	2.81	0.322		mg/Kg-dry	1	3/14/2024 12:42:00 PM
Cadmium	0.0948	0.0258		mg/Kg-dry	1	3/14/2024 12:42:00 PM
Sample Moisture (Percent Moisture)				Batch ID: R89408		Analyst: YL
Percent Moisture	19.8	0.500		wt%	1	2/5/2024 11:01:33 AM

NOTES:
S - Outlying surrogate recovery(ies) observed (high bias). Sample is non-detect; result meets QC requirements.

Client: Aerotech
Collection Date: 1/30/2024
Project: Sunset Point Development
Lab ID: 2402027-019
Matrix: Soil
Client Sample ID: B19-01

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
pH by EPA Method 9045				Batch ID: R89492		Analyst: AM
Hydrogen Ion (pH)	6.98		H	pH	1	2/8/2024 10:00:00 AM

Client: Aerotech
Collection Date: 1/30/2024
Project: Sunset Point Development
Lab ID: 2402027-021
Matrix: Soil
Client Sample ID: B20-01

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Diesel and Heavy Oil by NWTPH-Dx				Batch ID: 42968		Analyst: AP
Diesel Range Organics	ND	70.3	H	mg/Kg-dry	1	2/20/2024 5:12:31 AM
Heavy Oil	1,870	141	H	mg/Kg-dry	1	2/20/2024 5:12:31 AM
Total Petroleum Hydrocarbons	1,870	211	H	mg/Kg-dry	1	2/20/2024 5:12:31 AM
Surr: 2-Fluorobiphenyl	121	50 - 150	H	%Rec	1	2/20/2024 5:12:31 AM
Surr: o-Terphenyl	126	50 - 150	H	%Rec	1	2/20/2024 5:12:31 AM
NOTES: Detection may be biased high by organic material						
Total Metals by EPA 6020B				Batch ID: 43204		Analyst: ME
Arsenic	2.99	0.346		mg/Kg-dry	1	3/14/2024 12:44:00 PM
Cadmium	0.312	0.0277		mg/Kg-dry	1	3/14/2024 12:44:00 PM
Sample Moisture (Percent Moisture)				Batch ID: R89676		Analyst: MP
Percent Moisture	26.0	0.500		wt%	1	2/19/2024 8:09:46 AM

Client: Aerotech
Collection Date: 1/30/2024
Project: Sunset Point Development
Lab ID: 2402027-022
Matrix: Soil
Client Sample ID: B20-02

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Diesel and Heavy Oil by NWTPH-Dx				Batch ID: 42968		Analyst: AP
Diesel Range Organics	ND	54.7	H	mg/Kg-dry	1	2/20/2024 12:53:05 AM
Heavy Oil	115	109	H	mg/Kg-dry	1	2/20/2024 12:53:05 AM
Total Petroleum Hydrocarbons	ND	164	H	mg/Kg-dry	1	2/20/2024 12:53:05 AM
Surr: 2-Fluorobiphenyl	123	50 - 150	H	%Rec	1	2/20/2024 12:53:05 AM
Surr: o-Terphenyl	121	50 - 150	H	%Rec	1	2/20/2024 12:53:05 AM
Sample Moisture (Percent Moisture)				Batch ID: R89676		Analyst: MP
Percent Moisture	12.7	0.500		wt%	1	2/19/2024 8:09:46 AM

Client: Aerotech
Project: Sunset Point Development
Lab ID: 2402027-023
Client Sample ID: B20-03

Collection Date: 1/30/2024
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Diesel and Heavy Oil by NWTPH-Dx				Batch ID: 42819		Analyst: AP
Diesel Range Organics	ND	54.0		mg/Kg-dry	1	2/6/2024 12:18:14 AM
Heavy Oil	968	108		mg/Kg-dry	1	2/6/2024 12:18:14 AM
Total Petroleum Hydrocarbons	968	162		mg/Kg-dry	1	2/6/2024 12:18:14 AM
Surr: 2-Fluorobiphenyl	84.1	50 - 150		%Rec	1	2/6/2024 12:18:14 AM
Surr: o-Terphenyl	86.8	50 - 150		%Rec	1	2/6/2024 12:18:14 AM
PAHs by EPA Method 8270E SIM				Batch ID: 42838		Analyst: RG
Naphthalene	ND	0.0244		mg/Kg-dry	1	2/6/2024 9:26:56 PM
2-Methylnaphthalene	ND	0.0244		mg/Kg-dry	1	2/6/2024 9:26:56 PM
1-Methylnaphthalene	ND	0.0244		mg/Kg-dry	1	2/6/2024 9:26:56 PM
Acenaphthylene	ND	0.0244		mg/Kg-dry	1	2/6/2024 9:26:56 PM
Acenaphthene	ND	0.0244		mg/Kg-dry	1	2/6/2024 9:26:56 PM
Fluorene	ND	0.0244		mg/Kg-dry	1	2/6/2024 9:26:56 PM
Phenanthrene	ND	0.0244		mg/Kg-dry	1	2/6/2024 9:26:56 PM
Anthracene	ND	0.0244		mg/Kg-dry	1	2/6/2024 9:26:56 PM
Fluoranthene	ND	0.0244		mg/Kg-dry	1	2/6/2024 9:26:56 PM
Pyrene	ND	0.0488		mg/Kg-dry	1	2/6/2024 9:26:56 PM
Benz(a)anthracene	ND	0.0244		mg/Kg-dry	1	2/6/2024 9:26:56 PM
Chrysene	ND	0.0244		mg/Kg-dry	1	2/6/2024 9:26:56 PM
Benzo(b)fluoranthene	ND	0.0305		mg/Kg-dry	1	2/6/2024 9:26:56 PM
Benzo(k)fluoranthene	ND	0.0305		mg/Kg-dry	1	2/6/2024 9:26:56 PM
Benzo(a)pyrene	ND	0.0366		mg/Kg-dry	1	2/6/2024 9:26:56 PM
Indeno(1,2,3-cd)pyrene	ND	0.0488		mg/Kg-dry	1	2/6/2024 9:26:56 PM
Dibenz(a,h)anthracene	ND	0.0611		mg/Kg-dry	1	2/6/2024 9:26:56 PM
Benzo(g,h,i)perylene	ND	0.0611		mg/Kg-dry	1	2/6/2024 9:26:56 PM
Surr: 2-Fluorobiphenyl	58.8	29.3 - 159		%Rec	1	2/6/2024 9:26:56 PM
Surr: Terphenyl-d14 (surr)	58.5	28.4 - 159		%Rec	1	2/6/2024 9:26:56 PM
Total Metals by EPA 6020B				Batch ID: 43204		Analyst: ME
Arsenic	2.71	0.273		mg/Kg-dry	1	3/14/2024 12:47:00 PM
Cadmium	0.136	0.0218		mg/Kg-dry	1	3/14/2024 12:47:00 PM
Sample Moisture (Percent Moisture)				Batch ID: R89409		Analyst: YL
Percent Moisture	11.2	0.500		wt%	1	2/5/2024 11:04:19 AM

Client: Aerotech
Collection Date: 1/30/2024
Project: Sunset Point Development
Lab ID: 2402027-023
Matrix: Soil
Client Sample ID: B20-03

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
pH by EPA Method 9045				Batch ID: R89429		Analyst: AM
Hydrogen Ion (pH)	6.67			pH	1	2/5/2024 10:20:00 AM

Client: Aerotech
Collection Date: 1/30/2024
Project: Sunset Point Development
Lab ID: 2402027-024
Matrix: Soil
Client Sample ID: B20-04

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Diesel and Heavy Oil by NWTPH-Dx				Batch ID: 42968		Analyst: AP
Diesel Range Organics	ND	56.6	H	mg/Kg-dry	1	2/19/2024 11:26:40 PM
Heavy Oil	ND	113	H	mg/Kg-dry	1	2/19/2024 11:26:40 PM
Total Petroleum Hydrocarbons	ND	170	H	mg/Kg-dry	1	2/19/2024 11:26:40 PM
Surr: 2-Fluorobiphenyl	100	50 - 150	H	%Rec	1	2/19/2024 11:26:40 PM
Surr: o-Terphenyl	97.6	50 - 150	H	%Rec	1	2/19/2024 11:26:40 PM
Sample Moisture (Percent Moisture)				Batch ID: R89676		Analyst: MP
Percent Moisture	13.8	0.500		wt%	1	2/19/2024 8:09:46 AM

Client: Aerotech
Collection Date: 1/30/2024
Project: Sunset Point Development
Lab ID: 2402027-025
Matrix: Soil
Client Sample ID: B21-01

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Diesel and Heavy Oil by NWTPH-Dx				Batch ID: 42968		Analyst: AP
Diesel Range Organics	ND	78.8	H	mg/Kg-dry	1	2/19/2024 11:37:24 PM
Heavy Oil	ND	158	H	mg/Kg-dry	1	2/19/2024 11:37:24 PM
Total Petroleum Hydrocarbons	ND	237	H	mg/Kg-dry	1	2/19/2024 11:37:24 PM
Surr: 2-Fluorobiphenyl	96.9	50 - 150	H	%Rec	1	2/19/2024 11:37:24 PM
Surr: o-Terphenyl	95.1	50 - 150	H	%Rec	1	2/19/2024 11:37:24 PM
Total Metals by EPA 6020B				Batch ID: 43204		Analyst: ME
Arsenic	1.62	0.276		mg/Kg-dry	1	3/14/2024 12:49:00 PM
Cadmium	0.0420	0.0221		mg/Kg-dry	1	3/14/2024 12:49:00 PM
Sample Moisture (Percent Moisture)				Batch ID: R89676		Analyst: MP
Percent Moisture	8.75	0.500		wt%	1	2/19/2024 8:09:46 AM

Client: Aerotech
Collection Date: 1/30/2024
Project: Sunset Point Development
Lab ID: 2402027-026
Matrix: Soil
Client Sample ID: B22-01

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA 6020B				Batch ID: 43204		Analyst: ME
Arsenic	3.28	0.281		mg/Kg-dry	1	3/14/2024 12:57:00 PM
Cadmium	0.140	0.0225		mg/Kg-dry	1	3/14/2024 12:57:00 PM
Sample Moisture (Percent Moisture)				Batch ID: R90179		Analyst: MP
Percent Moisture	10.3	0.500		wt%	1	3/13/2024 8:19:44 AM

Client: Aerotech
Collection Date: 1/30/2024
Project: Sunset Point Development
Lab ID: 2402027-028
Matrix: Soil
Client Sample ID: B23-02

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Organochlorine Pesticides by EPA Method 8081A				Batch ID: 42839		Analyst: SK
Toxaphene	ND	1.10	D	mg/Kg-dry	10	2/8/2024 10:12:11 AM
Alpha BHC	ND	0.0110		mg/Kg-dry	1	2/7/2024 12:40:59 PM
Beta BHC	ND	0.0110		mg/Kg-dry	1	2/7/2024 12:40:59 PM
Gamma BHC (Lindane)	ND	0.0110		mg/Kg-dry	1	2/7/2024 12:40:59 PM
Delta BHC	ND	0.0110		mg/Kg-dry	1	2/7/2024 12:40:59 PM
Heptachlor	ND	0.0110		mg/Kg-dry	1	2/7/2024 12:40:59 PM
Aldrin	ND	0.0110		mg/Kg-dry	1	2/7/2024 12:40:59 PM
Heptachlor epoxide	ND	0.0110		mg/Kg-dry	1	2/7/2024 12:40:59 PM
gamma-Chlordane	ND	0.0110		mg/Kg-dry	1	2/7/2024 12:40:59 PM
Endosulfan I	ND	0.0110		mg/Kg-dry	1	2/7/2024 12:40:59 PM
alpha-Chlordane	ND	0.0110		mg/Kg-dry	1	2/7/2024 12:40:59 PM
Dieldrin	ND	0.0110		mg/Kg-dry	1	2/7/2024 12:40:59 PM
4,4'-DDE	ND	0.0110		mg/Kg-dry	1	2/7/2024 12:40:59 PM
Endrin	ND	0.0110		mg/Kg-dry	1	2/7/2024 12:40:59 PM
Endosulfan II	ND	0.0110		mg/Kg-dry	1	2/7/2024 12:40:59 PM
4,4'-DDD	ND	0.110	D	mg/Kg-dry	10	2/8/2024 10:12:11 AM
Endrin aldehyde	ND	0.0110		mg/Kg-dry	1	2/7/2024 12:40:59 PM
Endosulfan sulfate	ND	0.0110		mg/Kg-dry	1	2/7/2024 12:40:59 PM
4,4'-DDT	ND	0.110	D	mg/Kg-dry	10	2/8/2024 10:12:11 AM
Endrin ketone	ND	0.0110		mg/Kg-dry	1	2/7/2024 12:40:59 PM
Methoxychlor	ND	0.110	D	mg/Kg-dry	10	2/8/2024 10:12:11 AM
Surr: Decachlorobiphenyl	99.4	44.8 - 154		%Rec	1	2/7/2024 12:40:59 PM
Surr: Tetrachloro-m-xylene	108	62.8 - 160		%Rec	1	2/7/2024 12:40:59 PM
Total Metals by EPA 6020B				Batch ID: 43204		Analyst: ME
Arsenic	2.33	0.298		mg/Kg-dry	1	3/14/2024 12:59:00 PM
Cadmium	0.0500	0.0238		mg/Kg-dry	1	3/14/2024 12:59:00 PM
Sample Moisture (Percent Moisture)				Batch ID: R89409		Analyst: YL
Percent Moisture	14.6	0.500		wt%	1	2/5/2024 11:04:19 AM
pH by EPA Method 9045				Batch ID: R89429		Analyst: AM
Hydrogen Ion (pH)	6.53			pH	1	2/5/2024 10:20:00 AM

Client: Aerotech
Collection Date: 1/30/2024
Project: Sunset Point Development
Lab ID: 2402027-029
Matrix: Soil
Client Sample ID: B24-01

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA 6020B				Batch ID: 43204		Analyst: ME
Arsenic	3.16	0.280		mg/Kg-dry	1	3/14/2024 1:02:00 PM
Cadmium	0.190	0.0224		mg/Kg-dry	1	3/14/2024 1:02:00 PM
Sample Moisture (Percent Moisture)				Batch ID: R90179		Analyst: MP
Percent Moisture	7.87	0.500		wt%	1	3/13/2024 8:19:44 AM

Client: Aerotech
Collection Date: 1/30/2024
Project: Sunset Point Development
Lab ID: 2402027-030
Matrix: Soil
Client Sample ID: B24-02

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Diesel and Heavy Oil by NWTPH-Dx				Batch ID: 42819		Analyst: AP
Diesel Range Organics	ND	53.6		mg/Kg-dry	1	2/5/2024 5:26:00 PM
Heavy Oil	ND	107		mg/Kg-dry	1	2/5/2024 5:26:00 PM
Total Petroleum Hydrocarbons	ND	161		mg/Kg-dry	1	2/5/2024 5:26:00 PM
Surr: 2-Fluorobiphenyl	112	50 - 150		%Rec	1	2/5/2024 5:26:00 PM
Surr: o-Terphenyl	106	50 - 150		%Rec	1	2/5/2024 5:26:00 PM
Sample Moisture (Percent Moisture)				Batch ID: R89409		Analyst: YL
Percent Moisture	7.80	0.500		wt%	1	2/5/2024 11:04:19 AM
pH by EPA Method 9045				Batch ID: R89429		Analyst: AM
Hydrogen Ion (pH)	7.07			pH	1	2/5/2024 10:20:00 AM

Client: Aerotech
Collection Date: 1/30/2024
Project: Sunset Point Development
Lab ID: 2402027-031
Matrix: Soil
Client Sample ID: B25-01

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA 6020B				Batch ID: 43204		Analyst: ME
Arsenic	4.72	0.310		mg/Kg-dry	1	3/14/2024 1:04:00 PM
Cadmium	0.746	0.0248		mg/Kg-dry	1	3/14/2024 1:04:00 PM
Sample Moisture (Percent Moisture)				Batch ID: R90179		Analyst: MP
Percent Moisture	14.5	0.500		wt%	1	3/13/2024 8:19:44 AM

Client: Aerotech
Collection Date: 1/30/2024
Project: Sunset Point Development
Lab ID: 2402027-032
Matrix: Soil
Client Sample ID: B25-02

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Diesel and Heavy Oil by NWTPH-Dx				Batch ID: 42819		Analyst: AP
Diesel Range Organics	ND	53.5		mg/Kg-dry	1	2/5/2024 5:36:51 PM
Heavy Oil	ND	107		mg/Kg-dry	1	2/5/2024 5:36:51 PM
Total Petroleum Hydrocarbons	ND	160		mg/Kg-dry	1	2/5/2024 5:36:51 PM
Surr: 2-Fluorobiphenyl	112	50 - 150		%Rec	1	2/5/2024 5:36:51 PM
Surr: o-Terphenyl	108	50 - 150		%Rec	1	2/5/2024 5:36:51 PM
Sample Moisture (Percent Moisture)				Batch ID: R89409		Analyst: YL
Percent Moisture	10.2	0.500		wt%	1	2/5/2024 11:04:19 AM

Client: Aerotech
Collection Date: 1/30/2024
Project: Sunset Point Development
Lab ID: 2402027-036
Matrix: Soil
Client Sample ID: B27-02

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA 6020B				Batch ID: 43204		Analyst: ME
Arsenic	4.59	0.366		mg/Kg-dry	1	3/14/2024 1:06:00 PM
Cadmium	0.216	0.0293		mg/Kg-dry	1	3/14/2024 1:06:00 PM
Sample Moisture (Percent Moisture)				Batch ID: R90179		Analyst: MP
Percent Moisture	30.0	0.500		wt%	1	3/13/2024 8:19:44 AM
pH by EPA Method 9045				Batch ID: R89429		Analyst: AM
Hydrogen Ion (pH)	7.26			pH	1	2/5/2024 10:20:00 AM

Client: Aerotech
Collection Date: 1/30/2024
Project: Sunset Point Development
Lab ID: 2402027-037
Matrix: Soil
Client Sample ID: B28-01

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA 6020B				Batch ID: 43204		Analyst: ME
Arsenic	3.20	0.265		mg/Kg-dry	1	3/14/2024 1:09:00 PM
Cadmium	0.0352	0.0212		mg/Kg-dry	1	3/14/2024 1:09:00 PM
Sample Moisture (Percent Moisture)				Batch ID: R90179		Analyst: MP
Percent Moisture	10.8	0.500		wt%	1	3/13/2024 8:19:44 AM

Client: Aerotech
Collection Date: 1/30/2024
Project: Sunset Point Development
Lab ID: 2402027-040
Matrix: Soil
Client Sample ID: B30-01

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA 6020B				Batch ID: 43204		Analyst: ME
Arsenic	2.99	0.418		mg/Kg-dry	1	3/14/2024 1:14:00 PM
Cadmium	0.445	0.0334		mg/Kg-dry	1	3/14/2024 1:14:00 PM
Sample Moisture (Percent Moisture)				Batch ID: R90179		Analyst: MP
Percent Moisture	39.2	0.500		wt%	1	3/13/2024 8:19:44 AM

Client: Aerotech
Collection Date: 1/30/2024
Project: Sunset Point Development
Lab ID: 2402027-043
Matrix: Soil
Client Sample ID: B31-02

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA 6020B				Batch ID: 43204		Analyst: ME
Arsenic	3.45	0.304		mg/Kg-dry	1	3/14/2024 1:16:00 PM
Cadmium	0.0291	0.0243		mg/Kg-dry	1	3/14/2024 1:16:00 PM
Sample Moisture (Percent Moisture)				Batch ID: R90179		Analyst: MP
Percent Moisture	21.4	0.500		wt%	1	3/13/2024 8:19:44 AM

Client: Aerotech
Collection Date: 1/30/2024
Project: Sunset Point Development
Lab ID: 2402027-044
Matrix: Soil
Client Sample ID: B32-01

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA 6020B				Batch ID: 43235		Analyst: ME
Arsenic	1.86	0.354		mg/Kg-dry	1	3/13/2024 3:12:00 PM
Cadmium	0.215	0.0283		mg/Kg-dry	1	3/13/2024 3:12:00 PM
Sample Moisture (Percent Moisture)				Batch ID: R90179		Analyst: MP
Percent Moisture	29.8	0.500		wt%	1	3/13/2024 8:19:44 AM

Client: Aerotech
Collection Date: 1/30/2024
Project: Sunset Point Development
Lab ID: 2402027-045
Matrix: Soil
Client Sample ID: B32-02

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA 6020B				Batch ID: 42814		Analyst: ME
Arsenic	1.83	0.248		mg/Kg-dry	1	2/6/2024 5:09:00 PM
Cadmium	0.0625	0.0199		mg/Kg-dry	1	2/6/2024 5:09:00 PM
Chromium	33.7	0.248		mg/Kg-dry	1	2/6/2024 5:09:00 PM
Lead	3.98	0.993		mg/Kg-dry	1	2/6/2024 5:09:00 PM
Mercury	ND	0.199		mg/Kg-dry	1	2/6/2024 5:09:00 PM
Sample Moisture (Percent Moisture)				Batch ID: R89409		Analyst: YL
Percent Moisture	21.9			wt%	1	2/5/2024 11:04:19 AM
Hexavalent Chromium by EPA Method 7196				Batch ID: 43020		Analyst: SS
Chromium, Hexavalent	1.63	0.620		mg/Kg-dry	1	2/23/2024 4:13:00 PM

Work Order: 2402027
CLIENT: Aerotech
Project: Sunset Point Development

QC SUMMARY REPORT

Hexavalent Chromium by EPA Method 7196

Sample ID: MB-43020	SampType: MBLK			Units: mg/Kg		Prep Date: 2/23/2024			RunNo: 89805	
Client ID: MBLKS	Batch ID: 43020					Analysis Date: 2/23/2024			SeqNo: 1874410	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	ND	0.500									

Sample ID: LCS-43020	SampType: LCS			Units: mg/Kg		Prep Date: 2/23/2024			RunNo: 89805	
Client ID: LCSS	Batch ID: 43020					Analysis Date: 2/23/2024			SeqNo: 1874411	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	10.7	0.500	12.87	0	82.8	66.6	106.6				

Sample ID: 2402117-004ADUP	SampType: DUP			Units: mg/Kg-dry		Prep Date: 2/23/2024			RunNo: 89805	
Client ID: BATCH	Batch ID: 43020					Analysis Date: 2/23/2024			SeqNo: 1874414	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	ND	0.610						0		30	

Sample ID: 2402117-004AMS1	SampType: MS			Units: mg/Kg-dry		Prep Date: 2/23/2024			RunNo: 89805	
Client ID: BATCH	Batch ID: 43020					Analysis Date: 2/23/2024			SeqNo: 1874415	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	ND	0.632	16.28	0	0	5	143				S

NOTES:
S - Outlying spike recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect.

Sample ID: 2402117-004AMS2	SampType: MS			Units: mg/Kg-dry		Prep Date: 2/23/2024			RunNo: 89805	
Client ID: BATCH	Batch ID: 43020					Analysis Date: 2/23/2024			SeqNo: 1874416	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	ND	0.652	16.77	0	0	5	143				S

NOTES:
S - Outlying spike recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect.

Work Order: 2402027
CLIENT: Aerotech
Project: Sunset Point Development

QC SUMMARY REPORT

pH by EPA Method 9045

Sample ID: MB-R89429	SampType: MBLK			Units: pH		Prep Date: 2/5/2024		RunNo: 89429		
Client ID: MBLKS	Batch ID: R89429					Analysis Date: 2/5/2024		SeqNo: 1867194		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hydrogen Ion (pH)	6.17										

Sample ID: LCS-R89429	SampType: LCS			Units: pH		Prep Date: 2/5/2024		RunNo: 89429		
Client ID: LCSS	Batch ID: R89429					Analysis Date: 2/5/2024		SeqNo: 1867195		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hydrogen Ion (pH)	7.19		7.000	0	103	95	105				

Sample ID: 2402027-036ADUP	SampType: DUP			Units: pH		Prep Date: 2/5/2024		RunNo: 89429		
Client ID: B27-02	Batch ID: R89429					Analysis Date: 2/5/2024		SeqNo: 1867200		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hydrogen Ion (pH)	7.14							7.260	1.67	10	

Sample ID: MB-R89492	SampType: MBLK			Units: pH		Prep Date: 2/8/2024		RunNo: 89492		
Client ID: MBLKS	Batch ID: R89492					Analysis Date: 2/8/2024		SeqNo: 1868387		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hydrogen Ion (pH)	6.20										

Sample ID: LCS-R89492	SampType: LCS			Units: pH		Prep Date: 2/8/2024		RunNo: 89492		
Client ID: LCSS	Batch ID: R89492					Analysis Date: 2/8/2024		SeqNo: 1868388		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hydrogen Ion (pH)	7.17		7.000	0	102	95	105				

Work Order: 2402027
CLIENT: Aerotech
Project: Sunset Point Development

QC SUMMARY REPORT

pH by EPA Method 9045

Sample ID: **2402027-019ADUP**	SampType: **DUP**			Units: **pH**		Prep Date: **2/8/2024**		RunNo: **89492**			
Client ID: **B19-01**	Batch ID: **R89492**					Analysis Date: **2/8/2024**		SeqNo: **1868390**			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hydrogen Ion (pH)	7.04							6.980	0.856	10	H

Work Order: 2402027
CLIENT: Aerotech
Project: Sunset Point Development

QC SUMMARY REPORT

Total Metals by EPA 6020B

Sample ID: MB-42814	SampType: MBLK			Units: mg/Kg		Prep Date: 2/5/2024			RunNo: 89458	
Client ID: MBLKS	Batch ID: 42814					Analysis Date: 2/6/2024			SeqNo: 1867705	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.202									
Cadmium	ND	0.0161									
Chromium	ND	0.202									
Lead	ND	0.806									
Mercury	ND	0.161									

Sample ID: LCS-42814	SampType: LCS			Units: mg/Kg		Prep Date: 2/5/2024			RunNo: 89458	
Client ID: LCSS	Batch ID: 42814					Analysis Date: 2/6/2024			SeqNo: 1867706	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	42.9	0.214	42.74	0	100	80	120				
Cadmium	2.28	0.0171	2.137	0	107	80	120				
Chromium	46.6	0.214	42.74	0	109	80	120				
Lead	22.8	0.855	21.37	0	107	80	120				
Mercury	1.13	0.171	1.068	0	106	80	120				

Sample ID: 2402021-003AMS	SampType: MS			Units: mg/Kg-dry		Prep Date: 2/5/2024			RunNo: 89458	
Client ID: BATCH	Batch ID: 42814					Analysis Date: 2/6/2024			SeqNo: 1867709	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	49.7	0.226	45.26	7.390	93.6	75	125				
Cadmium	2.47	0.0181	2.263	0.1382	103	75	125				
Chromium	58.9	0.226	45.26	17.20	92.1	75	125				
Lead	35.6	0.905	22.63	10.54	111	75	125				
Mercury	1.22	0.181	1.132	0.02852	106	75	125				

Work Order: 2402027
CLIENT: Aerotech
Project: Sunset Point Development

QC SUMMARY REPORT

Total Metals by EPA 6020B

Sample ID: 2402021-003AMSD	SampType: MSD			Units: mg/Kg-dry		Prep Date: 2/5/2024			RunNo: 89458		
Client ID: BATCH	Batch ID: 42814					Analysis Date: 2/6/2024			SeqNo: 1867710		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	48.9	0.228	45.63	7.390	90.9	75	125	49.75	1.81	20	
Cadmium	2.38	0.0183	2.281	0.1382	98.2	75	125	2.467	3.69	20	
Chromium	57.0	0.228	45.63	17.20	87.2	75	125	58.89	3.33	20	
Lead	34.9	0.913	22.81	10.54	107	75	125	35.64	2.20	20	
Mercury	1.16	0.183	1.141	0.02852	99.5	75	125	1.223	5.03	20	

Sample ID: MB-43235	SampType: MBLK			Units: mg/Kg		Prep Date: 3/12/2024			RunNo: 90205		
Client ID: MBLKS	Batch ID: 43235					Analysis Date: 3/13/2024			SeqNo: 1881741		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.254									
Cadmium	ND	0.0203									

Sample ID: LCS-43235	SampType: LCS			Units: mg/Kg		Prep Date: 3/12/2024			RunNo: 90205		
Client ID: LCSS	Batch ID: 43235					Analysis Date: 3/13/2024			SeqNo: 1881742		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	42.9	0.260	41.67	0	103	80	120				
Cadmium	2.15	0.0208	2.083	0	103	80	120				

Sample ID: 2403152-001AMS	SampType: MS			Units: mg/Kg-dry		Prep Date: 3/12/2024			RunNo: 90205		
Client ID: BATCH	Batch ID: 43235					Analysis Date: 3/13/2024			SeqNo: 1881745		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	43.1	0.274	43.77	2.450	92.8	75	125				
Cadmium	2.31	0.0219	2.189	0.08086	102	75	125				

Work Order: 2402027
CLIENT: Aerotech
Project: Sunset Point Development

QC SUMMARY REPORT

Total Metals by EPA 6020B

Sample ID: 2403152-001AMSD	SampType: MSD			Units: mg/Kg-dry		Prep Date: 3/12/2024			RunNo: 90205		
Client ID: BATCH	Batch ID: 43235					Analysis Date: 3/13/2024			SeqNo: 1881746		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	50.4	0.298	47.72	2.450	100	75	125	43.08	15.6	20	
Cadmium	2.71	0.0239	2.386	0.08086	110	75	125	2.308	16.2	20	

Sample ID: MB-43204	SampType: MBLK			Units: mg/Kg		Prep Date: 3/11/2024			RunNo: 90269		
Client ID: MBLKS	Batch ID: 43204					Analysis Date: 3/14/2024			SeqNo: 1882943		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.246									
Cadmium	ND	0.0197									

Sample ID: LCS-43204	SampType: LCS			Units: mg/Kg		Prep Date: 3/11/2024			RunNo: 90269		
Client ID: LCSS	Batch ID: 43204					Analysis Date: 3/14/2024			SeqNo: 1882944		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	39.4	0.254	40.65	0	96.9	80	120				
Cadmium	2.03	0.0203	2.033	0	99.9	80	120				

Sample ID: 2402027-003AMS	SampType: MS			Units: mg/Kg-dry		Prep Date: 3/11/2024			RunNo: 90269		
Client ID: B12-01	Batch ID: 43204					Analysis Date: 3/14/2024			SeqNo: 1882947		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	45.1	0.278	44.45	2.770	95.1	75	125				
Cadmium	2.35	0.0222	2.222	0.05909	103	75	125				

Sample ID: 2402027-003AMSD	SampType: MSD			Units: mg/Kg-dry		Prep Date: 3/11/2024			RunNo: 90269		
Client ID: B12-01	Batch ID: 43204					Analysis Date: 3/14/2024			SeqNo: 1882948		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	47.4	0.287	45.84	2.770	97.4	75	125	45.05	5.10	20	
Cadmium	2.49	0.0229	2.292	0.05909	106	75	125	2.354	5.62	20	

Work Order: 2402027
CLIENT: Aerotech
Project: Sunset Point Development

QC SUMMARY REPORT

Total Metals by EPA 6020B

Sample ID: 2402027-003AMSD	SampType: MSD			Units: mg/Kg-dry		Prep Date: 3/11/2024			RunNo: 90269		
Client ID: B12-01	Batch ID: 43204					Analysis Date: 3/14/2024			SeqNo: 1882948		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Work Order: 2402027
CLIENT: Aerotech
Project: Sunset Point Development

QC SUMMARY REPORT

Metals (EPA 6020B) with TCLP Extraction (EPA 1311)

Sample ID: MB-43587	SampType: MBLK	Units: mg/L	Prep Date: 4/16/2024	RunNo: 91018
Client ID: MBLKS	Batch ID: 43587		Analysis Date: 4/16/2024	SeqNo: 1897726

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.100									
Barium	ND	0.500									
Cadmium	ND	0.100									
Chromium	ND	0.200									
Lead	ND	0.200									
Mercury	ND	0.0200									
Selenium	ND	0.100									
Silver	ND	0.200									

Sample ID: LCS-43587	SampType: LCS	Units: mg/L	Prep Date: 4/16/2024	RunNo: 91018
Client ID: LCSS	Batch ID: 43587		Analysis Date: 4/16/2024	SeqNo: 1897727

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	5.39	0.100	5.000	0	108	65	135				
Barium	5.57	0.500	5.000	0	111	65	135				
Cadmium	0.282	0.100	0.2500	0	113	65	135				
Chromium	5.94	0.200	5.000	0	119	65	135				
Lead	2.82	0.200	2.500	0	113	65	135				
Mercury	0.146	0.0200	0.1250	0	117	65	135				
Selenium	0.534	0.100	0.5000	0	107	65	135				
Silver	0.270	0.200	0.2500	0	108	65	135				

Sample ID: 2402027-006ADUP	SampType: DUP	Units: mg/L	Prep Date: 4/16/2024	RunNo: 91018
Client ID: B14-01	Batch ID: 43587		Analysis Date: 4/16/2024	SeqNo: 1897729

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.100						0		30	
Barium	ND	0.500						0		30	
Cadmium	ND	0.100						0		30	
Chromium	ND	0.200						0		30	
Lead	ND	0.200						0		30	

Work Order: 2402027
CLIENT: Aerotech
Project: Sunset Point Development

QC SUMMARY REPORT

Metals (EPA 6020B) with TCLP Extraction (EPA 1311)

Sample ID: 2402027-006ADUP	SampType: DUP			Units: mg/L		Prep Date: 4/16/2024		RunNo: 91018		
Client ID: B14-01	Batch ID: 43587					Analysis Date: 4/16/2024		SeqNo: 1897729		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.0200						0		30	
Selenium	ND	0.100						0		30	
Silver	ND	0.200						0		30	

Sample ID: 2402027-006AMS	SampType: MS			Units: mg/L		Prep Date: 4/16/2024		RunNo: 91018		
Client ID: B14-01	Batch ID: 43587					Analysis Date: 4/16/2024		SeqNo: 1897731		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	5.10	0.100	5.000	0.001300	102	65	135				
Barium	5.54	0.500	5.000	0.3121	105	65	135				
Cadmium	0.266	0.100	0.2500	0.001000	106	65	135				
Chromium	5.35	0.200	5.000	0.01365	107	65	135				
Lead	2.52	0.200	2.500	0.001550	101	65	135				
Mercury	0.131	0.0200	0.1250	0.0005500	105	65	135				
Selenium	0.503	0.100	0.5000	0	101	65	135				
Silver	0.259	0.200	0.2500	0.0001000	104	65	135				

Sample ID: 2402027-006AMSD	SampType: MSD			Units: mg/L		Prep Date: 4/16/2024		RunNo: 91018		
Client ID: B14-01	Batch ID: 43587					Analysis Date: 4/16/2024		SeqNo: 1897732		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	4.88	0.100	5.000	0.001300	97.6	65	135	5.100	4.42	30	
Barium	5.54	0.500	5.000	0.3121	105	65	135	5.542	0.0460	30	
Cadmium	0.266	0.100	0.2500	0.001000	106	65	135	0.2663	0.150	30	
Chromium	5.11	0.200	5.000	0.01365	102	65	135	5.355	4.73	30	
Lead	2.51	0.200	2.500	0.001550	100	65	135	2.523	0.457	30	
Mercury	0.132	0.0200	0.1250	0.0005500	105	65	135	0.1312	0.835	30	
Selenium	0.481	0.100	0.5000	0	96.2	65	135	0.5035	4.51	30	
Silver	0.260	0.200	0.2500	0.0001000	104	65	135	0.2590	0.308	30	

Work Order: 2402027
CLIENT: Aerotech
Project: Sunset Point Development

QC SUMMARY REPORT

Diesel and Heavy Oil by NWTPH-Dx

Sample ID: MB-42819	SampType: MBLK			Units: mg/Kg		Prep Date: 2/5/2024			RunNo: 89451		
Client ID: MBLKS	Batch ID: 42819					Analysis Date: 2/5/2024			SeqNo: 1867493		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics	ND	50.0									
Heavy Oil	ND	100									
Total Petroleum Hydrocarbons	ND	150									
Surr: 2-Fluorobiphenyl	9.33		10.00		93.3	50	150				
Surr: o-Terphenyl	9.25		10.00		92.5	50	150				

Sample ID: LCS-42819	SampType: LCS			Units: mg/Kg		Prep Date: 2/5/2024			RunNo: 89451		
Client ID: LCSS	Batch ID: 42819					Analysis Date: 2/5/2024			SeqNo: 1867494		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Petroleum Hydrocarbons	485	150	500.0	0	96.9	80.8	118				
Surr: 2-Fluorobiphenyl	9.33		10.00		93.3	50	150				
Surr: o-Terphenyl	12.1		10.00		121	50	150				

Sample ID: 2402027-032AMS	SampType: MS			Units: mg/Kg-dry		Prep Date: 2/5/2024			RunNo: 89451		
Client ID: B25-02	Batch ID: 42819					Analysis Date: 2/5/2024			SeqNo: 1867498		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Petroleum Hydrocarbons	487	161	536.7	0	90.8	43.5	147				
Surr: 2-Fluorobiphenyl	10.9		10.73		101	50	150				
Surr: o-Terphenyl	13.7		10.73		128	50	150				

Sample ID: 2402027-032AMSD	SampType: MSD			Units: mg/Kg-dry		Prep Date: 2/5/2024			RunNo: 89451		
Client ID: B25-02	Batch ID: 42819					Analysis Date: 2/5/2024			SeqNo: 1867499		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Petroleum Hydrocarbons	683	161	536.2	0	127	43.5	147	487.5	33.4	30	
Surr: 2-Fluorobiphenyl	13.1		10.72		122	50	150		0		
Surr: o-Terphenyl	16.0		10.72		150	50	150		0		

Work Order: 2402027
CLIENT: Aerotech
Project: Sunset Point Development

QC SUMMARY REPORT

Diesel and Heavy Oil by NWTPH-Dx

Sample ID: 2402028-001ADUP	SampType: DUP			Units: mg/Kg-dry		Prep Date: 2/5/2024		RunNo: 89451		
Client ID: BATCH	Batch ID: 42819					Analysis Date: 2/5/2024		SeqNo: 1867510		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics	ND	74.4						0		30	
Heavy Oil	502	149						342.7	37.7	30	
Total Petroleum Hydrocarbons	526	223						342.7	42.2	30	
Surr: 2-Fluorobiphenyl	19.9		14.87		134	50	150		0		
Surr: o-Terphenyl	18.0		14.87		121	50	150		0		

Sample ID: MB-42968	SampType: MBLK			Units: mg/Kg		Prep Date: 2/19/2024		RunNo: 89791		
Client ID: MBLKS	Batch ID: 42968					Analysis Date: 2/19/2024		SeqNo: 1874064		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics	ND	50.0									
Heavy Oil	ND	100									
Total Petroleum Hydrocarbons	ND	150									
Surr: 2-Fluorobiphenyl	10.4		10.00		104	50	150				
Surr: o-Terphenyl	10.3		10.00		103	50	150				

Sample ID: LCS-42968	SampType: LCS			Units: mg/Kg		Prep Date: 2/19/2024		RunNo: 89791		
Client ID: LCSS	Batch ID: 42968					Analysis Date: 2/19/2024		SeqNo: 1874065		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Petroleum Hydrocarbons	524	150	500.0	0	105	80.8	118				
Surr: 2-Fluorobiphenyl	9.71		10.00		97.1	50	150				
Surr: o-Terphenyl	12.3		10.00		123	50	150				

Sample ID: 2402027-022AMS	SampType: MS			Units: mg/Kg-dry		Prep Date: 2/19/2024		RunNo: 89791		
Client ID: B20-02	Batch ID: 42968					Analysis Date: 2/20/2024		SeqNo: 1874070		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Petroleum Hydrocarbons	692	169	564.0	114.8	102	43.5	147				H
Surr: 2-Fluorobiphenyl	11.3		11.28		101	50	150				H

Work Order: 2402027
CLIENT: Aerotech
Project: Sunset Point Development

QC SUMMARY REPORT

Diesel and Heavy Oil by NWTPH-Dx

Sample ID: 2402027-022AMS	SampType: MS			Units: mg/Kg-dry		Prep Date: 2/19/2024		RunNo: 89791		
Client ID: B20-02	Batch ID: 42968					Analysis Date: 2/20/2024		SeqNo: 1874070		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: o-Terphenyl	14.1		11.28		125	50	150				H

Sample ID: 2402027-022AMSD	SampType: MSD			Units: mg/Kg-dry		Prep Date: 2/19/2024		RunNo: 89791		
Client ID: B20-02	Batch ID: 42968					Analysis Date: 2/20/2024		SeqNo: 1874071		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Petroleum Hydrocarbons	760	167	556.9	114.8	116	43.5	147	692.3	9.39	30	H
Surr: 2-Fluorobiphenyl	12.0		11.14		107	50	150		0		H
Surr: o-Terphenyl	15.5		11.14		139	50	150		0		H

Sample ID: 2402028-051ADUP	SampType: DUP			Units: mg/Kg-dry		Prep Date: 2/19/2024		RunNo: 89791		
Client ID: BATCH	Batch ID: 42968					Analysis Date: 2/20/2024		SeqNo: 1874082		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics	ND	70.7						0		30	H
Heavy Oil	626	141						431.5	36.9	30	H
Total Petroleum Hydrocarbons	626	212						0	200	30	H
Surr: 2-Fluorobiphenyl	16.6		14.15		117	50	150		0		H
Surr: o-Terphenyl	16.9		14.15		119	50	150		0		H

Work Order: 2402027
CLIENT: Aerotech
Project: Sunset Point Development

QC SUMMARY REPORT
PAHs by EPA Method 8270E SIM

Sample ID: MB-42838	SampType: MBLK			Units: mg/Kg		Prep Date: 2/6/2024		RunNo: 89463		
Client ID: MBLKS	Batch ID: 42838					Analysis Date: 2/6/2024		SeqNo: 1867796		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	ND	0.0200									
2-Methylnaphthalene	ND	0.0200									
1-Methylnaphthalene	ND	0.0200									
Acenaphthene	ND	0.0200									
Acenaphthylene	ND	0.0200									
Phenanthrene	ND	0.0200									
Fluorene	ND	0.0200									
Anthracene	ND	0.0200									
Fluoranthene	ND	0.0200									
Pyrene	ND	0.0400									
Benz(a)anthracene	ND	0.0200									
Chrysene	ND	0.0200									
Benzo(b)fluoranthene	ND	0.0250									
Benzo(k)fluoranthene	ND	0.0250									
Benzo(a)pyrene	ND	0.0300									
Indeno(1,2,3-cd)pyrene	ND	0.0400									
Dibenz(a,h)anthracene	ND	0.0500									
Benzo(g,h,i)perylene	ND	0.0500									
Surr: 2-Fluorobiphenyl	1.06		1.000		106	22.2	146				
Surr: Terphenyl-d14 (surr)	1.03		1.000		103	20.2	159				

Sample ID: LCS-42838	SampType: LCS			Units: mg/Kg		Prep Date: 2/6/2024		RunNo: 89463		
Client ID: LCSS	Batch ID: 42838					Analysis Date: 2/6/2024		SeqNo: 1867797		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	1.69	0.0200	2.000	0	84.7	54.4	123				
2-Methylnaphthalene	1.69	0.0200	2.000	0	84.7	55.3	123				
1-Methylnaphthalene	1.68	0.0200	2.000	0	83.9	56.6	121				
Acenaphthene	1.66	0.0200	2.000	0	83.1	50.4	123				
Acenaphthylene	1.64	0.0200	2.000	0	82.1	57	122				
Phenanthrene	1.64	0.0200	2.000	0	81.8	47.4	127				

Work Order: 2402027
CLIENT: Aerotech
Project: Sunset Point Development

QC SUMMARY REPORT
PAHs by EPA Method 8270E SIM

Sample ID: LCS-42838	SampType: LCS			Units: mg/Kg		Prep Date: 2/6/2024		RunNo: 89463		
Client ID: LCSS	Batch ID: 42838					Analysis Date: 2/6/2024		SeqNo: 1867797		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluorene	1.66	0.0200	2.000	0	83.0	51.5	127				
Anthracene	1.64	0.0200	2.000	0	82.0	48.5	124				
Fluoranthene	1.65	0.0200	2.000	0	82.6	46.4	132				
Pyrene	1.69	0.0400	2.000	0	84.3	45.2	134				
Benz(a)anthracene	1.67	0.0200	2.000	0	83.4	45.9	138				
Chrysene	1.59	0.0200	2.000	0	79.7	51.5	124				
Benzo(b)fluoranthene	1.58	0.0250	2.000	0	79.0	52.8	130				
Benzo(k)fluoranthene	1.63	0.0250	2.000	0	81.5	50	127				
Benzo(a)pyrene	1.52	0.0300	2.000	0	76.1	53	127				
Indeno(1,2,3-cd)pyrene	1.64	0.0400	2.000	0	81.9	55.7	129				
Dibenz(a,h)anthracene	1.59	0.0500	2.000	0	79.7	54.3	126				
Benzo(g,h,i)perylene	1.57	0.0500	2.000	0	78.5	52.7	123				
Surr: 2-Fluorobiphenyl	1.03		1.000		103	29.3	159				
Surr: Terphenyl-d14 (surr)	1.00		1.000		100	28.4	159				

Sample ID: LCSD-42838	SampType: LCSD			Units: mg/Kg		Prep Date: 2/6/2024		RunNo: 89463		
Client ID: LCSS02	Batch ID: 42838					Analysis Date: 2/6/2024		SeqNo: 1867798		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	1.69	0.0200	2.000	0	84.3	54.4	123	1.694	0.461	30	
2-Methylnaphthalene	1.69	0.0200	2.000	0	84.7	55.3	123	1.694	0.0229	30	
1-Methylnaphthalene	1.68	0.0200	2.000	0	83.9	56.6	121	1.677	0.0980	30	
Acenaphthene	1.64	0.0200	2.000	0	82.0	50.4	123	1.663	1.37	30	
Acenaphthylene	1.64	0.0200	2.000	0	81.9	57	122	1.643	0.313	30	
Phenanthrene	1.60	0.0200	2.000	0	80.1	47.4	127	1.636	2.08	30	
Fluorene	1.64	0.0200	2.000	0	81.8	51.5	127	1.659	1.47	30	
Anthracene	1.63	0.0200	2.000	0	81.5	48.5	124	1.640	0.604	30	
Fluoranthene	1.62	0.0200	2.000	0	81.2	46.4	132	1.651	1.71	30	
Pyrene	1.65	0.0400	2.000	0	82.7	45.2	134	1.685	1.93	30	
Benz(a)anthracene	1.64	0.0200	2.000	0	82.0	45.9	138	1.668	1.72	30	
Chrysene	1.56	0.0200	2.000	0	78.1	51.5	124	1.595	2.10	30	

Work Order: 2402027
CLIENT: Aerotech
Project: Sunset Point Development

QC SUMMARY REPORT

PAHs by EPA Method 8270E SIM

Sample ID: LCSD-42838	SampType: LCSD			Units: mg/Kg		Prep Date: 2/6/2024			RunNo: 89463		
Client ID: LCSS02	Batch ID: 42838					Analysis Date: 2/6/2024			SeqNo: 1867798		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzo(b)fluoranthene	1.55	0.0250	2.000	0	77.6	52.8	130	1.580	1.80	30	
Benzo(k)fluoranthene	1.59	0.0250	2.000	0	79.3	50	127	1.631	2.77	30	
Benzo(a)pyrene	1.48	0.0300	2.000	0	74.1	53	127	1.522	2.68	30	
Indeno(1,2,3-cd)pyrene	1.62	0.0400	2.000	0	81.1	55.7	129	1.637	0.879	30	
Dibenz(a,h)anthracene	1.57	0.0500	2.000	0	78.3	54.3	126	1.595	1.82	30	
Benzo(g,h,i)perylene	1.55	0.0500	2.000	0	77.4	52.7	123	1.570	1.45	30	
Surr: 2-Fluorobiphenyl	1.02		1.000		102	29.3	159		0		
Surr: Terphenyl-d14 (surr)	0.969		1.000		96.9	28.4	159		0		

Sample ID: 2402026-002AMS	SampType: MS			Units: mg/Kg-dry		Prep Date: 2/6/2024			RunNo: 89463		
Client ID: BATCH	Batch ID: 42838					Analysis Date: 2/6/2024			SeqNo: 1867800		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	2.06	0.0254	2.535	0.04343	79.6	45.1	134				
2-Methylnaphthalene	2.10	0.0254	2.535	0.04170	81.1	45	136				
1-Methylnaphthalene	2.09	0.0254	2.535	0.05189	80.4	46.7	133				
Acenaphthene	2.04	0.0254	2.535	0.04827	78.7	38.4	137				
Acenaphthylene	2.19	0.0254	2.535	0.09870	82.6	48.7	133				
Phenanthrene	3.55	0.0254	2.535	1.187	93.3	38.3	138				
Fluorene	2.11	0.0254	2.535	0.09554	79.5	41.7	137				
Anthracene	2.03	0.0254	2.535	0.06987	77.4	40.5	135				
Fluoranthene	3.50	0.0254	2.535	1.204	90.5	33.6	148				
Pyrene	4.14	0.0507	2.535	1.619	99.3	32.8	146				
Benz(a)anthracene	2.61	0.0254	2.535	0.4423	85.5	37.8	142				
Chrysene	2.77	0.0254	2.535	0.6519	83.6	39	136				
Benzo(b)fluoranthene	2.70	0.0317	2.535	0.6034	82.7	34.3	146				
Benzo(k)fluoranthene	2.26	0.0317	2.535	0.2041	80.9	33.7	138				
Benzo(a)pyrene	2.68	0.0380	2.535	0.5887	82.5	41.8	137				
Indeno(1,2,3-cd)pyrene	2.28	0.0507	2.535	0.2346	80.9	33.1	145				
Dibenz(a,h)anthracene	2.01	0.0634	2.535	0.07101	76.5	33	142				
Benzo(g,h,i)perylene	2.29	0.0634	2.535	0.3213	77.5	24.4	143				

Work Order: 2402027
CLIENT: Aerotech
Project: Sunset Point Development

QC SUMMARY REPORT

PAHs by EPA Method 8270E SIM

Sample ID: 2402026-002AMS	SampType: MS			Units: mg/Kg-dry		Prep Date: 2/6/2024			RunNo: 89463		
Client ID: BATCH	Batch ID: 42838					Analysis Date: 2/6/2024			SeqNo: 1867800		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 2-Fluorobiphenyl	1.48		1.268		117	29.3	159				
Surr: Terphenyl-d14 (surr)	1.41		1.268		111	28.4	159				

Sample ID: 2402026-002AMSD	SampType: MSD			Units: mg/Kg-dry		Prep Date: 2/6/2024			RunNo: 89463		
Client ID: BATCH	Batch ID: 42838					Analysis Date: 2/6/2024			SeqNo: 1867801		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	2.84	0.0259	2.594	0.04343	108	45.1	134	2.062	31.8	30	
2-Methylnaphthalene	2.88	0.0259	2.594	0.04170	110	45	136	2.097	31.6	30	
1-Methylnaphthalene	2.86	0.0259	2.594	0.05189	108	46.7	133	2.091	31.1	30	
Acenaphthene	2.79	0.0259	2.594	0.04827	106	38.4	137	2.043	30.9	30	
Acenaphthylene	2.88	0.0259	2.594	0.09870	107	48.7	133	2.193	27.0	30	
Phenanthrene	3.48	0.0259	2.594	1.187	88.4	38.3	138	3.551	2.06	30	
Fluorene	2.82	0.0259	2.594	0.09554	105	41.7	137	2.110	28.8	30	
Anthracene	2.76	0.0259	2.594	0.06987	104	40.5	135	2.031	30.3	30	
Fluoranthene	3.44	0.0259	2.594	1.204	86.3	33.6	148	3.499	1.67	30	
Pyrene	3.74	0.0519	2.594	1.619	81.8	32.8	146	4.135	10.0	30	
Benz(a)anthracene	3.08	0.0259	2.594	0.4423	102	37.8	142	2.609	16.4	30	
Chrysene	3.01	0.0259	2.594	0.6519	90.8	39	136	2.772	8.16	30	
Benzo(b)fluoranthene	3.10	0.0324	2.594	0.6034	96.3	34.3	146	2.700	13.9	30	
Benzo(k)fluoranthene	2.90	0.0324	2.594	0.2041	104	33.7	138	2.255	24.9	30	
Benzo(a)pyrene	3.03	0.0389	2.594	0.5887	94.2	41.8	137	2.681	12.3	30	
Indeno(1,2,3-cd)pyrene	2.90	0.0519	2.594	0.2346	103	33.1	145	2.285	23.7	30	
Dibenz(a,h)anthracene	2.71	0.0648	2.594	0.07101	102	33	142	2.011	29.5	30	
Benzo(g,h,i)perylene	2.82	0.0648	2.594	0.3213	96.2	24.4	143	2.285	20.8	30	
Surr: 2-Fluorobiphenyl	1.68		1.297		130	29.3	159		0		
Surr: Terphenyl-d14 (surr)	1.62		1.297		125	28.4	159		0		

Work Order: 2402027
CLIENT: Aerotech
Project: Sunset Point Development

QC SUMMARY REPORT

Organochlorine Pesticides by EPA Method 8081A

Sample ID: MB-42839	SampType: MBLK			Units: mg/Kg		Prep Date: 2/6/2024		RunNo: 89505		
Client ID: MBLKS	Batch ID: 42839					Analysis Date: 2/7/2024		SeqNo: 1868589		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alpha BHC	ND	0.0100									
Beta BHC	ND	0.0100									
Gamma BHC (Lindane)	ND	0.0100									
Delta BHC	ND	0.0100									
Heptachlor	ND	0.0100									
Aldrin	ND	0.0100									
Heptachlor epoxide	ND	0.0100									
gamma-Chlordane	ND	0.0100									
Endosulfan I	ND	0.0100									
alpha-Chlordane	ND	0.0100									
Dieldrin	ND	0.0100									
4,4'-DDE	ND	0.0100									
Endrin	ND	0.0100									
Endosulfan II	ND	0.0100									
Endrin aldehyde	ND	0.0100									
Endosulfan sulfate	ND	0.0100									
Endrin ketone	ND	0.0100									
Surr: Decachlorobiphenyl	0.194		0.2000		96.8	43.8	173				
Surr: Tetrachloro-m-xylene	0.212		0.2000		106	36.6	156				

Sample ID: LCS1-42839	SampType: LCS			Units: mg/Kg		Prep Date: 2/6/2024		RunNo: 89505		
Client ID: LCSS	Batch ID: 42839					Analysis Date: 2/7/2024		SeqNo: 1868590		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alpha BHC	0.235	0.0100	0.2000	0	117	68.1	149				
Beta BHC	0.239	0.0100	0.2000	0	120	69.8	138				
Gamma BHC (Lindane)	0.235	0.0100	0.2000	0	118	68.7	139				
Delta BHC	0.228	0.0100	0.2000	0	114	70	138				
Heptachlor	0.252	0.0100	0.2000	0	126	77.9	150				
Aldrin	0.240	0.0100	0.2000	0	120	68.1	144				
Heptachlor epoxide	0.243	0.0100	0.2000	0	122	69.3	143				

Work Order: 2402027
CLIENT: Aerotech
Project: Sunset Point Development

QC SUMMARY REPORT

Organochlorine Pesticides by EPA Method 8081A

Sample ID: LCS1-42839	SampType: LCS			Units: mg/Kg		Prep Date: 2/6/2024			RunNo: 89505	
Client ID: LCSS	Batch ID: 42839					Analysis Date: 2/7/2024			SeqNo: 1868590	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
gamma-Chlordane	0.244	0.0100	0.2000	0	122	67	141				
Endosulfan I	0.239	0.0100	0.2000	0	119	68.2	142				
alpha-Chlordane	0.243	0.0100	0.2000	0	121	65.3	140				
Dieldrin	0.237	0.0100	0.2000	0	118	66.3	142				
4,4'-DDE	0.243	0.0100	0.2000	0	121	64	135				
Endrin	0.253	0.0100	0.2000	0	127	71.7	144				
Endosulfan II	0.234	0.0100	0.2000	0	117	67.6	135				
4,4'-DDD	0.239	0.0100	0.2000	0	119	61.8	142				
Endrin aldehyde	0.200	0.0100	0.2000	0	99.9	65.1	135				
Endosulfan sulfate	0.230	0.0100	0.2000	0	115	64.1	135				
4,4'-DDT	0.252	0.0100	0.2000	0	126	68.2	140				
Endrin ketone	0.229	0.0100	0.2000	0	115	66.4	132				
Methoxychlor	0.265	0.0100	0.2000	0	132	66	136				
Surr: Decachlorobiphenyl	0.179		0.2000		89.4	44.8	154				
Surr: Tetrachloro-m-xylene	0.200		0.2000		100	62.8	160				

Sample ID: LCS3-42839	SampType: LCS			Units: mg/Kg		Prep Date: 2/6/2024			RunNo: 89505	
Client ID: LCSS	Batch ID: 42839					Analysis Date: 2/7/2024			SeqNo: 1868592	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chlordane, Total (Technical)	0.934	0.100	1.000	0	93.4	49.1	161				
Surr: Decachlorobiphenyl	0.174		0.2000		86.8	44.8	154				
Surr: Tetrachloro-m-xylene	0.192		0.2000		96.1	62.8	160				

Sample ID: 2402028-009AMS	SampType: MS			Units: mg/Kg-dry		Prep Date: 2/6/2024			RunNo: 89505	
Client ID: BATCH	Batch ID: 42839					Analysis Date: 2/7/2024			SeqNo: 1868595	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alpha BHC	0.391	0.0146	0.2921	0	134	63.1	154				
Beta BHC	0.385	0.0146	0.2921	0	132	59.4	159				
Gamma BHC (Lindane)	0.384	0.0146	0.2921	0	131	55.8	156				

Work Order: 2402027
CLIENT: Aerotech
Project: Sunset Point Development

QC SUMMARY REPORT

Organochlorine Pesticides by EPA Method 8081A

Sample ID: 2402028-009AMS	SampType: MS			Units: mg/Kg-dry		Prep Date: 2/6/2024			RunNo: 89505		
Client ID: BATCH	Batch ID: 42839					Analysis Date: 2/7/2024			SeqNo: 1868595		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Delta BHC	0.388	0.0146	0.2921	0	133	58.3	157				
Heptachlor	0.422	0.0146	0.2921	0	145	56.6	156				
Aldrin	0.414	0.0146	0.2921	0.01174	138	59.3	155				
Heptachlor epoxide	0.402	0.0146	0.2921	0	138	63.7	157				
gamma-Chlordane	0.374	0.0146	0.2921	0	128	53.7	159				
Endosulfan I	0.374	0.0146	0.2921	0	128	60.8	159				
alpha-Chlordane	0.404	0.0146	0.2921	0	138	55.8	160				
Dieldrin	7.51	0.0146	0.2921	7.125	131	66.5	157				
4,4'-DDE	0.601	0.0146	0.2921	0.2349	125	55	159				
Endrin	0.371	0.0146	0.2921	0	127	64	159				
Endosulfan II	0.347	0.0146	0.2921	0	119	65.5	156				
4,4'-DDD	0.392	0.0146	0.2921	0	134	58.3	160				
Endrin aldehyde	0.290	0.0146	0.2921	0	99.1	48.9	146				
Endosulfan sulfate	0.331	0.0146	0.2921	0	113	64.6	155				
4,4'-DDT	0.820	0.0146	0.2921	0.4956	111	59.1	159				
Endrin ketone	0.365	0.0146	0.2921	0	125	67.9	158				
Methoxychlor	0.548	0.0146	0.2921	0	187	62.5	157				S
Surr: Decachlorobiphenyl	0.265		0.2921		90.7	44.8	154				
Surr: Tetrachloro-m-xylene	0.345		0.2921		118	62.8	160				

NOTES:
S - Outlying spike recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect.

Sample ID: 2402028-009AMSD	SampType: MSD			Units: mg/Kg-dry		Prep Date: 2/6/2024			RunNo: 89505		
Client ID: BATCH	Batch ID: 42839					Analysis Date: 2/7/2024			SeqNo: 1868596		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alpha BHC	0.524	0.0196	0.3917	0	134	63.1	154	0.3907	29.1	30	
Beta BHC	0.509	0.0196	0.3917	0	130	59.4	159	0.3846	27.8	30	
Gamma BHC (Lindane)	0.513	0.0196	0.3917	0	131	55.8	156	0.3836	28.9	30	
Delta BHC	0.511	0.0196	0.3917	0	130	58.3	157	0.3876	27.4	30	
Heptachlor	0.567	0.0196	0.3917	0	145	56.6	156	0.4224	29.3	30	
Aldrin	0.553	0.0196	0.3917	0.01174	138	59.3	155	0.4138	28.9	30	

Work Order: 2402027
CLIENT: Aerotech
Project: Sunset Point Development

QC SUMMARY REPORT

Organochlorine Pesticides by EPA Method 8081A

Sample ID: 2402028-009AMSD	SampType: MSD			Units: mg/Kg-dry		Prep Date: 2/6/2024			RunNo: 89505		
Client ID: BATCH	Batch ID: 42839					Analysis Date: 2/7/2024			SeqNo: 1868596		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Heptachlor epoxide	0.532	0.0196	0.3917	0	136	63.7	157	0.4022	27.8	30	
gamma-Chlordane	0.498	0.0196	0.3917	0	127	53.7	159	0.3740	28.5	30	
Endosulfan I	0.495	0.0196	0.3917	0	126	60.8	159	0.3745	27.7	30	
alpha-Chlordane	0.530	0.0196	0.3917	0	135	55.8	160	0.4040	27.0	30	
Dieldrin	8.18	0.0196	0.3917	7.125	269	66.5	157	7.507	8.55	30	S
4,4'-DDE	0.733	0.0196	0.3917	0.2349	127	55	159	0.6007	19.8	30	
Endrin	0.496	0.0196	0.3917	0	127	64	159	0.3707	28.9	30	
Endosulfan II	0.468	0.0196	0.3917	0	119	65.5	156	0.3470	29.6	30	
4,4'-DDD	0.526	0.0196	0.3917	0	134	58.3	160	0.3916	29.2	30	
Endrin aldehyde	0.393	0.0196	0.3917	0	100	48.9	146	0.2895	30.3	30	
Endosulfan sulfate	0.437	0.0196	0.3917	0	112	64.6	155	0.3314	27.5	30	
4,4'-DDT	0.939	0.0196	0.3917	0.4956	113	59.1	159	0.8202	13.5	30	
Endrin ketone	0.477	0.0196	0.3917	0	122	67.9	158	0.3650	26.7	30	
Methoxychlor	0.670	0.0196	0.3917	0	171	62.5	157	0.5477	20.1	30	S
Surr: Decachlorobiphenyl	0.350		0.3917		89.5	44.8	154		0		
Surr: Tetrachloro-m-xylene	0.447		0.3917		114	62.8	160		0		

NOTES:
S - Outlying spike recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect.

Sample ID: MB-42839	SampType: MBLK			Units: mg/Kg		Prep Date: 2/6/2024			RunNo: 89505		
Client ID: MBLKS	Batch ID: 42839					Analysis Date: 2/8/2024			SeqNo: 1868602		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Toxaphene	ND	0.100									
4,4'-DDD	ND	0.0100									
4,4'-DDT	ND	0.0100									
Methoxychlor	ND	0.0100									

Work Order: 2402027
CLIENT: Aerotech
Project: Sunset Point Development

QC SUMMARY REPORT

Organochlorine Pesticides by EPA Method 8081A

Sample ID: **LCS2-42839** SampType: **LCS** Units: **mg/Kg** Prep Date: **2/6/2024** RunNo: **89505**
Client ID: **LCSS** Batch ID: **42839** Analysis Date: **2/8/2024** SeqNo: **1868604**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Toxaphene	0.979	0.100	1.000	0	97.9	58	150				
Surr: Decachlorobiphenyl	0.213		0.2000		107	44.8	154				
Surr: Tetrachloro-m-xylene	0.223		0.2000		111	62.8	160				

QC SUMMARY REPORT

Gasoline by NWTPH-Gx

Units: mg/Kg	Prep Date: 2/2/2024	RunNo: 89415
	Analysis Date: 2/3/2024	SeqNo: 1867034

PK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
0	85.6	65	135				
	91.1	65	135				
	104	65	135				

Units: mg/Kg	Prep Date: 2/2/2024	RunNo: 89415
	Analysis Date: 2/3/2024	SeqNo: 1867033

PK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
	85.5	65	135				
	106	65	135				

Units: mg/Kg-dry	Prep Date: 2/2/2024	RunNo: 89415
	Analysis Date: 2/3/2024	SeqNo: 1867005

PK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
				0		30	
	86.2	65	135		0		
	105	65	135		0		

Units: mg/Kg-dry	Prep Date: 2/2/2024	RunNo: 89415
	Analysis Date: 2/3/2024	SeqNo: 1867008

PK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
				0		30	
	86.3	65	135		0		
	106	65	135		0		

LABORATORY ANALYTICAL RESULTS: REPORTS

Area-Wide Soil Metals Background Levels
(Report dated: March 25, 2024)

Fremont Analytical
An Alliance Technical Group Company
3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

Aerotech
Alan Blotch
14220 Interurban Ave S, Ste. 116
Tukwila, WA 98168

RE: Sunset Pointe
Work Order Number: 2403441

March 28, 2024

Attention Alan Blotch:

Fremont Analytical, Inc. received 10 sample(s) on 3/25/2024 for the analyses presented in the following report.

Sample Moisture (Percent Moisture)
Total Metals by EPA Method 6020

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Brianna Barnes
Project Manager

Fremont Analytical
An Alliance Technical Group Company

Date: *03/28/2024*

CLIENT: Aerotech
Project: Sunset Pointe
Work Order: 2403441

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2403441-001	B150-1	03/21/2024 12:00 AM	03/25/2024 12:05 PM
2403441-002	B150-2	03/21/2024 12:00 AM	03/25/2024 12:05 PM
2403441-003	B151-1	03/21/2024 12:00 AM	03/25/2024 12:05 PM
2403441-004	B151-2	03/21/2024 12:00 AM	03/25/2024 12:05 PM
2403441-005	B152-1	03/21/2024 12:00 AM	03/25/2024 12:05 PM
2403441-006	B152-2	03/21/2024 12:00 AM	03/25/2024 12:05 PM
2403441-007	B153-1	03/21/2024 12:00 AM	03/25/2024 12:05 PM
2403441-008	B153-2	03/21/2024 12:00 AM	03/25/2024 12:05 PM
2403441-009	B154-1	03/21/2024 12:00 AM	03/25/2024 12:05 PM
2403441-010	B154-2	03/21/2024 12:00 AM	03/25/2024 12:05 PM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

Fremont Analytical
An Alliance Technical Group Company

Case Narrative

WO#: **2403441**
Date: **3/28/2024**

CLIENT: Aerotech
Project: Sunset Pointe

I. SAMPLE RECEIPT:
Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:
Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:
Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Qualifiers:

* - Flagged value is not within established control limits
B - Analyte detected in the associated Method Blank
D - Dilution was required
E - Value above quantitation range
H - Holding times for preparation or analysis exceeded
I - Analyte with an internal standard that does not meet established acceptance criteria
J - Analyte detected below Reporting Limit
N - Tentatively Identified Compound (TIC)
Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria
S - Spike recovery outside accepted recovery limits
ND - Not detected at the Reporting Limit
R - High relative percent difference observed

Acronyms:

%Rec - Percent Recovery
CCB - Continued Calibration Blank
CCV - Continued Calibration Verification
DF - Dilution Factor
DUP - Sample Duplicate
HEM - Hexane Extractable Material
ICV - Initial Calibration Verification
LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
MCL - Maximum Contaminant Level
MB or MBLANK - Method Blank
MDL - Method Detection Limit
MS/MSD - Matrix Spike / Matrix Spike Duplicate
PDS - Post Digestion Spike
Ref Val - Reference Value
REP - Sample Replicate
RL - Reporting Limit
RPD - Relative Percent Difference
SD - Serial Dilution
SGT - Silica Gel Treatment
SPK - Spike
Surr - Surrogate

CLIENT: Aerotech
Project: Sunset Pointe

Lab ID: 2403441-002
Client Sample ID: B150-2
Collection Date: 3/21/2024
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020				Batch ID: 43374		Analyst: ME
Arsenic	2.96	0.259		mg/Kg-dry	1	3/26/2024 4:09:00 PM
Cadmium	0.150	0.0208		mg/Kg-dry	1	3/26/2024 4:09:00 PM
Sample Moisture (Percent Moisture)				Batch ID: R90557		Analyst: MF
Percent Moisture	7.36	0.500		wt%	1	3/28/2024 9:18:21 AM

Lab ID: 2403441-004
Client Sample ID: B151-2
Collection Date: 3/21/2024
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020				Batch ID: 43374		Analyst: ME
Arsenic	2.80	0.314		mg/Kg-dry	1	3/26/2024 4:12:00 PM
Cadmium	0.251	0.0251		mg/Kg-dry	1	3/26/2024 4:12:00 PM
Sample Moisture (Percent Moisture)				Batch ID: R90557		Analyst: MF
Percent Moisture	25.2	0.500		wt%	1	3/28/2024 9:18:21 AM

Lab ID: 2403441-006
Client Sample ID: B152-2
Collection Date: 3/21/2024
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020				Batch ID: 43374		Analyst: ME
Arsenic	3.63	0.306		mg/Kg-dry	1	3/26/2024 4:28:00 PM
Cadmium	0.0900	0.0245		mg/Kg-dry	1	3/26/2024 4:28:00 PM
Sample Moisture (Percent Moisture)				Batch ID: R90557		Analyst: MF
Percent Moisture	22.5	0.500		wt%	1	3/28/2024 9:18:21 AM

CLIENT: Aerotech
Project: Sunset Pointe

Lab ID: 2403441-008 **Collection Date:** 3/21/2024
Client Sample ID: B153-2 **Matrix:** Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020				Batch ID: 43374		Analyst: ME
Arsenic	3.96	0.373		mg/Kg-dry	1	3/26/2024 4:30:00 PM
Cadmium	0.120	0.0298		mg/Kg-dry	1	3/26/2024 4:30:00 PM
Sample Moisture (Percent Moisture)				Batch ID: R90557		Analyst: MF
Percent Moisture	34.0	0.500		wt%	1	3/28/2024 9:18:21 AM

Lab ID: 2403441-010 **Collection Date:** 3/21/2024
Client Sample ID: B154-2 **Matrix:** Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020				Batch ID: 43374		Analyst: ME
Arsenic	4.41	0.318		mg/Kg-dry	1	3/26/2024 4:33:00 PM
Cadmium	0.127	0.0255		mg/Kg-dry	1	3/26/2024 4:33:00 PM
Sample Moisture (Percent Moisture)				Batch ID: R90557		Analyst: MF
Percent Moisture	23.9	0.500		wt%	1	3/28/2024 9:18:21 AM

Work Order: 2403441
CLIENT: Aerotech
Project: Sunset Pointe

QC SUMMARY REPORT

Total Metals by EPA Method 6020

Sample ID: **MB-43374**	SampType: **MBLK**			Units: **mg/Kg**		Prep Date: **3/25/2024**		RunNo: **90530**			
Client ID: **MBLKS**	Batch ID: **43374**					Analysis Date: **3/26/2024**		SeqNo: **1888034**			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.250									
Cadmium	ND	0.0200									

Sample ID: **LCS-43374**	SampType: **LCS**			Units: **mg/Kg**		Prep Date: **3/25/2024**		RunNo: **90530**			
Client ID: **LCSS**	Batch ID: **43374**					Analysis Date: **3/26/2024**		SeqNo: **1888035**			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	38.3	0.250	40.00	0	95.6	80	120				
Cadmium	1.96	0.0200	2.000	0	98.2	80	120				

Sample ID: **2403441-004AMS**	SampType: **MS**			Units: **mg/Kg-dry**		Prep Date: **3/25/2024**		RunNo: **90530**			
Client ID: **B151-2**	Batch ID: **43374**					Analysis Date: **3/26/2024**		SeqNo: **1888066**			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	46.9	0.312	49.88	2.803	88.4	75	125				
Cadmium	2.58	0.0249	2.494	0.2513	93.3	75	125				

Sample ID: **2403441-004AMSD**	SampType: **MSD**			Units: **mg/Kg-dry**		Prep Date: **3/25/2024**		RunNo: **90530**			
Client ID: **B151-2**	Batch ID: **43374**					Analysis Date: **3/26/2024**		SeqNo: **1888069**			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	45.1	0.316	50.63	2.803	83.5	75	125	46.88	3.93	20	
Cadmium	2.52	0.0253	2.532	0.2513	89.5	75	125	2.578	2.38	20	

Fremont Analytical
An Alliance Technical Group Company

Sample Log-In Check List

Client Name:	AEROTE	Work Order Number:	2403441
Logged by:	Morgan Wilson	Date Received:	3/25/2024 12:05:00 PM

Chain of Custody

1.	Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2.	How was the sample delivered?	Client		

Log In

3.	Custody Seals present on shipping container/cooler? (Refer to comments for Custody Seals not intact)	Yes ☐	No ☐	Not Present ☑
4.	Was an attempt made to cool the samples?	Yes ☐	No ☑	NA ☐
		Unknown prior to receipt.		
5.	Were all items received at a temperature of >2°C to 6°C *	Yes ☐	No ☐	NA ☑
6.	Sample(s) in proper container(s)?	Yes ☑	No ☐	
7.	Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8.	Are samples properly preserved?	Yes ☑	No ☐	
9.	Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10.	Is there headspace in the VOA vials?	Yes ☐	No ☐	NA ☑
11.	Did all samples containers arrive in good condition(unbroken)?	Yes ☑	No ☐	
12.	Does paperwork match bottle labels?	Yes ☑	No ☐	
13.	Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
14.	Is it clear what analyses were requested?	Yes ☑	No ☐	
15.	Were all hold times (except field parameters, pH e.g.) able to be met?	Yes ☑	No ☐	

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified:		Date:	
By Whom:		Via:	☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:			
Client Instructions:			

17. Additional remarks:

Item Information

Item #	Temp °C
Sample	18.5

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Chain of Custody Record & Laboratory Services Agreement

Date: 03.22.24 | Page: 1 of: 1 | Laboratory Project No (internal): 2403441

Project Name: SUNSET POINTE | Special Remarks:

Client: AEROTECH | Project No:

Address: | Collected by:

City, State, Zip: | Location:

Telephone: (360)710-5899 | Report To (PM): ALAN BLOTCH | Sample Disposal: ☐ Return to client ☒ Disposal by lab (after 30 days)

Fax: | PM Email: ALAN@DIRTYDIRT.US

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	# of Cont.	VOCs (EPA 8260 / 624)	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8) Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)	ARSENIC - CADMIUM				Comments
1	B150 -1	03|21		SOIL												X					
2	" -2															X					
3	B151 -1															X					
4	" 2															X					
5	B152 -1															X					
6	" -2															X					
7	B153 -1															X					
8	" -2															X					
9	B154 -1															X					
10	" -2															X					

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al (As) B Ba Be Ca (Cd) Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Turn-around Time:
☒ Standard ☐ Next Day
☐ 3 Day ☐ Same Day
☐ 2 Day (specify)

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above, that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x [signature]	ALAN T. BLOTCH	03/25	x [signature]	[illegible]	3/25/24 1205
Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x			x		

LABORATORY ANALYTICAL RESULTS: REPORTS

Pond Water Testing
(Report dated: March 22, 2024)

Fremont Analytical
An Alliance Technical Group Company
3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

Aerotech
Alan Blotch
14220 Interurban Ave S, Ste. 116
Tukwila, WA 98168

RE: Sunset Pointe
Work Order Number: 2403328

March 22, 2024

Attention Alan Blotch:

Fremont Analytical, Inc. received 1 sample(s) on 3/19/2024 for the analyses presented in the following report.

Total Metals by EPA Method 200.8

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Brianna Barnes
Project Manager

Fremont Analytical
An Alliance Technical Group Company

Date: *03/22/2024*

CLIENT: Aerotech
Project: Sunset Pointe
Work Order: 2403328

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2403328-001	W-Pond	03/18/2024 2:00 PM	03/19/2024 1:30 PM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

CLIENT: Aerotech
Project: Sunset Pointe

I. SAMPLE RECEIPT:
Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:
Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:
Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Qualifiers & Acronyms

WO#: **2403328**
Date Reported: **3/22/2024**

Qualifiers:

* - Flagged value is not within established control limits
B - Analyte detected in the associated Method Blank
D - Dilution was required
E - Value above quantitation range
H - Holding times for preparation or analysis exceeded
I - Analyte with an internal standard that does not meet established acceptance criteria
J - Analyte detected below Reporting Limit
N - Tentatively Identified Compound (TIC)
Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria
S - Spike recovery outside accepted recovery limits
ND - Not detected at the Reporting Limit
R - High relative percent difference observed

Acronyms:

%Rec - Percent Recovery
CCB - Continued Calibration Blank
CCV - Continued Calibration Verification
DF - Dilution Factor
DUP - Sample Duplicate
HEM - Hexane Extractable Material
ICV - Initial Calibration Verification
LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
MCL - Maximum Contaminant Level
MB or MBLANK - Method Blank
MDL - Method Detection Limit
MS/MSD - Matrix Spike / Matrix Spike Duplicate
PDS - Post Digestion Spike
Ref Val - Reference Value
REP - Sample Replicate
RL - Reporting Limit
RPD - Relative Percent Difference
SD - Serial Dilution
SGT - Silica Gel Treatment
SPK - Spike
Surr - Surrogate

Fremont Analytical
An Alliance Technical Group Company

Analytical Report

Work Order: **2403328**
Date Reported: **3/22/2024**

Client: Aerotech
Project: Sunset Pointe
Lab ID: 2403328-001
Client Sample ID: **W-Pond**

Collection Date: 3/18/2024 2:00:00 PM
Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 200.8				Batch ID: 43331		Analyst: ME
Arsenic	0.994	0.500		µg/L	1	3/21/2024 1:34:00 PM
Cadmium	ND	0.100		µg/L	1	3/21/2024 1:34:00 PM

Fremont Analytical
An Alliance Technical Group Company

Date: *3/22/2024*

Work Order: 2403328
CLIENT: Aerotech
Project: Sunset Pointe

QC SUMMARY REPORT

Total Metals by EPA Method 200.8

Sample ID: **MB-43331**	SampType: **MBLK**	Units: **µg/L**	Prep Date: **3/20/2024**	RunNo: **90395**
Client ID: **MBLKW**	Batch ID: **43331**		Analysis Date: **3/21/2024**	SeqNo: **1885523**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.500									
Cadmium	ND	0.100									

Sample ID: **LCS-43331**	SampType: **LCS**	Units: **µg/L**	Prep Date: **3/20/2024**	RunNo: **90395**
Client ID: **LCSW**	Batch ID: **43331**		Analysis Date: **3/21/2024**	SeqNo: **1885524**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	103	0.500	100.0	0	103	85	115				
Cadmium	5.21	0.100	5.000	0	104	85	115				

Sample ID: **2403264-001ADUP**	SampType: **DUP**	Units: **µg/L**	Prep Date: **3/20/2024**	RunNo: **90395**
Client ID: **BATCH**	Batch ID: **43331**		Analysis Date: **3/21/2024**	SeqNo: **1885526**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.500						0		30	
Cadmium	27.0	0.100						27.04	0.0185	30	E

Sample ID: **2403264-001AMS**	SampType: **MS**	Units: **µg/L**	Prep Date: **3/20/2024**	RunNo: **90395**
Client ID: **BATCH**	Batch ID: **43331**		Analysis Date: **3/21/2024**	SeqNo: **1885528**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	105	0.500	100.0	0.3510	104	70	130				
Cadmium	32.8	0.100	5.000	27.04	116	70	130				E

Sample ID: **2403334-001BMS**	SampType: **MS**	Units: **µg/L**	Prep Date: **3/20/2024**	RunNo: **90395**
Client ID: **BATCH**	Batch ID: **43331**		Analysis Date: **3/21/2024**	SeqNo: **1885514**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	103	0.500	100.0	1.500	102	70	130				
Cadmium	5.33	0.100	5.000	0.01100	106	70	130				

Fremont Analytical
An Alliance Technical Group Company

Date: *3/22/2024*

Work Order: 2403328
CLIENT: Aerotech
Project: Sunset Pointe

QC SUMMARY REPORT

Total Metals by EPA Method 200.8

Sample ID: **2403334-001BMS** SampType: **MS** Units: **µg/L** Prep Date: **3/20/2024** RunNo: **90395**
Client ID: **BATCH** Batch ID: **43331** Analysis Date: **3/21/2024** SeqNo: **1885514**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Fremont Analytical
An Alliance Technical Group Company

Sample Log-In Check List

Client Name:	AEROTE	Work Order Number:	2403328
Logged by:	Morgan Wilson	Date Received:	3/19/2024 1:30:00 PM

Chain of Custody

1.	Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2.	How was the sample delivered?	Client		

Log In

3.	Custody Seals present on shipping container/cooler? (Refer to comments for Custody Seals not intact)	Yes ☐	No ☐	Not Present ☑
4.	Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5.	Were all items received at a temperature of >2°C to 6°C *	Yes ☑	No ☐	NA ☐
6.	Sample(s) in proper container(s)?	Yes ☑	No ☐	
7.	Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8.	Are samples properly preserved?	Yes ☑	No ☐	
9.	Was preservative added to bottles?	Yes ☑	No ☐	NA ☐ HNO3
10.	Is there headspace in the VOA vials?	Yes ☐	No ☐	NA ☑
11.	Did all samples containers arrive in good condition(unbroken)?	Yes ☑	No ☐	
12.	Does paperwork match bottle labels?	Yes ☑	No ☐	
13.	Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
14.	Is it clear what analyses were requested?	Yes ☑	No ☐	
15.	Were all hold times (except field parameters, pH e.g.) able to be met?	Yes ☑	No ☐	

Special Handling (if applicable)

16.	Was client notified of all discrepancies with this order?	Yes ☐	No ☐	NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

Item Information

Item #	Temp °C
Sample	1.3

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C

Fremont Analytical
An Alliance Technical Group Company

3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790

Chain of Custody Record & Laboratory Services Agreement

Date: 3/19/24 Page: 1 of: 1

Laboratory Project No (internal): 2403328

Project Name: Sunset Pointe

Special Remarks:

Client: Aerotech

Project No:

Address: 14247 Ambaum Blvd SW, Rear

Collected by: Nick Gerkin

City, State, Zip: Burien, WA 98166

Location: Puyallup

Telephone: 206 482 2287

Report To (PM): Alan Blotch

Email(s): Nicke.dtyd.rt.us

Disposal: Samples will be disposed in 30 days unless otherwise requested.
☐ Retain volume (specify above) ☐ Return to client

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	# of Cont.	VOCs (EPA 8260 / 624)	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8) Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)	Comments
1	W-POND	3/18/24	1400	W	2									X D			
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Turn-around Time:
☒ Standard ☐ Next Day
☐ 3 Day ☐ Same Day
☐ 2 Day _____ (specify)

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above, that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x	Nick Gerkin	1330	x	Grayce Hein-Gipson	3/19/24 1330
Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x			x		

Tab No.6

Sunset Pointe Development

City of Puyallup

PRELIMINARY MAJOR PLAT REVIEW

City of Puyallup
Planning Division
333 S. Meridian, Puyallup, WA 98371
(253) 864-4165
www.cityofpuyallup.org

July 28, 2023

CES NW Inc.
29th St. NE, suite D
Puyallup, WA 98372

DEVELOPMENT REVIEW TEAM (DRT) LETTER	
DRT #	2
PERMIT #	P-18-0040
PROJECT NAME	SUNSET POINTE
PERMIT TYPE	Preliminary Major Plat
PROJECT DESCRIPTION	** SUNSET POINTE MAJOR PLAT ** AMR E-18-0166
SITE ADDRESS	2301 23RD ST SE ;
PARCEL #	0420353027;
ASSOCIATED LAND USE PERMIT(S)	
APPLICATION DATE	March 15, 2018
APPLICATION COMPLETE DATE	
PROJECT STATUS	**Active Development Review Team (DRT) review case – resubmittal required.** Please address review comments below and resubmit revised permit materials and by responding in writing to the remaining items that need to be addressed.
APPROVAL EXPIRATION	**N/A –** Active permit application, not approved
CONDITIONS	**Active permit application, not approved;** Pursuant to PMC 20.11.022 regarding inactive applications, any and all pending land use applications or plat applications shall be deemed null and void unless a timely re-submittal is made to the City within 1 year of issuance of this Development Review Team (DRT) comment letter. DRT review letters typically identify requested corrections, studies or other additional required pieces of information necessary to demonstrate conformance with the City's adopted development standards and codes.

	Subsequent applicant re-submittals shall make a good faith effort to respond to each request from this letter in order for the application to remain active. The failure to provide timely responses or lack of providing the requested material(s) within the 1-year window following DRT comment letter issuance shall be grounds for expiration, thus deeming the pending application null and void with or without a full or partial refund of application fees.

The City has completed the review of the above-mentioned permit submittal. All of your review comments, conditions, and redlined plans can be found on the City's permit portal. Redlined plans can be found on the City's Permit Portal in the "Reviews" section under "Documents Returned for Corrections". Below please find the permit submittal review comments from your review team and re-submittal instructions. Should you have any questions regarding the review comments, please contact the plan reviewer associated with the comment listed below.

Re-submittal Instructions

To resubmit, you must respond to all comments in a written response letter and submit a letter of transmittal. Letter of transmittal and response letter must be submitted to the 'Correction Response Letter' item listed in the submittal items list. Avoid using "upload additional docs" unless there is NO submittal item available for your document. Please Note: If you do not resubmit as instructed your re-submittal will be rejected. If you have any questions about how to resubmit, please contact the permit center at permitcenter@puyallupwa.gov.

1. Log in to your permits portal and navigate to thestatus page for this permit. Under the 'Upload Documents' section, select 'click here to upload document'.

2. For each submittal item listed re-submit a new version of the submittal item by clicking the "New Version" button next to the file name of the original file submitted. DO NOT click the 'browse' button unless the document you are submitting for that submittal item is not a new version of the originally submitted document.

3. Click 'Upload Documents' at bottom of the page.

How to use this letter

This review letter includes two sections: **"Corrections"** and **"Conditions".**

The **"Corrections"** section includes all items that the applicant must address to comply with the Puyallup Municipal Code (PMC) and city standards. Items listed in under **Action Items** require a resubmittal under this permit for further review by the Development Review Team (DRT); your application is not approved. Please make those updates to the proposed plans and resubmit for review. Please include a response letter outlining how you have revised your proposal to meet these items for ease of plan check by DRT members.

The **"Conditions"** are items that will govern the final permit submittal(s) for the project. Please be aware that these conditions will become conditions of the final permits and/or recommendations to the Hearing Examiner, if applicable.

If you have questions regarding the action items or conditions outlined in this letter, please contact the appropriate staff member directly using the phone number and/or email provided.

Corrections

Planning Review - Chris Beale; (253) 841-5418; CBeale@PuyallupWA.gov

- The site appears to be marked as PENDING CLEAN UP for site contamination with the Tacoma Pierce County Health Department (TPCHD); previous SEPA comments from Ecology also indicate environmental clean up issues (see Ecology letter dated April, 2018). SEPA mitigation conditions are forthcoming regarding site environmental assessment, and possible site clean up at the direction of Ecology, to be addressed at the time of civil review. Applicant must coordinate with Ecology and/or TPCHD to resolve. February, 2022 staff follow up comment to this correct: The Ecology clean up report data was obtained in 2020 (Ecology clean up ID 11739). Also see the Ecology SEPA comment letter with requirements (dated April 27, 2018) under the Toxic Clean ups section. The response report (Environmental associates phase 1 report, dated January 14, 2005) provided does not resolve this comment. Please contact the Toxic Clean ups coordinator and Ecology and obtain updated guidance on needed remediation steps to resolve site contamination issues and provide upon resubmittal.

  UPDATED COMMENT: (July 28, 2023) Staff has reviewed the Phase I Environmental Site Assessment of the site by Earth Solutions NW and transmitted the report to Ecology for review under SEPA. Ecology provided a response on July 26, 2023 - see file in documents and images. We will require pollution in the environment be cleaned up in compliance with WAC 173-340 before allowing any grading, filling, or other construction activities at the site. or an independent cleanup conducted under WAC 173-340-515, the cleanup would be complete when a no further action opinion (NFA) letter is issued under WAC 173-340-515(5)(b). Please follow up with a response to the Ecology email with a plan of action on the part of the owner/applicant to address the recommendations from the Toxic Cleanup program staff.
- At the time of civil permit application, the applicant shall provide an access and grading plan for proposed lots 7 and 8 that demonstrates access drive will not exceed 10% slope, that storm water design will direct water to the proposed dispersion area to the west and that retaining walls needed to support access to lots 7 and 8 meet the retaining wall codes (PMC 19.12.070 (3) and PMC 20.58.005 (2)). The access tract may need to shift south to avoid conflicts and meet code which may impact final plat layout. See corresponding comments from Fire Prevention and Engineering.

  UPDATED COMMENT: (July 28, 2023) Staff has reviewed the preliminary exhibit and cannot determine if the wall proposed will meet the setback and height regulations in PMC 19.12.070 (3) and PMC 20.58.005 (2). See mark ups. The feasibility of lot 8 appears dependent upon tract c access and grading and walls.

- All pedestrian walkways shall be dedicated as use by the public at the time of final plat; the walk way between lots 14/15, site wetlands, lots 3/5 will be a public right of way dedication at the time of final plat. These walkways shall be 15' wide right of way, and fully improved with blacktop asphalt or other approved surfacing by Public Works, 10' wide improved surface, with 24" gravel shoulders, access restrictions (bollards or other method as approved by Public Works) and landscaping, at the time of civil permitting.

  UPDATED COMMENT: (July 28, 2023) These do not appear to be called out as ROW dedication and are not shown as improved as required. Please note this will be a condition of recommended approval.
- Other conditions outlined in the December, 2020 DRT letter remain in effect and will be carried forward to the Hearing Examiner once all issues related to the plat are resolved.
- Confirm that the NGPA will not be disturbed during site grading. Its not clear if a retaining wall is proposed or a storm drainage line? [R6-02 Prelim plat sheet P2, planning comment]
- Confirm the height and setback of this wall meets PMC 20.58.005 (2). The feasibility of lot 8 appears dependent upon tract c access and grading and walls. [R6-02 Prelim plat sheet P2, planning comment]
- Add a list of tracts and purpose of each tract to the cover sheet. Please note that tract E, the trail area between pond A and B and trail along west side of tract B are required to be dedicated as public right of way [R6-02 Prelim plat sheet 1, planning comment]
- Note condition from December 2020 letter that applies to this connection between Highlands DR and 19th Ave extension. Public right of way dedication of 80' for future roadway connection from the extended 19th Ave to Highlands
  Drive shall be provided at the time of final plat on parcel A; [R6-02 Prelim plat sheet 1, planning comment]

Engineering Review - Jamie Carter; (253) 435-3616; JCarter@puyallupwa.gov

- NOTE TO DESIGNER: As this project has a lot of history and several reviews/reviewers, on this round of Major Plat Review we have included many notes regarding plat layout and construction. This is to ensure that notes from previous reviews are not lost or forgotten. Many of these engineering comments do not require responses or corrections and are included as reminders or placeholders for items and design concepts that shall be included with the civil submittal. Other comments will require clarification or correction for this phase of development review. Please review the notes thoroughly in order to reduce subsequent submittals and review times.

- STORM GENERAL
  - Development and redevelopment projects are required to employ, wherever feasable, Low Impact Development practices to meet the design criteria set forth in PMC 21.10.190 and the Ecology Manual.
  - Public ROW runoff shall be detained and treated independently from proposed private stormwater faciities. This shall be accomplished by providing separate publicly maintained storm facilities within a tract or dedicated ROW; enlarging the private facilities to account for bypass runoff; or other methods as approved by the City Engineer. PMC 21.10.190(3).
  - At the time of civil permit application the applicant is responsible for submitting a permanent stormwater management plan which meets the design requirements provided by PMC 21.10. The plan and accompanying information shall provide sufficient information to evaluate the environmental characteristics of the affected areas, the potential impacts of the proposed development on surface water resources, and the effectiveness and acceptability of measures proposed for managing storm water runoff. The findings, existing and proposed impervious areas, facility sizing, and overflow control shall be summarized in a written report. PMC 21.10.190, 21.10.060.
  - In the event that during civil design there is insufficient room for proposed stormwater facilities in the area(s) shown on the plat, the stormwater area(s) shall be increased as necessary so that the final design will be in compliance with city and state standards. This may result in the number of lots being reduced, or a reduction in other site amenities. PMC 21.10.060(4), PMC 21.10.150.
  - At the time of preliminary plat construction all storm drains shall be signed according to City of Puyallup Design Standard 204.11.
  - All private storm drainage facilities shall be covered by a maintenance agreement provided by the city and recorded by Pierce County. Under this agreement, if the owner fails to properly maintain the facilities, the city, after giving the owner notice, may perform necessary maintenance at the owners expense. PMC 21.10.270
  - Erosion control measures for this site will be critical. A comprehensive erosion control plan will be required as part of the civil permit application.
  - Prior to the final plat being accepted by the city, all disturbed areas within the site shall be stabilized to the satisfaction of the City Engineer.
  - A Stormwater System Development Charge (SDC) will be assessed for each new Single Family Residence (SFR). The current SDC as of this writing is $4,013.00 per unit. Stormwater SDCs are due at the time of site development permit, or in the case where no site development permit is required, at the time of building permit issuance for the individual lot(s), and the fees do not vest until the time of site development permit issuance, or at the time of building permit issuance in the case where a site development permit is not required.
  - A Construction Stormwater General Permit shall be obtained from the Washington State Department of Ecology if any land disturbing activities will disturb one or more

acres of land, or are part of a larger common plat of development or sale that will ultimately disturb one or more acres of land.

- FULL DISPERSION - The concept of FULL DISPERSION is acceptable to the City and is a preferred method of controlling runoff. However, there are specific design standards laid out by the ECY Manual that have to be met in order to qualify the design. The Drainage Report at CIVIL SUBMITTAL must clearly demonstrate how the design will achieve these requirements. Specifically:
  -According to the 2019 SWMMWW the design must be laid out to allow the runoff from the impervious or cleared areas to fully disperse into the preserved area, meaning that the flows cannot be intercepted by PIPES, ditches, streams, rivers, lakes, or wetlands. See BMP T5.30.
  -The entire parcel set aside for dispersion must be in an easement or be dedicated to the City. Showing the 100 foot flow path is correct for stormwater analysis, but the entire parcel is to be preserved.
  -Specify that the project is using FULL DISPERSION FROM ROADWAY SURFACES under BMP T5.30 to mitigate roofs and driveways. Address each bullet (requirement) from that section in detail or describe how the roof and driveway runoff will be otherwise conveyed and dispersed through the preserved parcel.
  -Refer to FULL DISPERSION FROM CLEARED AREAS IN RESIDENTIAL PROJECTS for requirements related to landscaped and cleared areas. Address each bullet from that section in detail or describe how the cleared areas will be dispersed through the preserved parcel.
  -What is the true size of the proposed preserved parcel? Page 8 of the stormwater report says 10.74 while other docs claim about 11.13. GIS says 10.77. Measure the parcel POST-DEDICATION and use that number for the 10% impervious area within a dispersion basin calculation.
- RECHARGE BASIN - This project basin ultimately discharges to existing wetlands/ponds within the development. To that end the project must demonstrate compliance with the following conditions:
  - Document the tributary area to the wetland/ponds and provide an analysis of surface water elevations and volume using a continuous runoff model for the 100-year recurrence interval developed condition.
  - Any developed flows to the ponds shall match the pre-developed flowrates for the 2-, 10-, and 100-year recurrence interval flows.
  - The overflow route from the wetlands/ponds shall be analyzed, using the fully developed contributing basin and any potential adverse impacts shall be identified and mitigated.
  - Provide hydroperiod analysis in accordance with the ECY Manual MR#8 and Appendix I-C.
- RECHARGE BASIN - Will roofs from lots 16-18 be hard piped to manifold in back of lots? Is manifold to be installed in "forrested" area? How will runoff from Lots 9-12 drain to the buffer?
- RECHARGE BASIN - Minor discrepensies persist between the Basin Maps and the

model. Lawn is 0.76 on Basin Map and is modeled as 0.543 acres. Totals do not match: 5.45 acres on the map and 5.238 acres modeled. Clarify or revise.

- RECHARGE BASIN: Existing culverts should be analyzed in conjunction with the recharge of the ponds/wetlands for proper capacity based on the developed condition. The analysis shall be enhanced prior to civil submittal to include details about the proposed control structures and the specific inputs and outflows to the existing ponds/wetlands.
- ROADWAY BASIN - 23rd St Pl SE - Model this basin like the recharge basin. Clearly step through each phase of the drainage (ex: lawn->forest->buffer->pond) for both routes (23rd St Pl SE and through the buffer behind Lot 15). Current modeling shows that mitigated flows exceed pre-developed flows. Provide more information and show the graph of the mitigated versus the pre-developed. Incorporate the model results into the Hydroperiod Analysis and clearly illustrate the nexus between the two.
- GROUNDWATER MONITORING PROGRAM - Clarify for reviewers the results of the groundwater monitoring program. The purpose is to record the highest and median groundwater levels in order for the project to be allowed to exclude infiltration from the design (in this case). In TP-104 the peak depth is recorded, but the peak groundwater level would correspond with the smallest depth BGS recorded thus revealing the highest elevation that the groundwater reached. Also, it is unclear to reviewers why the other 2 wells (TP-201 and TP-202) were only dug to depths that represent a level that is just above all recorded groundwater levels resulting in negative (?) depths to groundwater and N/A readings in the table. If the level of the water is known can it not be reported and analyzed? Revise or clarify.
- Correct typo as indicated. [R6-05 Prelim Report 2023_05_23*, Page 15/281]
- Correct typo as indicated. [R6-05 Prelim Report 2023_05_23*, Page 38/281]
- Why are CB#1 and CB#2 proposed to drain directly into the City's system? Report says the roadway for 23rd St Pl SE will flow to dispersion trench in Tract B. [R6-02 Preliminary Plat Plans, Sheet P2]
- Symbol not in legend. Is this a retaining wall? Provide details including drainage and structural engineering if required with civil submittal. [R6-02 Preliminary Plat Plans, Sheet P2]
- What does this shape and linetype represent? Legend shows this linetype as an easement line. [R6-02 Preliminary Plat Plans, Sheet P2]
- WATER PMC Chapter 14.02 and Puyallup Design Standards Section 300
  - A new 8-inch diameter water main shall be extended into the site. The 4-inch main proposed on the plans on 23rd St Pl SE may be acceptable as it is a dead-end run with no possibility of being expanded in the future. If a fire hydrant is required then the pipe will need to be upsized. Pipe for water mains shall be ductile iron conforming to Section 7-9 of the Standard Specifications.
  - Water mains shall have a minimum cover of 36-inches from paved final grade in improved ROW and easements, and 48-inches of cover in unimproved ROW and easements.

- 2-inch blow off assemblies are required on dead-end water lines except where fire hydrants are installed at the dead-end. See Detail 03.06.01.
- A 3/4-inch water service shall be provided for each building lot and shall be extended 10-feet into each of the proposed lots.
- The water main shall be located generally 10 or 12-feet west or south of roadway centerlines per city standard details.
- The minimum distance between water lines and sewer lines shall be 10-feet horizontally and 18-inches vertically. If this criterion cannot be met the applicant shall isolate the sewer and water lines by encasement, shielding, or other approved methods. CS 301.1(8).
- Fire Hydrants and other appurtenances shall be placed as directed by the Puyallup Fire Code Official. Fire Hydrants shall be placed so that there is a minimum of 50-feet separation from hydrants to any building walls.
- Air relief valves are required at high points in water lines. See detail 03.07.01.
- Water valves shall be installed along the water line at a maximum spacing of 400 feet and at the intersection of lateral lines. Water valves shall be clustered generally and shall be designed and located so that each leg of the main line system can be isolated.
- Detectable marking tape shall be installed on all new water mains including water service lines. The tape shall be placed approximately 1.5 feet above the top of pipe and shall extend its full length. Detectable marking tape shall be blue in color and meet the material requirements specified in the Standard Specifications 9-15.18.
- A water systems development charge (SDC) will be assessed for each new single-family residence. The current amount as of this writing is $5,218.00. SDCs are due at the time of building permit issuance and do not vest until time of permit issuance.

- SEWER PMC Chapter 14.08 and Puyallup Design Standards Section 400
  - The applicant shall extend the existing public sewer main located within 23rd St Pl SE into the new cul-de-sac.
  - 6-inch side sewers shall be extended 15 feet into the proposed lots. The depth at the property line shall be a minimum depth of 5-feet.
  - Side sewers shall have a cleanout at the property line, at the building, and every 100 feet between the two points.
  - A sewer systems development charge (SDC) will be assessed for each new single-family residence. The current amount as of this writing is $5,218.00. SDCs are due at the time of building permit issuance and do not vest until time of permit issuance.

- TRAFFIC SCOPING WORKSHEET - Traffic scoping worksheet says 15 units and current plans show 18. Update scoping document for civil submittal.
- STREETS GENERAL
  - Root barriers in accordance with City Standard Detail 01.02.03 shall be installed for all street trees within 10-feet of the ROW.
  - Wheel chair ramps, driveways, etc. shall be constructed in accordance with city standards and current ADA regulations. If there is a conflict between the city standards

and ADA regulations, the ADA regulations shall take precedence over the city's requirements.
- A separate street lighting and channelization plan is required for the city's review as part of the civil permit review.
- The sidewalks fronting home sites within the plat shall be poured at the time the homes are built. All other sidewalks are to be poured at the time of plat development. The developer shall be responsible to post an assignment of funds to guarantee all sidewalks are poured within 18 months of final plat approval.
- The asphalt within the sub-division shall be placed in two 2-inch lifts. The first lift shall be placed prior to final plat approval. The second lift shall be delayed until 90% of the homes are built or until18 months after time of final plat, whichever occurs first. The developer shall be required to post an assignment of funds to guarantee the second lift.
- Street numbering and addressing shall be provided by Engineering Services and reflected on the final plat documents.
- Prior to final plat approval, the developer shall post a maintenance bond with the city in an amount set by the city to guarantee all workmanship for a one-year period from the time of plat completion.
- Existing private utilities that are in conflict with city maintained ROW and utilities shall be relocated outside of the traveled road section, i.e., behind the curb and under the sidewalk area at the developers expense.

- What will become of the newly created areas of 23rd St Pl SE where the 'existing cul-de-sac is to be removed'? While these areas are dedicated to the City, they still need to be reconstructed or stabilized.
- Identify/locate and label with the AFN the storm easement depicted between 22nd St SE and 23rd St Pl SE.
- Label entire 40 foot utility easement on and near 19th Ave SE on the plans. The lines are shown, but more labels/dimensions are needed.
- GRADING GENERAL
  - A Grading Plan conforming to all requirements of PMC Section 21.14.120 will be required for this project during civil submittal.
  - Note on the plat shall indicate: Certified safe bearing load for the building lots.
  - Note on the plat shall indicate: Geotech report required for each building lot prior to issuance of a building permit for said lot.
  - Cross sections will be required at various points along the property lines extending 30-feet onto adjacent properties to assure no impact from storm water damming or runoff.
- The following dedication language shall be provided on the final plat document:

  - FURTHER, THE UNDERSIGNED OWNERS OF THE LAND HEREBY SUBDIVIDED, WAIVE FOR THEMSELVES, THEIR HEIRS AND ASSIGNS, AND ANY PERSON OR ENTITY DERIVING TITLE FROM THE UNDERSIGNED, ANY AND ALL CLAIMS FOR DAMAGES

AGAINST THE CITY OF PUYALLUP, ITS SUCCESSORS AND ASSIGNS, WHICH MAY BE OCCASIONED TO ADJACENT LAND BY THE CONSTRUCTION, DRAINAGE OR MAINTENANCE OF DEDICATED ROADS WITHIN THIS SUBDIVISION, OTHER THAN CLAIMS RESULTING FROM INADEQUATE MAINTENANCE BY THE CITY OF PUYALLUP.

FURTHER, THE UNDERSIGNED OWNERS OF THE LAND HEREBY SUBDIVIDED, AGREE FOR THEMSELVES, THEIR HEIRS AND ASSIGNS, TO INDEMNIFY AND HOLD THE CITY OF PUYALLUP, ITS SUCCESSORS AND ASSIGNS, HARMLESS FROM ANY LOSSES, INCLUDING ANY REASONABLE COSTS OF DEFENSE, SUFFERED BY THE CITY OF PUYALLUP, ITS SUCCESSORS AND ASSIGNS, RESULTING FROM CLAIMS FOR DAMAGES BY PERSONS WITHIN OR WITHOUT THIS SUBDIVISION FINALLY ADJUDICATED TO HAVE BEEN CAUSED BY THE NEGLIGENCE OR WRONGFUL ACTS OR OMISSIONS OF THE UNDERSIGNED OWNERS, THEIR EMPLOYEES, AGENTS OR CONTRACTORS, IN ALTERING THE GROUND SURFACE, DRAINAGE OR SURFACE OR SUB-SURFACE WATER FLOWS WITHIN THIS SUBDIVISION, OR IN ESTABLISHING OR CONSTRUCTING THE ROADS WITHIN THIS SUBDIVISION.

PROVIDED, THIS WAIVER AND INDEMNIFICATION SHALL NOT APPLY TO THE EXTENT THAT ANY LIABILITY OR DAMAGES RESULT IN WHOLE OR IN PART FORM THE NEGLIGENCE OR WRONGFUL ACTS OR OMISSIONS OF THE CITY OF PUYALLUP, OR ITS EMPLOYEES, AGENTS, CONTRACTORS, SUCCESSORS OR ASSIGNS.

SUBJECT TO THE TERMS AND CONDITIONS CONTAINED HEREIN, THIS SUBDIVISION, DEDICATION, WAIVER OF CLAIMS AND AGREEMENT TO HOLD HARMLESS IS MADE WITH THE FREE CONSENT AND IN ACCORDANCE WITH THE DESIRES OF SAID OWNERS.

- GENERAL
  - Clearly indicate that all Tracts will be dedicated to the city as open space and/or critical area. The city requires adequate provisions for access and maintenance to all public storm facilities located within these tracts and shall condition the review of the civil plans to provide it.
  - Utility extensions shall be completed prior to building permit issuance.
  - Benchmark and monumentation to the City of Puyallup datum (NAVD 88) will be required as part of this project/plat.
  - Prior to permit approval, the applicant shall provide documentation that the United States Post Office has been contacted to coordiante mailbox locations for the project.
- Submit a comment response letter detailing how each correction has been addressed and confirming that the conditions and standards requested for future permit submittals have either been prepared or will be.

Conditions

Condition Category	Condition	Department	Condition Status
	SPECIFIC ENGINEERING CONDITIO NS OF PROJECT APPROVAL: *The project proposed to provide a protective easement of the entire Parcel 0420353009. This easement shall be in place prior to the approval of the final plat. *The project shall extend frontage improvements to the West along 19th Ave SE to tie into the existing curb line. The frontage improvements shall include curb/gutter, sidewalk, storm and half street paving. The storm improvements shall include removal of any existing facilities that don't meet current city standards and installation of required facilities for proper drainage. *Due to the onsite Wetlands the Project is required to meet minimum requirement # 8 of the 2014 ECY SWMMWW. As part of the requirement seasonal high groundwater will need to be determined to have a complete picture of the hydraulics of the Wetlands. Based on this requirement the project shall provide continuous groundwater monitoring through a minimum of one wet season as outlined in the 2014 ECY SWMMWW. *If changes to existing culvert and control structure within the wetlands are proposed as part of the project the applicant shall obtain all required Army Corp of Engineers and WDFW permits for the alterations and work with the wetlands.	Engineering Division	Open
	GENERAL ENGINEERING CONDITIONS OF PROJECT APPROVAL: The following engineering conditions are references to requirements and standards that apply to the development proposal regardless of any specific conditions noted above. This list is intended to assist the applicant with incorporating City requirements into the project design	Development & Permitting Services	Open

Condition Category	Condition	Department	Condition Status
	documents but should not be considered an exhaustive list of all necessary provisions from the Municipal Code, design standards, or the Ecology stormwater manual. GENERAL: *The individual lot designations shall be identified by numerals, starting with numeral one. [PMC 19.02.100] *Indicate a 10-foot private utility easement adjacent to the right-of-way line of the proposed lots. [PMC 17.42] *The following Dedication language shall be provided on the final plat document: FURTHER, THE UNDERSIGNED OWNERS OF THE LAND HEREBY SUBDIVIDED, WAIVE FOR THEMSELVES, THEIR HEIRS AND ASSIGNS, AND ANY PERSON OR ENTITY DERIVING TITLE FROM THE UNDERSIGNED, ANY AND ALL CLAIMS FOR DAMAGES AGAINST THE CITY OF PUYALLUP, ITS SUCCESSORS AND ASSIGNS, WHICH MAY BE OCCASIONED TO ADJACENT LAND BY THE CONSTRUCTION, DRAINAGE OR MAINTENANCE OF DEDICATED ROADS WITHIN THIS SUBDIVISION, OTHER THAN CLAIMS RESULTING FROM INADEQUATE MAINTENANCE BY THE CITY OF PUYALLUP. FURTHER, THE UNDERSIGNED OWNERS OF THE LAND HEREBY SUBDIVIDED, AGREE FOR THEMSELVES, THEIR HEIRS AND ASSIGNS, TO INDEMNIFY AND HOLD THE CITY OF PUYALLUP, ITS SUCCESSORS AND ASSIGNS, HARMLESS FROM ANY LOSSES, INCLUDING ANY REASONABLE COSTS OF DEFENSE, SUFFERED BY THE CITY OF PUYALLUP, ITS SUCCESSORS AND ASSIGNS, RESULTING FROM CLAIMS FOR DAMAGES BY PERSONS WITHIN OR WITHOUT THIS SUBDIVISION FINALLY ADJUDICATED TO HAVE BEEN CAUSED BY THE NEGLIGENCE OR WRONGFUL ACTS OR OMISSIONS OF THE		

Condition Category	Condition	Department	Condition Status
	UNDERSIGNED OWNERS, THEIR EMPLOYEES, AGENTS OR CONTRACTORS, IN ALTERING THE GROUND SURFACE, DRAINAGE OR SURFACE OR SUB-SURFACE WATER FLOWS WITHIN THIS SUBDIVISION, OR IN ESTABLISHING OR CONSTRUCTING THE ROADS WITHIN THIS SUBDIVISION. PROVIDED, THIS WAIVER AND INDEMNIFICATION SHALL NOT APPLY TO THE EXTENT THAT ANY LIABILITY OR DAMAGES RESULT IN WHOLE OR IN PART FROM THE NEGLIGENCE OR WRONGFUL ACTS OR OMISSIONS OF THE CITY OF PUYALLUP, OR ITS EMPLOYEES, AGENTS, CONTRACTORS, SUCCESSORS OR ASSIGNS. SUBJECT TO THE TERMS AND CONDITIONS CONTAINED HEREIN, THIS SUBDIVISION, DEDICATION, WAIVER OF CLAIMS AND AGREEMENT TO HOLD HARMLESS IS MADE WITH THE FREE CONSENT AND IN ACCORDANCE WITH THE DESIRES OF SAID OWNERS.		
	WATER: *The proposed water system shall be designed and constructed to current City (Fire/ Domestic) standards. [PMC 14.02.120] *The water main shall be located generally 10 or 12-feet west or south of roadway centerlines per city standard drawings. [PMC 14.02.120(f) & CS 301.1(11)] *A new water main line shall be extended to, and through, the site sufficient to provide the necessary flows for both the domestic system and fire system. The minimum water pipe size shall be 8-inch diameter. [PMC 14.02.190, 14.20.010 & CS 301.1(1)] *A 1-inch poly line water service including setter and box shall be provided for each building lot and shall be extended 10-feet into each of the	Development & Permitting Services	Open

Condition Category	Condition	Department	Condition Status
	proposed lots. The City will install meters at the time of individual lot development. NOTE: Tract meters, including transmitters, shall be installed by the applicant. [PMC 14.02.220(2) & CS 301.3] *The minimum distance between water lines and sewer lines shall be 10-feet horizontally and 18-inches vertically. If this criterion cannot be met, the applicant shall isolate the sewer and water lines by encasement, shielding, or other approved methods. [PMC 14.02.120(f) & CS 301.1(8)] *Fire hydrants and other appurtenances shall be placed as directed by the Puyallup Fire Code Official. Fire hydrants shall be placed so that there is a minimum of 50-feet of separation from hydrants to any building walls. [PMC 16.08.080 & CS 301.2, 302.3] *Prior to completion of the project, the engineer-of-record shall complete the State Department of Health's "Construction Completion Report for Distribution Main Projects", seal, and provide to the City. [WAC 246-290-120] *For new plats, water connection fees and systems development charges will be assessed at the time of building permit issuance for the individual lots. [PMC 14.02.040, 14.10.030]		
	SANITARY SEWER: *The proposed sanitary sewer system shall be designed and constructed to current City Standards. [PMC 14.08.040, 14.08.120] *6-inch side sewers shall be extended 15-feet into the proposed lots. [PMC 14.20.010 & CS 401(6)] *The sanitary sewer main shall be located 5-feet east or north of roadway centerlines. [PMC 17.42] *Any portion of a mainline extension located outside City right-of-way must be centered in a 40-foot wide easement granted to the City for maintenance purposes. The easement, if necessary, shall be clearly indicated on the plat	Development & Permitting Services	Open

Condition Category	Condition	Department	Condition Status
	document. [PMC 17.42 & CS 401(14)] *A separate and independent side sewer will be required from the public main to all building sites for each proposed lot. Side sewers shall be extended from the main 15-feet beyond the property line at the building site and shall be 6-inch minimum diameter with a 0.02 foot per foot slope. [PMC 14.08.110 & CS 401(6)] *Side sewers shall have a cleanout at the property line, at the building, and every 100 feet between the two points. [PMC 14.08.120 & CS 401(7)] *Individual grinder pump systems shall comply with City Standard 401 (17) and provide a minimum storage capacity of 220 gallons in accordance with City's Sanitary Sewer Comprehensive Plan. *Any forcemains serving the individual lots shall be privately maintained and located outside the limits of the ROW. Provide a gravity sewer connection between the private forcemain discharge on private property and the public sewer main. Clearly indicate private sewer easement(s) across the individual lots. *Utility extensions shall be completed prior to building permit issuance. *A sanitary sewer system development charge (SDC) will be assessed for each new single family residence and is due at the time of building permit issuance for the individual lot(s). [PMC 14.10.010, 14.10.030] *Sewer connection fees and systems development charges are due at the time of building permit issuance and do not vest until time of permit issuance. [PMC 14.10.010, 14.10.030]		
	STORMWATER/ EROSION CONTROL: *Stormwater design shall be in accordance with the 2012 Stormwater Management Manual for Western Washington as amended in December,	Development & Permitting Services	Open

Condition Category	Condition	Department	Condition Status
	2014 (The 2014 SWMMWW aka "Ecology Manual"). *The applicant shall complete the stormwater flowchart, Figure 3.1, contained in Ecology's Phase II Municipal Stormwater Permit, Appendix I. The completed flowchart shall be submitted with the preliminary stormwater site plan. *The proposed plat shall employ, wherever feasible, low impact development practices to meet the design criteria set forth in PMC 21.10.190, the Ecology Manual Volume III, Chapter 3, and Volume V, Chapter 5. *The applicant is responsible for submitting a preliminary stormwater management site plan (2 sets) which meets the design requirements provided by PMC Section 21.10 and Ecology Manual Volume I, Section 2.5.1. The preliminary stormwater site plan (PSSP) shall be submitted prior to Preliminary Plat approval to ensure that adequate stormwater facilities are anticipated prior to development of the individual lot(s). The preliminary stormwater site plan shall reasonably estimate the quantity of roof and driveway stormwater runoff and the application of On-site Stormwater Management BMPs for the proposed development. *The storm drainage system shall be designed and constructed in accordance with current City Standards. [PMC 17.42] *Preliminary feasibility/infeasibility testing for infiltration facilities shall be in accordance with the site analysis requirements of the Ecology Manual, Volume I, Chapter 3, specifically: -Groundwater evaluation, either instantaneous (MR1-5); or continuous monitoring (MR1-9), during the wet weather months (December 21 through April 1). -Hydraulic conductivity testing using the Small Scale Pilot Infiltration Tests (PIT) during the wet		

Condition Category	Condition	Department	Condition Status
	weather months (December 21 through April 1) unless the site is located on unconsolidated outwash soils. If the site is located on unconsolidated outwash soils, grain size analyses may be substituted for the Small Scale PIT test. -Testing to determine the hydraulic restriction layer. *Public right-of-way runoff shall be detained and treated independently from proposed private stormwater facilities. This shall be accomplished by providing separate publicly maintained storm facilities within a tract or dedicated right-of-way; enlarging the private facilities to account for bypass runoff; or other methods as approved by the City Engineer. [PMC 21.10.190(3)] *Water quality treatment of stormwater shall be in accordance with the Ecology Manual, Volume V. *A maintenance access road and approach will be required to maintain the public storm facilities in Tract B. *A Construction Stormwater General Permit shall be obtained from the Department of Ecology prior to any land disturbing activities such as clearing, grading, excavating and/or demolition. *At the time of civil permit application, the applicant is responsible for submitting a permanent storm water management plan (2 sets) which meets the design requirements provided by PMC Section 21.10. The plan and accompanying information shall provide sufficient information to evaluate the environmental characteristics of the affected areas, the potential impacts of the proposed development on surface water resources, and the effectiveness and acceptability of measures proposed for managing storm water runoff. The findings, existing and proposed impervious area, facility sizing, and overflow control shall be summarized in a written report		

Condition Category	Condition	Department	Condition Status
	(TIR or SSP). [PMC 21.10.190, 21.10.060] *The written technical report shall clearly delineate any offsite basins tributary to the project site and include the following information: [PMC 21.10.060] -the quantity of the offsite runoff; -the location(s) where the offsite runoff enters the project site; -how the offsite runoff will be routed through the project site. -the location of proposed retention/detention facilities -and, the location of proposed treatment facilities *In the event that during civil design, there is insufficient room for proposed stormwater facilities in the area(s) shown on the major plat, the stormwater area(s) shall be increased as necessary so the final design will be in compliance with current City Standards. This may result in the number of lots being reduced, or a reduction in other site amenities. [PMC 21.10.060(4), 21.10.150] *Overflow facilities shall be provided for any proposed detention/retention facilities in accordance with the City Standards. This includes a downstream analysis a minimum of ¼ mile downstream from the site. *Any above-ground stormwater facility shall be screened from public right-of-way and adjacent property per the underlying zoning perimeter buffer requirements in the PMC. *Stormwater R/D facilities shall be a minimum of 20-feet from any public right-of-way, tract, vegetative buffer, and/or property line measured from the toe of the exterior slope/embankment of the facility. [PMC 21.10 & DOE Manual, Vol. V, Pg 10-39 and Pg 10-9] *The proposed project discharges to an adjacent		

Condition Category	Condition	Department	Condition Status
	wetland. The applicant shall provide a hydrologic analysis which ensures the wetland's hydrologic conditions, hydrophytic vegetation, and substrate characteristics are maintained. *The number of infiltration tests shall be based on the area contributing to the proposed BMP, e.g., one test for every 5,000 sq. ft of permeable pavement, or one test for each bioretention cell. Upon submission of the geotechnical infiltration testing, appropriate long-term correction factors shall be noted for any areas utilizing infiltration into the underlying native soils in accordance with the Ecology Manual, Volume III, Chapter 3. *Construction of frontage improvements associated with this project will likely require extension of the stormwater main to accommodate road runoff. *At the time of civil permit application, all pipe reaches shall be summarized in a Conveyance Table containing the following minimum information and included in the TIR: Pipe Reach Name Design Flow (cfs) Structure Tributary Area (cfs) Pipe-Full Flow Pipe Diameter (in) Water Depth at Design Flow (in) Pipe Length (ft) Critical Depth (in) Pipe Slope (%) Velocity at Design Flow (fps) Manning's Coefficient (n) Velocity at Pipe-Full Flow (fps) Percent full at Design Flow (%) HGL for each Pipe Reach (elev) *At the time of preliminary plat construction, all storm drains shall be signed as follows: -Publicly maintained stormwater catch basins shall be signed using glue-down markers supplied		

Condition Category	Condition	Department	Condition Status
	by the City and installed by the project proponent. -Privately maintained stormwater catch basins shall be signed with pre-cut 90ml torch down heavy-duty, intersection-grade preformed thermoplastic pavement marking material. It shall read either "Only Rain Down the Drain" or "No Dumping, Drains to Stream". Alternatively, the glue- down markers may be purchased from the City for a nominal fee. *All private storm drainage facilities shall be covered by a maintenance agreement provided by the City and recorded with Pierce County. Under this agreement, if the owner fails to properly maintain the facilities, the City, after giving the owner notice, may perform necessary maintenance at the owner's expense. *Erosion control measures for this site will be critical. A comprehensive erosion control plan will be required as part of the civil permit application. *Prior to the final plat being accepted by the City, all disturbed areas within the site shall be stabilized to the satisfaction of the City Engineer. *A Stormwater Systems Development Charge (SDC) will be assessed for each new single family residence. *Stormwater Systems Development fees are due at the time of site development permit or in the case where no site development permit is required, at the time of building permit issuance for the individual lot(s); and the fees do not vest until the time of site development permit issuance, or at the time of building permit issuance in the case where a site development permit is not required.		
	STREET: 56. Half-street improvements shall be completed along the entire property frontage and	Development & Permitting Services	Open

Condition Category	Condition	Department	Condition Status
	include curb, gutter, sidewalk, roadway base, pavement, street lighting, and drainage. Dedication of right-of-way may be required to provide for adequate roadway section. [PMC 11.08.120, 11.08.130, 19.12.050(1)] *Upon civil permit application, the following items shall be provided: -Road plans shall include a plan and profile view of the roadway indicating both the centerline and flow line elevations. [PMC 17.42 & CS 2.2] -A separate street lighting and channelization plan shall be provided in accordance with City Standards. -Root barriers in accordance with City Standard Detail 01.02.03 shall be installed for all street trees within ten (10) feet of the public ROW. -Wheel chair ramps, accessible routes, etc. shall be constructed in accordance with City Standards and current ADA regulations. If there is a conflict between the City Standards and ADA regulations, the ADA regulations shall take precedence over the City's requirements. [PMC 17.42] -Indicate the ROW limits for 13th St SW and Road A. -Indicate the Sight Distance Triangle limit at the Road A intersection. *Street numbering and addressing shall be provided by Engineering Services and reflected on the final plat document. [CS 103.1] *Existing private utilities (gas, telcom, cable, etc...) that are in conflict with City maintained right-of-way and utilities shall be relocated outside of the travelled road section, i.e., behind the curb under the sidewalk area.		
	GRADING: *A Grading Plan conforming to all requirements of PMC Section 21.14.120 will be required for this	Development & Permitting Services	Open

Condition Category	Condition	Department	Condition Status
	project. The Plan shall be prepared by a Civil Engineer licensed in the State of Washington. [PMC 21.14.070] *A geotechnical report conforming to all requirements PMC Sections 21.14.150 and 21.14.160 will be required prior to issuance of the first building permit. The Report shall be prepared by a Civil Engineer or Engineering Geologist licensed in the State of Washington. Prior to final acceptance of this project, the author of the Report shall provide certification to the City of the following: -The project was constructed in accordance with the recommendations contained in the report. -Any building lot within the site is suitable for building up to a maximum safe bearing load expressed in pounds per square foot (psf). A note indicating the certified safe bearing load for the building lots shall be provided on the face of the plat. Alternatively, a note shall be provided on the face of the plat indicating that a geotechnical report will be required for each building lot prior to issuance of a building permit on that lot. *Cross sections will be required at various points along the property lines extending 30-feet onto adjacent properties to assure no impact from storm water damming or runoff. [PMC 17.42 & CS 502.1] *At the time of civil permit application, the following notes shall be added to the first sheet of the TESCP: a. "At any time during construction it is determined by the City that mud and debris are being tracked onto public streets with insufficient cleanup, all work shall cease on the project until this condition is corrected. The contractor and/or the owner shall immediately take all steps		

Condition Category	Condition	Department	Condition Status
	necessary to prevent future tracking of mud and debris into the public ROW, which may include the installation of a wheel wash facility on-site." b. "Contractor shall designate a Washington Department of Ecology certified erosion and sediment control leadperson, and shall comply with the Stormwater Pollution Prevention Plan (SWPPP) prepared for this project." c. "Sediment-laden runoff shall not be allowed to discharge beyond the construction limits in accordance with the Project's NPDES General Stormwater Permit." d. "The closed depression is the permanent stormwater infiltration system for the project and shall not be utilized for TESC runoff. Connect to the closed depression only after construction is complete and site is stabilized and paved." *RCW 19.122 requires all owners of underground facilities to notify pipeline companies of scheduled excavations through the one-number locator service if proposed excavation is within 100 feet of the utility. Notification must occur in a window of not less than 2 business days but not more than 10 business days before beginning the excavation. If a transmission pipeline company is notified that excavation work will occur near a pipeline, a representative of the company must consult with the excavator on-site prior to excavation.		
	*Engineering plans submitted for review and approval shall be comply with City Standards Section 1.0 and Section 2.0, particularly: -Engineering plans submitted for review and approval shall be based on 24 x 36-inch sheets. -The scale for design plans shall be indicated directly below the north arrow and shall be only 1"=20' or 1"=30'. The north arrow shall point up or to the right on the plans.	Development & Permitting Services	Open

Condition Category	Condition	Department	Condition Status
	-Engineering plan sheets shall be numbered sequentially in this manner: Sheet 1 of 20, Sheet 2 of 20, etc. ending in Sheet 20 of 20. -All applicable City Standard Notes and Standard Details shall be included on the construction plans for this project. A copy of the City Standards can be found on the City's web site under Office of the City Engineer, Engineering Services. *Prior to Acceptance/Occupancy, Record Drawings shall be provided for review and approval by the City. Record Drawings shall be provided as follows: a. Electronic version of the record drawings in the following formats: i. AutoCAD Map 2007 or newer in State Plane South Projection ii. PDF		
	1. Comply with 2018 IFC, IBC and C.O.P engineering codes and standards. 2. Fire Hydrants will be addressed at Civils and required to be constructed to C.O.P standards. 3. Fire Hydrants to reach all points of each structure within 600'. 4. 10% Maximum for road grade and driveways.	Fire Prevention	Open
	TRAFFIC CONDITIONS OF APPROVAL: Traffic Impact fees (TIF) will be assessed for each new single family residence in accordance with fees adopted by ordinance, per PMC 21.10. Park impact fees shall be charged per new dwelling unit based on its size. Fees are assessed in accordance with fees adopted by ordinance, per PMC 21.10 School impact fees shall be paid directly to the	Development & Permitting Services	Open

Condition Category	Condition	Department	Condition Status
	school district in accordance with adopted fee at the time of collection by the District. Per Puyallup Municipal Code Section 11.08.130, the applicant/owner would be expected to construct half-street improvements including curb, gutter, sidewalk, roadway base, pavement, and street lighting. Any existing improvements which are damaged now or during the course of construction, or which do not meet current City Standards, shall be replaced. Based on the materials submitted, the applicant would be expected to construct half-street improvements (along the property frontage) on the following streets: a) 23rd St Pl SE shall consist of 28' streets with curb, gutter, 5' sidewalks, 5.5' planter strips, and streetlights within a 50' right-of-way. "NO PARKING" signs on one side of the street will be required. b) 19th Ave SE shall match the existing curb alignment on the south side of the street. The roadway shall consist of a 28' street with curb, gutter, 5' sidewalks, and streetlights in a 60' right-of-way. "NO PARKING" signs on one side of the street will be required. A separate street lighting plan is required for the City's civil review. Streetlights will be required on 19th Ave SE & 23rd St Pl SE. The maximum grade for City streets is 10%. Offsite striping plan required to safely transition vehicles to/from widened sections on 19th Ave SE. At the intersection of 21st St SE & 19th Ave SE, the NE corner must be completely clear of sight obstructions. The City's Approach Sight Distance Standards 01.01.11 (85ft sight triangle) must be		

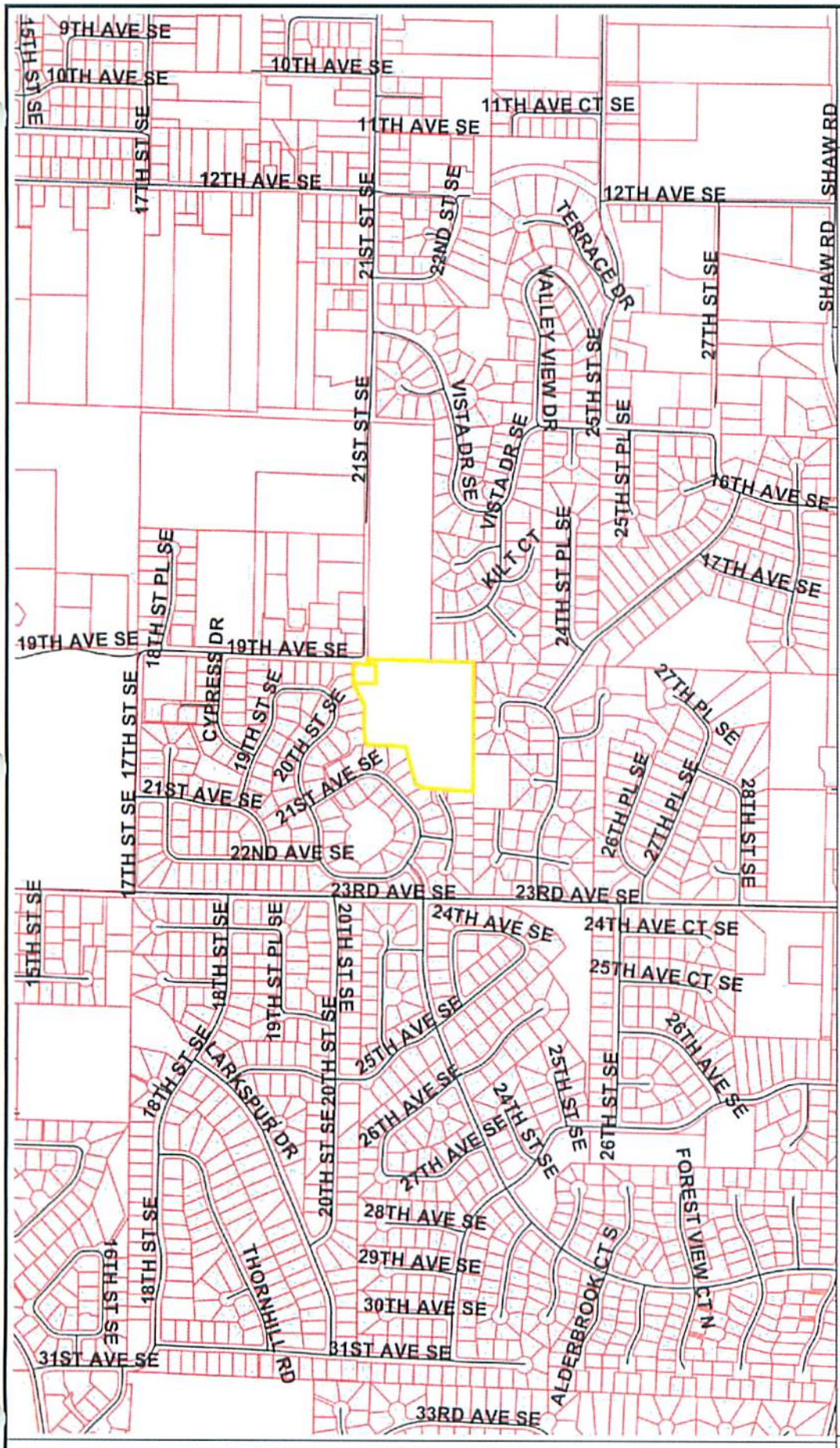
Condition Category	Condition	Department	Condition Status
	shown on civil plans. The Cul-de-sac on 19th Ave SE must meet minimum radius requirement per Fire requirements. The future road connection stubs (Highland Dr & north side of the 19th Ave SE Cul-de-sac) shall be installed with "Roadway to be extended in future" signage (per standard 01.01.21). Right of way dedication shall be provided at the time of final plat.		
Submit With Building Permit Application	Permit submittals and construction plans must adhere to the conditions and recommendations of the geotechnical report(s).	Building Division	Open

Sincerely,
Chris Beale
Senior Planner
(253) 841-5418
CBeale@PuyallupWA.gov

Habitat Technologies, Inc.

CRITICAL AREAS ASSESSMENT:
SUNSET POINTE RESIDENTIAL DEVELOPMENT

September 21, 2018



The map features are approximate and are intended only to provide an indication of said feature. Additional areas that have not been mapped may be present. This is not a survey. The orthophotos and other data may not align. Pierce County and Habitat Technologies assume no liability for variations ascertained by actual survey. All data is expressly provided AS IS and WITH ALL FAULTS. Pierce County and Habitat Technologies make no warranty of fitness for a particular purpose.

Map Legend

- Highlighted Tax Parcels
- Tax Parcels
- Roads
- Major Roads

Figure 1 Site Vicinity

0 450 900 ft.

N

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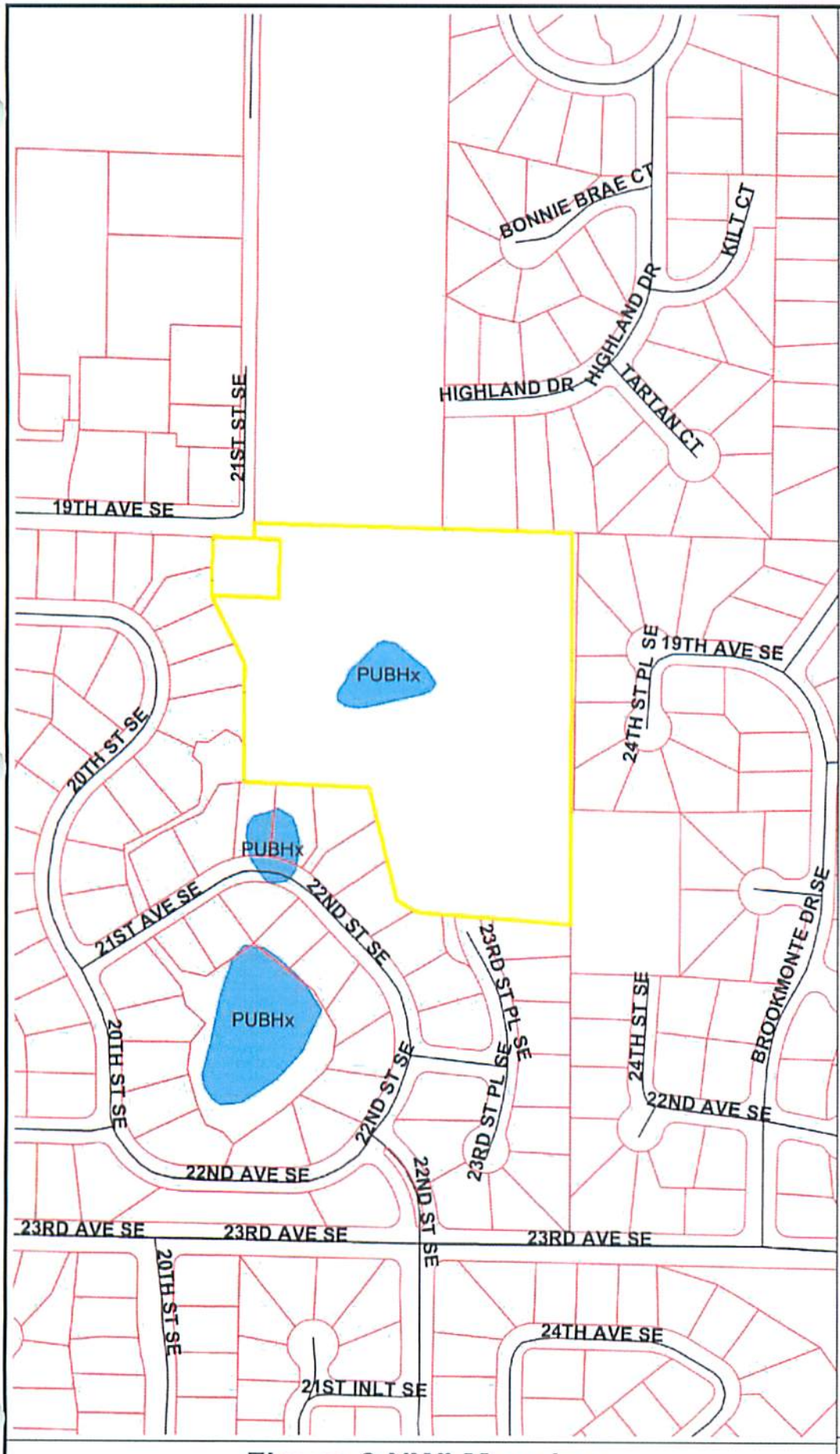
Habitat Technologies



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Map Legend

- Highlighted Tax Parcels
- Tax Parcels
- Roads
- Major Roads
- National Wetlands Inventory

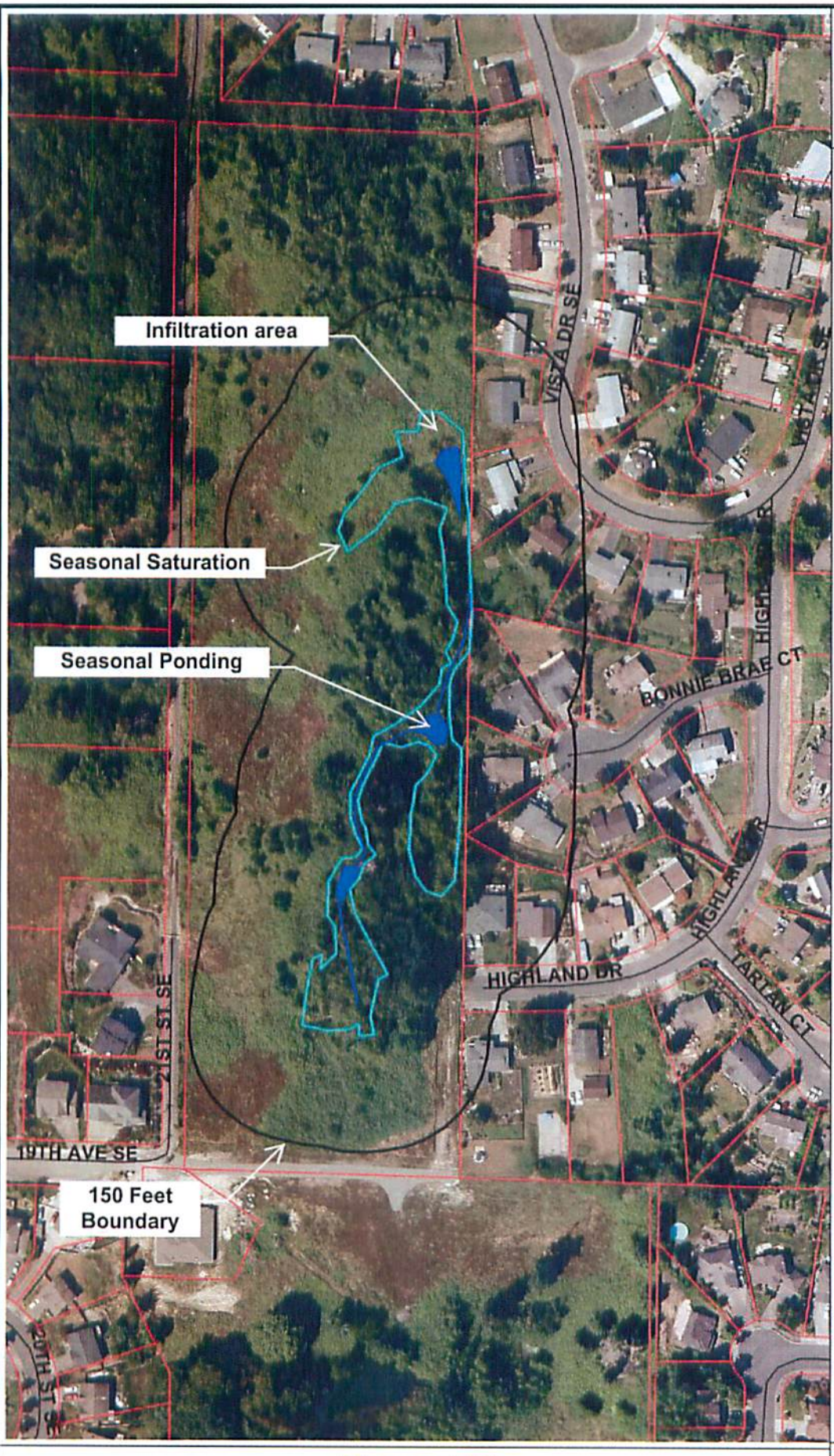
Figure 2 NWI Mapping

0 150 300 ft.

N

9/27/18 2:24 PM

Habitat Technologies



The map features are approximate and are intended only to provide an indication of said feature. Additional areas that have not been mapped may be present. This is not a survey. The orthophotos and other data may not align. Pierce County and Habitat Technologies assume no liability for variations ascertained by actual survey. All data is expressly provided AS IS and WITH ALL FAULTS. Pierce County and Habitat Technologies make no warranty of fitness for a particular purpose.

Map Legend

- Wetland D
- Highlighted Tax Parcels
- Tax Parcels
- Roads
- Major Roads
- County - 2014 - Ortho

Figure D2

Habitat Technologies

0 100 200 ft.

N

10/11/17 12:01 PM

- 2-inch blow off assemblies are required on dead-end water lines except where fire hydrants are installed at the dead-end. See Detail 03.06.01.
- A 3/4-inch water service shall be provided for each building lot and shall be extended 10-feet into each of the proposed lots.
- The water main shall be located generally 10 or 12-feet west or south of roadway centerlines per city standard details.
- The minimum distance between water lines and sewer lines shall be 10-feet horizontally and 18-inches vertically. If this criterion cannot be met the applicant shall isolate the sewer and water lines by encasement, shielding, or other approved methods. CS 301.1(8).
- Fire Hydrants and other appurtenances shall be placed as directed by the Puyallup Fire Code Official. Fire Hydrants shall be placed so that there is a minimum of 50-feet separation from hydrants to any building walls.
- Air relief valves are required at high points in water lines. See detail 03.07.01.
- Water valves shall be installed along the water line at a maximum spacing of 400 feet and at the intersection of lateral lines. Water valves shall be clustered generally and shall be designed and located so that each leg of the main line system can be isolated.
- Detectable marking tape shall be installed on all new water mains including water service lines. The tape shall be placed approximately 1.5 feet above the top of pipe and shall extend its full length. Detectable marking tape shall be blue in color and meet the material requirements specified in the Standard Specifications 9-15.18.
- A water systems development charge (SDC) will be assessed for each new single-family residence. The current amount as of this writing is $5,218.00. SDCs are due at the time of building permit issuance and do not vest until time of permit issuance.

- SEWER PMC Chapter 14.08 and Puyallup Design Standards Section 400
  - The applicant shall extend the existing public sewer main located within 23rd St Pl SE into the new cul-de-sac.
  - 6-inch side sewers shall be extended 15 feet into the proposed lots. The depth at the property line shall be a minimum depth of 5-feet.
  - Side sewers shall have a cleanout at the property line, at the building, and every 100 feet between the two points.
  - A sewer systems development charge (SDC) will be assessed for each new single-family residence. The current amount as of this writing is $5,218.00. SDCs are due at the time of building permit issuance and do not vest until time of permit issuance.

- TRAFFIC SCOPING WORKSHEET - Traffic scoping worksheet says 15 units and current plans show 18. Update scoping document for civil submittal.
- STREETS GENERAL
  - Root barriers in accordance with City Standard Detail 01.02.03 shall be installed for all street trees within 10-feet of the ROW.
  - Wheel chair ramps, driveways, etc. shall be constructed in accordance with city standards and current ADA regulations. If there is a conflict between the city standards

and ADA regulations, the ADA regulations shall take precedence over the city's requirements.
- A separate street lighting and channelization plan is required for the city's review as part of the civil permit review.
- The sidewalks fronting home sites within the plat shall be poured at the time the homes are built. All other sidewalks are to be poured at the time of plat development. The developer shall be responsible to post an assignment of funds to guarantee all sidewalks are poured within 18 months of final plat approval.
- The asphalt within the sub-division shall be placed in two 2-inch lifts. The first lift shall be placed prior to final plat approval. The second lift shall be delayed until 90% of the homes are built or until18 months after time of final plat, whichever occurs first. The developer shall be required to post an assignment of funds to guarantee the second lift.
- Street numbering and addressing shall be provided by Engineering Services and reflected on the final plat documents.
- Prior to final plat approval, the developer shall post a maintenance bond with the city in an amount set by the city to guarantee all workmanship for a one-year period from the time of plat completion.
- Existing private utilities that are in conflict with city maintained ROW and utilities shall be relocated outside of the traveled road section, i.e., behind the curb and under the sidewalk area at the developers expense.

- What will become of the newly created areas of 23rd St Pl SE where the 'existing cul-de-sac is to be removed'? While these areas are dedicated to the City, they still need to be reconstructed or stabilized.
- Identify/locate and label with the AFN the storm easement depicted between 22nd St SE and 23rd St Pl SE.
- Label entire 40 foot utility easement on and near 19th Ave SE on the plans. The lines are shown, but more labels/dimensions are needed.
- GRADING GENERAL
  - A Grading Plan conforming to all requirements of PMC Section 21.14.120 will be required for this project during civil submittal.
  - Note on the plat shall indicate: Certified safe bearing load for the building lots.
  - Note on the plat shall indicate: Geotech report required for each building lot prior to issuance of a building permit for said lot.
  - Cross sections will be required at various points along the property lines extending 30-feet onto adjacent properties to assure no impact from storm water damming or runoff.
- The following dedication language shall be provided on the final plat document:

  - FURTHER, THE UNDERSIGNED OWNERS OF THE LAND HEREBY SUBDIVIDED, WAIVE FOR THEMSELVES, THEIR HEIRS AND ASSIGNS, AND ANY PERSON OR ENTITY DERIVING TITLE FROM THE UNDERSIGNED, ANY AND ALL CLAIMS FOR DAMAGES

AGAINST THE CITY OF PUYALLUP, ITS SUCCESSORS AND ASSIGNS, WHICH MAY BE OCCASIONED TO ADJACENT LAND BY THE CONSTRUCTION, DRAINAGE OR MAINTENANCE OF DEDICATED ROADS WITHIN THIS SUBDIVISION, OTHER THAN CLAIMS RESULTING FROM INADEQUATE MAINTENANCE BY THE CITY OF PUYALLUP.

FURTHER, THE UNDERSIGNED OWNERS OF THE LAND HEREBY SUBDIVIDED, AGREE FOR THEMSELVES, THEIR HEIRS AND ASSIGNS, TO INDEMNIFY AND HOLD THE CITY OF PUYALLUP, ITS SUCCESSORS AND ASSIGNS, HARMLESS FROM ANY LOSSES, INCLUDING ANY REASONABLE COSTS OF DEFENSE, SUFFERED BY THE CITY OF PUYALLUP, ITS SUCCESSORS AND ASSIGNS, RESULTING FROM CLAIMS FOR DAMAGES BY PERSONS WITHIN OR WITHOUT THIS SUBDIVISION FINALLY ADJUDICATED TO HAVE BEEN CAUSED BY THE NEGLIGENCE OR WRONGFUL ACTS OR OMISSIONS OF THE UNDERSIGNED OWNERS, THEIR EMPLOYEES, AGENTS OR CONTRACTORS, IN ALTERING THE GROUND SURFACE, DRAINAGE OR SURFACE OR SUB-SURFACE WATER FLOWS WITHIN THIS SUBDIVISION, OR IN ESTABLISHING OR CONSTRUCTING THE ROADS WITHIN THIS SUBDIVISION.

PROVIDED, THIS WAIVER AND INDEMNIFICATION SHALL NOT APPLY TO THE EXTENT THAT ANY LIABILITY OR DAMAGES RESULT IN WHOLE OR IN PART FORM THE NEGLIGENCE OR WRONGFUL ACTS OR OMISSIONS OF THE CITY OF PUYALLUP, OR ITS EMPLOYEES, AGENTS, CONTRACTORS, SUCCESSORS OR ASSIGNS.

SUBJECT TO THE TERMS AND CONDITIONS CONTAINED HEREIN, THIS SUBDIVISION, DEDICATION, WAIVER OF CLAIMS AND AGREEMENT TO HOLD HARMLESS IS MADE WITH THE FREE CONSENT AND IN ACCORDANCE WITH THE DESIRES OF SAID OWNERS.

- GENERAL
  - Clearly indicate that all Tracts will be dedicated to the city as open space and/or critical area. The city requires adequate provisions for access and maintenance to all public storm facilities located within these tracts and shall condition the review of the civil plans to provide it.
  - Utility extensions shall be completed prior to building permit issuance.
  - Benchmark and monumentation to the City of Puyallup datum (NAVD 88) will be required as part of this project/plat.
  - Prior to permit approval, the applicant shall provide documentation that the United States Post Office has been contacted to coordiante mailbox locations for the project.
- Submit a comment response letter detailing how each correction has been addressed and confirming that the conditions and standards requested for future permit submittals have either been prepared or will be.

Conditions

Condition Category	Condition	Department	Condition Status
	SPECIFIC ENGINEERING CONDITIO NS OF PROJECT APPROVAL: *The project proposed to provide a protective easement of the entire Parcel 0420353009. This easement shall be in place prior to the approval of the final plat. *The project shall extend frontage improvements to the West along 19th Ave SE to tie into the existing curb line. The frontage improvements shall include curb/gutter, sidewalk, storm and half street paving. The storm improvements shall include removal of any existing facilities that don't meet current city standards and installation of required facilities for proper drainage. *Due to the onsite Wetlands the Project is required to meet minimum requirement # 8 of the 2014 ECY SWMMWW. As part of the requirement seasonal high groundwater will need to be determined to have a complete picture of the hydraulics of the Wetlands. Based on this requirement the project shall provide continuous groundwater monitoring through a minimum of one wet season as outlined in the 2014 ECY SWMMWW. *If changes to existing culvert and control structure within the wetlands are proposed as part of the project the applicant shall obtain all required Army Corp of Engineers and WDFW permits for the alterations and work with the wetlands.	Engineering Division	Open
	GENERAL ENGINEERING CONDITIONS OF PROJECT APPROVAL: The following engineering conditions are references to requirements and standards that apply to the development proposal regardless of any specific conditions noted above. This list is intended to assist the applicant with incorporating City requirements into the project design	Development & Permitting Services	Open

Condition Category	Condition	Department	Condition Status
	documents but should not be considered an exhaustive list of all necessary provisions from the Municipal Code, design standards, or the Ecology stormwater manual. GENERAL: *The individual lot designations shall be identified by numerals, starting with numeral one. [PMC 19.02.100] *Indicate a 10-foot private utility easement adjacent to the right-of-way line of the proposed lots. [PMC 17.42] *The following Dedication language shall be provided on the final plat document: FURTHER, THE UNDERSIGNED OWNERS OF THE LAND HEREBY SUBDIVIDED, WAIVE FOR THEMSELVES, THEIR HEIRS AND ASSIGNS, AND ANY PERSON OR ENTITY DERIVING TITLE FROM THE UNDERSIGNED, ANY AND ALL CLAIMS FOR DAMAGES AGAINST THE CITY OF PUYALLUP, ITS SUCCESSORS AND ASSIGNS, WHICH MAY BE OCCASIONED TO ADJACENT LAND BY THE CONSTRUCTION, DRAINAGE OR MAINTENANCE OF DEDICATED ROADS WITHIN THIS SUBDIVISION, OTHER THAN CLAIMS RESULTING FROM INADEQUATE MAINTENANCE BY THE CITY OF PUYALLUP. FURTHER, THE UNDERSIGNED OWNERS OF THE LAND HEREBY SUBDIVIDED, AGREE FOR THEMSELVES, THEIR HEIRS AND ASSIGNS, TO INDEMNIFY AND HOLD THE CITY OF PUYALLUP, ITS SUCCESSORS AND ASSIGNS, HARMLESS FROM ANY LOSSES, INCLUDING ANY REASONABLE COSTS OF DEFENSE, SUFFERED BY THE CITY OF PUYALLUP, ITS SUCCESSORS AND ASSIGNS, RESULTING FROM CLAIMS FOR DAMAGES BY PERSONS WITHIN OR WITHOUT THIS SUBDIVISION FINALLY ADJUDICATED TO HAVE BEEN CAUSED BY THE NEGLIGENCE OR WRONGFUL ACTS OR OMISSIONS OF THE		

Condition Category	Condition	Department	Condition Status
	UNDERSIGNED OWNERS, THEIR EMPLOYEES, AGENTS OR CONTRACTORS, IN ALTERING THE GROUND SURFACE, DRAINAGE OR SURFACE OR SUB-SURFACE WATER FLOWS WITHIN THIS SUBDIVISION, OR IN ESTABLISHING OR CONSTRUCTING THE ROADS WITHIN THIS SUBDIVISION. PROVIDED, THIS WAIVER AND INDEMNIFICATION SHALL NOT APPLY TO THE EXTENT THAT ANY LIABILITY OR DAMAGES RESULT IN WHOLE OR IN PART FROM THE NEGLIGENCE OR WRONGFUL ACTS OR OMISSIONS OF THE CITY OF PUYALLUP, OR ITS EMPLOYEES, AGENTS, CONTRACTORS, SUCCESSORS OR ASSIGNS. SUBJECT TO THE TERMS AND CONDITIONS CONTAINED HEREIN, THIS SUBDIVISION, DEDICATION, WAIVER OF CLAIMS AND AGREEMENT TO HOLD HARMLESS IS MADE WITH THE FREE CONSENT AND IN ACCORDANCE WITH THE DESIRES OF SAID OWNERS.		
	WATER: *The proposed water system shall be designed and constructed to current City (Fire/ Domestic) standards. [PMC 14.02.120] *The water main shall be located generally 10 or 12-feet west or south of roadway centerlines per city standard drawings. [PMC 14.02.120(f) & CS 301.1(11)] *A new water main line shall be extended to, and through, the site sufficient to provide the necessary flows for both the domestic system and fire system. The minimum water pipe size shall be 8-inch diameter. [PMC 14.02.190, 14.20.010 & CS 301.1(1)] *A 1-inch poly line water service including setter and box shall be provided for each building lot and shall be extended 10-feet into each of the	Development & Permitting Services	Open

Condition Category	Condition	Department	Condition Status
	proposed lots. The City will install meters at the time of individual lot development. NOTE: Tract meters, including transmitters, shall be installed by the applicant. [PMC 14.02.220(2) & CS 301.3] *The minimum distance between water lines and sewer lines shall be 10-feet horizontally and 18-inches vertically. If this criterion cannot be met, the applicant shall isolate the sewer and water lines by encasement, shielding, or other approved methods. [PMC 14.02.120(f) & CS 301.1(8)] *Fire hydrants and other appurtenances shall be placed as directed by the Puyallup Fire Code Official. Fire hydrants shall be placed so that there is a minimum of 50-feet of separation from hydrants to any building walls. [PMC 16.08.080 & CS 301.2, 302.3] *Prior to completion of the project, the engineer-of-record shall complete the State Department of Health's "Construction Completion Report for Distribution Main Projects", seal, and provide to the City. [WAC 246-290-120] *For new plats, water connection fees and systems development charges will be assessed at the time of building permit issuance for the individual lots. [PMC 14.02.040, 14.10.030]		
	SANITARY SEWER: *The proposed sanitary sewer system shall be designed and constructed to current City Standards. [PMC 14.08.040, 14.08.120] *6-inch side sewers shall be extended 15-feet into the proposed lots. [PMC 14.20.010 & CS 401(6)] *The sanitary sewer main shall be located 5-feet east or north of roadway centerlines. [PMC 17.42] *Any portion of a mainline extension located outside City right-of-way must be centered in a 40-foot wide easement granted to the City for maintenance purposes. The easement, if necessary, shall be clearly indicated on the plat	Development & Permitting Services	Open

Condition Category	Condition	Department	Condition Status
	document. [PMC 17.42 & CS 401(14)] *A separate and independent side sewer will be required from the public main to all building sites for each proposed lot. Side sewers shall be extended from the main 15-feet beyond the property line at the building site and shall be 6-inch minimum diameter with a 0.02 foot per foot slope. [PMC 14.08.110 & CS 401(6)] *Side sewers shall have a cleanout at the property line, at the building, and every 100 feet between the two points. [PMC 14.08.120 & CS 401(7)] *Individual grinder pump systems shall comply with City Standard 401 (17) and provide a minimum storage capacity of 220 gallons in accordance with City's Sanitary Sewer Comprehensive Plan. *Any forcemains serving the individual lots shall be privately maintained and located outside the limits of the ROW. Provide a gravity sewer connection between the private forcemain discharge on private property and the public sewer main. Clearly indicate private sewer easement(s) across the individual lots. *Utility extensions shall be completed prior to building permit issuance. *A sanitary sewer system development charge (SDC) will be assessed for each new single family residence and is due at the time of building permit issuance for the individual lot(s). [PMC 14.10.010, 14.10.030] *Sewer connection fees and systems development charges are due at the time of building permit issuance and do not vest until time of permit issuance. [PMC 14.10.010, 14.10.030]		
	STORMWATER/ EROSION CONTROL: *Stormwater design shall be in accordance with the 2012 Stormwater Management Manual for Western Washington as amended in December,	Development & Permitting Services	Open

Condition Category	Condition	Department	Condition Status
	2014 (The 2014 SWMMWW aka "Ecology Manual"). *The applicant shall complete the stormwater flowchart, Figure 3.1, contained in Ecology's Phase II Municipal Stormwater Permit, Appendix I. The completed flowchart shall be submitted with the preliminary stormwater site plan. *The proposed plat shall employ, wherever feasible, low impact development practices to meet the design criteria set forth in PMC 21.10.190, the Ecology Manual Volume III, Chapter 3, and Volume V, Chapter 5. *The applicant is responsible for submitting a preliminary stormwater management site plan (2 sets) which meets the design requirements provided by PMC Section 21.10 and Ecology Manual Volume I, Section 2.5.1. The preliminary stormwater site plan (PSSP) shall be submitted prior to Preliminary Plat approval to ensure that adequate stormwater facilities are anticipated prior to development of the individual lot(s). The preliminary stormwater site plan shall reasonably estimate the quantity of roof and driveway stormwater runoff and the application of On-site Stormwater Management BMPs for the proposed development. *The storm drainage system shall be designed and constructed in accordance with current City Standards. [PMC 17.42] *Preliminary feasibility/infeasibility testing for infiltration facilities shall be in accordance with the site analysis requirements of the Ecology Manual, Volume I, Chapter 3, specifically: -Groundwater evaluation, either instantaneous (MR1-5); or continuous monitoring (MR1-9), during the wet weather months (December 21 through April 1). -Hydraulic conductivity testing using the Small Scale Pilot Infiltration Tests (PIT) during the wet		

Condition Category	Condition	Department	Condition Status
	weather months (December 21 through April 1) unless the site is located on unconsolidated outwash soils. If the site is located on unconsolidated outwash soils, grain size analyses may be substituted for the Small Scale PIT test. -Testing to determine the hydraulic restriction layer. *Public right-of-way runoff shall be detained and treated independently from proposed private stormwater facilities. This shall be accomplished by providing separate publicly maintained storm facilities within a tract or dedicated right-of-way; enlarging the private facilities to account for bypass runoff; or other methods as approved by the City Engineer. [PMC 21.10.190(3)] *Water quality treatment of stormwater shall be in accordance with the Ecology Manual, Volume V. *A maintenance access road and approach will be required to maintain the public storm facilities in Tract B. *A Construction Stormwater General Permit shall be obtained from the Department of Ecology prior to any land disturbing activities such as clearing, grading, excavating and/or demolition. *At the time of civil permit application, the applicant is responsible for submitting a permanent storm water management plan (2 sets) which meets the design requirements provided by PMC Section 21.10. The plan and accompanying information shall provide sufficient information to evaluate the environmental characteristics of the affected areas, the potential impacts of the proposed development on surface water resources, and the effectiveness and acceptability of measures proposed for managing storm water runoff. The findings, existing and proposed impervious area, facility sizing, and overflow control shall be summarized in a written report		

Condition Category	Condition	Department	Condition Status
	(TIR or SSP). [PMC 21.10.190, 21.10.060] *The written technical report shall clearly delineate any offsite basins tributary to the project site and include the following information: [PMC 21.10.060] -the quantity of the offsite runoff; -the location(s) where the offsite runoff enters the project site; -how the offsite runoff will be routed through the project site. -the location of proposed retention/detention facilities -and, the location of proposed treatment facilities *In the event that during civil design, there is insufficient room for proposed stormwater facilities in the area(s) shown on the major plat, the stormwater area(s) shall be increased as necessary so the final design will be in compliance with current City Standards. This may result in the number of lots being reduced, or a reduction in other site amenities. [PMC 21.10.060(4), 21.10.150] *Overflow facilities shall be provided for any proposed detention/retention facilities in accordance with the City Standards. This includes a downstream analysis a minimum of ¼ mile downstream from the site. *Any above-ground stormwater facility shall be screened from public right-of-way and adjacent property per the underlying zoning perimeter buffer requirements in the PMC. *Stormwater R/D facilities shall be a minimum of 20-feet from any public right-of-way, tract, vegetative buffer, and/or property line measured from the toe of the exterior slope/embankment of the facility. [PMC 21.10 & DOE Manual, Vol. V, Pg 10-39 and Pg 10-9] *The proposed project discharges to an adjacent		

Condition Category	Condition	Department	Condition Status
	wetland. The applicant shall provide a hydrologic analysis which ensures the wetland's hydrologic conditions, hydrophytic vegetation, and substrate characteristics are maintained. *The number of infiltration tests shall be based on the area contributing to the proposed BMP, e.g., one test for every 5,000 sq. ft of permeable pavement, or one test for each bioretention cell. Upon submission of the geotechnical infiltration testing, appropriate long-term correction factors shall be noted for any areas utilizing infiltration into the underlying native soils in accordance with the Ecology Manual, Volume III, Chapter 3. *Construction of frontage improvements associated with this project will likely require extension of the stormwater main to accommodate road runoff. *At the time of civil permit application, all pipe reaches shall be summarized in a Conveyance Table containing the following minimum information and included in the TIR: Pipe Reach Name Design Flow (cfs) Structure Tributary Area (cfs) Pipe-Full Flow Pipe Diameter (in) Water Depth at Design Flow (in) Pipe Length (ft) Critical Depth (in) Pipe Slope (%) Velocity at Design Flow (fps) Manning's Coefficient (n) Velocity at Pipe-Full Flow (fps) Percent full at Design Flow (%) HGL for each Pipe Reach (elev) *At the time of preliminary plat construction, all storm drains shall be signed as follows: -Publicly maintained stormwater catch basins shall be signed using glue-down markers supplied		

Tab No.6

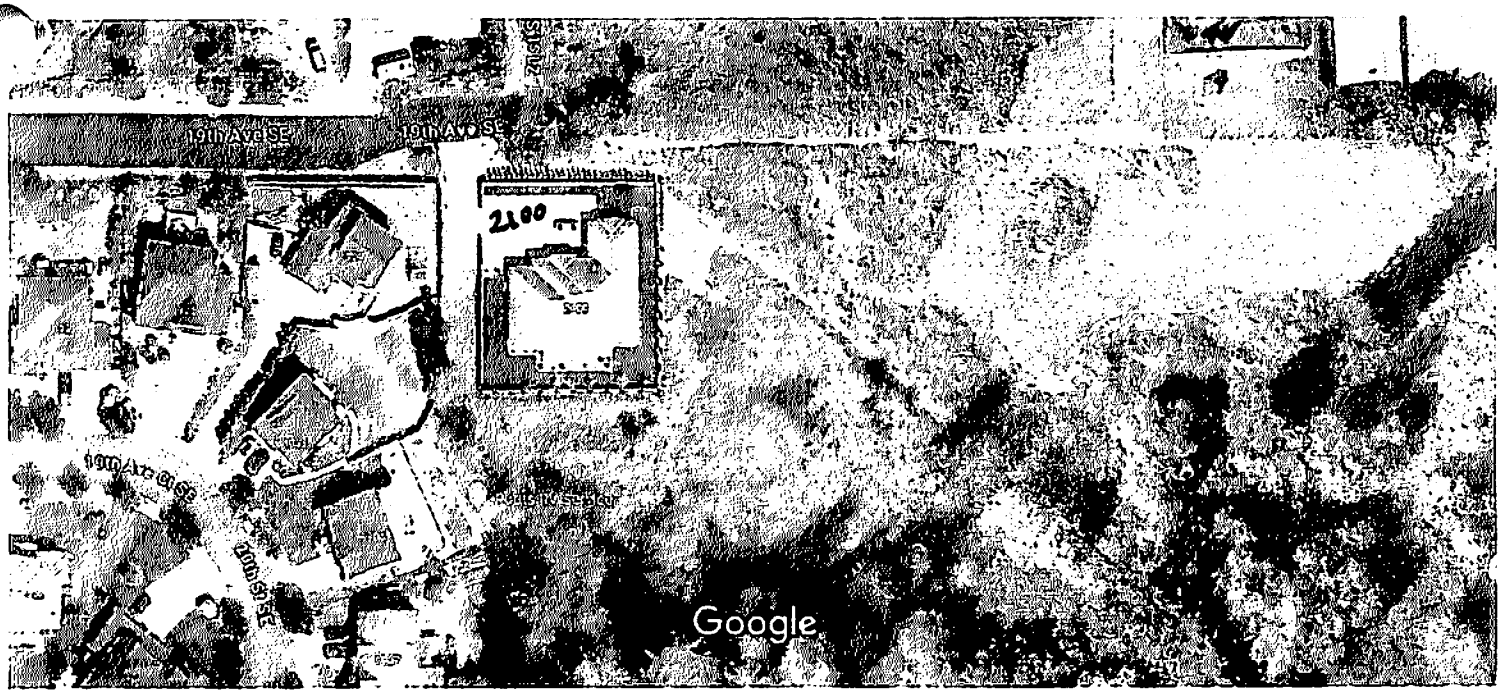
Property Demolition & Cleanup

– Big Dog Demolition (2011 - 2012)
– Tacoma Abatement Company (2018)
– DP Excavation (August 2018)
– DM Disposal & Waste Connections (2018)

BIG DOG DEMOLITION

(2011-2012)

Google Maps 2300 19th Ave SE



Big Dog Demolition demolished the two original residences construction in 1924 and 1928. The residence at 2100 - 19th Avenue Southeast was constructed at their former location.

Alan Blotch

From: Peter Chen <yiping080756@gmail.com>
Sent: Saturday, April 27, 2024 11:43 PM
To: Alan Blotch
Subject: Copy of paychecks
Attachments: scan0016.pdf

Hi Alan,

I am so happy to have you as my environmental consultant.

Attached are copies of 2 paychecks to Big Dog Demo for its combined work of demolishing a remnant of a burned house and removing drums in the property shortly after I brought it.

The owner of Big Dog Demo sold his company to the current owner a few years later and is not reachable now.

Peter

STORE YOUR DUPLICATE CHECKS IN YOUR CHECK BOX.

☑ Track your expenses...

☐ Clothing ☐ Food ☐ Transportation
☐ Credit Card ☐ Utilities ☐ Mortgage
☐ Entertainment ☐ Insurance ☐ Other: _____

☐ TAX-DEDUCTIBLE ITEM

1700

12/10 11

Big Dog Dens
Eight thousand and 00/100

Demolishing house

BALANCE FORWARD
THIS ITEM 8000.00
BALANCE
DEPOSIT
OTHER
BALANCE FORWARD

For added security, your name and account number do not appear on this copy.

NOT NEGOTIABLE

STORE YOUR REPLACE CHECKS IN YOUR CHECK BOX.

If back your expenses...

☐ Clothing ☐ Food ☐ Transportation
☐ Credit Card ☐ Utilities ☐ Mortgage
☐ Entertainment ☐ Insurance ☐ Other _____

☐ TAX DEDUCTIBLE ITEM

1710

1/25 12

BALANCE FORWARD

THIS ITEM 19.06.17

BALANCE 0

DEPOSIT

OTHER

BALANCE FORWARD

[redacted]

For added security, your name and account number do not appear on this copy.

NOT NEGOTIABLE

TACOMA ABATEMENT COMPANY
Asbestos Abatement
(2018)

TACOMA ABATEMENT COMPANY, LLC

Notice of Asbestos Removal: 8/10/2018

Completion of Asbestos Clean up
Concerning:

Completion of the Asbestos Removal at: 2100 19th Ave Se, Puyallup WA 98372

Per the Department of Labor and Industries WAC regulation 296-155(9) Part S, the asbestos containing materials as identified in the lab results provided by CEI labs, has been removed from this property that was affected. Work practices, personal air monitoring and engineering controls have shown the area to be cleared.

If you have any questions please contact me,

Matthew Ware
Operations Manager
Tacoma Abatement Company, LLC
5111 S. Burlington Way, Tacoma, Wa 98409
Phone: 253-830-5945 Fax: 253-985-0165

Alan Blotch

From: Alan Blotch
Sent: Tuesday, February 20, 2024 10:49 AM
To: matt@TACabate.com
Cc: yiping chen
Subject: FW: Prior Project Information

Hello Matt,

Were you able to find the documents?
We are concerned if nothing is included in our Report, Ecology will have questions.
Thanks for your efforts
Alan
(360) 710-5899

From: Alan Blotch
Sent: Thursday, February 15, 2024 10:54 AM
To: matt@TACabate.com
Cc: yiping chen <yiping10@hotmail.com>
Subject: Prior Project Information

Hello Matt

Thanks for your callback

Our Firm is preparing a request for No Further Action report to Ecology, and the want all the available info for the following.
Of course, no one at Ecology ever looks at such info, but I think they just check a box on a form that the info is provided.

Client: Dr. Peter Chen

Site: 2100 – 19th Ave Southeast
Puyallup, WA

"Notice of Asbestos Removal: Completion of Asbestos Removal"
Letter dated 08/1-/2018

Thanks for your assistance!
Alan
(360) 710-5899

Alan Blotch
Aerotech Environmental Consulting, Inc.
14247 Ambaum Boulevard SW – Rear
Burien, Washington 98166
(360) 710-5899

Invoice

Tacoma Abatement Company, LLC
5111 S Burlington Way
Tacoma, WA 98409
(253) 830-5945
(253) 276-0267 Fax
info@tacomaabatement.com

Date	Invoice #
8/9/2018	4407

Bill To

Peter Chen
2100 19th Ave SE
Puyallup, WA 98372
USA

Project

Peter Chen
2100 19th Ave SE
Puyallup, WA 98372
USA

P.O. No.	Terms
	Net 15

Quantity	Description	U/M	Rate	Amount
	Clean and clear work area, including general debris. Removal of Asbestos Containing Materials		13,200.00	13,200.00T
	Notifications		610.00	610.00T
20	Air Sampling as Required by Washington State		45.00	900.00T
	SALES TAX (SHIP TO: PUYALLUP-2711)		9.90%	1,456.29

To pay by credit card, please visit our website at tacomaabatement.com and click on "Pay Your Bill".

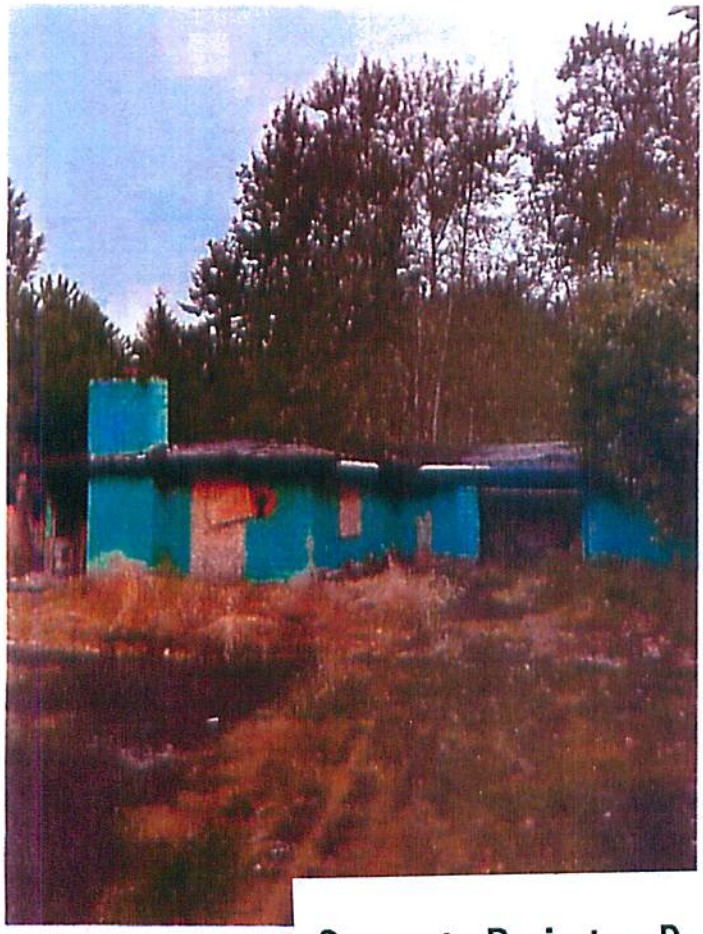
EIN: 45-3178053 WA State Contractor: TACOMAC894PE

Total	$16,166.29
Payments/Credits	-$8,000.00
Balance Due	**$8,166.29**

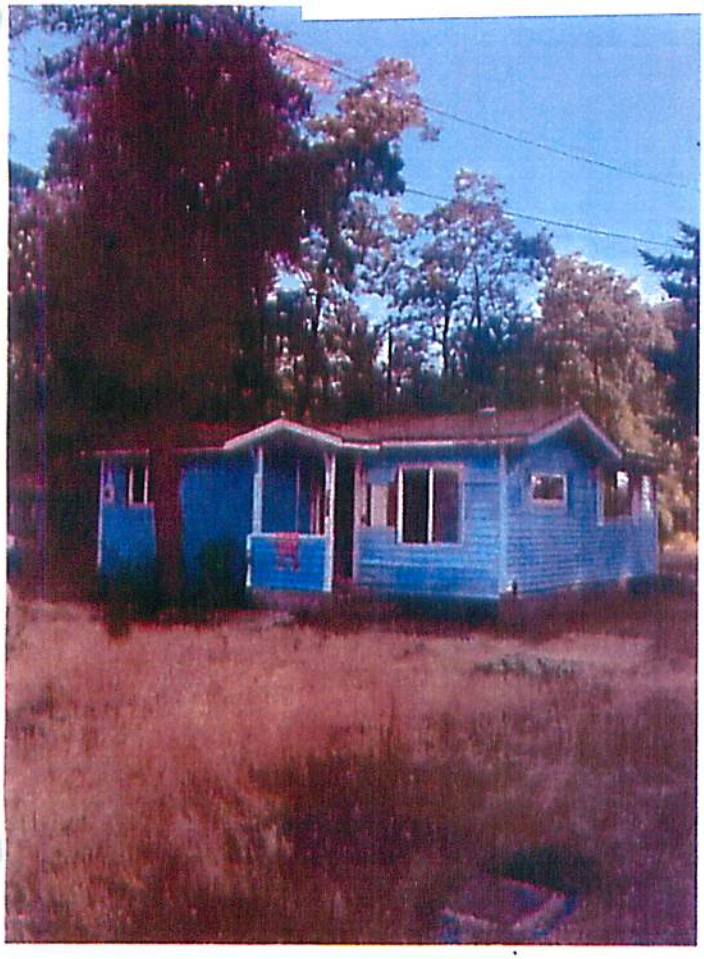
D.P. EXCAVATION
Building Demolition
(2018)

Sunset Pointe Demo(August 2, 2018)

by D.P.Excavation



Sunset Pointe Demo(August 2, 2018)



dP EXCAVATION

Demolition - Land Clearing - Hauling -
Septic Systems - Site Development

License #: DPEXCE*833DC
253-720-7790
11410 316th Street East
Graham, WA 98338

INVOICE

Inv. No: 18-00021

August 18, 2018

TO:
Dr. Peter Chen

Address:2100 19th ave se Puyallup wa

Scope: Clean up all garbage and asbestos materials

Original scope of work	$15,000
TOTAL REQUESTED	**$15,000**

Paid in Full

Demolition - Land Clearing - Hauling -
Septic Systems - Site Development

License #: DPEXCE*833DC
253-720-7790
11410 316th Street East
Graham, WA 98338

PROPOSAL AND CONTRACT

This agreement is made this 30th day of July 2018 between the Contractor, DP Excavation, a Washington sole proprietorship hereinafter "Contractor" and **DR. PETER CHEN AND DR. BETH LIU CHEN** hereinafter "Owner", for the following project:
LOAD OUT OF DEMOLITION DEBRIS,
Site Address: 2100 19TH AVE.S.E., PUYALLUP,WA

Parcel No(s): 0420353026; 042035027; 0420353009; 0420357011 **Legal Description:**
Section 35 Township 20 Range 04 Quarter 33 : PARCEL 1 OF ROS FOR BLA 2018-04-16-5001 POR OF SW DESC AS FOLL COM AT SW COR OF SW TH E ALG S LI 1974.60 TH N 0 DEG 2 MIN 48 SEC W 615.92 FT TH N 0 DEG 2 MIN 48 SEC W 750.69 FT TH N 88 DEG 18 MIN W 617.28 FT TH S 0 DEG 53 MIN 14 SEC W 30 FT TO POB TH S 88 DEG 18 MIN E 60.85 FT TH S 1 DEG 3 MIN 13 SEC W 122.62 FT TH N 87 DEG 52 MIN 20 SEC W 130.65 FT TH N 1 DEG 9 MIN 3 SEC E 121.64 FT TH S 88

DEG 18 E 69.57 FT TO POB SEG F 7515 DC5/29/96JU DC00570389 5/18/18 KG

The Owner and Contractor agree as follows:

ARTICLE I

The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations or agreements, either written or oral.

ARTICLE II
DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION
The work shall commence no later than 8-2-18 and Substantial completion shall by 6-14-18. PROPOSAL & CONTRACT-

ARTICLE III
CONTRACT SUM
The Owner shall pay the Contractor the Contract Sum in current funds for the Contractor's performance of the Contract. The Contract Sum being: **$15,000.00** (FIFTEEN THOUSAND DOLLARS & ZERO CENTS) **Such Sum includes WSST (Sales Tax)**

ARTICLE IV
PAYMENTS
The Owner agrees to pay the Contractor the Contract Sum as follows: **CONTRCT SUM SHALL BE PAID IN FULL IN CASH UPON COMPLETION.**

ARTICLE V
DISPUTE RESOLUTION
The Owner and Contractor agree that any disputes will be first subject to non-binding mediation. Each party shall bear their own costs for such mediation. Otherwise, jurisdiction shall be the Superior Court in and for the State of Washington County of Pierce. The American Rule shall apply with respect to any and all attorneys' fees.

ARTICLE VI
INCLUSIONS
1) LOAD OUT OF DEMOLITION DEBRIS PILES CURRENTLY PILED ON SITE.

ARTICLE VII
EXCLUSIONS
1) Asbestos Abatement;
2) Erosion Control shall consist of Straw placed upon footprint area of the debris piles being loaded for removal from site. Any and all other erosion control is expressly excluded;
3) ANY AND ALL DEMOLITION DEBRIS SHALL BE HAULED BY WASTE CONNECTIONS AND TIPPING FEES SHALL BE PAID BY OWNER DIRECTLY TO WASTE CONNECTIONS;
4) LOADING AND/OR REMOVAL OF ANY CONCRETE DEBRIS FROM SITE IS EXPRESSLY EXCLUDED FROM THE SCOPE OF WORK.

Attached to this Agreement as Exhibit "A" is Contractor's Disclosure in accordance with RCW 18.27 *et seq.*

DATED this 30TH Day of July 2018.

By _____
Dr. Peter Chen 7/31/2018
Owner

By _____
Paul E. Newton 8-1-18
Contractor

By _____
Dr. Beth Liu Chen
Owner

D.M. DISPOSAL, INC
Demolition Debris & Site Clleanup
(2018)

D.M. DISPOSAL CO., INC.

POST OFFICE BOX 532
PUYALLUP, WASHINGTON 98371
(253) 414-0347

Date: September 15, 2023

RE: Letter of Disposal

Customer: Peter Chen

Site Address: 2100 19th Ave SE, Puyallup, WA 98372

Dear Mr. Chen

This is to confirm with you that In July 2018 we hauled all of the demolition debris and site clean up of your property. The entire job was classified as asbestos, and every load was wrapped and processed according to code, and disposed at the LRI Landfill.

The debris consisted of an old house, barns, out buildings, battery casings, tires, and all miscellaneous debris found on the property. If you have any additional questions regarding this project, please let me know.

Sincerely,

John Rush
Senior Account Manager
John.Rush@Wasteconnections.com

alan.blotch@earthlink.net

From: John Rush <John.Rush@WasteConnections.com>
Sent: Friday, February 23, 2024 8:48 AM
To: Alan Blotch
Subject: RE: Peter Chen Property

Alan –

This is the best I can do to get you this information. The material was disposed at:
LRI-Landfill – Pierce County
30919 Meridian St E
Graham, WA 98338

Hauls and Loads:

Date	Total Disposal Weight (lb)	Total Disposal Weight (ton)
8/3/2018	8,840.00	4.42
8/2/2018	10,220.00	5.11
8/2/2018	12,400.00	6.20
8/3/2018	11,640.00	5.82
8/3/2018	12,040.00	6.02
8/7/2018	17,540.00	8.77
8/7/2018	21,840.00	10.92
8/7/2018	25,960.00	12.98
8/7/2018	14,340.00	7.17
8/8/2018	22,040.00	11.02
8/8/2018	24,040.00	12.02
8/8/2018	32,700.00	16.35
8/8/2018	15,180.00	7.59
8/8/2018	22,540.00	11.27
8/9/2018	5.83	0.00

John Rush
Cell:253.255.5633
John.Rush@Wasteconnections.com

125.66 TONS

DM RECYCLING
WASTE CONNECTIONS
Connect with the Future

From: Alan Blotch <Alan@dirtydirt.us>
Sent: Wednesday, February 21, 2024 10:12 AM
To: John Rush <John.Rush@WasteConnections.com>
Subject: RE: Peter Chen Property

Alan Blotch

From: John Rush <John.Rush@WasteConnections.com>
Sent: Wednesday, February 28, 2024 11:10 AM
To: Alan Blotch
Subject: RE: Peter Chen Property

Alan –

It was good to talk with you again today. I wanted to clarify with you every load that we hauled of Mr. Chen's property was hauled as asbestos. Meaning, each container load was double lined, burrito wrapped and disposed at the
LRI-304th Landfill as such.

The reason that the entire job, or clean up had to be treated and processed that way is because each structure had been caught fire and burned. Due to the age of the structures it was assumed that there must have been some asbestos, and once they have burned there is no way to adequately test for asbestos, so the county requires it all be treated as asbestos.

This came as a significantly higher price to MR. Chen, but it was handled correctly. If you have any questions, please let me know.

John Rush
Cell:253.255.5633
John.Rush@Wasteconnections.com

DM RECYCLING
WASTE CONNECTIONS
Connect with the Future

D.M. DISPOSAL CO., INC.
POST OFFICE BOX 532
PUYALLUP, WASHINGTON 98371
(253) 414-0334

Proposal/Contract

Peter - Yiping Chen

July 25, 2018

2100 19th Ave SE
Puyallup, WA 98372

Dear Peter -

The following proposal outlines the cost for hauling ACM (Asbestos Contained Material) demolition debris, from your site in Puyallup, WA. Note,

Proposed Costs For Hauling ACM Demolition Debris:

- 40-yard Roll Off Container
- Delivery Fee - $95 per box
- Hauling and Disposal Fee - $1775 per load
- Maximum tonnage per container is 10 ton

Total job cost:

- Estimated number of tons 275
- Total number of hauls 28
- Total cost including tax - $49,700

John Rush
253.255.5633
johnr@WasteConnections.com

Yiping Chen

7/31/2018

Compliant with U.S. EPA Final Rule: 40 CFR Part 312

---- and ----

ASTM E1527-21 Phase I Standard Practice

PHASE I
ENVIRONMENTAL SITE ASSESSMENT

Subject Property:

SUNSET POINTE DEVELOPMENT

214 - 23rd Street Place Southeast

2100 - 19th Avenue Southeast

Puyallup, Washington 98372

May 6, 2024

AEROTECH

Environmental Consulting Inc.

Anchorage Seattle Portland

Cost-effective environmental solutions
for the western United States and Alaska

Compliant with All Appropriate Inquiry
Final Rule: 40 CFR Part 312
— **and** —
ASTM E1572-21 *Phase I Standard Practice*

PHASE I
ENVIRONMENTAL
SITE ASSESSMENT

Subject Property:

SUNSET POINTE DEVELOPMENT
214 - 23rd Street Place Southeast (South Entrance)
2100 - 19th Avenue Southeast (North Entrance)
Puyallup, Washington 98372

May 6, 2024

Prepared by:
AEROTECH
ENVIRONMENTAL CONSULTING, INC.
14247-R Ambaum Boulevard Southwest
Burien, Washington 98166
(360) 710-5899

» *Alan@DirtyDirt.US* «

Providing Service to:
• Anchorage • Seattle • Portland
for over 24 years!

PHASE I
ENVIRONMENTAL SITE ASSESSMENT

Compliant with
ASTM E1572-21 Phase I Standard Practice

Client(s):	Dr. Peter Chen **SUNSET POINTE DEVELOPMENT** 4709 Memory Land West University Place, WA 98466 (253) 906-1634 / yiping10@hotmail.com
Point of Contact:	Craig Deaver / Principal **C.E.S. NW, Inc.** 429 - 29th Street, Suite D Puyallup, WA 98372 Office: (253) 848-4282 / cdeaver@cesnwinc.com
Subject Property:	**SUNSET POINTE DEVELOPMENT** 2100 - 19th Avenue Southeast (North Entrance) 214 - 23rd Street Place Southeast (South Entrance) Puyallup, Washington 98372
Pierce County Assessor:	Parcel No.0420-35-3027 395,476 sqft / 9.08-acres Parcel No.0420-35-7011 4,235 sqft / 0.10-acres
City of Puyallup:	Development Permit No.P-18-0040 Preliminary Major Plat AMR E-18-0166
Key Site Manger:	Dr. Peter Chen *Sunset Pointe Development*
Site Knowledgeable:	Mr. Craig Deaver *C.E.S. NW, Inc.*
NAICS Classification:	Code No: 236.117 Developers / Builders of single and multi family housing
Environmental Assessor:	Alan T. Blotch (360) 710-5899 / alan.blotch@earthlink.net
Project Number:	No. 24 - 0246
Report Date:	May 6, 2024

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EXECUTIVE SUMMARY

The subject of this *Phase I Environmental Site Assessment* is an irregular-shaped approximate 9.08-acre residential Property located on the southeast side of Puyallup, Washington. The Property is bounded on the north by 19th Avenue Southeast and 23rd Street Place Southeast. One block south is 23rd Avenue Southeast; Shaw Road East is two-thirds of a mile; Pioneer Way East is one mile north; State Route 161 / 512 is one and one-third of a mile east; State Route WA-410 is one and one-quarter of a mile northeast.

The subject Property is a vacant, undeveloped Property that will be developed with a eighteen residential development lots known as *Sunset Pointe Development*.

The subject Property is level on the south side with residences adjoining to the south on 23rd Place southeast; to the west on 22nd Street Southeast; and 19th Avenue Southeast on the northwest. The southern portion is grassy with areas in the center and along the western fence line overgrown with native vegetation. The trees are second growth or even younger. The eastern Property is level with a slope to the east which defines the eastern development. In the south center of the Development is a small manmade lined plastic pond adjoining the east side of the pathway; which drains into a large Retention Pond defined on the north, east, and south sides. On the northeaster corner of the Retention Pond is beamed wall of non-native backfill which allows access to the surface of the Pond at 361 feet above sea level.

The future of the Property is the development is the *Sunset Pointe*, configured with eighteen residential lots. The Development will include a large wetlands area that divides the Property into a northern and section. The wetlands will include a larger detention pond the the center and two smaller wetlands ponds to the east; with an overall flow towards the southwestern corner of the Parcel. A fifty foot wetlands buffer will be created to the north and south. Adjoining the wetlands to the south is the stormwater discharge area. The northern section of the Development be eight lots. The southern portion will be developed with lots nine.

The subject Property was originally undeveloped wooded land; initially developed in the early 1920s with two small residences. In 1940, a detected garage and 10,000 square foot horse barn. In 1950, two approximately 4,000 square foot storage barns were constructed. In 2010, two arson fires destroyed the *Western Washington Pioneer Museum* building. In 2018, all of the remaining structures were demolished and removed from the Property, and a general cleanup was completed. In 2011, following the fire, the Washington Department of Ecology placed the Property as a *Confirm or Suspected Contaminated Site*. In 2018, all on-site buildings were demolished; the waste materials were removed in 2023.

The subject Property is a residential area. To the north is 19th Avenue and multifamily residences; to the south is the 23rd Street Place Southeast; to the east are residences; and to the west are residences.

■ **Recommendation: No Further Action**. As a result of the on-site Reconnaissance, records research, historical investigation, and review of Federally reported environmental information, this Assessment has revealed no obvious evidence of potential environmental risks or Recognized Environmental Conditions indicating the presence of hazardous or other conditions that could reasonably be expected to environmentally impact the Site. Based upon this Phase I Assessment, it is reasonable and prudent to believe that the risk of contamination at the Site is so minimal that no further investigation is recommended.

Upon the completion of this Assessment, no further inestigation, remediation, or response actions are indicated, suggested, or recommended relative the potential environmental conditions at the subject Property other than those previously discussed. Based upon this Phase I Assessment, and with those discussed exceptions, it is reasonable and prudent for the Client to believe there is no other significant risk of contamination that has not been discussed.

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ASTM PROTOCOL CONCLUSION

We have performed a *Phase I Environmental Site Assessment* in conformance with the scope and limitations of ASTM Practice 1527-21 for Pierce County Parcels 0420-35-3027and 0420-35-7011, located in Puyallup, Washington the *property*. Any exceptions to, or deletions from, this practice are described in Possible Report Exceptions To All Appropriate Inquiry Rule Section[1] of this *report*.

This Assessment has not identified a *Recognized Environmental Condition*[2] in connection with the *property*,

This Assessment has not identified a *Historical Recognized Environmental Condition*[3] in connection with the *property*.

This Assessment has not revealed evidence of a *Controlled Recognized Environmental Condition*[4] in connection with the *property*.

---

[1] Refer to page 5 of this Assessment.

[2] *Recognized Environmental Condition* -recognized environmental conditions mean: (1) the presence of *hazardous substances* or *petroleum products* in, on, or at the subject Property due to release to the environment, (2) the likely presence of *hazardous substances* or *petroleum products* in, on, or at the subject Property, or (3) the presence of *hazardous substances* or *petroleum products* in, on, or at the subject Property under conditions that pose a *material threat* of a *future release* to the environment. *De minimis conditions* are not recognized environmental conditions". ASTM E1527-22 § 1.1.

[3] *Historical Recognized Environmental Condition* – "a previously *recognized environmental condition* affecting the *subject property* that has been addressed to the satisfaction of the applicable regulatory authority of meeting unrestricted use criteria established by the applicable regulatory authority or authorities without subjecting the *subject property* to any controls (property *use limitations* or *activity and use limitations*) A *historical recognized environmental condition* is not a *recognized environmental condition*.ASTM E1527-21 § 3.2.0. See Appendix X4."

[4] *Controlled Recognized Environmental Condition* –– "a *recognized environmental condition* affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities, with *hazardous substances* or *petroleum products* allowed to remain in place subject to implementation of controls property use or activity and *use limitations*....Identification of a *controlled recognized environmental condition* is a multi-step process that must be reflected in the *report's* Findings and Opinions section(s), as described in 12.5 and 12.7, including the *environmental professional's* rationale for concluding that a finding is a *controlled recognized environmental condition:..*' ASTM E1527-21 § 3.2.17.

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U.S EPA REGULATORY REVISIONS
CERCLA "All Appropriate Inquiry"

Standard and Practices for All Appropriate Inquires:

On December 15, 2002, the U.S. Federal Register ("FR") published a Rule promulgated by the U.S. Environmental Protection Agency effective February 13, 2023 entitled *Standards and Practices for All Appropriate Inquires* as delineated in 87 FR 76578.

Summary of All Appropriate Inquires Changes:

"Parties purchasing potentially contaminated properties may use the ASTM E1527-21 standard practice to comply with the all appropriate inquires requirements of the Comprehensive Environmental Response, Compensation, and Liability (CERCLA). This rule does not require any entity to use this standard. Any party who wants to claim protection from liability under one of CERCLA's landowner liability protections may follow the regulatory requirements of the All Appropriate Inquires Rule at 40 CFR part 312, use the ASTM E1527-13 "Standard Practice for Phase I Environmental Site Assessments" for up to one year after this rule becomes effective [February 13, 2023] ... or use the standard recognized in this final rule, the ASTM E1527-21 standard to comply with the all appropriate inquires provision of CERCLA." (*Standards and Practices for All Appropriate Inquires*, (US Environmental Protection Agency), Federal Register December 15, 2022, page 765812).

Rule Making Background:

"Commentators asserted that the updated standard now represents 'good commercial and customary business practice,' and therefore should replace the current ASTM E1527-13 Phase I Environmental Site Assessment standard referenced by EPA, rather that merely being added as an additional referenced standard." (Ibid, p, 765813).

Rule Making Summary:

> "The ASTM standard is not an EPA regulation, and use is not required to comply with the All Appropriate Inquires Rule or any other EPA regulations." (Ibid, p765814).
> "The Agency notes that this action does not require any party to use the ASTM E1527-21 standard. ... This action merely allows for the option of using ATSM International's E1527-21 ... The Agency notes that there are no legally significant differences between the regulatory requirements and the ASTM E1527-21 standard. (Ibid, pp.765914-15).

If requested, a copy of the Federal Register referred to in the preceding is including in the *Phase I Assessment Appendix*, Section III, *Supplemental Documents*.

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ASSESSMENT OVERVIEW

Purpose:

The purpose of this Assessment is to comply with selected sections of the standards and practices for "all appropriate inquiry" for the purposes of CERCLA sections 101(35)(B)(i)(I) and 101(35)(B)(ii) and (iii), as defined in *Standards and Practices for All Appropriate Inquiries; Final Rule*, U.S. EPA, 40 CFR Part 312 (70 FR 66070). Some of the requires contained in Part 312 are excluded from this Assessment, as delineated in the preceding Section entitled "Report Exceptions to All Appropriate Inquiry Rule."

The business purpose of this Phase I Environmental Site Assessment was to investigate, review, assess, and evaluate – through historical research, document and record review, generally available environmental data, visual or physical observations, and inspection by a trained assessor – the presence or likely existence of:

- Contamination by hazardous materials, generally recognized environmental contaminants, visible pollutants, underground contaminants, and asbestos-containing materials.
- The possibility that these materials are or may have been introduced – by internal generation, external introduction, or unknown sources – into the structure or subject Property.
- A brief overview, evaluation, and assessment of the severity of the current potential environmental risk based upon known standards or applicable regulations.

Unless specifically noted within the text of this Report, this Phase I Environmental Site Assessment does not include or address groundwater, soil, or extraneous material contamination upon or under the surface soils, with respect to testing, coring, or sampling analysis.

Protocol:

The procedure for this Environmental Site Assessment was to perform in practical and reasonable steps-- employing currently available technology, existing regulations, and generally acceptable engineering practices – an investigation to ascertain the possibility, presence, or absence of environmental releases, threatened releases, or Recognized Environmental Conditions, as limited by the Scope of Work. As such, this Assessment was performed in substantial compliance with the ASTM Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (E 1521-21[1]).

Objectives:

- To attempt to accomplish all appropriate inquiry into ownership and uses of the Property consistent with good commercial or customary practice, in an effort to minimize liability.
- To conduct an investigation of the Property that will assist ownership's positioning within the "safe harbor" section of the Federal Superfund liability in 42 U.S.C. §9601(35), the Lender Liability Final Rule, and the CERCLA amendments enacted as part of the 2002 Brownfields Act.
- To provide environmental information that will assist in evaluating ownership's risk of potential loss or value impairment of the security interest due to environmental defects; and information for decisions and operational limitations concerning the National Pollution Contingency Plan.

While this Phase I Assessment cannot absolutely quantify and qualify every possible past and present environmental risk, the Assessment does provide a partial information basis for reasonable decision making regarding the potential for environmental liabilities and risk, based upon the current Site-specific situation, Assessment limitations, and methods of evaluation.

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This Phase I Environmental
Site Assessment was performed in
Compliance with the
All Appropriate Inquiry (AAI)
Final Rule: 40 CFR Part 312[5]

* * * * *

POSSIBLE REPORT EXCEPTIONS TO ALL APPROPRIATE INQUIRY RULE:

§ 40 CFR Part 312.25 Searches for recorded environmental cleanup liens. (a) All appropriate inquiry must include a search for the existence of environmental cleanup liens against the subject property that are filed or recorded under federal, tribal, state, or local law.

§ 40 CFR Part 312.28 Specialized knowledge or experience on the part of the defendant. (a) Persons to whom this part is applicable per § 312.1(b)[6] must take into account, their specialized knowledge of the subject property, the area surrounding the subject property, the conditions of adjoining properties, and any other experience relevant to the inquiry, for the purpose of identifying conditions indicative of releases or threatened releases at the subject property, as defined in § 312.1(c).

§ 40 CFR Part 312.29 The relationship of the purchase price to the value of the property, if the property were not contaminated. (a) Persons to whom this part is applicable per § 312.1(b) must consider whether the purchase price of the subject property reasonably reflects to fair market value of the property, if the property were not contaminated.

---

[5] A copy of excerpts from the *Standards and Practices for All Appropriate Inquiries; Final Rule* U.S. EPA, 40 CFR Part 312, 70 FR 66070, November 1, 2005, may be included in the Appendix of this Report, in the Section entitled *Supplemental Documents*.

[6] § 312.1(b). *Applicability*. The requirements of this part are applicable to: (1) Persons seeking to establish: (i) The innocent landowner defense pursuant to CERCLA sections 101(35) and 197(b)(3); (ii) The bona fide prospective purchaser liability protection pursuant to CERCLA sections 101(40) and 107(r); (iii) The contiguous property owner liability protection pursuant to CERCLA section 107(q); and (2) persons conducting site characterization and assessments with the use of a grant awarded under CERCLA section 104(k)(2)(B).

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ASTM PHASE 1 REVISIONS
ASTM E1527-21

Phase I (ASTM E1527-21) Environmental Site Assessment Defined

"The objective of this *Phase I Environmental Site Assessment* practice is to permit a *user* to satisfy one of the requirements to qualify for the *Innocent Landowner*, *Contiguous Property Owner*, or *Bona Fide Prospective Purchaser* limitations ("LLPs"). That is , this practice that constitutes *All Appropriate Inquiry* into the previous ownership and uses of the property consistent with good commercial and customary standards and practices as defined in 42 U.S.C. §9601(35)(B) that establishes a party as an Innocent Landowner.. ASTM E1527-21 § 1.1. If a Property Owner qualifies for any one of these three defenses, that Owner will not be held liable for contamination discovered after the purchase.

"*The objectives guiding the development of this practice* are: (1) to synthesize and memorialize good and put in writing good commercial and customary standards and practices for Phase I environmental site assessments for commercial real estate; (2) to facilitate high quality, standardized environmental site assessments; and (3) to provide a practical and reasonable standard practice for conducting all appropriate inquires; and (4) to clarify an industry standard for all appropriate inquires in an effort to guide legal interpretation of the LLPs.

The scope of this practice includes research and reporting requirements that support the User's ability to quality for LLP. As such, sufficient documentation of all sources, records, and resources utilized in conducting the inquiry required by this practice must be provided in the written report.". ASTM E1527-21 § 1.2.

#1. Innocent Landowner Defense to CERCLA Liability:

"A person may qualify as one of three types of innocent landowners: (1) a person 'did not know and had no reason to know' that contamination existed on the subject property at the time the purchaser acquired the subject property, (ii) a government entity which acquired the subject property by escheat, or through any other involuntary transfer or acquisition, or through the exercise of eminent domain by purchase or condemnation; and (iii) a person who 'acquired th facility by inheritance or bequest.' To quality for the innocent landowner defense, such person must have made all appropriate inquires on or before the date of purchase. Furthermore, the all appropriate inquires must not have resulted in knowledge of the contamination [i.e., *Recognized Environmental Condition*]. If it does, then such person did not 'know' or 'had reason to know' of contamination and would not be eligible for the innocent landowner defense." ASTM E1527-21 § 3.2.42 In addition, an individual seeking the *Prospective Purchaser* protection must have purchased the Property after January 11, 2002, and completed all appropriate inquiry on or before the date of purchase.

#2. *Contiguous Property Owner*

As defined in 42 U.S.C. § 9607(q) "... a person may quality for the contiguous property owner liability protection is. among other requirements. such person owns real property that is contiguous to, and that is or may be contaminated by hazardous substances from other real property that is not owned by that

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person. Furthermore, such person conducted all appropriate inquires at the time of acquisition [and not after acquisition] and did not know or have reason to know that the subject Property was or could be contaminated by a release or threatened release from the contiguous property. The All Appropriate Inquires must not result in knowledge of contamination [i.e., a *Recognized Environmental Condition*]. If it does, then such person did 'know' or 'had reason to know' of contamination and would not be eligible for the continuous property liability protection [emphasis added]." ASTM E1527-21 § 3.2.16

#3 *Bona Fide Prospective Purchaser*

"An individual seeking the *Prospective Purchaser* protection must have purchased the Property after January 11, 2002, and completed all appropriate inquiry on or before the date of purchase." Which means a *Phase I Environmental Site Assessment,* compliant with the requirements of the ASTM 1527-21 Standard Practice, must have been conducted and did not identify a Recognized Environmental Condition.

What is a Recognized Environmental Condition?

As defined in the ASTM E1527-21 Standard Practice, "Recognized Environmental Conditions mean: (1) the presence of *hazardous substances* or *petroleum products* in, on, or at the subject Property due to release to the environment, (2) the likely presence of *hazardous substances* or *petroleum products* in, on, or at the subject Property, or (3) the presence of *hazardous substances* or *petroleum products* in, on, or at the subject Property under conditions that pose a *material threat* of a *future release* to the environment. *De minimis conditions* are not recognized environmental conditions". ASTM E1527-21 § 1.1.

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TABLE OF CONTENTS

Page No:

EXECUTIVE SUMMARY 4

ASTM PROTOCOL CONCLUSION 5

U.S EPA REGULATORY REVISIONS 6
- Standard and Practices for All Appropriate Inquires 6
- Summary of All Appropriate Inquires Changes 6
- Rule Making Background 6
- Rule Making Summary 6

ASSESSMENT OVERVIEW 7
- Purpose 7
- Protocol 7
- Objectives 7

POSSIBLE REPORT EXCEPTIONS TO ALL APPROPRIATE INQUIRY RULE 8
- § 40 CFR Part 312.25 Searches for recorded environmental cleanup liens 8
- § 40 CFR Part 312.28 Specialized knowledge or experience on the part of the defendant 8
- § 40 CFR Part 312.29 The relationship of the purchase price to the value of the property, if the property were not contaminated 8

GENERAL SITE RECONNAISSANCE OVERVIEW 14

SUBJECT PROPERTY SITE DESCRIPTION 14
- Visual Description 14
- USGS Topographical Map Data 16
- Surficial and Subsurface Soil Characteristics 17
- Surficial Water Flow 18
- Reported Ground Water Flows 18

HISTORICAL USAGE 18
- Fifty-Year Complete Standard Historical Source Summary: 19
- Standard Historical Resources 19
- Alternative Sources of Historical Information 19
- Historical Research Intervals 20
- Historical Sources – Reasonableness Attainability 20
- All Appropriate Inquires Not Exhaustive 20
- Historical Research Data Gaps - Federal Definition 20

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Historical Research Data Gaps - ASTM Definition 21
Historical Research / Data Gap Summary 22
Aerial Photograph Review 22
City and Telephone Directories 24
County Permit/Inspection Department 25
Historical (Standard) Resources: Credible Sources and Individuals 25
Historical Information - Knowledgeable Individuals 26
Sanborn Fire Insurance Maps 26
Recorded Land Title Records 27
Topographical (Historical) Maps 28
Washington Commercial Real Estate Disclosure 29
Washington Business Registration 30

OBSERVATIONS AND INFORMATION 30
Site Reconnaissance: Key Site Manager 30
Site Reconnaissance: Site Knowledgeable Person 30
Site Reconnaissance: Personal Interviews / Site Document Review 31
Property Exterior Observations 31
Structure Interior Access Limitations 32
Structure Interior Observations 33
Business Operations (Current and Historic) NAICS Classification 33

MATERIAL, PRODUCT, AND WASTE-STREAM 33
Materials/Products Handling and Storage 33
Medical Waste Discharges 33
Storage Tanks - Above and Below Ground 34
Waste Disposal Local / State Compliance 34
Waste Stream Processing and Disposal 34
Waste (Hazardous) Processing and Disposal 34
Wastewater, Storm Water Discharges 35

ADJACENT AND ADJOINING PROPERTIES 35

CONTAMINATION SOURCES 37
Airborne Off-Site Arsenic / Lead Migration 37
(Presumed) Asbestos-Containing Building Materials 37
Formaldehyde 38
Lead-Based Paint 38
Lead-Based Paint Pre-Renovation Limitations 38
Lead-Based Paint OSHA §1926.62 Regulations 39
Lead in Drinking Water 39
PCB-Containing Exterior Electrical Transformers 40

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Radon 40
Underground Storage Tanks 41
Vapor Intrusion 42
Vapor Encroachment Evaluation 44

HISTORICAL CONTAMINATION SOURCES 44
Activity and Use Limitations 44
Controlled Recognized Environmental Conditions 45
Historical Recognized Environmental Condition 45
Property Use limitations 46
Regulatory Agency Records Information 46

POTENTIAL OFF-SITE CONTAMINATION 47
Adjacent and Adjoining Property Contamination Receptors 47
Adjacent and Adjoining Property Contamination Sources 47

ENVIRONMENTAL DATABASE INFORMATION 48
Review of Federally Reported Environmental Data 48
Review of State of Washington Reported Environmental Data 51
Independent Cleanup Response 51
Confirmed and Suspected Contaminated Sites List 51

STATEMENT OF THE ENVIRONMENTAL PROFESSIONAL 53
Statement of Quality Assurance 53
Statement of Regulatory Compliance 53
Environmental Assessment Report Limitations 54

REFERENCES AND CITATIONS 55

INTERVIEWS WITH KNOWLEDGEABLE PARTIES 56

TERMS AND DEFINITIONS 59

VAPOR ENCROACHMENT TERMS AND DEFINITIONS 66

APPENDIX 69

ENVIRONMENTAL CONTRACTOR'S CERTIFICATION 72
Statement of Environmental Professional Qualifications 74

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Phase I Environmental Site Assessment
Table of Tabular Contents

Tab 1 Site Location & Photographs

Tab 2 City of Puyallup Permit Review
May 15, 2018

Tab 3 Initial Field Investigation of Fire
Department of Ecology (TPCHD Investigator)

Tab 4 Regulatory Interactions with Ecology

Tab 5 Phase I Environmental Audit (2005)

Tab 6 ERIS Enviornmental Database

GENERAL SITE RECONNAISSANCE OVERVIEW

Dr. Peter Chen on behalf of the *Sunset Pointe Development* engaged Aerotech Environmental Consulting, Inc. ("Aerotech") to perform a Phase I Environmental Site Assessment on the subject Property. This Assessment was additionally performed as required by the U.S. Small Business Administration ("SBA") Environmental Policy Guidelines for Phase I Environmental Site Assessments (SOP 50 10 6[7]), and the "All Appropriate Inquiry" standard as promulgated by the U.S. Environmental Protection Agency in 40 CFR Part 312.

This Property consists of a large currently undeveloped Property in Puyallup, Washington. Mr. Ratzke identified Mr. Paulo Chavez as the *Key Site Manager*. The *Key Site Manager* is the person identified by the Client or the Owner of the Property as having the most reliable knowledge as to the previous uses and current condition of the subject Property and is in a position to provide accurate information to the Environmental Assessor. The Assessor performed the on-site Reconnaissance multiple times from January to April 5, 2024.

According to the information provided verbally by the Key Site Manager, two Phase I Assessments, Environmental Investigations or Site Assessments, or other environmentally-related activities or studies, have been performed at, or for, the subject Property. These Reports indicated the potential presence of environmental impact or a Recognized Environmental Condition.

The Reports available for this Assessment were: a *Phase "1" Environmental Audit* dated January 14, 2005 prepared by Environmental Associates, Incorporated; a *Critical Areas Assessment* dated January 19, 2018, Revised on September 21, 2018. prepared by Habitat Technologies; and *Phase I Environmental Site Assessment Sunset Point*, dated February 10, 2023 prepared by Earth Solutions NW, LLC.

All of the Recognized Environmental Conditions identified in the listed Reports have been addressed and mitigated.

SUBJECT PROPERTY SITE DESCRIPTION

Visual Description:

The subject of this *Phase I Environmental Site Assessment* is an irregular-shaped approximate 9.08-acre residential Property located on the southeast side of Puyallup, Washington. a vacant, undeveloped Property that will be developed with a eighteen residential development lots known as *Sunset Pointe Development*.

Adjoining and adjacent properties and landmarks include to the north 19th Avenue Southeast and 23rd Street Place Southeast; to the south is 23rd Avenue Southeast; to the east is Shaw Road East

[7]SOP effective October 10, 2020.

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two-thirds; Pioneer Way East one mile north; State Route 161 / 512 one and one-third of a mile east; State Route WA-410 one and one-quarter of a mile northeast; and Wildwood Park one-third of a mile east. Significant bodies of water include *Wildwood Spring* one-third of a mile to the south; *Bradley Lake* one mile to the southwest; and the *Puyallup River* one and one-half of a mile to the north.

The subject Property is level on the south side with residences adjoining to the south on 23rd Place southeast; to the west on 22nd Street Southeast; and 19th Avenue Southeast on the northwest. The southern portion is grassy with areas (368 to 374 feet above mean sea level) in the center and along the western fence line overgrown with native vegetation including underbrush and weeds including Oregon grape, western sword fern, salal, trailing blackberry, red huckleberry, western bracken fern, violet, trillium, evergreen blackberry, rose, and salmonberry. The trees are second growth or even younger, including Douglas Fir, Western Cedar, Western Hemlock, Big Leaf Maple, and Red Alder with an understory of vine maple. The eastern Property is level with a slope to the east which defines the eastern development.

In the south center of the Development is a small manmade lined plastic pond adjoining the east side of the pathway; which drains into a large Retention Pond defined on the north, east, and south sides. On the northeaster corner of the Retention Pond is beamed wall of non-native backfill which allows access to the surface of the Pond at 361 feet above sea level. Adjoining the west side of the Pond is an apparent wetlands area. Remaining on the Development are to foundations of the former *Western Washington Pioneer Museum*, horse barn, main residence, storage / utility builing, and barn. In the approximate center of the Property is small telephone switching building.

The future of the Property is the development is the *Sunset Pointe*, configured with eighteen residential lots. The Development will include a large wetlands area that divides the Property into a northern and section. The wetlands will include a larger detention pond the the center and two smaller wetlands ponds to the east; with an overall flow towards the southwestern corner of the Parcel. A fifty foot wetlands buffer will be created to the north and south. Adjoining the wetlands to the south is the Tract B, that will be the stormwater discharge area with two constructed ponds.

The northern section of the Development be lots one through eight, accessed from 19th Avenue Southwest or 23rd Street Place Southeast into the dead end Cul de Sac. The southern portion will be developed with lots nine through eighteen with the individual driveways facing the 23rd Street Place Southeast center dead end Cul de Sac.

During the course of the on-site observations, particular attention was directed towards (i) pools of liquid; (ii) roads and paths that might be used for unauthorized entry; (iii) drains and sumps; (iv) stressed vegetation; (v) pits, ponds, or lagoons; (vi) surface or soil staining; (vii) ditches, catch basins, or dry wells; (viii) unidentified substance containers; (ix) location of manholes, sewer grates, sewer outfalls; and (x) other subterranean accesses. All roads, driveways, paths, and other vehicular access areas were identified and evaluated for suspected use as an avenue for transport or disposal of hazardous materials, regulated substances, or petroleum products. Railroad tracks and previous right-of-ways are also identified if present on the subject Property. Potential wetland area indicators were considered during the on-site activities. These indicators include (i) wetland characteristic soil types; (ii) areas that appear permanently wet during most of the year; (iii) the presence of wetlands-related submergent or emergent plants; and (iv) wetland indicative wildlife.

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The subject Property was originally undeveloped wooded land; initially developed in the early 1920s with two small residences. In 1940, a detected garage and 10,000 square foot horse barn. In 1950, two approximately 4,000 square foot storage barns were constructed. The current Retention Pond constructed in the early 1960s. In 2010, two arson fires destroyed the *Western Washington Pioneer Museum* building, and damaged oils and chemicals stored inside and adjoining the building. In 2018, all of the remaining structures were demolished and removed from the Property, and a general cleanup was completed. In 2011, following the fire, the Washington Department of Ecology placed the Property as a *Confirm or Suspected Contaminated Site* (ISIS No.11739 / FS ID.9490). In 2018, all on-site buildings were demolished; the waste materials were removed in 2023.

The subject Property is located in a residential area. To the north is 19th Avenue and multifamily residences; to the south is the 23rd Street Place Southeast; to the east are residences; and

USGS Topographical Map Data:

The precise subject Property location is Latitude 47° 1725387 and Longitude -122° 2653114. The Site is located within Universal Tranverse Mercator Zone No.10T. The Property is approximate 428 feet above mean sea level. As observed during the Site visit and confirmed on the USGS topographic map, the subject Property exhibits Site Specific a surficial drainage towards the east based upon overall Site topography. The general local topographical gradient is northwest

During the course of the on-site observations, particular attention was directed towards (i) pools of liquid; (ii) roads and paths that might be used for unauthorized entry; (iii) drains and sumps; (iv) stressed vegetation; (v) pits, ponds, or lagoons; (vi) surface or soil staining; (vii) ditches, catch basins, or dry wells; (viii) unidentified substance containers; (ix) location of manholes, sewer grates, sewer outfalls; and (x) other subterranean accesses.

All roads, driveways, paths, and other vehicular access areas were identified and evaluated for suspected use as an avenue for transport or disposal of hazardous materials, regulated substances, or petroleum products. Railroad tracks and previous right-of-ways are also identified if present on the subject Property. Potential wetland area indicators were considered during the on-site activities. These indicators include (i) wetland characteristic soil types; (ii) areas that appear permanently wet during most of the year; (iii) the presence of wetlands-related submergent or emergent plants; and (iv) wetland indicative wildlife.

Cordilleran and Vashon Glaciation Effects:

The Cordilleran Ice Sheet was the last of seven glaciers to advance over northern Washington. It crossed into Washington more that 19,000 B.P. (ie, before present - defined as January 1, 1950) years ago. The Vashon Glacier[8] was part of the *Cordilleran Ice Sheet*, which also include the *Puget Lobe* in the center and *Juan de Fuca Lobe* (on the east)[9]

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[8] Also known as the Puget Lobe.

[9] *Deglaciation of the Puget Lowland*, Ralph A. Haugerud, April 7, 2021.

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At the full extent, this Glacier extended south to Tenino, east to past Everett and Tacoma; to the east into Spokane, and to the west just north of Port Angeles[10], extending to the Washington coast. The Glacier was over three times taller than the *Columbia Center* high-rise building (997 feet verses 3,600 feet) in Seattle to 1,200 feet thick at Olympia[11].

During the advance of the Vashon Glacier, meltwater flow underneath the ice sheet carved out Lake Washington, Lake Tapps, Lake Sammamish, Puget Sound, and the Hood Canal. This ice sheet exerted enormous pressure on the underlying land, but as the Glacier retreated marine water was replaced by freshwater in all of the troughs except the Duwamish Embayment. This was the extension of the current Puget Sound that reached the current Elliott Bay to Commencement Bay.

The progressive northward retreat from the Terminal Zone was accompanied by the development of ice-marginal streams and proglacial lakes the drained southward during the initial retreat, but northward during the late Vashon Period[12]. The final destruction of the Puget Lobe occurred when ice retreated north of Admiralty Inlet, which allowed seawater to enter the Puget lowland. The earliest human beings known to be in Western Washington were present as of 13,800 B.P[13]. A mastodon kill site from that time period was excavated in Sequim in 1977[14].

Surficial and Subsurface Soil Characteristics:

The subject Property soils are dominated by soil that exhibits a silty loam texture and coloration typical of the *Kitsap Series*. The surficial soils in the graded areas is black to very dark gray to a depth of 8 to 20 inches below ground surface ("bgs"). The subsoil to a depth of 20 to 24 inches was very dark gray to gray and exhibited prominent redoximorphic ("RMF) features[15].

Aerotech conducted near-surface and subsurface testing of the Property soils to determine

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[10] The western extend stopped before reaching Quinault and Aberdene. See, *Patterns and Processes of Landscape Development by the Puget Lobe Ice Sheet*, Derek Booth and Barry Goldstein, University of Washington Press, 1991 .

[11] Map produced by State of Washington Department of Natural Resources, 2018 .

[12] Research Article, *Quaternary Research*, University of Washington Press.Volume 13, Issue 3, pp. 303-321, May, 1980 .

[13] Welch, Craig (October 30, 2011). *WSU Prof was Right: Mastondon Weapon was Older Then Thought*, The Seattle Times .

[14] *Ibid* .

[15] Redoximorphic ("RMF")features consist of color patterns in a soil that are caused by a loss (depletion) or gain (concentration)of pigment compared to the matrix color, formed by oxidation / reduction of iron and/or manganese – controlled by the presence of iron. The composition and responsible formation process for a soil color or pattern must be known or inferred before it can be described as an RMF

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if an battery acid contamination was present on the Parcel. All of the ten soil sample analytical results were between 6.24 pH and 7.26 pH. Pierce County lists[16] the criteria for "Class A Compost" as between 6.0 - 8.0 pH.

Surficial Water Flow:

The Site topography is generally level, with elevation decreases on the eastern edge and to the west into the Retention Pond and western adjoining wetlands area. Surficial drainage towards the west as partially influenced by previous Site grading activities. The General Topographic Gradient has been determined from the USGS 1 Degree Digital Elevation Model, which allows the inference of the general surficial groundwater flows.

Reported Ground Water Flows:

Hydrogeologic information was obtained from the reported ground water flows at wells in the immediate area. This inference, while accurate in the general sense, may not be an accurate predictor of groundwater flow between adjoining sites, or locations in close proximity to one another. Local gradient under the subject Property may be influenced naturally by zones of higher or lower permeability, or artificially by nearby pumping or recharge, and may deviate in any location for the overall regional trend. Groundwater is inferred to flow to the northwest.

The principal aquifers in the Puget Sound Region occur in glacial drift, that along with finer grained interglacial sediments, underlies the basin lowland to depths of more than 1,00 feet. The sand and gravel units in the glacial drift form the principle aquifers. These aquifers receive ample recharge from the typically heavy precipitation characteristic of western Washington. The glacial drift in the Puget Sound region varies greatly in composition and water yielding capacity.

Typically, wells in glacial drift that tap silt, clay, or till in the Region at approximately 75 to 100 feet below ground surface may have yields of 100 gallons or more per minute. Deeper wells tapping thick, saturated layers of highly permeable gravel and coarse sand, typically at depths greater than 250 feet below ground surface, can yield more than 1,000 gallons per minute. Ground is inferred at more than 30 feet below ground surface with a flow to the northwest.

HISTORICAL USAGE
STANDARD INFORMATION SOURCES:
LOCAL AND STATE

> "The objective of compiling and analyzing historical property information is to develop a history of the previous uses of the subject and adjoining properties and the surrounding area, in order to help identify the likelihood of past uses having led to a recognized environmental concern in connection with the subject property." ASTM E1527-21 § 8.3.1. "The term

[16] Pierce County Development Engineering Inspection Team, *Development Engineering Handout 9, Soil Amendment*, May 28, 2015.

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historical resources means any resource or resources other than [... aerial photographs, fire insurance maps, local city directories, and historical topographic maps...] that are credible to a reasonable person and that may identify past uses of the subject property or adjoining properties.. ... Not all historical resources can be found in each listed source, nor is it always necessary to review every source [emphasis added]."

The *Historical Site milestones* can include (i) construction activities that involve structural, renovation, or remodeling at any location within the subject Property; (ii) major changes in the topography or grade of the Site; (iii) installation or construction of roads, utilities, water or sewer systems; (iv) installation, removal, or modification of permanent equipment; or (v) installation, removal, or modification of storage tanks.

Fifty-Year Complete Standard Historical Source Summary:

The subject Property was originally undeveloped wooded land; initially developed in the early 1920s with two small residences. In 1940, a detected garage and 10,000 square foot horse barn. In 1950, two approximately 4,000 square foot storage barns were constructed. The current Retention Pond constructed in the early 1960s. In 2010, two arson fires destroyed the *Western Washington Pioneer Museum* building, and damaged oils and chemicals stored inside and adjoining the building. In 2018, all of the remaining structures were demolished and removed from the Property, and a general cleanup was completed. In 2011, following the fire, the Washington Department of Ecology reclassified the Property as a *Confirm or Suspected Contaminated Site* (ISIS No.11739). All on-site buildings were demolished in 2018 and the waste materials removed in 2023.

Standard Historical Resources:

"The following historical resources shall be reviewed if, based upon local customary practice and the judgement of the environmental professional , they are reasonably ascertainable: (i) aerial photographs, (ii) fire insurance maps, (iii) local street directories, and (iv) historical topographic maps." ASTM E1527-21 § 8.3.2. "Data, imagery, documents, records, and other resources that typically provide useful information about the historical uses of properties. Standard Historical Resources include: aerial photographs, fire insurance maps, local street directories, building department records, interviews, topographic maps, and property tax files." ASTM E1527-21 § 3.2.89

Alternative Sources of Historical Information:

"Sources of historical information include, but are not limited to: i) libraries; ii) historical societies; iii) government agencies; iv) local building / inspection department records or planning department records; v) current *owners* and *occupants* of the *subject property* or surrounding *properties*; vi) records in the files of the *property owner(s)* and/or *occupants*; vii) local government officials or employees with knowledge of the *subject property*; viii) newspaper archives; ix)internet searches; x) community organizations; xi) private collections unique to a local area; xii) map preparation companies; xiii) private resellers of historical *property* information; and xiv) prior assessments (see 8.4)" ASTM E1527-21 § 8.3.3.

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Historical Research Intervals:

"Review of historical resources at less than five year intervals, is not required by this Practice... If the specific use of the subject Property and adjoining properties appears unchanged over a period longer than 5 years, then is not required by this practice to research the use during that period (for example, if fire insurance maps show the same solely residential use building in 1940 and 1960, then the period between need not be researched)."

"As another example, if the *subject property* was reportedly not developed until 1960, it would still be necessary to attempt to confirm that is was undeveloped back to 1940. Such information may come from one or more of the *standard historical resources* specified in 8.3.4.1 through 8.3.4.8, or it may come from *other historical sources resources* (see 8.3.4.9). However, checking *other historical sources resources* is not required." (ASTM E1527-21 § 8.3.8)

"Not all historical resources can be found in each listed source, nor is it always necessary to review every source." ASTM E1527-21 § 8.3.2.1 & § 8.3.8.

Historical Sources – Reasonableness Attainability:

Availability of information varies from information source to information source, including governmental restrictions. The User or Environmental Professional is not obligated to identify, obtain, or review every possible record that might exist with respect to a property. Instead this practice identifies record information that shall be reviewed from standard sources, and the User or Environmental Professional is required to review only record information that is reasonably ascertainable from those standard sources. Record information that is reasonably ascertainable means: information that is publicly available; (2) information that is obtainable from its source within reasonable time and constraints, and; (3) information that is practically reviewable. ... Information that can only be reviewed by a visit to the source is reasonably ascertainable if the visit is permitted by the source within 20 days of the request. ASTM E1527-21 §§ 8.1.4 & 8.1.55.4.1.2.2.

All Appropriate Inquires Not Exhaustive:

"All Appropriate Inquiries does not mean an exhaustive assessment of the property. There is a point at which the cost of information obtained or the time required to gather it outweighs the usefulness of the information and, in fact, may be a material detriment to the orderly completion of transactions. One of the purposes of this practice is to identify a balance between the competing goals of limiting the costs and time demands inherent in conducting an environmental site assessment and the reduction of uncertainty about unknown conditions resulting from additional information." ASTM E1527-21 § 4.5.2. "However, while some states maintain reasonably ascertainable IC / EC [Institutional Controls / Environmental Covenants] other states do not. The environmental professional should determine whether AULs are considered reasonably ascertainable records in the state in which the subject Property is located

Historical Research Data Gaps - Federal Definition:

As defined in the Standards and Practices for All Appropriate Inquiries; Final Rule (70 FR 66070) promulgated November 1, 2005, and effective November 1, 2006,

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"*Data gap* means: a lack or inability to obtain information required by the standards and practices listed in subpart C of this part despite good faith efforts by the environmental professional or persons identified under § 312.1(b), as appropriate, to gather such information pursuant to §§ 312.20(e)(1) and 312.20(e)(2)." [§ 312.10 *Definitions]*.

"To the extent there are data gaps (as defined in § 312.10) in the information developed as part of the inquiries in paragraph (e) of this section that affect the ability of persons (including the environmental professional) conducting the all appropriate inquiries to identify conditions indicative of releases or threatened releases in each area of inquiry under each standard and practice such persons should identify the sources of information consulted to address such data gaps, and comment upon the significance of such data gaps with regard to the ability to identify conditions indicative of releases or threatened releases of hazardous substances [and in the case of persons identified in § 312.1(b)(2), hazardous substances, pollutants, contaminants, petroleum and petroleum products, and controlled substances (as defined in 21 U.S.C. 802)] on, at, in, or to the subject property." [§ 312.20(g)].

This Federal definition is supplemented in the 2021 *ASTM Phase I Standard Practice*, which includes additional explanations, details, and examples that can be used by the Environmental Professional to determine the both the reliability of the Historical Sources and the significance, if applicable, of any Historical Research *Data Gaps*.

Historical Research Data Gaps - ASTM Definition:

The ASTM Standard Practice defines a *Data Gap* as; : "[a] lack of or inability to obtain information required by this practice despite good faith efforts by the Environmental Professional to gather such information. *Data Gaps* may result incompleteness in any of the activities required by this practice, including but not limited to, site reconnaissance (for example, an inability to conduct the site visit) and interviews - (for example, an inability to interview the *key site manager*, regulatory officials, etc.). See Sec 12.7) [Opinions]." ASTM E1521-21 § 3.2.19. See Sec 12.7 [Opinions]."

"A lack of or inability to obtain information required by this practice despite good faith efforts by the environmental professional to gather such information. *Data Gaps* may result incompleteness in any of the activities required by this practice, including but not limited to, site reconnaissance (for example, an inability to conduct the site visit) and interviews - (for example, an inability to interview the *key site manager*, regulatory officials, etc.). See Sec 12.7) [Opinions]." ASTM E1521-22 § 3.2.19

A data gap is only significant if other information and/or professional experience raises reasonable concerns involving the effects of that data gap on the ability of the environmental professional to render an opinion regarding whether conditions exist that are indicative of a recognized environmental condition, controlled recognized environmental condition, or historical recognized environmental condition. For example, if a building on the subject property is inaccessible during the site reconnaissance, and the environmental professional's experience indicates that the use of such a building often involves activity that leads to a recognized environmental condition, the inability to inspect the building would be a significant data gap..." ASTM 1527-21 § 12.7.

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"A data gap that the environmental professional believes impacts their ability to conclude if a recognized environmental conditions of controlled environmental condition at the subject Property. The determination that a data gap is significant should be based on the environmental professional's judgment, experience, and the sources consulted during completion of this practice and whether the missing information, if available, would likely allow the environmental professional to conclude if a recognized environmental conditions or controlled recognized environmental condition exists at the subject Property." ASTM E1527-21 § 3.2.83.

Historical Research / Data Gap Summary:

The subject Property was originally undeveloped wooded land; initially developed in the early 1920s with two small residences. In 1940, a detected garage and 10,000 square foot horse barn. In 1950, two approximately 4,000 square foot storage barns were constructed. The current Retention Pond constructed in the early 1960s. In 2010, two arson fires destroyed the Western Washington Pioneer building, and damaged oils and chemicals stored inside and adjoining the building. In 2018, all of the remaining structures were demolished and removed from the Property, and a general cleanup was completed. In 2011, following the fire, the subject Property was classified as a Contaminated Site. All on-site buildings were demolished in 2018 and the waste materials removed in 2023.

In the opinion of the Environmental Profession[17] preparer of this Assessment, no Significant Historical Data Gaps as defined above, were identified during the preparation of this Assessment. No further investigation relative to those issues is indicated or recommended.

Aerial Photograph Review:

Originally performed under government contracts, aerial photographs of the general area are available beginning with the 1940's. The scales for these aerials can range from 1"=1667' to 1"= 2500' aerials taken by private contractors were generally taken at lower altitudes and provide a larger scale. Depending upon the resolution, the photographs can provide valuable information on land use and site development of both the subject and adjoining properties. Ultimately, the scale, clarity, and resolution serves as the limitations on visual interpretation. Aerial photographs for the subject Property were reviewed as available from numerous sources, including but not limited to, the Natural

[17] The Aerotech Environmental Professional is Mr. Alan T. Blotch, whose qualifications include, but are not limited to: (i) environmental evaluation of residential, commercial, and industrial properties that spans 43 years; (2) State of California *Licensed Environmental Professional* from 1993 through 2012 when funding for this Program terminated; and (3) involvement with the ASTM *Environmental Section* continuous since 1990.

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Resources Conservation Service District Offices ("DNR-WA"); NETOonline[18] ("NETR"); U.S. Air Force ("USAF"); US Geological Service ("USGS"); King County Aerial Survey ("KCAS"); United States Army Corp of Engineers ("USACE")

Date:	*Source:*	*Development:*
1941	USDA	The subject Property is developed with a small structure on the north end; substantially undeveloped wooded land. A roadway starts at the intersection of 19th Avenue Southeast and 21st Street Southeast and extends to the southeast past a small residence to the eastern ridge and then extends to the south to terminate at a residence with farm building. To the south 23rd Avenue is not present.
1943	USDA	The subject Property is developed with a small structure on the north end; substantially undeveloped wooded land. A roadway starts at the intersection of 19th Avenue Southeast and 21st Street Southeast and extends to the southeast past a small residence to the eastern ridge and then extends to the south to terminate at a residence with farm building. To the south 23rd Avenue is not present. A gravel pit is adjoining to the south and southwest.
1957	USDA	The subject Property is developed on the north side by two small residences; to the south are two residences, a small, and a large barn. To the south is an adjoining is a gravel pit. A roadway starts at the intersection of 19th Avenue Southeast and 21st Street Southeast and extends to the southeast past a small residence to the eastern ridge and then extends to the south to intersect 23rd Avenue. A gravel pit is adjoining to the south and southwest.
1968	USDA	The subject Property is developed on the north side by two small residences; to the south are two residences, a small, and a large barn. To the south is an adjoining is a gravel pit. A roadway starts at the intersection of 19th Avenue Southeast and 21st Street Southeast and extends to the southeast past a small residence to the eastern ridge and then extends to the south to intersect 23rd Avenue. A gravel pit is adjoining to the south and southwest.

[18] The NETR library include photographic collections that vary by state, county, and locality, and are all cited as "NET"R sources without referenced to the particular source collection..

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1980	USGS	The subject Property is developed on the north side by two small residences; to the south are two residences, a small, and a large barn. To the east is wooded land. To the south is an adjoining is a gravel pit. A roadway starts at the intersection of 19th Avenue Southeast and 21st Street Southeast and extends to the southeast past a small residence to the eastern ridge and then extends to the south to intersect 23rd Avenue. A gravel pit is adjoining to the south and southwest.
1990	USGS	The subject Property is developed on the north side by two small residences; to the south are two residences, a small, and a large barn. The large pond is visible at the northern curve of the driveway. To the east is a large parcel of cleared and graded land. To the south is an adjoining is a gravel pit. A roadway starts at the intersection of 19th Avenue Southeast and 21st Street Southeast and extends to the southeast past a small residence to the eastern ridge and then extends to the south to intersect 23rd Avenue. A gravel pit is adjoining to the south and southwest.
2006	USGS	The subject Property is primarily wooded land developed on the north side by two small residences; to the south are two residences, a small, and a large barn. The large pond is visible at the northern curve of the driveway. To the south, east, and west are large residential developments. To the north is a long strip of undeveloped partially wooded land.

City and Telephone Directories:

Local directories based upon physical surveys of residents have been compiled since the late 1880's for use as city planning and marketing database tools. Commonly referred to as "reverse directories" or "city directories," these directories are generally maintained at public libraries. The historical reverse directories complied by the Cole and Polk Companies were reviewed.

The northern portion of the subject Property is addressed as 2100 - 19th Avenue Southeast and 2102 - 23rd Street Place Southeast, Puyllup

Date:	*Address:*	*Occupant:*
2005	2104 - 23rd St.Pl.SE	Starr, Ron
	2104 - 23rd St.Pl.SE	Ottesen, Jeffrey L.

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1998	2105 - 23rd St.Pl.SE	Ottensen Jeffrey
1998	2105 - 23rd St.Pl.SE	No listing

County Permit/Inspection Department - Permit Review:

The Property is located in Pierce County. All building activity is regulated by the Municipal Building. Due the time required to obtain building department records via Freedom of Information requests ("FOIA"), this method of research was deemed to be reasonably ascertainable[2]. As such, documents were requested and reviewed at the offices of the Building Services Division. The following substantive information was available.

Date:	*Number:*	*Activity:*
1924		Construction of 912 square foot wood framed and sided one-story residence, with pitched composite shingles
1928		Construction of 1,104 square foot wood framed and sided one story residence, with pitched composite shingles.
1940		Construction of one-story, wood pole framed barn building, approximately 10,000 square feet.
1940		Construction of 1,092 square foot, concrete block two-story detached garage.
1950		Construction of 4,480 square foot wood pole framed "utility / storage" single-story barn
1950		Construction of 4,000 square foot wood pole framed single-story storage building

Historical (Standard) Resources: Credible Sources and Individuals:

Historical sources may include persons with documented knowledge of the subject or adjoining properties. "*Other historical resources* means any resource or resources other than those designated in 8.3.4.1 through 8.3.4.8 that are credible to a reasonable person and that may identify past uses of the *property*; such resources may also include information regarding *adjoining properties* or surrounding *properties*. This category includes, but is not limited to: ... news articles, books about the area being researched ... or records in the files and/or personal knowledge of the *owner* and / or *occupants* of the *properties*." ASTM 1527-21 § 8.3.4.9.

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"**Intervals** – Review of standard historical resources at less than five-year intervals is not required by this practice. For example, if the *subject property* had one use in 1950 and another use in 1955, it is not required to check for a third use **in the intervening period**. As another example, **if the specific use of the *subject property* appears unchanged over a period longer that five years**, then it is not required by this practice to research the use of that period [emphasis added] (such as if *fire insurance maps* show the same solely residential use building in 1940 and 1960, then the period in between need not be researched). ASTM E1527-21 § 8.3.5.

Historical Information - Knowledgeable Individuals:

Historical sources may include persons with documented knowledge of the subject or adjoining properties. For the purposes of the interview, *Actual Knowledge* is defined as the knowledge actually possessed by an individual who is a real person, rather than an entity. Actual Knowledge is to be distinguished from *constructive knowledge t*hat is knowledge imputed to an individual or entity." ASTM E1527-22 § 3.2.3. Additionally, the interviewer must determine the that information being provided is in *Good faith,* defined as the absence of any intention to seek an unfair advantage or to defraud another party, an honest sincere intention to fulfill one's obligations in the conduct of transaction concerned." ASTM E1527-22 § 3.2.36.

Sanborn Fire Insurance Maps:

In 1867, Massachusetts survey Daniel Sanborn began the began preparing detailed street maps of densely populated areas throughout the United States as the *Sanborn Map Company.* The purpose of the mapping process was to assist fire insurance agents in determining the degree of fire hazard associated with a particular area or property. This was accomplished by Sanborn personnel physically inspecting each property and preparing a map that shows the size, shape, and construction of all developments – including dwellings, commercial buildings, factories, or small storage structures, and other potentially hazard fixtures (such as above and underground storage tank)s – and their precise location. The maps also detailed descriptions of the surrounding land.. The maps used a sophisticated set of symbols that allowed complex information to be conveyed clearly. The symbols included building construction, fire walls, locations of windows and doors, sprinkler systems, and most importantly with industrial buildings, the occupancy or activity that occurred at the property. Especially Hazardous Risks were colored green with six dots representing the comparative danger from fire by occupancy.

Most of the Sanborn Maps were drawn at a scale of one inch to fifty feet (1:600) when expressed as a representative fraction. Depending upon the development or usage of the overall area, scales of (1:1,200) or one inch to two hundred feet and (1:4,800) used of one inch to one hundred feet were also used. For these reasons, the Sanborn maps were originally produced for populated or industrial areas.

Beginning in the 1920s, due to various development factors, Sanborn began updating the maps for its customers by issuing colored paste-on correction slips. This method of updating maps resulted in occasional mistakes, and for that reason Aerotech relies upon the set of Sanborn Maps

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provided the Environmental Risk Information Services ("ERIS"). Complete Sanborn Maps were not reviewed for this Assessment due to the sufficiency of acceptable alternative historical sources.

Recorded Land Title Records:

"Real Estate transaction routinely involve the purchase of title insurance *title insurance*; inherent in which is an offer to provide title insurance generally referred to aa a *Title Commitment* or preliminary *Title Report* provided by a *Title Company*. ... Such title insurance documentation reliably identifies an AUL, environment liens, usage controls, and environmental access and/or monitoring requirements." ASTM E1527-21 § 5.4.1.1

In addition to environmental information found in a Title Insurance (or Preliminary Title Insurance), the Land Title records will broadly capture more specifically-named AULs, such as '– environmental covenants – ' or 'Environmental easements', 'land use covenants, "declaration of use covenants [and/or] agreements', or 'declaration of land use restrictions'. 'environmental land use controls', and other similarly worded documents." ASTM E1527-21 § 5.4.1.2.2.

Recorded land titles are records usually maintained by the municipal clerk or county recorder of deeds which detail ownership fees, leases, land contracts, easements, liens, deficiencies, and other encumbrances attached to or recorded against the subject property in the local jurisdiction having control for or reporting responsibility to the subject Property.

Due to state land trust regulations and laws, land title records will often only provide trust names, bank trust numbers, owner's names, or easement holders, and not information concerning previous uses or occupants of the subject Property. Additionally, environmental liens recorded against the subject Property are considered outside the scope of recorded land title records. For these reasons, this Environmental Site Assessment has relied upon other information sources assumed to be either more accurate or informative than recorded land titles.

With an abundance of caution, the Site tax records at the Office of the Pierce County Assessor were accessed from review. The reasonably ascertainable records contained the following information:

Date:	*Excise Number:* / Bldg Permit	*Action:*
1924		Construction of 912 square foot wood framed and sided one-story residence, with pitched composite shingles
1928		Construction of 1,104 square foot wood framed and sided one story residence, with pitched composite shingles.
1940		Construction of one-story, wood pole framed barn building, approximately 10,000 square feet.
1940		Construction of 1,092 square foot, concrete block two-story detached garage.

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1950		Construction of 4,480 square foot wood pole framed "utility / storage" single-story barn
1950		Construction of 4,000 square foot wood pole framed single-story storage building
12/03/2011	4274495	Sharon Ottinger Grantor to: Peter Y and Liu Beth Chen, Statutory Warranty Deed – four assessor Parcels, Sale: $632,000.
03/28/2019		Pierce County Assessor On Site Physical Property Inspection.
04/10/2020		Pierce Assessor on-site Physical Inspection

Topographical (Historical) Maps:

A topographic map is a flat representation of the curved surface of the surface of the earth. As a result, a topographic map shows the contours, which makes is possible to accurately place geological features and measure elevations. In addition, the maps contain symbols that represent features such as: streets, buildings, streams, vegetation, and actual occupancy or usage of particular areas. As areas become more developed, additional map symbols were added to represent: built-up roads, types of highways, areas of intermittent drainage, waterway descriptions, water retention and detention, seasonally submerged areas, and descriptions of areas of disturbed soils. This attention to accuracy and detail makes the use of historical topographic maps a reliance source of the historical development of an area or property.

The United States Geological Survey ("USGS") has been the primary civilian mapping agency of the United States since 1879. The USGS topographic maps ("topo") maps have been published at many scales, but 1:24,000 (also referred to as a 7.5-minute quadrangle) has been the standard topographic map scale since 1947. Since 2009, the new computer-generated maps have been published every three years).

The USGS Historical Map Collection contains the USGS topographic maps published from 1884 through 2006. The goal of the USGS National Map's *Historical Topographic Map Collection* ("HTMC") is to provide a digital repository of USGS 1:250,000 scale and larger maps printed between 1884 and 2006. The following topographic maps were reviewed

Date:	*Source:*	*Description:*
1949	USGS	The subject Property is developed with four parcels; two residences, a storage barn, and horse barn. No ponds are identified on the Property. A small "gravel pit" is identified to the southwest.

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1956	USGS	The subject Property is developed with four parcels; two residences, a storage barn, and horse barn. No ponds are identified on the Property. Directly to the west is a small "gravel pit"; to the east is undeveloped land.
1968	USGS	The subject Property is developed with four parcels; two residences, a storage barn, and horse barn. No ponds are identified on the Property. Two ponds are located in their current location. Directly to the west is a small "gravel pit"; to the east is undeveloped land.
1973	USGS	The subject Property is developed with four parcels; two residences, a storage barn, and horse barn. No ponds are identified on the Property. Directly to the west is a large "gravel pit"; to the east is undeveloped land.
1981	USGS	The subject Property is developed with four parcels; two residences, a storage barn, and horse barn. No ponds are identified on the Property. Directly to the west is a large "gravel pit"; to the east is undeveloped land.
1993	USGS	The subject Property is developed with four parcels; two residences, a storage barn, and horse barn. Two ponds are located in their current location. Directly to the west is a large "gravel pit"; to the east is undeveloped land.

Washington Commercial Real Estate Disclosure:

On February 28, 2010, the State of Washington Legislature passed Substitute Senate Bill No.6749, concerning the transfer of commercial real estate – commonly known as the *Commercial Real Estate Disclosure Act.*

As required in the Act, a seller of commercial real estate must provide a buyer with a Disclosure Statement about the land – whether improved or unimproved – unless the buyer waives the right to receive it. The Disclosure for commercial real estate concerns title, water, sewer and on-site sewage, structure, systems, fixtures, and environmental.

The Disclosure Statement must be provided within five business days, or as otherwise agreed to, after mutual acceptance of a written purchase agreement between a buyer and a seller. Within three business days of receiving the Disclosure Statement, the buyer has the right to approve and accept the Statement or rescind the Agreement for purchase. If the seller fails to provide the Disclosure Statement, the buyer may rescind the transaction until the transfer has closed. If the Disclosure Statement is delivered late, the buyer's right to rescind expires three days after receipt of the Disclosure Statement. A completed Commercial Real Estate Disclosure Statement was not provided prior to the completion of the Phase I Environmental Site Assessment.

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Washington Business Registration:

The State of Washington Business Licensing Service maintains records of all business licenses issued within the State of Washington. In order to thoroughly evaluate potential environmental issues, a search of business licenses issued through the Washington State Business Licensing Service was completed for the Property, which did reveal any relevant recorded transfers.

VISUAL AND PHYSICAL OBSERVATIONS AND INFORMATION: STRUCTURAL AND BUSINESS OPERATIONAL

Dr. Peter Chen, the Owner of the Property, identified Mr. Craig Deaver with *C.E.S. NW, Inc.* as the Key Site Manager. The *Key Site Manager* is the person identified by the Client or the Owner of the Property as a person having the most reliable knowledge as to the previous uses and of the Property and have accurate information for the Environmental Questionnaire. The Site Reconnaissance was conducted multiple times from January through May of, 2024.

The *Site Knowledgeable Person* is a person identified by the Key Site Manager as an individual with first hand knowledge of the subject and / or adjoining properties historical and current development and able to provide information regarding the Site historical development and usage.

A Site Knowledgeable Person identified as Mr. Craig Deaver .

Site Reconnaissance: Key Site Manager:

The *Key Site Manager* ("KSM")is the person identified by the Client or the Owner of the Property as a person having the most reliable knowledge as to the previous uses and current condition of the subject Property and in a position to provide reasonably accurate information for the Environmental Questionnaire. If the *Key Site Manager* is unable to be on Site at the time of the Site Reconnaissance, the KSM may identify a *Site Knowledgeable Person.*

Site Reconnaissance: Site Knowledgeable Person:

.The *Site Knowledgeable Person* ("SNP") a person identified by the Key Site Manager as an individual with first hand knowledge of the subject and / or adjoining properties historical and current development and able to provide information regarding the Site historical development and usage. In the alternative Real Estate Agent may also function the SNP. The definition and designation of the SNP is not included in the ASTM Standard Practice for Phase I Environmental Site Assessments.

A Site Knowledgeable Person was identified.

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Site Reconnaissance: Personal Interviews / Site Document Review:

The Aerotech Assessor and Environmental Professional[19], Alan T. Blotch, performed the on-site Reconnaissance in January, accompanied by the Key Site Manager. Prior to the Site Reconnaissance Interviews were conducted with the Key Site Manager. He was interviewed regarding the current Site operations, required environmental permits, his knowledge of current and historical environmental issues, past uses of the Property, and possible environmental concerns.

If an adjoining property represented an obvious Recognized Environmental Condition or a visual reconnaissance of the site indicated a potential environmental concern, the owner or operator of that site was also contacted regarding the type, nature, and potential impact of the environmental concern. The information obtained and conclusions reached during the course of these interviews and document review has been incorporated in this Assessment; while the specific source of the information may not be identified in the text of the Assessment Report.

Property Exterior Observations:

The subject of this *Phase I Environmental Site Assessment* is located on the southeast side of Puyallup, Washington currently a vacant, undeveloped Property that will be developed with a eighteen residential development lots known as *Sunset Pointe Development.*

The subject Property is level on the south side with residences adjoining to the south on 23rd Place southeast; to the west on 22nd Street Southeast; and 19th Avenue Southeast on the northwest. The southern portion is grassy with areas in the center and along the western fence line overgrown with native vegetation including underbrush and weeds including Oregon grape, western sword fern, salal, trailing blackberry, red huckleberry, western bracken fern, violet, trillium, evergreen blackberry, rose, and salmonberry. The trees are second growth or even younger, including Douglas Fir, Western Cedar, Western Hemlock, Big Leaf Maple, and Red Alder with an understory of vine maple. The eastern Property is level with a slope to the east which defines the eastern development.

In the south center of the Development is a small manmade lined plastic pond adjoining the east side of the pathway; which drains into a large Retention Pond defined on the north, east, and south sides. On the northeaster corner of the Retention Pond is beamed wall of non-native backfill which allows access to the surface of the Pond. Adjoining the west side of the Pond is an apparent wetlands area. Remaining on the Development are to foundations of the former *Western Washington Pioneer Museum*, horse barn, main residence, storage / utility building, and barn. In the approximate center of the Property is small telephone switching building.

The future of the Property is the development is the *Sunset Pointe*, The northern section of the Development be lots one through eight, accessed from 19th Avenue Southwest or 23rd Street Place Southeast into the dead end Cul de Sac. The southern portion will be developed with lots nine through eighteen with the individual driveways facing the 23rd Street Place Southeast dead end.

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[19] "Environmental Professional" as defined in the *Standards and Practices for All Appropriate Inquiries; Final Rule*; U.S. EPA, 40 CFR Part 312 (70 FR 66070) November 1, 2005, as specifically stated in § 312.10.

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With the exception of environmental issues discussed in this Assessment, during the course of the on-site observations, particular attention was directed towards (i) pools of liquid; (ii) roads and paths that might be used for unauthorized entry; (iii) drains and sumps; (iv) stressed vegetation; (v) pits, ponds, or lagoons; (vi) surface or soil staining; (vii) ditches, catch basins, or dry wells; (viii) unidentified substance containers; (ix) location of manholes, sewer grates, sewer outfalls; and (x) other subterranean accesses. All roads, driveways, paths, and other vehicular access areas were identified and evaluated for suspected use as an avenue for transport or disposal of hazardous materials, regulated substances, or petroleum products. Railroad tracks and previous right-of-ways are also identified if present on the subject Property. Potential wetland area indicators were considered during the on-site activities. These indicators include (i) wetland characteristic soil types; (ii) areas that appear permanently wet during most of the year; (iii) the presence of wetlands-related submergent or emergent plants; and (iv) wetland indicative wildlife.

Structure Interior Access Limitations:

The State of Washington has previously stated that "face coverings are required statewide in all public spaces because they are effective in slowing the spread of COVID-19, especially when combined with 6 feet of physical distance."

The State of Washington has promulgated revised *Covid-19 Response Guidelines for Employers* (November 15, 2020). These Guidelines include in part:

> "6. **Miscellaneous Venues:** All retail activities and business meetings are prohibited. Miscellaneous venues include: convention / conference centers, designed meeting spaces in a hotel, events centers, fairgrounds, sporting events, nonprofit establishments, or similar venue.
>
> 9. **Real Estate:** Open houses are prohibited.
>
> 13. **Professional Services** are required to mandate that employees work from home when possible and close offices to the public if possible. Any office that must remain open must limit occupancy to 25 percent of indoor occupancy limits.
>
> 14. **Professional Services** are limited to 25 percent of outdoor occupancy limits.
>
> * * * * *
>
> For employers and workers: Washington employers must ensure workers wear face coverings at work in almost all situations. Employers must provide face coverings at work in almost all situations. Employers must provide face coverings if workers do not have them. Employers must comply with this order, which is enforced by the Department of Labor & Industries."

Due to the State of Washington COVID-19 requirements Aerotech employees shall limit their interior contact with others whenever possible. If the interior configuration of a space or area

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does not allow Aerotech employees to obtain such an objective, then portions of, or the entire interior of the Property will be observed without entrance into the area or building.

Structure Interior Observations:

All the former structures formerly on the Property have been removed.

Business Operations (Current and Historic) NAICS Classification:

The North American Industry Classification System ("NAICS") is the classification that was developed for use by Federal Statistical Agencies for the collection, analysis, and publication of statistical data related to the U.S. Economy. Additionally, the goal was to develop a North American standard. It is the first economic classification system based on a single economic concept. It was adopted in 1997 to replace the Standard Industrial System ("SIC").

The Small Business Administration SOP 50 10 6, effective October 1, 2020, requires all properties except a Multi-Unit Building are compared to the SOP Appendix 6: *NAICS Codes of Environmentally Sensitive Industries* for a match.[20] The comparison must include the Property's current and known prior uses. (When indicated, a copy of the NAICS listing is included in the *Supplement Documents Section* of the Appendix of this Report).

All the former structures formerly on the Property have been removed. The NAICS Classification is No. 236.117, Developers / Builders of single and multi family housing. This classification is based upon the NAICS Code reported by the business as applicable to its operation. Had the prior Site historic business been in the general category of business operations identified by the EPA of U.S. SBA as a higher risk industry particular attention was paid to those activities that possibly presented an elevated environmental impact.

MATERIAL, PRODUCT, AND WASTE-STREAM HANDLING AND PROCESSING

Materials/Products Handling and Storage:

No improper storage of materials or products was observed at the Site. Reporting under the Spill Prevention, Control and Countermeasures program to address accidental chemical spills (40 CFR §§109-114) is not required. Additionally, no activities were observed that could be interpreted to be indicative of improper classification of waste material[3].

Medical Waste Discharges:

For the purposes of this Assessment, medical waste is defined in the *Medical Waste Tracking*

[20] See, SBA SOP 50 10 7.1, §1(4)(a).

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Act ("MWTA") 42 U.S.C. §§ 6992-92k, "as waste materials produced in the diagnosis, treatment, or immunization of human beings or animals, in research pertaining thereto, or in the production or testing of biologicals. Specifically covered are cultures and stocks of infectious agents and associated biologicals, human pathological wastes, human blood and blood products, sharps (both used and unused), animal waste, and isolation waste." For the purposes of this Assessment, bloodborne pathogen waste material is defined in paragraph (b) of the *Occupational Exposure to Bloodborne Pathogens; Final Rule*, 29 CFR § 1910.1030 as "blood" and "other potentially infectious materials." No improper medical waste storage or discharge was observed.

Storage Tanks - Above and Below Ground:

During the course of on-site activities, particular attention was directed toward indicators of above or below ground storage tanks, including (i) fill pipes, overflow pipes, vent pipes; (ii) areas of abnormal or heavy staining; (iii) man ways, manholes, or access covers: (iv) abandoned concrete saddles or gravity racks; (v) abandoned pumping equipment or gasoline pumps; (vi) concrete pads not homogeneous with surrounding surfaces; (vii) concrete build-up areas potentially pump islands or non-homogeneous patching; or (viii) new fill areas or piles of fill. No such visual indicators of suspected underground storage tanks was observed during the Site Reconnaissance.

Waste Disposal Local / State Compliance:

According to supplied information, the Site is not required to file, submit, or operate under any environmental permits, approvals, or notifications that were previously in place, or are known to be required in the future. Moreover, according the same supplied information and statements, the Site is not received prior notification of environmental violations, litigation, citations, claims, complaints, administrative actions, or environmental clean up or remedial actions pertaining to the Property or the operations conducted on the Property. This is consistent with the information reported in the Environmental Database prepared for the subject Site.

Waste Stream Processing and Disposal:

During the on-site observations, particular attention was directed toward activities or situations that could be considered contamination indicators by a regulated substance[4]. Potential indicators of contamination or violation can include: (1) stained or discolored sinks, drains, catch basins, drip pads, or sumps; (2) spills around loading docks, fueling areas, catch basins, or surface drains; (3) waste disposal areas, dumpsters, and other storage containers--evidence of spills or staining should be recorded; (4) pipes, gutters, spouts, or tubes protruding into bodies of water; or (5) waste that may require a RCRA permit. No areas of potential concern were observed.

Waste (Hazardous) Processing and Disposal:

In addition to solid waste disposal[5], the on-site observations considered the potential

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existence of hazardous waste, defined as a solid waste which, due to quantity, concentration, or other characteristics, may cause an increase in mortality or illness, or may pose a hazard to human health or the environment, under RCRA 42 USC §6903(5). The Assessor did not observed any such waste processing or disposal activities at the Site.

Wastewater, Storm Water Discharges:

All point source discharges regulated by the Clean Water Act ("CWA") are subject to the applicable water quality-based standards as established in the National Pollutant Discharge Elimination System ("NPDES") codification 40 CFR Subpart D §131.36. Additionally, CWA Sections 402 (p)(1) and (p)(2) have created categories of storm water discharges within Permit Issuance and Permit Compliance Deadlines for Phase I Storm water Discharges effective October 1, 1993, that may also be applicable to the subject Property (as detailed in the Federal Register, Volume 57, Number 244). Any significant change in the usage of the subject Property could require the submittal an NPDES initial storm water discharge permit under 40 CFR §122.26 or 40 CFR Chapter I - Preamble Appendix A. However, no requirements for NPDES permitting were discovered that are currently applicable to the subject Property that have not been addressed.

VISUAL AND PHYSICAL OBSERVATIONS AND INFORMATION: ADJACENT AND ADJOINING PROPERTIES

For the Scope of this Assessment, properties are defined and categorized based upon their physical proximity to the subject Property. An *adjacent* property is any real property located within 0.25 mile of the subject Property's border. An *adjoining* property is any real property whose border is contiguous or partially contiguous with the Property, or that would be if the properties were not separated by a roadway, public thoroughfare, river, or stream.

Adjoining Properties Overview:

Adjoining properties that have contiguous borders with the subject Property were closely observed due to the lack of any physical obstruction between the properties that might impede or prevent the migration of contaminants onto the subject Property. When the subject Property and adjoining property are divided by a roadway – especially a multiple lane configuration – the migration of contaminants are often intercepted by underground utilities that typical divert the migration, by providing a pathway formed by the excavation and backfilling of the utility trenches that transports the contamination laterally down the roadway.

The subject Property is located in a residential area. To the north is 19th Avenue and multifamily residences; to the south is the 23rd Street Place Southeast; to the east are residences; and to the west are residences facing 22nd Street Southeast.

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Adjoining and Adjacent Properties:

To the north: is 19th Avenue and multifamily residences;

To the south: is the 23rd Street Place Southeast;

To the east: are residences and undeveloped lots;

To the west: are residences facing 22nd Street Southeast.

Adjacent Properties Description:

An *adjacent property* is defined as: (1) a real property that would not meet the ASTM E1527-21 *adjoining properties* definition; and (2) are located within the "the distance that hazardous substances or petroleum products are likely to migrate based upon local geologic and/of hydrogeologic conditions; the property type; existing or past uses of surrounding properties; and other reasonable factors."[21] The primary function of Aerotech is to determine the search range within the constraints of: (1) ASTM recommended search range; (2) nature of the adjacent properties development; (3) density of the development; and (4) migration characteristics of the anticipated environmental contaminants. Since the major determinant of the adjacent properties search range tends to the development / density of surrounding properties, the nature of groundwater flow, and historical knowledge of the Aerotech Environmental Professionals, Aerotech believes the modified search ranges are reasonable and prudent. The search ranges for the subject Property are found in *Environmental Database Information* Section of this Phase I Environmental Site Assessment..

Limited visual observation of the adjoining properties was performed by the Aerotech Environmental Professions for the operations, conditions, and reported information that could reasonably be anticipated to environmentally impact the subject Property. There were no observed operations, obvious emission of contaminants, materials storage practices or other visual indicators of potential environmental impact originating at or on the adjoining properties which could affect the subject Property.

Adjoining and adjacent properties and landmarks include to the north 19th Avenue Southeast and 23rd Street Place Southeast; to the south is 23rd Avenue Southeast; to the east is Shaw Road East two-thirds; Pioneer Way East one mile north; State Route 161 / 512 one and one-third of a mile east; State Route WA-410 one and one-quarter of a mile northeast; and Wildwood Park one-third of a mile east. Significant bodies of water include *Wildwood Spring* one-third of a mile to the south; *Bradley Lake* one mile to the southwest; and the *Puyallup River* one and one-half of a mile to the north.

[21] ASTM E1527-21 *Standard Practice for Environmental Assessments: Phase I Environmental Site Assessment Process,* E1527-21 §8.1.2.

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POTENTIAL ON-SITE CONTAMINATION SOURCES

Airborne Off-Site Arsenic / Lead Migration:

Overview of Contamination Source. Beginning in 1888, the American Smelter and Refining Company ("ASARCO") operated a copper smelter in Ruston, located on the northwest side of Tacoma, Washington. The Smelter terminated operations in 1985 to the need for expensive air pollution control. At one time, the Smelter refined over 10% of the world's copper. This operation, now referred to as the *Asarco Tacoma Smelter,* operated a 571 foot tall smokestack through which they exhausted their smelter smoke – that contained heavy metals including arsenic and lead.

The smelting operations generated an arsenic and lead plume that covers 1,000 square miles. The *Asarco Tacoma Smelter Plume* is classified as a Superfund Cleanup Site. U.S. Environmental Protection Agency has described the contamination plume one of the country's most polluted sites.

Characteristics of Soil Contamination. The soil contamination varies in different areas due to the effects of: distance from the Smelter; wind currents; geographic features (such as elevation variations), the historical presence of trees and forests, and surficial disturbances such as construction, development, and landscaping. Generally, the presence of trees and foliage tended to reduce the concentrations of arsenic and lead that settled on the ground surface.

Overview of Extent of Contamination. In 2014 the *State of Washington Department of Ecology* ("WDOE") published *Buying and Selling Real Estate in the Tacoma Smelter Plume* (*Frequently Asked Questions*, WDOE Publication Number 14-09-085) which contained a map of the Tacoma Smelter Plume of the predicted levels of arsenic and lead contamination in soils. The map was based upon the information developed to date for the soil contamination highest 10% of parcels in the area. The map ranks areas as the *high zone* (over 100 ppm[22]); *high moderate zone* (40.1 to 100 ppm); *low moderate zone* (20 to 40 ppm); and *low zone* (less than 20 ppm).

Predicted Zone of Subject Property. According to the WDOE 2014 map of predicted levels of arsenic and lead, the subject Property is located in the *High Moderate Zone* with estimated arsenic levels between 40.2 to 100 ppm.

(Presumed) Asbestos-Containing Building Materials:

During the on-site Reconnaissance, the following materials were observed[23], including but

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[22] *PPM* is concentration in parts per million

[23] The Site Reconnaissance observations were performed by an Accredited AHERA Asbestos Building Inspector trained and Certified to determine the presence, condition, and need for Response Actions for Suspected and Presumed Asbestos-Containing Building Materials. However, the Site

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not limited to gypsum wall and ceiling surfacing materials, insulation, floor tiles and associated mastic and roofing materials. As defined in NESHAP §61.141, the observed materials may be classified as suspect regulated asbestos-containing building materials (ACBM"). Prior an activities that may disturb, contact, or remove the suspected materials, either they should be tested by an appropriated Certified Asbestos Building Inspector, or they should be treated as asbestos-containing.

No structures are present on the subject Property.

Formaldehyde:

Formaldehyde is an extremely popular chemical used in a variety of both building materials and furnishing products. Currently national usage is estimated in the billions of pounds per year. EPA has now classified formaldehyde as a "probable human carcinogen" suspected of inducing cancer in humans. Studies have shown that after installation, indoor formaldehyde levels require years of decline and reach residual background levels. During the off-gassing process, the indoor levels can be a significant source of irritation to hypersensitive individuals.

The formaldehyde product investigated within the scope of this Assessment is urea-formaldehyde foam insulation ("UFFI"), used in the 1970's primarily as wall cavity insulation. The release potential of UFFI from wall cavities is dependent upon factors such as; water-damaged walls, unpainted wall surfaces, or cracked paint or wall covering. While interior air sampling and analysis is the only conclusive method to delineate formaldehyde concentrations, visual and physical inspection of the subject Property indicate a virtually non-existent potential for UFFI contamination.

Lead-Based Paint:

In 1978 the Federal Government banned the use of lead-based paint in residential applications, however use in general industry continued at a decreased rate to the present. Lead-based paint presents a hazard through inhalation or ingestion of paint chips or vapor fumes. The greatest cumulative health threat is to young children, and for this reason the Department of Housing and Urban Development ("HUD") has promulgated lead standards and survey requirements for buildings affected by HUD funding. This HUD regulation represents the only Federal requirement for lead-based paint hazard management applicable to privately owned structures.

No structures are present on the subject Property.

Lead-Based Paint Pre-Renovation Limitations:

As controlled by the *Lead-Based Paint Pre-Renovation Rule*[6] renovations or repairs are regulated in residential housing constructed prior to January 1, 1978. The Lead-Based Paint Pre-Renovation Rule ("Lead PRE") applies with limited exceptions to all residential dwellings built before January 1, 1978[7]. The Rule requires anyone whose compensated work disturbs painted

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Reconnaissance activities were not an asbestos building survey, Good Faith Survey, or assessment pursuant to the regulatory requirements of AHERA.

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surfaces in regulated housing – including rental property owners and managers, general contractors, and special trades contractors – larger in size than two square feet of lead-based painted surfaces to: (i) distribute the pamphlet, *Protect Your Family From Lead In Your Home* [8], to the owners, occupants, and tenants before initiating the repairs or renovations; (ii) obtain confirmation of the receipt of this pamphlet; and (iii) retain those records for three years. The LBP Rules to not apply to the subject Property.

No structures are present on the subject Property.

Lead-Based Paint OSHA §1926.62 Regulations:

During the Site observations[24], suspected lead-based paint ("LBP") surfaces were not identified with paint in poor or delaminated condition. As defined in the OSHA *Lead Standard in Construction and General Industry*, and applicable State regulations, prior to any activity that may disturb suspect LBP surfaces, either an inspection should be performed by an appropriately qualified Inspector, or the materials should be handled as lead-containing. Additionally, as required by 29 CFR §1926.62, (i) a limited response action should be initiated where necessary, and (ii) potentially impacted employees and occupants should be provided training.

No structures are present on the subject Property.

Lead in Drinking Water:

Based upon the lack of developed structures at the Site, there is a low potential for any still existing interior plumbing to contain lead in the pipes or lead-based solder, based upon construction standards before 1987 (40 CFR §141.11). The presence or absence of elevated lead concentrations in the water can only be confirmed through laboratory testing. However, no current Federal regulations require individual property owners to test for lead in drinking water.

Micro Biological Contaminants:

The presence of micro biological organisms and their byproducts is ubiquitous throughout the indoor and outdoor environments. Mold, also known as fungi, are a species of micro biological organisms can detrimentally effect buildings via the presence of their spores, off gassing, and airborne suspension of the organisms themselves. In the presence of both excess moisture and a nutrient supply, molds can grow rapidly to produce larger colonies with adverse consequences.

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[24] The Lead-Based Paint Survey and Assessment was completed by a Federally Certified Lead Inspector (Certification No.3521-09-09-5377) and Federally Certified Lead Risk Assessor (Certification No.3522-09-09-5361), also Licensed in the State of Washington Lead Risk Assessment (Certification No.6084) as required under the Washington Administrative Code §365-230 and is certified to conduct Lead-based Paint activities pursuant to Washington Administrative Code §365-230-200.

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While it is generally accepted that in particular environments, molds can be allergenic, and occasionally infectious or toxic, there is both no clear scientific evidence to support the conclusions that the mere presence of micro organisms is in itself a recognized environmental condition, or that any threshold level exists of airborne organisms of byproducts above which a negative impact to human health will likely result [9]. In particular, the U.S. EPA has stated "no EPA or other federal limits have been set for mold or mold spores..."[10]

In spite of the lack of scientific data – in response to the growing public concern over the potential adverse health effects of mold exposure – a variety of public agencies and regulatory authorities have published recommendations and guidelines for the assessment and remediation of mold. In recognition of both the increased public awareness and scientific limitations regarding mold, the observations conducted on Site attempted to identify clearly known indicators of potential micro biological impact.

These readily observable indicators typically include: (i) obvious visual indications of micro biological organism growth in readily accessible areas; (ii) indicators of extensive or continued water intrusion or severe staining; (iii) secondary indicators such as smells and odors; and (iv) information obtained from the Key Site Manager and other knowledgeable personnel. Since the majority of micro biological growth tends to occur in enclosed, covered, and otherwise inaccessible building and interstitial spaces, the likelihood that micro organisms would not be observed even though present, is possible. As such, even though no readily visible observations or indicators of micro biological impact were observed during the Site visit, a micro biologically-based problem could be present at the Site, even though not observed.

No structures are present on the subject Property.

PCB-Containing Exterior Electrical Transformers:

The Assessor did not observed any leaking pole-mounted electrical transformers on the subject Property. All transformers are owned by the utility company, and not the responsibility of the Property owner.

Radon:

Radon is emitted by the natural breakdown and radioactive decay of uranium in rocks and soils, which then enters buildings through cracks in the foundation, sump pumps, areas around drainage pipes and other openings. In addition, radon may enter a structure as a water contaminant, natural gas contaminant, or off-gas by-product of building materials. Once inside an enclosed space, radon can accumulate. No visual estimation technique exists that accurately predicts the potential radon risk within a building. The radon risk is a function of site location, soils composition, building construction, foundation integrity, and previous landfill practices. Actual physical testing of a building is the only way to accurately determine the radon levels. Radon health risks can be controlled by recognizing the potential for a problem, by testing and by reduction of radon levels in the building. In response to the unknown health risks of radon, the US EPA conducted a radon survey that attempted to generalize the radon health risks by County.

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Radon is emitted by the natural breakdown and radioactive decay of uranium in rocks and soils, which then enters buildings through cracks in the foundation, sump pumps, areas around drainage pipes and other openings. In addition, radon may enter a structure as a water contaminant, natural gas contaminant, or off-gas by-product of building materials. Once inside an enclosed space, radon can accumulate. No visual estimation technique exists that accurately predicts the potential radon risk within a building. The radon risk is a function of site location, soils composition, building construction, foundation integrity, and previous landfill practices. Actual physical testing of a building is the only way to accurately determine the radon levels. Radon health risks can be controlled by recognizing the potential for a problem, by testing and by reduction of radon levels in the building. In response to the unknown health risks of radon, the US EPA conducted a radon survey that attempted to generalize the radon health risks by County.

The Property is located in Pierce County, Washington. The U.S. Environmental Protection Agency ("USEPA") with assistance from the State of Washington, has sampled the radon concentrations throughout the State and classified those measurements based upon the risk to human health. the following matrix was developed by the USEPA:

Radon Testing Results
Pierce County, Washington

Area	Average Activity	% < 4 pCi/L	% 4-20 pCi/L	% < 20 pCi/L
1st Floor / Living	0.334 pCi/L	99%	1%	0%
2nd Floor / Living	0.800 pC/L	100%	0%	0%
Basement	0.538 pC/L	97%	3%	0%

Based upon these reported results, the County of Pierce has been rated by the U.S. Environmental Protection Agency as a Radon Zone3; the anticipated generalized level of Site radon is less than 2 Pico curies per liter ("pC/L"). Radon response actions are not indicated.

Underground Storage Tanks:

Careful observations were made during the Site reconnaissance for visual indicators of underground storage tanks, as typically exhibited by: fill pipes, overflow pipes, or vent pipes; areas of abnormal or heavy surficial staining; manways, manholes, or access covers; abandoned concrete saddles for gravity racks; concrete pads not homogeneous with surrounding surfaces; concrete build-up areas potentially indicating the locations of former pump islands; abandoned pumping equipment or gasoline pumps; or areas of non-homogeneous patching, new fill areas, piles of fill. No such indicators were observed during the Site Reconnaissance.

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Vapor Intrusion:

The subject and adjoining properties were evaluated for Vapor Intrusion employing the *Standard Guild for Vapor Encroachment Screening on Property Involved in Real Estate Transactions*, ASTM Standard Practice designation E2600-15 approved October 1, 2015

The term *Vapor Encroachment Screen* ("VES") is an evaluation of a Property to identity a Vapor Encroachment Condition ("VEC"). The objective is to identify the:

> The presence of likely presence of COC [chemicals of concern] vapors in the vadose zone of the *target property* (TP) caused by the release of vapors in the vadose zone of the *target property* (TP) caused by the release of vapors from contaminated soil and/or groundwater either on or near the TP as identified by Tier 1 (see section 8) or Tier 2 (see section 9) procedures.

The VES process is a two-tiered screen process. The purpose of this Investigation is to determine if a *Vapor Encroachment Condition* [25]effects the subject Property. The procedure is to determine of a VEC exists or does not exist.

TIER 1 SCREENING PROCESS

The Tier 1 Screening begins with the default AOC[26] defined by the appropriate minimum search distances adjusted as appropriate for local conditions, and then determining if known or suspected contaminated properties with COCs within the established AOC.

The default Area of Concern is one-third of a mile around the Target Property for the Contaminants of Concern and one-tenth of a mile for petroleum hydrocarbons Contaminants of Concern. The Area of Concern is measured from the Target Property boundary to the contaminated property with known or suspected Contaminant of Concern contamination of soil or groundwater.

Area of Concern Adjustments

The default Area of Concern is one-third of a mile around the Target Property for the Contaminants of Concern; however, the distance for petroleum hydrocarbons is one-tenth of a mile. The term *appropriate minimum search distance* is used in lieu of radius to include

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[25] *Vapor Encroachment Condition* ("VEC") presence or likely presence of COC vapors in the vadose zone of the *TP* caused by the vapors from contaminated soil and/or groundwater either on or near the *TP* as identified by the Tier1 (see Section 8) or Tier 2 (see Section 9) procedures in this guide. (§ 3.2.37).

[26] *Area of Concern* ("AOC") defined by the *appropriate minimum search distance* adjusted as appropriate. When the AOC is defined by the *appropriate minimum search distance* without adjustment, the AOC is the default *AOC*. (§ 3.2.3)

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irregularly shaped properties.

If groundwater[27] flow is known or can be inferred, the default AOC in the down-gradient may be reduced to the area within the critical distance. The default Area of Concern in the down-gradient direction may be reduced to the area within the critical distance (i.e., 100 feet). The Area of Concern in the cross-gradient direction may also be reduced, depending upon the critical distance and the width of the COC-contaminated plume associated with a known or likely COC-contaminated property.

Other Factors of Consideration

Gradient and Subsurface Changes. The closer a known or suspected COC-contaminated property is to the target Property, the greater the probability for a VEC to exist, subsurface conditions being equal. When evaluating the location of a known or suspected *COC-contaminated properties* within the established AOC, the Environmental Professional should also take into consideration locations where the existing gradient can change significantly such as seasonal influences, tidal effects, and others. Soil gas migration maybe independent of the groundwater gradient. (§ 8.5.1.3 (1)).

Vapor Conduits, Design, and Aging. Man-made conduits[28] such as utility corridors, sanitary sewers, and storm sewers and significant natural conduits such as Karst terrain or fractured bedrock can sometimes create a sufficiently direct partway from a vapor contaminant source to the subsurface of the Target Property such that vapor encroachment may be a concern. Vapor encroachment may also be influenced by the age and design of infrastructure features associate with these conditions.

Site Cleanup Status. The date of a prior release, the volume or quantity of the COC release, and the response measures implement for the release.

If the linear distance from the nearest edge of a Contaminated Plume to the nearest structure on the subject Property – or to the subject Property boundary if there are no structures on the subject Property – or less than 100 feet, then the condition is considered to be a potential Vapor Encroachment Condition ("VEC"). If the Chemicals of Concern are dissolved petroleum hydrocarbons, the distance must be less than 30 feet in order for a potential VEC to exist.

Tier 1 Conclusions

Once the Area of Concern is established, Tier 1 screening involves evaluating whether any known or suspected properties that may be associated with COCs are located within the established Area of Concern. The Tier 1 Conclusion from the screen is (1) a Vapor Encroachment Condition

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[27] *Groundwater* – water contained in the pore spaces of saturated geological media. (§ 3.2.15)

[28] *Conduit* – preferential pathway along which vapors released from contaminated soil and/or groundwater may migrate onto the *TP* or away from the *TP*. (§ 3.2.6)

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exists, or (2) a Vapor Encroachment Condition does not exist.

TIER 2 SCREENING PROCESS

Tier 2 focuses on characteristics of the contaminated plume associated with contaminated properties and the proximity of said contaminated plume to the *TP*. The information to conduct a Tier 2 screen is often found in state regulatory files and may also be obtained fro other available documents or information.

Vapor Encroachment Evaluation:

This Evaluation has not identified the presence of a Contaminated Plume within the ASTM specific distance as delineated in E 2600-08 §§ 8.5.1 - 8.5.3.

POTENTIAL ON-SITE HISTORICAL CONTAMINATION SOURCES

The Historical Usage Information research activities included a review of Standard Historical Sources, including but not limited to: (i) aerial photographs, (ii) fire insurance maps, (iii) property tax files, (iv) recorded land title records, (v) United States Geological Services topographical maps, (vi) local street directories, (vii) building department records, (viii) zoning or land use records, and (ix) other historical sources[29]. The historical information contained in this Section may also include reviews of applicable Agency records, files, and database information.

Activity and Use Limitations:

Activity and Use Limitations ("AUL") include both legal and physical or engineering controls that may be required by an authoritative agency. Agencies, organizations, and jurisdictions may define or utilize these terms differently. An AUL is often recorded in land title records. AUL information may often be recorded in the restrictions of record on the title, rather than a within the chain of title.

"The term AUL is...to include both legal (that is, institutional) and physical (that is, engineering) controls within its scope. Other agencies, organizations, and jurisdictions may define or utilize these terms differently (for example, EPA and California do not include physical controls within their definitions of "*institutional controls*." Department of Defense and International County / City Management Association use "Land Use Controls." The term "land use restrictions" is but not

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[29] As defined in the *ASTM Standard Practice for Environmental Site Assessments E1527-13* (§ 8.3.4.9), "other historical sources" can include: miscellaneous maps, newspaper archives, internet sites, community organizations, local libraries, historical societies, current owners or occupants of neighboring properties, or records and files of the Property Owner or occupants.

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defined in the *Brownfields Amendments*). ASTM E1527-21 § 3.2.2. Note 1.

The subject Property is not controlled by any Activity or Use Limitations.

Controlled Recognized Environmental Conditions:

A Controlled Recognized Environmental Condition ("CREC") resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed by remain in place subject to the implementation of required controls. A "controlled recognized environmental condition – a recognized environmental condition affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities with *hazardous substances* or *petroleum products* allowed to remain in place subject to implementation of controls *property use* limitations limitation or activity and use limitations. (ASTM E1527-21 § 3.2.7)

A condition identified as a Controlled Recognized Environmental Condition does not imply that the Assessment has evaluated or confirmed the adequacy, implementation, or continued effectiveness of the required control that has been, or is intended to be implemented. For example, if a leaking underground storage tank has been cleaned up to a "commercial use" or "Commercial - Industrial" regulatory standard, but does not meet the most unrestricted residential standard, this is considered a Controlled Recognized Environmental Condition; the "control" is represented by the restriction that the property remain commercial - industrial. A Controlled Recognized Environmental Condition was not identified in connection with the subject Property.

Historical Recognized Environmental Condition:

As defined under the ASTM Phase I Standard Practice, a Historical Recognized Environmental Condition is a past release of any hazardous substance or petroleum product that has occurred in connection with the Property and has been addressed to the satisfaction of the applicable regulatory agency or meeting the unrestricted residential use criteria established by a regulatory authority, without subjecting the property to any required controls such as property use restrictions, activity and use limitations, institutional controls, or engineering controls – at the time of the completion of the Environmental Site Assessment. (See, ASTM E1527-21, § 3.2.0, *Definitions*[11]). The final determination will be influenced by the current impact of the Historical Recognized Environmental Condition ("HREC") on the property. For example, if a past release of any hazardous substances or petroleum products has occurred in connection with the property and has been remediated, with such remediation accepted by the responsible regulatory agency, this condition shall be considered an HREC.

The prior Site activities and agency interactions, as defined above, do not represent such an Historical Recognized Environmental Condition. Had such conditions were present, additional investigation in that regard would have been performed.

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Property Use limitations:

The most recent *ASTM E-1527-21 Standard Practice for Environmental Site Assessments* promulgated a new recognized environmental condition defined as a "Property Use Limitation". This condition is "... a limitation or restriction on current or future use of a *property* in connection with a response to a past *release* in accordance with the applicable regulatory authority or authorities that allows *hazardous substances* or *petroleum products* to remain in place at concentrations exceeding unrestricted use criteria." (Refer to ASTM E1527-21 § 3.2.69).

A Property Use Limitation was not identified at the subject Property.

Regulatory Agency Records Information:

The Phase I Environmental Assessment activities included a review Standard Historical Sources[30] for: (i) reasonably ascertainable historical documents and records; (ii) commercially available environmental database information, and when appropriate, (iii) in person review by Aerotech personnel of regulatory Agency files and other Agency information. The following information was available from the State of Washington Department of Ecology:

Former Pioneer Museum
c/o: Ms. Sharon Tanner
2301 - 23rd Street Southeast
Puyallup, Washington 98373

Facility / Site ID.9490
ISIS Cleanup Site ID.11739

On June 27 and again on 28, 2010, an arson fire occurred primarily at the Western Washington Pioneer Museum that destroyed most of the Building. Subsequently on May 10, 2010. T h e previous sampling of the Site was performed by Ms. Sharon Bell (*Environmental Specialist*, Tacoma-Pierce County Health Department). This investigation reported:

> "The results indicated the presence of gasoline range hydrocarbons (GRO), likely mineral spirits, and lube oil in concentrations significantly above the state's cleanup levels: GRO [gasoline] was detected at 1900 ppm (state cleanup level is 100 ppm); lube oil ranged from 3100 to 37,000 ppm (state cleanup level is 2000 ppm). A variety of pesticides and herbicides were also detected," [electronic communication by Sharon Bell to Joshua Gunia (Ms. Tanner grandson) , "Drums at 2301 23rd St E" dated May 10, 2011"].

[30] *Standard Historical Sources* include sources delineated in § 8.3.4 of the ASTM *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* ASTM E 1527-13, including: (i) aerial photographs, (ii) Fire Insurance maps (commonly referred to as "Sanborn Maps"), Property tax files, (iii) recorded land title records, (iv) USGS topographical maps, (v) local street directories (commonly referred to as "Polk Directories", building department records, (vi) zoning / land use records, (vii) and other historical records as discussed in § 8.3.4.9.

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All of the samples were near-surface, at locations that visually contained: (1) fire debris visible on the ground; (2) within one foot of leaking drums, and (3) visual evidence of black staining typical of surficial staining of petroleum products. A second area of concern was the north-northeastern edge of the Retention Pond.

POTENTIAL OFF-SITE CONTAMINATION: SOURCES AND RECEPTORS

> An *adjacent property* is defined as any real property located within 0.25 mile of the subject Property's border. An *adjoining property* is defined as any real property whose border is contiguous or partially contiguous with the subject Property, or that would be if the properties were not separated by a roadway, street, public thoroughfare, river, or stream.

Potential Adjacent and Adjoining Property Contamination Receptors:

Environmentally sensitive receptors were investigated within a thousand feet of the borders of the subject Property. The sensitive receptors are materials or structures particularly susceptible to environmental damage or stress from migrating contamination. The major receptor groups investigated were water supplies, surface water bodies, residential structures, and other public receptors. During the course of on-site visual and physical inspection, no indicators of sensitive receptor contamination from the subject Property were observed.

Potential Adjacent and Adjoining Property Contamination Sources:

Environmentally sensitive sources were investigated within a thousand feet of the borders of the subject Property. The sensitive sources are activities particularly susceptible to becoming a source for environmental damage or stress from the generation of migrating contamination. During the course of on-site visual and physical inspection, no indicators of contamination sources to the subject Property were observed.

Database Search Range and Modifications

Approximate Minimum Search Range:

"The area for which records must be obtained and reviewed pursuant to Section 8 [*Records Review*} subject to the limitations provided in that Section. This may include areas outside the subject Property an shall be measured from the nearest subject Property boundary. The term is used in lieu of *radius* to include irregularly shaped properties." ASTM E1527-21 § 3.2.7.

Minimum Records Search Radius Adjustments:

When allowed by 8.2.2, the appropriate minimum search distance for a particular record may ne adjusted at the discretion of the environmental professional. Factors to consider in adjusting the appropriate

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minimum search distance include: (1) the density (for example, urban, suburban,, or rural of the setting in which the subject property is located; (2) the distance that the hazardous substances or petroleum products are likely to migrate are likely to migrate based on local geologic or hydrogeologic conditions; (3) the subject Property type; (4) existing or past uses of surrounding properties, and other reasonable factors. The justification for each adjustment and the approximate minimum search distance actually used for any particular record shall be explained in the report." ASTM E1527-21 § 8.1.4.

ENVIRONMENTAL DATABASE INFORMATION

For the Scope of this Analysis, properties are defined and categorized based upon their physical proximity to the subject Property. An *adjacent property* is any real property located within 0.25 mile of the subject Property's border. An *adjoining property* is any real property whose border is contiguous or partially contiguous with the subject Property, or that would be if the Properties were not separated by a roadway, street, public thoroughfare, river, or stream. These definitions are consistent with ASTM Standards.

Database Search Range and Modifications

Approximate Minimum Search Range:

"The area for which records must be obtained and reviewed pursuant to Section 8 [*Records Review*} subject to the limitations provided in that Section. This may include areas outside the subject Property an shall be measured from the nearest subject Property boundary. The term is used in lieu of *radius* to include irregularly shaped properties." ASTM E1527-21 § 3.2.7.

Minimum Records Search Radius Adjustments:

When allowed by 8.2.2, the appropriate minimum search distance for a particular record may ne adjusted at the discretion of the environmental professional. Factors to consider in adjusting the appropriate minimum search distance include: (1) the density (for example, urban, suburban,, or rural of the setting in which the subject property is located; (2) the distance that the hazardous substances or petroleum products are likely to migrate are likely to migrate based on local geologic or hydrogeologic conditions; (3) the subject Property type; (4) existing or past uses of surrounding properties, and other reasonable factors. The justification for each adjustment and the approximate minimum search distance actually used for any particular record shall be explained in the report." ASTM E1527-21 § 8.1.4.

Review of Federally Reported Environmental Data:

This review of the existing compilation of the Federal environmental databases attempts to identify environment problem sites, activities, and occurrences from the records and reports of the U.S. Environmental Protection Agency ("US EPA"). A detailed listing is included in the Appendix, *Environmental Databases*.

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National Priorities List ("NPL") of Superfund Sites:

The NPL is the EPA's database of hazardous waste sites currently identified and targeted for priority cleanup action under the Superfund program. An ERIS search of the most recent National Priorities List revealed no sites within the Property's database search range.

Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA") of 1980:

Mandated as part of the 1980 Superfund Act, the CERCLIS (Comprehensive Environmental Response, Compensation and Liability Information System) list is an EPA compilation of the sites investigated or currently being investigated for a release or potential release of a regulated hazardous substance under the CERCLA regulations. An ERIS search of the most recent CERCLIS database reported no sites within the Property's database search range.

CERCLIS No Further Remedial Action Planned ("NFRAP") Sites:

The No Further Remedial Action Planned Report – also commonly known as the CERCLIS Archive report – contains information pertaining to sites which have been removed from the U.S. EPA CERCLIS database. NFRAP sites may be sites where, following an initial investigation, either not contamination was found, contamination was discovered and immediately remediated, or the contamination concentrations of threat to human health or the environmental was not serious enough to warrant Federal intervention, Superfund action, or NPL consideration. An ERIS review of the most recent designated database search range revealed no NFRAP sites within the selected and designated distance parameters.

Superfund Enterprise Management System Sites ("SEMS"):

The Superfund Enterprise Management System ("SEMS") tracks hazardous waste sites, potentially hazardous waste sites, and remediation activities performed in support of the EPA Superfund Program across the United States. The list formerly known as CERCLIS was renamed to SEMS by the US EPA. The database additionally contains sites which are either proposed to or on the National Priorities List ("NPL") and the sites which are in the screening and assessment phase for possible inclusion on the NPL. An ERIS review of the most recent SEMS database revealed no sites within one-quarter of a mile of the Property.

Superfund Enterprise Management System Sites Archives ("SEMS-ARCHIVE"):

The Superfund Enterprise Management System Archives ("SEMS-ARCHIVE") tracks sites that have no further interest under the Federal Superfund Programs based on available information. This list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the U.S. EPA in 2015. The database additionally contains sites which are either proposed to or on the National Priorities List ("NPL") and the sites which are in the screening and assessment phase for possible inclusion on the NPL. An ERIS review of the most recent SEMS database revealed no sites within one-quarter of a mile of the Property.

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RCRA Corrective Action Order Sites ("CORRACTS"):

The CORRACTS database contains information concerning the RCRA facilities that have conducted, or are currently conducting a Corrective Action. This occurs when a RCRA Corrective Action Order is issued pursuant to RCRA §3008(h), when there has been a release of a hazardous waste or constituents into the environmental from a RCRA or potentially RCRA regulated facility. Additionally, Corrective Actions may be imposed as a prerequisite to receiving or maintaining a RCRA TSDF operating permit. An ERIS review of the most recent CORRACTS sites reported no sites within the appropriate distances.

Resource Conservation and Recovery Act ("RCRA") Facilities:

The RCRA program identifies and tracks hazardous waste from the generation source to the point of ultimate disposal. The RCRA facilities database is the composite of reporting facilities that generate, store, transport, treat, or dispose of controlled or hazardous waste. The **RCRA Large Quantity Generators List ("RCRA LQG")** Database lists sites that generate more than 1,000 kilograms of hazardous waste or 1 kilogram of acutely hazardous water per month. The **RCRA Small Quantity Generators List ("RCRA SQG")** Database identifies sites that generate hazardous or acutely hazardous waste under the *RCRA LQG* definitions. Generators that occasionally generate or generate amounts below the defined *RCRA LQG* are classified and identified on the **RCRA Very Small Generators List ("RCRA VSQG")**. Additionally, a *VSQG* may not accumulate more than 1,000 kilograms of hazardous waste at any time. The **RCRA Non-Generator List ("RCRA Non Gen")** identifies sites that may have generated hazardous waste in the past, but currently do not generate any hazardous waste.

An ERIS review of the most recent database identified the following sites within their appropriate database search ranges:

RCRA LQG Database:	no sites identified
RCRA SQG Database:	no sites identified
RCRA VSQG Database:	no sites identified
RCRA Non Gen Database:	no sites identified

Facility Index System / Facility Registry System ("FINDS") Facilities:

The Facility Index System contains both facility information and "pointers" to other sources that contain more facility detail. This FINDS database is a compilation of the Permit Compliance System ("PCS"); Aerometric Information Retrieval System ("AIRS"); DOCKET Enforcement Cases; Federal Underground Injection Control ("FURS"); Federal Facilities Information System ("FFIS"); PCB Activity Data System ("PADS"); and state listings of laws and statutes. An ERIS search of the most recent FINDS facilities database found no FINDS facility within one-eighth of a mile of the subject Property.

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Review of State of Washington Reported Environmental Data:

This review of the existing compilation of the State environmental databases attempts to identify environment problem sites, activities, and occurrences from the records and reports of the applicable State Agencies. A detailed listing is included in the Appendix.

State of Washington - Registered Underground Storage Tank ("UST") Sites:

Underground Storage Tanks are regulated under Subtitle I of RCRA and must be registered with the appropriate State agency. The State of Washington requires registration through the Department of Ecology ("WDOE"). An ERIS search of the most recent State UST database found no UST sites within one-eighth mile of the subject Property.

State of Washington - Leaking Underground Storage Tank ("LUST") Incident Location Sites:

Underground Storage Tank incident releases are regulated under RCRA and must be reported within 48 hours to the State of Washington Department of Ecology. The Agency maintains a database of all reported LUST incident sites. The LUST database identified no LUSTs site within one-eighth of a mile of the subject Property.

Independent Cleanup Response ("ICR")

The State of Washington Department of Ecology ("WDOE") maintains a list of facilities that have submitted Independent Remedial Action reports to the Department; the Reports may have been submitted from the Site Owner or a consultant. These cleanup actions have been conducted without Department oversight or approval and are not under an order of decree. "Independent Cleanup" is historical terminology for the WDOE Voluntary Cleanup Program ("VCP"). The IRC Databeas is no longer updated; current records are maintained in the VCP Program Database. An ERIS search of the most recent ICR Database identified one ICR Site within the appropriate database search range.

The identified ICR Site is the subject Property.

Confirmed and Suspected Contaminated Sites List ("CSCSL")

The State of Washington Department of Ecology ("WDOE") maintains a list of facilities that includes sites being cleaned up, waiting to be cleaned up, or that need additional investigation. Most contaminated sites are handled by the WDOE's Toxic Cleanup Program and are cleaned up and issued closure under Washington's environmental cleanup regulation, the Model Toxics Control Act ("MTCA"). Property owners may cleanup may cleanup sites independently or under WDOE supervision; and the WDOE can also clean up sites. The CSCSL database is equivalent to the federal CERCLES database. An ERIS search of the most recent ICR Database identified no ICR Sites within the appropriate database search range.

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The identified CSCSL Site is the subject Property.

State of Washington - Voluntary Cleanup Program ("VCP") Sites:

The State of Washington Department of Ecology ("Ecology") has received remedial action reports from site owners and operators for Response Actions that were conducted without Department approval or oversight, and not under the requirements of an order or decree. These reports were received before 1993 were entered into the Independent Cleanup Program, and starting January 1, 1993, were entered into the Voluntary Cleanup Program. An ERIS search of the most recent Department of Ecology VCP database found no VCP sites within one-eighth mile of the subject Property.

State of Washington Waste Landfill Facilities:

The State Solid Waste Landfill Facilities ("SW/LF") listing is the sites identified by the State of Washington Department of Ecology, Waste Management Division, as either currently operating or previously identified as a solid waste landfill. This classification can be a result of either RCRA Part B permitting or prior identification by the Board. A search of the March 2021 database revealed no SWLF site within one-quarter mile of the Site.

State of Washington - Environmental Report Tracking System ("ERTS") Sites:

The State of Washington Department of Ecology ("Ecology") maintains a list of reported environmental incidents received from the US EPA, county, and local agencies and sources known as the Environmental Report Tracking System ("ERTS") database. Every incident entered into the ERTS is assigned a unique ERTS Number. The ERTS system generally contains details of the reported incident including, but not limited to: initial contact and their description of the incident, responsible Agency and responding personnel, actions taken in response to the incident, and recommendations for further action if required. An ERIS search of the most recent Department of Ecology ERTS database found no incident sites within at, or adjoining the subject Property.

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STATEMENT OF THE ENVIRONMENTAL PROFESSIONAL

Statement of Quality Assurance

I have performed this Assessment in accordance with generally accepted environmental practices and procedures, as of the date of this Report. I have employed the degree of care and skill ordinarily exercised under similar circumstances by reputable environmental technologists practicing in this area. The conclusions contained within this Assessment are based upon site conditions I observed or were reasonably ascertainable and present at the time of my inspection.

The objective of this Environmental Site Assessment was to ascertain the potential presence or absence of environmental releases or threatened releases that could impact the subject Property, as delineated by the Scope of Work. The Scope of this Assessment does not purport to encompass every report, record, or other form of documentation relevant to the Property being evaluated. Additionally, this Assessment does not include or address reasonably ascertainable Environmental Liens currently recorded against the Property.

The procedure was to perform reasonable steps in accordance with the existing regulations, currently available technology, and generally accepted engineering practices in order to accomplish the stated objective.

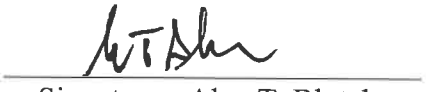
The conclusions and recommendations stated in this Report are based upon personal observations made by myself and other employees of Aerotech, and also upon information provided by others. I have no reason to suspect or believe that the information provided is inaccurate.

Statement of Regulatory Compliance

I have performed this Assessment in compliance with requirements set forth in the *Standards and Practices for All Appropriate Inquiries; Final Rule* ("AAI"); U.S. EPA, 40 CFR Part 312, 70 FR 66070, November 1, 2005.

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in § 312.10 of this part. I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Signature of Environmental Professional:



Signature - Alan T. Blotch:

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Environmental Assessment Report Limitations:

The enclosed Phase I Environmental Site Assessment has been performed for the exclusive use of the Client(s) for the transaction at issue concerning:

SUNSET POINTE DEVELOPMENT
2301 - 23rd Avenue Southeast
Puyallup, Washington 98372

This Assessment has been performed in accordance with generally accepted environmental practices and procedures, as of the date of the Report. All services have been performed employing that degree of care and skill ordinarily exercised under similar circumstances by reputable environmental technologists practicing in this, or similar localities. No other warranty or guarantee, expressed or implied, is made or offered.

Limitations. The conclusions and recommendations stated in this Report are based upon observations made by employees of Aerotech Environmental Consulting, Inc. and also upon information provided by others. We have no reason to suspect or believe that the information provided is inaccurate. However, we cannot be held responsible for the accuracy of the information provided to us by others. The Scope of this Assessment does not purport to encompass every report, record, or other form of documentation relevant to the Property being evaluated.

This Assessment does not include or address reasonably ascertainable Environmental Liens currently recorded against the subject Property.

The observations contained within this Assessment are based upon site conditions readily visible and present at the time of our Site inspection. These site observations are unable to specifically address conditions of subsurface soil, groundwater, or underground storage tanks, unless specifically mentioned. This Phase I Environmental Site Assessment does not attempt to address the past or forecast the future Site conditions.

Reliance Upon Report. This Report is prepared for the exclusive use and reliance upon by the named Client(s) in this Report. Only Aerotech, with the written approval of the Client(s), can assign the Reliance Interest for this Report to parties other than the named Client(s). Any use of, or reliance upon the Report by a party other than those specifically named in this Report, shall be solely at the risk of such third party and without recourse against Aerotech, or its affiliates or subsidiaries, or their respective employees, officers, or directories, regardless of whether the action in which recover of damages is sought is based upon contract, tort, (including the sole, concurrent, or other negligence and strict liability of Aerotech), statute, or otherwise. This Report shall not be used by a party that does not agree to be bound by the above statement.

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REFERENCES AND CITATIONS

1. See, *Amendment to Standards and Practices For All Appropriate Inquires Under CERCLA: Final Rule*, 78 Federal Register 79319, dated December 30, 2013.

2. For the purposes of this Assessment, information is considered reasonably ascertainable if it is (1) publicly available, (2) obtainable from its source within reasonable time and cost constraints, and (3) practically reviewable. The length of time required to obtain information from the City Building and Zoning Department is considered to be reasonable.

3. *Solid Waste:* defined as garbage, refuse, sludge, and other discarded material including solid, semi-solid, and contained gaseous waste per RCRA 42 USC §6903(27). For visual assessment purposes, any material that is discharged is a solid waste. A majority of the regulatory exclusions do not apply to discharges made within a structure.

4. *Regulated Substance:* defined as a substance that is (i) regulated under RCRA via direct definition; or (ii) regulated under CERCLA or the Clean Air Act, that may become subject to RCRA regulations as a result of the CERCLA classification.

5. *Disposal:* defined as the discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste or hazardous waste into or on any land or water so that such solid waste of hazardous waste or constituent thereof may enter the environment or be emitted into the air or discharged into the waters, including ground waters, per RCRA 42 USC §6903(3).

6. Refer to, *Federal Register* Volume 61 Number 9064, March 6 1996, *Lead; Requirements for Disclosure of Known Lead-Based Paint and/or Lead-Based Paint Hazards in Housing*.

7. EPA and HUD consider "housing constructed before 1978" to mean housing for which a construction permit was obtained before January 1, 1978. If no permit was obtained, then housing in which construction was started before January 1, 1978.

8. The Lead PRE required the distribution of the pamphlet *Protect Your Family From Lead In Your Home*, available from the U.S. Environmental Protection Agency, U.S. Consumer Product Safety Commission, and the U.S. Department of Housing (Publication No. EPA-K-99-001). Contact: (800) 424-LEAD or www.epa.gov/lead.

9. The American Conference of Governmental Industrial Hygienists has concluded that there are no mandatory numerical limits against which investigators can compare measurements of air or source concentrations for the majority of substances of biological origin that are associated with building-related exposures.

10. See, U.S. EPA Publication: *A Brief Guide to Mold, Moisture, and Your Home*, page 13, Publication No. EPA 402-K-02-003, 2002.

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INTERVIEWS WITH KNOWLEDGEABLE PARTIES

Qualification(s) of Knowledgeable Parties

Knowledgeable parties are those persons who may be aware of, have good or actual knowledge of, or: (1) the physical characteristics of the subject Property **(§10.5.1)**; (2) the prior occupant(s) and uses of the subject Property; (3) the current occupant(s) of the subject Property; (3) any specialized knowledge or experience that may be material to a Recognized Environmental Condition that may effect the subject Property **(§6.3)**; (4) actual knowledge of any Environmental Lien in connection with or encumbering the subject Property **(§6.4)**; (5) knowledge of an Activity or Use Limitations in connection with the subject Property **(§6.4)**; (6) any pending, threatened, or past litigation relevant to hazardous substances or petroleum products in, on, or from the subject Property; (7) any pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on or from the subject Property; ....(8) any notices from any governmental agency regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products that may effect the subject Property.

Key Site Manager Identification

The Key Site Manager is the person identified by the owner or operator of the property as having good knowledge of the uses and physical characteristics of the property. **(§3.2..47)** Prior to the Property Reconnaissance, the Property Owner shall be asked to identify the Key Site Manager. **(§10.5.1)**

If the User is the current Property Owner, the User has the obligation to identify a Key Site Manager, even if it is the User is himself or herself. **(§10.5.10)**

Key Site Manager Interview

If a Key Site Manager is identified, the Environmental Assessor conducting the Site Reconnaissance shall make at least one reasonable attempt (in writing or by telephone) to arrange a mutually convenient appointment for the Site Reconnaissance when the Key Site Manager agrees to be present. If the attempt is successful, the Key Site Manager shall be interviewed in conjunction with the Site Reconnaissance and requested to complete verbally or answer in writing the questions contained within the *Environmental Questionnaire*.

If such attempt is unsuccessful, when performing the Site Reconnaissance the Environmental Assessor shall inquire whether an identified Key Site Manager (if any) or if a person with good knowledge of the uses and physical characteristics of the subject Property is available to be interviewed at that time; if so, that person shall be interviewed. In either situation, it is within the discretion of the Environmental Assessor to decide which questions to ask before, during, or after the Site Reconnaissance or in some combination thereof. **(§10.5.1)**

User Identification

The User is the person seeking to rely upon the Phase I Environmental Site Assessment of the subject Property. A User may include, without limitation, a potential Purchaser of subject Property, a potential tenant of the subject Property, the Owner of the subject Property, a lender, or a Property Manager. **(§3.2.98)**

User Interview

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The User has specific obligations for completing a successful application of this Practice. **(§3.2.98)** The User should provide to the Environmental Assessor: (1) any specialized knowledge or experience that is material to Recognized Environmental Conditions in connection with the subject Property **(§6.3)**; (2) actual knowledge of any environmental lien encumbering the subject Property; and (3) actual knowledge of any Activity or Use Limitation encumbering the subject Property **(§6.4)**.

The User should communicate any information based on such knowledge or experience to the Environmental Assessor before the Assessor conducts the Site Reconnaissance. **(§6.4)**

User - "the Party seeking to use the Practice E1527-13 to complete and environmental site assessment of the property. A user may include, without limitation, a potential purchaser of property, a potential tenant of the property, the owner of the property, a lender, or a property manager. The user has specific obligations for completing a successful application of this practice outlined in Section 6." §3.2.98. "If the user has any specialized knowledge or experience that is material to recognized environmental conditions in connection with the property, the user should communicate any information based on such knowledge or experience to the environmental professional. The user should do so before the environmental professional conducts the site reconnaissance." §6.3. "*Actual Knowledge of the User* – If the user has actual knowledge of any environmental lien or AULs encumbering the property or in connection with the property, the user should communicate such information to the environmental professional. The user should do so before the environmental professional conducts the site visit." §6.4

"6.2 *Review of Title and Judicial Records for Environmental Liens and Activity and Use Limitations (AULs)*... Any environmental liens and AULs [activity and use limitations] known to the user should be reported to the environmental professional conducting a Phase I Environmental Site Assessment. Unless added by a change in the scope of work to be performed by the environmental professional, this practice does not impose on the environmental professional the responsibility to undertake a review of recorded land titles and judicial records for environmental liens and AULs. " §6.2

"6.8 *Other* – Either the user shall make known to the environmental professional the reason why the user wants to have the Phase I Environmental Site Assessment performed or, if the user does not identify the purpose of the Phase I Environmental Assessment, the environmental professional shall assume the purpose is to qualify for an LLP to CERCLA liability and state this in the report." §6.8

"10.7.1 User – If the person to be interviewed is the user (the person on whose behalf the Phase I Environmental Site Assessment is being conducted), the user has an obligation to answer all questions posed by the person conducting the interview, in good faith, to the extent of his or her actual knowledge or to designate a key site manager to do so. If answers to questions are unknown or partially unknown to the user or such key site manager, this interview shall not thereby be deemed incomplete." §10.7.1

Incomplete Interviews

While the Environmental Assessor conducting the interview(s) has an obligation to ask questions, in many instances the person to whom the questions are addressed will have no obligation to answer them. Additionally, incomplete answers will be recorded as received.
(§10.7)

If the User of the Phase I Environmental Site Assessment is not available or not identified, the Environmental Assessor shall assume that the purpose of the Assessment is to qualify for an LLP to

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CERCLA liability. Such an assumption, if made by the Environmental Assessor, shall be stated in the Assessment. **(§10.7.1)**

"10.9 *Proceedings Involving the Property* – Prior to the site visit, the property owner, key site manager (if any is identified), the user (if different from the property owner) shall be asked whether they know of: (1) any pending, threatened, or past litigation relevant to hazardous substances or petroleum products in, on, or from the property; (2) any pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on or from the property; and (3) any notices from any governmental agency regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products." §10.9

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TERMS AND DEFINITIONS

(Effective April 1, 2019)

Description of Terms Specific to this Report

activity / use limitations Legal or physical restrictions or limitations on the use of, or access to, a site or facility: (1) to reduce or eliminate potential exposure to hazardous substances or petroleum products in the soil, soil vapor, ground water, or surface water on the property, or (2) to prevent activities that could interfere with the effectiveness of a response action, in order to ensure maintenance of a condition of no risk to public health or the environmental. These legal or physical restrictions, which may include institutional and/or engineering controls, are intended to prevent adverse impacts to individuals or populations that may be exposed to hazardous substances in the soil, soil vapor, ground water, or surface water on the property. (ASTM E 1527-13, § 3.2.3 *Definitions*).

adjacent property any real property located within 0.25 mile of the subject Property's border.

adjoining property any real property the border of which is contiguous (i.e., touching) or partially contiguous with that of the property, or that would be contiguous or partially contiguous with that of the subject property but for a street, road, or other public thoroughfare separating them. If the properties in question are separated by a public roadway with a minimum of four lanes and limited access, then the properties are not considered to be adjoining; they are adjacent.

ASTM formerly the American Society for Testing and Materials; a non profit organization that developed the standard industry guidance for the performance of environmental site assessments.

business environmental risk a risk which can have a material environmental or environmentally-driven impact on the business associated with the current or planned use of a parcel of commercial real estate, not necessarily limited to those environmental issues evaluated in a Transaction Screen or Phase I Site Assessment.

Business Environmental Risk

A risk which may have a material environmental or environmentally-driven impact on the business associated with the current or planned use. This risk is not necessarily limited to those environmental issues required to be investigated pursuant to the Scope of Work for an ASTM Scope Environmental Site Assessment. (ASTM E 1527-13, § 3.2.11 *Definitions*). Substances may be present on a property in quantities or under conditions that may lead to contamination of the property or health risks, but if such contaminants do not present clear CERCLA liability, they are considered outside the ASTM Phase I Scope of Work and are considered an ASTM "Non-scope consideration."

Commercial Real Estate

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Any real property except a dwelling or property with no more than four dwelling units exclusively used for residential use (except when a dwelling or property has a commercial function such as the construction for profit). This includes, but is not limited to, undeveloped real property and real property used for industrial, retail, office, agricultural, other commercial, medical, or education purposes. (ASTM E 1527-13, § 3.2.12 *Definitions*).

Controlled Recognized Environmental Condition

A Recognized Environmental Condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed by remain in place subject to the implementation of required controls. A condition identified as a Controlled Recognized Environmental Condition does not imply that the Assessment has evaluated or confirmed the adequacy, implementation, or continued effectiveness of the required control that has been, or is intended to be implemented. For example, if a leaking underground storage tank has been cleaned up to a "commercial use" or "Commercial - Industrial" regulatory standard, but does not meet the most unrestricted residential standard, this is considered a Controlled Recognized Environmental Condition; the "control" is represented by the restriction that the property remain commercial - industrial. (ASTM E 1527-13, § 3.2.18).

De Minimis Condition

The general regulatory definition is: insignificant in amount (either weight or volume) and toxicity or hazard. De minimis is derived from the Latin term meaning "at the least." In a legal context, de minimis is something or an act "which does not rise to the level of sufficient importance to be dealt with judicially" (*Black's Law Dictionary*, Third Edition). Originally, the term was used by the U.S. Environmental Protection Agency to describe waste contributions to Superfund sites that were minimal in either quantity or toxicity, or not significantly greater than the other contributors hazardous wastes present at a site. (*Superfund and Small Waste Contributors*, U.S. Environmental Protection Agency Department of Cleanup Enforcement, published June 24, 2010). The term de minimis has been expanded to include small amounts of hazardous waste of generally low toxicity that – due to their volume or quantity – would typically not result in Agency action. (*Policy 520B De Minimis Contribution Settlements*, State of Washington Department of Ecology, Effective January 6, 2006). As a general rule, with low toxicity substances this has translated into a volume of waste that can be contained in a single fifty-five gallon drum. The American Society for Testing and Materials ("ASTM") has stated in their Standard Practices that de a minimis condition is a condition that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of

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	appropriate governmental agencies and such a condition is not a Recognized Environmental Condition or Controlled Recognized Environmental Condition. (ASTM E 1527-13, § 3.2.22, *Definitions*).
Deteriorated Paint	Any interior or exterior paint or other coating that is peeling, chipping, chalking, or cracking, or any paint or coating located on the interior of exterior surface or fixture that is otherwise damaged or separated from the substrate. (WAC Chapter 365-230-020(26)).
dry wells	underground areas where soil has been removed and replaced with pea gravel, coarse sand, or large rocks. Dry wells are used for drainage, to control storm runoff, for the collection of spilled liquids (intentional and non-intentional) and wastewater disposal (often illegal). Because the function of a dry well is to hold drainage and storm water until it soaks into the ground, these structures are capable of leaching potentially contaminated liquids into the subsurface soil and then into the ground water.
dwelling	any structure all or part of which is designed or used for human habitation, ie.; a place of residence or abode.
engineering controls	physical modifications to a site or facility (for example, capping, slurry walls, or point of use water treatment) to reduce or eliminate the potential for exposure to hazardous substances in the soil or ground water on the property.
environmental audit	the investigative process to determine if the operations of an existing facility are in compliance with applicable environmental laws and regulations. This term should not be used to describe Transaction Screens or Phase I Site Assessments, although an environmental audit may include an site assessment or, if prior audits are available, may be part of an environmental site assessment.
Environmental Professional	(for the performance of Environmental Site Assessments) a person possessing sufficient training and experience necessary to conduct a site reconnaissance, interviews, and other activities in accordance with the practices of the ASTM, and from the information generated by such activities, having the ability to develop opinions and conclusions regarding recognized environmental conditions in connection with the property in question. Status of an individual as an environmental professional may be limited to the type of assessment to be performed or to specific segments of the assessment for which the professional is responsible.
Environmental Questionnaire (SBA)	a questionnaire used by a Lender to determine the likelihood that Contamination may be present at Property offered to secure an SBA guaranteed loan. Environmental Questionnaires mus be completed or reviewed by a Lender that has made at least one site visit to the Property and a good faith effort to conduct an interview with the current owner or operator of the Property. An Environmental

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Professional may, but is not required to, assist with the responses to the questionnaire. An Environmental Questionnaire may be considered if it was completed up to 1 year prior to submission. The current owner or operator of the Property must sign the Environmental Questionnaire the Environmental Questionnaire. If the current owner or operator of the Property will no sign the Environmental Questionnaire it cannot be used and lender must then, at a minimum, obtain a Transaction Screen.

field screen questionnaire

the environmental questionnaire normally completed by the Key Site Manager, that asks the respondent to answer all questions to the best of their actual knowledge and good faith. The answers provide further details on the appropriateness of the investigation and areas of potential environmental concern.

historical recognized environmental condition

an environmental condition which in the past would have been considered a recognized environmental condition, but presently may or may not be considered a recognized environmental condition. If a past release of any hazardous substances or petroleum products has occurred in connection with the property and has been remediated, with said remediation accepted by the responsible regulatory agency (for example, by the issuance of a No Further Action letter), this condition is generally considered to be an historical recognized environmental condition. As such, it still should be referenced in the findings or conclusions section of the assessment report. The environmental professional preparing the report may provide an opinion of the current impact upon the property of this historical recognized environmental condition.

Historical Recognized Environmental Condition

A past release of any hazardous substance or petroleum product that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory agency or meeting the unrestricted residential use criteria established by a regulatory authority, without subjecting the property to any required controls such as property use restrictions, activity and use limitations, institutional controls, or engineering controls – at the time of the completion of the Environmental Site Assessment. (ASTM E 1527-13, § 3.2.41, *Definitions*).

Judicial Records for Environmental Liens: Search and Review

To meet the requirements of the All Appropriate Inquiry Standard 40 CFR §§ 312.20 and 312.25, a review of title and judicial records for Environmental Liens recorded against the Property must be performed by the User of this Assessment and provided to the Environmental Professional for review. The Scope of Work for this Assessment states that the Firm and Environmental Professional will not perform a search for Environmental Liens.

Key Site Manager a person identified by the owner of the Property as having the best reliable

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knowledge of the previous uses, current conditions, and physical characteristics of the Property, and in a position to provide reasonably accurate information for the Field Screen Questionnaire.

institutional controls — a legal or administrative restriction (for example a deed restriction, restrictive zoning) on the use of, or access to, a site or facility to reduce or eliminate potential exposure to hazardous substances in the soil or ground water on the property.

Material Fact — information that substantially adversely affects the value of a property of a party's ability to perform its obligations in a real estate transaction, or operates to materially impair or defeat the purpose of the transaction (State of Washington Laws, Chapter 58, Section 1(9).

material threat — a physically observable or obvious threat which is reasonably likely to lead to a release that, in the opinion of the environmental professional, is threatening and might result in impact to the public health or the environment.

Migration — The movement of hazardous substances or petroleum products in any form, including but not limited to: solid and liquid at the surface or subsurface, and vapor in the subsurface. (Vapor in the subsurface is also described in the *Vapor Encroachment Screen on Property Involced in Real Estate Transactions*, ASTM Standard Practice No. E2600-08; however, this Environmental Site Assessment has not applied the E 2600-15 Practice to the subject Property in order to achieve compliance with the E 1527-13 Standards). (ASTM E 1527-13, § 3.2.55 *Definitions*).

obvious — that which is plain or evident; a condition or fact that could not be ignored or overlooked by a reasonable observer while visually or physically observing the property.

Phase I Environmental Site Assessment — the process described in the ASTM practice E 1527-13, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*. See also 40 CFR § 312.20.) The process by which a person or entity seeks to determine if a particular parcel of property including improvements is subject to recognized environmental conditions. The process does not purport to address all of the safety, environmental concerns, and regulatory compliance applicability associated with its use.

practically reviewable — information that is practically reviewable means that the information is provided by the source in a manner and in a form that, upon examination, yields information relevant to the property without the need for extraordinary analysis

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of irrelevant data. Records that cannot be feasiblely retrieved by reference to the location of the property or a geographic area in which the property is located are not generally practically reviewable.

primary collateral — the project site that is acquired or improved through the loan proceeds; and any business real property to be taken as collateral when it represents over 50% of the total collateral value. Primary collateral includes leasehold applications.

reasonable time and cost

information is obtainable within reasonable time and cost if the information will be provided by the source within 20 calendar days of receiving a written, telephonic, or in-person request at no more than nominal cost intended to cover the source's cost of retrieving and duplicating the information.

reasonably ascertainable

for the purposes of environmental assessments, information that is (1) publicly available, (2) obtainable from its source within reasonable time and cost constraints, and (3) practically reviewable.

Recognized Environmental Condition — Defined by the ASTM as the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, ground water, or surface water of the property. The term is not intended to include de minimis conditions that generally do not present a material risk of harm to health or the environment and would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

Recognized Environmental Condition

The presence or likely presence of any hazardous substances or petroleum products in, on, or at the property (1) due to any release, (2)under conditions indicative of a release to the environmental, (3) under conditions that pose a material threat of a future release to the environment. De Minimis Conditions are not Recognized Environmental Conditions. (ASTM E 1527-13, § 3.2.77 *Definitions*).

Records Search with Risk Assessment — as defined by the U.S. Small Business Administration means and includes (1) a search of the government databases identified in 40 CRF § 312.26 for an AAI compliant Phase I as well as a search of historical use sources (for example, aerial photography, city directories, reverse directories and/or fire insurance maps) pertaining to the Property and Adjoining Properties; and a risk assessment by an Environmental Professional based on the results search as to whether the Property is either "low risk" or "elevated risk" or "high risk for Contamination. While the

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choice of standard historical sources to be reviewed on any particular site is at the discretion of the Environmental Professional in his or her professional judgment, the historical sources should identify property uses back to the property's first developed use, or back to 1940, whichever is earlier. The Environmental Professional need only review as many of the standard historical sources as are necessary, reasonably ascertainable, and likely to beneficial.

Regulatory Agency File and Records Review

If a property or any of the adjoining properties is identified on one or more of the *Standard Environmental Record Sources* as delineated in the ASTM E 1527-13 § 8.2.1, pertinent regulatory agency files and/or records associated with the listing should be reviewed in order to obtain sufficient information to assist in the determination of the presence of a Recognized Environmental Condition, Historical Recognized Environmental Condition, Controlled Recognized Environmental Condition, or a De Minimis Condition. The Assessment will provide a written summary of the reviewed materials. If such a review is not warranted, the Assessment will provide the justification for not conducting the regulatory file review.

residential building — any room, group of rooms or other interior areas of a structure designed or used for human habitation; common areas accessible by inhabitants; and the surrounding property.

Site Assessment — Many state agencies refer to the Phase II level of investigation as "Site Assessment," typically performed in the preliminary stages of a response action to recently discovered contamination, whose objective is to determine in an expeditious manner if the level or extent of site contamination poses an immediate risk to human health or the environment, thereby necessitating an immediate response action.

Site Characterization — A Phase III investigation conducted in order to delineate and quantify the extent of contamination upon the subject Property, and generate sufficient information and data with which to reasonably estimate the cost of remediation or other response actions.

Site Reconnaissance Report — A Reconnaissance Report is a written summary of the information and observations of the Site Assessor who personally performed the Site Visit at the subject Property. This Report is completed following the guidelines and procedures delineated in the *Aerotech Environmental Consulting Guidance for Performing the Site Visit and Reconnaissance Report.*

Title Records for Environmental Liens: Search and Review

To meet the requirements of the All Appropriate Inquiry Standard 40 CFR §§ 312.20 and 312.25, a review of title and judicial records for Environmental Liens recorded against the Property must be performed by the User of this Assessment and provided to the Environmental Professional for review. The Scope of Work

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for this Assessment states that the Firm and Environmental Professional will not perform a search for Environmental Liens.

Transaction Screen Site Assessment — the process described in the ASTM E 1528-14 standard, *Standard Practice for Environmental Site Assessments: Transaction Screen Process*.

VAPOR ENCROACHMENT TERMS AND DEFINITIONS

(Effective December, 2020)

Appropriate Minimum Search Distances — are provided in the in the E2600-15 Standard Practice

Area of Concern — ("AOC") defined by the *appropriate minimum search distance* adjusted as appropriate. When the AOC is defined by the *appropriate minimum search distance* without adjustment, the AOC is the default *AOC*. (§ 3.2.3)

Business Environmental Risk — risk that can have a material environmental or environmentally drive impact on the transaction or the business associated with the current or planned us of a parcel of property, not limited to environmental issues that are investigated pursuant to this guide. (§ 3.3.2)

Chemicals of Concern — ("COCs") a chemical toat is present in the subsurface environment... and can potentially migrate as a vapor into the valdose zone of the *TP*; can also include volatility and toxicity and include volatile organic compounds, semi-volatile organic compounds.

Conduit — preferential pathway along which vapors released from contaminated soil and/or groundwater may migrate onto the *TP* or away from the *TP*. (§ 3.2.6)

Contaminated Plume — plume in which concentrations of COC are known to be present in the soil or groundwater or both at concentrations exceeding levels that generally would be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. (§ 3.2.8)

A contaminated plume can take the form of a groundwater or soil contaminated plume. In a groundwater contaminated plume, COC may be conveyed as solutes away from the point at which they were introduced into groundwater. They move with the migrating groundwater mass in the direction of the groundwater flow. When dispersion within the groundwater contaminated plume brings a dissolved COC to the groundwater-soil gas interface, the COC may transition from the dissolved state to the vapor state and migrate from groundwater into soil gas in the vadose zone. Once a COC migrates into soil gas in the vadose zone, its migration may no longer be dependent on or related to groundwater movement.

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	In a soil contaminated plume, COC volatilized from the soil mix freely with soil gas that exists within soil voids in the vadose zone. The COC in soil gas can also be introduced from underlying contaminated groundwater, as result of a liquid spill into vadose zone soils, or by the direct release of vapors from a leaking underground source. Migration of COC contaminated soil gas through the vadose zone may be in any direction; however, it preferentially follows the path of least resistance. Fluctuations in barometric pressure may cause movement f air and vapors into and out of the vadose zone through preferential pathways.
Critical Distance	the Critical Distance is the lineal distance in any direction between the nearest edge of the Contaminated Plume and the nearest Target Propery boundary, and is equal to 100 feet for COCs or 30 feet for dissolved petroleum hydrocarbons COC. The critical distance represents an estimate of the lineal distance COC vapors volatilized from contaminated groundwater or contaminated soil might migrate in the vadose zone to the Target Property.
Groundwater	water contained in the pore spaces of saturated geological media. (§ 3.2.15).
Preferential Pathway	pathway that has the least amount of constraint on the migration of COC vapors (§ 3.2.25)
Recognized Environmental Condition	(REC") the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions *indicative of a release* to environment; or (3) under conditions that pose a material threat of a future release to the environment. (§ 3.3.22)
Saturated Zone	zone in which all of the voids in the rock or soil are filled with water at a pressure that is greater than atmospheric. (§ 3.2.29).
Solute	a substance that can be dissolved by a solvent to create a solution. A solute can come in many forms; it can be gas, liquid, or solid. The solvent or substance that dissolves the solute, breaks the solute apart and distributes the solute molecules equally. A solvent can dilute various amounts of solute, depending on how strong of a solvent is used and how strong of a solvent is used and how easily the solute molecules come apart. This property of solutes to dissolve in a solvent is known as solubility.
Vadose zone	(also referred to as the unsaturated zone) zone between the land surface and the water table within which moisture content is less than saturation (except in the capillary fringe) and pressure is less than atmospheric. (§ 3.2.29).
Vapor Encroachment Condition	("VEC") presence or likely presence of COC vapors in the vadose zone of the *TP* caused by the vapors from contaminated soil and/or groundwater either on or near the *TP* as identified by the Tier1 (see Section 8) or Tier 2 (see Section 9) procedures

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in this guide. (§ 3.2.37).

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APPENDIX

- Site Location and Photographs
- Project Contract Documents
- Supplemental Documents
- Environmental Database

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■ Site Location and Photographs

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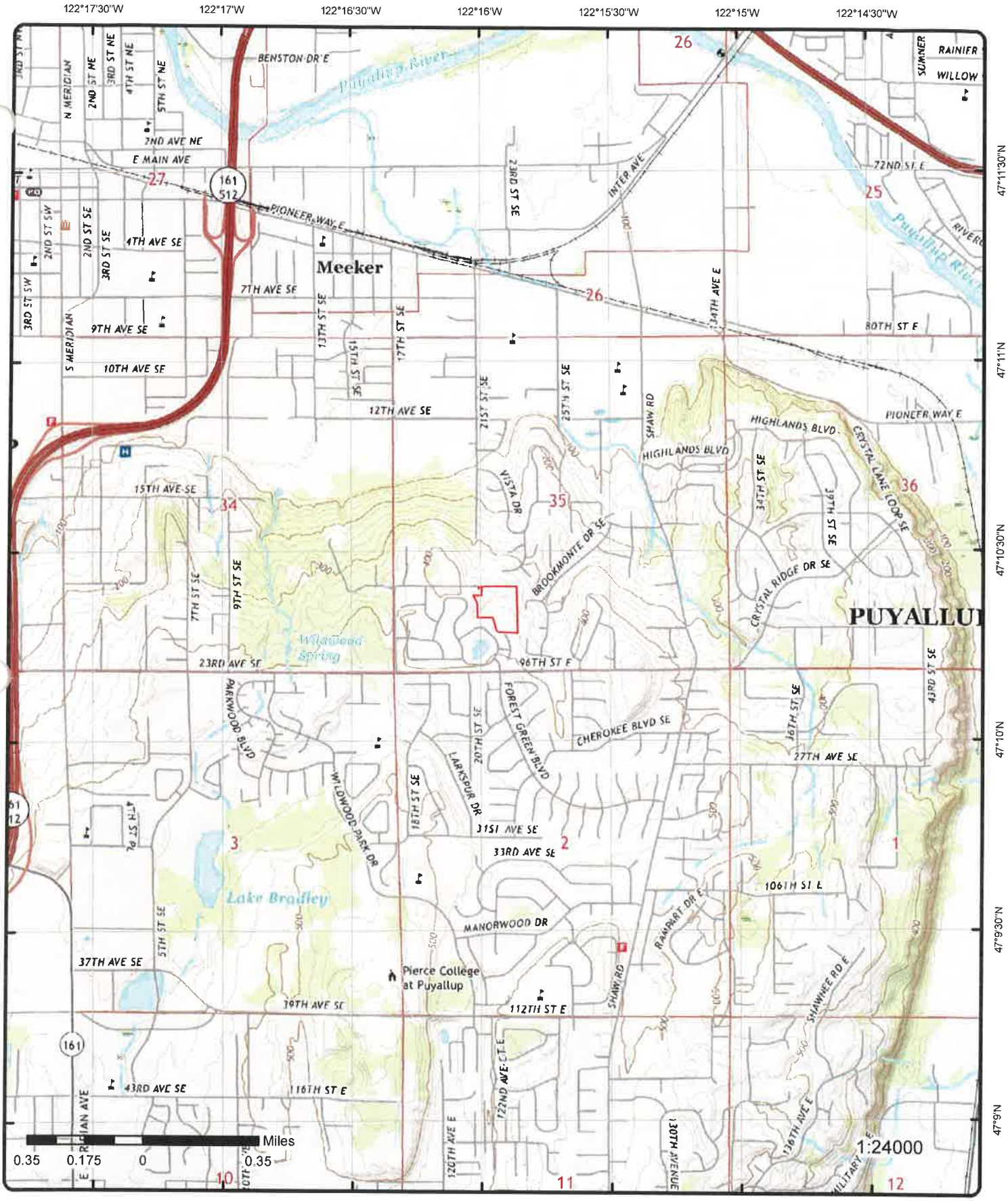


Topographic Map

Year: 2020

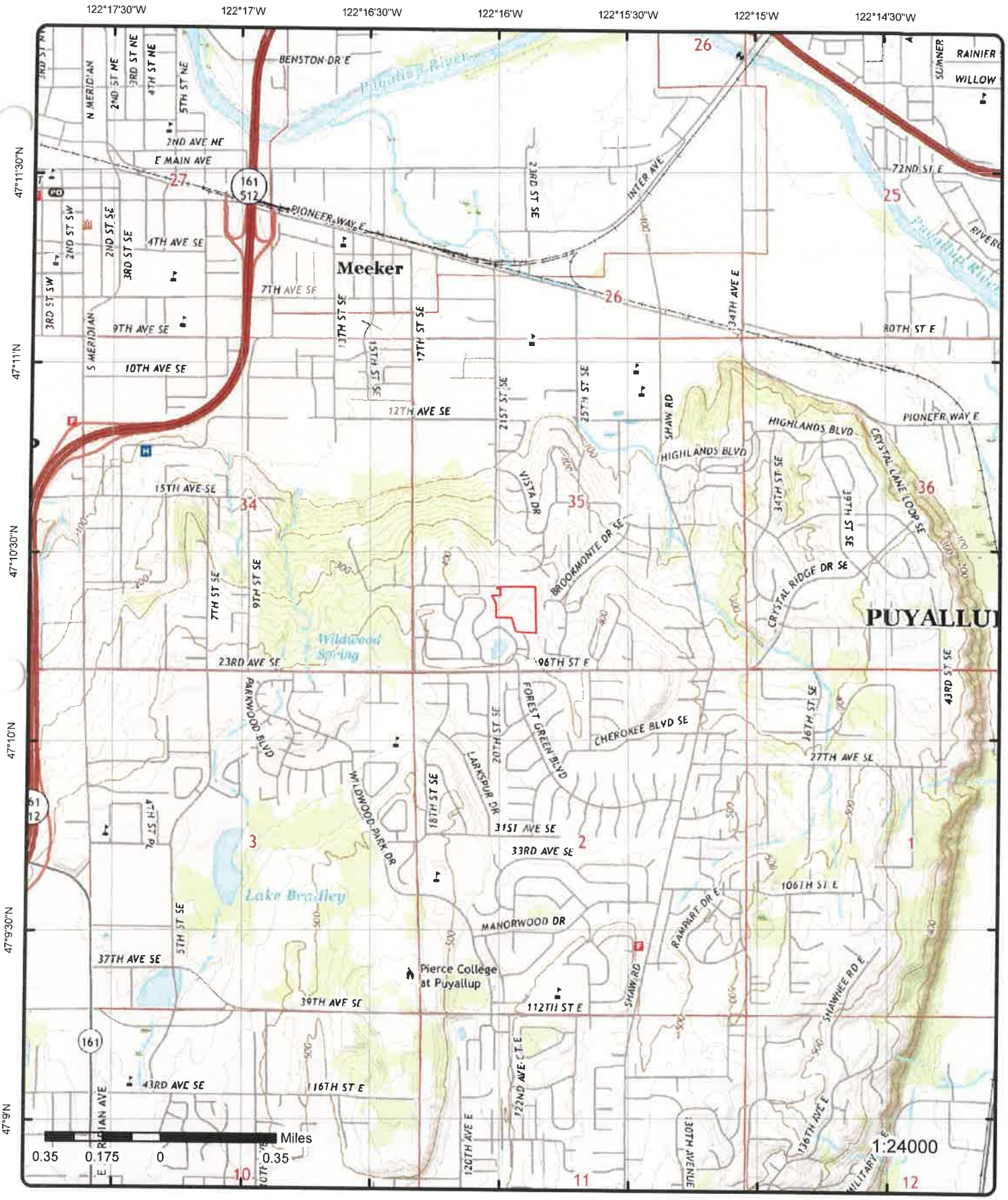
Order Number: 24050300454

Address: n/a, WA

Quadrangle(s): Puyallup WA, Sumner WA

Source: USGS Topographic Map

© ERIS Information Inc.



Topographic Map

Year: 2020

Order Number: 24050300454

Address: n/a, WA

Quadrangle(s): Puyallup WA, Sumner WA

Source: USGS Topographic Map

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ERTS 620837, Greeley Property, 2301 23rd St. SE, Puyallup

Map Legend

- Highlighted Tax Parcels
- Roads
- Interstate
- Limited Access State Routes
- Other State Routes
- Ramps
- Major Arterial
- Collector
- Local Access
- County - 2008 - Ortho

Scale 1:1,747

0 75 150 ft.

Printed: 5/10/11 5:38 PM

Tacoma - Pierce County Health Department

The map features are approximate and are intended only to provide an indication of said feature. Additional areas that have not been mapped may be present. This is not a survey. Orthophotos and other data may not align. Pierce County assumes no liability for variations ascertained by actual survey. All data is expressly provided AS IS and WITH ALL FAULTS. Pierce County makes no warranty of fitness for a particular purpose.

Sunseet Point
Puyallup, Washington

Northern entrance to Property

Driveway entrance

Entrance road

Northern portion of Parcel

Eastern fence line

View to the east

Northeast wall of retention pond

Center of pond

Western adjoining wetlands

Pathway along east side of pond

Area south of pond

Former man-made retention pond with dischage into Retention Pond

Foundation of Storage Barn

Foundation of residence

Foundation of Horse Barn

Foundation of Museum building

Foundation of Museam north addition

South side surfaces

Southern entrance to Property

Signage on southern fence

Subject Property along fence line

■ Project Contract Documents

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ENVIRONMENTAL CONTRACTOR'S CERTIFICATION

SUNSET POINTE DEVELOPMENT
2301 - 23rd Avenue Southeast
Puyallup, Washington 98372

1. Contractor's Name: Aerotech Environmental Consulting, Inc.

2. Contractor's Address: 14247-R Ambaum Boulevard Southwest, Burien, Washington 98166

3. Name and title of person completing this certification: Alan T. Blotch / President

4. Answer the following questions about each employee that contractor will have perform the assessment or prepare the report showing the results of the inspection:

   a. Name and Title of Employee: Alan T. Blotch – Environmental Assessor

   b. Length of experience doing environmental assessments: 45 years

   c. Education degrees received: Masters of Business Administration
   Juris Doctor – Environmental Law

   d. Relevant training received: ASTM E50 Environmental Assessment Committee Meetings

5. Identify any certifications and approvals issued to contractor pursuant to an official Federal, State of local program or policy to conduct environmental assessments: Registered Environmental Assessor
   Issued by State of California (1993-2012)

6. Describe the generally recognized standards which the contractor will use to perform the assessment.
   Standard Practice for Environmental Site Assessments: Phase I Assessment (ASTM E 1527-21)
   Standard Practice for Environmental Site Assessments: Transaction Screen Process (ASTM E 1528-22)

7. Disclose the nature of any previous environmental inspections contractor has ever performed for the owner of the property: None.

8. Disclose the nature of any affiliation or association contractor now has, or ever had, with the above referenced seller of the property, of the above referenced buyer of the property - Phase I Assessment (2018)

9. Describe the liability insurance carried by contractor to cover claims in the event that ir fails to discover adverse environmental conditions during an environmental inspection.
   Professional Errors & Omissions Coverage $1,000,000 / claim and $1,000,000 aggregate liability

THE UNDERSIGNED HEREBY CERTIFIES, UNDER PENALTY OF THE CRIMINAL AND/OR CIVIL PENALTIES IN 18 U.S.C. § 1001 FOR FALSE STATEMENTS TO THE UNITED STATES GOVERNMENT, THAT THE ABOVE INFORMATION IS TRUE AND CORRECT.

ATBlotch
Signature

05/06/24
Date

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■ Supplemental Documents

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Statement of Environmental Professional Qualifications:

CURRICULUM VITAE
Alan T. Blotch

Mr. Blotch was previously the Corporate General Counsel for a national industrial safety and environmental consulting firm, with offices throughout the United States. Since 2000, he has been the President of an environmental consulting firm while continuing his law practice, specializing in insurance defense litigation orientated towards construction, products liability, environmental, health, and safety matters.

Mr. Blotch has over 45 years experience in the industrial safety and environmental consulting industry, including both field assessment and management positions. For nine years he held a variety of positions with a national consulting firm, including division manager, marketing vice president, and executive vice president.

Additionally, Mr. Blotch has been involved since 1991 in the development of the ASTM E50 Committee Phase I Environmental Site Assessment Standard Practice, ASTM Standard for the Survey of Asbestos Building Materials, EPA/HUD contract NIBS Lead-Based Paint Operations Manual, and NIBS Asbestos Operations and Maintenance Guidance manual.

Education:

University of Illinois at Chicago Circle – undergraduate pre-law
Illinois Benedictine College – Masters of Business Administration
Chicago-Kent College of Law – Juris Doctor of Law
with Certificate in Environmental and Energy Law

Certifications / Licenses:

Registered Environmental Assessor – State of California (1993 - 2012)
Asbestos Supervisor, Project Manager – AHERA Accredited
Asbestos Building Inspector, Management Planner, Project Designer - AHERA Accredited
Attorney at Law – State of Washington & State of Oregon
Lead-Based Paint Inspector and Risk Assessor - US EPA Accredited
Lead-Based Paint Risk Assessor - State of Washington Licensed

Organization Memberships:

American Bar Association
– Section of Environmental, Energy, and Natural Resources, member.
American Industrial Hygiene Association
American Society of Safety Engineers
– Board of Directors, Puget Sound Chapter, former member;
– Former Chairman, Regulatory Affairs Committee
American Society for Testing and Materials (ASTM)
– Environmental Standards Committee E50, Environmental Site Assessments, member;
– Asbestos Inspection Protocol for the Survey of Asbestos Building Materials Working Group, member;
– Environmental Standards Committee E06, Performance of Buildings, member.
Association of Trial Lawyers of America

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Defense Research Institute, Inc.
National Institute of Building Sciences
– Operations Committee of Consultative Council; member, Project Committee on Lead-Based Paint O&M Work Practices Manual and Procedures Development, member;
– Project Committee on Asbestos Management, and Operations and Maintenance Manual Development, member;
– Project Committee on Asbestos Specifications and Response Actions Standards Revision, former member.
Occupational Safety and Health Administration
– Advisory Committee on Construction Safety and Health, former participant.
Puget Sound Area Construction Safety Summit
Washington Defense Trial Lawyers Association
– Association magazine editorial board, former member.
Washington State Trial Lawyers Association
Washington State Bar Association
– Attorney Character and Fitness Committee / former Hearing Officer

Professional and Standards Development:

ASTM Phase I Environmental Site Assessment Practice. Beginning in 1991, Mr. Blotch was involved in the drafting and review of the American Society for Testing and Materials ("ASTM") Environmental Standards Committee E50, Environmental Site Assessments, charged with the responsibility of developing the ASTM Phase I Environmental Site Assessment Standard Practice. This involvement in the committee's work continues to the present, included the 2006 Standard Revisions.

ASTM Survey of Asbestos in Buildings Practice. In 1993, the ASTM formed a working group to develop an Asbestos Inspection Protocol for the Survey of Asbestos Building Materials Working Group. Mr. Blotch personally performed the drafting of significant portions of the initial Survey document. His involvement continues to the present.

National Institute of Building Sciences ("NIBS") Lead-Based Paint Work Practices Manual. In 1992, Mr. Blotch was invited to join the newly formed NIBS Operations Committee of Consultative Council, Project Committee on Lead-Based Paint O&M Work Practices Manual and Procedures Development pursuant to a NIBS contract with the EPA and HUD. For two years Mr. Blotch attended the committee meetings and discussion groups and participated in the development and review of the Manual, which was subsequently published by the EPA.

NIBS Asbestos Operations and Maintenance Manual. Beginning in 1994, Mr. Blotch was invited to join the newly formed Project Committee on Asbestos Management, and Operations and Maintenance, charged with the responsibility of developing an Asbestos O&M Manual. This work included both the attendance of working group committee meetings and document review. This project was completed within two years.

NIBS Asbestos Specifications Revision. In order to ensure compliance with the revised OSHA asbestos regulations, in 1997, NIBS formed a Project Committee on Asbestos Specifications and Response Actions Standards Revision, of which Mr. Blotch was a member. His involvement included review and comment on the draft Specification revisions to the NIBS Asbestos MASTERSPEC® Removal and Response document.

State of Washington Industrial Hygiene & Safety Title Protection Act. Instrumental in drafting the 2001 Session Washington State Industrial Hygiene and Professional Safety Title Protection Act, Chapter 18

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of the Washington Revised Code. Testified before the Legislature's combined House and Senate Committee on Commerce and Industry in support of the Title Protection Act.

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City of Puyallup
Planning Division
333 S. Meridian, Puyallup, WA 98371
(253) 864-4165
www.cityofpuyallup.org

July 28, 2023

CES NW Inc.
29th St. NE, suite D
Puyallup, WA 98372

DEVELOPMENT REVIEW TEAM (DRT) LETTER	
DRT #	2
PERMIT #	P-18-0040
PROJECT NAME	SUNSET POINTE
PERMIT TYPE	Preliminary Major Plat
PROJECT DESCRIPTION	** SUNSET POINTE MAJOR PLAT ** AMR E-18-0166
SITE ADDRESS	2301 23RD ST SE ;
PARCEL #	0420353027;
ASSOCIATED LAND USE PERMIT(S)	
APPLICATION DATE	March 15, 2018
APPLICATION COMPLETE DATE	
PROJECT STATUS	**Active Development Review Team (DRT) review case – resubmittal required.** Please address review comments below and resubmit revised permit materials and by responding in writing to the remaining items that need to be addressed.
APPROVAL EXPIRATION	**N/A** – Active permit application, not approved
CONDITIONS	**Active permit application, not approved;** Pursuant to PMC 20.11.022 regarding inactive applications, any and all pending land use applications or plat applications shall be deemed null and void unless a timely re-submittal is made to the City within 1 year of issuance of this Development Review Team (DRT) comment letter. DRT review letters typically identify requested corrections, studies or other additional required pieces of information necessary to demonstrate conformance with the City's adopted development standards and codes.

	Subsequent applicant re-submittals shall make a good faith effort to respond to each request from this letter in order for the application to remain active. The failure to provide timely responses or lack of providing the requested material(s) within the 1-year window following DRT comment letter issuance shall be grounds for expiration, thus deeming the pending application null and void with or without a full or partial refund of application fees.

The City has completed the review of the above-mentioned permit submittal. All of your review comments, conditions, and redlined plans can be found on the City's permit portal. Redlined plans can be found on the City's Permit Portal in the "Reviews" section under "Documents Returned for Corrections". Below please find the permit submittal review comments from your review team and re-submittal instructions. Should you have any questions regarding the review comments, please contact the plan reviewer associated with the comment listed below.

Re-submittal Instructions

To resubmit, you must respond to all comments in a written response letter and submit a letter of transmittal. Letter of transmittal and response letter must be submitted to the 'Correction Response Letter' item listed in the submittal items list. Avoid using "upload additional docs" unless there is NO submittal item available for your document. Please Note: If you do not resubmit as instructed your re-submittal will be rejected. If you have any questions about how to resubmit, please contact the permit center at permitcenter@puyallupwa.gov.

1. Log in to your permits portal and navigate to thestatus page for this permit. Under the 'Upload Documents' section, select 'click here to upload document'.

2. For each submittal item listed re-submit a new version of the submittal item by clicking the "New Version" button next to the file name of the original file submitted. DO NOT click the 'browse' button unless the document you are submitting for that submittal item is not a new version of the originally submitted document.

3. Click 'Upload Documents' at bottom of the page.

How to use this letter

This review letter includes two sections: **"Corrections"** and **"Conditions".**

The **"Corrections"** section includes all items that the applicant must address to comply with the Puyallup Municipal Code (PMC) and city standards. Items listed in under **Action Items** require a resubmittal under this permit for further review by the Development Review Team (DRT); your application is not approved. Please make those updates to the proposed plans and resubmit for review. Please include a response letter outlining how you have revised your proposal to meet these items for ease of plan check by DRT members.

The **"Conditions"** are items that will govern the final permit submittal(s) for the project. Please be aware that these conditions will become conditions of the final permits and/or recommendations to the Hearing Examiner, if applicable.

If you have questions regarding the action items or conditions outlined in this letter, please contact the appropriate staff member directly using the phone number and/or email provided.

Corrections

Planning Review - Chris Beale; (253) 841-5418; CBeale@PuyallupWA.gov

- The site appears to be marked as PENDING CLEAN UP for site contamination with the Tacoma Pierce County Health Department (TPCHD); previous SEPA comments from Ecology also indicate environmental clean up issues (see Ecology letter dated April, 2018). SEPA mitigation conditions are forthcoming regarding site environmental assessment, and possible site clean up at the direction of Ecology, to be addressed at the time of civil review. Applicant must coordinate with Ecology and/or TPCHD to resolve. February, 2022 staff follow up comment to this correct: The Ecology clean up report data was obtained in 2020 (Ecology clean up ID 11739). Also see the Ecology SEPA comment letter with requirements (dated April 27, 2018) under the Toxic Clean ups section. The response report (Environmental associates phase 1 report, dated January 14, 2005) provided does not resolve this comment. Please contact the Toxic Clean ups coordinator and Ecology and obtain updated guidance on needed remediation steps to resolve site contamination issues and provide upon resubmittal.

  2023 PH 1 ALSO DOES NOT

  UPDATED COMMENT: (July 28, 2023) Staff has reviewed the Phase I Environmental Site Assessment of the site by Earth Solutions NW and transmitted the report to Ecology for review under SEPA. Ecology provided a response on July 26, 2023 - see file in documents and images. We will require pollution in the environment be cleaned up in compliance with WAC 173-340 before allowing any grading, filling, or other construction activities at the site. or an independent cleanup conducted under WAC 173-340-515, the cleanup would be complete when a no further action opinion (NFA) letter is issued under WAC 173-340-515(5)(b). Please follow up with a response to the Ecology email with a plan of action on the part of the owner/applicant to address the recommendations from the Toxic Cleanup program staff.
- At the time of civil permit application, the applicant shall provide an access and grading plan for proposed lots 7 and 8 that demonstrates access drive will not exceed 10% slope, that storm water design will direct water to the proposed dispersion area to the west and that retaining walls needed to support access to lots 7 and 8 meet the retaining wall codes (PMC 19.12.070 (3) and PMC 20.58.005 (2)). The access tract may need to shift south to avoid conflicts and meet code which may impact final plat layout. See corresponding comments from Fire Prevention and Engineering.

  UPDATED COMMENT: (July 28, 2023) Staff has reviewed the preliminary exhibit and cannot determine if the wall proposed will meet the setback and height regulations in PMC 19.12.070 (3) and PMC 20.58.005 (2). See mark ups. The feasibility of lot 8 appears dependent upon tract c access and grading and walls.

- All pedestrian walkways shall be dedicated as use by the public at the time of final plat; the walk way between lots 14/15, site wetlands, lots 3/5 will be a public right of way dedication at the time of final plat. These walkways shall be 15' wide right of way, and fully improved with blacktop asphalt or other approved surfacing by Public Works, 10' wide improved surface, with 24" gravel shoulders, access restrictions (bollards or other method as approved by Public Works) and landscaping, at the time of civil permitting.

  UPDATED COMMENT: (July 28, 2023) These do not appear to be called out as ROW dedication and are not shown as improved as required. Please note this will be a condition of recommended approval.
- Other conditions outlined in the December, 2020 DRT letter remain in effect and will be carried forward to the Hearing Examiner once all issues related to the plat are resolved.
- Confirm that the NGPA will not be disturbed during site grading. Its not clear if a retaining wall is proposed or a storm drainage line? [R6-02 Prelim plat sheet P2, planning comment]
- Confirm the height and setback of this wall meets PMC 20.58.005 (2). The feasibility of lot 8 appears dependent upon tract c access and grading and walls. [R6-02 Prelim plat sheet P2, planning comment]
- Add a list of tracts and purpose of each tract to the cover sheet. Please note that tract E, the trail area between pond A and B and trail along west side of tract B are required to be dedicated as public right of way [R6-02 Prelim plat sheet 1, planning comment]
- Note condition from December 2020 letter that applies to this connection between Highlands DR and 19th Ave extension. Public right of way dedication of 80' for future roadway connection from the extended 19th Ave to Highlands
  Drive shall be provided at the time of final plat on parcel A; [R6-02 Prelim plat sheet 1, planning comment]

Engineering Review - Jamie Carter; (253) 435-3616; JCarter@puyallupwa.gov

- NOTE TO DESIGNER: As this project has a lot of history and several reviews/reviewers, on this round of Major Plat Review we have included many notes regarding plat layout and construction. This is to ensure that notes from previous reviews are not lost or forgotten. Many of these engineering comments do not require responses or corrections and are included as reminders or placeholders for items and design concepts that shall be included with the civil submittal. Other comments will require clarification or correction for this phase of development review. Please review the notes thoroughly in order to reduce subsequent submittals and review times.

- STORM GENERAL

  - Development and redevelopment projects are required to employ, wherever feasable, Low Impact Development practices to meet the design criteria set forth in PMC 21.10.190 and the Ecology Manual.
  - Public ROW runoff shall be detained and treated independently from proposed private stormwater faciities. This shall be accomplished by providing separate publicly maintained storm facilities within a tract or dedicated ROW; enlarging the private facilities to account for bypass runoff; or other methods as approved by the City Engineer. PMC 21.10.190(3).
  - At the time of civil permit application the applicant is responsible for submitting a permanent stormwater management plan which meets the design requirements provided by PMC 21.10. The plan and accompanying information shall provide sufficient information to evaluate the environmental characteristics of the affected areas, the potential impacts of the proposed development on surface water resources, and the effectiveness and acceptability of measures proposed for managing storm water runoff. The findings, existing and proposed impervious areas, facility sizing, and overflow control shall be summarized in a written report. PMC 21.10.190, 21.10.060.
  - In the event that during civil design there is insufficient room for proposed stormwater facilities in the area(s) shown on the plat, the stormwater area(s) shall be increased as necessary so that the final design will be in compliance with city and state standards. This may result in the number of lots being reduced, or a reduction in other site amenities. PMC 21.10.060(4), PMC 21.10.150.
  - At the time of preliminary plat construction all storm drains shall be signed according to City of Puyallup Design Standard 204.11.
  - All private storm drainage facilities shall be covered by a maintenance agreement provided by the city and recorded by Pierce County. Under this agreement, if the owner fails to properly maintain the facilities, the city, after giving the owner notice, may perform necessary maintenance at the owners expense. PMC 21.10.270
  - Erosion control measures for this site will be critical. A comprehensive erosion control plan will be required as part of the civil permit application.
  - Prior to the final plat being accepted by the city, all disturbed areas within the site shall be stabilized to the satisfaction of the City Engineer.
  - A Stormwater System Development Charge (SDC) will be assessed for each new Single Family Residence (SFR). The current SDC as of this writing is $4,013.00 per unit. Stormwater SDCs are due at the time of site development permit, or in the case where no site development permit is required, at the time of building permit issuance for the individual lot(s), and the fees do not vest until the time of site development permit issuance, or at the time of building permit issuance in the case where a site development permit is not required.
  - A Construction Stormwater General Permit shall be obtained from the Washington State Department of Ecology if any land disturbing activities will disturb one or more

acres of land, or are part of a larger common plat of development or sale that will ultimately disturb one or more acres of land.

- FULL DISPERSION - The concept of FULL DISPERSION is acceptable to the City and is a preferred method of controlling runoff. However, there are specific design standards laid out by the ECY Manual that have to be met in order to qualify the design. The Drainage Report at CIVIL SUBMITTAL must clearly demonstrate how the design will achieve these requirements. Specifically:
  -According to the 2019 SWMMWW the design must be laid out to allow the runoff from the impervious or cleared areas to fully disperse into the preserved area, meaning that the flows cannot be intercepted by PIPES, ditches, streams, rivers, lakes, or wetlands. See BMP T5.30.
  -The entire parcel set aside for dispersion must be in an easement or be dedicated to the City. Showing the 100 foot flow path is correct for stormwater analysis, but the entire parcel is to be preserved.
  -Specify that the project is using FULL DISPERSION FROM ROADWAY SURFACES under BMP T5.30 to mitigate roofs and driveways. Address each bullet (requirement) from that section in detail or describe how the roof and driveway runoff will be otherwise conveyed and dispersed through the preserved parcel.
  -Refer to FULL DISPERSION FROM CLEARED AREAS IN RESIDENTIAL PROJECTS for requirements related to landscaped and cleared areas. Address each bullet from that section in detail or describe how the cleared areas will be dispersed through the preserved parcel.
  -What is the true size of the proposed preserved parcel? Page 8 of the stormwater report says 10.74 while other docs claim about 11.13. GIS says 10.77. Measure the parcel POST-DEDICATION and use that number for the 10% impervious area within a dispersion basin calculation.
- RECHARGE BASIN - This project basin ultimately discharges to existing wetlands/ponds within the development. To that end the project must demonstrate compliance with the following conditions:
  - Document the tributary area to the wetland/ponds and provide an analysis of surface water elevations and volume using a continuous runoff model for the 100-year recurrence interval developed condition.
  - Any developed flows to the ponds shall match the pre-developed flowrates for the 2-, 10-, and 100-year recurrence interval flows.
  - The overflow route from the wetlands/ponds shall be analyzed, using the fully developed contributing basin and any potential adverse impacts shall be identified and mitigated.
  - Provide hydroperiod analysis in accordance with the ECY Manual MR#8 and Appendix I-C.
- RECHARGE BASIN - Will roofs from lots 16-18 be hard piped to manifold in back of lots? Is manifold to be installed in "forrested" area? How will runoff from Lots 9-12 drain to the buffer?
- RECHARGE BASIN - Minor discrepensies persist between the Basin Maps and the

model. Lawn is 0.76 on Basin Map and is modeled as 0.543 acres. Totals do not match: 5.45 acres on the map and 5.238 acres modeled. Clarify or revise.

- RECHARGE BASIN: Existing culverts should be analyzed in conjunction with the recharge of the ponds/wetlands for proper capacity based on the developed condition. The analysis shall be enhanced prior to civil submittal to include details about the proposed control structures and the specific inputs and outflows to the existing ponds/wetlands.
- ROADWAY BASIN - 23rd St Pl SE - Model this basin like the recharge basin. Clearly step through each phase of the drainage (ex: lawn->forest->buffer->pond) for both routes (23rd St Pl SE and through the buffer behind Lot 15). Current modeling shows that mitigated flows exceed pre-developed flows. Provide more information and show the graph of the mitigated versus the pre-developed. Incorporate the model results into the Hydroperiod Analysis and clearly illustrate the nexus between the two.
- GROUNDWATER MONITORING PROGRAM - Clarify for reviewers the results of the groundwater monitoring program. The purpose is to record the highest and median groundwater levels in order for the project to be allowed to exclude infiltration from the design (in this case). In TP-104 the peak depth is recorded, but the peak groundwater level would correspond with the smallest depth BGS recorded thus revealing the highest elevation that the groundwater reached. Also, it is unclear to reviewers why the other 2 wells (TP-201 and TP-202) were only dug to depths that represent a level that is just above all recorded groundwater levels resulting in negative (?) depths to groundwater and N/A readings in the table. If the level of the water is known can it not be reported and analyzed? Revise or clarify.
- Correct typo as indicated. [R6-05 Prelim Report 2023_05_23*, Page 15/281]
- Correct typo as indicated. [R6-05 Prelim Report 2023_05_23*, Page 38/281]
- Why are CB#1 and CB#2 proposed to drain directly into the City's system? Report says the roadway for 23rd St Pl SE will flow to dispersion trench in Tract B. [R6-02 Preliminary Plat Plans, Sheet P2]
- Symbol not in legend. Is this a retaining wall? Provide details including drainage and structural engineering if required with civil submittal. [R6-02 Preliminary Plat Plans, Sheet P2]
- What does this shape and linetype represent? Legend shows this linetype as an easement line. [R6-02 Preliminary Plat Plans, Sheet P2]
- WATER PMC Chapter 14.02 and Puyallup Design Standards Section 300
  - A new 8-inch diameter water main shall be extended into the site. The 4-inch main proposed on the plans on 23rd St Pl SE may be acceptable as it is a dead-end run with no possibility of being expanded in the future. If a fire hydrant is required then the pipe will need to be upsized. Pipe for water mains shall be ductile iron conforming to Section 7-9 of the Standard Specifications.
  - Water mains shall have a minimum cover of 36-inches from paved final grade in improved ROW and easements, and 48-inches of cover in unimproved ROW and easements.

- 2-inch blow off assemblies are required on dead-end water lines except where fire hydrants are installed at the dead-end. See Detail 03.06.01.
- A 3/4-inch water service shall be provided for each building lot and shall be extended 10-feet into each of the proposed lots.
- The water main shall be located generally 10 or 12-feet west or south of roadway centerlines per city standard details.
- The minimum distance between water lines and sewer lines shall be 10-feet horizontally and 18-inches vertically. If this criterion cannot be met the applicant shall isolate the sewer and water lines by encasement, shielding, or other approved methods. CS 301.1(8).
- Fire Hydrants and other appurtenances shall be placed as directed by the Puyallup Fire Code Official. Fire Hydrants shall be placed so that there is a minimum of 50-feet separation from hydrants to any building walls.
- Air relief valves are required at high points in water lines. See detail 03.07.01.
- Water valves shall be installed along the water line at a maximum spacing of 400 feet and at the intersection of lateral lines. Water valves shall be clustered generally and shall be designed and located so that each leg of the main line system can be isolated.
- Detectable marking tape shall be installed on all new water mains including water service lines. The tape shall be placed approximately 1.5 feet above the top of pipe and shall extend its full length. Detectable marking tape shall be blue in color and meet the material requirements specified in the Standard Specifications 9-15.18.
- A water systems development charge (SDC) will be assessed for each new single-family residence. The current amount as of this writing is $5,218.00. SDCs are due at the time of building permit issuance and do not vest until time of permit issuance.

- SEWER PMC Chapter 14.08 and Puyallup Design Standards Section 400
  - The applicant shall extend the existing public sewer main located within 23rd St Pl SE into the new cul-de-sac.
  - 6-inch side sewers shall be extended 15 feet into the proposed lots. The depth at the property line shall be a minimum depth of 5-feet.
  - Side sewers shall have a cleanout at the property line, at the building, and every 100 feet between the two points.
  - A sewer systems development charge (SDC) will be assessed for each new single-family residence. The current amount as of this writing is $5,218.00. SDCs are due at the time of building permit issuance and do not vest until time of permit issuance.

- TRAFFIC SCOPING WORKSHEET - Traffic scoping worksheet says 15 units and current plans show 18. Update scoping document for civil submittal.
- STREETS GENERAL
  - Root barriers in accordance with City Standard Detail 01.02.03 shall be installed for all street trees within 10-feet of the ROW.
  - Wheel chair ramps, driveways, etc. shall be constructed in accordance with city standards and current ADA regulations. If there is a conflict between the city standards

and ADA regulations, the ADA regulations shall take precedence over the city's requirements.
- A separate street lighting and channelization plan is required for the city's review as part of the civil permit review.
- The sidewalks fronting home sites within the plat shall be poured at the time the homes are built. All other sidewalks are to be poured at the time of plat development. The developer shall be responsible to post an assignment of funds to guarantee all sidewalks are poured within 18 months of final plat approval.
- The asphalt within the sub-division shall be placed in two 2-inch lifts. The first lift shall be placed prior to final plat approval. The second lift shall be delayed until 90% of the homes are built or until18 months after time of final plat, whichever occurs first. The developer shall be required to post an assignment of funds to guarantee the second lift.
- Street numbering and addressing shall be provided by Engineering Services and reflected on the final plat documents.
- Prior to final plat approval, the developer shall post a maintenance bond with the city in an amount set by the city to guarantee all workmanship for a one-year period from the time of plat completion.
- Existing private utilities that are in conflict with city maintained ROW and utilities shall be relocated outside of the traveled road section, i.e., behind the curb and under the sidewalk area at the developers expense.

- What will become of the newly created areas of 23rd St Pl SE where the 'existing cul-de-sac is to be removed'? While these areas are dedicated to the City, they still need to be reconstructed or stabilized.
- Identify/locate and label with the AFN the storm easement depicted between 22nd St SE and 23rd St Pl SE.
- Label entire 40 foot utility easement on and near 19th Ave SE on the plans. The lines are shown, but more labels/dimensions are needed.
- GRADING GENERAL
  - A Grading Plan conforming to all requirements of PMC Section 21.14.120 will be required for this project during civil submittal.
  - Note on the plat shall indicate: Certified safe bearing load for the building lots.
  - Note on the plat shall indicate: Geotech report required for each building lot prior to issuance of a building permit for said lot.
  - Cross sections will be required at various points along the property lines extending 30-feet onto adjacent properties to assure no impact from storm water damming or runoff.
- The following dedication language shall be provided on the final plat document:

  - FURTHER, THE UNDERSIGNED OWNERS OF THE LAND HEREBY SUBDIVIDED, WAIVE FOR THEMSELVES, THEIR HEIRS AND ASSIGNS, AND ANY PERSON OR ENTITY DERIVING TITLE FROM THE UNDERSIGNED, ANY AND ALL CLAIMS FOR DAMAGES

INITIAL INVESTIGATION FIELD REPORT

ERTS Number: 620837
Parcel #: 0420353027
COUNTY: PIERCE

SITE INFORMATION

Site Name (e.g., Co. name over door): Pioneer Museum former	Site Address (including City and Zip+4): 2301 23rd St SE Puyallup, WA 98373	Site Phone: none
Site Contact and Title: Joshua Gunia, grandson of owner	Site Contact Address (including City and Zip+4): 11603 Canyon Road E. Puyallup 98373	Site Contact Phone: 253/435-9999
Site Owner: Sharon Tanner	Site Owner Address (including City and Zip+4): 11907 240th St NE Arlington, WA 98223	Site Owner Phone: 360/474-1829
Site Owner Contact:	Site Owner Contact Address (including City and Zip+4):	Owner Contact Phone:
Alternate Site Name(s):	Comments:	Is property > 10 acres? Yes ☒ No ☐
Previous Site Owner(s):	Comments:	

Location: Quarter-Quarter: 3-4 Section: 35 Township: 20N Range: 04E
Latitude: Degrees: 47 Minutes: 10 Seconds: 19.6 N
Longitude: Degrees: 122 Minutes: 15 Seconds: 54.8 W

INSPECTION INFORMATION

Inspection Date: 11.16.10	Inspection Time: 10 am	Entry Notice: Announced ☒	Unannounced ☐
Photographs	Yes ☒ No ☐	Weather: Clear ☒ Rain ☐	Temperature: ~50 ° F
Samples	Yes ☒ No ☐	Wind Direction:	Wind Speed:

RECOMMENDATION

No Further Action (Indicate NFA in box below):		LIST on ISIS (Indicate in box below):	
Release or threatened release does not pose a threat	☐	Site Hazard Assessment	☒
No release or threatened release	☐	Interim Action	☐
Educational mailing	☐	Emergency Action	☐
Refer to program/agency (Name: _____)	☐	Independent Cleanup Action In progress	☐
Independent Cleanup Action Completed (i.e., contam, removed)	☐		

COMPLAINT (Brief Summary of ERTS):
Leaking drums

SITE STATUS (Brief Summary of site condition(s) after investigation):
Soil in vicinity of a cluster of stored drums is contaminated with petroleum hydrocarbons and agricultural chemicals.

Investigator: S. Bell Date Submitted: 05.27.11

OBSERVATIONS

Description:

This property is about 20 acres in size, and encompasses three parcels. Two parcels list the taxpayer as Grace Ardell Greeley. A third parcel lists a separate taxpayer, Sharon Ottinger, with the same listed mailing address as the Greeley parcels. The Ottinger parcel is a half acre in size and forms the northwest corner of the southern Greeley parcel. Sharon Tanner currently owns all three parcels and is the daughter of Grace Greeley; Ottinger was her maiden name. The property was used as a farm and a museum until approximately 5 years ago when all activity ceased. The property was referred to as the Pioneer Museum, not to be confused with the Pioneer Farm Museum in Eatonville.

An arson fire occurred on the southern parcel, 0420353027, in late June 2010. The Fire Department encountered a number of unaffected drums in a burned structure on the property and contacted Ecology. Ron Holcomb with Ecology's Spill Response conducted an assessment of the drums and other containers. Subsequent information collected by Ron indicated the listed taxpayer, Grace Ardell Greely, had been dead for a number of years and the property had been inherited by her daughter, Sharon Tanner. Ms. Tanner designated her grandson, Joshua Gunia, as the point of contact regarding issues at the site. Spill Response referred the site to the Toxics Cleanup Program in November 2010 for follow up regarding soil contamination due to spillage from some of the drums.

I contacted Joshua Gunia and set up an appointment to meet him at the site on 11.16.10. We walked the site together, concentrating on the large storage building where the drums were located. The southern half of the building was destroyed in the fire. The remaining half is in poor condition, lacking a roof and exposing the drums stored inside to weather conditions. The drums were stored together and covered with tarps. Soil staining was apparent around the drums and in several other areas. I spoke with Joshua about the need for his family to hire an environmental professional to delineate the extent and type of contamination on the property due to the leaks and/or spills from the drums, and we also spoke about the need to properly dispose of the drum and their contents. He told me that it would require several months for the family to be able to coordinate that, and that they were trying to sell the property. I told Joshua that an interested buyer might be willing to conduct a Phase II Environmental Site Assessment.

No progress was made in assessing or remediating the soil contamination at this property. I eventually coordinated an approved site visit through Joshua to collect soil samples at the subject property. I returned to the property on 05.10.11 and collected three soil samples. All three samples were jar packed and submitted for HCID, Total RCRA metals, SVOCs, and PCB analyses. Metal and SVOC results were below MTCA CULs; PCBs were non-detect. HCID results indicated oil present in all three samples and gasoline present in S2. Further analysis with NWTPH-dx and NWTPH-gx found oil present in all three samples, ranging from 3100 to 37,000 mg/kg. Gasoline range organics were detected in S2 at 1,900 mg/kg and were noted by the lab to be similar to mineral spirits.

The S1 sample was also tested for the presence of chlorinated herbicides, as well as organochlorine and organophosphorus pesticides. All of the detected herbicide compounds are in the phenoxy chemical family. No organophosphorus pesticides were detected, with a reported laboratory PQL of 0.22 mg/kg. Lindane, an organochlorine pesticide, was detected at the cleanup level. The pesticide and herbicide compounds detected are tabulated below; only one has a MTCA Method A CUL (lindane). For those compounds found in CLARC, the Method B mg/kg values are also provided.

S1 results for pesticides and herbicides; measurement units are mg/kg

Method	Analyte Group	Detects	Concentration	MTCA CUL	CLARC
8081A	Organochlorine pesticides	**Beta-BHC (lindane)**	**0.01**	**0.01**	0.0769
		Methoxychlor	0.019	---	400
8151A	Chlorinated acid herbicides	MCPP	36	---	---
		MCPA	15	---	---
		Dichlorprop	1.1	---	---
		Pentachlorophenol	0.0035	---	8.33
		2,4,5-TP (Silvex)	0.094	---	640
		2,4-DB	0.037	---	640
		Dinoseb	0.011	---	80

Soil samples were jar packed, stored in a sample refrigerator, and transported on ice. GRO/VOCs were not anticipated as contaminants of concern. HCID results indicated the need to run S2 for gasoline and BTEX; the analytical results for these parameters should be considered estimates, with potential negative bias in the results as 5035A sample collection methods were not used and the sample preparation occurred past the recommended holding times. Also, matrix interference resulted in potential negative bias for the methoxychlor results; actual concentrations could be greater.

Summary: lube oil and gasoline range organics were found in concentrations exceeding MTCA Method A CULs. A variety of pesticides and herbicides were also detected; lindane was found in concentrations equaling the CUL. Further assessment of the site

for the presence of lindane and other agricul ..l chemicals is warranted. Note: EDB was nd ted for.

The TPCHD recommends listing this property as contaminated.

Description of past practices likely to be responsible for contamination:
Overflowing drums, leaking drums, spillage associated with storage of products in drums.

ACTIVITIES OR PRACTICES RESPONSIBLE FOR CONTAMINATION:

Spill	☒	LUST	☐
Pesticide disposal	☐	Tank	☐
Landfill	☐	Improper handling	☐
Drums	☐	Improper disposal	☐
Other – Describe:			

Are discharges permitted (if yes, describe): No ☒ Yes ☐

Standard Industrial Code(s)

CONTAMINANT(S)

AFFECTED MEDIA	CONTAMINANTS (#1-16: See contaminants key) Enter letter designating status of contaminant: C = Confirmed (above cleanup levels); S = Suspected; R= Remediated															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ground Water		S				S	S									
Surface Water																
Drinking Water																
Soil		C				C	C									
Sediment																
Air																

1 Base/neutral organics
2 Halogenated organic compounds
3 Metals - Priority pollutants
4 Metals - Other
5 Polychlorinated biPhenyls (PCBs)
6 Pesticides
7 Petroleum products
8 Phenolic compounds
9 Non-halogenated solvents
10 Dioxin
11 Polynuclear aromatic hydrocarbons (PAHs)
12 Reactive wastes
13 Corrosive wastes
14 Radioactive wastes
15 Conventional contaminants, organic
16 Conventional contaminants, inorganic

SITE INFORMATION

Soil type 13B Everett gravelly sandy loan and 20B, 20C Kitsap silt loam

Slope Level

Site vegetation/cover present:

Forest	☒	Pasture/open field	☒
Bare soil	☒	Wetlands	☐
Brush	☒	Pavement	☐
Landscaped	☐	Surface water	☐

Other – Describe:

Are there any drinking water systems affected?	☐ Yes	☐ No
Municipal, private, or both? (Circle one)		
How many people are estimated to be affected? ____		
Is there a potential for a release or threatened release to affect a drinking water source?	☐ Yes	☐ No
Are there monitoring wells in the vicinity?	☐ Yes	☐ No
Are there dry wells in the vicinity?	☐ Yes	☐ No

CONTAMINANT PATHWAYS AND TARGETS

	Ingestion	Inhalation	Contact
Ground Water	x	x	x
Surface Water	x	x	x
Drinking Water	x	x	x
Soil	x	x	x
Sediment			
Air		x	

Targets possible:

Human, adult	☒	Residential	☒
Human, children	☒	Industrial	☐
		Commercial	☐

Sensitive environments (See WARM Scoring Manual for definition):

☒ Yes ☐ No If yes, describe:

This site overlies the Central Pierce County Sole Source Aquifer. A pond/wetland is present on the site. Within two miles are multiple wetlands, parks and streams.

General Comments:

Subject Property:

State of Washington
Department of Ecology

REGULATORY INTERACTIONS

From: Smith, Sandy B. (ECY) <sasm461@ECY.WA.GOV>
Sent: Wednesday, July 26, 2023 2:40 PM
To: Chris Beale <CBeale@PuyallupWA.gov>
Cc: Lawson, Rebecca (ECY) <rlaw461@ECY.WA.GOV>; Lambiotte, Jerome (ECY) <jela461@ECY.WA.GOV>
Subject: RE: Pioneer Museum clean up site ID 11739 | 2301 23RD AVE SE

You don't often get email from sasm461@ecy.wa.gov. Learn why this is important

CAUTION: This is an External Email. Do not click links or open attachments unless you are expecting them.

Hello Chris,

Thank you for reaching out to Ecology Toxics Cleanup Program regarding the Pioneer Museum cleanup site. I have looked at Ecology's site file, 2018 SEPA records, and pages from the Phase I Environmental Site Assessment of the site by Earth Solutions NW that you provided by email.

Based on my review of the documents, cleanup of the Pioneer Museum may be required by Ecology under the Model Toxics Control Act, Chapter 70A.305 RCW, and implementing regulations contained in Chapter 173-340 WAC. We recommend that the City of Puyallup require pollution in the environment be cleaned up in compliance with WAC 173-340 before allowing any grading, filling, or other construction activities at the site, and while contaminated soil and groundwater are still easily accessible. For an independent cleanup conducted under WAC 173-340-515, the cleanup would be complete when a no further action opinion (NFA) letter is issued under WAC 173-340-515(5)(b).

The project applicant may want to consider entering Ecology's Voluntary Cleanup Program (VCP) or expedited VCP. Under the VCP, Ecology works with customers by reviewing and providing technical opinions on cleanup work required by the Model Toxics Control Act (MTCA), which is Washington's environmental cleanup law. Jerome Lambiotte (cc'd here) is the VCP supervisor for the southwest region, which includes Puyallup. He can answer your questions about the VCP and what next steps would be under that program.

We recommend the following steps with regard to the Pioneer Museum site:

- Request the applicant submit the Phase I ESA to Ecology. The applicant also should submit documentation of the disposition of the approximately 50 drums and containers of waste material formerly present on the property.
- Include mitigation measures in the SEPA Determination to require site cleanup before any site disturbance or development of the property. Many cities in southwest Washington do require cleanup of known sites before development.
- Request the project applicant work with Ecology to clean up the site, such as through the VCP, and obtain an NFA. This typically involves the applicant hiring an environmental consultant familiar with cleanup in Washington State to assist the applicant through the steps in the cleanup process.

If you have questions or want to discuss the site in more detail, please don't hesitate to contact me.

Sincerely, Sandy Smith

Sandy Smith

Cleanup Project Manager
Southwest Regional Office – Toxics Cleanup Program
Washington State Department of Ecology
sandy.smith@ecy.wa.gov
Mobile: 360.999.9588

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
PO Box 47775 • Olympia, Washington 98504-7775 • (360) 407-6300

December 7, 2011

Ms. Sharon Tanner
11907 240th Street NE
Arlington WA 98223

Dear Ms. Tanner:

RE: Early Notice Letter Regarding the Release of Hazardous Substance at the
Site Name: Former Pioneer Museum (site name),
Location: 2301 23rd Street SE, Puyallup, Washington 98373.
Facility Site Identification Number: 9490
ISIS Cleanup Site ID No.: 11739

Under Chapter 70.105D Revised Code of Washington (RCW) the Department of Ecology (Ecology) is required to conduct an Initial Investigation, of properties where we have received a report that there has been a release or threatened release of hazardous substance that could pose a threat to human health or the environment.

Ecology maintains a list of sites where an initial investigation has found that further testing and possible cleanup is needed. We call this our "database of Confirmed or Suspected Contaminated Sites". As a result of the initial investigation conducted by the Tacoma Pierce County Health Department, this property has been added to the database as a State Cleanup Site. The Facility Site Identification number assigned to this site is 18536 (existing site number). Please note that inclusion in this database does not mean Ecology has determined you liable for cleanup of the site, as that is a separate determination under the law.

This site has been added to our database because soil contaminated with Petroleum Hydrocarbons and agricultural products has been confirmed on this property. Our report indicates that contaminated soils were found during an arson fire investigation. Many drums containing hazardous substances were found at the site. We are aware the property was historically used as a farm and museum. We understand you inherited the property and designated your grandson as point of contact for issues involving the property and the fire. County staff talked to your grandson and were informed that it would take time for you to take care of the problem and that you were trying to sell the property. After months and no follow-up or cleanup activity our investigator collected samples which confirmed contamination and the property was listed. The purpose of the initial investigation is to confirm or deny the possibility of contamination on site.

In the future, Ecology may conduct a more detailed inspection of this property including testing for possible contamination. This inspection is called a "Site Hazard Assessment". At that time, Ecology will assess whether action will be needed and if necessary establish a priority for the work.

Ecology's policy is to work cooperatively with individuals to accomplish prompt and effective cleanups. Your cooperation with Ecology in planning or conducting a remedial action is not an admission of guilt or liability. Please be aware of state laws that must be adhered to if you decide to proceed with cleanup work on your own. The primary law is Chapter 70.105D RCW and the implementing regulations, the Model Toxics Control Act Cleanup Regulation (MTCA or Chapter 173-340 WAC). These laws can be found at Ecology's Toxics Cleanup Program website, http://www.ecy.wa.gov/toxicscleanup/policy .

If you would like a printed copy of the MTCA regulations or if you have questions call me at (360) 407-6240. These rules and how they impact each site can be confusing and complicated. There are Environmental Consultants that can be employed to assist property owners with the cleanup and site assessment process.

Ecology's Voluntary Cleanup Program is designed to provide technical assistance, for a fee, to cleanup sites that qualify. If you would like additional information regarding this program you can find information on our website at http://www.ecy.wa.gov/programs/tcp/vcp/vcpmain.htm or you can contact Scott Rose at 360-407-6347.

Sincerely,

Kim Cross
Toxics Cleanup Program
Southwest Regional Office

ksc:ENL 12072011 Former Pioneer Museum

by certified mail: (7010 0780 0002 3403 2803)

cc: Joshua Gunia
Sharon Bell, Department of Ecology
Cris Matthews, Department of Ecology

INITIAL INVESTIGATION FIELD REPORT

ERTS Number: 620837
Parcel #: 0420353027
COUNTY: PIERCE

SITE INFORMATION

Site Name (e.g., Co. name over door):	Site Address (including City and Zip+4):	Site Phone:
Pioneer Museum Former	2301 23rd St SE Puyallup, WA 98373	none
Site Contact and Title:	**Site Contact Address (including City and Zip+4):**	**Site Contact Phone:**
Joshua Gunia, grandson of owner	11603 Canyon Road E. Puyallup 98373	253/435-9999
Site Owner:	**Site Owner Address (including City and Zip+4):**	**Site Owner Phone:**
Sharon Tanner	11907 240th St NE Arlington, WA 98223	360/474-1829
Site Owner Contact:	**Site Owner Contact Address (including City and Zip+4):**	**Owner Contact Phone:**
Alternate Site Name(s):	**Comments:**	**Is property > 10 acres?** Yes ☒ No ☐
Previous Site Owner(s):	**Comments:**	

Location: Quarter-Quarter: 3-4 Section: 35 Township: 20N Range: 04E
Latitude: Degrees: 47 Minutes: 10 Seconds: 19.6 N
Longitude: Degrees: 122 Minutes: 15 Seconds: 54.8 W

INSPECTION INFORMATION

Inspection Date: 11.16.10	**Inspection Time:** 10 am	**Entry Notice:** Announced ☒	Unannounced ☐
Photographs	Yes ☒	No ☐	**Weather:** Clear ☒ Rain ☐ **Temperature:** ~50 ° F
Samples	Yes ☒	No ☐	**Wind Direction:** **Wind Speed:**

RECOMMENDATION

No Further Action (Indicate NFA in box below):		LIST on ISIS (Indicate in box below):	
Release or threatened release does not pose a threat	☐	Site Hazard Assessment	☒
No release or threatened release	☐	Interim Action	☐
Educational mailing	☐	Emergency Action	☐
Refer to program/agency (Name: _____)	☐	Independent Cleanup Action In progress	☐
Independent Cleanup Action Completed (i.e., contam, removed)	☐		

COMPLAINT (Brief Summary of ERTS):
Leaking drums

SITE STATUS (Brief Summary of site condition(s) after investigation):
Soil in vicinity of a cluster of stored drums is contaminated with petroleum hydrocarbons and agricultural chemicals.

Investigator: S. Bell **Date Submitted:** 05.27.11

OBSERVATIONS

Description:

This property is about 20 acres in size, and encompasses three parcels. Two parcels list the taxpayer as Grace Ardell Greeley. A third parcel lists a separate taxpayer, Sharon Ottinger, with the same listed mailing address as the Greeley parcels. The Ottinger parcel is a half acre in size and forms the northwest corner of the southern Greeley parcel. Sharon Tanner currently owns all three parcels and is e daughter of Grace Greeley; Ottinger was her maiden name. The property was used as a farm and a museum until approximately 5 ears ago when all activity ceased. The property was referred to as the Pioneer Museum, not to be confused with the Pioneer Farm Museum in Eatonville.

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No progress was made in assessing or remediating the soil contamination at this property. I eventually coordinated an approved site visit through Joshua to collect soil samples at the subject property. I returned to the property on 05.10.11 and collected three soil samples. All three samples were jar packed and submitted for HCID, Total RCRA metals, SVOCs, and PCB analyses. Metal and SVOC results were below MTCA CULs; PCBs were non-detect. HCID results indicated oil present in all three samples and gasoline present in S2. Further analysis with NWTPH-dx and NWTPH-gx found oil present in all three samples, ranging from 3100 to 37,000 mg/kg. Gasoline range organics were detected in S2 at 1,900 mg/kg and were noted by the lab to be similar to mineral spirits.

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S1 results for pesticides and herbicides; measurement units are mg/kg

Method	Analyte Group	Detects	Concentration	MTCA CUL	CLARC
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		Methoxychlor	0.019	---	400
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		MCPA	15	---	---
		Dichlorprop	1.1	---	---
		Pentachlorophenol	0.0035	---	8.33
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		2,4-DB	0.037	---	640
		Dinoseb	0.011	---	80

Soil samples were jar packed, stored in a sample refrigerator, and transported on ice. GRO/VOCs were not anticipated as contaminants of concern. HCID results indicated the need to run S2 for gasoline and BTEX; the analytical results for these parameters should be considered estimates, with potential negative bias in the results as 5035A sample collection methods were not used and the sample preparation occurred past the recommended holding times. Also, matrix interference resulted in potential negative bias for the methoxychlor results; actual concentrations could be greater.

Summary: lube oil and gasoline range organics were found in concentrations exceeding MTCA Method A CULs. A variety of pesticides and herbicides were also detected; lindane was found in concentrations equaling the CUL. Further assessment of the site

for the presence of lindane and other agricul al chemicals is warranted. Note: EDB was nd ted for.

The TPCHD recommends listing this property as contaminated.

Description of past practices likely to be responsible for contamination:
Overflowing drums, leaking drums, spillage associated with storage of products in drums.

ACTIVITIES OR PRACTICES RESPONSIBLE FOR CONTAMINATION:

Spill	☒	LUST	☐
Pesticide disposal	☐	Tank	☐
Landfill	☐	Improper handling	☐
Drums	☐	Improper disposal	☐
Other – Describe:			

Are discharges permitted (if yes, describe): No ☒ Yes ☐

Standard Industrial Code(s)

CONTAMINANT(S)

AFFECTED MEDIA	CONTAMINANTS (#1-16: See contaminants key) Enter letter designating status of contaminant: C = Confirmed (above cleanup levels); S = Suspected; R= Remediated															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ground Water		S				S	S									
Surface Water																
Drinking Water																
Soil		C				C	C									
Sediment																
Air																

1 Base/neutral organics
2 Halogenated organic compounds
3 Metals - Priority pollutants
4 Metals - Other
5 Polychlorinated biPhenyls (PCBs)
6 Pesticides
7 Petroleum products
8 Phenolic compounds
9 Non-halogenated solvents
10 Dioxin
11 Polynuclear aromatic hydrocarbons (PAHs)
12 Reactive wastes
13 Corrosive wastes
14 Radioactive wastes
15 Conventional contaminants, organic
16 Conventional contaminants, inorganic

SITE INFORMATION

Soil type 13B Everett gravelly sandy loan and 20B, 20C Kitsap silt loam

Slope Level

Site vegetation/cover present:

Forest	☒	Pasture/open field	☒
Bare soil	☒	Wetlands	☐
Brush	☒	Pavement	☐
Landscaped	☐	Surface water	☐

Other -- Describe:

Are there any drinking water systems affected?	☐ Yes	☐ No
Municipal, private, or both? (Circle one)		
How many people are estimated to be affected? ____		
Is there a potential for a release or threatened release to affect a drinking water source?	☐ Yes	☐ No
Are there monitoring wells in the vicinity?	☐ Yes	☐ No
Are there dry wells in the vicinity?	☐ Yes	☐ No

CONTAMINANT PATHWAYS AND TARGETS

	Ingestion	Inhalation	Contact
Ground Water	x	x	x
Surface Water	x	x	x
Drinking Water	x	x	x
Soil	x	x	x
Sediment			
Air		x	

Targets possible:

Human, adult	☒	Residential	☒
Human, children	☒	Industrial	☐
		Commercial	☐

Sensitive environments (See WARM Scoring Manual for definition):

☒ Yes ☐ No If yes, describe:

This site overlies the Central Pierce County Sole Source Aquifer. A pond/wetland is present on the site. Within two miles are multiple wetlands, parks and streams.

General Comments:

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

May 23, 2011

Sharon Bell
Tacoma-Pierce County Health Department
3629 South "D" Street
Tacoma, WA 98418-6813

Re: Analytical Data for Project 620837
Laboratory Reference No. 1105-092

Dear Sharon:

Enclosed are the analytical results and associated quality control data for samples submitted on May 11, 2011.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

Case Narrative

Samples were collected on May 10, 2011 and received by the laboratory on May 11, 2011. They were maintained at the laboratory at a temperature of 2°C to 6°C.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

Organochlorine Pesticides by EPA 8081A Analysis

Due to negative effects of the matrix on the instrument, values for 4,4'-DDT and Methoxychlor in the continuing calibration verification standards (CCVs) were low. Therefore, values can be greater than reported. Since the degradation of the CCV standards was reproducible after re-injecting the sample extracts, the CCV degradation problem was attributed to the matrix of these samples.

Any other QA/QC issues associated with this extraction and analysis will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.

Semivolatiles EPA 8270D/SIM Analysis

Some MTCA cleanup levels are non-achievable for samples S1-00-051011, S2-00-051011, and S3-00-051011 due to the necessary dilutions of the samples.

Surrogate recovery data is not available for sample S2-00-051011 due to the necessary dilution of the sample coupled with sample matrix effects.

Organophosphorus Pesticides by EPA 8270D/SIM Analysis

The surrogate recovery for Triphenyl phosphate is not available due to sample matrix interference.

NWTPH Gx/BTEX Analysis

Method 5035 VOA vials were not provided for sample S2-00-051011. The sample was therefore extracted from a 4-ounce jar for analysis.

The chromatogram for sample S2-00-051011 is similar to mineral spirits.

Please note that any other QA/QC issues associated with these extractions and analyses will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

NWTPH-HCID
(with acid/silica gel clean-up)

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	S1-00-051011					
Laboratory ID:	05-092-01					
Gasoline Range Organics	ND	33	NWTPH-HCID	5-11-11	5-11-11	U1
Diesel Range Organics	ND	6600	NWTPH-HCID	5-11-11	5-11-11	U1
Lube Oil	Detected	110	NWTPH-HCID	5-11-11	5-11-11	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*117*	*50-150*				
Client ID:	S2-00-051011					
Laboratory ID:	05-092-02					
Gasoline Range Organics	Detected	110	NWTPH-HCID	5-11-11	5-12-11	
Diesel Range Organics	ND	530	NWTPH-HCID	5-11-11	5-12-11	U1
Lube Oil	Detected	540	NWTPH-HCID	5-11-11	5-12-11	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*121*	*50-150*				
Client ID:	S3-00-051011					
Laboratory ID:	05-092-03					
Gasoline Range Organics	ND	21	NWTPH-HCID	5-11-11	5-11-11	
Diesel Range Organics	ND	5600	NWTPH-HCID	5-11-11	5-11-11	U1
Lube Oil	Detected	110	NWTPH-HCID	5-11-11	5-11-11	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*117*	*50-150*				

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

NWTPH-HCID
QUALITY CONTROL
(with acid/silica gel clean-up)

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0511S1					
Gasoline Range Organics	ND	20	NWTPH-HCID	5-11-11	5-11-11	
Diesel Range Organics	ND	50	NWTPH-HCID	5-11-11	5-11-11	
Lube Oil Range Organics	ND	100	NWTPH-HCID	5-11-11	5-11-11	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*118*	*50-150*				

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

SEMIVOLATILES by EPA 8270D/SIM
page 1 of 2

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	S1-00-051011					
Laboratory ID:	05-092-01					
n-Nitrosodimethylamine	ND	1.9	EPA 8270	5-16-11	5-18-11	
Pyridine	ND	19	EPA 8270	5-16-11	5-18-11	
Phenol	ND	1.9	EPA 8270	5-16-11	5-18-11	
Aniline	ND	1.9	EPA 8270	5-16-11	5-18-11	
bis(2-Chloroethyl)ether	ND	1.9	EPA 8270	5-16-11	5-18-11	
2-Chlorophenol	ND	1.9	EPA 8270	5-16-11	5-18-11	
1,3-Dichlorobenzene	ND	1.9	EPA 8270	5-16-11	5-18-11	
1,4-Dichlorobenzene	ND	1.9	EPA 8270	5-16-11	5-18-11	
Benzyl alcohol	ND	1.9	EPA 8270	5-16-11	5-18-11	
1,2-Dichlorobenzene	ND	1.9	EPA 8270	5-16-11	5-18-11	
2-Methylphenol (o-Cresol)	ND	1.9	EPA 8270	5-16-11	5-18-11	
bis(2-Chloroisopropyl)ether	ND	1.9	EPA 8270	5-16-11	5-18-11	
(3+4)-Methylphenol (m,p-Cresol)	ND	1.9	EPA 8270	5-16-11	5-18-11	
n-Nitroso-di-n-propylamine	ND	1.9	EPA 8270	5-16-11	5-18-11	
Hexachloroethane	ND	1.9	EPA 8270	5-16-11	5-18-11	
Nitrobenzene	ND	1.9	EPA 8270	5-16-11	5-18-11	
Isophorone	ND	1.9	EPA 8270	5-16-11	5-18-11	
2-Nitrophenol	ND	1.9	EPA 8270	5-16-11	5-18-11	
2,4-Dimethylphenol	ND	19	EPA 8270	5-16-11	5-18-11	
bis(2-Chloroethoxy)methane	ND	1.9	EPA 8270	5-16-11	5-18-11	
2,4-Dichlorophenol	ND	1.9	EPA 8270	5-16-11	5-18-11	
1,2,4-Trichlorobenzene	ND	1.9	EPA 8270	5-16-11	5-18-11	
Naphthalene	ND	0.015	EPA 8270/SIM	5-16-11	5-20-11	
4-Chloroaniline	ND	1.9	EPA 8270	5-16-11	5-18-11	
Hexachlorobutadiene	ND	1.9	EPA 8270	5-16-11	5-18-11	
4-Chloro-3-methylphenol	ND	1.9	EPA 8270	5-16-11	5-18-11	
2-Methylnaphthalene	ND	0.015	EPA 8270/SIM	5-16-11	5-20-11	
1-Methylnaphthalene	ND	0.015	EPA 8270/SIM	5-16-11	5-20-11	
Hexachlorocyclopentadiene	ND	1.9	EPA 8270	5-16-11	5-18-11	
2,4,6-Trichlorophenol	ND	1.9	EPA 8270	5-16-11	5-18-11	
2,3-Dichloroaniline	ND	1.9	EPA 8270	5-16-11	5-18-11	
2,4,5-Trichlorophenol	ND	1.9	EPA 8270	5-16-11	5-18-11	
2-Chloronaphthalene	ND	1.9	EPA 8270	5-16-11	5-18-11	
2-Nitroaniline	ND	1.9	EPA 8270	5-16-11	5-18-11	
1,4-Dinitrobenzene	ND	1.9	EPA 8270	5-16-11	5-18-11	
Dimethylphthalate	ND	1.9	EPA 8270	5-16-11	5-18-11	
1,3-Dinitrobenzene	ND	1.9	EPA 8270	5-16-11	5-18-11	
2,6-Dinitrotoluene	ND	1.9	EPA 8270	5-16-11	5-18-11	
1,2-Dinitrobenzene	ND	1.9	EPA 8270	5-16-11	5-18-11	
Acenaphthylene	ND	0.015	EPA 8270/SIM	5-16-11	5-20-11	
3-Nitroaniline	ND	1.9	EPA 8270	5-16-11	5-18-11	

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

SEMIVOLATILES by EPA 8270D/SIM
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	S1-00-051011					
Laboratory ID:	05-092-01					
2,4-Dinitrophenol	ND	9.3	EPA 8270	5-16-11	5-18-11	
Acenaphthene	0.019	0.015	EPA 8270/SIM	5-16-11	5-20-11	
4-Nitrophenol	ND	1.9	EPA 8270	5-16-11	5-18-11	
2,4-Dinitrotoluene	ND	1.9	EPA 8270	5-16-11	5-18-11	
Dibenzofuran	ND	1.9	EPA 8270	5-16-11	5-18-11	
2,3,5,6-Tetrachlorophenol	ND	1.9	EPA 8270	5-16-11	5-18-11	
2,3,4,6-Tetrachlorophenol	ND	1.9	EPA 8270	5-16-11	5-18-11	
Diethylphthalate	ND	9.3	EPA 8270	5-16-11	5-18-11	
4-Chlorophenyl-phenylether	ND	1.9	EPA 8270	5-16-11	5-18-11	
4-Nitroaniline	ND	1.9	EPA 8270	5-16-11	5-18-11	
Fluorene	ND	0.015	EPA 8270/SIM	5-16-11	5-20-11	
4,6-Dinitro-2-methylphenol	ND	9.3	EPA 8270	5-16-11	5-18-11	
n-Nitrosodiphenylamine	ND	1.9	EPA 8270	5-16-11	5-18-11	
1,2-Diphenylhydrazine	ND	1.9	EPA 8270	5-16-11	5-18-11	
4-Bromophenyl-phenylether	ND	1.9	EPA 8270	5-16-11	5-18-11	
Hexachlorobenzene	ND	1.9	EPA 8270	5-16-11	5-18-11	
Pentachlorophenol	ND	9.3	EPA 8270	5-16-11	5-18-11	
Phenanthrene	ND	0.015	EPA 8270/SIM	5-16-11	5-20-11	
Anthracene	ND	0.015	EPA 8270/SIM	5-16-11	5-20-11	
Carbazole	ND	1.9	EPA 8270	5-16-11	5-18-11	
Di-n-butylphthalate	ND	1.9	EPA 8270	5-16-11	5-18-11	
Fluoranthene	ND	0.015	EPA 8270/SIM	5-16-11	5-20-11	
Benzidine	ND	19	EPA 8270	5-16-11	5-18-11	
Pyrene	ND	0.015	EPA 8270/SIM	5-16-11	5-20-11	
Butylbenzylphthalate	ND	19	EPA 8270	5-16-11	5-18-11	
bis-2-Ethylhexyladipate	ND	1.9	EPA 8270	5-16-11	5-18-11	
3,3'-Dichlorobenzidine	ND	19	EPA 8270	5-16-11	5-18-11	
Benzo[a]anthracene	ND	0.015	EPA 8270/SIM	5-16-11	5-20-11	
Chrysene	ND	0.015	EPA 8270/SIM	5-16-11	5-20-11	
bis(2-Ethylhexyl)phthalate	ND	1.9	EPA 8270	5-16-11	5-18-11	
Di-n-octylphthalate	ND	1.9	EPA 8270	5-16-11	5-18-11	
Benzo[b]fluoranthene	0.029	0.015	EPA 8270/SIM	5-16-11	5-20-11	
Benzo(j,k)fluoranthene	0.040	0.015	EPA 8270/SIM	5-16-11	5-20-11	
Benzo[a]pyrene	0.13	0.015	EPA 8270/SIM	5-16-11	5-20-11	
Indeno[1,2,3-cd]pyrene	ND	0.015	EPA 8270/SIM	5-16-11	5-20-11	
Dibenz[a,h]anthracene	ND	0.015	EPA 8270/SIM	5-16-11	5-20-11	
Benzo[g,h,i]perylene	ND	0.015	EPA 8270/SIM	5-16-11	5-20-11	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorophenol	*73*	*30 - 97*				
Phenol-d6	*87*	*40 - 104*				
Nitrobenzene-d5	*75*	*35 - 102*				
2-Fluorobiphenyl	*91*	*44 - 97*				
2,4,6-Tribromophenol	*91*	*41 - 110*				
Terphenyl-d14	*86*	*53 - 107*				

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

SEMIVOLATILES by EPA 8270D/SIM
page 1 of 2

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	S2-00-051011					
Laboratory ID:	05-092-02					
n-Nitrosodimethylamine	ND	3.6	EPA 8270	5-16-11	5-19-11	
Pyridine	ND	36	EPA 8270	5-16-11	5-19-11	
Phenol	ND	3.6	EPA 8270	5-16-11	5-19-11	
Aniline	ND	3.6	EPA 8270	5-16-11	5-19-11	
bis(2-Chloroethyl)ether	ND	3.6	EPA 8270	5-16-11	5-19-11	
2-Chlorophenol	ND	3.6	EPA 8270	5-16-11	5-19-11	
1,3-Dichlorobenzene	ND	3.6	EPA 8270	5-16-11	5-19-11	
1,4-Dichlorobenzene	ND	3.6	EPA 8270	5-16-11	5-19-11	
Benzyl alcohol	ND	3.6	EPA 8270	5-16-11	5-19-11	
1,2-Dichlorobenzene	ND	3.6	EPA 8270	5-16-11	5-19-11	
2-Methylphenol (o-Cresol)	ND	3.6	EPA 8270	5-16-11	5-19-11	
bis(2-Chloroisopropyl)ether	ND	3.6	EPA 8270	5-16-11	5-19-11	
(3+4)-Methylphenol (m,p-Cresol)	ND	3.6	EPA 8270	5-16-11	5-19-11	
n-Nitroso-di-n-propylamine	ND	3.6	EPA 8270	5-16-11	5-19-11	
Hexachloroethane	ND	3.6	EPA 8270	5-16-11	5-19-11	
Nitrobenzene	ND	3.6	EPA 8270	5-16-11	5-19-11	
Isophorone	ND	3.6	EPA 8270	5-16-11	5-19-11	
2-Nitrophenol	ND	3.6	EPA 8270	5-16-11	5-19-11	
2,4-Dimethylphenol	ND	36	EPA 8270	5-16-11	5-19-11	
bis(2-Chloroethoxy)methane	ND	3.6	EPA 8270	5-16-11	5-19-11	
2,4-Dichlorophenol	ND	3.6	EPA 8270	5-16-11	5-19-11	
1,2,4-Trichlorobenzene	ND	3.6	EPA 8270	5-16-11	5-19-11	
Naphthalene	0.55	0.036	EPA 8270/SIM	5-16-11	5-20-11	
4-Chloroaniline	ND	3.6	EPA 8270	5-16-11	5-19-11	
Hexachlorobutadiene	ND	3.6	EPA 8270	5-16-11	5-19-11	
4-Chloro-3-methylphenol	ND	3.6	EPA 8270	5-16-11	5-19-11	
2-Methylnaphthalene	0.095	0.036	EPA 8270/SIM	5-16-11	5-20-11	
1-Methylnaphthalene	0.055	0.036	EPA 8270/SIM	5-16-11	5-20-11	
Hexachlorocyclopentadiene	ND	3.6	EPA 8270	5-16-11	5-19-11	
2,4,6-Trichlorophenol	ND	3.6	EPA 8270	5-16-11	5-19-11	
2,3-Dichloroaniline	ND	3.6	EPA 8270	5-16-11	5-19-11	
2,4,5-Trichlorophenol	ND	3.6	EPA 8270	5-16-11	5-19-11	
2-Chloronaphthalene	ND	3.6	EPA 8270	5-16-11	5-19-11	
2-Nitroaniline	ND	3.6	EPA 8270	5-16-11	5-19-11	
1,4-Dinitrobenzene	ND	3.6	EPA 8270	5-16-11	5-19-11	
Dimethylphthalate	ND	3.6	EPA 8270	5-16-11	5-19-11	
1,3-Dinitrobenzene	ND	3.6	EPA 8270	5-16-11	5-19-11	
2,6-Dinitrotoluene	ND	3.6	EPA 8270	5-16-11	5-19-11	
1,2-Dinitrobenzene	ND	3.6	EPA 8270	5-16-11	5-19-11	
Acenaphthylene	ND	0.036	EPA 8270/SIM	5-16-11	5-20-11	
3-Nitroaniline	ND	3.6	EPA 8270	5-16-11	5-19-11	

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Laboratory Reference: 1105-092
Project: 620837

SEMIVOLATILES by EPA 8270D/SIM
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	S2-00-051011					
Laboratory ID:	05-092-02					
2,4-Dinitrophenol	ND	18	EPA 8270	5-16-11	5-19-11	
Acenaphthene	ND	0.036	EPA 8270/SIM	5-16-11	5-20-11	
4-Nitrophenol	ND	3.6	EPA 8270	5-16-11	5-19-11	
2,4-Dinitrotoluene	ND	3.6	EPA 8270	5-16-11	5-19-11	
Dibenzofuran	ND	3.6	EPA 8270	5-16-11	5-19-11	
2,3,5,6-Tetrachlorophenol	ND	3.6	EPA 8270	5-16-11	5-19-11	
2,3,4,6-Tetrachlorophenol	ND	3.6	EPA 8270	5-16-11	5-19-11	
Diethylphthalate	ND	18	EPA 8270	5-16-11	5-19-11	
4-Chlorophenyl-phenylether	ND	3.6	EPA 8270	5-16-11	5-19-11	
4-Nitroaniline	ND	3.6	EPA 8270	5-16-11	5-19-11	
Fluorene	ND	0.036	EPA 8270/SIM	5-16-11	5-20-11	
4,6-Dinitro-2-methylphenol	ND	18	EPA 8270	5-16-11	5-19-11	
n-Nitrosodiphenylamine	ND	3.6	EPA 8270	5-16-11	5-19-11	
1,2-Diphenylhydrazine	ND	3.6	EPA 8270	5-16-11	5-19-11	
4-Bromophenyl-phenylether	ND	3.6	EPA 8270	5-16-11	5-19-11	
Hexachlorobenzene	ND	3.6	EPA 8270	5-16-11	5-19-11	
Pentachlorophenol	ND	18	EPA 8270	5-16-11	5-19-11	
Phenanthrene	0.060	0.036	EPA 8270/SIM	5-16-11	5-20-11	
Anthracene	ND	0.036	EPA 8270/SIM	5-16-11	5-20-11	
Carbazole	ND	3.6	EPA 8270	5-16-11	5-19-11	
Di-n-butylphthalate	ND	3.6	EPA 8270	5-16-11	5-19-11	
Fluoranthene	ND	0.036	EPA 8270/SIM	5-16-11	5-20-11	
Benzidine	ND	36	EPA 8270	5-16-11	5-19-11	
Pyrene	0.051	0.036	EPA 8270/SIM	5-16-11	5-20-11	
Butylbenzylphthalate	ND	36	EPA 8270	5-16-11	5-19-11	
bis-2-Ethylhexyladipate	ND	3.6	EPA 8270	5-16-11	5-19-11	
3,3'-Dichlorobenzidine	ND	36	EPA 8270	5-16-11	5-19-11	
Benzo[a]anthracene	0.076	0.036	EPA 8270/SIM	5-16-11	5-20-11	
Chrysene	0.17	0.036	EPA 8270/SIM	5-16-11	5-20-11	
bis(2-Ethylhexyl)phthalate	ND	3.6	EPA 8270	5-16-11	5-19-11	
Di-n-octylphthalate	ND	3.6	EPA 8270	5-16-11	5-19-11	
Benzo[b]fluoranthene	0.037	0.036	EPA 8270/SIM	5-16-11	5-20-11	
Benzo(j,k)fluoranthene	ND	0.036	EPA 8270/SIM	5-16-11	5-20-11	
Benzo[a]pyrene	0.038	0.036	EPA 8270/SIM	5-16-11	5-20-11	
Indeno[1,2,3-cd]pyrene	ND	0.036	EPA 8270/SIM	5-16-11	5-20-11	
Dibenz[a,h]anthracene	ND	0.036	EPA 8270/SIM	5-16-11	5-20-11	
Benzo[g,h,i]perylene	ND	0.036	EPA 8270/SIM	5-16-11	5-20-11	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorophenol	--	*30 - 97*				S
Phenol-d6	--	*40 - 104*				S
Nitrobenzene-d5	--	*35 - 102*				S
2-Fluorobiphenyl	--	*44 - 97*				S
2,4,6-Tribromophenol	--	*41 - 110*				S
Terphenyl-d14	--	*53 - 107*				S

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Laboratory Reference: 1105-092
Project: 620837

SEMIVOLATILES by EPA 8270D/SIM
page 1 of 2

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	S3-00-051011					
Laboratory ID:	05-092-03					
n-Nitrosodimethylamine	ND	1.8	EPA 8270	5-16-11	5-19-11	
Pyridine	ND	18	EPA 8270	5-16-11	5-19-11	
Phenol	ND	1.8	EPA 8270	5-16-11	5-19-11	
Aniline	ND	1.8	EPA 8270	5-16-11	5-19-11	
bis(2-Chloroethyl)ether	ND	1.8	EPA 8270	5-16-11	5-19-11	
2-Chlorophenol	ND	1.8	EPA 8270	5-16-11	5-19-11	
1,3-Dichlorobenzene	ND	1.8	EPA 8270	5-16-11	5-19-11	
1,4-Dichlorobenzene	ND	1.8	EPA 8270	5-16-11	5-19-11	
Benzyl alcohol	ND	1.8	EPA 8270	5-16-11	5-19-11	
1,2-Dichlorobenzene	ND	1.8	EPA 8270	5-16-11	5-19-11	
2-Methylphenol (o-Cresol)	ND	1.8	EPA 8270	5-16-11	5-19-11	
bis(2-Chloroisopropyl)ether	ND	1.8	EPA 8270	5-16-11	5-19-11	
(3+4)-Methylphenol (m,p-Cresol)	ND	1.8	EPA 8270	5-16-11	5-19-11	
n-Nitroso-di-n-propylamine	ND	1.8	EPA 8270	5-16-11	5-19-11	
Hexachloroethane	ND	1.8	EPA 8270	5-16-11	5-19-11	
Nitrobenzene	ND	1.8	EPA 8270	5-16-11	5-19-11	
Isophorone	ND	1.8	EPA 8270	5-16-11	5-19-11	
2-Nitrophenol	ND	1.8	EPA 8270	5-16-11	5-19-11	
2,4-Dimethylphenol	ND	18	EPA 8270	5-16-11	5-19-11	
bis(2-Chloroethoxy)methane	ND	1.8	EPA 8270	5-16-11	5-19-11	
2,4-Dichlorophenol	ND	1.8	EPA 8270	5-16-11	5-19-11	
1,2,4-Trichlorobenzene	ND	1.8	EPA 8270	5-16-11	5-19-11	
Naphthalene	ND	0.014	EPA 8270/SIM	5-16-11	5-19-11	
4-Chloroaniline	ND	1.8	EPA 8270	5-16-11	5-19-11	
Hexachlorobutadiene	ND	1.8	EPA 8270	5-16-11	5-19-11	
4-Chloro-3-methylphenol	ND	1.8	EPA 8270	5-16-11	5-19-11	
2-Methylnaphthalene	ND	0.014	EPA 8270/SIM	5-16-11	5-19-11	
1-Methylnaphthalene	ND	0.014	EPA 8270/SIM	5-16-11	5-19-11	
Hexachlorocyclopentadiene	ND	1.8	EPA 8270	5-16-11	5-19-11	
2,4,6-Trichlorophenol	ND	1.8	EPA 8270	5-16-11	5-19-11	
2,3-Dichloroaniline	ND	1.8	EPA 8270	5-16-11	5-19-11	
2,4,5-Trichlorophenol	ND	1.8	EPA 8270	5-16-11	5-19-11	
2-Chloronaphthalene	ND	1.8	EPA 8270	5-16-11	5-19-11	
2-Nitroaniline	ND	1.8	EPA 8270	5-16-11	5-19-11	
1,4-Dinitrobenzene	ND	1.8	EPA 8270	5-16-11	5-19-11	
Dimethylphthalate	ND	1.8	EPA 8270	5-16-11	5-19-11	
1,3-Dinitrobenzene	ND	1.8	EPA 8270	5-16-11	5-19-11	
2,6-Dinitrotoluene	ND	1.8	EPA 8270	5-16-11	5-19-11	
1,2-Dinitrobenzene	ND	1.8	EPA 8270	5-16-11	5-19-11	
Acenaphthylene	ND	0.014	EPA 8270/SIM	5-16-11	5-19-11	
3-Nitroaniline	ND	1.8	EPA 8270	5-16-11	5-19-11	

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 020837

SEMIVOLATILES by EPA 8270D/SIM
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	S3-00-051011					
Laboratory ID:	05-092-03					
2,4-Dinitrophenol	ND	8.9	EPA 8270	5-16-11	5-19-11	
Acenaphthene	0.015	0.014	EPA 8270/SIM	5-16-11	5-19-11	
4-Nitrophenol	ND	1.8	EPA 8270	5-16-11	5-19-11	
2,4-Dinitrotoluene	ND	1.8	EPA 8270	5-16-11	5-19-11	
Dibenzofuran	ND	1.8	EPA 8270	5-16-11	5-19-11	
2,3,5,6-Tetrachlorophenol	ND	1.8	EPA 8270	5-16-11	5-19-11	
2,3,4,6-Tetrachlorophenol	ND	1.8	EPA 8270	5-16-11	5-19-11	
Diethylphthalate	ND	8.9	EPA 8270	5-16-11	5-19-11	
4-Chlorophenyl-phenylether	ND	1.8	EPA 8270	5-16-11	5-19-11	
4-Nitroaniline	ND	1.8	EPA 8270	5-16-11	5-19-11	
Fluorene	ND	0.014	EPA 8270/SIM	5-16-11	5-19-11	
4,6-Dinitro-2-methylphenol	ND	8.9	EPA 8270	5-16-11	5-19-11	
n-Nitrosodiphenylamine	ND	1.8	EPA 8270	5-16-11	5-19-11	
1,2-Diphenylhydrazine	ND	1.8	EPA 8270	5-16-11	5-19-11	
4-Bromophenyl-phenylether	ND	1.8	EPA 8270	5-16-11	5-19-11	
Hexachlorobenzene	ND	1.8	EPA 8270	5-16-11	5-19-11	
Pentachlorophenol	ND	8.9	EPA 8270	5-16-11	5-19-11	
Phenanthrene	0.052	0.014	EPA 8270/SIM	5-16-11	5-19-11	
Anthracene	ND	0.014	EPA 8270/SIM	5-16-11	5-19-11	
Carbazole	ND	1.8	EPA 8270	5-16-11	5-19-11	
Di-n-butylphthalate	ND	1.8	EPA 8270	5-16-11	5-19-11	
Fluoranthene	ND	0.014	EPA 8270/SIM	5-16-11	5-19-11	
Benzidine	ND	18	EPA 8270	5-16-11	5-19-11	
Pyrene	ND	0.014	EPA 8270/SIM	5-16-11	5-19-11	
Butylbenzylphthalate	ND	18	EPA 8270	5-16-11	5-19-11	
bis-2-Ethylhexyladipate	ND	1.8	EPA 8270	5-16-11	5-19-11	
3,3'-Dichlorobenzidine	ND	18	EPA 8270	5-16-11	5-19-11	
Benzo[a]anthracene	ND	0.014	EPA 8270/SIM	5-16-11	5-19-11	
Chrysene	ND	0.014	EPA 8270/SIM	5-16-11	5-19-11	
bis(2-Ethylhexyl)phthalate	ND	1.8	EPA 8270	5-16-11	5-19-11	
Di-n-octylphthalate	ND	1.8	EPA 8270	5-16-11	5-19-11	
Benzo[b]fluoranthene	0.057	0.014	EPA 8270/SIM	5-16-11	5-19-11	
Benzo(j,k)fluoranthene	0.23	0.014	EPA 8270/SIM	5-16-11	5-19-11	
Benzo[a]pyrene	0.044	0.014	EPA 8270/SIM	5-16-11	5-19-11	
Indeno[1,2,3-cd]pyrene	ND	0.014	EPA 8270/SIM	5-16-11	5-19-11	
Dibenz[a,h]anthracene	ND	0.014	EPA 8270/SIM	5-16-11	5-19-11	
Benzo[g,h,i]perylene	ND	0.014	EPA 8270/SIM	5-16-11	5-19-11	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorophenol	*83*	*30 - 97*				
Phenol-d6	*98*	*40 - 104*				
Nitrobenzene-d5	*94*	*35 - 102*				
2-Fluorobiphenyl	*89*	*44 - 97*				
2,4,6-Tribromophenol	*87*	*41 - 110*				
Terphenyl-d14	*92*	*53 - 107*				

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

SEMIVOLATILES by EPA 8270D/SIM
METHOD BLANK QUALITY CONTROL
page 1 of 2

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0516S3					
n-Nitrosodimethylamine	ND	0.033	EPA 8270	5-16-11	5-17-11	
Pyridine	ND	0.33	EPA 8270	5-16-11	5-17-11	
Phenol	ND	0.033	EPA 8270	5-16-11	5-17-11	
Aniline	ND	0.033	EPA 8270	5-16-11	5-17-11	
bis(2-Chloroethyl)ether	ND	0.033	EPA 8270	5-16-11	5-17-11	
2-Chlorophenol	ND	0.033	EPA 8270	5-16-11	5-17-11	
1,3-Dichlorobenzene	ND	0.033	EPA 8270	5-16-11	5-17-11	
1,4-Dichlorobenzene	ND	0.033	EPA 8270	5-16-11	5-17-11	
Benzyl alcohol	ND	0.033	EPA 8270	5-16-11	5-17-11	
1,2-Dichlorobenzene	ND	0.033	EPA 8270	5-16-11	5-17-11	
2-Methylphenol (o-Cresol)	ND	0.033	EPA 8270	5-16-11	5-17-11	
bis(2-Chloroisopropyl)ether	ND	0.033	EPA 8270	5-16-11	5-17-11	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.033	EPA 8270	5-16-11	5-17-11	
n-Nitroso-di-n-propylamine	ND	0.033	EPA 8270	5-16-11	5-17-11	
Hexachloroethane	ND	0.033	EPA 8270	5-16-11	5-17-11	
Nitrobenzene	ND	0.033	EPA 8270	5-16-11	5-17-11	
Isophorone	ND	0.033	EPA 8270	5-16-11	5-17-11	
2-Nitrophenol	ND	0.033	EPA 8270	5-16-11	5-17-11	
2,4-Dimethylphenol	ND	0.33	EPA 8270	5-16-11	5-17-11	
bis(2-Chloroethoxy)methane	ND	0.033	EPA 8270	5-16-11	5-17-11	
2,4-Dichlorophenol	ND	0.033	EPA 8270	5-16-11	5-17-11	
1,2,4-Trichlorobenzene	ND	0.033	EPA 8270	5-16-11	5-17-11	
Naphthalene	ND	0.0067	EPA 8270/SIM	5-16-11	5-19-11	
4-Chloroaniline	ND	0.033	EPA 8270	5-16-11	5-17-11	
Hexachlorobutadiene	ND	0.033	EPA 8270	5-16-11	5-17-11	
4-Chloro-3-methylphenol	ND	0.033	EPA 8270	5-16-11	5-17-11	
2-Methylnaphthalene	ND	0.0067	EPA 8270/SIM	5-16-11	5-19-11	
1-Methylnaphthalene	ND	0.0067	EPA 8270/SIM	5-16-11	5-19-11	
Hexachlorocyclopentadiene	ND	0.033	EPA 8270	5-16-11	5-17-11	
2,4,6-Trichlorophenol	ND	0.033	EPA 8270	5-16-11	5-17-11	
2,3-Dichloroaniline	ND	0.033	EPA 8270	5-16-11	5-17-11	
2,4,5-Trichlorophenol	ND	0.033	EPA 8270	5-16-11	5-17-11	
2-Chloronaphthalene	ND	0.033	EPA 8270	5-16-11	5-17-11	
2-Nitroaniline	ND	0.033	EPA 8270	5-16-11	5-17-11	
1,4-Dinitrobenzene	ND	0.033	EPA 8270	5-16-11	5-17-11	
Dimethylphthalate	ND	0.033	EPA 8270	5-16-11	5-17-11	
1,3-Dinitrobenzene	ND	0.033	EPA 8270	5-16-11	5-17-11	
2,6-Dinitrotoluene	ND	0.033	EPA 8270	5-16-11	5-17-11	
1,2-Dinitrobenzene	ND	0.033	EPA 8270	5-16-11	5-17-11	
Acenaphthylene	ND	0.0067	EPA 8270/SIM	5-16-11	5-19-11	
3-Nitroaniline	ND	0.033	EPA 8270	5-16-11	5-17-11	

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

SEMIVOLATILES by EPA 8270D/SIM
METHOD BLANK QUALITY CONTROL
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0516S3					
2,4-Dinitrophenol	ND	0.17	EPA 8270	5-16-11	5-17-11	
Acenaphthene	ND	0.0067	EPA 8270/SIM	5-16-11	5-19-11	
4-Nitrophenol	ND	0.033	EPA 8270	5-16-11	5-17-11	
2,4-Dinitrotoluene	ND	0.033	EPA 8270	5-16-11	5-17-11	
Dibenzofuran	ND	0.033	EPA 8270	5-16-11	5-17-11	
2,3,5,6-Tetrachlorophenol	ND	0.033	EPA 8270	5-16-11	5-17-11	
2,3,4,6-Tetrachlorophenol	ND	0.033	EPA 8270	5-16-11	5-17-11	
Diethylphthalate	ND	0.17	EPA 8270	5-16-11	5-17-11	
4-Chlorophenyl-phenylether	ND	0.033	EPA 8270	5-16-11	5-17-11	
4-Nitroaniline	ND	0.033	EPA 8270	5-16-11	5-17-11	
Fluorene	ND	0.0067	EPA 8270/SIM	5-16-11	5-19-11	
4,6-Dinitro-2-methylphenol	ND	0.17	EPA 8270	5-16-11	5-17-11	
n-Nitrosodiphenylamine	ND	0.033	EPA 8270	5-16-11	5-17-11	
1,2-Diphenylhydrazine	ND	0.033	EPA 8270	5-16-11	5-17-11	
4-Bromophenyl-phenylether	ND	0.033	EPA 8270	5-16-11	5-17-11	
Hexachlorobenzene	ND	0.033	EPA 8270	5-16-11	5-17-11	
Pentachlorophenol	ND	0.17	EPA 8270	5-16-11	5-17-11	
Phenanthrene	ND	0.0067	EPA 8270/SIM	5-16-11	5-19-11	
Anthracene	ND	0.0067	EPA 8270/SIM	5-16-11	5-19-11	
Carbazole	ND	0.033	EPA 8270	5-16-11	5-17-11	
Di-n-butylphthalate	ND	0.33	EPA 8270	5-16-11	5-17-11	
Fluoranthene	ND	0.0067	EPA 8270/SIM	5-16-11	5-19-11	
Benzidine	ND	0.33	EPA 8270	5-16-11	5-17-11	
Pyrene	ND	0.0067	EPA 8270/SIM	5-16-11	5-19-11	
Butylbenzylphthalate	ND	0.33	EPA 8270	5-16-11	5-17-11	
bis-2-Ethylhexyladipate	ND	0.033	EPA 8270	5-16-11	5-17-11	
3,3'-Dichlorobenzidine	ND	0.33	EPA 8270	5-16-11	5-17-11	
Benzo[a]anthracene	ND	0.0067	EPA 8270/SIM	5-16-11	5-19-11	
Chrysene	ND	0.0067	EPA 8270/SIM	5-16-11	5-19-11	
bis(2-Ethylhexyl)phthalate	ND	0.033	EPA 8270	5-16-11	5-17-11	
Di-n-octylphthalate	ND	0.033	EPA 8270	5-16-11	5-17-11	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270/SIM	5-16-11	5-19-11	
Benzo[j,k]fluoranthene	ND	0.0067	EPA 8270/SIM	5-16-11	5-19-11	
Benzo[a]pyrene	ND	0.0067	EPA 8270/SIM	5-16-11	5-19-11	
Indeno[1,2,3-cd]pyrene	ND	0.0067	EPA 8270/SIM	5-16-11	5-19-11	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270/SIM	5-16-11	5-19-11	
Benzo[g,h,i]perylene	ND	0.0067	EPA 8270/SIM	5-16-11	5-19-11	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorophenol	*58*	*30 - 97*				
Phenol-d6	*64*	*40 - 104*				
Nitrobenzene-d5	*60*	*35 - 102*				
2-Fluorobiphenyl	*66*	*44 - 97*				
2,4,6-Tribromophenol	*71*	*41 - 110*				
Terphenyl-d14	*74*	*53 - 107*				

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

SEMIVOLATILES by EPA 8270D/SIM
SB/SBD QUALITY CONTROL

Matrix: Soil
Units: mg/Kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB051663									
	SB	SBD	SB	SBD	SB	SBD				
Phenol	0.895	1.04	1.33	1.33	67	78	31 - 111	15	34	
2-Chlorophenol	0.899	1.03	1.33	1.33	68	77	29 - 112	14	37	
1,4-Dichlorobenzene	0.421	0.488	0.667	0.667	63	73	24 - 100	15	37	
n-Nitroso-di-n-propylamine	0.435	0.491	0.667	0.667	65	74	35 - 104	12	32	
1,2,4-Trichlorobenzene	0.420	0.472	0.667	0.667	63	71	29 - 94	12	35	
4-Chloro-3-methylphenol	0.957	1.06	1.33	1.33	73	80	53 - 104	9	25	
Acenaphthene	0.462	0.505	0.667	0.667	69	76	50 - 95	9	23	
4-Nitrophenol	1.06	1.14	1.33	1.33	80	86	42 - 126	7	30	
2,4-Dinitrotoluene	0.496	0.565	0.667	0.667	74	85	53 - 103	13	31	
Pentachlorophenol	0.971	1.08	1.33	1.33	73	80	50 - 116	9	30	
Pyrene	0.495	0.531	0.667	0.667	74	80	57 - 108	7	27	
Surrogate:										
2-Fluorophenol					*62*	*71*	*30 - 97*			
Phenol-d6					*69*	*80*	*40 - 104*			
Nitrobenzene-d5					*70*	*77*	*35 - 102*			
2-Fluorobiphenyl					*72*	*76*	*44 - 97*			
2,4,6-Tribromophenol					*74*	*80*	*41 - 110*			
Terphenyl-d14					*75*	*81*	*53 - 107*			

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

PCBs by EPA 8082

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	S1-00-051011					
Laboratory ID:	05-092-01					
Aroclor 1016	ND	0.056	EPA 8082	5-11-11	5-12-11	
Aroclor 1221	ND	0.056	EPA 8082	5-11-11	5-12-11	
Aroclor 1232	ND	0.056	EPA 8082	5-11-11	5-12-11	
Aroclor 1242	ND	0.056	EPA 8082	5-11-11	5-12-11	
Aroclor 1248	ND	0.056	EPA 8082	5-11-11	5-12-11	
Aroclor 1254	ND	0.056	EPA 8082	5-11-11	5-12-11	
Aroclor 1260	ND	0.056	EPA 8082	5-11-11	5-12-11	
Surrogate:	*Percent Recovery*	*Control Limits*				
DCB	*72*	*42-123*				
Client ID:	S2-00-051011					
Laboratory ID:	05-092-02					
Aroclor 1016	ND	0.054	EPA 8082	5-11-11	5-12-11	
Aroclor 1221	ND	0.054	EPA 8082	5-11-11	5-12-11	
Aroclor 1232	ND	0.054	EPA 8082	5-11-11	5-12-11	
Aroclor 1242	ND	0.054	EPA 8082	5-11-11	5-12-11	
Aroclor 1248	ND	0.054	EPA 8082	5-11-11	5-12-11	
Aroclor 1254	ND	0.054	EPA 8082	5-11-11	5-12-11	
Aroclor 1260	ND	0.054	EPA 8082	5-11-11	5-12-11	
Surrogate:	*Percent Recovery*	*Control Limits*				
DCB	*71*	*42-123*				
Client ID:	S3-00-051011					
Laboratory ID:	05-092-03					
Aroclor 1016	ND	0.053	EPA 8082	5-11-11	5-12-11	
Aroclor 1221	ND	0.053	EPA 8082	5-11-11	5-12-11	
Aroclor 1232	ND	0.053	EPA 8082	5-11-11	5-12-11	
Aroclor 1242	ND	0.053	EPA 8082	5-11-11	5-12-11	
Aroclor 1248	ND	0.053	EPA 8082	5-11-11	5-12-11	
Aroclor 1254	ND	0.053	EPA 8082	5-11-11	5-12-11	
Aroclor 1260	ND	0.053	EPA 8082	5-11-11	5-12-11	
Surrogate:	*Percent Recovery*	*Control Limits*				
DCB	*75*	*42-123*				

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

PCBs by EPA 8082
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0511S1					
Aroclor 1016	ND	0.050	EPA 8082	5-11-11	5-12-11	
Aroclor 1221	ND	0.050	EPA 8082	5-11-11	5-12-11	
Aroclor 1232	ND	0.050	EPA 8082	5-11-11	5-12-11	
Aroclor 1242	ND	0.050	EPA 8082	5-11-11	5-12-11	
Aroclor 1248	ND	0.050	EPA 8082	5-11-11	5-12-11	
Aroclor 1254	ND	0.050	EPA 8082	5-11-11	5-12-11	
Aroclor 1260	ND	0.050	EPA 8082	5-11-11	5-12-11	
Surrogate:	*Percent Recovery*	*Control Limits*				
DCB	*81*	*42-123*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
MATRIX SPIKES											
Laboratory ID:	05-078-01										
	MS	MSD	MS	MSD		MS	MSD				
Aroclor 1260	0.468	0.461	0.500	0.500	ND	94	92	44-125	2	15	
Surrogate:											
DCB						*77*	*75*	*42-123*			

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

ORGANOCHLORINE PESTICIDES by EPA 8081A

Matrix: Soil
Units: ug/Kg (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	S1-60-051011					
Laboratory ID:	05-092-01					
alpha-BHC	ND	5.6	EPA 8081	5-12-11	5-13-11	
gamma-BHC	ND	5.6	EPA 8081	5-12-11	5-13-11	
beta-BHC	10	5.6	EPA 8081	5-12-11	5-13-11	P
delta-BHC	ND	5.6	EPA 8081	5-12-11	5-13-11	
Heptachlor	ND	5.6	EPA 8081	5-12-11	5-13-11	
Aldrin	ND	5.6	EPA 8081	5-12-11	5-13-11	
Heptachlor Epoxide	ND	5.6	EPA 8081	5-12-11	5-13-11	
gamma-Chlordane	ND	11	EPA 8081	5-12-11	5-13-11	
alpha-Chlordane	ND	11	EPA 8081	5-12-11	5-13-11	
4,4'-DDE	ND	11	EPA 8081	5-12-11	5-13-11	
Endosulfan I	ND	5.6	EPA 8081	5-12-11	5-13-11	
Dieldrin	ND	11	EPA 8081	5-12-11	5-13-11	
Endrin	ND	11	EPA 8081	5-12-11	5-13-11	
4,4'-DDD	ND	11	EPA 8081	5-12-11	5-13-11	
Endosulfan II	ND	11	EPA 8081	5-12-11	5-13-11	
4,4'-DDT	ND	11	EPA 8081	5-12-11	5-13-11	
Endrin Aldehyde	ND	11	EPA 8081	5-12-11	5-13-11	
Methoxychlor	19	11	EPA 8081	5-12-11	5-13-11	P
Endosulfan Sulfate	ND	11	EPA 8081	5-12-11	5-13-11	
Endrin Ketone	ND	11	EPA 8081	5-12-11	5-13-11	
Toxaphene	ND	56	EPA 8081	5-12-11	5-13-11	
Surrogate:	*Percent Recovery*	*Control Limits*				
TCMX	*74*	*30-111*				
DCB	*64*	*33-119*				

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 820837

ORGANOCHLORINE PESTICIDES by EPA 8081A
METHOD BLANK QUALITY CONTROL

Matrix: Soil
Units: ug/Kg (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0512S1					
alpha-BHC	ND	5.0	EPA 8081	5-12-11	5-13-11	
gamma-BHC	ND	5.0	EPA 8081	5-12-11	5-13-11	
beta-BHC	ND	5.0	EPA 8081	5-12-11	5-13-11	
delta-BHC	ND	5.0	EPA 8081	5-12-11	5-13-11	
Heptachlor	ND	5.0	EPA 8081	5-12-11	5-13-11	
Aldrin	ND	5.0	EPA 8081	5-12-11	5-13-11	
Heptachlor Epoxide	ND	5.0	EPA 8081	5-12-11	5-13-11	
gamma-Chlordane	ND	10	EPA 8081	5-12-11	5-13-11	
alpha-Chlordane	ND	10	EPA 8081	5-12-11	5-13-11	
4,4'-DDE	ND	10	EPA 8081	5-12-11	5-13-11	
Endosulfan I	ND	5.0	EPA 8081	5-12-11	5-13-11	
Dieldrin	ND	10	EPA 8081	5-12-11	5-13-11	
Endrin	ND	10	EPA 8081	5-12-11	5-13-11	
4,4'-DDD	ND	10	EPA 8081	5-12-11	5-13-11	
Endosulfan II	ND	10	EPA 8081	5-12-11	5-13-11	
4,4'-DDT	ND	10	EPA 8081	5-12-11	5-13-11	
Endrin Aldehyde	ND	10	EPA 8081	5-12-11	5-13-11	
Methoxychlor	ND	10	EPA 8081	5-12-11	5-13-11	
Endosulfan Sulfate	ND	10	EPA 8081	5-12-11	5-13-11	
Endrin Ketone	ND	10	EPA 8081	5-12-11	5-13-11	
Toxaphene	ND	50	EPA 8081	5-12-11	5-13-11	
Surrogate:	*Percent Recovery*	*Control Limits*				
TCMX	*83*	*30-111*				
DCB	*81*	*33-119*				

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

ORGANOCHLORINE PESTICIDES by EPA 8081A MS/MSD QUALITY CONTROL

Matrix: Soil
Units: ug/Kg (ppb)

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
MATRIX SPIKES											
Laboratory ID:	05-092-01										
	MS	MSD	MS	MSD		MS	MSD				
gamma-BHC	33.4	34.6	50.0	50.0	ND	67	69	32-86	4	10	
Heptachlor	33.8	35.0	50.0	50.0	ND	68	70	29-101	3	13	
Aldrin	37.4	36.1	50.0	50.0	ND	75	72	27-99	4	10	
Dieldrin	90.3	93.3	125	125	ND	72	75	33-92	3	10	
Endrin	90.0	91.6	125	125	ND	72	73	29-101	2	11	
4,4'-DDT	84.6	83.6	125	125	ND	68	67	21-114	1	15	
Surrogate:											
TCMX						*77*	*84*	*30-111*			
DCB						*73*	*78*	*33-119*			

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

CHLORINATED ACID HERBICIDES by EPA 8151A

Matrix: Soil
Units: ug/Kg (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	S1-00-051011					
Laboratory ID:	05-092-01					
Dalapon	ND	280	EPA 8151	5-12-11	5-19-11	
Dicamba	ND	11	EPA 8151	5-12-11	5-19-11	
MCPP	36000	10000	EPA 8151	5-12-11	5-19-11	
MCPA	18000	10000	EPA 8151	5-12-11	5-19-11	P
Dichlorprop	1100	790	EPA 8151	5-12-11	5-19-11	
2,4-D	ND	11	EPA 8151	5-12-11	5-19-11	
Pentachlorophenol	3.5	1.1	EPA 8151	5-12-11	5-19-11	P
2,4,5-TP (Silvex)	94	11	EPA 8151	5-12-11	5-19-11	
2,4,5-T	ND	11	EPA 8151	5-12-11	5-19-11	
2,4-DB	37	11	EPA 8151	5-12-11	5-19-11	
Dinoseb	11	11	EPA 8151	5-12-11	5-19-11	P
Surrogate:	*Percent Recovery*	*Control Limits*				
DCAA	*57*	*30-96*				

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

CHLORINATED ACID HERBICIDES by EPA 8151A QUALITY CONTROL

Matrix: Soil
Units: ug/Kg (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0512S1					
Dalapon	ND	230	EPA 8151	5-12-11	5-18-11	
Dicamba	ND	9.4	EPA 8151	5-12-11	5-18-11	
MCPP	ND	940	EPA 8151	5-12-11	5-18-11	
MCPA	ND	940	EPA 8151	5-12-11	5-18-11	
Dichlorprop	ND	71	EPA 8151	5-12-11	5-18-11	
2,4-D	ND	9.4	EPA 8151	5-12-11	5-18-11	
Pentachlorophenol	ND	0.95	EPA 8151	5-12-11	5-18-11	
2,4,5-TP (Silvex)	ND	9.5	EPA 8151	5-12-11	5-18-11	
2,4,5-T	ND	9.5	EPA 8151	5-12-11	5-18-11	
2,4-DB	ND	9.5	EPA 8151	5-12-11	5-18-11	
Dinoseb	ND	9.5	EPA 8151	5-12-11	5-18-11	
Surrogate:	*Percent Recovery*	*Control Limits*				
DCAA	*47*	*30-96*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
MATRIX SPIKES											
Laboratory ID:	05-092-01										
	MS	MSD	MS	MSD		MS	MSD				
Dicamba	60.4	58.1	100	100	ND	60	58	25-101	4	30	
2,4-D	49.5	54.7	100	100	ND	49	55	25-84	10	28	
Pentachlorophenol	7.52	7.79	10.0	10.0	3.13	44	47	27-96	4	26	
2,4,5-T	53.0	54.0	100	100	ND	53	54	25-94	2	20	
2,4-DB	67.2	76.0	100	100	33.4	34	43	25-117	12	27	
Surrogate:											
DCAA						*79*	*56*	*30-96*			

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

TOTAL METALS
EPA 6010B/7471A

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-092-01					
Client ID:	S1-00-051011					
Arsenic	ND	11	6010B	5-13-11	5-13-11	
Barium	210	2.8	6010B	5-13-11	5-13-11	
Cadmium	ND	0.56	6010B	5-13-11	5-13-11	
Chromium	25	0.56	6010B	5-13-11	5-13-11	
Lead	79	5.6	6010B	5-13-11	5-13-11	
Mercury	ND	0.28	7471A	5-11-11	5-11-11	
Selenium	ND	11	6010B	5-13-11	5-13-11	
Silver	ND	0.56	6010B	5-13-11	5-13-11	
Lab ID:	05-092-02					
Client ID:	S2-00-051011					
Arsenic	ND	11	6010B	5-13-11	5-13-11	
Barium	130	2.7	6010B	5-13-11	5-13-11	
Cadmium	ND	0.54	6010B	5-13-11	5-13-11	
Chromium	28	0.54	6010B	5-13-11	5-13-11	
Lead	13	5.4	6010B	5-13-11	5-13-11	
Mercury	ND	0.27	7471A	5-11-11	5-11-11	
Selenium	ND	11	6010B	5-13-11	5-13-11	
Silver	ND	0.54	6010B	5-13-11	5-13-11	

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

TOTAL METALS
EPA 6010B/7471A

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-092-03					
Client ID:	S3-00-051011					
Arsenic	ND	11	6010B	5-13-11	5-13-11	
Barium	91	2.7	6010B	5-13-11	5-13-11	
Cadmium	ND	0.53	6010B	5-13-11	5-13-11	
Chromium	18	0.53	6010B	5-13-11	5-13-11	
Lead	10	5.3	6010B	5-13-11	5-13-11	
Mercury	ND	0.27	7471A	5-11-11	5-11-11	
Selenium	ND	11	6010B	5-13-11	5-13-11	
Silver	ND	0.53	6010B	5-13-11	5-13-11	

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

TOTAL METALS
EPA 6010B
METHOD BLANK QUALITY CONTROL

Date Extracted:	5-13-11
Date Analyzed:	5-13-11
Matrix:	Soil
Units:	mg/kg (ppm)
Lab ID:	MB0513S1

Analyte	Method	Result	PQL
Arsenic	6010B	ND	10
Barium	6010B	ND	2.5
Cadmium	6010B	ND	0.50
Chromium	6010B	ND	0.50
Lead	6010B	ND	5.0
Selenium	6010B	ND	10
Silver	6010B	ND	0.50

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

TOTAL MERCURY
EPA 7471A
METHOD BLANK QUALITY CONTROL

Date Extracted:	5-11-11
Date Analyzed:	5-11-11
Matrix:	Soil
Units:	mg/kg (ppm)
Lab ID:	MB0511S1

Analyte	Method	Result	PQL
Mercury	7471A	ND	0.25

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 820837

TOTAL METALS
EPA 6010B
DUPLICATE QUALITY CONTROL

Date Extracted: 5-13-11
Date Analyzed: 5-13-11

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 05-090-01

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Arsenic	ND	ND	NA	10	
Barium	67.1	71.8	7	2.5	
Cadmium	ND	ND	NA	0.50	
Chromium	40.5	43.0	6	0.50	
Lead	9.79	9.83	0	5.0	
Selenium	ND	ND	NA	10	
Silver	ND	ND	NA	0.50	

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

TOTAL MERCURY
EPA 7471A
DUPLICATE QUALITY CONTROL

Date Extracted:	5-11-11
Date Analyzed:	5-11-11
Matrix:	Soil
Units:	mg/kg (ppm)
Lab ID:	05-081-13

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Mercury	ND	ND	NA	0.25	

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

TOTAL METALS
EPA 6010B
MS/MSD QUALITY CONTROL

Date Extracted: 5-13-11
Date Analyzed: 5-13-11

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 05-090-01

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Arsenic	100	92.6	93	92.8	93	0	
Barium	100	176	109	168	101	5	
Cadmium	50.0	48.4	97	47.6	95	2	
Chromium	100	137	97	132	92	4	
Lead	250	240	92	237	91	1	
Selenium	100	96.0	96	94.9	95	1	
Silver	25.0	22.3	89	22.0	88	2	

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

TOTAL MERCURY
EPA 7471A
MS/MSD QUALITY CONTROL

Date Extracted:	5-11-11
Date Analyzed:	5-11-11
Matrix:	Soil
Units:	mg/kg (ppm)
Lab ID:	05-081-13

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Mercury	ND	ND	NA	0.25	

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

ORGANOPHOSPHORUS PESTICIDES by EPA 8270D/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	S1-00-051011					
Laboratory ID:	05-092-01					
Dichlorvos(DDVP)	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
Mevinphos/Phosdrin	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
Ethoprophos	ND	0.56	EPA 8270/SIM	5-16-11	5-17-11	
Monocrotophos	ND	0.56	EPA 8270/SIM	5-16-11	5-17-11	
Naled	ND	0.56	EPA 8270/SIM	5-16-11	5-17-11	
Sulfotepp	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
Phorate	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
Dimethoate	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
Demeton-S	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
Diazinon	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
Disulfoton	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
Parathion-methyl	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
Fenchlorphos/Ronnel	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
Malathion	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
Fenthion	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
Parathion-ethyl	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
Chlorpyrifos/Dursban	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
Trichloronate	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
Merphos&Merphos-oxone	ND	0.56	EPA 8270/SIM	5-16-11	5-17-11	
Stirofos/Tetrachlorvinphos	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
Tokuthion/Prothiofos	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
Fensulfothion	ND	0.56	EPA 8270/SIM	5-16-11	5-17-11	
Bolstar/Sulprofos	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
EPN	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
Azinphos-methyl/Guthion	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
Coumaphos	ND	0.22	EPA 8270/SIM	5-16-11	5-17-11	
Surrogate:	*Percent Recovery*	*Control Limits*				
Tributyl phosphate	*106*	*29 - 109*				
Triphenyl phosphate	*.--*	*37 - 118*				F

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

ORGANOPHOSPHORUS PESTICIDES by EPA 8270D/SIM METHOD BLANK QUALITY CONTROL

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0516S1					
Dichlorvos(DDVP)	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
Mevinphos/Phosdrin	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
Ethoprophos	ND	0.050	EPA 8270/SIM	5-16-11	5-16-11	
Monocrotophos	ND	0.050	EPA 8270/SIM	5-16-11	5-16-11	
Naled	ND	0.050	EPA 8270/SIM	5-16-11	5-16-11	
Sulfotepp	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
Phorate	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
Dimethoate	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
Demeton-S	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
Diazinon	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
Disulfoton	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
Parathion-methyl	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
Fenchlorphos/Ronnel	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
Malathion	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
Fenthion	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
Parathion-ethyl	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
Chlorpyrifos/Dursban	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
Trichloronate	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
Merphos&Merphos-oxone	ND	0.050	EPA 8270/SIM	5-16-11	5-16-11	
Stirofos/Tetrachlorvinphos	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
Tokuthion/Prothiofos	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
Fensulfothion	ND	0.050	EPA 8270/SIM	5-16-11	5-16-11	
Bolstar/Sulprofos	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
EPN	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
Azinphos-methyl/Guthion	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
Coumaphos	ND	0.020	EPA 8270/SIM	5-16-11	5-16-11	
Surrogate:	*Percent Recovery*	*Control Limits*				
Tributyl phosphate	*65*	*28 - 109*				
Triphenyl phosphate	*80*	*37 - 118*				

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Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

ORGANOPHOSPHORUS PESTICIDES by EPA 8270D/SIM SB/SBD QUALITY CONTROL

Matrix: Soil
Units: mg/Kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0516S1									
	SB	SBD	SB	SBD	SB	SBD				
Dichlorvos(DDVP)	0.0585	0.0612	0.100	0.100	59	61	45 - 110	5	30	
Mevinphos/Phosdrin	0.0543	0.0590	0.100	0.100	54	59	50 - 110	8	30	
Ethoprophos	0.0741	0.0817	0.100	0.100	74	82	50 - 110	10	30	
Sulfotepp	0.0798	0.0856	0.100	0.100	80	86	45 - 110	7	30	
Phorate	0.0784	0.0849	0.100	0.100	78	85	50 - 110	8	30	
Dimethoate	0.0780	0.0863	0.100	0.100	78	86	50 - 110	10	30	
Demeton-S	0.0713	0.0813	0.100	0.100	71	81	45 - 110	13	30	
Diazinon	0.0739	0.0814	0.100	0.100	74	81	50 - 110	10	30	
Disulfoton	0.0790	0.0865	0.100	0.100	79	87	50 - 110	9	30	
Parathion-methyl	0.0708	0.0803	0.100	0.100	71	80	60 - 120	13	30	
Fenchlorphos/Ronnal	0.0879	0.0963	0.100	0.100	88	96	50 - 110	9	30	
Malathion	0.109	0.119	0.100	0.100	109	119	50 - 120	9	30	
Fenthion	0.0872	0.0949	0.100	0.100	87	95	50 - 110	8	30	
Parathion-ethyl	0.0679	0.0767	0.100	0.100	68	77	45 - 110	12	30	
Chlorpyrifos/Dursban	0.0850	0.0919	0.100	0.100	85	92	50 - 110	8	30	
Trichloronate	0.0872	0.0930	0.100	0.100	87	93	50 - 110	6	30	
Stirofos/Tetrachlorvinphos	0.139	0.153	0.100	0.100	139	153	80 - 160	10	30	
Tokuthion/Prothiofos	0.0790	0.0880	0.100	0.100	79	88	50 - 110	11	30	
Fensulfothion	0.0801	0.0885	0.100	0.100	80	87	45 - 110	10	30	
Bolstar/Sulprofos	0.0817	0.0919	0.100	0.100	82	92	50 - 110	12	30	
EPN	0.0700	0.0792	0.100	0.100	70	79	50 - 110	12	30	
Azinphos-methyl/Guthion	0.127	0.139	0.100	0.100	127	139	70 - 140	9	30	
Coumaphos	0.0728	0.0860	0.100	0.100	73	86	60 - 120	17	30	
Surrogate:										
Tributyl phosphate					*68*	*71*	*28 - 109*			
Triphenyl phosphate					*78*	*86*	*37 - 118*			

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: May 23, 2011
Samples Submitted: May 11, 2011
Laboratory Reference: 1105-092
Project: 620837

NWTPH-Gx/BTEX

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	S2-00-051011					
Laboratory ID:	05-092-02					
Benzene	ND	0.023	EPA 8021	5-13-11	5-16-11	
Toluene	0.60	0.12	EPA 8021	5-13-11	5-16-11	
Ethyl Benzene	27	2.9	EPA 8021	5-13-11	5-17-11	
m,p-Xylene	160	2.9	EPA 8021	5-13-11	5-17-11	
o-Xylene	31	2.9	EPA 8021	5-13-11	5-17-11	
Gasoline	1900	280	NWTPH-Gx	5-13-11	5-17-11	Z
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*92*	*68-124*				

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

PHASE I ENVIRONMENTAL AUDIT

Proposed Sunset Pointe Residential Plat
East of Intersection of 21st St SE and 19th Ave SE
Puyallup, Washington

DESERT CREEK, LLC

ENVIRONMENTAL
ASSOCIATES, INC.

1380 - 112th Avenue Northeast, Suite 300
Bellevue, Washington 98004
(425) 455-9025 Office
(888) 453-5394 Toll Free
(425) 455-2316 Fax

January 14, 2005 JN 24420

Nick Scholten
Desert Creek, LLC
P.O. Box 731989
Puyallup, Washington 98373

Subject: **PHASE I ENVIRONMENTAL AUDIT**
Proposed Sunset Pointe Residential Plat
East of Intersection of 21st St SE and 19th Ave SE
Puyallup, Washington

Dear Mr. Scholten,

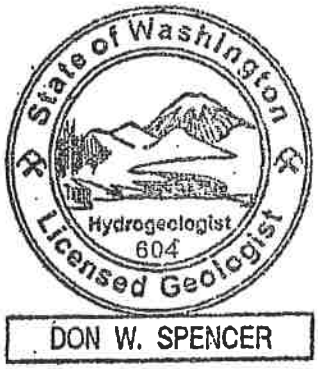
Environmental Associates, Inc., has completed a Phase I Environmental Audit of the subject property located in Puyallup, Washington. This report, prepared in accordance with the terms of our proposal dated December 29, 2004, and in a manner consistent with the intent and methodologies of ASTM E 1527-00, "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process", summarizes our approach to the project along with results and conclusions.

The contents of this report are confidential and are intended solely for your use and the use of your representatives. Four (4) copies of this report are being distributed to you. No other distribution or discussion of this report will take place without your prior approval in writing. Additional copies are available for a small fee.

We appreciate the opportunity to be of service on this assignment. If you have any questions or if we may be of additional service, please do not hesitate to contact us.

Respectfully submitted,
ENVIRONMENTAL ASSOCIATES, INC.

Don W. Spencer, M.Sc., P.G., R.E.A.
Principal



EPA-Certified Asbestos Inspector/Management Planner
I.D. # AM 48151

EPA/HUD Certified Lead Inspector (Licensed)

Registered Site Assessor/Licensed UST Supervisor
State Certification #0878545-U7

License: 604	(Washington)
License: 11464	(Oregon)
License: 876	(California)
License: 5195	(Illinois)
License: 0327	(Mississippi)

PHASE "1" ENVIRONMENTAL AUDIT

Proposed Sunset Pointe Residential Plat
East of Intersection of 21st St SE and 19th Ave SE
Puyallup, Washington

Prepared for:

Desert Creek, LLC
P.O. Box 731989
Puyallup, Washington 98373

Questions regarding this investigation, the conclusions reached and the recommendations given should be addressed to one of the following undersigned.

Derek B. Pulvino
Environmental Scientist
EPA-Certified Building Inspector
I.D. # 1010794

Don W. Spencer, M.Sc., P.G., R.E.A.
Principal

EPA-Certified Asbestos Inspector/Management Planner
I.D. # AM 48151

EPA/HUD Certified Lead Inspector (Licensed)

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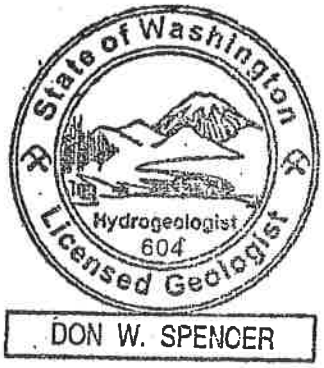


Reference Job Number: JN 24420

January 14, 2005

ENVIRONMENTAL ASSOCIATES, INC.

TABLE OF CONTENTS

METHODOLOGY/SCOPE OF WORK 5

FINDINGS 6

General Description 6

Geologic Setting 8

Development History and Land Use 8

Property Conveyance/Ownership Data 9

Site Reconnaissance 11

Check For PCB-Containing Materials 13

Check For Asbestos-Containing Materials 14

Review For Lead-Based Paint 14

Radon Evaluation 15

Water Supply, Waste Water and Solid Waste Management 16

Review: Washington DOE Listing Of Underground Storage Tanks 16

Review: EPA & State Records Of Potentially Hazardous Sites 16

Superfund and NPL 16

CORRACTS 16

MTCA/ CSCSL 16

RCRA/FINDS/TSDs 16

ERNS 17

Review: Landfill Documents 17

CONCLUSIONS/RECOMMENDATIONS 17

LIMITATIONS 21

REFERENCES 22

PLATES

Plate 1 - Vicinity Map
Plate 2 - Topographic Map
Plate 3 - Site Plan
Plates 4 & 5 - Site Photographs

APPENDICES

Appendix A - Environmental Database Report
Appendix B - AHERA Certification Documents
Appendix C - EPA PCB Guidance Documents
Appendix D - OSHA 3142 - Lead in Construction
Appendix E - Analytical Information

METHODOLOGY/SCOPE OF WORK

Our study approach consisted of completing a series of investigative tasks intended to satisfy the level of effort often referred to as "due diligence" by the "innocent purchaser" in the context of the Superfund Amendment and Reauthorization Act of 1986 (SARA), and nearly identical requirements set forth in the Model Toxics Control Act (MTCA), Chapter 70.105 D (Section 040) RCW pertaining to standards of liability. The objective of a Phase I audit is to reduce potential risk for exposure to future liability for environmental problems by demonstrating that at the time of acquisition or refinancing, the owner, buyer, or lender had no knowledge or reason to know that any hazardous substance had been released or disposed of on, in, or at the property. Moreover, in defining the purpose of the Phase I environmental site assessment process, section 1.1.1 of ASTM E-1527 advises that the goal of a Phase 1 is to identify "recognized environmental conditions," and defines a recognized environmental condition as "the presence or likely presence of any hazardous substances. . . on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances . . into structures on the property or into the ground, groundwater, or surface water of the property."

In an effort to evaluate condition and previous uses of the property in a manner consistent with good commercial and customary practice and in accordance with methods outlined under ASTM E 1527-00, "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process", our scope of work for this study included:

- Review of chronology of ownership and site history using the resources of the Pierce County Assessor's Office, business directories from several time periods, and aerial photography from several time periods as primary resources. This included an attempt to identify possible former industries or uses presenting some potential for generating waste which may have included dangerous or hazardous substances as defined by state and federal laws and regulations.

- Acquisition and review of available reports and other documentation pertaining to the subject site or nearby sites.

- Review of Washington Department of Ecology (WDOE) and Puyallup/Pierce County Department of Public Health documents regarding current and abandoned landfills.

- Review of the current EPA Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS), the EPA National Priority List (NPL), the EPA Resource Conservation and Recovery Act (RCRA) Notifiers, RCRA Corrective Action Report (CORRACTS), and Emergency Response Notification System (ERNS) lists of sites which are potentially contaminated or which produce hazardous substances as a normal part of their commercial operation in the vicinity of the site.

- Review of the current Washington Department of Ecology (WDOE) listing of underground storage tanks (USTs) along with the WDOE's Leaking Underground Storage Tank (LUST) listing for WDOE-documented leaking USTs in the vicinity of the subject property.

- Review of the current WDOE Confirmed and Suspected Contaminated Sites (CSCS) list of potentially contaminated sites which have been the subject of hazardous waste investigation and/or cleanup activity in conjunction with the Washington Model Toxics Control Act (MTCA) Chapter 173-340 WAC.

- Review published documents from the Bonneville Power Administration (BPA) to evaluate the risk for naturally occurring radon.

- A reconnaissance of the subject property and neighboring areas to look for evidence of potential contamination in the form of soil stains, odors, asbestos, lead-based paint (LBP), vegetation stress, discarded drums, discolored water, careless manufacturing or industrial practices, etc.

- Preparation of a summary report which documents the audit process and findings.

FINDINGS

GENERAL DESCRIPTION

The subject property consists of four separate tax parcels with together comprise an irregular-shaped parcel covering approximately 890,000 square feet (20 acres) of land. Improvements to the property include multiple buildings such as residences, barns, garages, and utility sheds. The improvements on the site, as documented by the Pierce County Assessor's Office, are outlined in the table below.

Stories	Framing/ construction	Size	Date of Construction	Roof
Tax Parcel: 0420353026				
Single story residence	Wood Framed	1,104	1928	Pitched with composition shingles
Tax Parcel: 0420353027				
Single story residence	Wood-framed	912	1924	Pitched with composition shingles
Single story storage shed	Wood-pole supported	10,000	1940	Pitched, surfacing not listed

Stories	Framing/ construction	Size	Date of Construction	Roof
Tax Parcel: 0420353027(continued)				
Single story barn	Wood-pole supported	4,480	1950	Pitched, surfacing not listed
Single story storage shed	Wood-pole supported	4,000	1950	Pitched, surfacing not listed
Two-story, detached garage	Cinder block	1,092	1940	Pitched, surfacing not listed

The Pierce County Assessor's Office did not list improvements on the remaining two parcels (#'s 0420357011, 0420353009). Currently the property is utilized as a residential property, with only the western house on the property (parcel# 0420353026) occupied. According to Mr. Richard Tanner, current occupant, the structures on the eastern portion of the site are occupied. The approximate location of the site is shown on the Vicinity Map, Plate 1, appended herewith.

The property is located in a rural/residential area approximately one-mile southeast of downtown Puyallup, Washington. Photographs reflecting the character of the subject property are provided with this report as Plates 4 and 5.

A brief description of land use on nearby parcels is provided below. Plate 3, Site Plan, depicts the setting of the subject property and land use for adjacent sites.

North: A residential subdivision is located adjacent to the northern border of the subject property.

South: A residential subdivision is also located adjacent to the southern border of the subject property.

East: The residential subdivision located to the north of the subject property also extends to run along the eastern border of the subject property.

West: A residential subdivision is located to the west of the southern portion of the subject property. Land to the west of the northern edge of the subject property is also residentially developed, however with a lower development density than sites located adjacent to the rest of the property.

According to the Pierce County Assessor's Office, the subject property is zoned for residential and agricultural use.

GEOLOGIC SETTING

Physiographically, the site is situated on a gently rolling elevated plain (the Vashon Drift Plain) which was formed during the last period of continental glaciation that ended approximately 13,500 years ago.

Published geologic maps for the site vicinity (Jones, 1999) suggest that much of the material underlying the subject site may be recessional gravel, a "moderately to poorly sorted gravel and sand with small amounts of silt and clay." Typically, the recessional deposits exhibits relatively moderate to high vertical hydraulic conductivity which frequently results in formation of a "perched" water table along interstitial contacts. The "perched" water table (if present) is frequently seasonal and derives recharge primarily from infiltration of precipitation through more permeable overlying soils.

Topographically, the site is situated on a northerly facing slope ranging from approximately 240- to 380-feet above sea level. Based upon inference from topography and local drainage patterns, it appears that shallow-seated groundwater (if present) in the vicinity of the subject property may flow in a northerly direction.

Although no site specific information has been developed by our firm with respect to depth to groundwater at this site, our experience in the area suggests that "perched" groundwater (if present) beneath the site may lie at a depth of approximately 10 to 20 feet or more beneath the ground surface.

With respect to surface water resources, several small unnamed ponds are located on the subject property.

DEVELOPMENT HISTORY AND LAND USE

Sources reviewed for information on site and area development and land use included the resources of the Seattle and Tacoma Public Libraries, Pierce County Assessor's Office, and aerial photographs of the subject property and surrounding area from several time periods.

Aerial photographs of the area were reviewed for the years 1969, 1979, 1985, 1996, 2000, and 2003. The following paragraphs provide an interpretive summary of our observations in each photo. The time intervals between the various historic aerial photographs selected for this particular project are, in our opinion, entirely adequate for the intended purpose which was to permit a general assessment of overall development and land use in the vicinity of the subject property.

1969 All of the currently present structures are visible on the property. Four small sheds are visible approximately 75-feet northeast of the southern on-site house. The currently present pond is not visible. A gravel mining operation is visible on the adjacent property to the south of the site. Two conveyor/loading belts are visible at the mine. As indicated by an access drive/road going from this gravel

mine to the southern portion of the site, the southern onsite structures appear to be utilized by the mining operation. The land located adjacent to the west is roughly half cleared and half forested. A small area of surface grading is visible adjacent to the eastern border of the northen portion of the site. Generally, a minimal quantity of houses are visible in the area of the site.

1979 Small areas of surface grading are visible both near the northern onsite house and on the southeast corner of the pasture area. The area adjacent to the east of the site, formerly noted as graded, has now become a residential housing development (to east/northeast). A new pond is visible within the gravel mining property. Trees/shrub vegetation has regrown on approximately 50% of the adjacent mining site.

1985 The graded area is no longer visible within the pasture, however the graded area near the northern house appears to be utilized as a parking area. To the south, the operations at the gravel mining site have expanded westward. No other significant changes are visible from the previous photograph.

1996 Development as a residential housing sub-division has commenced on the southern adjacent gravel mine property. The pond remains within the gravel mine site. Onsite, the current pond is now visible. Within the subject property pasture, trees continue to regrow. Several of the small sheds near the southern house on the property are no longer discernable.

2000 The housing development has been completed to the west/southwest of the site, on the former gravel mine property. None of the small sheds are visible in the vicinity of the southern onsite house.

2003 The houses currently present to the west/northwest of the site are either in construction or have been constructed. In general terms, the majority of the site vicinity has now been developed with residential properties.

PROPERTY CONVEYANCE/OWNERSHIP DATA

From the file resources of the Pierce County Assessor's Office and resources of the Tacoma and Seattle Public Libraries, the following limited history of ownership has been established:

SOURCE	OWNER	DATE OF PURCHASE
tax parcel #0420353026		
Pierce County Assessor's Office	Ottinger, Sharon	Not Listed
Metsker's Atlas of Pierce County (1965, 1951)	Greeley, V	Not Listed
Metsker's Atlas of Pierce County (1941)	V.B., L.T. and A.B. Greeley	Not Listed

SOURCE	OWNER	DATE OF PURCHASE
Kroll Atlas of Pierce County (1924)	Mark Graves, Jms Williams	Not Listed
Kroll Atlas of Pierce County (1915)	Mark Graves, E.G. Griswold	Not Listed
tax parcel #0420353027		
Pierce County Assessor's Office	Greeley, Grace Ardell	Not Listed
Metsker's Atlas of Pierce County (1965, 1951)	Greeley, V	Not Listed
Metsker's Atlas of Pierce County (1941)	V.B., L.T. and A.B. Greeley	Not Listed
Kroll Atlas of Pierce County (1924)	Mark Graves, Jms Williams	Not Listed
Kroll Atlas of Pierce County (1915)	Mark Graves, E.G. Griswold	Not Listed
tax parcel #0420357011		
Pierce County Assessor's Office	Greeley, Grace	11/26/1990
Pierce County Assessor's Office	Parkwood Homes	4/20/1990
Metsker's Atlas of Pierce County (1965, 1951)	Greeley, V	Not Listed
Metsker's Atlas of Pierce County (1941)	V.B., L.T. and A.B. Greeley	Not Listed
Kroll Atlas of Pierce County (1924)	Mark Graves, Jms Williams	Not Listed
Kroll Atlas of Pierce County (1915)	Mark Graves, E.G. Griswold	Not Listed
tax parcel #042035309		
Pierce County Assessor's Office	Greeley, Grace	11/26/1990
Metsker's Atlas of Pierce County (1965, 1951)	Greeley, V	Not Listed
Metsker's Atlas of Pierce County (1941)	V.B., L.T. and A.B. Greeley	Not Listed
Kroll Atlas of Pierce County (1924)	Mark Graves, Jms Williams	Not Listed
Kroll Atlas of Pierce County (1915)	Mark Graves, E.G. Griswold	Not Listed

According to resources available at the Tacoma and Seattle Public Libraries the Pierce County Assessor's Office, and a review of aerial photographs, the subject site was developed as early as 1924 with a single-family dwelling. Subsequent development of an additional residence as well as several storage sheds and barns occurred between that time and approximately 1950. In the earliest available aerial photograph (1969), the northern portion of the property currently used for pastoral purposes had been cleared of trees and other low-standing shrubbery, while a road/driveway was observed connecting the southern margin of the property with the gravel mine operating to the south of the site. Conversations with one of the current occupants/owners of the subject property (Pat Tanner) confirmed the use of the southern onsite buildings by the adjacent gravel mining operation. The exact nature of this usage (i.e. vehicle fueling, maintenance, clerical offices, etc) was not disclosed. Sanborn Fire Insurance maps did not provide coverage in the vicinity of the subject property. Borrowing from the jargon of ASTM, no "reasonably ascertainable" or "likely to be useful" information prior to 1924 was available. The absence of such information has no material effect upon the conclusions of this report.

Historic reverse street directories and archive records documented seven (7) occupants of the property in the directories/records reviewed for the years 1953 through 2003. These occupants included:

LISTED OCCUPANT	ADDRESS OF BUSINESS	OCCUPATION OF SITE (date of Polk's Guide Listing)
ON SUBJECT SITE		
Hill Top Gravel	2102 19th Ave SE	1953
Greeley, Vinto		1953
Greeley, Grace		1959
Ingham, Gerald	2100 19th Ave SE	1972
Ottinger, Edw		1979, 1985
Ottinger, Sharon		1990, 1997, 2003
Frontier Museum	2301 23rd Ave SE	1979, 1985, 1990
SOUTH/WEST OF SUBJECT SITE		
Hilltop Concrete Co	2223 23rd Ave SE	1959
Reid Concrete Inc.		1965
South Hill Sand and Gravel		1990

SITE RECONNAISSANCE

An Environmental Scientist/EPA-certified Asbestos Building Inspector from our firm visited the property on January 5, 2005 to review on-site conditions and land use practices in the surrounding area. Mr Nick Schoelten, potential purchaser of the property, arranged for access to the site. The representative areas reviewed during our site visit included the exterior grounds, and adjacent property usages. Access to the structure interiors was not provided to EAI during the course of our site reconnaissance.

As mentioned earlier, existing improvements to the subject property include multiple 1924-1950-vintage buildings. For further information on building construction details, please refer to the General Information section within this report. A gravel drive accesses the property from the northwest. Gravel/dirt covered parking areas are located adjacent to the onsite structures. Landscaped areas are situated adjacent to the houses, with the majority of the remaining property cleared pasture land. Residents occupy one of the onsite buildings. The remainder of the buildings are not occupied on a full time basis for residential or commercial purposes. Typical building materials and/or conditions observed during our site reconnaissance included:

- Floors appeared to be wood or concrete covered with carpet, sheet vinyl, or square vinyl tile.

- Interior walls throughout the building are painted sheetrock, natural wood, or concrete.

- Ceilings are painted drywall, or "popcorn" textured materials.

- A wood-fired stove is reported to be the sole current source of heat for the two residences. Referring to Photo #3 of Plate #5, an above-ground storage tank used to store heating oil was observed adjacent to the southern wall of the northern onsite residence. According to Ms. Tanner, use of this tank was discontinued approximately 20-years ago. No staining was noted near the base of this tank.

- Multiple junked cars were observed in the area of the northern house. No leaking or odors were noted in the vicinity of these vehicles. According to Richard Tanner, one of the current residents, these cars are slated for disposal and not used for parting out or onsite repair work.

- Cultural debris such as lumber, furniture, fencing, appliances, and general household rubbish was noted in the vicinity of the buildings located on the southern portion of the site.

- A steel vertical rack containing three separate above ground tanks/drums was noted near the southern border of the subject property. Although the bottom of one of these tanks was rusted out, no odors, stained soil, or disturbed vegetation was noted in the vicinity of these tanks. According to Ms. Tanner, these tanks were used to store gasoline to refuel the gravel mining vehicles. Ms. Tanner did not report any spills or releases from these tanks.

- A small pond was noted approximately halfway between the two onsite residences, on the southern side of the driveway. A soil retention wall consisting of battery casings was noted on the northern edge of this pond, at the area were the driveway crosses the ponds drainage conduit. According to Ms. Pat Tanner, property owner, these batteries were brought on the site approximately 40-years ago after being obtained from a local battery recycler (Kiby's Battery Company). Ms. Tanner stated that prior to purchasing the battery casings, Kiby's had removed the contents and cleaned the interiors of the casings. Onsite, the empty casings were then filled with soil and stacked in their present configuration adjacent to the roadway. More recently, Mr. Scholten of Desert Creek, LLC (potential purchaser of site) informed us (EAI) that in an attempt to independently evaluate environmental conditions, his company had collected a single soil sample from inside one of these battery casings. The sample was submitted by Desert Creek to Spectra Laboratories for Lead Toxicity Characteristic Leaching Potential (TCLP) and pH analyses. Analysis indicated the leachable lead concentrations to be 0.38-parts per million (ppm). The pH analysis indicated the soils to be slightly basic (7.5 pH units). As a basis for comparison of TCLP results to total concentrations, an unofficially adopted "rule of thumb" used by some regulators and investigators is that total concentration of a given metal in soils can be roughly estimated by multiplying the TCLP results by a factor of twenty. Using this calculation, an estimated

"total concentration of lead in the tested soil would be roughly 7.6-ppm, a concentration below the median concentration of "total" lead in soils of the Puget Sound region, as detailed by the Washington State Department of Ecology, in "Natural Background Soil Metals Concentrations in Washington State" (publication #94-115). To the extent that the results of the sampling and analysis undertaken by Desert Creek are reflective of conditions at other locations near the wall, it would then be possible to conclude that the risk of environmental impacts relating to this battery casing wall would be relatively low.

- An additional area of accumulated rubbish and household waste was noted in the vicinity of the northern house on the subject property.

According to Ms. Pat Tanner, no hazardous waste is generated on the property. In addition, she stated that there are no below-ground fuel storage tanks on the property. No obvious, visually discernable evidence to suggest the presence of any underground fuel storage tanks (i.e., vent lines, filler caps, etc.) was noted on the property. Similarly, no groundwater monitoring wells were noted on the property. At the time of our visit, no stains, odors, or unusual vegetation conditions that might otherwise indicate the potential presence of hazardous materials were observed on the subject property.

CHECK FOR PCB-CONTAINING MATERIALS

Prior to 1979, polychlorinated biphenyls (PCBs) were widely used in electrical equipment such as transformers, capacitors, switches, fluorescent lights (ballasts) and voltage regulators owing to their excellent cooling properties. In 1976, the EPA initiated regulation of PCBs through issues pursuant to the Toxic Substances Control Act (TSCA). These regulations generally control the use, manufacturing, storage, documentation, and disposal of PCBs. EPA eventually banned PCB use in 1978, and adoption of amendments to TSCA under Public Law 94-469 in 1979 prohibited any further manufacturing of PCBs in the United States.

Light Fixtures Based upon the age of the onsite buildings (1924 through 1950-vintage), it is conceivable that some transformer ballasts containing PCB's may exist within these buildings. In the event that ballasts are later discovered which do not possess clear labeling stating "No PCB's", we have attached an EPA information pamphlet as Appendix C for information regarding the handling and disposal of such ballasts.

Main Service Electrical Transformers Pole mounted main service electrical transformer was noted on the eastern edge of the property. No certifications or labels regarding PCBs were noted on the transformer. Careful examination of the transformer revealed no cracks, staining, or other evidence of potential leakage. Liability for this equipment ultimately lies with the utility company in any event.

CHECK FOR ASBESTOS-CONTAINING MATERIALS

During our site review, five (5) types of materials suspected to possibly contain asbestos were observed within the subject building. These materials included a ceiling/wall plaster, vinyl floor-tile, sheet-vinyl, window glazing, and popcorn ceiling. At the time of this writing we were not authorized by the client to sample or test the suspect materials to confirm or deny this presumption. A summary of the suspect materials is provided in the table below. As Eai Was not granted interior access, this list was compiled based upon materials visible from the exterior building windows, as well information supplied by the onsite residence.

MATERIAL	LOCATION	CONDITION[1]
Gypsum Wallboard	Throughout residence interiors	Good
Vinyl Floor Tile	Various locations within residences	Good
Sheet Vinyl Flooring	Various locations within residences	Good
Popcorn Ceiling	Front room of northern residence	Good
Window Glazing	Exterior of multi-pane windows	Good

Note: 1 - Material condition was evaluated borrowing criteria adopted under the Asbestos Hazard Emergency Response Act (AHERA), 40 CFR, part 763.

Our effort regarding identification of asbestos-containing materials within the subject building was a preliminary review and not an asbestos survey. Since no destructive sampling was authorized for this audit, materials not readily accessible such as roofing materials and/or materials obscured behind, beneath, or within walls or existing flooring materials were not reviewed.

REVIEW FOR LEAD-BASED PAINT

Lead was formerly a common additive to many paints to improve their durability and coverage. Lead-based paint presents a special hazard to small children who can ingest it by chewing on painted woodwork or eating flakes of paint. A number of studies showing the toxic effects of lead on humans, and on small children in particular, prompted the Consumer Product Safety Commission to mandate in 1977 that the amount of lead in most paints, including those for residential use, should not exceed 0.06 %.

A review of exterior painted surfaces on the subject property was conducted to assess the potential for lead-content in surface layers of paint. Representative painted surfaces (listed in the table below) were analyzed using "Lead-Check" sodium rhodizonate color reagent paint tests. These tests provide a qualitative indication as to whether lead is present in paint samples with reproducible results to a lower detection limit of 0.5 percent, a level corresponding to a threshold of concern established by HUD.

PAINTED SURFACE	RESULT
White wood trim on southern house exterior	Positive
Red wooden trim on exterior of detached garage on southern portion of site	Positive
White painted aluminum siding on exterior of southern house	Non-Detect
White painted wood on exterior of barn door, southern portion of property	Positive

As noted in the table above, three (3) of the surfaces tested using the "Lead Check" screening method showed a reddish hue response characteristic of the sodium rhodizonate method as an indication of the likely presence of lead in the painted surfaces. On that basis, we conclude that lead was likely present in the surfaces which tested positive.

RADON EVALUATION

Occurrence

Radon is a naturally occurring, highly mobile, chemically inert radioactive gas created through radioactive decay of uranium and thorium. The potential for occurrence of radon varies widely and is dependent upon (1) the concentration of radioactive materials in the underlying bedrock; (2) the relative permeability of soils with respect to gases; and (3) the amount of fracturing or faulting in surficial materials (EPA, 1987).

Health Risks

The concern regarding radon and its potential effects upon humans arises from the results of studies (EPA, 1987) which suggest that approximately fifteen percent of all lung cancer mortalities in the United States may be attributable to exposure to radon.

The EPA has established a concentration of radon of four (4) picocuries per liter (pCi/l) as a maximum permissible concentration "action level". Concentrations above this value would signal a potential health threat. According to some studies, an average concentration in homes across the United States is on the order of 1.4 pCi/l.

Risk of Potential Exposure in the Puyallup Area

The Bonneville Power Administration (BPA) recently published the results of measurements for radon made in residences throughout the region they serve which includes Washington, Oregon and Idaho. For the Puyallup area in the immediate vicinity of the subject property eleven tests have been performed. The results of their work (BPA, 1993) suggest that radon levels over 4 pCi/l were detected in two of the monitored residences in the vicinity of the subject site. Additionally, the average listed radon reading in the subject site township was 0.41 pCi/l, well below the EPA threshold of concern.

On the basis of the findings presented in the cited BPA survey, we conclude that the potential for exposure to naturally occurring radon at the subject site is very low.

WATER SUPPLY, WASTE WATER AND SOLID WASTE MANAGEMENT

Information supplied by Ms. Tanner revealed that water service is provided by onsite wells. Onsite septic systems service the current wastewater needs.

As discussed in the Site Reconnaissance section of this report, various areas of collected refuse were noted on the property.

REVIEW OF WASHINGTON DOE LISTING OF UNDERGROUND STORAGE TANKS

Review of the current Washington Department of Ecology listing of underground storage tanks (USTs) suggests that no facilities with registered USTs are located within a one-quarter mile radius of the subject property. Similarly, according to the most recent WDOE Leaking Underground Storage Tank (LUST) listing, none of the listed tank facilities located within an approximately one-half mile radius of the subject property have reported accidental releases or leakage to the WDOE in the past.

EPA & STATE RECORDS OF POTENTIALLY HAZARDOUS SITES

Superfund and NPL Review of the current EPA Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) and National Priority List (NPL) listings revealed no CERCLIS and no NPL sites within approximately one mile of the subject property that have been designated as potentially hazardous or eligible for participation in the Superfund cleanup program.

CORRACTS Review of the current EPA Corrective Action Report (CORRACTS) listing revealed that no CORRACTS sites are located within approximately one mile of the subject property that have been designated as having a potential release at the property under RCRA.

MTCA/CSCSL The Washington Department of Ecology hazardous waste cleanup and investigation program was launched in 1989 as a part of the Model Toxics Control Act (MTCA), Chapter 173-340 WAC, in order to evaluate potential and actual hazards at sites within the state. Of the more than 1,730 sites currently on the WDOE Confirmed and Suspected Contaminated Sites (CSCS) list, none are located within a one mile radius of the subject property.

RCRA/FINDS/ TSDs Review of EPA's Treatment, Storage and Disposal (TSD) facilities listing for sites that treat, store, or dispose of potentially hazardous materials revealed that no TSD sites are located within a one mile radius of the subject property.

Additionally, review of the Resource Conservation and Recovery Act (RCRA) listings, also revealed no RCRA Generators within a one-quarter mile radius of the subject property, and no RCRA Non-Regulated generators within a one-eighth mile radius of the subject property.

ERNS Review of the EPA's Emergency Response Notification Systems (ERNS) list for the State of Washington revealed that the subject site has not reported a spill. This list has been compiled with periodic updates since October 1987.

LANDFILLS

A review of WDOE and Tacoma/Pierce County Health Department documents regarding current and abandoned landfills revealed that there are no documented landfills located within a mile radius of the subject property.

CONCLUSIONS/RECOMMENDATIONS

Consistent with the report language requirements defined under ASTM E-1527-00 "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process", and more specifically section 11.7 thereto, the following conclusory statements are made:

We (EAI) have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E-1527 of the Proposed Sunset Pointe Residential Plat, located to the east of the intersection of 19th Avenue SE and 21st Street SE, Puyallup, Pierce County, Washington. No exceptions to, or deletions from this practice were made. This Phase I assessment has revealed no evidence of "recognized environmental conditions" as defined by ASTM in connection with the property except for the acknowledged past storage and dispensing of motor fuel (gasoline) associated with vehicles used in commercial mining of gravel in the site vicinity. Additional discussion and guidance is provided below.

HISTORIC ABOVE-GROUND STORAGE AND DISPENSING OF GASOLINE

Referring to Photo #1 on Plate 5 and as discussed briefly in earlier sections of the report, the current occupant of the site (Tanner) disclosed that gasoline was historically stored in and dispensed from multiple above-ground tanks located on the southern part of the property in support of vehicles associated with gravel mining operations. The bottom of one of the tanks was rusted out at the time of our site visit.

In defining the purpose of the Phase 1 environmental site assessment process, section 1.1.1 of ASTM E-1527 advises that the goal of a Phase 1 is to identify "recognized environmental conditions", and defines a recognized environmental condition as:

> "the presence or likely presence of any hazardous substances. . . on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances . . into structures on the property or into the ground, groundwater, or surface water of the property".

By virtue of the materials (motor fuel in substantial volume) stored at the subject site over a potentially extended period, in the context of the ASTM definition, such gasoline storage and dispensing operations appear to qualify as a "recognized environmental condition" for this property.

A list of mitigating factors which may moderate contemporary concerns regarding this aspect of site history from a purchase or lending perspective would include the following:

(1) No evidence was found in the public record to suggest that a release has occurred at the site;

(2) No obvious, visually discernable evidence to suggest or confirm that a release had occurred was observed in the course our (EAI's) visual reconnaissance of the property;

(3) If the findings of this report were disclosed to the Washington Department of Ecology (WDOE), it is unlikely that the WDOE would impose a requirement for additional studies or other actions upon the property owner, lender(s), or other involved parties.

In summary, without benefit of factual information in the form of sampling and testing in the vicinity of the fuel storage and dispensing area, the strongest conclusion we (EAI) can offer at this time is simply that we are not aware of a specific environmental problem which has been shown to be adversely affecting the environmental integrity of the subject property.

If, for reasons of their own, the client, owner, lender, or other involved parties desire a higher degree of confidence than is afforded by the current level of knowledge, limited but statistically representative shallow subsurface sampling in areas proximal to the former fuel storage and dispensing area supported by appropriate laboratory analysis could be employed to confirm actual subsurface environmental conditions in that area. As strongly implied under section 4.5.3 of ASTM E-1527, decision-making authority in that regard clearly lies with the client and/or other involved parties, depending upon their individual risk tolerances.

NON-CERCLA CONDITIONS

Non-CERCLA conditions of potential environmental significance identified at the subject site include:

- Potential PCB-containing fluorescent light ballasts within the subject buildings.
- Presence of "suspect" asbestos-containing building materials in the form of ceiling/wall plaster, vinyl floor-tile, sheet-vinyl, window glazing, and popcorn ceiling.
- Presence of a white and red lead-containing paint on the exterior of onsite structures.

Guidance with respect to future management of the above-noted non-CERCLA conditions is provided in the following paragraphs.

PCBS

Based upon the information developed during the course of our site review, it appears that some or all of the transformer ballasts in the fluorescent lights in the subject buildings may contain polychlorinated biphenyls (PCBs).

In our opinion, there is no immediate cause for concern regarding the potential for PCB-containing light ballasts. The only likely potential for exposure to PCBs would come in the event that one of the sealed ballasts were ruptured through abusive handling or as a result of a defect in a ballast.

It may be prudent to implement a management policy providing the inspection of ballasts by maintenance personnel during routine bulb changing activities. Ballasts may be periodically checked or replaced depending upon long-term management desires. Please refer to the attached EPA pamphlet, Appendix C, regarding appropriate handling and disposal practices for such ballasts.

ASBESTOS

Borrowing evaluation criteria adopted under the Asbestos Health Emergency Response Act (AHERA, 40 CFR Part 763), the observed potentially asbestos containing materials, enumerated earlier in this report are in "good" condition. In the current use and condition, the materials pose no threat to public health or to the environment.

To reduce exposure to potential future liability, and in an effort to comply with regulations regarding the presence of asbestos in commercial and apartment buildings under Chapter 296-62-07753 WAC, it may be prudent to consider implementation of a management policy (Operations and Maintenance Program/O&M) whereby all maintenance, repair, or service personnel who may be engaged to work

on the property are formally advised (i.e., signed acknowledgment) as to the "suspected" presence of asbestos-containing materials (ACM) prior to commencement of any work associated with the ACM.

Should the owner intend to renovate, demolish, remodel, or repair any or all portions of the structure containing asbestos, please note that applicable sections of WAC 296-65 require that all projects relating to construction, demolition, repair, or maintenance where release or likely release of asbestos fibers into the air could occur must be performed by "certified asbestos workers". Additional information may be obtained through the offices of Environmental Associates, Inc., or directly from the Washington State Department of Labor and Industries, P.O. Box 207, Olympia, Washington 98504. Finally, if future representative sampling and laboratory testing of these suspect materials were to confirm that they do not contain asbestos, these recommendations may logically be disregarded.

LEAD-BASED PAINT

As discussed earlier, a positive qualitative reaction suggesting the likely presence of lead was observed during "Lead Check" testing of the painted wood exterior finishes on several of the buildings located on the southern portion of the property. On the basis of the positive indications, we conclude that lead is most likely present in these areas, and could conceivably be in other areas as well. All painted surfaces were in poor to fair condition. Additional sampling and testing would be required to quantify the concentration of lead and the extent of the lead-bearing paint.

As with asbestos, workers who may have cause to disturb suspect lead-bearing surfaces in future activities as renovation, demolition, etc., should be formally advised of these findings so that they may take appropriate precautions in terms of exposure. Special handling and disposal requirements may apply in the event that lead-bearing painted surfaces are disturbed, removed, or demolished at this facility.

Alternative management approaches to resolve lead paint issues frequently include: (1) painting over paint layers containing lead with high density quality penetrating/sealing paint; or (2) removal of the paint under controlled conditions to prevent the release of lead-bearing paint into the atmosphere. Current thinking on this issue according to U.S. EPA Region 10, is to manage the material in-place until a structure is renovated or demolished.

With the endorsement of the Lead Based Paint Hazard Reduction Act, Title 10, came the need for special care on the part of landlords, consultants, and others who may become involved with lead-bearing structures to minimize potential health hazards as well as legal liabilities. Appendix D to this report provides an informational pamphlet which may be useful in gaining familiarity with concerns and practices relating to lead in residential structures. Additional information and guidance may be obtained directly from Environmental Associates, Inc., or from EPA.

Finally, under Section 1018 of the Residential Lead Based Paint Hazard Reduction Act of 1992 (also known as Title 10), the owner may be required to provide new renters as well as tenants renewing leases with (1) the standard EPA Pamphlet "Protect Your Family from Lead in Your Home" and (2) disclosure of all known lead-based paint occurrences at the facility.

LIMITATIONS

This report has been prepared for the exclusive use of Desert Creek, LLC, along with and their several representatives for specific application to this site. Our work for this project was conducted in a manner consistent with that level of care and skill normally exercised by members of the environmental science profession currently practicing under similar conditions in the area, and in accordance with the terms and conditions set forth in our proposal dated December 29, 2004. Conclusions and opinions offered here pertaining to materials and/or conditions rely solely upon results of sampling and testing conducted by others at separated sampling localities and conditions may vary between sampling localities or at other locations or depths. The environmental condition of subsurface soil and/or groundwater cannot typically be determined by visual examination of surficial conditions such as afforded by the scope of a Phase I audit such as performed here. Acknowledging that limitation, no warranty in that regard is made. No other warranty, expressed or implied, is made. If new information is developed in future site work which may include excavations, borings, studies, etc., Environmental Associates, Inc., must be retained to reevaluate the conclusions of this report and to provide amendments as required.

The level of effort regarding identification of potential ACM should be considered a reconnaissance, should not be confused with an asbestos survey, and should not be used as a sole informational resource for removal, construction, or abatement bidding purposes.

REFERENCES

GENERAL

Bonneville Power Administration (BPA), January 1993, Radon Monitoring Results from BPA's Residential Conservation Program, Report No. 15, (with April 1993 Map).

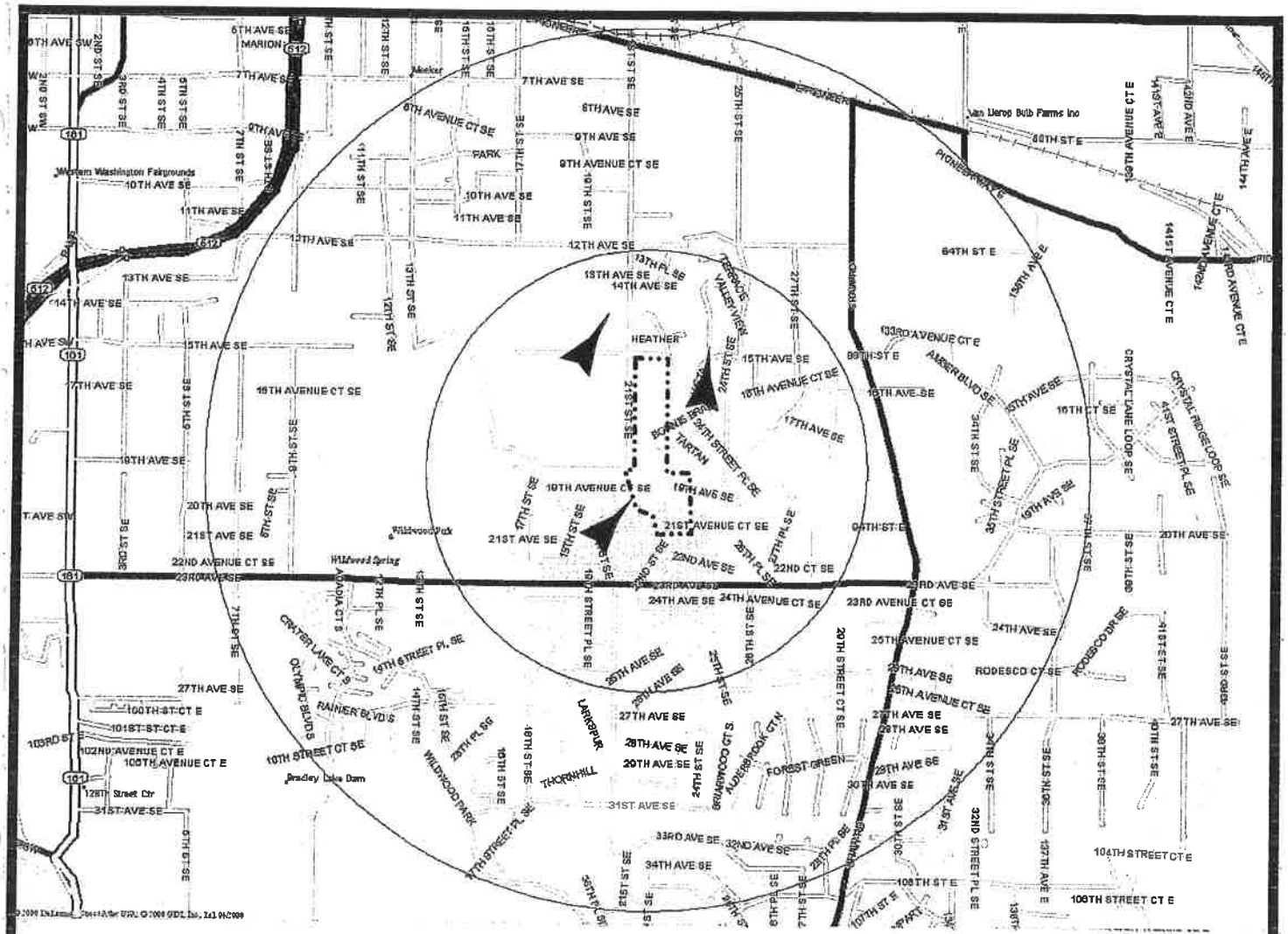
Environmental Protection Agency (EPA), September 1987, Radon Reference Manual EPA 520/1-87-20.

Jones, M.A., 1999, Geological Framework for The Puget Sound Aquifer System, Washington and British Columbia, USGS, Professional Paper 1424-C, plate 11.

Thomas Brothers Map Co., 1995, The Thomas Guide: King/Pierce/Snohomish Counties.

U.S. EPA, April 1994. Reducing Lead Hazards When Remodeling Your Home. EPA 747-R-94-002. 20 pps.

U.S. Geological Survey, 1961, Puyallup, Washington, 1:24,000 Quadrangle. Photorevised 1981, 1 sheet.



Inferred Direction of Groundwater Flow

Subject Property

N

Scale

0 *1/2* *1 mile*

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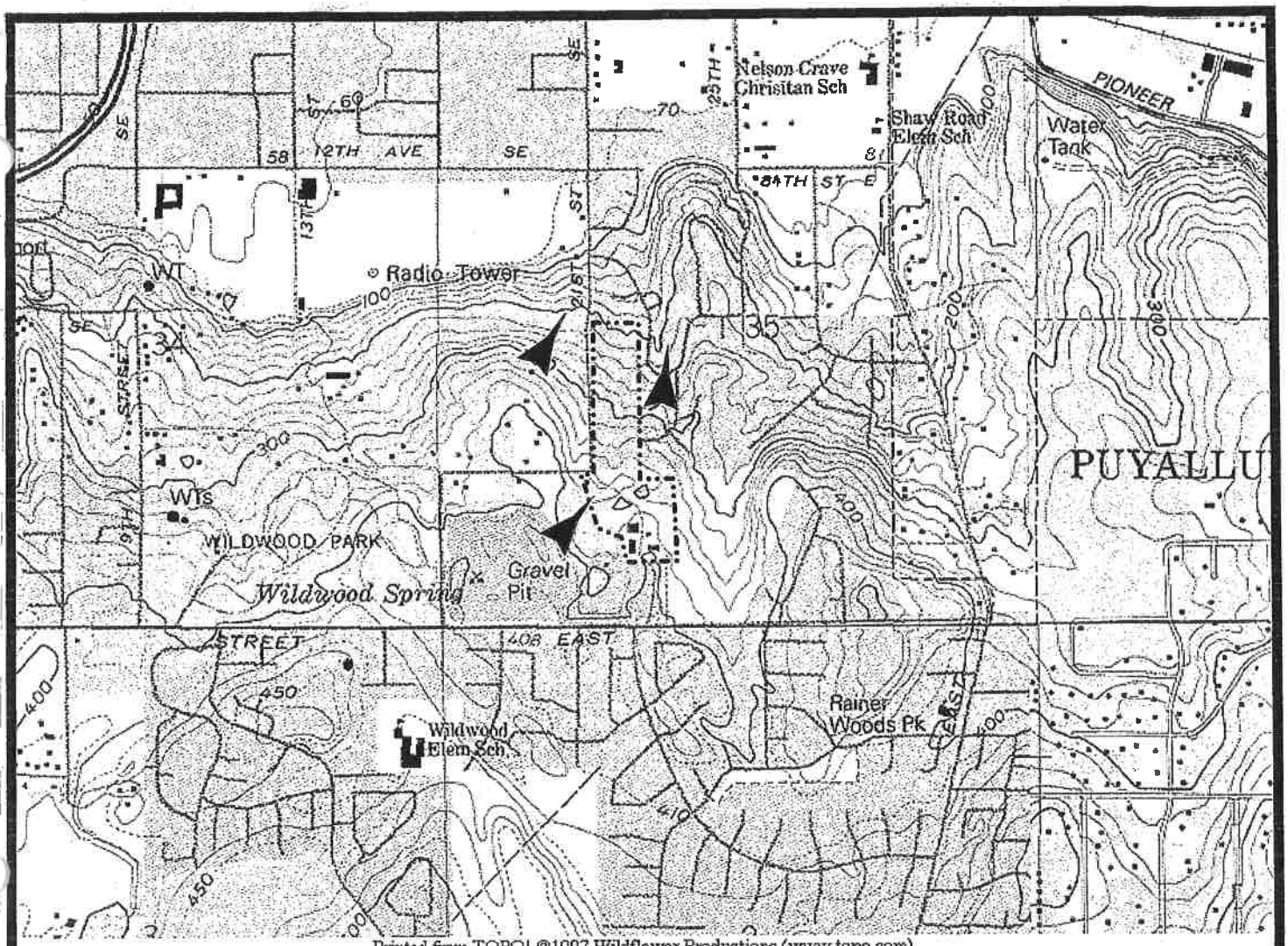
VICINITY MAP

Proposed Sunset Pointe Residential Plat
East of Intersection of 19th Ave SE and 21st St SE
Puyallup, Washington

Job Number:	*Date:*		*Plate:*
JN 24420	January 2005		1



Probable Direction of Regional Groundwater Flow

Subject Property

N

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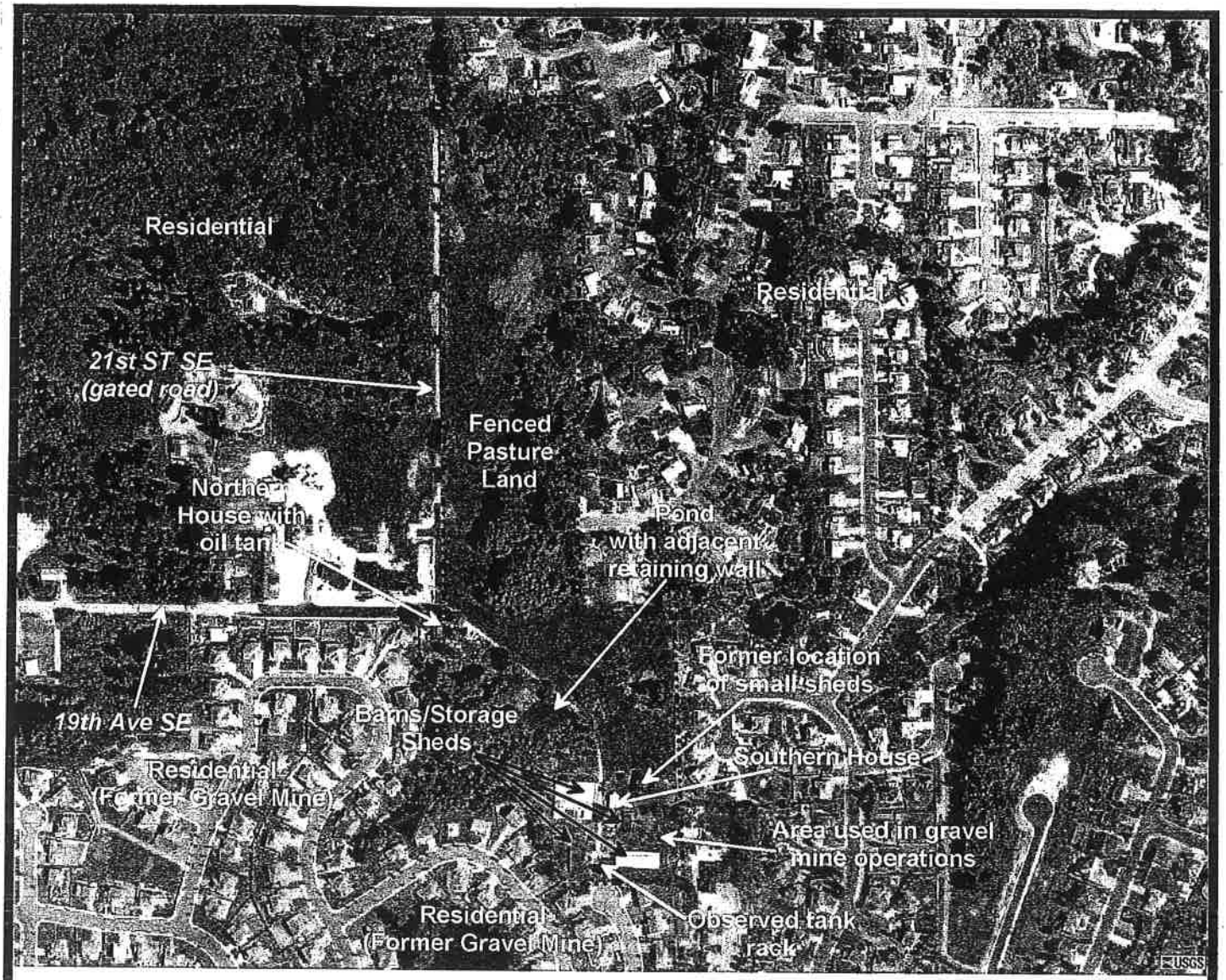
TOPOGRAPHIC MAP

Proposed Sunset Pointe Residential Plat
East of Intersection of 19th Ave SE and 21st St SE
Puyallup, Washington

Job Number:	*Date:*		*Plate:*
JN 24420	January 2005		2



Subject Property

Inferred regional groundwater flow direction

N

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Bellevue, Washington 98004

SITE PLAN

Proposed Sunset Pointe Residential Plat
East of Intersection of 19th Ave SE
and 21st St SE
Puyallup, Washington

Job Number:	*Date:*		*Plate:*
JN 24420	January 2005		3

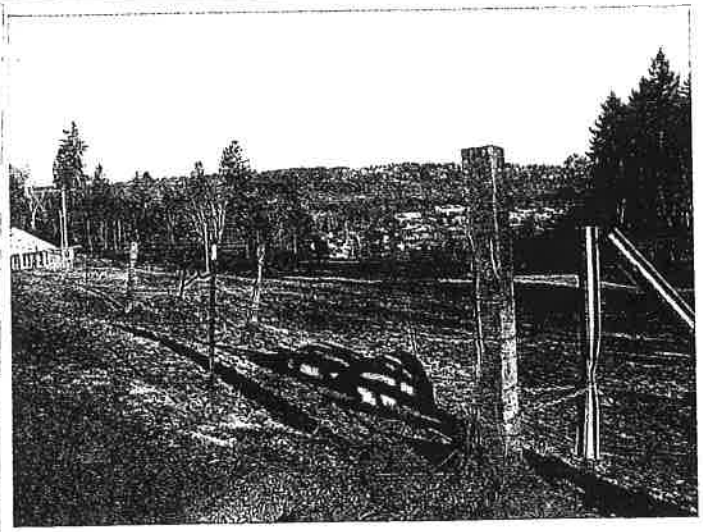

Photo 1: Pasture land on northern portion of the site, as viewed from subject property driveway.

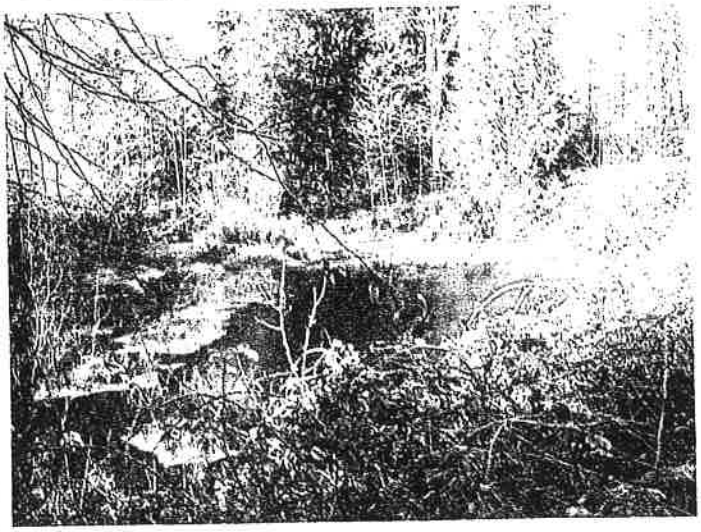

Photo 2: Pond located on southern portion of site. Retaining wall constructed with battery casings is located on northern portion of pond, near location where photo taken from.

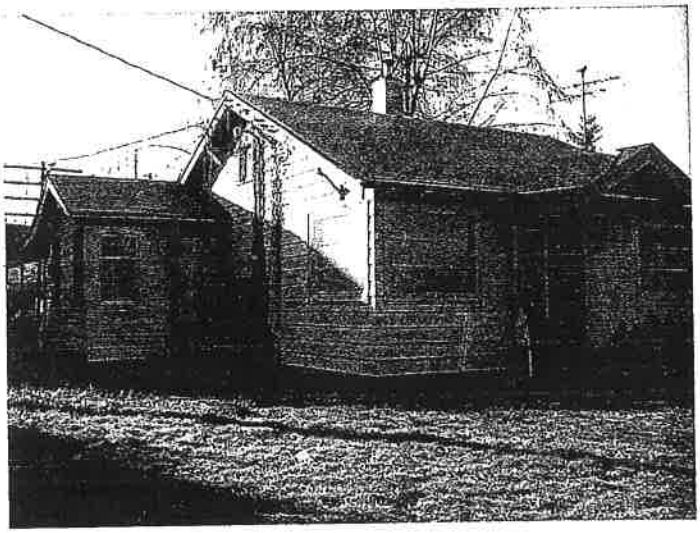

Photo 2: Southern house on subject property. Wood window, door, and other trim painted with a lead containing finish. Siding is aluminum. Lead not detected on siding finish.

Photo 4: Example of barn/storage sheds located on southern portion of site as well as types of refuse accumulated in this area.

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SITE PHOTOGRAPHS

Proposed Sunset Pointe Residential Plat
East of Intersection of 19th Ave SE and 21st St SE
Puyallup, Washington

Job Number:	*Date:*		*Plate:*
JN 24420	January 2005		4

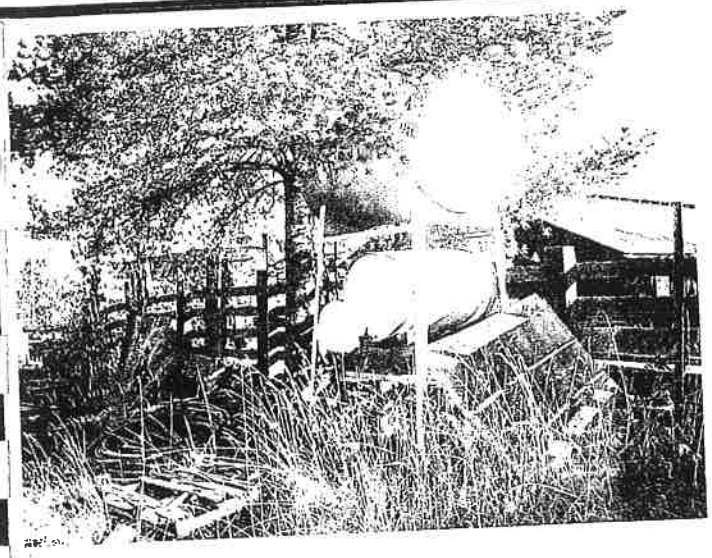

Photo 1: Steel rack containing multiple tanks/drums on southern portion of property. Bottom of lower left drum noted to be rusted out. No staining, odors, or disturbed vegetation noted under tanks.

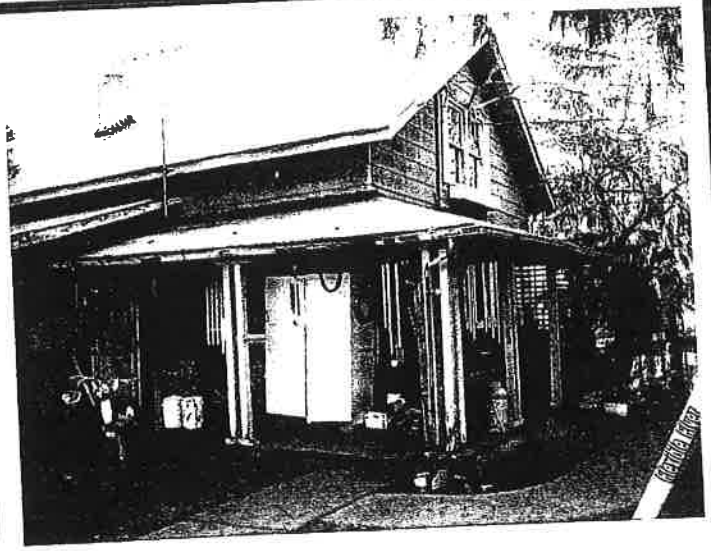

Photo 2: Northern house observed on subject site. Siding is asphaltic shingle material.

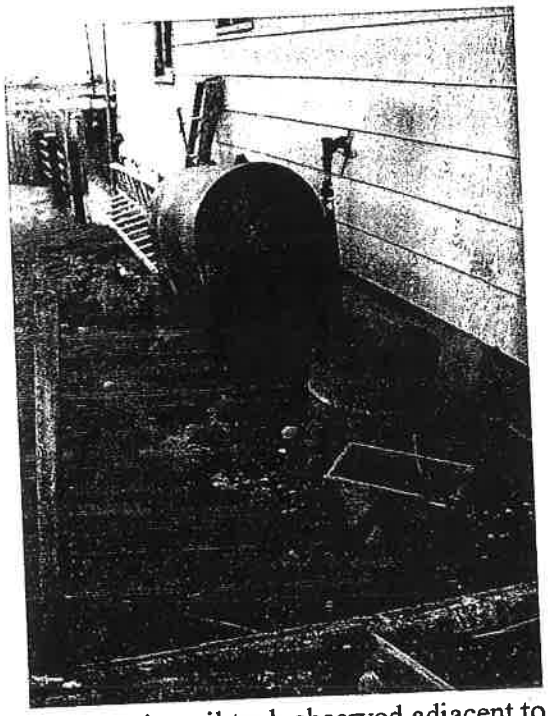

Photo 3: Heating oil tank observed adjacent to southern wall of northern house. Tank appeared to be in good condition.

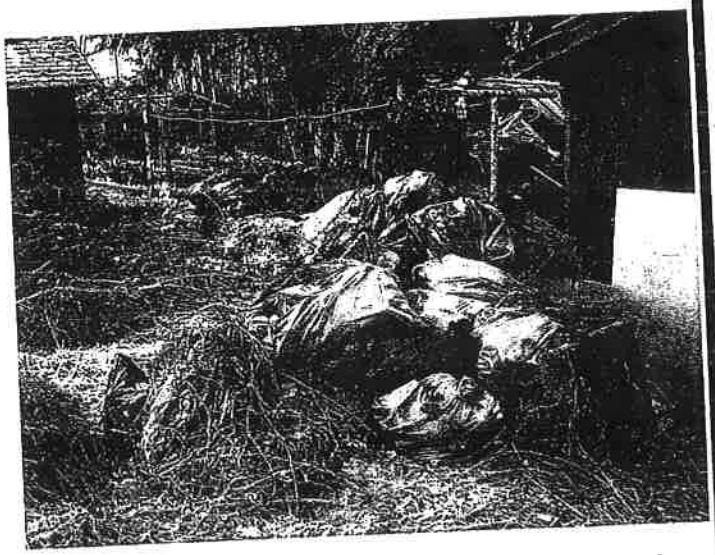

Photo 4: Household refuse noted in the vicinity of northern house on site.

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SITE PHOTOGRAPHS

Proposed Sunset Pointe Residential Plat
East of Intersection of 19th Ave SE and 21st St SE
Puyallup, Washington

Job Number:	*Date:*		*Plate:*
JN 24420	January 2005		5

■ Environmental Questionnaire

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■ Environmental Database

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ERIS

DATABASE REPORT

Project Property:	*Sunset Pointe Development* *n/a* *Puyallup WA*
Project No:	*24-246*
Report Type:	*Database Report*
Order No:	*24050300454*
Requested by:	*Aerotech Environmental Consulting, Inc.*
Date Completed:	*May 7, 2024*

Environmental Risk Information Services
A division of Glacier Media Inc.
1.866.517.5204 | info@erisinfo.com | erisinfo.com

Table of Contents

Table of Contents....2
Executive Summary....3
Executive Summary: Report Summary....4
Executive Summary: Site Report Summary - Project Property....8
Executive Summary: Site Report Summary - Surrounding Properties....9
Executive Summary: Summary by Data Source....11
Map....13
Aerial....16
Topographic Map....17
Detail Report....18
Unplottable Summary....28
Unplottable Report....29
Appendix: Database Descriptions....30
Definitions....45

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Executive Summary

Property Information:

Project Property:		*Sunset Pointe Development* *n/a Puyallup WA*
Project No:		*24-246*
Coordinates:		
	Latitude:	*47.1725387*
	Longitude:	*-122.26543114*
	UTM Northing:	*5,224,599.71*
	UTM Easting:	*555,665.87*
	UTM Zone:	*10T*
Elevation:		*373 FT*

Order Information:

Order No:	*24050300454*
Date Requested:	*May 3, 2024*
Requested by:	*Aerotech Environmental Consulting, Inc.*
Report Type:	*Database Report*

Historicals/Products:

ERIS Xplorer	*ERIS Xplorer*
Excel Add-On	*Excel Add-On*

Executive Summary: Report Summary

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
Standard Environmental Records								
Federal								
NPL	Y	1	0	0	0	0	0	0
PROPOSED NPL	Y	1	0	0	0	0	0	0
DELETED NPL	Y	0.5	0	0	0	0	-	0
SEMS	Y	0.5	0	0	0	0	-	0
ODI	Y	0.5	0	0	0	0	-	0
SEMS ARCHIVE	Y	0.5	0	0	0	0	-	0
IODI	Y	0.5	0	0	0	0	-	0
CERCLIS	Y	0.5	0	0	0	0	-	0
CERCLIS NFRAP	Y	0.5	0	0	0	0	-	0
CERCLIS LIENS	Y	PO	0	-	-	-	-	0
RCRA CORRACTS	Y	1	0	0	0	0	0	0
RCRA TSD	Y	0.5	0	0	0	0	-	0
RCRA LQG	Y	0.25	0	0	0	-	-	0
RCRA SQG	Y	0.25	0	0	0	-	-	0
RCRA VSQG	Y	0.25	0	0	0	-	-	0
RCRA NON GEN	Y	0.25	0	0	0	-	-	0
RCRA CONTROLS	Y	0.5	0	0	0	0	-	0
FED ENG	Y	0.5	0	0	0	0	-	0
FED INST	Y	0.5	0	0	0	0	-	0
LUCIS	Y	0.5	0	0	0	0	-	0
NPL IC	Y	0.5	0	0	0	0	-	0
ERNS 1982 TO 1986	Y	PO	0	-	-	-	-	0
ERNS 1987 TO 1989	Y	PO	0	-	-	-	-	0
ERNS	Y	PO	0	-	-	-	-	0
FED BROWNFIELDS	Y	0.5	0	0	0	0	-	0
FEMA UST	Y	0.25	0	0	0	-	-	0
FRP	Y	0.25	0	0	0	-	-	0

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
DELISTED FRP	Y	0.25	0	0	0	-	-	0
HIST GAS STATIONS	Y	0.25	0	0	0	-	-	0
REFN	Y	0.25	0	0	0	-	-	0
BULK TERMINAL	Y	0.25	0	0	0	-	-	0
SEMS LIEN	Y	PO	0	-	-	-	-	0
SUPERFUND ROD	Y	1	0	0	0	0	0	0
DOE FUSRAP	Y	1	0	0	0	0	0	0
State								
HSL	Y	1	0	0	0	0	0	0
CSCSL	Y	1	0	1	0	0	1	2
DELISTED SHWS	Y	1	0	0	0	0	0	0
CSCSL NFA	Y	0.5	0	0	0	0	-	0
SWF/LF	Y	0.5	0	0	0	0	-	0
RECYCLERS	Y	0.5	0	0	0	0	-	0
WASTE TIRE	Y	0.5	0	0	0	0	-	0
LUST	Y	0.5	0	0	0	0	-	0
LUST PTAP	Y	0.5	0	0	0	0	-	0
UST LOAN	Y	0.5	0	0	0	0	-	0
LST HOT	Y	0.5	0	0	0	0	-	0
UST	Y	0.25	0	0	0	-	-	0
DELISTED LST	Y	0.5	0	0	0	0	-	0
AST	Y	0.25	0	0	0	-	-	0
AST SPL PREV	Y	0.25	0	0	0	-	-	0
DELISTED TNK	Y	0.25	0	0	0	-	-	0
INST	Y	0.5	0	0	0	0	-	0
VCP	Y	0.5	0	0	0	0	-	0
BROWNFIELDS	Y	0.5	0	0	0	0	-	0
Tribal								
INDIAN LUST	Y	0.5	0	0	0	0	-	0
INDIAN UST	Y	0.25	0	0	0	-	-	0
DELISTED INDIAN LST	Y	0.5	0	0	0	0	-	0
DELISTED INDIAN UST	Y	0.25	0	0	0	-	-	0
County								

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
TP HIST LF	Y	0.5	0	0	0	0	-	0
HIST GAS STATION	Y	0.5	0	0	0	0	-	0
Additional Environmental Records								
Federal								
PFAS GHG	Y	0.5	0	0	0	0	-	0
FINDS/FRS	Y	PO	0	-	-	-	-	0
TRIS	Y	PO	0	-	-	-	-	0
PFAS NPL	Y	0.5	0	0	0	0	-	0
PFAS FED SITES	Y	0.5	0	0	0	0	-	0
PFAS SSEHRI	Y	0.5	0	0	0	0	-	0
ERNS PFAS	Y	0.5	0	0	0	0	-	0
PFAS NPDES	Y	0.5	0	0	0	0	-	0
PFAS TRI	Y	0.5	0	0	0	0	-	0
PFAS WATER	Y	0.5	0	0	0	0	-	0
PFAS TSCA	Y	0.5	0	0	0	0	-	0
PFAS E-MANIFEST	Y	0.5	0	0	0	0	-	0
PFAS IND	Y	0.5	0	0	0	0	-	0
HMIRS	Y	0.125	0	0	-	-	-	0
NCDL	Y	0.125	0	0	-	-	-	0
TSCA	Y	0.125	0	0	-	-	-	0
HIST TSCA	Y	0.125	0	0	-	-	-	0
FTTS ADMIN	Y	PO	0	-	-	-	-	0
FTTS INSP	Y	PO	0	-	-	-	-	0
PRP	Y	PO	0	-	-	-	-	0
SCRD DRYCLEANER	Y	0.5	0	0	0	0	-	0
ICIS	Y	PO	0	-	-	-	-	0
FED DRYCLEANERS	Y	0.25	0	0	0	-	-	0
DELISTED FED DRY	Y	0.25	0	0	0	-	-	0
FUDS	Y	1	0	0	0	0	0	0
FUDS MRS	Y	1	0	0	0	0	0	0
FORMER NIKE	Y	1	0	0	0	0	0	0
PIPELINE INCIDENT	Y	PO	0	-	-	-	-	0
MLTS	Y	PO	0	-	-	-	-	0
HIST MLTS	Y	PO	0	-	-	-	-	0
MINES	Y	0.25	0	0	0	-	-	0

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
SMCRA	Y	1	0	0	0	0	0	0
MRDS	Y	1	0	1	0	0	0	1
LM SITES	Y	1	0	0	0	0	0	0
ALT FUELS	Y	0.25	0	0	0	-	-	0
CONSENT DECREES	Y	0.25	0	0	0	-	-	0
AFS	Y	PO	0	-	-	-	-	0
SSTS	Y	0.25	0	0	0	-	-	0
PCBT	Y	0.5	0	0	0	0	-	0
PCB	Y	0.5	0	0	0	0	-	0
State								
SPILLS	Y	0.125	0	0	-	-	-	0
SPILLS WATER	Y	0.125	0	0	-	-	-	0
ALL SITES	Y	0.5	0	1	1	7	-	9
ERTS	Y	0.125	0	0	-	-	-	0
ICR	Y	0.5	0	0	1	0	-	1
DRYCLEANERS	Y	0.25	0	0	0	-	-	0
DELISTED DRYCLEANERS	Y	0.25	0	0	0	-	-	0
TIER 2	Y	0.125	0	0	-	-	-	0
CDL	Y	PO	0	-	-	-	-	0
HIST CDL	Y	PO	0	-	-	-	-	0
AIR PERMITS	Y	0.25	0	0	0	-	-	0
UIC	Y	PO	0	-	-	-	-	0
Tribal	***No Tribal additional environmental record sources available for this State.***							
County								
Total:			0	3	2	7	1	13

**** PO – Property Only***
**** 'Property and adjoining properties' database search radii are set at 0.25 miles.***

Executive Summary: Site Report Summary - Project Property

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number

No records found in the selected databases for the project property.

Executive Summary: Site Report Summary - Surrounding Properties

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
1	MRDS	UNNAMED PIT	PIERCE COUNTY PUYALLUP WA 98372 *Dep ID:* 10277634	SW	0.11 / 568.23	19	18
2	CSCSL	Pioneer Museum	2301 23RD AVE SE PUYALLUP WA 98372	S	0.12 / 616.78	44	18
2	ALL SITES	PIONEER MUSEUM	2301 23RD AVE SE PUYALLUP WA 98372	S	0.12 / 616.78	44	20
3	ICR	Pioneer Museum	2301 23RD AVE SE PUYALLUP WA 98372	SE	0.15 / 790.80	17	20
4	ALL SITES	CYPRESS MANOR	CORNER 19TH AVE SE & 17TH ST SE PUYALLUP WA 98372	W	0.24 / 1,242.08	-4	21
5	ALL SITES	Sullys Glen	2820 23rd Ave SE Puyallup WA 98374	ESE	0.39 / 2,039.19	101	22
6	ALL SITES	Puyallup Highlands Richmond American Homes	1500 Shaw Rd Puyallup WA 98372	ENE	0.48 / 2,555.05	-249	22
6	ALL SITES	Puyallup Highlands Construction Site	1500 SHAW RD PUYALLUP WA 98372	ENE	0.48 / 2,555.05	-249	23
6	ALL SITES	Puayllup Highlands Phase 3 Partial	1500 SHAW RD PUYALLUP WA 98372	ENE	0.48 / 2,555.05	-249	23
6	ALL SITES	Puyallup Highlands Phase 3 Partial	1500 SHAW RD PUYALLUP WA 98372	ENE	0.48 / 2,555.05	-249	24
6	ALL SITES	Puyallup Highlands Phase 4	1500 Shaw Rd Puyallup WA 98372	ENE	0.48 / 2,555.05	-249	24
6	ALL SITES	Puyallup Highlands High Country	1500 SHAW RD PUYALLUP WA 98372	ENE	0.48 / 2,555.05	-249	25

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
7	CSCSL	Puyallup School District Elementary School 20	SHAW & 12TH PUYALLUP WA 98371	NE	0.63 / 3,349.02	-293	25

Executive Summary: Summary by Data Source

Standard

State

CSCSL - Confirmed and Suspected Contaminated Sites List

A search of the CSCSL database, dated Mar 6, 2024 has found that there are 2 CSCSL site(s) within approximately 1.00miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
Pioneer Museum	2301 23RD AVE SE PUYALLUP WA 98372	S	0.12 / 616.78	2

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
Puyallup School District Elementary School 20	SHAW & 12TH PUYALLUP WA 98371	NE	0.63 / 3,349.02	7

Non Standard

Federal

MRDS - Mineral Resource Data System

A search of the MRDS database, dated Mar 15, 2016 has found that there are 1 MRDS site(s) within approximately 1.00miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
UNNAMED PIT	PIERCE COUNTY PUYALLUP WA 98372 ***Dep ID**: 10277634*	SW	0.11 / 568.23	1

State

ALL SITES - Facility/Site Identification System

A search of the ALL SITES database, dated Jan 8, 2024 has found that there are 9 ALL SITES site(s) within approximately 0.50miles of the project property.

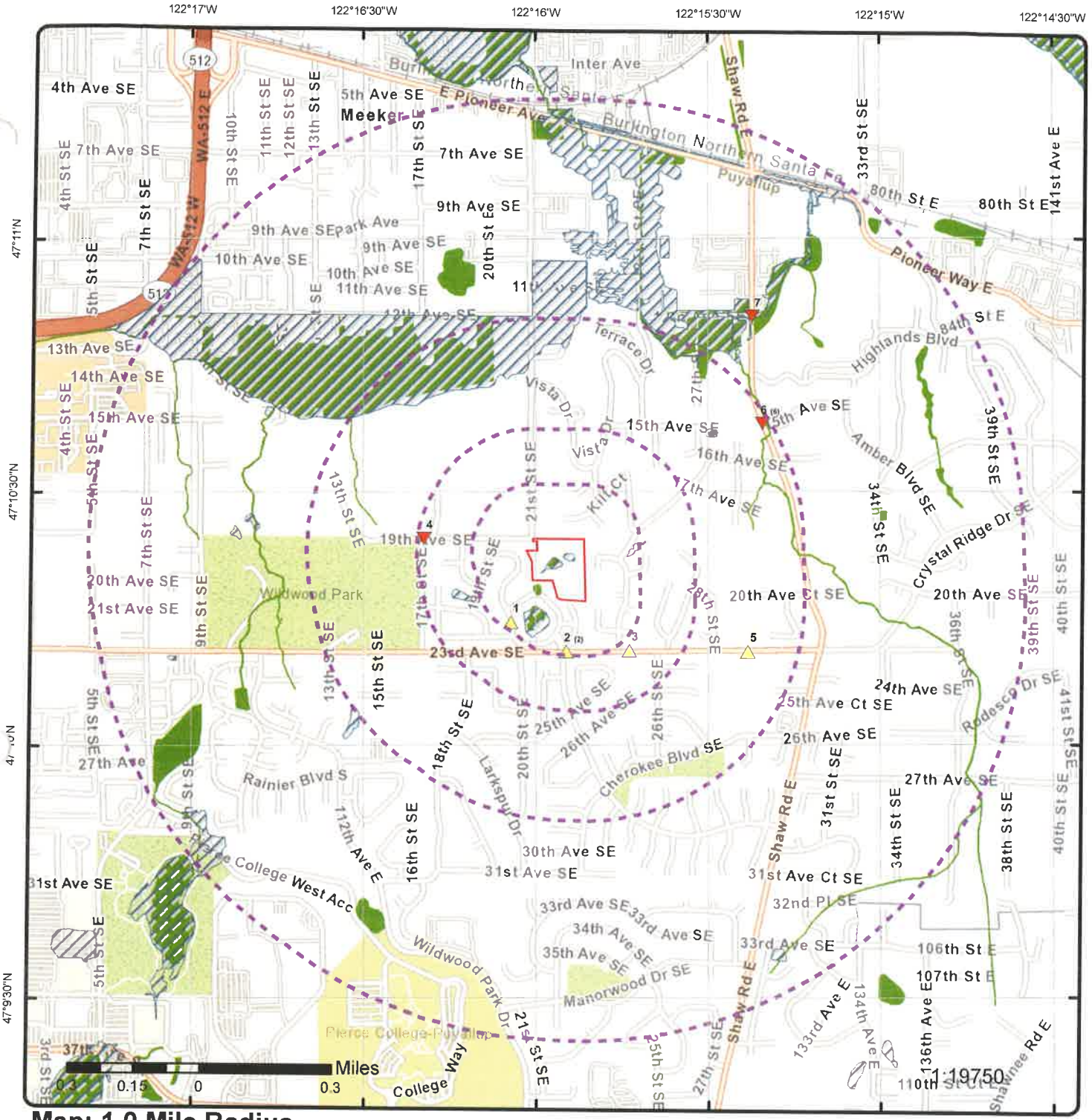
Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
PIONEER MUSEUM	2301 23RD AVE SE PUYALLUP WA 98372	S	0.12 / 616.78	2
Sullys Glen	2820 23rd Ave SE Puyallup WA 98374	ESE	0.39 / 2,039.19	5

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
Lower Elevation	**Address**	**Direction**	**Distance (mi/ft)**	**Map Key**
CYPRESS MANOR	CORNER 19TH AVE SE & 17TH ST SE PUYALLUP WA 98372	W	0.24 / 1,242.08	4
Puyallup Highlands Richmond American Homes	1500 Shaw Rd Puyallup WA 98372	ENE	0.48 / 2,555.05	6
Puyallup Highlands Construction Site	1500 SHAW RD PUYALLUP WA 98372	ENE	0.48 / 2,555.05	6
Puayllup Highlands Phase 3 Partial	1500 SHAW RD PUYALLUP WA 98372	ENE	0.48 / 2,555.05	6
Puyallup Highlands Phase 3 Partial	1500 SHAW RD PUYALLUP WA 98372	ENE	0.48 / 2,555.05	6
Puyallup Highlands Phase 4	1500 Shaw Rd Puyallup WA 98372	ENE	0.48 / 2,555.05	6
Puyallup Highlands High Country	1500 SHAW RD PUYALLUP WA 98372	ENE	0.48 / 2,555.05	6

ICR - Independent Cleanup Reports

A search of the ICR database, dated Nov 6, 2015 has found that there are 1 ICR site(s) within approximately 0.50miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
Pioneer Museum	2301 23RD AVE SE PUYALLUP WA 98372	SE	0.15 / 790.80	3



Map: 1.0 Mile Radius

Order Number: 24050300454

Address: n/a, Puyallup, WA

- Project Property
- Buffer Outline
- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- Areas with Higher Elevation
- Areas with Same Elevation
- Areas with Lower Elevation
- Areas with Unknown Elevation
- Freeways; Highways
- Traffic Circle; Ramp
- Major & Minor Arterial
- Traffic Circle; Ramp
- Local Road
- Rail
- State
- Country
- National Wetland
- Indian Reserve Land
- 100 Year Flood Zone
- 500 Year Flood Zone
- FWS Special Designation Areas
- National Priorities List (Active, Delisted, Proposed, Institutional Control)

Source: © 2021 ESRI StreetMap Premium

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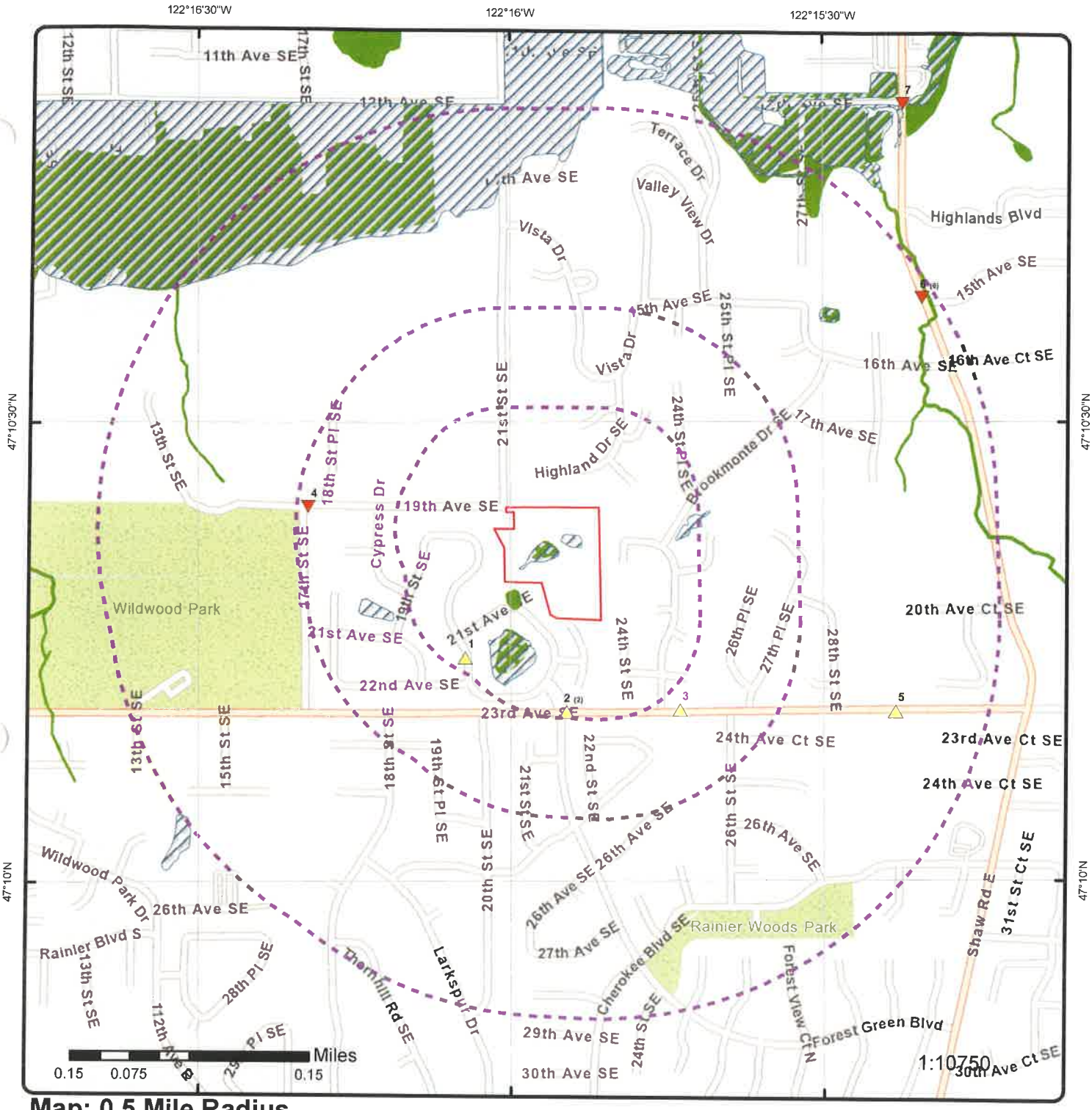


Map: 0.5 Mile Radius

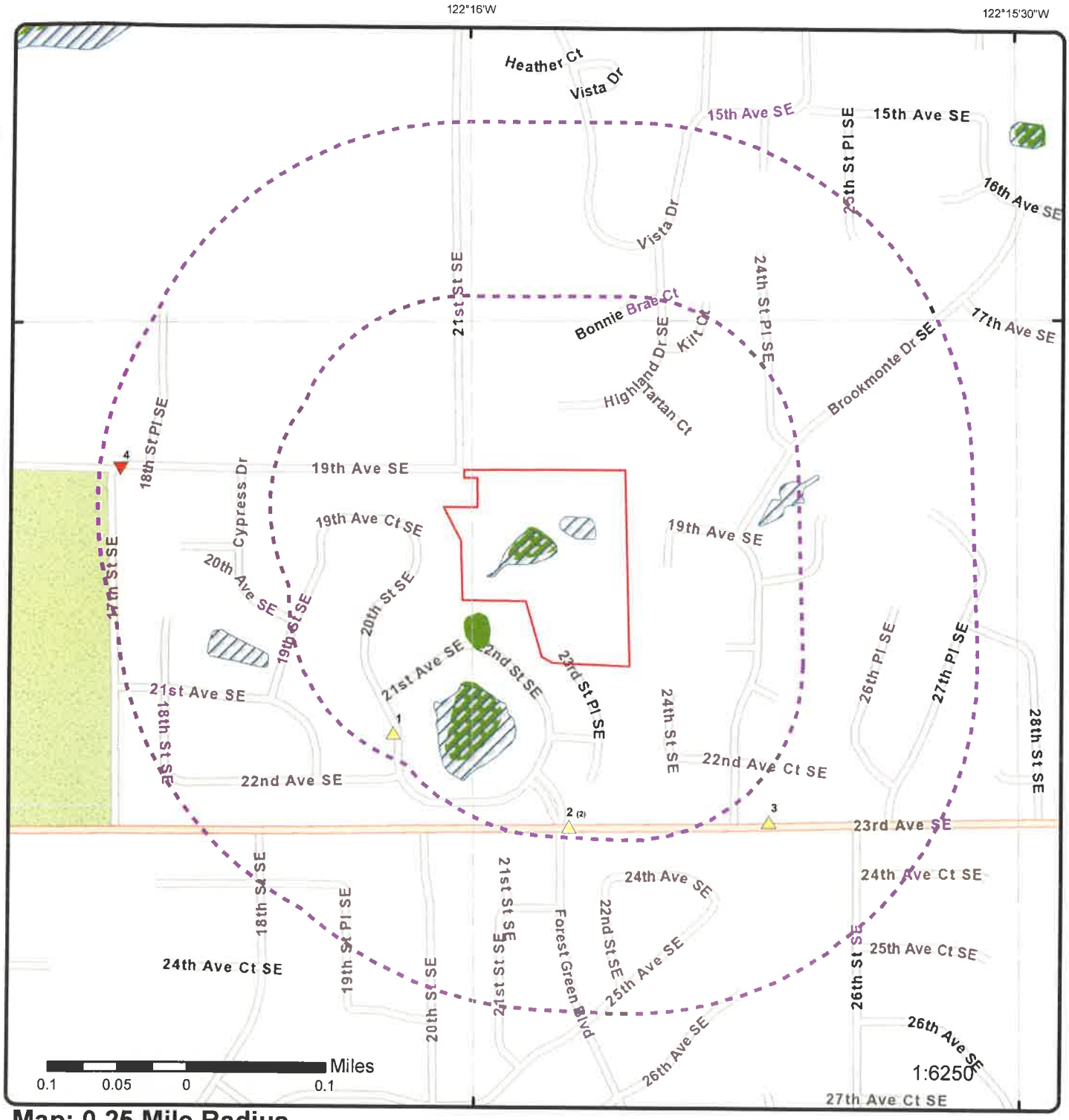
Order Number: 24050300454

Address: n/a, Puyallup, WA

- Project Property
- Buffer Outline
- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- Areas with Higher Elevation
- Areas with Same Elevation
- Areas with Lower Elevation
- Areas with Unknown Elevation
- Freeways; Highways
- Traffic Circle; Ramp
- Major & Minor Arterial
- Traffic Circle; Ramp
- Local Road
- Rail
- State
- Country
- National Wetland
- Indian Reserve Land
- 100 Year Flood Zone
- 500 Year Flood Zone
- FWS Special Designation Areas
- National Priorities List (Active, Delisted, Proposed, Institutional Control)

Source: © 2021 ESRI StreetMap Premium

© ERIS Information Inc.



Map: 0.25 Mile Radius

Order Number: 24050300454

Address: n/a, Puyallup, WA

- Project Property
- Buffer Outline
- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- Areas with Higher Elevation
- Areas with Same Elevation
- Areas with Lower Elevation
- Areas with Unknown Elevation
- Freeways; Highways
- Traffic Circle; Ramp
- Major & Minor Arterial
- Traffic Circle; Ramp
- Local Road
- Rail
- State
- Country
- National Wetland
- Indian Reserve Land
- 100 Year Flood Zone
- 500 Year Flood Zone
- FWS Special Designation Areas
- National Priorities List (Active, Delisted, Proposed, Institutional Control)

Source: © 2021 ESRI StreetMap Premium

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Aerial Year: 2022

Address: n/a, Puyallup, WA

Source: ESRI World Imagery

Order Number: 24050300454

ERIS

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Detail Report

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
1	1 of1	SW	0.11 / 568.23	391.34 / 19	UNNAMED PIT PIERCE COUNTY PUYALLUP WA 98372	MRDS

Dep ID:	10277634	**I1:**	15
Dev Status:	PAST PRODUCER	**Latitude:**	47.170715
Code List:	SDG	**Longitude:**	-122.267883
Url:	http://mrdata.usgs.gov/mrds/show-mrds.php?dep_id=10277634		

Commodity

I1:	27	**Line:**	1
Code:	SDG	**Inserted By:**	MAS migration
Commodity:	Sand and Gravel, Cons	**Insert Date:**	29-OCT-2002 09:00:24
Commodity Type:	Non-metallic	**Updated By:**	USGS
Commodity Group:	Sand and Gravel	**Update Date:**	29-OCT-2002 09:02:25
Importance:	Primary		

Names

I1:	17	**Inserted By:**	MAS migration
Status:	Previous	**Insert Date:**	29-OCT-02
Site Name:	Pyramid Sand and Gravel	**Updated By:**	USGS
Line:	1	**Update Date:**	29-OCT-02

Names

I1:	39	**Inserted By:**	MAS migration
Status:	Current	**Insert Date:**	29-OCT-02
Site Name:	Unnamed Pit	**Updated By:**	USGS
Line:	2	**Update Date:**	29-OCT-02

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
2	1 of2	S	0.12 / 616.78	416.74 / 44	Pioneer Museum 2301 23RD AVE SE PUYALLUP WA 98372	CSCSL

Fac Site ID:	9490	**Responsible Unit:**	Southwest
Cleanup Site ID:	11739	**Fac Site ID (OD):**	9490
Site Status:	Awaiting Cleanup	**Cleanup SiteID(OD):**	11739
Site Rank:		**Site Rank (OD):**	
Current VCP:		**Has Env Coven (OD):**	
Past VCP:		**Respon Unit (OD):**	Southwest
Has Inst Control:		**County (OD):**	Pierce
County:	Pierce	**Region (OD):**	Southwest
Region:	Southwest	**Longitude (OD):**	-122.265384
Latitude:	47.172527	**Latitude (OD):**	47.172527
Longitude:	-122.265384		
Site Name:	Pioneer Museum		
Address:	2301 23RD AVE SE		
City:	PUYALLUP		
Zip Code:	98372		
Site Status (OD):	Awaiting Cleanup		
Site Name (OD):	Pioneer Museum		
Address (OD):	2301 23RD AVE SE		
City (OD):	PUYALLUP		

Zipcode (OD): 98372
Location (OD): ""
(47.172527, -122.265384)
Alternate Site Names:
Data Source(s): Confirmed and Suspected Contaminated Sites; Cleanup Sites (Open Data Portal); Open Data Portal - Media and Contaminants
Site URL: https://apps.ecology.wa.gov/cleanupsearch/site/11739
Site Details URL: https://apps.ecology.wa.gov/cleanupsearch/reports/cleanup/sitedetails/11739

Contaminants Detail(s)

Contaminant Name: Other Halogenated Organics
Groundwater:
Surfacewater:
Soil: Confirmed Above Cleanup Levels
Sediment:
Air:
Bedrock:

Contaminant Name: Petroleum-Other
Groundwater:
Surfacewater:
Soil: Confirmed Above Cleanup Levels
Sediment:
Air:
Bedrock:

Contaminant Name: Petroleum-Gasoline
Groundwater:
Surfacewater:
Soil: Confirmed Above Cleanup Levels
Sediment:
Air:
Bedrock:

Contaminant Name: Non-Halogenated Pesticides
Groundwater:
Surfacewater:
Soil: Confirmed Above Cleanup Levels
Sediment:
Air:
Bedrock:

Contaminant Name: Phenolic Compounds
Groundwater:
Surfacewater:
Soil: Confirmed Above Cleanup Levels
Sediment:
Air:
Bedrock:

Open Data Portal - Media and Contaminants as of August 24, 2022

Contaminant: Petroleum-Other
Contaminant Media: Soil
Contaminant Status: Confirmed Above Cleanup Levels

Contaminant: Petroleum-Gasoline
Contaminant Media: Soil
Contaminant Status: Confirmed Above Cleanup Levels

Contaminant: Other Halogenated Organics
Contaminant Media: Soil
Contaminant Status: Confirmed Above Cleanup Levels

Contaminant: Phenolic Compounds
Contaminant Media: Soil

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Contaminant Status: Confirmed Above Cleanup Levels

Contaminant: Non-Halogenated Pesticides
Contaminant Media: Soil
Contaminant Status: Confirmed Above Cleanup Levels

2	2 of2	S	0.12 / 616.78	416.74 / 44	PIONEER MUSEUM 2301 23RD AVE SE PUYALLUP WA 98372	ALL SITES

Facility/Site ID: 9490
Point Y: 47.1725259052823
Point X: -122.265370589115
Source File: Washington State Department of Ecology Facilties - Sites Interactions; Washington State Department of Ecology Facilties - Sites

Facility/Site Interaction

Program ID:
Interaction ID: 98655
Interaction Status: A
Interac Stat Desc: Active
Interaction Type: SCS
Facility Alternate: PIONEER MUSEUM
Interaction Desc: State Cleanup Site
Program Name Desc: Toxics Cleanup Program
Database Name Desc: Integrated Site Info System

Interact Start Dt: 28-Jun-2010
Interact End Dt:
Ecology Program: TOXICS
Prog Database Name: ISIS

Facility Location Detail

Coord Extension: 0
Coord Geog: 8
Horizontal: Unknown
Horizont 1: WGS84
Horizont 2: Address

Horizont Accuracy: 99
Hor Dtm Co: 4
Horz Coll Meth Cd: 4
Location Verified:
Geo Loc ID: 9490

3	1 of1	SE	0.15 / 790.80	389.40 / 17	Pioneer Museum 2301 23RD AVE SE PUYALLUP WA 98372	ICR

Cleanup Site ID: 11739
Facility Site ID: 9490
Site Status: Awaiting Cleanup
Statute: MTCA
Rank:
Rank Description:
Has Env Covenant:
Is Brownfiled Site:
Is PSI Site:

WRIA ID: 10
Is NFA Site:
Responsible Unit: Southwest
Latitude: 47.172527000000002
Longitude: -122.265384
Legislative District: 25
Congr District: 10
County Name: Pierce

Cleanup Activities

Related ID:
VCP Prj No:
Activity Name: Initial Investigation / Federal Preliminary Assessment
Activity Status: Completed
County Name: Pierce
Applies to: CleanupSite
Applies to Description:

Start Date: 2010-06-28
End Date: 2011-12-07
Legal Mechanism:
Performed by: Ecology w/ Contractor
Project Manager: County Health-SW

Related ID:
VCP Prj No:
Activity Name: Early Notice Letter(s)

Start Date:
End Date: 2011-12-07
Legal Mechanism:

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Activity Status:		**Performed by:**	
County Name:	Pierce	**Project Manager:**	Cross, Kim
Applies to:	CleanupSite		
Applies to Description:			

Media Contaminants

Contaminant Type:	Petroleum-Gasoline	**Sediment:**	
Groundwater:		**Sediment Desc.:**	
Groundwater Desc.:		**Air:**	
Surface Water:		**Air Desc.:**	
Surfacewater Desc.:		**Bedrock:**	
Soil:	C	**Bedrock Desc.:**	
Soil Desc.:	Confirmed Above Cleanup Level	**County Name:**	Pierce
Contaminant Type:	Petroleum-Other	**Sediment:**	
Groundwater:		**Sediment Desc.:**	
Groundwater Desc.:		**Air:**	
Surface Water:		**Air Desc.:**	
Surfacewater Desc.:		**Bedrock:**	
Soil:	C	**Bedrock Desc.:**	
Soil Desc.:	Confirmed Above Cleanup Level	**County Name:**	Pierce
Contaminant Type:	Phenolic Compounds	**Sediment:**	
Groundwater:		**Sediment Desc.:**	
Groundwater Desc.:		**Air:**	
Surface Water:		**Air Desc.:**	
Surfacewater Desc.:		**Bedrock:**	
Soil:	C	**Bedrock Desc.:**	
Soil Desc.:	Confirmed Above Cleanup Level	**County Name:**	Pierce
Contaminant Type:	Non-Halogenated Pesticides	**Sediment:**	
Groundwater:		**Sediment Desc.:**	
Groundwater Desc.:		**Air:**	
Surface Water:		**Air Desc.:**	
Surfacewater Desc.:		**Bedrock:**	
Soil:	C	**Bedrock Desc.:**	
Soil Desc.:	Confirmed Above Cleanup Level	**County Name:**	Pierce
Contaminant Type:	Other Halogenated Organics	**Sediment:**	
Groundwater:		**Sediment Desc.:**	
Groundwater Desc.:		**Air:**	
Surface Water:		**Air Desc.:**	
Surfacewater Desc.:		**Bedrock:**	
Soil:	C	**Bedrock Desc.:**	
Soil Desc.:	Confirmed Above Cleanup Level	**County Name:**	Pierce

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
4	1 of1	W	0.24 / 1,242.08	368.68 / -4	**CYPRESS MANOR** **CORNER 19TH AVE SE & 17TH ST SE** **PUYALLUP WA 98372**	ALL SITES

Facility/Site ID:	14849
Point Y:	47.1769000001415
Point X:	-122.260999999959
Source File:	Washington State Department of Ecology Facilties - Sites Interactions; Washington State Department of Ecology Facilties - Sites

Facility/Site Interaction

Program ID:	WAR007059	**Interact Start Dt:**	07-Apr-2006
Interaction ID:	84127	**Interact End Dt:**	
Interaction Status:	A	**Ecology Program:**	WATQUAL
Interac Stat Desc:	Active	**Prog Database Name:**	PARIS
Interaction Type:	CONSTSWGP		
Facility Alternate:	CYPRESS MANOR		

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Interaction Desc: Construction SW GP
Program Name Desc: Water Quality Program
Database Name Desc: Permitting & Reporting Information System

Facility Location Detail

Coord Extension: 0
Coord Geog: 0
Horizontal: Unknown
Horizont 1: WGS84
Horizont 2: Unknown
Horizont Accuracy: 99
Hor Dtm Co: 4
Horz Coll Meth Cd: 99
Location Verified:
Geo Loc ID: 14849

5	1 of1	ESE	0.39 / 2,039.19	473.25 / 101	Sullys Glen 2820 23rd Ave SE Puyallup WA 98374	ALL SITES

Facility/Site ID: 7041
Point Y: 47.1688087563446
Point X: -122.25644171358
Source File: Washington State Department of Ecology Facilties - Sites Interactions; Washington State Department of Ecology Facilties - Sites

Facility/Site Interaction

Program ID: WAR305747
Interaction ID: 123271
Interaction Status: A
Interac Stat Desc: Active
Interaction Type: CONSTSWGP
Facility Alternate: Sully's Glen
Interaction Desc: Construction SW GP
Program Name Desc: Water Quality Program
Database Name Desc: Permitting & Reporting Information System
Interact Start Dt: 09-Aug-2017
Interact End Dt:
Ecology Program: WATQUAL
Prog Database Name: PARIS

Facility Location Detail

Coord Extension: 0
Coord Geog: 0
Horizontal: Unknown
Horizont 1: WGS84
Horizont 2: Address
Horizont Accuracy: 99
Hor Dtm Co: 4
Horz Coll Meth Cd: 4
Location Verified:
Geo Loc ID: 7041

6	1 of6	ENE	0.48 / 2,555.05	123.75 / -249	Puyallup Highlands Richmond American Homes 1500 Shaw Rd Puyallup WA 98372	ALL SITES

Facility/Site ID: 19488
Point Y: 47.1771297227509
Point X: -122.255868884921
Source File: Washington State Department of Ecology Facilties - Sites Interactions; Washington State Department of Ecology Facilties - Sites

Facility/Site Interaction

Program ID: WAR126927
Interaction ID: 104667
Interaction Status: I
Interac Stat Desc: Inactive
Interaction Type: CONSTSWGP
Facility Alternate: Puyallup Highlands Richmond American Homes
Interaction Desc: Construction SW GP
Program Name Desc: Water Quality Program
Interact Start Dt: 02-Apr-2013
Interact End Dt: 15-Jun-2018
Ecology Program: WATQUAL
Prog Database Name: PARIS

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Database Name Desc: Permitting & Reporting Information System

Facility Location Detail

Coord Extension:	0	**Horizont Accuracy:**	6
Coord Geog:	8	**Hor Dtm Co:**	3
Horizontal:	40ft	**Horz Coll Meth Cd:**	13
Horizont 1:	NAD83HARN	**Location Verified:**	
Horizont 2:	Digital map or GIS	**Geo Loc ID:**	19488

6	2 of6	ENE	0.48 / 2,555.05	123.75 / -249	**Puyallup Highlands Construction Site** **1500 SHAW RD** **PUYALLUP WA 98372**	ALL SITES

Facility/Site ID: 6587244
Point Y: 47.1769189998338
Point X: -122.25570299964
Source File: Washington State Department of Ecology Facilties - Sites Interactions; Washington State Department of Ecology Facilties - Sites

Facility/Site Interaction

Program ID:		**Interact Start Dt:**	22-Feb-2010
Interaction ID:	90992	**Interact End Dt:**	
Interaction Status:	A	**Ecology Program:**	WATQUAL
Interac Stat Desc:	Active	**Prog Database Name:**	DMS
Interaction Type:	ENFORFNL		
Facility Alternate:			
Interaction Desc:	Enforcement Final		
Program Name Desc:	Water Quality Program		
Database Name Desc:	Docket Management System		

Program ID:	WAR006083	**Interact Start Dt:**	18-Mar-2005
Interaction ID:	87647	**Interact End Dt:**	16-Dec-2010
Interaction Status:	I	**Ecology Program:**	WATQUAL
Interac Stat Desc:	Inactive	**Prog Database Name:**	PARIS
Interaction Type:	CONSTSWGP		
Facility Alternate:	PUYALLUP HIGHLANDS		
Interaction Desc:	Construction SW GP		
Program Name Desc:	Water Quality Program		
Database Name Desc:	Permitting & Reporting Information System		

Program ID:	WAR124893	**Interact Start Dt:**	11-Apr-2011
Interaction ID:	96273	**Interact End Dt:**	20-Nov-2014
Interaction Status:	I	**Ecology Program:**	WATQUAL
Interac Stat Desc:	Inactive	**Prog Database Name:**	PARIS
Interaction Type:	CONSTSWGP		
Facility Alternate:	Puyallup Highlands Phase 3		
Interaction Desc:	Construction SW GP		
Program Name Desc:	Water Quality Program		
Database Name Desc:	Permitting & Reporting Information System		

Facility Location Detail

Coord Extension:	99	**Horizont Accuracy:**	99
Coord Geog:	99	**Hor Dtm Co:**	2
Horizontal:	Unknown	**Horz Coll Meth Cd:**	99
Horizont 1:	NAD83	**Location Verified:**	F
Horizont 2:	Unknown	**Geo Loc ID:**	6587244

6	3 of6	ENE	0.48 / 2,555.05	123.75 / -249	**Puayllup Highlands Phase 3 Partial** **1500 SHAW RD**	ALL SITES

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
					PUYALLUP WA 98372	

Facility/Site ID: 11283
Point Y: 47.1802054941701
Point X: -122.249252181185
Source File: Washington State Department of Ecology Facilties - Sites Interactions; Washington State Department of Ecology Facilties - Sites

Facility/Site Interaction

Program ID: WAR125473
Interaction ID: 99219
Interaction Status: I
Interac Stat Desc: Inactive
Interaction Type: CONSTSWGP
Facility Alternate: Puayllup Highlands Phase 3 Partial
Interaction Desc: Construction SW GP
Program Name Desc: Water Quality Program
Database Name Desc: Permitting & Reporting Information System
Interact Start Dt: 06-Jan-2012
Interact End Dt: 05-Aug-2014
Ecology Program: WATQUAL
Prog Database Name: PARIS

Facility Location Detail

Coord Extension: 0
Coord Geog: 8
Horizontal: 40ft
Horizont 1: NAD83HARN
Horizont 2: Digital map or GIS
Horizont Accuracy: 6
Hor Dtm Co: 3
Horz Coll Meth Cd: 13
Location Verified:
Geo Loc ID: 11283

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
6	4 of6	ENE	0.48 / 2,555.05	123.75 / -249	Puyallup Highlands Phase 3 Partial 1500 SHAW RD PUYALLUP WA 98372	ALL SITES

Facility/Site ID: 6276
Point Y: 47.1789834889905
Point X: -122.246638256843
Source File: Washington State Department of Ecology Facilties - Sites Interactions; Washington State Department of Ecology Facilties - Sites

Facility/Site Interaction

Program ID: WAR126613
Interaction ID: 103330
Interaction Status: I
Interac Stat Desc: Inactive
Interaction Type: CONSTSWGP
Facility Alternate: Puyallup Highlands Phase 3 Partial
Interaction Desc: Construction SW GP
Program Name Desc: Water Quality Program
Database Name Desc: Permitting & Reporting Information System
Interact Start Dt: 12-Dec-2012
Interact End Dt: 20-Nov-2013
Ecology Program: WATQUAL
Prog Database Name: PARIS

Facility Location Detail

Coord Extension: 0
Coord Geog: 8
Horizontal: 40ft
Horizont 1: NAD83HARN
Horizont 2: Digital map or GIS
Horizont Accuracy: 6
Hor Dtm Co: 3
Horz Coll Meth Cd: 13
Location Verified:
Geo Loc ID: 6276

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
6	5 of6	ENE	0.48 / 2,555.05	123.75 / -249	Puyallup Highlands Phase 4 1500 Shaw Rd Puyallup WA 98372	ALL SITES

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Facility/Site ID: 15776
Point Y: 47.1769183619257
Point X: -122.255701102411
Source File: Washington State Department of Ecology Facilties - Sites Interactions; Washington State Department of Ecology Facilties - Sites

Facility/Site Interaction

Program ID: WAR125927
Interaction ID: 101944
Interaction Status: A
Interac Stat Desc: Active
Interaction Type: CONSTSWGP
Facility Alternate: Puyallup Highlands Phase 4
Interaction Desc: Construction SW GP
Program Name Desc: Water Quality Program
Database Name Desc: Permitting & Reporting Information System
Interact Start Dt: 25-Jun-2012
Interact End Dt:
Ecology Program: WATQUAL
Prog Database Name: PARIS

Facility Location Detail

Coord Extension: 0
Coord Geog: 8
Horizontal: Unknown
Horizont 1: WGS84
Horizont 2: Unknown
Horizont Accuracy: 99
Hor Dtm Co: 4
Horz Coll Meth Cd: 99
Location Verified:
Geo Loc ID: 15776

6	6 of6	ENE	0.48 / 2,555.05	123.75 / -249	Puyallup Highlands High Country 1500 SHAW RD PUYALLUP WA 98372	ALL SITES

Facility/Site ID: 9017
Point Y: 47.1810006611168
Point X: -122.247990916528
Source File: Washington State Department of Ecology Facilties - Sites Interactions; Washington State Department of Ecology Facilties - Sites

Facility/Site Interaction

Program ID: WAR302153
Interaction ID: 109335
Interaction Status: A
Interac Stat Desc: Active
Interaction Type: CONSTSWGP
Facility Alternate: Puyallup Highlands High Country
Interaction Desc: Construction SW GP
Program Name Desc: Water Quality Program
Database Name Desc: Permitting & Reporting Information System
Interact Start Dt: 30-Jun-2014
Interact End Dt:
Ecology Program: WATQUAL
Prog Database Name: PARIS

Facility Location Detail

Coord Extension: 0
Coord Geog: 8
Horizontal: 40ft
Horizont 1: NAD83HARN
Horizont 2: Digital map or GIS
Horizont Accuracy: 6
Hor Dtm Co: 3
Horz Coll Meth Cd: 13
Location Verified:
Geo Loc ID: 9017

7	1 of1	NE	0.63 / 3,349.02	79.92 / -293	Puyallup School District Elementary School 20 SHAW & 12TH PUYALLUP WA 98371	CSCSL

Fac Site ID: 18433269
Responsible Unit: Southwest

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Cleanup Site ID:	8207	**Fac Site ID (OD):**	18433269
Site Status:	Cleanup Started	**Cleanup SiteID(OD):**	8207
Site Rank:		**Site Rank (OD):**	
Current VCP:		**Has Env Coven (OD):**	
Past VCP:		**Respon Unit (OD):**	Southwest
Has Inst Control:		**County (OD):**	Pierce
County:	Pierce	**Region (OD):**	Southwest
Region:	Southwest	**Longitude (OD):**	-122.25633
Latitude:	47.1833300009404	**Latitude (OD):**	47.18333
Longitude:	-122.25633		

Site Name: Puyallup School District Elementary School 20
Address: SHAW & 12TH
City: PUYALLUP
Zip Code: 98371
Site Status (OD): Cleanup Started
Site Name (OD): PUYALLUP SCHOOL DISTICT ELEMENTARY SCHOOL 20
Address (OD): SHAW & 12TH
City (OD): PUYALLUP
Zipcode (OD): 98371
Location (OD): ""
(47.18333, -122.25633)
Alternate Site Names: ELEMENTARY SCHOOL 20
Data Source(s): Confirmed and Suspected Contaminated Sites; Cleanup Sites (Open Data Portal); Open Data Portal - Media and Contaminants
Site URL: https://apps.ecology.wa.gov/cleanupsearch/site/8207
Site Details URL: https://apps.ecology.wa.gov/cleanupsearch/reports/cleanup/sitedetails/8207

Contaminants Detail(s)

Contaminant Name: Other Non-Halogenated Organics
Groundwater: Suspected
Surfacewater:
Soil: Confirmed Above Cleanup Levels
Sediment:
Air:
Bedrock:

Contaminant Name: Lead
Groundwater: Confirmed Above Cleanup Levels
Surfacewater:
Soil: Remediated-Below
Sediment:
Air:
Bedrock:

Contaminant Name: Benzene
Groundwater: Suspected
Surfacewater:
Soil: Remediated-Above
Sediment:
Air:
Bedrock:

Contaminant Name: Petroleum-Gasoline
Groundwater: Confirmed Above Cleanup Levels
Surfacewater:
Soil: Confirmed Above Cleanup Levels
Sediment:
Air:
Bedrock:

Open Data Portal - Media and Contaminants as of August 24, 2022

Contaminant: Lead
Contaminant Media: Groundwater
Contaminant Status: Confirmed Above Cleanup Levels

Contaminant:	Benzene
Contaminant Media:	Groundwater
Contaminant Status:	Suspected
Contaminant:	Petroleum-Gasoline
Contaminant Media:	Soil
Contaminant Status:	Confirmed Above Cleanup Levels
Contaminant:	Other Non-Halogenated Organics
Contaminant Media:	Groundwater
Contaminant Status:	Suspected
Contaminant:	Lead
Contaminant Media:	Soil
Contaminant Status:	Remediated-Below
Contaminant:	Petroleum-Gasoline
Contaminant Media:	Groundwater
Contaminant Status:	Confirmed Above Cleanup Levels
Contaminant:	Benzene
Contaminant Media:	Soil
Contaminant Status:	Remediated-Above
Contaminant:	Other Non-Halogenated Organics
Contaminant Media:	Soil
Contaminant Status:	Confirmed Above Cleanup Levels

Unplottable Summary

Total: 0 Unplottable sites

DB	Company Name/Site Name	Address	City	Zip	ERIS ID

No unplottable records were found that may be relevant for the search criteria.

INITIAL INVESTIGATION FIELD REPORT

WASHINGTON STATE DEPARTMENT OF ECOLOGY

ERTS Number: 620837
Parcel #: 0420353027
COUNTY: PIERCE

SITE INFORMATION

Site Name (e.g., Co. name over door):	Site Address (including City and Zip+4):	Site Phone:
Pioneer Museum	2301 23rd St SE Puyallup, WA 98373	none
Site Contact and Title: Joshua Gunia, grandson of owner	Site Contact Address (including City and Zip+4): 11603 Canyon Road E. Puyallup 98373	Site Contact Phone: 253/435-9999
Site Owner: Sharon Tanner	Site Owner Address (including City and Zip+4): 11907 240th St NE Arlington, WA 98223	Site Owner Phone: 360/474-1829
Site Owner Contact:	Site Owner Contact Address (including City and Zip+4):	Owner Contact Phone:
Alternate Site Name(s):	Comments:	Is property > 10 acres? Yes ☒ No ☐
Previous Site Owner(s):	Comments:	

Location: Quarter-Quarter: 3-4 Section: 35 Township: 20N Range: 04E
Latitude: Degrees: 47 Minutes: 10 Seconds: 19.6 N
Longitude: Degrees: 122 Minutes: 15 Seconds: 54.8 W

INSPECTION INFORMATION

Inspection Date: 11.16.10	Inspection Time: 10 am	Entry Notice: Announced ☒ Unannounced ☐
Photographs Yes ☒ No ☐		Weather: Clear ☒ Rain ☐ Temperature: ~50 ° F
Samples Yes ☒ No ☐		Wind Direction: Wind Speed:

RECOMMENDATION

No Further Action (Indicate NFA in box below):		**LIST on ISIS** (Indicate in box below):	
Release or threatened release does not pose a threat	☐	Site Hazard Assessment	☒
No release or threatened release	☐	Interim Action	☐
Educational mailing	☐	Emergency Action	☐
Refer to program/agency (Name: _____)	☐	Independent Cleanup Action In progress	☐
Independent Cleanup Action Completed (i.e., contam, removed)	☐		

COMPLAINT (Brief Summary of ERTS):
Leaking drums

SITE STATUS (Brief Summary of site condition(s) after investigation):
Soil in vicinity of a cluster of stored drums is contaminated with petroleum hydrocarbons and agricultural chemicals.

Investigator: S. Bell	Date Submitted: 05.27.11

OBSERVATIONS

Description:

This property is about 20 acres in size, and encompasses three parcels. Two parcels list the taxpayer as Grace Ardell Greeley. A third parcel lists a separate taxpayer, Sharon Ottinger, with the same listed mailing address as the Greeley parcels. The Ottinger parcel is a half acre in size and forms the northwest corner of the southern Greeley parcel. Sharon Tanner currently owns all three parcels and is the daughter of Grace Greeley; Ottinger was her maiden name. The property was used as a farm and a museum until approximately 5 years ago when all activity ceased. The property was referred to as the Pioneer Museum, not to be confused with the Pioneer Farm Museum in Eatonville.

An arson fire occurred on the southern parcel, 0420353027, in late June 2010. The Fire Department encountered a number of unaffected drums in a burned structure on the property and contacted Ecology. Ron Holcomb with Ecology's Spill Response conducted an assessment of the drums and other containers. Subsequent information collected by Ron indicated the listed taxpayer, Grace Ardell Greely, had been dead for a number of years and the property had been inherited by her daughter, Sharon Tanner. Ms. Tanner designated her grandson, Joshua Gunia, as the point of contact regarding issues at the site. Spill Response referred the site to the Toxics Cleanup Program in November 2010 for follow up regarding soil contamination due to spillage from some of the drums.

I contacted Joshua Gunia and set up an appointment to meet him at the site on 11.16.10. We walked the site together, concentrating on the large storage building where the drums were located. The southern half of the building was destroyed in the fire. The remaining half is in poor condition, lacking a roof and exposing the drums stored inside to weather conditions. The drums were stored together and covered with tarps. Soil staining was apparent around the drums and in several other areas. I spoke with Joshua about the need for his family to hire an environmental professional to delineate the extent and type of contamination on the property due to the leaks and/or spills from the drums, and we also spoke about the need to properly dispose of the drum and their contents. He told me that it would require several months for the family to be able to coordinate that, and that they were trying to sell the property. I told Joshua that an interested buyer might be willing to conduct a Phase II Environmental Site Assessment.

No progress was made in assessing or remediating the soil contamination at this property. I eventually coordinated an approved site visit through Joshua to collect soil samples at the subject property. I returned to the property on 05.10.11 and collected three soil samples. All three samples were jar packed and submitted for HCID, Total RCRA metals, SVOCs, and PCB analyses. Metal and SVOC results were below MTCA CULs; PCBs were non-detect. HCID results indicated oil present in all three samples and gasoline present in S2. Further analysis with NWTPH-dx and NWTPH-gx found oil present in all three samples, ranging from 3100 to 37,000 mg/kg. Gasoline range organics were detected in S2 at 1,900 mg/kg and were noted by the lab to be similar to mineral spirits.

The S1 sample was also tested for the presence of chlorinated herbicides, as well as organochlorine and organophosphorus pesticides. All of the detected herbicide compounds are in the phenoxy chemical family. No organophosphorus pesticides were detected, with a reported laboratory PQL of 0.22 mg/kg. Lindane, an organochlorine pesticide, was detected at the cleanup level. The pesticide and herbicide compounds detected are tabulated below; only one has a MTCA Method A CUL (lindane). For those compounds found in CLARC, the Method B mg/kg values are also provided.

S1 results for pesticides and herbicides; measurement units are mg/kg

Method	Analyte Group	Detects	Concentration	MTCA CUL	CLARC
8081A	Organochlorine pesticides	Beta-BHC (**lindane**)	**0.01**	**0.01**	0.0769
		Methoxychlor	0.019	---	400
8151A	Chlorinated acid herbicides	MCPP	36	---	---
		MCPA	15	---	---
		Dichlorprop	1.1	---	---
		Pentachlorophenol	0.0035	---	8.33
		2,4,5-TP (Silvex)	0.094	---	640
		2,4-DB	0.037	---	640
		Dinoseb	0.011	---	80

Soil samples were jar packed, stored in a sample refrigerator, and transported on ice. GRO/VOCs were not anticipated as contaminants of concern. HCID results indicated the need to run S2 for gasoline and BTEX; the analytical results for these parameters should be considered estimates, with potential negative bias in the results as 5035A sample collection methods were not used and the sample preparation occurred past the recommended holding times. Also, matrix interference resulted in potential negative bias for the methoxychlor results; actual concentrations could be greater.

Summary: lube oil and gasoline range organics were found in concentrations exceeding MTCA Method A CULs. A variety of pesticides and herbicides were also detected; lindane was found in concentrations equaling the CUL. Further assessment of the site for the presence of lindane and other agricultural chemicals is warranted. Note: EDB was not tested for.

The TPCHD recommends listing this property as contaminated.

Description of past practices likely to be responsible for contamination:
Overflowing drums, leaking drums, spillage associated with storage of products in drums.

ACTIVITIES OR PRACTICES RESPONSIBLE FOR CONTAMINATION:

Spill	☒	LUST	☐
Pesticide disposal	☐	Tank	☐
Landfill	☐	Improper handling	☐
Drums	☐	Improper disposal	☐
Other – Describe:			

Are discharges permitted (if yes, describe): No ☒ Yes ☐

Standard Industrial Code(s)

CONTAMINANT(S)

AFFECTED MEDIA	**CONTAMINANTS** (#1-16: See contaminants key) Enter letter designating status of contaminant: **C** = Confirmed (above cleanup levels); **S** = Suspected; **R**= Remediated															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ground Water		**S**				**S**	**S**									
Surface Water																
Drinking Water																
Soil		**C**				**C**	**C**									
Sediment																
Air																

1 Base/neutral organics
2 Halogenated organic compounds
3 Metals - Priority pollutants
4 Metals - Other
5 Polychlorinated biPhenyls (PCBs)
6 Pesticides
7 Petroleum products
8 Phenolic compounds
9 Non-halogenated solvents
10 Dioxin
11 Polynuclear aromatic hydrocarbons (PAHs)
12 Reactive wastes
13 Corrosive wastes
14 Radioactive wastes
15 Conventional contaminants, organic
16 Conventional contaminants, inorganic

SITE INFORMATION

Soil type 13B Everett gravelly sandy loan and 20B, 20C Kitsap silt loam

Slope Level

Site vegetation/cover present:

Forest	☒	Pasture/open field	☒
Bare soil	☒	Wetlands	☐
Brush	☒	Pavement	☐
Landscaped	☐	Surface water	☐

Other – Describe:

Are there any drinking water systems affected?	☐ Yes	☐ No
Municipal, private, or both? (Circle one)		
How many people are estimated to be affected? _____		
Is there a potential for a release or threatened release to affect a drinking water source?	☐ Yes	☐ No
Are there monitoring wells in the vicinity?	☐ Yes	☐ No
Are there dry wells in the vicinity?	☐ Yes	☐ No

CONTAMINANT PATHWAYS AND TARGETS

	Ingestion	Inhalation	Contact
Ground Water	x	x	x
Surface Water	x	x	x
Drinking Water	x	x	x
Soil	x	x	x
Sediment			
Air		x	

Targets possible:

Human, adult	☒	Residential	☒
Human, children	☒	Industrial	☐
		Commercial	☐

Sensitive environments (See WARM Scoring Manual for definition):

☒ Yes ☐ No If yes, describe:

This site overlies the Central Pierce County Sole Source Aquifer. A pond/wetland is present on the site. Within two miles are multiple wetlands, parks and streams.

General Comments:

SITE MAP/DIAGRAM

Site Name	
↑ **North**	Approximate scale: _____ inch = _____ feet
ERTS Number	County PIERCE
Inspector	Date

PHASE I ENVIRONMENTAL AUDIT

Proposed Sunset Pointe Residential Plat
East of Intersection of 21st St SE and 19th Ave SE
Puyallup, Washington

DESERT CREEK, LLC

ENVIRONMENTAL
ASSOCIATES, INC.

1380 - 112th Avenue Northeast, Suite 300
Bellevue, Washington 98004
(425) 455-9025 Office
(888) 453-5394 Toll Free
(425) 455-2316 Fax

January 14, 2005

JN 24420

Nick Scholten
Desert Creek, LLC
P.O. Box 731989
Puyallup, Washington 98373

Subject: **PHASE I ENVIRONMENTAL AUDIT**
Proposed Sunset Pointe Residential Plat
East of Intersection of 21st St SE and 19th Ave SE
Puyallup, Washington

Dear Mr. Scholten,

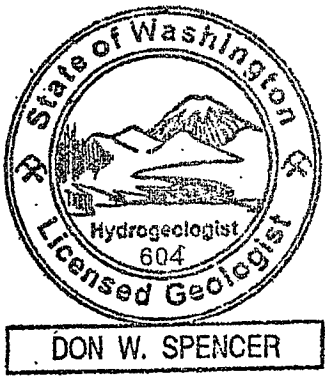
Environmental Associates, Inc., has completed a Phase I Environmental Audit of the subject property located in Puyallup, Washington. This report, prepared in accordance with the terms of our proposal dated December 29, 2004, and in a manner consistent with the intent and methodologies of ASTM E 1527-00, "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process", summarizes our approach to the project along with results and conclusions.

The contents of this report are confidential and are intended solely for your use and the use of your representatives. Four (4) copies of this report are being distributed to you. No other distribution or discussion of this report will take place without your prior approval in writing. Additional copies are available for a small fee.

We appreciate the opportunity to be of service on this assignment. If you have any questions or if we may be of additional service, please do not hesitate to contact us.

Respectfully submitted,
ENVIRONMENTAL ASSOCIATES, INC.

Don W. Spencer, M.Sc., P.G., R.E.A.
Principal



EPA-Certified Asbestos Inspector/Management Planner
I.D. # AM 48151

EPA/HUD Certified Lead Inspector (Licensed)

Registered Site Assessor/Licensed UST Supervisor
State Certification #0878545-U7

License: 604	(Washington)
License: 11464	(Oregon)
License: 876	(California)
License: 5195	(Illinois)
License: 0327	(Mississippi)

PHASE "1" ENVIRONMENTAL AUDIT

Proposed Sunset Pointe Residential Plat
East of Intersection of 21st St SE and 19th Ave SE
Puyallup, Washington

Prepared for:

Desert Creek, LLC
P.O. Box 731989
Puyallup, Washington 98373

Questions regarding this investigation, the conclusions reached and the recommendations given should be addressed to one of the following undersigned.

Derek B. Pulvino
Environmental Scientist
EPA-Certified Building Inspector
I.D. # 1010794

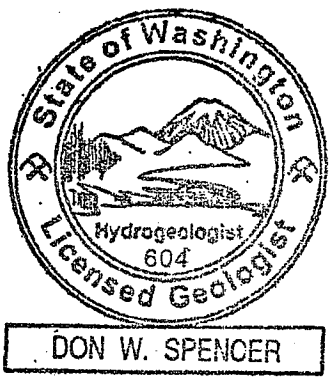
Don W. Spencer, M.Sc., P.G., R.E.A.
Principal

EPA-Certified Asbestos Inspector/Management Planner
I.D. # AM 48151

EPA/HUD Certified Lead Inspector (Licensed)

Registered Site Assessor/Licensed UST Supervisor
State Certification #0878545-U7

License: 604 (Washington)
License: 11464 (Oregon)
License: 876 (California)
License: 5195 (Illinois)
License: 0327 (Mississippi)



Reference Job Number: JN 24420

January 14, 2005

ENVIRONMENTAL ASSOCIATES, INC.

TABLE OF CONTENTS

METHODOLOGY/SCOPE OF WORK 5

FINDINGS 6

General Description 6

Geologic Setting 8

Development History and Land Use 8

Property Conveyance/Ownership Data 9

Site Reconnaissance 11

Check For PCB-Containing Materials 13

Check For Asbestos-Containing Materials 14

Review For Lead-Based Paint 14

Radon Evaluation 15

Water Supply, Waste Water and Solid Waste Management 16

Review: Washington DOE Listing Of Underground Storage Tanks 16

Review: EPA & State Records Of Potentially Hazardous Sites 16

Superfund and NPL 16

CORRACTS 16

MTCA/ CSCSL 16

RCRA/FINDS/TSDs 16

ERNS 17

Review: Landfill Documents 17

CONCLUSIONS/RECOMMENDATIONS 17

LIMITATIONS 21

REFERENCES 22

PLATES

Plate 1 - Vicinity Map
Plate 2 - Topographic Map
Plate 3 - Site Plan
Plates 4 & 5 - Site Photographs

APPENDICES

Appendix A - Environmental Database Report
Appendix B - AHERA Certification Documents
Appendix C - EPA PCB Guidance Documents
Appendix D - OSHA 3142 - Lead in Construction
Appendix E - Analytical Information

METHODOLOGY/SCOPE OF WORK

Our study approach consisted of completing a series of investigative tasks intended to satisfy the level of effort often referred to as "due diligence" by the "innocent purchaser" in the context of the Superfund Amendment and Reauthorization Act of 1986 (SARA), and nearly identical requirements set forth in the Model Toxics Control Act (MTCA), Chapter 70.105 D (Section 040) RCW pertaining to standards of liability. The objective of a Phase I audit is to reduce potential risk for exposure to future liability for environmental problems by demonstrating that at the time of acquisition or refinancing, the owner, buyer, or lender had no knowledge or reason to know that any hazardous substance had been released or disposed of on, in, or at the property. Moreover, in defining the purpose of the Phase I environmental site assessment process, section 1.1.1 of ASTM E-1527 advises that the goal of a Phase 1 is to identify "recognized environmental conditions," and defines a recognized environmental condition as "the presence or likely presence of any hazardous substances. . . on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances . . into structures on the property or into the ground, groundwater, or surface water of the property."

In an effort to evaluate condition and previous uses of the property in a manner consistent with good commercial and customary practice and in accordance with methods outlined under ASTM E 1527-00, "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process", our scope of work for this study included:

- Review of chronology of ownership and site history using the resources of the Pierce County Assessor's Office, business directories from several time periods, and aerial photography from several time periods as primary resources. This included an attempt to identify possible former industries or uses presenting some potential for generating waste which may have included dangerous or hazardous substances as defined by state and federal laws and regulations.

- Acquisition and review of available reports and other documentation pertaining to the subject site or nearby sites.

- Review of Washington Department of Ecology (WDOE) and Puyallup/Pierce County Department of Public Health documents regarding current and abandoned landfills.

- Review of the current EPA Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS), the EPA National Priority List (NPL), the EPA Resource Conservation and Recovery Act (RCRA) Notifiers, RCRA Corrective Action Report (CORRACTS), and Emergency Response Notification System (ERNS) lists of sites which are potentially contaminated or which produce hazardous substances as a normal part of their commercial operation in the vicinity of the site.

- Review of the current Washington Department of Ecology (WDOE) listing of underground storage tanks (USTs) along with the WDOE's Leaking Underground Storage Tank (LUST) listing for WDOE-documented leaking USTs in the vicinity of the subject property.

- Review of the current WDOE Confirmed and Suspected Contaminated Sites (CSCS) list of potentially contaminated sites which have been the subject of hazardous waste investigation and/or cleanup activity in conjunction with the Washington Model Toxics Control Act (MTCA) Chapter 173-340 WAC.

- Review published documents from the Bonneville Power Administration (BPA) to evaluate the risk for naturally occurring radon.

- A reconnaissance of the subject property and neighboring areas to look for evidence of potential contamination in the form of soil stains, odors, asbestos, lead-based paint (LBP), vegetation stress, discarded drums, discolored water, careless manufacturing or industrial practices, etc.

- Preparation of a summary report which documents the audit process and findings.

FINDINGS

GENERAL DESCRIPTION

The subject property consists of four separate tax parcels with together comprise an irregular-shaped parcel covering approximately 890,000 square feet (20 acres) of land. Improvements to the property include multiple buildings such as residences, barns, garages, and utility sheds. The improvements on the site, as documented by the Pierce County Assessor's Office, are outlined in the table below.

Stories	Framing/ construction	Size	Date of Construction	Roof
Tax Parcel: 0420353026				
Single story residence	Wood Framed	1,104	1928	Pitched with composition shingles
Tax Parcel: 0420353027				
Single story residence	Wood-framed	912	1924	Pitched with composition shingles
Single story storage shed	Wood-pole supported	10,000	1940	Pitched, surfacing not listed

Stories	Framing/ construction	Size	Date of Construction	Roof
Tax Parcel: 0420353027(continued)				
Single story barn	Wood-pole supported	4,480	1950	Pitched, surfacing not listed
Single story storage shed	Wood-pole supported	4,000	1950	Pitched, surfacing not listed
Two-story, detached garage	Cinder block	1,092	1940	Pitched, surfacing not listed

The Pierce County Assessor's Office did not list improvements on the remaining two parcels (#'s 0420357011, 0420353009). Currently the property is utilized as a residential property, with only the western house on the property (parcel# 0420353026) occupied. According to Mr. Richard Tanner, current occupant, the structures on the eastern portion of the site are occupied. The approximate location of the site is shown on the Vicinity Map, Plate 1, appended herewith.

The property is located in a rural/residential area approximately one-mile southeast of downtown Puyallup, Washington. Photographs reflecting the character of the subject property are provided with this report as Plates 4 and 5.

A brief description of land use on nearby parcels is provided below. Plate 3, Site Plan, depicts the setting of the subject property and land use for adjacent sites.

North: A residential subdivision is located adjacent to the northern border of the subject property.

South: A residential subdivision is also located adjacent to the southern border of the subject property.

East: The residential subdivision located to the north of the subject property also extends to run along the eastern border of the subject property.

West: A residential subdivision is located to the west of the southern portion of the subject property. Land to the west of the northern edge of the subject property is also residentially developed, however with a lower development density than sites located adjacent to the rest of the property.

According to the Pierce County Assessor's Office, the subject property is zoned for residential and agricultural use.

GEOLOGIC SETTING

Physiographically, the site is situated on a gently rolling elevated plain (the Vashon Drift Plain) which was formed during the last period of continental glaciation that ended approximately 13,500 years ago.

Published geologic maps for the site vicinity (Jones, 1999) suggest that much of the material underlying the subject site may be recessional gravel, a "moderately to poorly sorted gravel and sand with small amounts of silt and clay." Typically, the recessional deposits exhibits relatively moderate to high vertical hydraulic conductivity which frequently results in formation of a "perched" water table along interstitial contacts. The "perched" water table (if present) is frequently seasonal and derives recharge primarily from infiltration of precipitation through more permeable overlying soils.

Topographically, the site is situated on a northerly facing slope ranging from approximately 240- to 380-feet above sea level. Based upon inference from topography and local drainage patterns, it appears that shallow-seated groundwater (if present) in the vicinity of the subject property may flow in a northerly direction.

Although no site specific information has been developed by our firm with respect to depth to groundwater at this site, our experience in the area suggests that "perched" groundwater (if present) beneath the site may lie at a depth of approximately 10 to 20 feet or more beneath the ground surface.

With respect to surface water resources, several small unnamed ponds are located on the subject property.

DEVELOPMENT HISTORY AND LAND USE

Sources reviewed for information on site and area development and land use included the resources of the Seattle and Tacoma Public Libraries, Pierce County Assessor's Office, and aerial photographs of the subject property and surrounding area from several time periods.

Aerial photographs of the area were reviewed for the years 1969, 1979, 1985, 1996, 2000, and 2003. The following paragraphs provide an interpretive summary of our observations in each photo. The time intervals between the various historic aerial photographs selected for this particular project are, in our opinion, entirely adequate for the intended purpose which was to permit a general assessment of overall development and land use in the vicinity of the subject property.

1969 All of the currently present structures are visible on the property. Four small sheds are visible approximately 75-feet northeast of the southern on-site house. The currently present pond is not visible. A gravel mining operation is visible on the adjacent property to the south of the site. Two conveyor/loading belts are visible at the mine. As indicated by an access drive/road going from this gravel

mine to the southern portion of the site, the southern onsite structures appear to be utilized by the mining operation. The land located adjacent to the west is roughly half cleared and half forested. A small area of surface grading is visible adjacent to the eastern border of the northen portion of the site. Generally, a minimal quantity of houses are visible in the area of the site.

1979 Small areas of surface grading are visible both near the northern onsite house and on the southeast corner of the pasture area. The area adjacent to the east of the site, formerly noted as graded, has now become a residential housing development (to east/northeast). A new pond is visible within the gravel mining property. Trees/shrub vegetation has regrown on approximately 50% of the adjacent mining site.

1985 The graded area is no longer visible within the pasture, however the graded area near the northern house appears to be utilized as a parking area. To the south, the operations at the gravel mining site have expanded westward. No other significant changes are visible from the previous photograph.

1996 Development as a residential housing sub-division has commenced on the southern adjacent gravel mine property. The pond remains within the gravel mine site. Onsite, the current pond is now visible. Within the subject property pasture, trees continue to regrow. Several of the small sheds near the southern house on the property are no longer discernable.

2000 The housing development has been completed to the west/southwest of the site, on the former gravel mine property. None of the small sheds are visible in the vicinity of the southern onsite house.

2003 The houses currently present to the west/northwest of the site are either in construction or have been constructed. In general terms, the majority of the site vicinity has now been developed with residential properties.

PROPERTY CONVEYANCE/OWNERSHIP DATA

From the file resources of the Pierce County Assessor's Office and resources of the Tacoma and Seattle Public Libraries, the following limited history of ownership has been established:

SOURCE	OWNER	DATE OF PURCHASE
tax parcel #0420353026		
Pierce County Assessor's Office	Ottinger, Sharon	Not Listed
Metsker's Atlas of Pierce County (1965, 1951)	Greeley, V	Not Listed
Metsker's Atlas of Pierce County (1941)	V.B., L.T. and A.B. Greeley	Not Listed

SOURCE	OWNER	DATE OF PURCHASE
Kroll Atlas of Pierce County (1924)	Mark Graves, Jms Williams	Not Listed
Kroll Atlas of Pierce County (1915)	Mark Graves, E.G. Griswold	Not Listed
tax parcel #0420353027		
Pierce County Assessor's Office	Greeley, Grace Ardell	Not Listed
Metsker's Atlas of Pierce County (1965, 1951)	Greeley, V	Not Listed
Metsker's Atlas of Pierce County (1941)	V.B., L.T. and A.B. Greeley	Not Listed
Kroll Atlas of Pierce County (1924)	Mark Graves, Jms Williams	Not Listed
Kroll Atlas of Pierce County (1915)	Mark Graves, E.G. Griswold	Not Listed
tax parcel #0420357011		
Pierce County Assessor's Office	Greeley, Grace	11/26/1990
Pierce County Assessor's Office	Parkwood Homes	4/20/1990
Metsker's Atlas of Pierce County (1965, 1951)	Greeley, V	Not Listed
Metsker's Atlas of Pierce County (1941)	V.B., L.T. and A.B. Greeley	Not Listed
Kroll Atlas of Pierce County (1924)	Mark Graves, Jms Williams	Not Listed
Kroll Atlas of Pierce County (1915)	Mark Graves, E.G. Griswold	Not Listed
tax parcel #042035309		
Pierce County Assessor's Office	Greeley, Grace	11/26/1990
Metsker's Atlas of Pierce County (1965, 1951)	Greeley, V	Not Listed
Metsker's Atlas of Pierce County (1941)	V.B., L.T. and A.B. Greeley	Not Listed
Kroll Atlas of Pierce County (1924)	Mark Graves, Jms Williams	Not Listed
Kroll Atlas of Pierce County (1915)	Mark Graves, E.G. Griswold	Not Listed

According to resources available at the Tacoma and Seattle Public Libraries the Pierce County Assessor's Office, and a review of aerial photographs, the subject site was developed as early as 1924 with a single-family dwelling. Subsequent development of an additional residence as well as several storage sheds and barns occurred between that time and approximately 1950. In the earliest available aerial photograph (1969), the northern portion of the property currently used for pastoral purposes had been cleared of trees and other low-standing shrubbery, while a road/driveway was observed connecting the southern margin of the property with the gravel mine operating to the south of the site. Conversations with one of the current occupants/owners of the subject property (Pat Tanner) confirmed the use of the southern onsite buildings by the adjacent gravel mining operation. The exact nature of this usage (i.e. vehicle fueling, maintenance, clerical offices, etc) was not disclosed. Sanborn Fire Insurance maps did not provide coverage in the vicinity of the subject property. Borrowing from the jargon of ASTM, no "reasonably ascertainable" or "likely to be useful" information prior to 1924 was available. The absence of such information has no material effect upon the conclusions of this report.

Historic reverse street directories and archive records documented seven (7) occupants of the property in the directories/records reviewed for the years 1953 through 2003. These occupants included:

LISTED OCCUPANT	ADDRESS OF BUSINESS	OCCUPATION OF SITE (date of Polk's Guide Listing)
ON SUBJECT SITE		
Hill Top Gravel	2102 19th Ave SE	1953
Greeley, Vinto		1953
Greeley, Grace		1959
Ingham, Gerald	2100 19th Ave SE	1972
Ottinger, Edw		1979, 1985
Ottinger, Sharon		1990, 1997, 2003
Frontier Museum	2301 23rd Ave SE	1979, 1985, 1990
SOUTH/WEST OF SUBJECT SITE		
Hilltop Concrete Co	2223 23rd Ave SE	1959
Reid Concrete Inc.		1965
South Hill Sand and Gravel		1990

SITE RECONNAISSANCE

An Environmental Scientist/EPA-certified Asbestos Building Inspector from our firm visited the property on January 5, 2005 to review on-site conditions and land use practices in the surrounding area. Mr Nick Schoelten, potential purchaser of the property, arranged for access to the site. The representative areas reviewed during our site visit included the exterior grounds, and adjacent property usages. Access to the structure interiors was not provided to EAI during the course of our site reconnaissance.

As mentioned earlier, existing improvements to the subject property include multiple 1924-1950-vintage buildings. For further information on building construction details, please refer to the General Information section within this report. A gravel drive accesses the property from the northwest. Gravel/dirt covered parking areas are located adjacent to the onsite structures. Landscaped areas are situated adjacent to the houses, with the majority of the remaining property cleared pasture land. Residents occupy one of the onsite buildings. The remainder of the buildings are not occupied on a full time basis for residential or commercial purposes. Typical building materials and/or conditions observed during our site reconnaissance included:

- Floors appeared to be wood or concrete covered with carpet, sheet vinyl, or square vinyl tile.

- Interior walls throughout the building are painted sheetrock, natural wood, or concrete.

- Ceilings are painted drywall, or "popcorn" textured materials.

- A wood-fired stove is reported to be the sole current source of heat for the two residences. Referring to Photo #3 of Plate #5, an above-ground storage tank used to store heating oil was observed adjacent to the southern wall of the northern onsite residence. According to Ms. Tanner, use of this tank was discontinued approximately 20-years ago. No staining was noted near the base of this tank.

- Multiple junked cars were observed in the area of the northern house. No leaking or odors were noted in the vicinity of these vehicles. According to Richard Tanner, one of the current residents, these cars are slated for disposal and not used for parting out or onsite repair work.

- Cultural debris such as lumber, furniture, fencing, appliances, and general household rubbish was noted in the vicinity of the buildings located on the southern portion of the site.

- A steel vertical rack containing three separate above ground tanks/drums was noted near the southern border of the subject property. Although the bottom of one of these tanks was rusted out, no odors, stained soil, or disturbed vegetation was noted in the vicinity of these tanks. According to Ms. Tanner, these tanks were used to store gasoline to refuel the gravel mining vehicles. Ms. Tanner did not report any spills or releases from these tanks.

- A small pond was noted approximately halfway between the two onsite residences, on the southern side of the driveway. A soil retention wall consisting of battery casings was noted on the northern edge of this pond, at the area were the driveway crosses the ponds drainage conduit. According to Ms. Pat Tanner, property owner, these batteries were brought on the site approximately 40-years ago after being obtained from a local battery recycler (Kiby's Battery Company). Ms. Tanner stated that prior to purchasing the battery casings, Kiby's had removed the contents and cleaned the interiors of the casings. Onsite, the empty casings were then filled with soil and stacked in their present configuration adjacent to the roadway. More recently, Mr. Scholten of Desert Creek, LLC (potential purchaser of site) informed us (EAI) that in an attempt to independently evaluate environmental conditions, his company had collected a single soil sample from inside one of these battery casings. The sample was submitted by Desert Creek to Spectra Laboratories for Lead Toxicity Characteristic Leaching Potential (TCLP) and pH analyses. Analysis indicated the leachable lead concentrations to be 0.38-parts per million (ppm). The pH analysis indicated the soils to be slightly basic (7.5 pH units). As a basis for comparison of TCLP results to <u>total concentrations</u>, an unofficially adopted "rule of thumb" used by some regulators and investigators is that <u>total</u> concentration of a given metal in soils can be roughly estimated by multiplying the TCLP results by a factor of twenty. Using this calculation, an <u>estimated</u>

"total concentration of lead in the tested soil would be roughly 7.6-ppm, a concentration below the median concentration of "total" lead in soils of the Puget Sound region, as detailed by the Washington State Department of Ecology, in "Natural Background Soil Metals Concentrations in Washington State" (publication #94-115). To the extent that the results of the sampling and analysis undertaken by Desert Creek are reflective of conditions at other locations near the wall, it would then be possible to conclude that the risk of environmental impacts relating to this battery casing wall would be relatively low.

- An additional area of accumulated rubbish and household waste was noted in the vicinity of the northern house on the subject property.

According to Ms. Pat Tanner, no hazardous waste is generated on the property. In addition, she stated that there are no below-ground fuel storage tanks on the property. No obvious, visually discernable evidence to suggest the presence of any underground fuel storage tanks (i.e., vent lines, filler caps, etc.) was noted on the property. Similarly, no groundwater monitoring wells were noted on the property. At the time of our visit, no stains, odors, or unusual vegetation conditions that might otherwise indicate the potential presence of hazardous materials were observed on the subject property.

CHECK FOR PCB-CONTAINING MATERIALS

Prior to 1979, polychlorinated biphenyls (PCBs) were widely used in electrical equipment such as transformers, capacitors, switches, fluorescent lights (ballasts) and voltage regulators owing to their excellent cooling properties. In 1976, the EPA initiated regulation of PCBs through issues pursuant to the Toxic Substances Control Act (TSCA). These regulations generally control the use, manufacturing, storage, documentation, and disposal of PCBs. EPA eventually banned PCB use in 1978, and adoption of amendments to TSCA under Public Law 94-469 in 1979 prohibited any further manufacturing of PCBs in the United States.

Light Fixtures

Based upon the age of the onsite buildings (1924 through 1950-vintage), it is conceivable that some transformer ballasts containing PCB's may exist within these buildings. In the event that ballasts are later discovered which do not possess clear labeling stating "No PCB's", we have attached an EPA information pamphlet as Appendix C for information regarding the handling and disposal of such ballasts.

Main Service Electrical Transformers

Pole mounted main service electrical transformer was noted on the eastern edge of the property. No certifications or labels regarding PCBs were noted on the transformer. Careful examination of the transformer revealed no cracks, staining, or other evidence of potential leakage. Liability for this equipment ultimately lies with the utility company in any event.

CHECK FOR ASBESTOS-CONTAINING MATERIALS

During our site review, five (5) types of materials suspected to possibly contain asbestos were observed within the subject building. These materials included a ceiling/wall plaster, vinyl floor-tile, sheet-vinyl, window glazing, and popcorn ceiling. At the time of this writing we were not authorized by the client to sample or test the suspect materials to confirm or deny this presumption. A summary of the suspect materials is provided in the table below. As Eai Was not granted interior access, this list was compiled based upon materials visible from the exterior building windows, as well information supplied by the onsite residence.

MATERIAL	LOCATION	CONDITION[1]
Gypsum Wallboard	Throughout residence interiors	Good
Vinyl Floor Tile	Various locations within residences	Good
Sheet Vinyl Flooring	Various locations within residences	Good
Popcorn Ceiling	Front room of northern residence	Good
Window Glazing	Exterior of multi-pane windows	Good

Note: 1 - Material condition was evaluated borrowing criteria adopted under the Asbestos Hazard Emergency Response Act (AHERA), 40 CFR, part 763.

Our effort regarding identification of asbestos-containing materials within the subject building was a preliminary review and not an asbestos survey. Since no destructive sampling was authorized for this audit, materials not readily accessible such as roofing materials and/or materials obscured behind, beneath, or within walls or existing flooring materials were not reviewed.

REVIEW FOR LEAD-BASED PAINT

Lead was formerly a common additive to many paints to improve their durability and coverage. Lead-based paint presents a special hazard to small children who can ingest it by chewing on painted woodwork or eating flakes of paint. A number of studies showing the toxic effects of lead on humans, and on small children in particular, prompted the Consumer Product Safety Commission to mandate in 1977 that the amount of lead in most paints, including those for residential use, should not exceed 0.06 %.

A review of exterior painted surfaces on the subject property was conducted to assess the potential for lead-content in surface layers of paint. Representative painted surfaces (listed in the table below) were analyzed using "Lead-Check" sodium rhodizonate color reagent paint tests. These tests provide a qualitative indication as to whether lead is present in paint samples with reproducible results to a lower detection limit of 0.5 percent, a level corresponding to a threshold of concern established by HUD.

PAINTED SURFACE	RESULT
White wood trim on southern house exterior	Positive
Red wooden trim on exterior of detached garage on southern portion of site	Positive
White painted aluminum siding on exterior of southern house	Non-Detect
White painted wood on exterior of barn door, southern portion of property	Positive

As noted in the table above, three (3) of the surfaces tested using the "Lead Check" screening method showed a reddish hue response characteristic of the sodium rhodizonate method as an indication of the likely presence of lead in the painted surfaces. On that basis, we conclude that lead was likely present in the surfaces which tested positive.

RADON EVALUATION

Occurrence

Radon is a naturally occurring, highly mobile, chemically inert radioactive gas created through radioactive decay of uranium and thorium. The potential for occurrence of radon varies widely and is dependent upon (1) the concentration of radioactive materials in the underlying bedrock; (2) the relative permeability of soils with respect to gases; and (3) the amount of fracturing or faulting in surficial materials (EPA, 1987).

Health Risks

The concern regarding radon and its potential effects upon humans arises from the results of studies (EPA, 1987) which suggest that approximately fifteen percent of all lung cancer mortalities in the United States may be attributable to exposure to radon.

The EPA has established a concentration of radon of four (4) picocuries per liter (pCi/l) as a maximum permissible concentration "action level". Concentrations above this value would signal a potential health threat. According to some studies, an average concentration in homes across the United States is on the order of 1.4 pCi/l.

Risk of Potential Exposure in the Puyallup Area

The Bonneville Power Administration (BPA) recently published the results of measurements for radon made in residences throughout the region they serve which includes Washington, Oregon and Idaho. For the Puyallup area in the immediate vicinity of the subject property eleven tests have been performed. The results of their work (BPA, 1993) suggest that radon levels over 4 pCi/l were detected in two of the monitored residences in the vicinity of the subject site. Additionally, the average listed radon reading in the subject site township was 0.41 pCi/l, well below the EPA threshold of concern.

On the basis of the findings presented in the cited BPA survey, we conclude that the potential for exposure to naturally occurring radon at the subject site is very low.

WATER SUPPLY, WASTE WATER AND SOLID WASTE MANAGEMENT

Information supplied by Ms. Tanner revealed that water service is provided by onsite wells. Onsite septic systems service the current wastewater needs.

As discussed in the Site Reconnaissance section of this report, various areas of collected refuse were noted on the property.

REVIEW OF WASHINGTON DOE LISTING OF UNDERGROUND STORAGE TANKS

Review of the current Washington Department of Ecology listing of underground storage tanks (USTs) suggests that no facilities with registered USTs are located within a one-quarter mile radius of the subject property. Similarly, according to the most recent WDOE Leaking Underground Storage Tank (LUST) listing, none of the listed tank facilities located within an approximately one-half mile radius of the subject property have reported accidental releases or leakage to the WDOE in the past.

EPA & STATE RECORDS OF POTENTIALLY HAZARDOUS SITES

Superfund and NPL Review of the current EPA Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) and National Priority List (NPL) listings revealed no CERCLIS and no NPL sites within approximately one mile of the subject property that have been designated as potentially hazardous or eligible for participation in the Superfund cleanup program.

CORRACTS Review of the current EPA Corrective Action Report (CORRACTS) listing revealed that no CORRACTS sites are located within approximately one mile of the subject property that have been designated as having a potential release at the property under RCRA.

MTCA/CSCSL The Washington Department of Ecology hazardous waste cleanup and investigation program was launched in 1989 as a part of the Model Toxics Control Act (MTCA), Chapter 173-340 WAC, in order to evaluate potential and actual hazards at sites within the state. Of the more than 1,730 sites currently on the WDOE Confirmed and Suspected Contaminated Sites (CSCS) list, none are located within a one mile radius of the subject property.

RCRA/FINDS/ TSDs Review of EPA's Treatment, Storage and Disposal (TSD) facilities listing for sites that treat, store, or dispose of potentially hazardous materials revealed that no TSD sites are located within a one mile radius of the subject property.

Additionally, review of the Resource Conservation and Recovery Act (RCRA) listings, also revealed no RCRA Generators within a one-quarter mile radius of the subject property, and no RCRA Non-Regulated generators within a one-eighth mile radius of the subject property.

ERNS Review of the EPA's Emergency Response Notification Systems (ERNS) list for the State of Washington revealed that the subject site has not reported a spill. This list has been compiled with periodic updates since October 1987.

LANDFILLS

A review of WDOE and Tacoma/Pierce County Health Department documents regarding current and abandoned landfills revealed that there are no documented landfills located within a mile radius of the subject property.

CONCLUSIONS/RECOMMENDATIONS

Consistent with the report language requirements defined under ASTM E-1527-00 "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process", and more specifically section 11.7 thereto, the following conclusory statements are made:

We (EAI) have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E-1527 of the Proposed Sunset Pointe Residential Plat, located to the east of the intersection of 19th Avenue SE and 21st Street SE, Puyallup, Pierce County, Washington. No exceptions to, or deletions from this practice were made. This Phase I assessment has revealed no evidence of "recognized environmental conditions" as defined by ASTM in connection with the property except for the acknowledged past storage and dispensing of motor fuel (gasoline) associated with vehicles used in commercial mining of gravel in the site vicinity. Additional discussion and guidance is provided below.

HISTORIC ABOVE-GROUND STORAGE AND DISPENSING OF GASOLINE

Referring to Photo #1 on Plate 5 and as discussed briefly in earlier sections of the report, the current occupant of the site (Tanner) disclosed that gasoline was historically stored in and dispensed from multiple above-ground tanks located on the southern part of the property in support of vehicles associated with gravel mining operations. The bottom of one of the tanks was rusted out at the time of our site visit.

In defining the purpose of the Phase 1 environmental site assessment process, section 1.1.1 of ASTM E-1527 advises that the goal of a Phase 1 is to identify "recognized environmental conditions", and defines a recognized environmental condition as:

> "the presence or likely presence of any hazardous substances. . . on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances . . into structures on the property or into the ground, groundwater, or surface water of the property".

By virtue of the materials (motor fuel in substantial volume) stored at the subject site over a potentially extended period, in the context of the ASTM definition, such gasoline storage and dispensing operations appear to qualify as a "recognized environmental condition" for this property.

A list of mitigating factors which may moderate contemporary concerns regarding this aspect of site history from a purchase or lending perspective would include the following:

(1) No evidence was found in the public record to suggest that a release has occurred at the site;

(2) No obvious, visually discernable evidence to suggest or confirm that a release had occurred was observed in the course our (EAI's) visual reconnaissance of the property;

(3) If the findings of this report were disclosed to the Washington Department of Ecology (WDOE), it is unlikely that the WDOE would impose a requirement for additional studies or other actions upon the property owner, lender(s), or other involved parties.

In summary, without benefit of factual information in the form of sampling and testing in the vicinity of the fuel storage and dispensing area, the strongest conclusion we (EAI) can offer at this time is simply that we are not aware of a specific environmental problem which has been shown to be adversely affecting the environmental integrity of the subject property.

If, for reasons of their own, the client, owner, lender, or other involved parties desire a higher degree of confidence than is afforded by the current level of knowledge, limited but statistically representative shallow subsurface sampling in areas proximal to the former fuel storage and dispensing area supported by appropriate laboratory analysis could be employed to confirm actual subsurface environmental conditions in that area. As strongly implied under section 4.5.3 of ASTM E-1527, decision-making authority in that regard clearly lies with the client and/or other involved parties, depending upon their individual risk tolerances.

NON-CERCLA CONDITIONS

Non-CERCLA conditions of potential environmental significance identified at the subject site include:

- Potential PCB-containing fluorescent light ballasts within the subject buildings.
- Presence of "suspect" asbestos-containing building materials in the form of ceiling/wall plaster, vinyl floor-tile, sheet-vinyl, window glazing, and popcorn ceiling.
- Presence of a white and red lead-containing paint on the exterior of onsite structures.

Guidance with respect to future management of the above-noted non-CERCLA conditions is provided in the following paragraphs.

PCBS

Based upon the information developed during the course of our site review, it appears that some or all of the transformer ballasts in the fluorescent lights in the subject buildings may contain polychlorinated biphenyls (PCBs).

In our opinion, there is no immediate cause for concern regarding the potential for PCB-containing light ballasts. The only likely potential for exposure to PCBs would come in the event that one of the sealed ballasts were ruptured through abusive handling or as a result of a defect in a ballast.

It may be prudent to implement a management policy providing the inspection of ballasts by maintenance personnel during routine bulb changing activities. Ballasts may be periodically checked or replaced depending upon long-term management desires. Please refer to the attached EPA pamphlet, Appendix C, regarding appropriate handling and disposal practices for such ballasts.

ASBESTOS

Borrowing evaluation criteria adopted under the Asbestos Health Emergency Response Act (AHERA, 40 CFR Part 763), the observed potentially asbestos containing materials, enumerated earlier in this report are in "good" condition. In the current use and condition, the materials pose no threat to public health or to the environment.

To reduce exposure to potential future liability, and in an effort to comply with regulations regarding the presence of asbestos in commercial and apartment buildings under Chapter 296-62-07753 WAC, it may be prudent to consider implementation of a management policy (Operations and Maintenance Program/O&M) whereby all maintenance, repair, or service personnel who may be engaged to work

on the property are formally advised (i.e., signed acknowledgment) as to the "suspected" presence of asbestos-containing materials (ACM) prior to commencement of any work associated with the ACM.

Should the owner intend to renovate, demolish, remodel, or repair any or all portions of the structure containing asbestos, please note that applicable sections of WAC 296-65 require that all projects relating to construction, demolition, repair, or maintenance where release or likely release of asbestos fibers into the air could occur must be performed by "certified asbestos workers". Additional information may be obtained through the offices of Environmental Associates, Inc., or directly from the Washington State Department of Labor and Industries, P.O. Box 207, Olympia, Washington 98504. Finally, if future representative sampling and laboratory testing of these suspect materials were to confirm that they do not contain asbestos, these recommendations may logically be disregarded.

LEAD-BASED PAINT

As discussed earlier, a positive qualitative reaction suggesting the likely presence of lead was observed during "Lead Check" testing of the painted wood exterior finishes on several of the buildings located on the southern portion of the property. On the basis of the positive indications, we conclude that lead is most likely present in these areas, and could conceivably be in other areas as well. All painted surfaces were in poor to fair condition. Additional sampling and testing would be required to quantify the concentration of lead and the extent of the lead-bearing paint.

As with asbestos, workers who may have cause to disturb suspect lead-bearing surfaces in future activities as renovation, demolition, etc., should be formally advised of these findings so that they may take appropriate precautions in terms of exposure. Special handling and disposal requirements may apply in the event that lead-bearing painted surfaces are disturbed, removed, or demolished at this facility.

Alternative management approaches to resolve lead paint issues frequently include: (1) painting over paint layers containing lead with high density quality penetrating/sealing paint; or (2) removal of the paint under controlled conditions to prevent the release of lead-bearing paint into the atmosphere. Current thinking on this issue according to U.S. EPA Region 10, is to manage the material in-place until a structure is renovated or demolished.

With the endorsement of the Lead Based Paint Hazard Reduction Act, Title 10, came the need for special care on the part of landlords, consultants, and others who may become involved with lead-bearing structures to minimize potential health hazards as well as legal liabilities. Appendix D to this report provides an informational pamphlet which may be useful in gaining familiarity with concerns and practices relating to lead in residential structures. Additional information and guidance may be obtained directly from Environmental Associates, Inc., or from EPA.

Finally, under Section 1018 of the Residential Lead Based Paint Hazard Reduction Act of 1992 (also known as Title 10), the owner may be required to provide new renters as well as tenants renewing leases with (1) the standard EPA Pamphlet "Protect Your Family from Lead in Your Home" and (2) disclosure of all known lead-based paint occurrences at the facility.

LIMITATIONS

This report has been prepared for the exclusive use of Desert Creek, LLC, along with and their several representatives for specific application to this site. Our work for this project was conducted in a manner consistent with that level of care and skill normally exercised by members of the environmental science profession currently practicing under similar conditions in the area, and in accordance with the terms and conditions set forth in our proposal dated December 29, 2004. Conclusions and opinions offered here pertaining to materials and/or conditions rely solely upon results of sampling and testing conducted by others at separated sampling localities and conditions may vary between sampling localities or at other locations or depths. The environmental condition of subsurface soil and/or groundwater cannot typically be determined by visual examination of surficial conditions such as afforded by the scope of a Phase I audit such as performed here. Acknowledging that limitation, no warranty in that regard is made. No other warranty, expressed or implied, is made. If new information is developed in future site work which may include excavations, borings, studies, etc., Environmental Associates, Inc., must be retained to reevaluate the conclusions of this report and to provide amendments as required.

The level of effort regarding identification of potential ACM should be considered a reconnaissance, should not be confused with an asbestos survey, and should not be used as a sole informational resource for removal, construction, or abatement bidding purposes.

REFERENCES

GENERAL

Bonneville Power Administration (BPA), January 1993, Radon Monitoring Results from BPA's Residential Conservation Program, Report No. 15, (with April 1993 Map).

Environmental Protection Agency (EPA), September 1987, Radon Reference Manual EPA 520/1-87-20.

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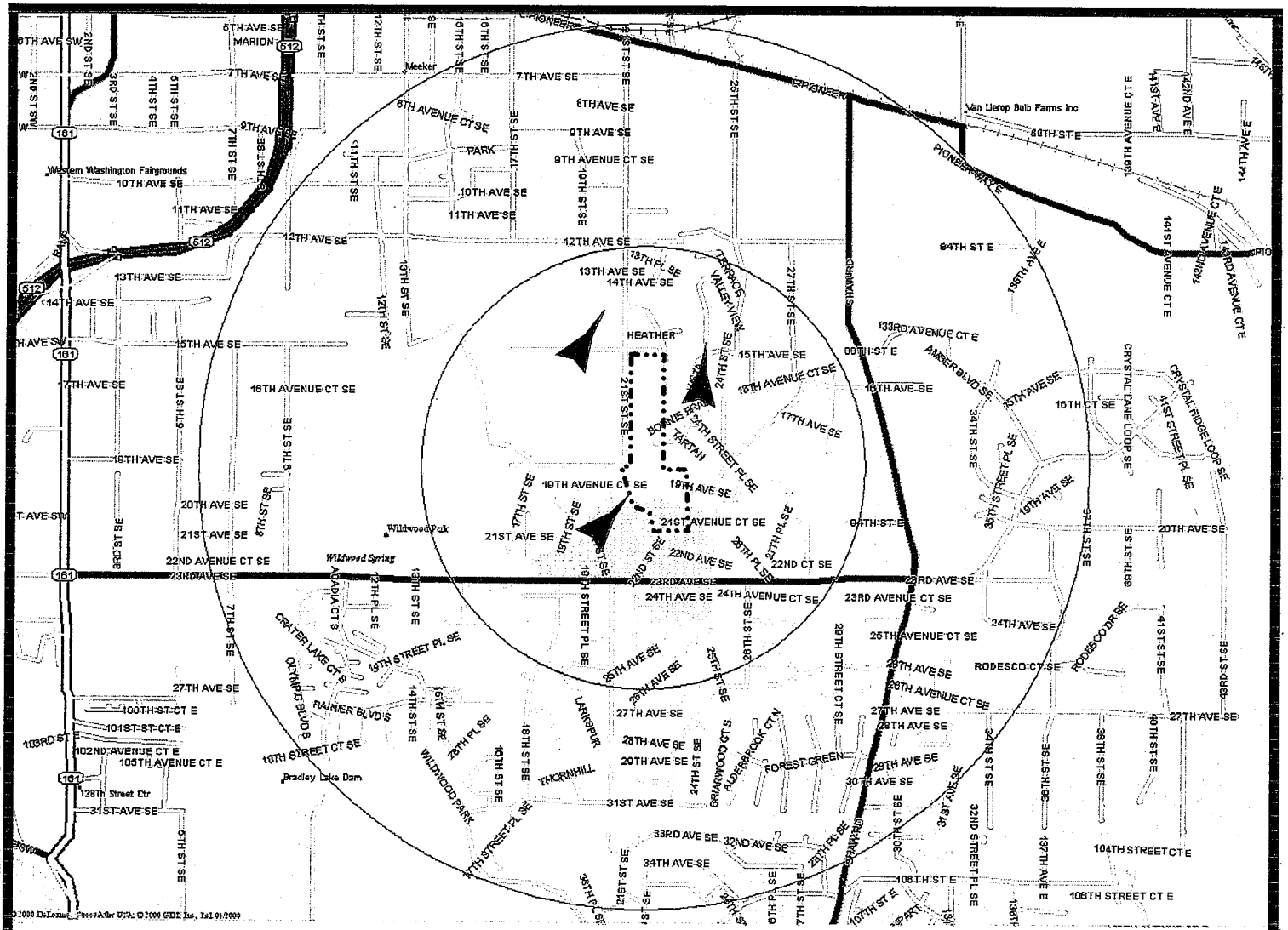
Thomas Brothers Map Co., 1995, The Thomas Guide: King/Pierce/Snohomish Counties.

U.S. EPA, April 1994. Reducing Lead Hazards When Remodeling Your Home. EPA 747-R-94-002. 20 pps.

U.S. Geological Survey, 1961, Puyallup, Washington, 1:24,000 Quadrangle. Photorevised 1981, 1 sheet.



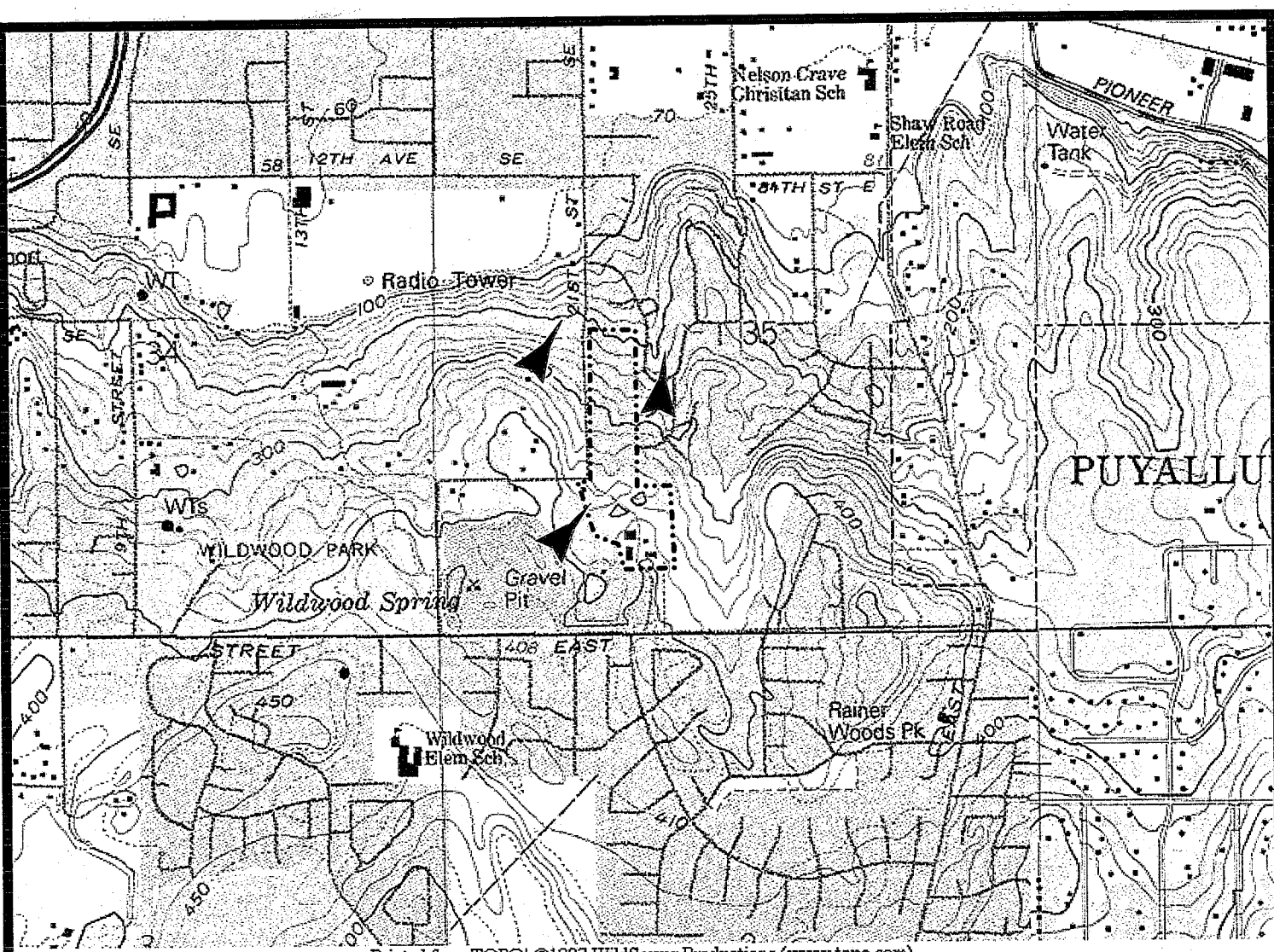
ENVIRONMENTAL ASSOCIATES, INC.

1380 112th Avenue N.E., Ste. 300
Bellevue, Washington 98004

VICINITY MAP

Proposed Sunset Pointe Residential Plat
East of Intersection of 19th Ave SE
and 21st St SE
Puyallup, Washington

Job Number:	Date:		Plate:
JN 24420	January 2005		1



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Probable Direction of Regional Groundwater Flow

Subject Property

N

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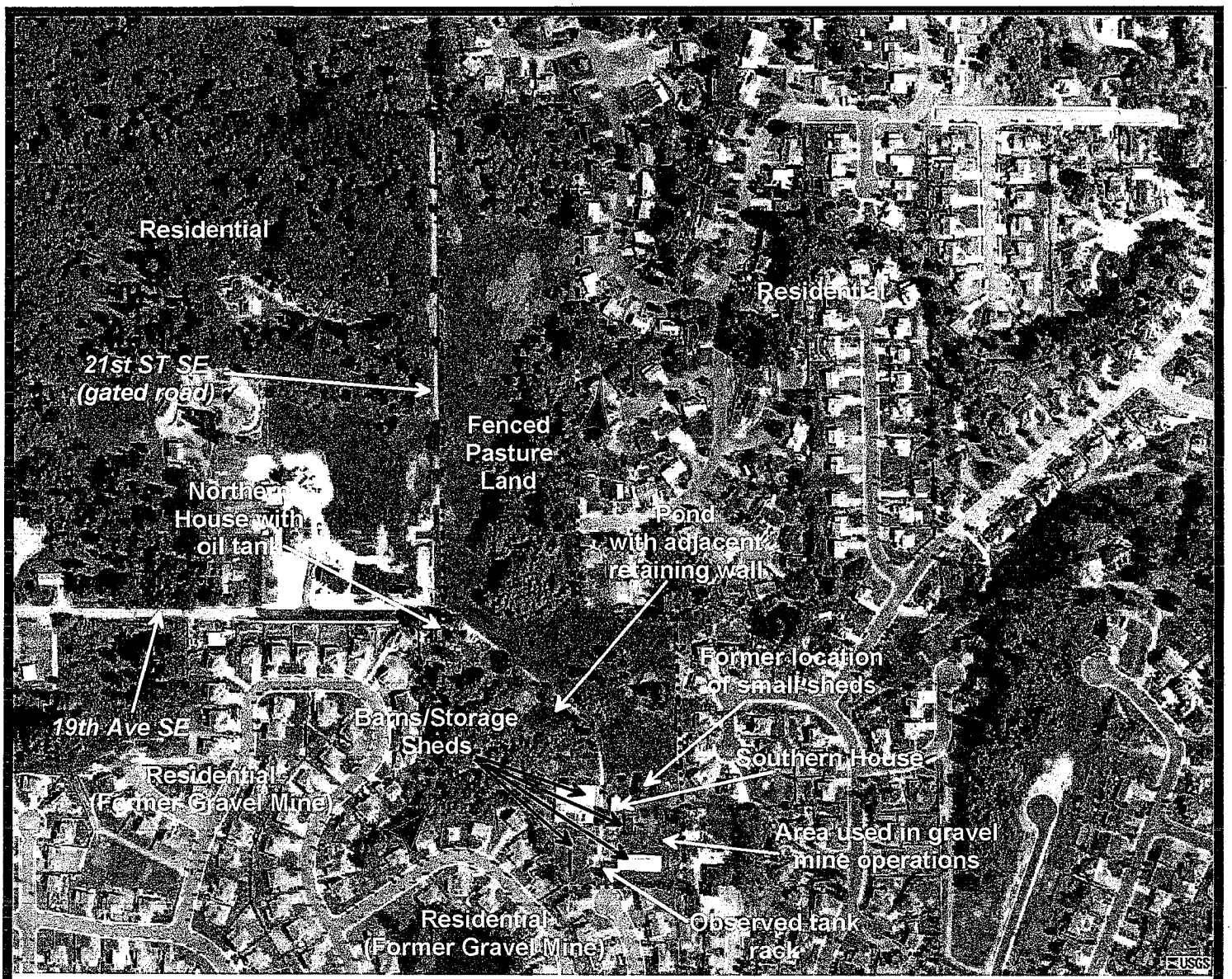
Bellevue, Washington 98004

TOPOGRAPHIC MAP

Proposed Sunset Pointe Residential Plat
East of Intersection of 19th Ave SE
and 21st St SE
Puyallup, Washington

Job Number:	*Date:*		*Plate:*
JN 24420	January 2005		2



Subject Property

Inferred regional groundwater flow direction

N

ENVIRONMENTAL ASSOCIATES, INC.

1380 112th Avenue N.E., Ste. 300
Bellevue, Washington 98004

SITE PLAN

Proposed Sunset Pointe Residential Plat
East of Intersection of 19th Ave SE
and 21st St SE
Puyallup, Washington

Job Number:	*Date:*		*Plate:*
JN 24420	January 2005		3

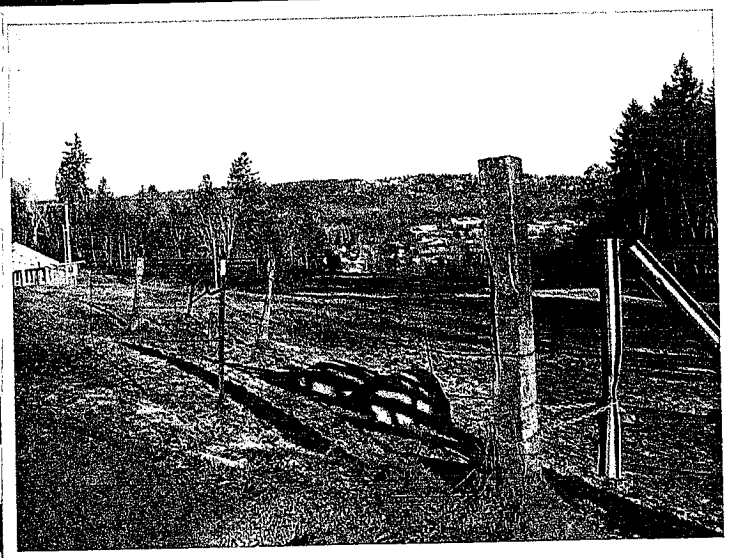


Photo 1: Pasture land on northern portion of the site, as viewed from subject property driveway.

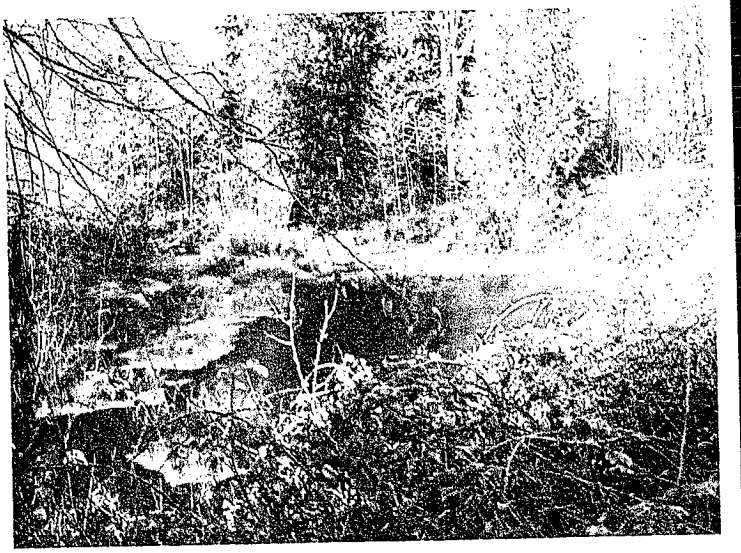


Photo 2: Pond located on southern portion of site. Retaining wall constructed with battery casings is located on northern portion of pond, near location where photo taken from.

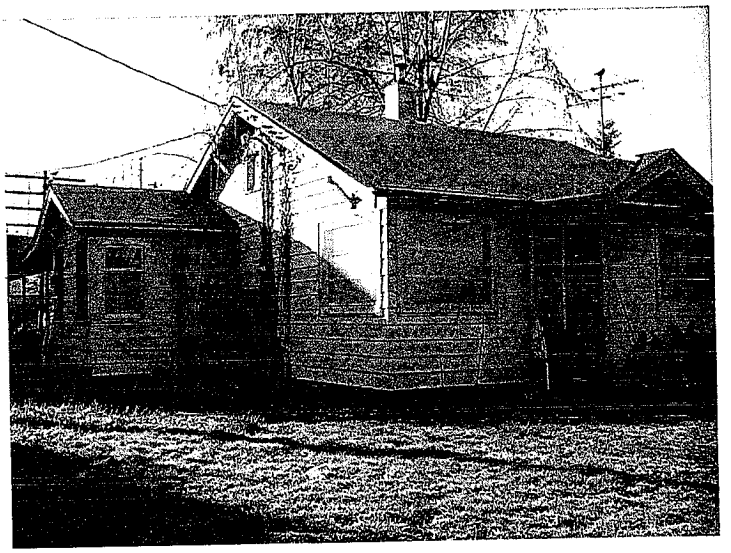


Photo 2: Southern house on subject property. Wood window, door, and other trim painted with a lead containing finish. Siding is aluminum. Lead not detected on siding finish.

Photo 4: Example of barn/storage sheds located on southern portion of site as well as types of refuse accumulated in this area.

ENVIRONMENTAL ASSOCIATES, INC.

1380 - 112th Avenue N.E., Ste. 300
Bellevue, Washington 98004

SITE PHOTOGRAPHS

Proposed Sunset Pointe Residential Plat
East of Intersection of 19th Ave SE and 21st St SE
Puyallup, Washington

Job Number:	*Date:*		*Plate:*
JN 24420	January 2005		4

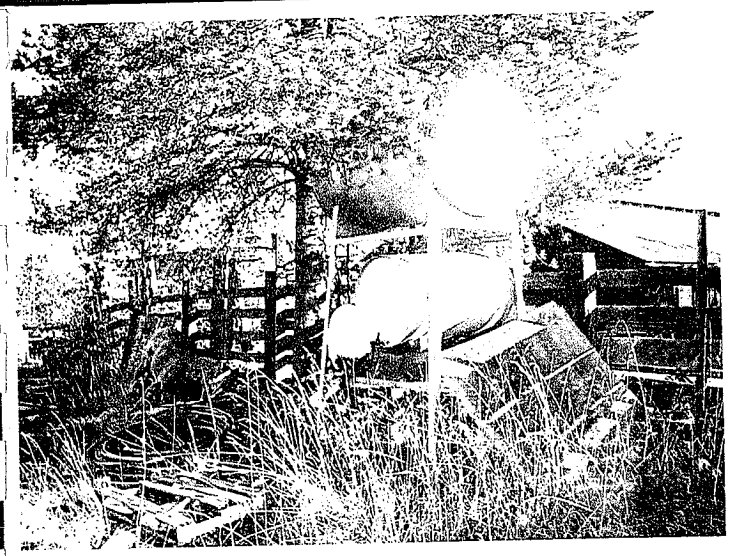


Photo 1: Steel rack containing multiple tanks/drums on southern portion of property. Bottom of lower left drum noted to be rusted out. No staining, odors, or disturbed vegetation noted under tanks.

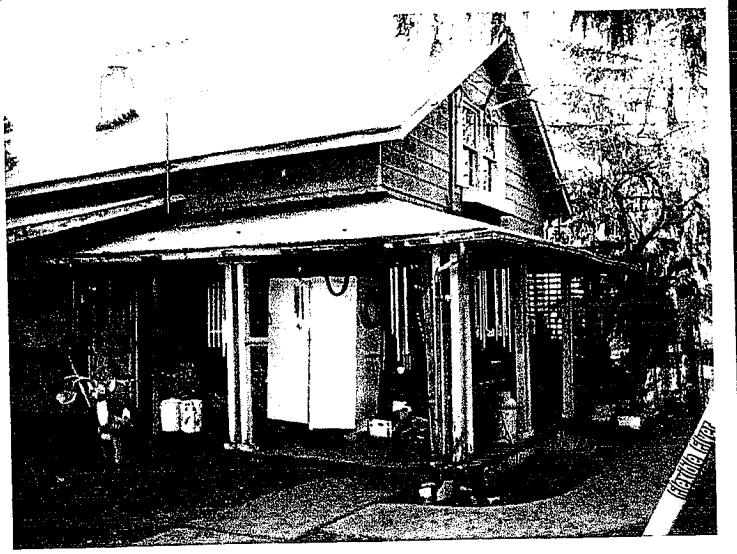


Photo 2: Northern house observed on subject site. Siding is asphaltic shingle material.

Photo 3: Heating oil tank observed adjacent to southern wall of northern house. Tank appeared to be in good condition.

Photo 4: Household refuse noted in the vicinity of northern house on site.

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Bellevue, Washington 98004

SITE PHOTOGRAPHS

Proposed Sunset Pointe Residential Plat
East of Intersection of 19th Ave SE and 21st St SE
Puyallup, Washington

Job Number:	*Date:*		*Plate:*
JN 24420	January 2005		5

APPENDIX A

Environmental Database Report

APPENDIX A

Environmental Database Report

TARGET PROPERTY:

2100 19 SE AVE

PUYALLUP WA 98372

Job Number: 24420

Environmental Associates, Inc.

1380 112th Avenue Northeast, Suite 300

Bellevue, Washington 98004

12-30-04

Search Summary Report

Target Site: 2100 19 SE AVE
PUYALLUP WA 98372

FirstSearch Summary

Database	Sel	Updated	Radius	Site	1/8	1/4	1/2	1/2>	ZIP	TOTALS
NPL	Y	09-12-04	1.00	0	0	0	0	0	0	0
CERCLIS	Y	09-13-04	0.50	0	0	0	0	-	0	0
NFRAP	Y	06-23-04	0.12	0	0	-	-	-	0	0
RCRA TSD	Y	09-12-04	0.50	0	0	0	0	-	0	0
RCRA COR	Y	09-12-04	1.00	0	0	0	0	0	0	0
RCRA GEN	Y	09-12-04	0.25	0	0	0	-	-	0	0
RCRA NLR	Y	07-12-04	0.12	0	0	-	-	-	0	0
ERNS	Y	12-31-03	0.12	0	0	-	-	-	0	0
NPDES	N	10-17-04	0.12	-	-	-	-	-	-	-
FINDS	N	07-16-98	0.12	-	-	-	-	-	-	-
TRIS	N	11-08-04	0.12	-	-	-	-	-	-	-
State Sites	Y	08-05-04	1.00	0	0	0	0	0	0	0
Spills-1990	N	NA	0.12	-	-	-	-	-	-	-
Spills-1980	N	NA	0.12	-	-	-	-	-	-	-
SWL	Y	11-01-01	0.50	0	0	0	0	-	0	0
Permits	N	NA	0.12	-	-	-	-	-	-	-
Other	N	09-30-03	0.12	-	-	-	-	-	-	-
REG UST/AST	Y	08-05-04	0.25	0	0	0	-	-	0	0
Leaking UST	Y	08-05-04	0.50	0	0	0	0	-	0	0
State Wells	N	NA	0.50	-	-	-	-	-	-	-
Aquifers	N	NA	0.50	-	-	-	-	-	-	-
ACEC	N	NA	0.50	-	-	-	-	-	-	-
Wetlands	N	11-20-00	0.50	-	-	-	-	-	-	-
Floodplains	N	09-01-98	0.50	-	-	-	-	-	-	-
Nuclear Permits	N	04-30-99	0.50	-	-	-	-	-	-	-
Historic/Landmark	N	09-01-02	1.00	-	-	-	-	-	-	-
Federal Land Use	N	10-07-03	1.00	-	-	-	-	-	-	-
Federal Wells	N	05-19-03	0.50	-	-	-	-	-	-	-
Releases(Air/Water)	N	12-31-03	0.05	-	-	-	-	-	-	-
HMIRS	N	03-31-03	0.05	-	-	-	-	-	-	-
NCDB	N	08-30-04	0.12	-	-	-	-	-	-	-
PADS	N	09-14-04	0.12	-	-	-	-	-	-	-
Federal Other	N	12-31-02	0.25	-	-	-	-	-	-	-
Misc	N	NA	0.25	-	-	-	-	-	-	-
Towers	N	08-16-01	0.25	-	-	-	-	-	-	-
Soils	N	03-18-97	0.25	-	-	-	-	-	-	-
Receptors	N	01-01-95	0.50	-	-	-	-	-	-	-
- TOTALS -				0	0	0	0	0	0	0

Site Information Report

Request Date:	12-30-04	**Search Type:**	COORD
Requestor Name:	Derek Pulvino	**Job Number:**	24420
Standard:	ASTM		

TARGET ADDRESS: 2100 19 SE AVE
PUYALLUP WA 98372

Demographics

Sites:	0	**Non-Geocoded:**	0	**Population:**	NA
Radon:	-0.1 PCI/L				

Site Location

	Degrees (Decimal)	**Degrees (Min/Sec)**		**UTMs**
Longitude:	-122.265653	-122:15:56	**Easting:**	555649.053
Latitude:	47.174193	47:10:27	**Northing:**	5224564.793
			Zone:	10

Comment

Comment:

Additional Requests/Services

Adjacent ZIP Codes: 1 Mile(s)

ZIP Code	City Name	ST	Dist/Dir	Sel
98374	PUYALLUP	WA	0.29 SW	Y

Services:

	Requested?	Date
Sanborns	No	
Aerial Photographs	No	
Topographical Maps	No	
City Directories	No	
Title Search	No	
Municipal Reports	No	
Online Topos	No	

Environmental FirstSearch
Site Detail Report

TARGET SITE: 2100 19 SE AVE
PUYALLUP WA 98372

JOB: 24420

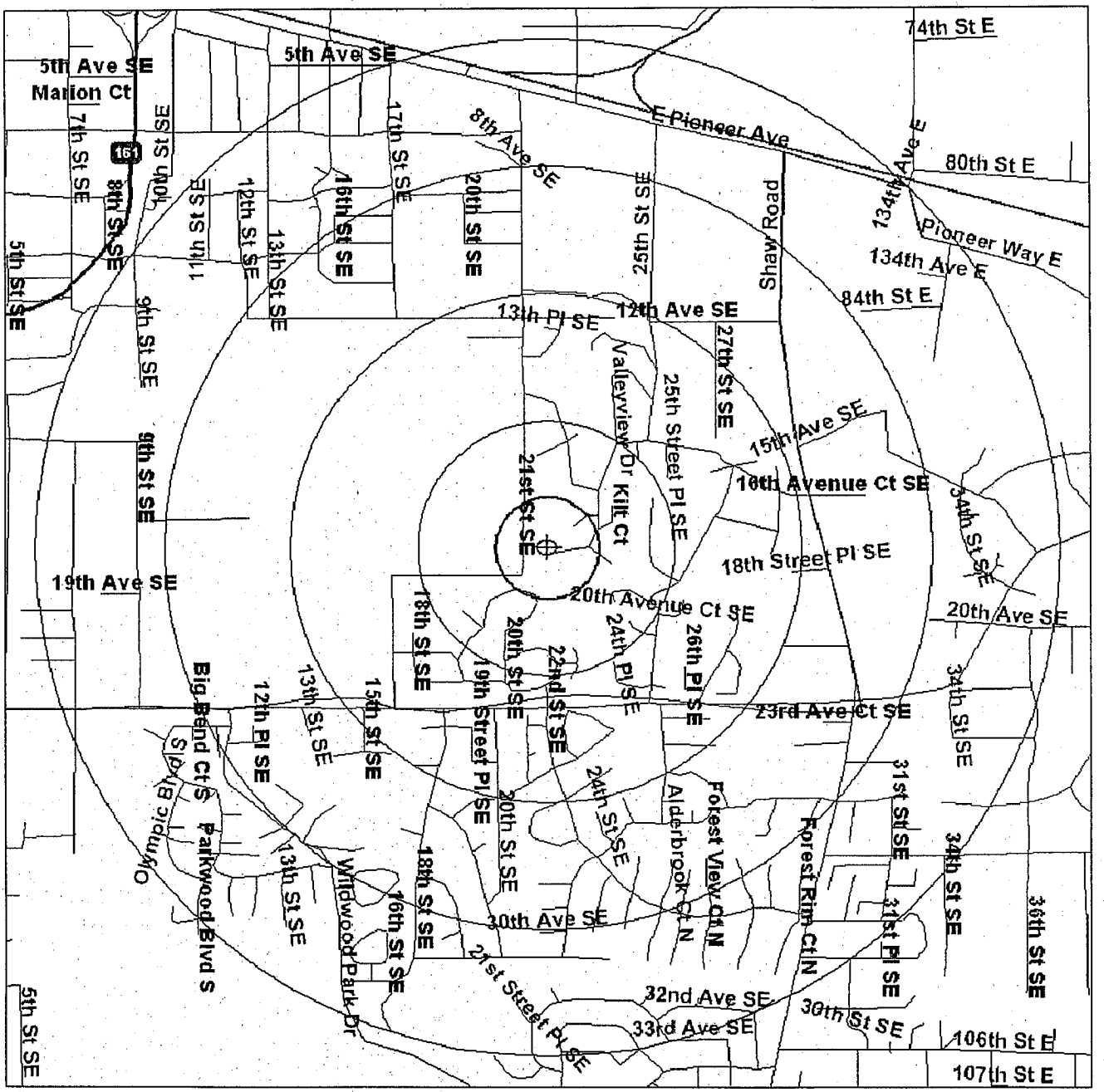
No sites were found!

Environmental FirstSearch

1 Mile Radius

ASTM: All Databases

2100 19 SE AVE, PUYALLUP WA 98372



Source: 1999 U.S. Census TIGER Files

Target Site (Latitude: 47.174193 Longitude: -122.265653) .....

Identified Site, Multiple Sites, Receptor .....

NPL, Solid Waste Landfill (SWL) or Hazardous Waste .....

Railroads .....

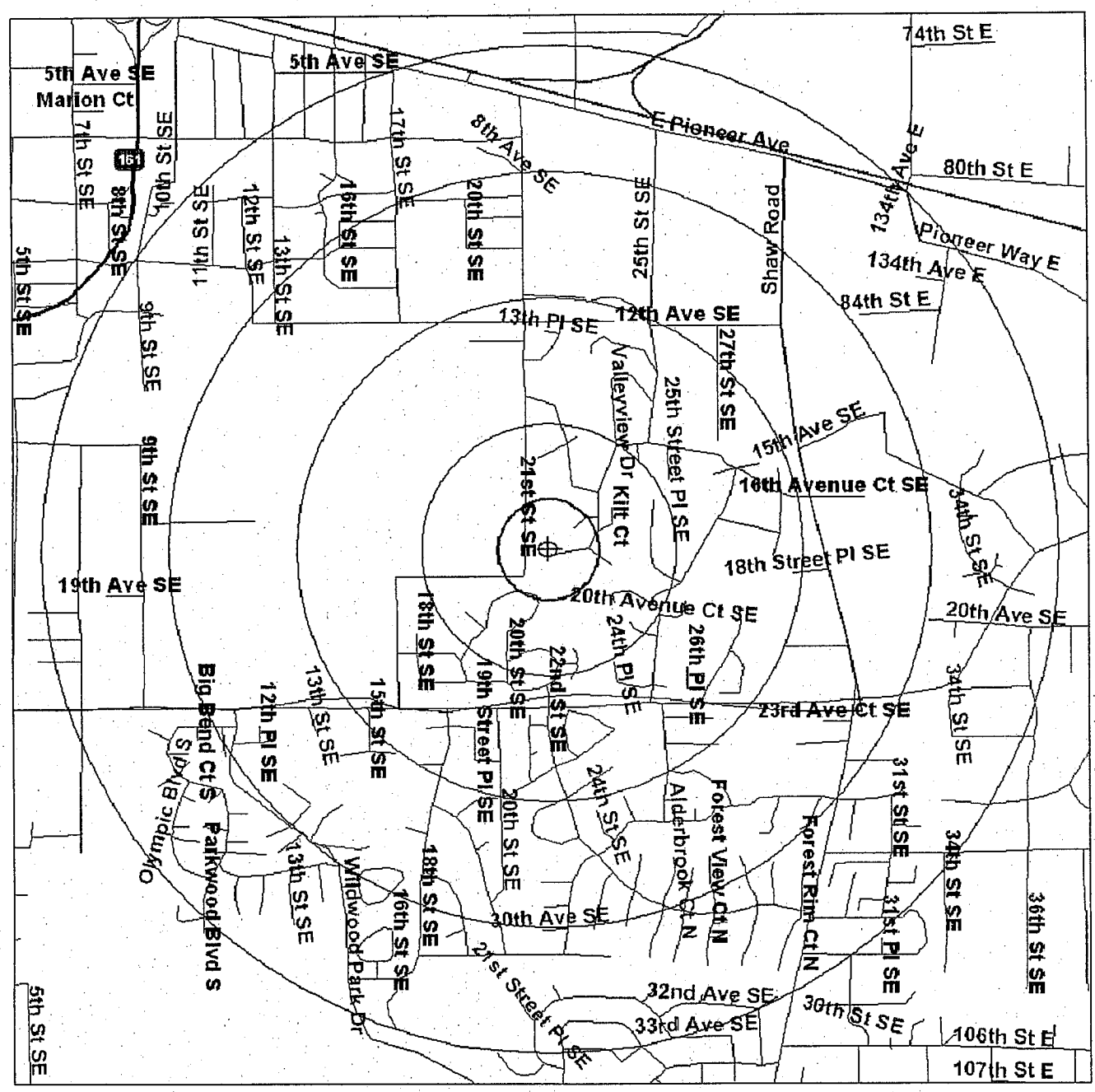
Black Rings Represent 1/4 Mile Radii; Red Ring Represents 500 ft. Radius

Environmental FirstSearch

1 Mile Radius

ASTM: NPL, RCRACOR, STATE

2100 19 SE AVE, PUYALLUP WA 98372



Source: 1999 U.S. Census TIGER Files

Target Site (Latitude: 47.174193 Longitude: -122.265653) .....

Identified Site, Multiple Sites, Receptor .....

NPL, Solid Waste Landfill (SWL) or Hazardous Waste .....

Railroads .....

Black Rings Represent 1/4 Mile Radii; Red Ring Represents 500 ft. Radius

APPENDIX B

AHERA Certification Documents

Certificate of Training

J&J Associates is pleased to certify that

Don Spencer

has attended and successfully completed the

AHERA Management Planner Refresher

in accordance with
40 CFR Part 763, Subpart E, Appendix C
on this 29th day of September 2004
at Bellevue Washington

Valid through September 29, 2005

John G Lester Jr.
COURSE INSTRUCTOR

John G Lester Jr.
TRAINING DIRECTOR

J&J040929-MPR-01
ACCREDITATION NO.

J&J Associates
550 NW Fairwood Way
Bremerton, Washington 98311
(360) 692-5925

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LITHO. IN U.S.A.

Certificate of Training

J&J Associates is pleased to certify that

Don Spencer

has attended and successfully completed the

AHERA BUILDING INSPECTOR REFRESHER

in accordance with
40 CFR Part 763, Subpart E, Appendix C
on this 29th day of September 2004
at Bellevue Washington

Valid through September 29, 2005

John G Lester Jr.
COURSE INSTRUCTOR

John G Lester Jr.
TRAINING DIRECTOR

J&J040929-BIR-07
ACCREDITATION NO.

J&J ASSOCIATES
550 NW Fairwood Way
Bremerton, Washington 98311
(360) 692-5925

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Certificate of Completion

This is to certify that

Derek B. Pulvino

has satisfactorily completed
4 hours of refresher training as an

Asbestos Building Inspector

to comply with the training requirements of
TSCA Title II / 40 CFR 763 (AHERA)

Certificate Number 1010794

Instructor

Provider Cert. Number: MO9907012

ARGUS PACIFIC
SAFETY • TRAINING • INDUSTRIAL HYGIENE

Aug 25, 2004
Date(s) of Training

Exam Score: NA

Expiration Date: Aug 25, 2005

Argus Pacific, Inc. • 1900 W. Nickerson, Suite 315 • Seattle, Washington • 98119 • (206) 285.3373 • fax (206) 285.3927

APPENDIX C

EPA PCB Guidance Document

WASTE MANAGEMENT GUIDANCE

PCB'S IN FLUORESCENT LIGHT FIXTURES

The purpose of this fact sheet is to provide some basic information on polychlorinated biphenyls (PCBs) and guidelines for handling PCBs in fluorescent light fixtures. Though the precautionary actions described in this fact sheet may seem extreme, or suggest to some that cleanup of a small PCB spill is personally hazardous, this is not generally so. For example, if you should get a small amount of PCB on your skin during cleanup, it is highly unlikely that you would be harmed. However, given the nature of PCBs and the fact that much is still unknown about the effects of minor exposure, no absolute guarantees or reassurances can be given. For that reason, EPA has chosen to describe a conservative approach which minimizes personal hazard. It is EPA's hope that this information will inform you rather than alarm you.

What are PCBs

PCBs belong to a broad family organic chemicals known as chlorinated hydrocarbons. These are produced by the combination of one or more chlorine atoms and a biphenyl molecule. PCBs range in consistency from heavy oil liquids to waxy solids. Prior to 1979, PCBs were widely used in electrical equipment such as transformers, capacitors, switches and voltage regulators for their "cooling" properties because they do not readily burn or conduct electricity, and only boil at high temperatures. Also, PCBs do not readily react with other chemicals. They were also used in mining equipment, heat transfer and hydraulic systems, carbonless copy paper, pigments and microscopy mounting media.

How Does EPA Regulate PCBs?

EPA regulates PCBs through rules issued pursuant to the Toxic Substances Control Act of 1976. These regulations generally control the use, making, storage, records and disposal of PCBs. There are millions of pieces of equipment in operation in the U.S. which were manufactured prior to these regulations and which contain PCBs.

Small Capacitors in Fluorescent Light Ballast's and Cause for Failure

Light ballast's are the primary electric components of fluorescent light fixtures and are generally located within the fixture under a metal cover plate. The ballast units are generally composed of a transformer to reduce the incoming voltage, a small capacitor (which may contain PCBs) and possibly a thermal cut-off switch and/or safety fuse. These components are surrounded by a tarlike substance that is designed to muffle the noise that is inherent in the operation of the ballast. This substance covers the small capacitor. When a ballast unit fails, excessive heat can be generated which will melt or burn the tar material, creating a characteristic foul order.

DEQ

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
John Engler, Governor • Russell J. Harding, Director
www.deq.state.mi.us

WASTE MANAGEMENT DIVISION
PO BOX 30241
LANSING MI 48909

Small Capacitors in Fluorescent Light Ballast's and Cause for Failure (continued)

Light ballast's are the primary electric components of fluorescent light fixtures and are generally located within the fixture under a metal cover plate. The ballast units are generally composed of a transformer to reduce the incoming voltage, a small capacitor (which may contain PCBs) and possibly a thermal cut-off switch and/or safety fuse. These components are surrounded by a tarlike substance that is designed to muffle the noise that is inherent in the operation of the ballast. This substance covers the small capacitor. When a ballast unit fails, excessive heat can be generated which will melt or burn the tar material, creating a characteristic foul order.

In considering causes of ballast failure, some privately conducted tests have indicated that operation of power saving lamps with a standard ballast or standard lamps with a power-saving ballast tends to significantly increase the ballast operating temperature and decrease its normal life span. It appears that ballast's will fail less frequently if standard lamps are used only with standard bulbs and power-saving lamps with power-saving ballast's. Fluorescent lamps should be changed in pairs: new lamps should not be used with old lamps.

In considering causes of ballast failure, some privately conducted tests have indicated that operation of power saving lamps with a standard ballast or standard lamps with a power-saving ballast tends to significantly increase the ballast operating temperature and decrease its normal life span. It appears that ballast's will fail less frequently if standard lamps are used only with standard bulbs and power-saving lamps with power-saving ballast's. Fluorescent lamps should be changed in pairs: new lamps should not be used with old lamps.

Does Your Fluorescent Light Ballast Contain PCBs

Before EPA banned the manufacturing of PCBs in 1978, PCBs were used in the manufacturing of fluorescent light ballast's. The use of PCBs in ballast's manufactured prior to 1978 is not regulated by EPA. All light ballast's manufactured since 1978 which do not contain PCBs should be marked by the manufacturer with the statement "No PCBs." **For those ballast's manufactures prior to 1978, or for those ballast's which contain no statement regarding PCB content, you should assume that they do contain PCBs.**

If the ballast does contain PCBs, they are located inside the small capacitor. These would be approximately 1 to 1 1/2 ounces of PCB fluid in the capacitor itself. If the ballast fails, the capacitor may break open, allowing the PCB oil to drip out of the fixture. The capacitor does not always leak when the ballast fails, but when it does happen, measures should be taken to limit or avoid personal exposure.

What Should I Do if My Light Ballast Leaks

EPA has these recommendations for anyone with fluorescent light ballast leaking PCBs:

1. Vacate the room or area immediately and open any windows to ventilate the room to the outside. If the incident occurred in a room which cannot be vented, the person replacing the failed ballast and cleaning up can reduce exposure by wearing a chemical cartridge respirator equipped with an organic vapor cartridge.

2. Turn off the light fixture at the switch and disconnect electricity at the fuse or breaker box. Let the ballast cool for 20-30 minutes before proceeding.

   If the room is fully ventilated, the amount of PCB contaminated particulate matter in the air should decrease significantly enough to make negligible and risk from breathing.

3. Wear rubber gloves that will not absorb PCBs (e.g. neoprene, butyl, or nitrile). Further, if you will be working directly under the fixture, consider using additional protective gear such as goggles (or a face shield) and rubber apron to help guard against possible exposure from further leaking or cleanup activities. Exercise caution to avoid personal contamination's (e.g. from touching your face with a contaminated glove).

   During the cleanup or removal period, smoking should be prohibited in the area because smoking increases the inhalation rate of contaminated air. In addition, you may be using a flammable solvent in the cleanup.

4. Remove the fluorescent lamp.

5. Recheck that the power is off at the fuse or breaker box. Remove the metal cover over the wiring and ballast unit, loosen the ballast unit by taking out the metal screws which hold it to the end of the fixture; cut the electrical wires going to the ballast and remove the ballast. Note: Wire connectors can be used when installing new ballast.

6. Proceed to clean up leaks using the following guidelines:

   PCBs that leak onto nonabsorbent surfaces such as table tops and uncarpeted floors should first be cleaned up by wiping with a rag or paper towel or by scraping with a putty knife if hardened. Avoid smearing the PCB around. This would only contaminate a larger area. Surfaces should then be thoroughly cleaned twice using an appropriate solvent or detergent. Only certain solvents are effective in cleaning up spilled PCBs. These include mineral spirits, deodorized kerosene, turpentine and rubbing alcohol. Certain detergents containing trisodium phosphate (such as "Soilex" or "Spic 'n Span") may be used. However, they should be used only at full strength and applied with a damp rag rather than diluted in a bucket. That solution would become contaminated and cannot be legally disposed of in the sewer system. Some of the other effective detergent products (which are commercially available) include "Triton X-I 00" (Rohm-Hass), "Sterox" (Monsanto), and "Power Cleaner 155" (Penetone Corp.). EPA does not endorse these particular products. Other effective products may also be available.

   For leaks onto absorbent material such as drapes and carpets, there is no reliable way to clean and decontaminate the material. In the case of rugs and fabrics, the material should be cut away in a six-inch radius around the contaminated point(s). In areas where foot traffic has spread contamination the entire carpet should be disposed of. Proper disposal procedures for all such materials are described in the following section. Associated surfaces, such as flooring under contaminated carpeting, should be thoroughly cleaned with a solvent or detergent as previously described.

7. Contaminated materials (ballast's, rags, contaminated clothing, gloves, drapes, carpets, etc) should be packed into crumpled newspapers or other sorbent materials (sawdust, kitty litter, vermiculite, soil, etc.) and placed in a double thickness plastic bag. After containing the PCBs, a disposal facility should be contacted for pickup, manifesting and shipment. The PCB materials will be packed in a drum approved for PCBs by the Department of Transportation and finally disposed of at an EPA approved site.

   (One might consider discarding the entire light fixture instead of decontaminating the unit. This would eliminate the chance of skin coming into direct contact with the PCBs while cleaning inside the light fixture.)

   When you are completely through with the cleanup process, and contaminated materials and protective clothing have been packed for disposal, you should wash your hands thoroughly with detergent. Continue to ventilate the room for 24 hours before reuse.

How to Get Rid of Your PCBs

Arrangements must be made with a facility for the pick-up, manifesting and shipment of ballast's, PCB-soiled items or fluorescent fixtures containing PCBs, to an EPA approved chemical waste processing site. These firms will also perform minor PCB spill cleanups and arrange for the removal of PCB capacitors. If you don't find a nearby facility, please check the telephone yellow pages under waste disposal. If you have further questions, please call EPA's regional office in Chicago at 312/886-6832, Toxic Program Section.

Non-leaking small PCB capacitors (lighting ballast's) are not required to be incinerated. They should be placed in a U.S. DOT approved drum with adequate absorbent, and disposal of in an approved landfill unless regulated under N.R.E.P.A. 451 PA 1994: Part 111 (hazardous waste regulations). NOTE: PCB's are not regulated as hazardous waste, however there may be other components in the ballast which would cause it to test out as a hazardous waste.

* this fact sheet has been duplicated and updated from a prior EPA publication

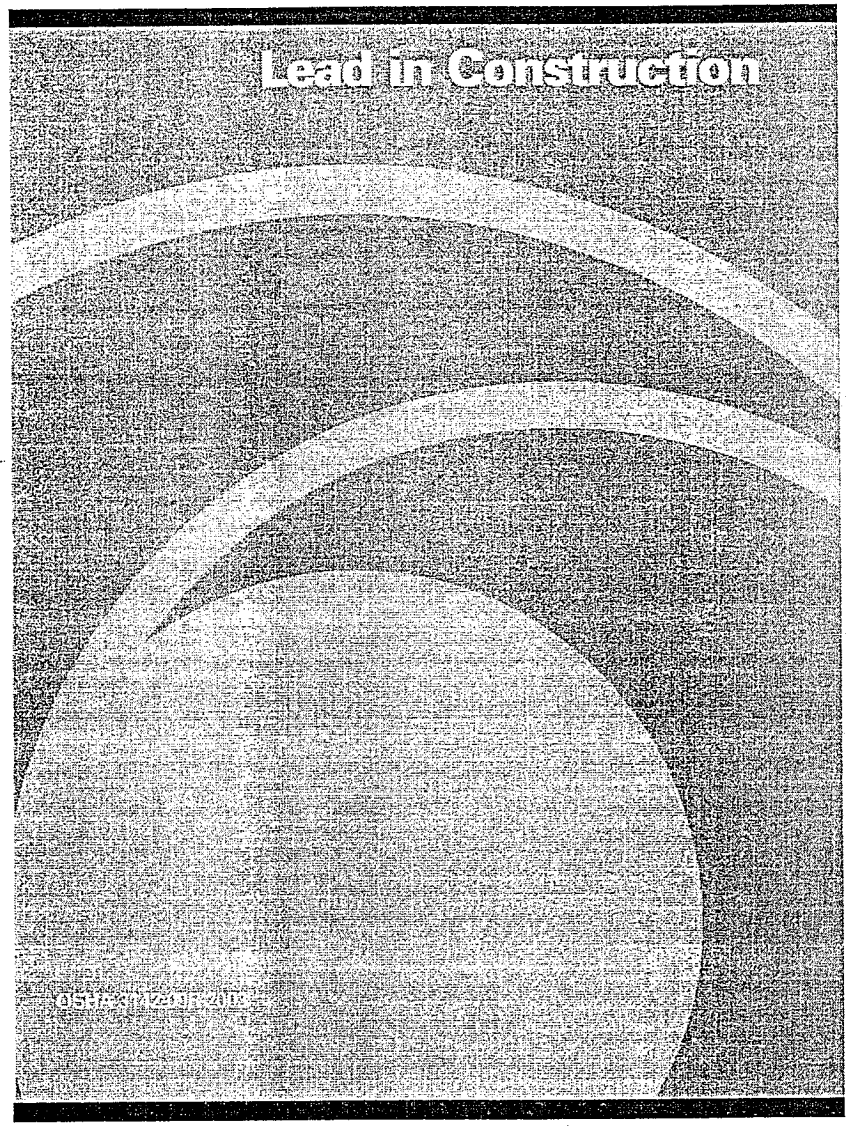
(doc/y/PCBs.doc/1/20/97/EAB)

APPENDIX D

OSHA 3142 - Lead In Construction

OSHA Occupational Safety and Health Administration

www.osha.gov



This informational booklet provides a general overview of a particular topic related to OSHA standards. It does not alter or determine compliance responsibilities in OSHA standards or the *Occupational Safety and Health Act of 1970.* Because interpretations and enforcement policy may change over time, you should consult current OSHA administrative interpretations and decisions by the Occupational Safety and Health Review Commission and the Courts for additional guidance on OSHA compliance requirements.

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OSHA

www.osha.gov

Lead in Construction

U.S. Department of Labor

Occupational Safety and Health Administration

OSHA 3142-09R
2003

Contents

Health Hazards of Lead Exposure...3

Worker Exposure...5

Construction Workers and Lead Exposure...5

OSHA's Lead Standard...6

Employer Responsibilities...8

- Hazard Assessment...9
- Medical Surveillance...12
- Medical Removal Provisions...14
- Recordkeeping...16

Exposure Reduction and Employee Protection...18

- Engineering Controls...18
- Housekeeping and Personal Hygiene...21
- Protective Clothing and Equipment...24
- Respiratory Protection...26
- Employee Information and Training...29

OSHA Assistance, Services, and Products...30

OSHA Regional Office Directory...36

Health Hazards of Lead Exposure

Pure lead (Pb) is a heavy metal at room temperature and pressure. A basic chemical element, it can combine with various other substances to form numerous lead compounds.

Lead has been poisoning workers for thousands of years. Lead can damage the central nervous system, cardiovascular system, reproductive system, hematological system, and kidneys. When absorbed into the body in high enough doses, lead can be toxic.

In addition, workers' lead exposure can harm their children's development.

Short-term (acute) overexposure--as short as days--can cause acute encephalopathy, a condition affecting the brain that develops quickly into seizures, coma, and death from cardiorespiratory arrest. Short-term occupational exposures of this type are highly unusual but not impossible.

Extended, long-term (chronic) overexposure can result in severe damage to the central nervous system, particularly the brain. It can also damage the blood-forming, urinary, and reproductive systems. There is no sharp dividing line between rapidly developing acute effects of lead and chronic effects that take longer to develop.

SYMPTOMS OF CHRONIC OVEREXPOSURE

Some of the common symptoms include:

- Loss of appetite;
- Constipation;
- Nausea;
- Excessive tiredness;
- Headache;
- Fine tremors;
- Colic with severe abdominal pain;
- Metallic taste in the mouth;
- Weakness;
- Nervous irritability;
- Hyperactivity;

- Muscle and joint pain or soreness;
- Anxiety;
- Pallor;
- Insomnia;
- Numbness; and
- Dizziness.

REPRODUCTIVE RISKS

Lead is toxic to both male and female reproductive systems. Lead can alter the structure of sperm cells and there is evidence of miscarriage and stillbirth in women exposed to lead or whose partners have been exposed. Children born to parents who were exposed to excess lead levels are more likely to have birth defects, mental retardation, or behavioral disorders or to die during the first year of childhood.

Workers who desire medical advice about reproductive issues related to lead should contact qualified medical personnel to arrange for a job evaluation and medical followup--particularly if they are pregnant or actively seeking to have a child. Employers whose employees may be exposed to lead and who have been contacted by employees with concerns about reproductive issues must make medical examinations and consultations available.

CHELATING AGENTS

Under certain limited circumstances, a physician may prescribe special drugs called chelating agents to reduce the amount of lead absorbed in body tissues. Using chelation as a preventive measure--that is, to lower blood level but continue to expose a worker--is prohibited and therapeutic or diagnostic chelations of lead that are required must be done under the supervision of a licensed physician in a clinical setting, with thorough and appropriate medical monitoring. The employee must be notified in writing before treatment of potential consequences and allowed to obtain a second opinion.

Worker Exposure

Lead is most commonly absorbed into the body by inhalation. When workers breathe in lead as a dust, fume, or mist, their lungs and upper respiratory tract absorb it into the body. They can also absorb lead through the digestive system if it enters the mouth and is ingested.

A significant portion of the lead inhaled or ingested gets into the bloodstream. Once in the bloodstream, lead circulates through the body and is stored in various organs and body tissues. Some of this lead is filtered out of the body quickly and excreted, but some remains in the blood and tissues. As exposure continues, the amount stored will increase if the body absorbs more lead than it excretes. The lead stored in the tissue can slowly cause irreversible damage, first to individual cells, then to organs and whole body systems.

Construction Workers and Lead Exposure

HOW LEAD IS USED

In construction, lead is used frequently for roofs, cornices, tank linings, and electrical conduits. In plumbing, soft solder, used chiefly for soldering tinplate and copper pipe joints, is an alloy of lead and tin. Soft solder has been banned for many uses in the United States. In addition, the Consumer Product Safety Commission bans the use of lead-based paint in residences. Because lead-based paint inhibits the rusting and corrosion of iron and steel, however, lead continues to be used on bridges, railways, ships, lighthouses, and other steel structures, although substitute coatings are available.

Construction projects vary in their scope and potential for exposing workers to lead and other hazards. Projects such as removing paint from a few interior residential doors may involve limited exposure. Others projects, however, may involve removing or stripping substantial quantities of lead-based paints on large bridges and other structures.

MOST VULNERABLE WORKERS

Workers potentially at risk for lead exposure include those involved in iron work; demolition work; painting; lead-based paint

abatement; plumbing; heating and air conditioning maintenance and repair; electrical work; and carpentry, renovation, and remodeling work. Plumbers, welders, and painters are among those workers most exposed to lead. Significant lead exposures also can arise from removing paint from surfaces previously coated with lead-based paint such as bridges, residences being renovated, and structures being demolished or salvaged. With the increase in highway work, bridge repair, residential lead abatement, and residential remodeling, the potential for exposure to lead-based paint has become more common.

Workers at the highest risk of lead exposure are those involved in:

- Abrasive blasting and
- Welding, cutting, and burning on steel structures.

Other operations with the potential to expose workers to lead include:

- Lead burning;
- Using lead-containing mortar;
- Power tool cleaning without dust collection systems;
- Rivet busting;
- Cleanup activities where dry expendable abrasives are used;
- Movement and removal of abrasive blasting enclosures;
- Manual dry scraping and sanding;
- Manual demolition of structures;
- Heat-gun applications;
- Power tool cleaning with dust collection systems; and
- Spray painting with lead-based paint.

OSHA's Lead Standard

OSHA's Lead Standard for the Construction Industry, Title 29 Code of Federal Regulations 1926.62, covers lead in a variety of forms, including metallic lead, all inorganic lead compounds, and organic lead soaps.

EXPOSURE LIMITS

The standard establishes maximum limits of exposure to lead for all workers covered, including a permissible exposure limit (PEL) and action level (AL).

The PEL sets the maximum worker exposure to lead: 50 micrograms of lead per cubic meter of air (50µg/m3) averaged over an eight-hour period. If employees are exposed to lead for more than eight hours in a workday, their allowable exposure as a TWA for that day must be reduced according to this formula:

Employee exposure (in µg/m3) = 400 divided by the hours worked in the day.

The AL, regardless of respirator use, is an airborne concentration of 30µg/m3, averaged over an eight-hour period. The AL is the level at which an employer must begin specific compliance activities outlined in the standard.

APPLICABILITY TO CONSTRUCTION

OSHA's lead in construction standard applies to all construction work where an employee may be exposed to lead. All work related to construction, alteration, or repair, including painting and decorating, is included. Under this standard, construction includes, but is not limited to:

- Demolition or salvage of structures where lead or materials containing lead are present;
- Removal or encapsulation of materials containing lead;
- New construction, alteration, repair, or renovation of structures, substrates, or portions or materials containing lead;
- Installation of products containing lead;
- Lead contamination from emergency cleanup;
- Transportation, disposal, storage, or containment of lead or materials containing lead where construction activities are performed; and
- Maintenance operations associated with these construction activities.

Employer Responsibilities

WORKER PROTECTIONS

Employers of construction workers are responsible for developing and implementing a worker protection program. At a minimum, the employer's worker protection program for employees exposed to lead above the PEL should include:

- Hazard determination, including exposure assessment;
- Medical surveillance and provisions for medical removal;
- Job-specific compliance programs;
- Engineering and work practice controls;
- Respiratory protection;
- Protective clothing and equipment;
- Housekeeping;
- Hygiene facilities and practices;
- Signs;
- Employee information and training; and
- Recordkeeping.

Because lead is a cumulative and persistent toxic substance and health effects may result from exposure over prolonged periods, employers must use these precautions where feasible to minimize employee exposure to lead.

The employer should, as needed, consult a qualified safety and health professional to develop and implement an effective, site-specific worker protection program. These professionals may work independently or may be associated with an insurance carrier, trade organization, or onsite consultation program.

ELEMENTS OF A COMPLIANCE PROGRAM

For each job where employee exposure exceeds the PEL, the employer must establish and implement a written compliance program to reduce employee exposure to the PEL or below. The compliance program must provide for frequent and regular inspections of job sites, materials, and equipment by a competent person. Written programs, which must be reviewed and updated at least every six months, must include:

- A description of each activity in which lead is emitted (such as equipment used, material involved, controls in place, crew size, employee job responsibilities, operating procedures, and maintenance practices);
- The means to be used to achieve compliance and engineering plans and studies used to determine the engineering controls selected where they are required;
- Information on the technology considered to meet the PEL;
- Air monitoring data that document the source of lead emissions;
- A detailed schedule for implementing the program, including copies of documentation (such as purchase orders for equipment, construction contracts);
- A work practice program;
- An administrative control schedule, if applicable; and
- Arrangements made among contractors on multi-contractor sites to inform employees of potential lead exposure.

Hazard Assessment

An employer is required to conduct an initial employee exposure assessment of whether employees are exposed to lead at or above the AL based on:

- Any information, observation, or calculation that indicates employee exposure to lead;
- Any previous measurements of airborne lead; and
- Any employee complaints of symptoms attributable to lead exposure.

Objective data and historical measurements of lead may be used to satisfy the standard's initial monitoring requirements.

INITIAL EMPLOYEE EXPOSURE ASSESSMENT

Initial monitoring may be limited to a representative sample of those employees exposed to the greatest concentrations of airborne lead. Representative exposure sampling is permitted when there are a number of employees performing the same job, with

lead exposure of similar duration and level, under essentially the same conditions. For employees engaged in similar work, the standard requires that the members of the group reasonably expected to have the highest exposure levels be monitored. This result is then attributed to the other employees of the group.

The employer must establish and maintain an accurate record documenting the nature and relevancy of previous exposure data. Instead of performing initial monitoring, the employer may in some cases rely on objective data that demonstrate that a particular lead-containing material or product cannot result in employee exposure at or above the action level when it is processed, used, or handled.

BIOLOGICAL MONITORING TESTS

Analysis of blood lead samples must be conducted by an OSHA-approved lab and be accurate (to a confidence level of 95 percent) within plus or minus 15 percent, or 6 µg/dl, whichever is greater. If an employee's airborne lead level is at or above the AL for more than 30 days in any consecutive 12 months, the employer must make biological monitoring available on the following schedule:

- At least every two months for the first six months and every six months thereafter for employees exposed at or above the action level for more than 30 days annually;
- At least every two months for employees whose last blood sampling and analysis indicated a blood lead level at or above 40 µg/dl; and
- At least monthly while an employee is removed from exposure due an elevated blood lead level.

PENDING EMPLOYEE EXPOSURE ASSESSMENT

Until the employer performs an exposure assessment and documents that employees are not exposed above the PEL, OSHA requires some degree of interim protection for employees. This means providing respiratory protection, protective work clothing and equipment, hygiene facilities, biological monitoring, and training—as specified by the standards—for certain tasks prone to produce high exposure. These include:

- Manual demolition of structures such as dry wall, manual scraping, manual sanding, and use of a heat gun where lead-containing coatings or paints are present;
- Power tool cleaning with or without local exhaust ventilation;
- Spray painting with lead-containing paint;
- Lead burning;
- Use of lead-containing mortar;
- Abrasive blasting, rivet busting, welding, cutting, or torch-burning on any structure where lead-containing coatings or paint are present;
- Abrasive blasting enclosure movement and removal;
- Cleanup of activities where dry expendable abrasives are used; and
- Any other task the employer believes may cause exposures in excess of the PEL.

TEST RESULTS SHOWING NO OVEREXPOSURES

If the initial assessment indicates that no employee is exposed above the AL, the employer may discontinue monitoring. Further exposure testing is not required unless there is a change in processes or controls that may result in additional employees being exposed to lead at or above the AL, or may result in employees already exposed at or above the AL being exposed above the PEL. The employer must keep a written record of the determination, including the date, location within the work site, and the name and social security number of each monitored employee.

EMPLOYEE NOTIFICATION OF MONITORING RESULTS

The employer must notify each employee in writing of employee exposure assessment results within five working days of receiving them. Whenever the results indicate that the representative employee exposure, without the use of respirators, is above the PEL, the employer must include a written notice stating that the employee's exposure exceeded the PEL and describing corrective action taken or to be taken to reduce exposure to or below the PEL.

Medical Surveillance

When an employee's airborne exposure is at or above the AL for more than 30 days in any consecutive 12 months, an immediate medical consultation is required when the employee notifies the employer that he or she:

- Has developed signs or symptoms commonly associated with lead-related disease;
- Has demonstrated difficulty in breathing during respirator use or a fit test;
- Desires medical advice concerning the effects of past or current lead exposure on the employee's ability to have a healthy child; and
- Is under medical removal and has a medically appropriate need.

MEDICAL EXAMS

The best indicator of personal lead exposure is through a blood test to indicate elevated blood lead levels. A medical exam must also include:

- Detailed work and medical histories, with particular attention to past lead exposure (occupational and nonoccupational), personal habits (smoking and hygiene), and past gastro-intestinal, hematologic, renal, cardiovascular, reproductive, and neurological problems;
- A thorough physical exam, with particular attention to gums, teeth, hematologic, gastrointestinal, renal, cardiovascular, and neurological systems; evaluation of lung function if respirators are used;
- A blood pressure measurement;
- A blood sample and analysis to determine blood lead level;
  - Hemoglobin and hematocrit determinations, red cell indices, and an exam of peripheral smear morphology; and
  - Zinc protopor-phyrin; blood urea nitrogen; and serum creatinine;
- A routine urinalysis with microscopic exam; and
- Any lab or other test the examining physician deems necessary.

INFORMATION FOR THE EXAMINING PHYSICIAN

The employer must provide all examining physicians with a copy of the lead in construction standard, including all appendices, a description of the affected employee's duties as they relate to the employee's exposure, the employee's lead exposure level or anticipated exposure level, a description of personal protective equipment used or to be used, prior blood lead determinations, and all prior written medical opinions for the employee.

WHEN MONITORING SHOWS NO EMPLOYEE EXPOSURES ABOVE THE AL

Employers must make available, at no cost to the employee, initial medical surveillance for employees exposed to lead on the job at or above the action level on any one day per year. This initial medical surveillance consists of biological monitoring in the form of blood sampling and analysis for lead and zinc protoporyrin (ZPP) levels. In addition, a medical surveillance program with biological monitoring must be made available to any employee exposed at or above the action level for more than 30 days in any consecutive 12 months.

AFTER THE MEDICAL EXAMINATION

Employers must obtain and provide the employee a copy of a written opinion from each examining or consulting physician that contains only information related to occupational exposure to lead and must include:

- Whether the employee has any detected medical condition that would increase the health risk from lead exposure;
- Any special protective measures or limitations on the worker's exposure to lead,
- Any limitation on respirator use; and
- Results of the blood lead determinations.

In addition, the written statement may include a statement that the physician has informed the employee of the results of the consultation or medical examination and any medical condition that may require further examination or treatment.

The employer must instruct the physician that findings, including lab results or diagnoses unrelated to the worker's lead exposure, must not be revealed to the employer or included in the written opinion to the employer. The employer must also instruct the physician to advise employees of any medical condition, occupational or non-occupational, that necessitates further evaluation or treatment. In addition, some states also require laboratories and health care providers to report cases of elevated blood lead concentrations to their state health departments.

Medical Removal Provisions

Temporary medical removal can result from an elevated blood level or a written medical opinion. More specifically, the employer is required to remove from work an employee with a lead exposure at or above the AL each time periodic and follow-up (within two weeks of the periodic test) blood sampling tests indicate that the employee's blood level is at or above 50 µg /dl. The employer also must remove from work an employee with lead exposure at or above the AL each time a final medical determination indicates that the employee needs reduced lead exposure for medical reasons. If the physician who is implementing the employer's medical program makes a final written opinion recommending the employee's removal or other special protective measures, the employer must implement the physician's recommendation.

For an employee removed from exposure to lead at or above the AL due to a blood lead level at or above 50 µg/dl, the employer may return that employee to former job status when two consecutive blood sampling tests indicate that the employee's blood lead level is below 40 µg /dl. For an employee removed from exposure to lead due to a final medical determination, the employee must be returned when a subsequent final medical determination results in a medical finding, determination, or opinion that the employee no longer has a detected medical condition that places the employee at increased risk of lead exposure.

The employer must remove any limitations placed on employees or end any special protective measures when a subse-

quent final medical determination indicates they are no longer necessary. If the former position no longer exists, the employee is returned consistent with whatever job assignment discretion the employer would have had if no removal occurred.

WORKER PROTECTIONS AND BENEFITS

The employer must provide up to 18 months of medical removal protection (MRP) benefits each time an employee is removed from lead exposure or medically limited. As long as the position/job exists, the employer must maintain the earnings, seniority, and other employment rights and benefits as though the employee had not been removed from the job or otherwise medically limited. The employer may condition medical removal protection benefits on the employee's participation in followup medical surveillance.

If a removed employee files a worker's compensation claim or other compensation for lost wages due to a lead-related disability, the employer must continue medical removal protection benefits until the claim is resolved. However, the employer's MRP benefits obligation will be reduced by the amount that the employee receives from these sources. Also, the employer's MRP benefits obligation will be reduced by any income the employee receives from employment with another employer made possible by virtue of the employee's removal.

RECORDS REQUIREMENTS INVOLVING MEDICAL REMOVAL

In the case of medical removal, the employer's records must include:

- The worker's name and social security number,
- The date of each occasion that the worker was removed from current exposure to lead,
- The date when the worker was returned to the former job status,
- A brief explanation of how each removal was or is being accomplished, and
- A statement indicating whether the reason for the removal was an elevated blood lead level.

Recordkeeping

EMPLOYER REQUIREMENTS

The employer must maintain any employee exposure and medical records to document ongoing employee exposure, medical monitoring, and medical removal of workers. This data provides a baseline to evaluate the employee's health properly. Employees or former employees, their designated representatives, and OSHA must have access to exposure and medical records in accordance with 29 CFR 1910.1020. Rules of agency practice and procedure governing OSHA access to employee medical records are found in 29 CFR 1913.10.

EXPOSURE ASSESSMENT RECORDS

The employer must establish and maintain an accurate record of all monitoring and other data used to conduct employee exposure assessments as required by this standard and in accordance with 29 CFR 1910.1020. The exposure assessment records must include:

- The dates, number, duration, location, and results of each sample taken, including a description of the sampling proce-dure used to determine representative employee exposure;
- A description of the sampling and analytical methods used and evidence of their accuracy;
- The type of respiratory protection worn, if any;
- The name, social security number, and job classification of the monitored employee and all others whose exposure the mea-surement represents; and
- Environmental variables that could affect the measurement of employee exposure.

MEDICAL SURVEILLANCE RECORDS

The employer must maintain an accurate record for each employee subject to medical surveillance, including:

- The name, social security number, and description of the employee's duties;
- A copy of the physician's written opinions;

- The results of any airborne exposure monitoring done for the employee and provided to the physician; and
- Any employee medical complaints related to lead exposure.

In addition, the employer must keep or ensure that the examining physician keeps the following medical records:

- A copy of the medical examination results including medical and work history;
- A description of the laboratory procedures and a copy of any guidelines used to interpret the test results; and
- A copy of the results of biological monitoring.

The employer or physician or both must maintain medical records in accordance with 29 CFR 1910.1020.

DOCUMENTS FOR EMPLOYEES SUBJECT TO MEDICAL REMOVAL

The employer must maintain--for at least the duration of employ-ment--an accurate record for each employee subject to medical removal, including:

- The name and social security number of the employee;
- The date on each occasion that the employee was removed from current exposure to lead and the corresponding date which the employee was returned to former job status;
- A brief explanation of how each removal was or is being accomplished; and
- A statement about each removal indicating whether the reason for removal was an elevated blood level.

EMPLOYER REQUIREMENTS RELATED TO OBJECTIVE DATA

The employer must establish and maintain an accurate record documenting the nature and relevancy of objective data relied on to assess initial employee exposure in lieu of exposure monitoring. The employer must maintain the record of objective data relied on for at least 30 years.

DOCUMENTS FOR OSHA AND NIOSH REVIEW

The employer must make all records--including exposure monitor-ing, objective data, medical removal, and medical records--

available upon request to affected employees, former employees, and their designated representatives and to the OSHA Assistant Secretary and the Director of the National Institute for Occupational Safety and Health (NIOSH) for examination and copying in accordance with 29 CFR 1910.1020.

WHEN CLOSING A BUSINESS

When an employer ceases to do business, the successor employer must receive and retain all required records. If no successor is available, these records must be sent to the Director of NIOSH.

Exposure Reduction and Employee Protection

The most effective way to protect workers is to minimize their exposure through engineering controls, good work practices and training, and use of personal protective clothing and equipment, including respirators, where required. The employer needs to designate a competent person capable of identifying existing and predictable lead hazards and who is authorized to take prompt corrective measures to eliminate such problems. The employer should, as needed, consult a qualified safety and health professional to develop and implement an effective worker protection program. These professionals may work independently or may be associated with an insurance carrier, trade organization, or onsite consultation program.

Engineering Controls

Engineering measures include local and general exhaust ventilation, process and equipment modification, material substitution, component replacement, and isolation or automation. Examples of recommended engineering controls that can help reduce worker exposure to lead are described as follows.

EXHAUST VENTILATION

Equip power tools used to remove lead-based paint with dust collection shrouds or other attachments so that paint is exhausted

through a high-efficiency particulate air (HEPA) vacuum system. For operations such as welding, cutting/burning, or heating, use local exhaust ventilation. Use HEPA vacuums during cleanup operations.

For abrasive blasting operations, build a containment structure that is designed to optimize the flow of clean ventilation air past the workers' breathing zones. This will help reduce the exposure to airborne lead and increase visibility. Maintain the affected area under negative pressure to reduce the chances that lead dust will contaminate areas outside the enclosure. Equip the containment structure with an adequately sized dust collector to control emissions of particulate matter into the environment.

ENCLOSURE OR ENCAPSULATION

One way to reduce the lead inhalation or ingestion hazard posed by lead-based paint is to encapsulate it with a material that bonds to the surface, such as acrylic or epoxy coating or flexible wall coverings. Another option is to enclose it using systems such as gypsum wallboard, plywood paneling, and aluminum, vinyl, or wood exterior siding. Floors coated with lead-based paint can be covered using vinyl tile or linoleum.

The building owner or other responsible person should oversee the custodial and maintenance staffs and contractors during all activities involving enclosed or encapsulated lead-based paint. This will minimize the potential for an inadvertent lead release during maintenance, renovation, or demolition.

SUBSTITUTION

Choose materials and chemicals that do not contain lead for construction projects. Among the options are:

- Use zinc-containing primers covered by an epoxy intermediate coat and polyurethane topcoat instead of lead-containing coatings.
- Substitute mobile hydraulic shears for torch cutting under certain circumstances.
- Consider surface preparation equipment such as needle guns with multiple reciprocating needles completely enclosed within an adjustable shroud, instead of abrasive blasting under certain

conditions. The shroud captures dust and debris at the cutting edge and can be equipped with a HEPA vacuum filtration with a self-drumming feature. One such commercial unit can remove lead-based paint from flat steel and concrete surfaces, outside edges, inside corners, and pipes.

- Choose chemical strippers in lieu of hand scraping with a heat gun for work on building exteriors, surfaces involving carvings or molding, or intricate iron work. Chemical removal generates less airborne lead dust. (Be aware, however, that these strippers themselves can be hazardous and that the employer must review the material safety data sheets (MSDSs) for these stripping agents to obtain information on their hazards.)

COMPONENT REPLACEMENT

Replace lead-based painted building components such as windows, doors, and trim with new components free of lead-containing paint. Another option is to remove the paint offsite and then repaint the components with zinc-based paint before replacing them.

PROCESS OR EQUIPMENT MODIFICATION

When applying lead paints or other lead-containing coatings, use a brush or roller rather than a sprayer. This application method introduces little or no paint mist into the air to present a lead inhalation hazard. (Note that there is a ban on the use of lead-based paint in residential housing.)

Use non-silica-containing abrasives such as steel or iron shot/grit sand instead of sand in abrasive blasting operations when practical. The free silica portion of the dust presents a respiratory health hazard.

When appropriate for the conditions, choose blasting techniques that are less dusty than open-air abrasive blasting. These include hydro- or wet-blasting using high-pressure water with or without an abrasive or surrounding the blast nozzle with a ring of water, and vacuum blasting where a vacuum hood for material removal is positioned around the exterior of the blasting nozzle.

When using a heat gun to remove lead-based paints in residential housing units, be sure it is of the flameless electrical softener

type. Heat guns should have electronically controlled temperature settings to allow usage below 700 degrees F. Equip heat guns with various nozzles to cover all common applications and to limit the size of the heated work area.

When using abrasive blasting with a vacuum hood on exterior building surfaces, ensure that the configuration of the heads on the blasting nozzle match the configuration of the substrate so that the vacuum is effective in containing debris.

Ensure that HEPA vacuum cleaners have the appropriate attachments for use on unusual surfaces. Proper use of brushes of various sizes, crevice and angular tools, when needed, will enhance the quality of the HEPA-vacuuming process and help reduce the amount of lead dust released into the air.

ISOLATION

Although it is not feasible to enclose and ventilate some abrasive blasting operations completely, it is possible to isolate many operations to help reduce the potential for lead exposure. Isolation consists of keeping employees not involved in the blasting operations as far away from the work area as possible, reducing the risk of exposure.

Housekeeping and Personal Hygiene

Lead is a cumulative and persistent toxic substance that poses a serious health risk. A rigorous housekeeping program and the observance of basic personal hygiene practices will minimize employee exposure to lead. In addition, these two elements of the worker protection program help prevent workers from taking lead-contaminated dust out of the worksite and into their homes where it can extend the workers' exposures and potentially affect their families' health.

HOUSEKEEPING PRACTICES

An effective housekeeping program involves a regular schedule to remove accumulations of lead dust and lead-containing debris. The schedule should be adapted to exposure conditions at a particular worksite. OSHA's Lead Standard for Construction requires

employers to maintain all surfaces as free of lead contamination as practicable. Vacuuming lead dust with HEPA-filtered equipment or wetting the dust with water before sweeping are effective control measures. Compressed air may not be used to remove lead from contaminated surfaces unless a ventilation system is in place to capture the dust generated by the compressed air.

In addition, put all lead-containing debris and contaminated items accumulated for disposal into sealed, impermeable bags or other closed impermeable containers. Label bags and containers as lead-containing waste. These measures provide additional help in controlling exposure.

PERSONAL HYGIENE PRACTICES

Emphasize workers' personal hygiene such as washing their hands and face after work and before eating to minimize their exposure to lead. Provide and ensure that workers use washing facilities. Provide clean change areas and readily accessible eating areas. If possible, provide a parking area where cars will not be contaminated with lead. These measures:

- Reduce workers' exposure to lead and the likelihood that they will ingest lead,
- Ensure that the exposure does not extend beyond the worksite,
- Reduce the movement of lead from the worksite, and
- Provide added protection to employees and their families.

CHANGE AREAS

The employer must provide a clean change area for employees whose airborne exposure to lead is above the PEL. The area must be equipped with storage facilities for street clothes and a separate area with facilities for the removal and storage of lead-contaminated protective work clothing and equipment. This separation prevents cross contamination of the employee's street and work clothing.

Employees must use a clean change area for taking off street clothes, suiting up in clean protective work clothing, donning respirators before beginning work, and dressing in street clothes after work. No lead-contaminated items should enter this area.

Work clothing must not be worn away from the jobsite. Under no circumstances should lead-contaminated work clothes be laundered at home or taken from the worksite, except to be laundered professionally or for disposal following applicable federal, state, and local regulations.

SHOWERS AND WASHING FACILITIES

When feasible, showers must be provided for use by employees whose airborne exposure to lead is above the permissible exposure limit so they can shower before leaving the worksite. Where showers are provided, employees must change out of their work clothes and shower before changing into their street clothes and leaving the worksite. If employees do not change into clean clothing before leaving the worksite, they may contaminate their homes and automobiles with lead dust, extending their exposure and exposing other members of their household to lead.

In addition, employers must provide adequate washing facilities for their workers. These facilities must be close to the worksite and furnished with water, soap, and clean towels so employees can remove lead contamination from their skin.

Contaminated water from washing facilities and showers must be disposed of in accordance with applicable local, state, or federal regulations.

PERSONAL PRACTICES

The employer must ensure that employees do not enter lunchroom facilities or eating areas with protective work clothing or equipment unless surface lead dust has been removed. HEPA vacuuming and use of a downdraft booth are examples of cleaning methods that limit the dispersion of lead dust from contaminated work clothing.

In all areas where employees are exposed to lead above the PEL, employees must observe the prohibition on the presence and consumption or use of food, beverages, tobacco products, and cosmetics. Employees whose airborne exposure to lead is above the PEL must wash their hands and face before eating, drinking, smoking, or applying cosmetics.

END-OF-DAY PROCEDURES

Employers must ensure that workers who are exposed to lead above the permissible exposure limit follow these procedures at the end of their workday:

- Place contaminated clothes, including work shoes and personal protective equipment to be cleaned, laundered, or disposed of, in a properly labeled closed container.
- Take a shower and wash their hair. Where showers are not provided, employees must wash their hands and face at the end of the workshift.
- Change into street clothes in clean change areas.

Protective Clothing and Equipment

EMPLOYER REQUIREMENTS

Employers must provide workers who are exposed to lead above the PEL or for whom the possibility of skin or eye irritation exists with clean, dry protective work clothing and equipment that are appropriate for the hazard. Employers must provide these items at no cost to employees. Appropriate protective work clothing and equipment used on construction sites includes:

- Coveralls or other full-body work clothing;
- Gloves, hats, and shoes or disposable shoe coverlets;
- Vented goggles or face shields with protective spectacles or goggles;
- Welding or abrasive blasting helmets; and
- Respirators.

Clean work clothing must be issued daily for employees whose exposure levels to lead are above 200 µg/m3, weekly if exposures are above the PEL but at or below 200 µg/m3 or where the possibility of skin or eye irritation exists.

HANDLING CONTAMINATED PROTECTIVE CLOTHING

Workers must not be allowed to leave the worksite wearing lead-contaminated protective clothing or equipment. This is an essential

step in reducing the movement of lead contamination from the workplace into the worker's home and provides added protection for employees and their families.

Disposable coveralls and separate shoe covers may be used, if appropriate, to avoid the need for laundering. Workers must remove protective clothing in change rooms provided for that purpose.

Employers must ensure that employees leave the respirator use area to wash their faces and respirator facepieces as necessary. In addition, employers may require their employees to use HEPA vacuuming, damp wiping, or another suitable cleaning method before removing a respirator to clear loose particle contamination on the respirator and at the face-mask seal.

Place contaminated clothing that is to be cleaned, laundered, or disposed of by the employer in closed containers. Label containers with the warning: "Caution: Clothing contaminated with lead. Do not remove dust by blowing or shaking. Dispose of lead-contaminated wash water in accordance with applicable local, state, or federal regulations."

Workers responsible for handling contaminated clothing, including those in laundry services or subcontractors, must be informed in writing of the potential health hazard of lead exposure. At no time shall lead be removed from protective clothing or equipment by brushing, shaking, or blowing. These actions disperse the lead into the work area.

PREVENTING HEAT STRESS

Workers wearing protective clothing, particularly in hot environments or within containment structures, can face a risk from heat stress if proper control measures are not used.

Heat stress is caused by several interacting factors, including environmental conditions, type of protective clothing worn, the work activity required and anticipated work rate, and individual employee characteristics such as age, weight, and fitness level. When heat stress is a concern, the employer should choose lighter, less insulating protective clothing over heavier clothing, as long as

it provides adequate protection. Other measures the employer can take include: discussing the possibility of heat stress and its signs and symptoms with all workers; using appropriate work/rest regimens; and providing heat stress monitoring that includes measuring employees' heart rates, body temperatures, and weight loss. Employers must provide a source of water or electrolyte drink in a non-contaminated eating and drinking area close to the work area so workers can drink often throughout the day. Workers must wash their hands and face before drinking any fluid if their airborne exposure is above the PEL.

Respiratory Protection

Although engineering and work practice controls are the primary means of protecting workers from exposure to lead, source control at construction sites sometimes is insufficient to control exposure. In these cases, airborne lead concentrations may be high or may vary widely. Respirators often must be used to supplement engineering controls and work practices to reduce worker lead exposures below the PEL. When respirators are required, employers must provide them at no cost to workers.

The standard requires that respirators be used during periods when an employee's exposure to lead exceeds the PEL, including

- Periods necessary to install or implement engineering or work practice controls, and
- Work operations for which engineering and work practice controls are insufficient to reduce employee exposures to or below the PEL.

Respirators also must be provided upon employee request. A requested respirator is included as a requirement to provide increased protection for those employees who wish to reduce their lead burden below what is required by the standard, particularly if they intend to have children in the near future. In addition, respirators must be used when performing previously indicated high exposure or "trigger" tasks, before completion of the initial assessment.

PROVIDING ADEQUATE RESPIRATORY PROTECTION

Before any employee first starts wearing a respirator in the work environment, the employer must perform a fit test. For all employees wearing negative or positive pressure tight-fitting facepiece respirators, the employer must perform either qualitative or quantitative fit tests using an OSHA-accepted fit testing protocol. In addition, employees must be fit tested whenever a different respirator facepiece is used, and at least annually thereafter.

Where daily airborne exposure to lead exceeds 50 µg/m3, affected workers must don respirators before entering the work area and should not remove them until they leave the high-exposure area or have completed a decontamination procedure. Employers must assure that the respirator issued to the employee is selected and fitted properly to ensure minimum leakage through the facepiece-to-face seal.

RESPIRATORY PROTECTION PROGRAMS

When respirators are required at a worksite, the employer must establish a respiratory protection program in accordance with the OSHA standard on respiratory protection, 29 CFR 1910.134. At a minimum, an acceptable respirator program for lead must include:

- Procedures for selecting respirators appropriate to the hazard;
- Fit testing procedures;
- Procedures for proper use of respirators in routine and reasonably foreseeable emergency situations, including cartridge change schedules;
- Procedures and schedules for cleaning, disinfecting, storing, inspecting, repairing, discarding, and otherwise maintaining respirators;
- Training of employees in the respiratory hazard to which they are potentially exposed during routine and emergency situations;
- Training of employees in the proper use of respirators, including putting on and removing them, any limitations of their use, and their maintenance;

- Procedures for regularly evaluating the effectiveness of the program;
- Procedures to ensure air quality when supplied air is used;
- A written program and designation of a program administrator; and
- Recordkeeping procedures.

In addition, the construction industry lead standard stipulates medical evaluations of employees required to use respirators.

If an employee has difficulty in breathing during a fit test or while using a respirator, the employer must make a medical examination available to that employee to determine whether he or she can wear a respirator safely.

SELECTING A RESPIRATOR

The employer must select the appropriate respirator from Table 1 of the lead standard, 29 CFR 1926.62(f)(3)(i). The employer must provide a powered air-purifying respirator when an employee chooses to use this respirator and it will provide the employee adequate protection. A NIOSH-certified respirator must be selected and used in compliance with the conditions of its certification. In addition, if exposure monitoring or experience indicates airborne exposures to contaminants other than lead such as silica, solvents, or polyurethane coatings, these exposures must be considered when selecting respiratory protection.

Select type CE respirators approved by NIOSH for abrasive blasting operations. Currently, there are two kinds of CE respirators with the following assigned protection factors (APFs): a continuous-flow respirator with a loose-fitting hood, APF 25; and a full facepiece supplied-air respirator operated in a positive-pressure mode, APF 2,000. (Note: OSHA recognizes Bullard Helmets, Models 77 and 88 (1995); Clemco Appollo, Models 20 and 60 (1997); and 3M Model 8100 (1998) as having APFs of 1,000.)

For any airline respirator, it is important to follow the manufacturer's instructions regarding air quality, air pressure, and inside diameter and length of hoses. Be aware that using longer hoses or smaller inside diameter hoses than the manufacturer specifies or

hoses with bends or kinks may reduce or restrict the airflow to a respirator.

Employee Information and Training

The employer must inform employees about lead hazards according to the requirement of OSHA's Hazard Communication standard for the construction industry, 29 CFR 1926.59, including--but not limited to--the requirements for warning signs and labels, material safety data sheets (MSDSs), and employee information and training. (Refer to 29 CFR 1910.1200.)

PROGRAM REQUIREMENTS

Employers must institute an information and training program and ensure that all employees subject to exposure to lead or lead compounds at or above the action level on any day participate. Also covered under information and training are employees who may suffer skin or eye irritation from lead compounds. Initial training must be provided before the initial job assignment. Training must be repeated at least annually and, in brief summary, must include:

- The content of the OSHA lead standard and its appendices;
- The specific nature of operations that could lead to lead expo-sure above the action level;
- The purpose, proper selection, fit, use, and limitations of respirators;
- The purpose and a description of the medical surveillance program, and the medical removal protection program;
- Information concerning the adverse health effects associated with excessive lead exposure;
- The engineering and work practice controls associated with employees' job assignments;
- The contents of any lead-related compliance plan in effect;
- Instructions to employees that chelating agents must not be used routinely to remove lead from their bodies and when necessary only under medical supervision and at the direction of a licensed physician; and

- The right to access records under "Access to Employee Exposure and Medical Records," 29 CFR 1910.1020.

All materials relating to the training program and a copy of the standard and its appendices must be made readily available to all affected employees.

WARNING SIGNS

Employers are required to post these warning signs in each work area where employee exposure to lead is above the PEL:

- WARNING
- LEAD WORK AREA
- POISON
- NO SMOKING OR EATING

All signs must be well lit and kept clean so that they are easily visible. Statements that contradict or detract from the signs' meaning are prohibited. Signs required by other statutes, regulations, or ordinances, however, may be posted in addition to, or in combination with, this sign.

OSHA Assistance, Services, and Products

OSHA can provide extensive help through a variety of programs, including assistance about safety and health programs, state plans, workplace consultations, voluntary protection programs, strategic partnerships, alliances, and training and education. An overall commitment to workplace safety and health can add value to your business, to your workplace, and to your life.

How does safety and health management system assistance help employers and employees?

Working in a safe and healthful environment can stimulate innovation and creativity and result in increased performance and higher productivity. The key to a safe and healthful work environment is a comprehensive safety and health management system.

OSHA has electronic compliance assistance tools, or eTools, on its website that walks users through the steps required to develop a

comprehensive safety and health program. The eTools are posted at www.osha.gov, and are based on guidelines that identify four general elements critical to a successful safety and health management system:

- Management leadership and employee involvement,
- Worksite analysis,
- Hazard prevention and control, and
- Safety and health training.

STATE PROGRAMS

The Occupational Safety and Health Act of 1970 (OSH Act) encourages states to develop and operate their own job safety and health plans. OSHA approves and monitors these plans and funds up to 50 percent of each program's operating costs. State plans must provide standards and enforcement programs, as well as voluntary compliance activities, that are at least as effective as federal OSHA's.

Currently, 26 states and territories have their own plans. Twenty-three cover both private and public (state and local government) employees and three states, Connecticut, New Jersey, and New York, cover only the public sector. For more information on state plans, see the list at the end of this publication, or visit OSHA's website at www.osha.gov.

CONSULTATION ASSISTANCE

Consultation assistance is available on request to employers who want help establishing and maintaining a safe and healthful workplace. Funded largely by OSHA, the service is provided at no cost to small employers and is delivered by state authorities through professional safety and health consultants.

SAFETY AND HEALTH ACHIEVEMENT RECOGNITION PROGRAM

Under the consultation program, certain exemplary employers may request participation in OSHA's Safety and Health Achievement Recognition Program (SHARP). Eligibility for participation includes, but is not limited to, receiving a full-service, compre-

hensive consultation visit, correcting all identified hazards, and developing an effective safety and health management system.

Employers accepted into SHARP may receive an exemption from programmed inspections (not complaint or accident investigation inspections) for 1 year initially, or 2 years upon renewal. For more information about consultation assistance, see the list of consultation projects at the end of this publication.

VOLUNTARY PROTECTION PROGRAMS

Voluntary Protection Programs (VPP) are designed to recognize outstanding achievements by companies that have developed and implemented effective safety and health management programs. There are three VPP programs: Star, Merit, and Demonstration. All are designed to

- Recognize who that have successfully developed and implemented effective and comprehensive safety and health management programs;
- Encourage these employers to continuously improve their safety and health management programs;
- Motivate other employers to achieve excellent safety and health results in the same outstanding way; and
- Establish a cooperative relationship between employers, employees, and OSHA.

VPP participation can bring many benefits to employers and employees, including fewer worker fatalities, injuries, and illnesses; lost-workday case rates generally 50 percent below industry averages; and lower workers' compensation and other injury- and illness-related costs. In addition, many VPP sites report improved employee motivation to work safely, leading to a better quality of life at work; positive community recognition and interaction; further improvement and revitalization of already-good safety and health programs; and a positive relationship with OSHA.

After a site applies for the program, OSHA reviews an employer's VPP application and conducts a VPP onsite evaluation to verify that the site's safety and health management programs are

operating effectively. OSHA conducts onsite evaluations on a regular basis.

Sites participating in VPP are not scheduled for regular, programmed inspections. OSHA does, however, handle any employee complaints, serious accidents, or significant chemical releases that may occur at VPP sites according to routine enforcement procedures.

Additional information on VPP is available from OSHA regional offices listed at the end of this booklet. Also, see "Cooperative Programs" on OSHA's website.

COOPERATIVE PARTNERSHIPS

OSHA has learned firsthand that voluntary, cooperative partnerships with employers, employees, and unions can be a useful alternative to traditional enforcement and an effective way to reduce worker deaths, injuries, and illnesses. This is especially true when a partnership leads to the development and implementation of a comprehensive workplace safety and health management system.

ALLIANCE PROGRAM

Alliances enable organizations committed to workplace safety and health to collaborate with OSHA to prevent injuries and illnesses in the workplace. OSHA and its allies work together to reach out to, educate, and lead the nation's employers and their employees in improving and advancing workplace safety and health.

Alliances are open to all, including trade or professional organizations, businesses, labor organizations, educational institutions, and government agencies. In some cases, organizations may be building on existing relationships with OSHA through other cooperative programs.

There are few formal program requirements for alliances, which are less structured than other cooperative agreements, and the agreements do not include an enforcement component. However, OSHA and the participating organizations must define, implement, and meet a set of short- and long-term goals that fall into three categories: training and education; outreach and communication; and promotion of the national dialogue on workplace safety and health.

STRATEGIC PARTNERSHIP PROGRAM

OSHA Strategic Partnerships are agreements among labor, management, and government to improve workplace safety and health. These partnerships encourage, assist, and recognize the efforts of the partners to eliminate serious workplace hazards and achieve a high level of worker safety and health. Whereas OSHA's Consultation Program and VPP entail one-on-one relationships between OSHA and individual worksites, most strategic partnerships build cooperative relationships with groups of employers and employees.

For more information about this program, contact your nearest OSHA office or visit our website.

OCCUPATIONAL SAFETY AND HEALTH TRAINING

The OSHA Training Institute in Arlington Heights, Ill., provides basic and advanced training and education in safety and health for federal and state compliance officers, state consultants, other federal agency personnel, and private-sector employers, employees, and their representatives.

TRAINING GRANTS

OSHA awards grants to nonprofit organizations to provide safety and health training and education to employers and workers in the workplace. Grants often focus on high-risk activities or hazards or may help nonprofit organizations in training, education, and outreach.

OSHA expects each grantee to develop a program that addresses a safety and health topic named by OSHA, recruit workers and employers for the training, and conduct the training. Grantees are also expected to follow up with students to find out how they applied the training in their workplaces.

For more information contact OSHA Office of Training and Education, 2020 Arlington Heights Rd., Arlington Heights, IL 60005; or call (847) 297-4810.

OSHA
www.osha.gov

OTHER ASSISTANCE MATERIALS

OSHA has a variety of materials and tools on its website at www.osha.gov. These include eTools such as Expert Advisors and Electronic Compliance Assistance Tools, information on specific health and safety topics, regulations, directives, publications, videos, and other information for employers and employees.

OSHA also has an extensive publications program. For a list of items, visit OSHA's website at www.osha.gov or contact the OSHA Publications Office, U.S. Department of Labor, 200 Constitution Avenue, NW, N-3101, Washington, DC 20210. Telephone (202) 693-1888 or fax to (202) 693-2498.

In addition, OSHA's CD-ROM includes standards, interpretations, directives, and more. It is available for sale from the U.S. Government Printing Office. To order, write to the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402, or phone (202) 512-1800.

IN CASE OF AN EMERGENCY OR TO FILE A COMPLAINT

To report an emergency, file a complaint, or seek OSHA advice, assistance, or products, call (800) 321-OSHA or contact your nearest OSHA regional office listed at the end of this publication. The teletypewriter (TTY) number is (877) 889-5627.

Employees can also file a complaint online and get more information on OSHA federal and state programs by visiting OSHA's website at www.osha.gov.

OSHA Regional Offices

Region I
(CT,* ME, MA, NH, RI, VT*)
Boston, MA 02203
(617) 565-9860

Region II
(NJ,* NY,* PR,* VI*)
201 Varick Street, Room 670
New York, NY 10014
(212) 337-2378

Region III
(DE, DC, MD,* PA,* VA,* WV)
The Curtis Center
170 S. Independence Mall West
Suite 740 West
Philadelphia, PA 19106-3309
(215) 861-4900

Region IV
(AL, FL, GA, KY,* MS, NC,* SC,* TN*)
Atlanta Federal Center
61 Forsyth Street SW, Room 6T50
Atlanta, GA 30303
(404) 562-2300

Region V
(IL, IN,* MI,* MN,* OH, WI)
230 South Dearborn Street,
Room 3244
Chicago, IL 60604
(312) 353-2220

Region VI
(AR, LA, NM,* OK, TX)
525 Griffin Street, Room 602
Dallas, TX 75202
(214) 767-4731 or 4736 x224

Region VII
(IA,* KS, MO, NE)
City Center Square
1100 Main Street, Suite 800
Kansas City, MO 64105
(816) 426-5861

Region VIII
(CO, MT, ND, SD, UT,* WY*)
1999 Broadway, Suite 1690
PO Box 46550
Denver, CO 80202-5716
(303) 844-1600

Region IX
(American Samoa, AZ,* CA,* HI, NV,* Northern Mariana Islands)
71 Stevenson Street, Room 420
San Francisco, CA 94105
(415) 975-4310

Region X
(AK,* ID, OR,* WA*)
1111 Third Avenue, Suite 715
Seattle, WA 98101-3212
(206) 553-5930

*These states and territories operate their own OSHA-approved job safety and health programs (Connecticut, New Jersey, and New York plans cover public employees only). States with approved programs must have a standard that is identical to, or at least as effective as, the federal standard.

Note: To get contact information for OSHA Area Offices, OSHA-approved state plans, and OSHA Consultation Projects, please visit us online at www.osha.gov or call us at (800) 321-OSHA.

APPENDIX E

Analytical Information

SPECTRA Laboratories

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850 • Fax (253) 572-9838

11/09/2004

Dessert Creek LLC
PO Box 1900
Eatonville, WA 98328
Attn: Chad Gilliardi

P.O.#:	PD CC 006557
Project:	Ottinger
Client ID:	Wall
Sample Matrix:	Soil
Date Sampled:	10/27/2004
Date Received:	10/27/2004
Spectra Project:	2004100379
Spectra Number:	1

Analyte	Result	Units	Method
TCLP Lead	0.38	mg/L	SW846 6010B
pH	7.55	pH Units	SW846 9045

SPECTRA LABORATORIES

for
Steve Hibbs, Laboratory Manager
as/mlh

ERTS 620837, Pioneer Museum
Photos taken by S. Bell, 05.10.11

1. Burned house located near the NW corner of the site.

2. Storage building where drums are located.

3. Inside the storage building, view towards the SW corner of the former building footprint.

4. Looking into the doors of the storage building; drums are visible on the right, with a 5 gallon container visible in the entrance. Doors are located on the east side of the building.

ERTS 620837, Pioneer Museum
Photos taken by S. Bell, 05.10.11

5. 5 gallon container visible in doorway

6. Leakage is visible around bottom of container, as well as a heavily stained area to the south (left)..

7. Closeup of leaking 5 gallon container; contents appear to be grease.

8. Closeup of stained area south of drum, on the inside of the doors to the building.

ERTS 620837, Pioneer Museum
Photos taken by S. Bell, 05.10.11

9. Drums stored inside building, view to north

10. Same drums, view towards northwest corner of building.

11. Same drums, view towards northeast corner of building.

12. Same drums, view towards east/southeast; note doors to building in background.

ERTS 620837, Pioneer Museum
Photos taken by S. Bell, 05.10.11

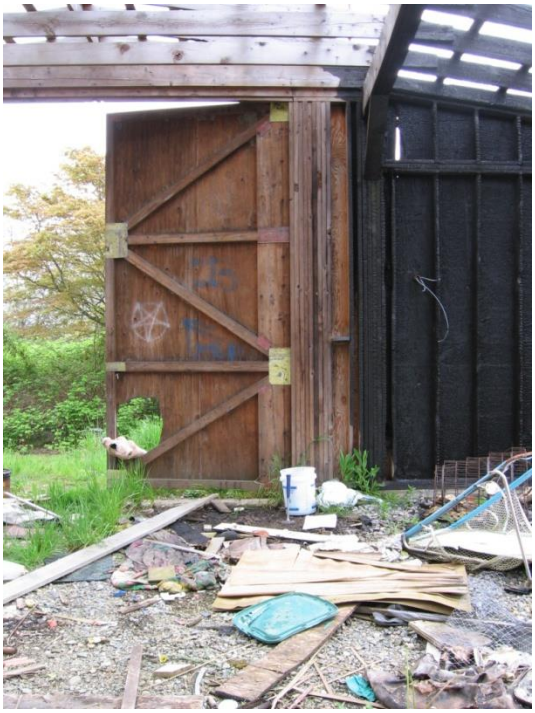
13. Same drums, view along east side of drum storage towards the south; note stained area on ground around drums.

14. Same group of drums; this photo shows a drum with the top cut off, exposed to rain, overflowing, located in the SW corner of the group of drums..

15. Sample locations are noted. View is looking towards the drums from the interior of the building, with the north wall in the background.

16. Sample S1-00-051011 collected near the east wall, and the interior edge of the south door.

ERTS 620837, Pioneer Museum
Photos taken by S. Bell, 05.10.11



17. General sample location of S1-00-051011 indicated by the 5 gallon bucket.

18. Sample location of S2-00-051011, in the stained area adjacent to a leaking drum in the SE corner of the drum group. Note the material hardened on the side of the drum and emanating from a hole now plugged.

19. Photo depicts surface soil held together by sticky material at this location.

20. General sample location for S2-00-051011.

ERTS 620837, Pioneer Museum
Photos taken by S. Bell, 05.10.11

21. General sample location for sample S3-00-051011.

22. Sample location for S3-00-051011.