

HARTNETT REAL ESTATE LLC DEVELOPMENT

REMEDIAL ACTION REPORT FOR LEAD- AND ARSENIC- CONTAMINATED FORMER ORCHARD SOILS

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Remedial Action Report

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Site Name: Hartnett Real Estate LLC Development

Site Address: 270 E Penny Road
Wenatchee, WA 98801

Alternate Location Info: Parcel #232021430210;
47.466 N Lat. / -120.331 W Long.
T 23 N, R 20 EWM, Section 21, Quarter Section SE

Ecology Facility Site ID No: **To Be Assigned**

Voluntary Cleanup Program Project No: To Be Assigned

Order No: N/A

Consent Decree No: N/A

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Executive Summary

This report summarizes the conversion of former orchard lands to commercial development on parcel #232021430210 within the City of Wenatchee in Chelan County, WA. The project site is located at 270 E Penny Road. The applicant has developed the parcel with an automotive repair business. During the preliminary permitting of the business, it was determined that the subject parcel is mapped as former orchard lands on the Ecology Dirt Alert online mapping tool. Initial testing of the site by Ecology staff confirmed that the parcel contained surface soils contaminated with lead and arsenic levels above the Model Toxics Control Act (MTCA) Method A cleanup levels and remediation was required during development (See Attachment A/Form 1 for initial Ecology testing results).

This document serves as the contaminated soils Remedial Action Report (Report) for the management of lead and arsenic soils on the parcel. The applicant has utilized the Ecology model remedies for former orchard lands, as described in *Model Remedies for Cleanup of Former Orchard Properties in Central and Eastern Washington July 2021*; publication 21-09-006, to manage lead and arsenic soils at the site. Primarily, lead and arsenic surface soils have been left onsite. Deep excavation to clean soils occurred on the northern half of the parcel during initial site preparation. Approximately 1,000 cu. yards of clean soils were excavated from below the clean soil horizon, stockpiled, and lab tested before being exported off-site for storage prior to reuse in soft capping of landscaping areas, consistent with publication 21-09-009 methodologies for sampling and testing stockpiles. Excess dirty soils generated through grading were used to back-fill the 1,000-cu. yd excavation before final site grading occurred. This eliminated the need for off-site export of dirty soils. The parcel was then hard capped with buildings, concrete, and paved surfaces. Landscaping areas around the perimeter of the parcel were soft capped with a marker material and topped with more than 6 inches of clean soils from the deep excavation stockpile. The clean soil stockpile was lab tested a second time before being used for the soft cap. Institutional controls were utilized and an environmental covenant prepared by Ecology will be recorded with the Auditor's office indicating that lead and arsenic soils are present on the site. The applicant has also completed the Ecology Commercial Self Certification Form. The project site and remediation are discussed in detail below.

1 Introduction

The applicant has developed former orchard lands on parcel #232021430210 at 270 E Penny Road within the City of Wenatchee, WA. The applicant has developed the parcel with an automotive repair business. During the preliminary permitting of the business, it was determined that the subject parcel is mapped as former orchard lands on the Ecology Dirt Alert online mapping tool. Initial testing of the site by Ecology staff confirmed that the parcel contains surface soils contaminated with lead and arsenic levels above the Model Toxics Control Act (MTCA) Method A cleanup levels and remediation was required as part of site development (See Attachment A/Form 1 for initial Ecology testing results). In order to move forward with the development of the property, the applicant has developed this Report to appropriately manage the lead and arsenic soils identified at the site. For the purpose of this project, it was assumed that all surface soils at the site were contaminated with lead and arsenic levels above MTCA Method A clean up levels. Site remediation focused on managing all surface soils on the parcel under the Ecology Model Remedy guidance for former orchard lands.

Grette Associates, LLC has prepared this Remedial Action Report (Report) on behalf of the applicant to present the remediation actions conducted at the Hartnett site within the City of Wenatchee, WA for the management of lead and arsenic surface soils associated with former orchard lands. This Report was developed to meet the requirements of the MTCA Cleanup Regulation (WAC 173-340) and utilized the Ecology *Model Remedies for Cleanup of Former Orchard Properties in Central and Eastern Washington July 2021*; publication 21-09-006 to manage lead and arsenic soils at the site. This Report summarizes the pre-development and post-development site conditions, environmental reports prepared for the site, and the scope of work for completing the proposed remediation action. The applicant has enrolled in the Ecology VCP program and is requesting a No Further Action opinion from Ecology based on these actions.

1.1 Site Information

The project site is comprised of parcel #232021430210 located at 270 E Penny Road on the north side of the City of Wenatchee, WA. The parcel is 0.9 acres in size and is rectangular in shape. E Penny Road is located along the southern property line. A shared driveway is present along the eastern property line. The parcel is zoned North Wenatchee Business District (NWBD). Prior to the start of the project, the parcel was undeveloped. No commercial orchard was present on the parcel. The property consisted of mowed weedy herbaceous species and grasses. The property is surrounded to the north, east and south by commercial and industrial development. The property to the west is currently undeveloped and comprised of mowed weedy herbaceous species and grasses.



Figure 1. Vicinity Map of the subject parcel.

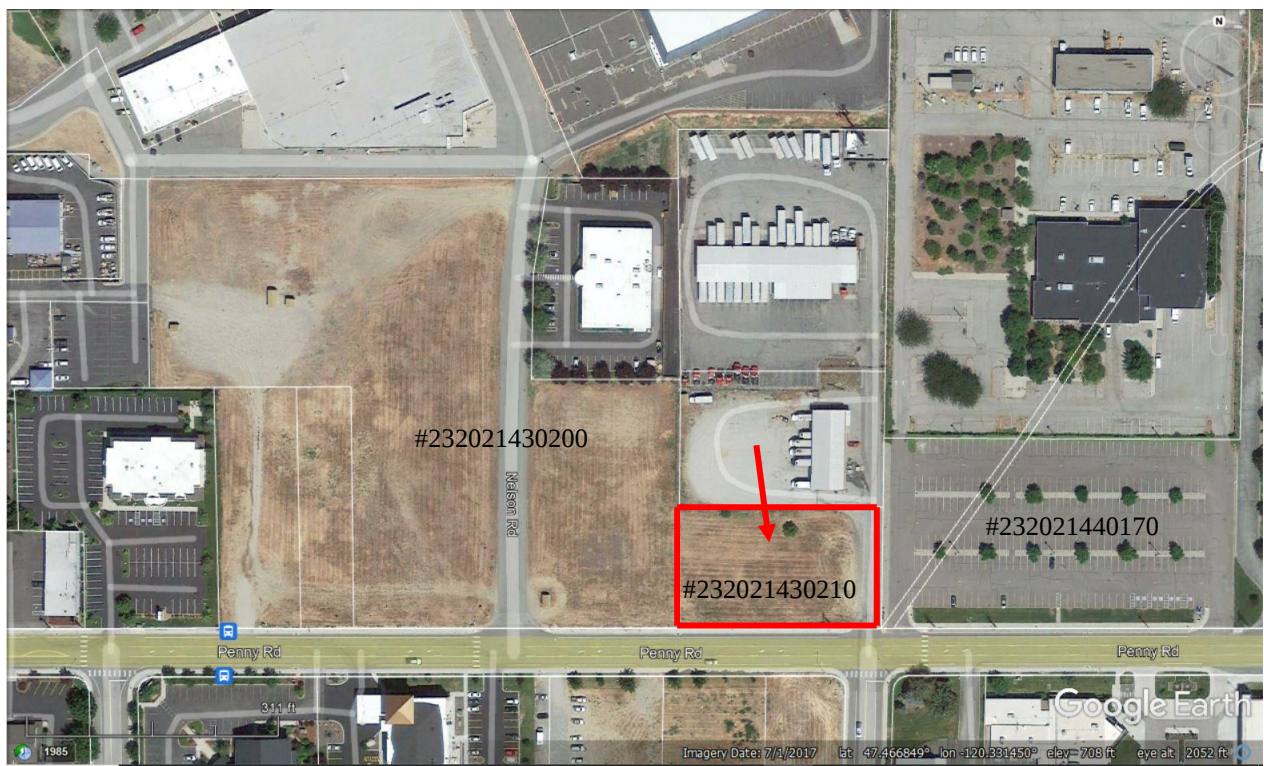


Figure 2. Map of subject parcel and the surrounding parcels.

1.2 Site History

Historically, the parcel had been utilized as commercial orchard prior to 1991. A review of aerial photography of the site indicates that the parcel was cleared of orchard sometime between July of 1991 and August of 1998. Based on the Ecology Dirt Alert online mapping tool, the subject parcel may have been in commercial orchard production when lead arsenate was still utilized as a pesticide (1890-1950). Results posted on Dirt Alert are from initial site sampling by Ecology on May 10, 2022. Initial Ecology sampling results are included as Attachment A. Initial sampling results indicated that surface soils are contaminated with lead and arsenic above MTCA Method A cleanup levels. For the purpose of this project, it was assumed that all surface soils on the parcel were contaminated and required remediation based on the initial Ecology sampling data.



Figure 3. Dirt Alert mapping of the subject parcel; Arsenic results.

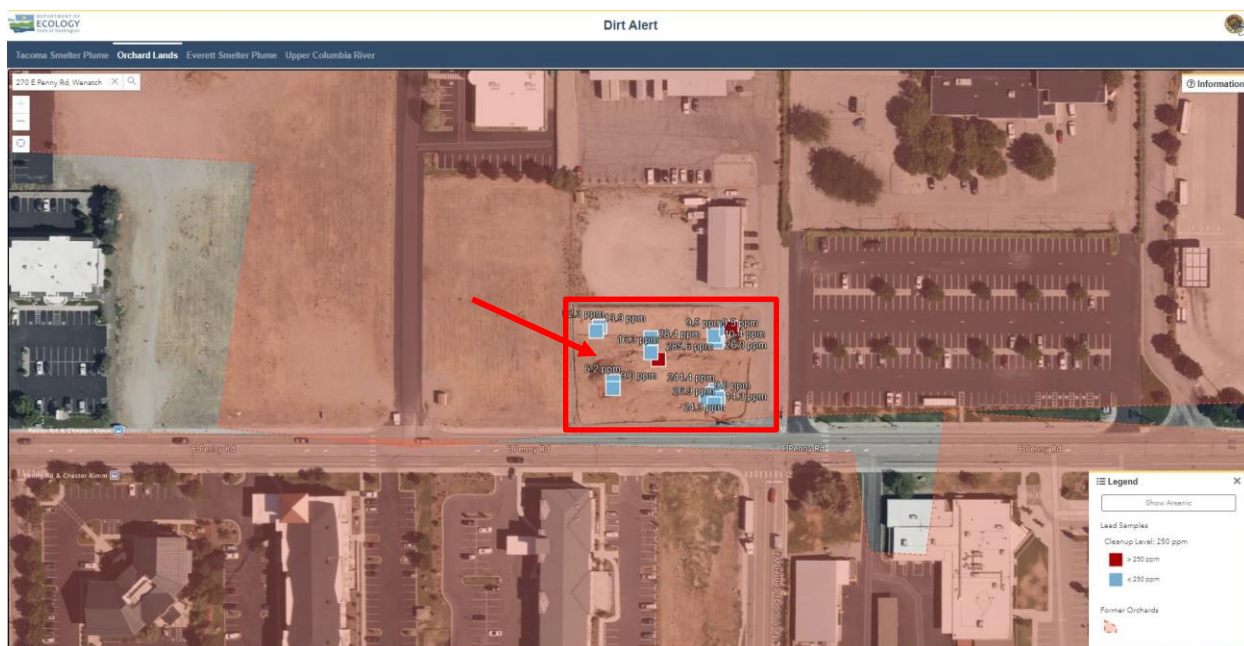


Figure 4. Dirt Alert mapping of the subject parcel; Lead results.

1.3 Site Geology

According to the USDA NRCS Websoil Survey (www.websoilsurvey.nrcs.usda.gov), the parcel is mapped as containing Burch fine sandy loam, 3 to 8 percent slopes (BuB) and Cashmere sandy loam, 3 to 8 percent slopes (CaB). Burch fine sandy loam is formed on terraces from alluvium derived from sandstone. A typical profile contains fine sandy loam from 0-8 inches and loam from 8-60 inches. Depth to the water table is listed as more than 80 inches. Depth to a restrictive layer is listed as more than 80 inches. The soil is not considered hydric in Chelan County. Cashmere sandy loam is formed on terraces and alluvial fans from glaciofluvial deposits. A typical profile contains sandy loam from 0-60 inches. Depth to the water table is listed as more than 80 inches. Depth to a restrictive layer is listed as more than 80 inches. The soil is not considered hydric in Chelan County.

According to Chelan County GIS, the site is not mapped as containing erosive soils or other known geo-hazard areas.

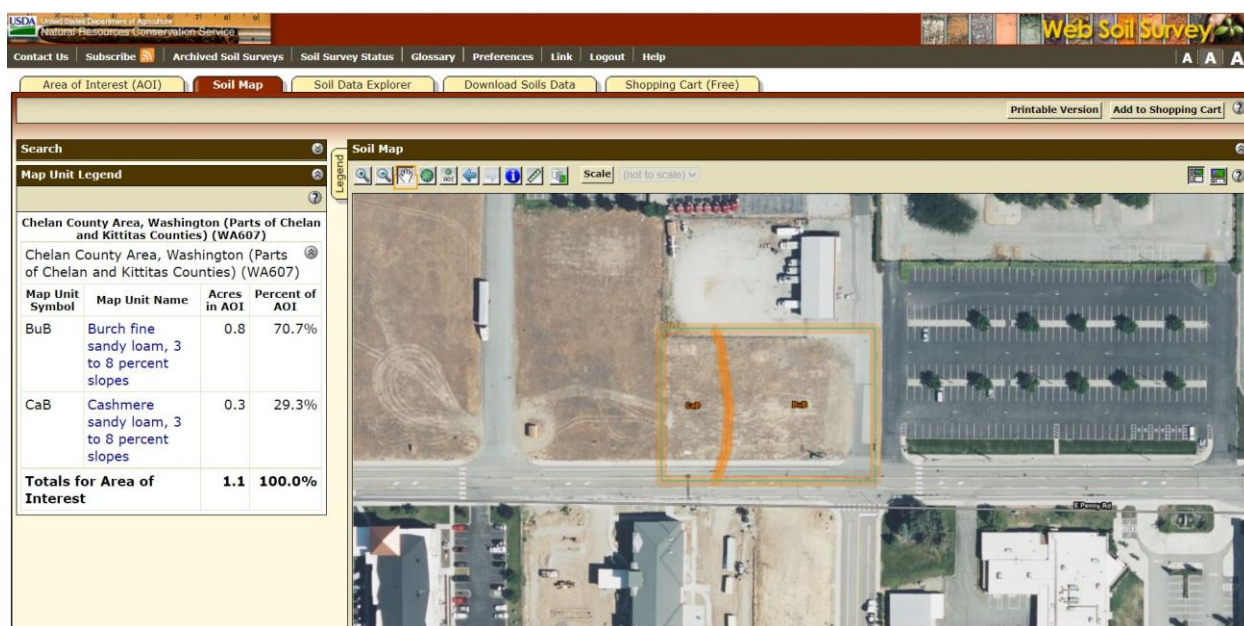


Figure 5. USDA NRCS soil mapping of the subject parcel.

1.4 Site Hydrology

Groundwater was not encountered near the ground surface at the site. The parcel sits on a flat terrace, along with the neighboring parcels. There are no surface water features located within the vicinity of the site. It is anticipated based on publicly available well records that static water is present approximately 85 ft below the ground surface. According to the USFWS National Wetlands Inventory, no wetlands are mapped within the vicinity of the subject parcel. According to the Washington Department of Natural Resources Forest Practices Application Mapping Tool, no surface hydrology is located on the subject parcel. An unknown stream is mapped on the parcel to the east. Aerial photo analysis does not show any indications that a stream is present in the vicinity of the site and the WDNR stream location is currently comprised of a paved parking lot.

1.5 Previous Environmental Investigations

The site was sampled by the Department of Ecology on May 10, 2022 (Excel data from initial Ecology sampling is included as Attachment A/Form 1). Soils at the site were sampled by Jeff Newschwander using an XRF analyzer to determine if lead and arsenic contamination was present in surface soils. Sampling occurred across the site and Ecology sampling results were uploaded to EIM and the Dirt Alert website (Figures 3 and 4). Based on data gathered during the Ecology site visit, it was determined that lead and arsenic contaminated surface soils were present intermittently across the parcel. For the purpose of this project, it was assumed that all surface soils were contaminated and would be remediated utilizing the Model Remedy. Given this assumption, no further site characterization sampling was undertaken by the client.

1.6 Site Work and Follow-up Testing

Following the initial surface soil sampling by Ecology, the applicant arranged for the excavation of test pits along the north property line to determine the depth of lead and arsenic soil contamination at the site. Grette Associates, LLC was contracted to perform additional XRF testing during the depth investigation. The depth investigation occurred on August 1, 2022. Seven (7) test pits were dug to a depth between 24 and 40 inches from east to west along the north edge of the property on the morning of August 1st (Sheet 1; Photographs 1-2). Based on XRF results it was determined that the depth of contaminated soils ranged from 15 inches to 40 inches below grade depending on location; with most of the contaminated soils terminating a depth of 24 inches below grade.

On the afternoon of August 1st an excavator removed the top 24 inches of contaminated soil in an approximate 30 ft wide by 200 ft long trench from east to west across the parcel and stockpiled the dirty soils on the center of the property. Grette Associates performed an additional XRF compliance testing at 20 sampling locations within the trench to determine if excavation to a clean soil horizon had been achieved. Of the 20 sampling locations, 10 had been adequately excavated to clean soils and 10 required additional excavation. Based on this information, additional excavation to a depth of 30 inches below grade occurred in the trench in order to ubiquitously reach the horizon of clean soils along the northern property line.

On August 3, 2022 the 30-inch-deep excavated trench was compliance tested utilizing an XRF at the 20 fixed sampling locations. Results of the compliance testing are included as Attachment B. It was determined that clean soils had been reached at 30 inches in depth below grade at 16 of the 20 sampling locations. Four sampling locations did not pass the XRF compliance sampling at 30 inches in depth for arsenic only and include Sample 3, Sample 6, Sample 9, and Sample 10 (Sheet 2). However, the average arsenic level of the 20 compliance samples was 12 ppm (assuming 5 ppm for non-detect samples per the detection limit of the Olympus Vanta XRF) and was within the 20 ppm MTCA Method A clean up levels. Based on this information, it was assumed that deep clean soil excavation at the site could begin.

Approximately 1,000 cu. yards of deep clean soil was excavated from below the clean soil horizon at 30 inches below grade (Sheet 3). The deep clean soil excavation measured approximately 150 ft long, 18 ft wide, and 10 ft deep from the bottom of the trench. This soil was stockpiled separate from contaminated soils at the site (Photograph 4). 14 composite samples were collected over two sampling events from the deep clean soils stockpile. The composite samples were sent to Cascade Analytical for verification that soils in the clean stockpile tested below prescribed MTCA Method

A clean up levels (discussed below). Clean soil stockpile lab results are included as Attachment C/Form 3 and Form 8. All 14 lab-tested composite samples of the excavated clean soils were below MTCA Method A clean up levels.

The clean soils from the deep excavation were exported off site and stored for future re-use as soft capping material in the landscaping areas on the property. Following export of the clean soils, the 1,000-cu yd clean soil excavation area and exploratory trench were back-filled with contaminated surface soils from across the parcel (Sheet 4). Although no testing of the fill material occurred, contamination levels of the dirty fill material is expected to correspond with the initial Ecology testing results included as Attachment A.

Before being utilized in the soft cap, the exported clean soils stockpile was lab tested a second time to verify compliance before use as a soft cap. Four composite samples from the clean soil stockpile were sent to the lab for verification. All four samples from the clean soil stockpile tested below prescribed MTCA Method A clean up levels. The clean soils stockpile lab results are included as Attachment D/Form 3 and Form 9.

1.7 Other Site Information

No additional site information is available.

2 Proposed Remediation Standards

Based on the information gathered in the field, it was determined that remediation would focus on managing historic lead and arsenic orchard soils across the entire parcel. Because of the relatively low hazard resulting from lead and arsenic soils on historic orchard land, the MTCA Method A remediation level is appropriate for the site, based on existing and future land use. Per WAC 173-340 Table 740-1, MTCA Method A remediation levels for lead and arsenic for unrestricted land uses are as follows:

Hazardous Substance	CAS Number	Cleanup Level	PPM Conversion
Arsenic	7440-38-2	20 mg/kg	20 ppm
Lead	7439-92-1	250 mg/kg	250 ppm

Table 1. Summarized remediation level values for lead and arsenic from WAC 173-340 Table 740-1.

These levels are considered conservative remediation levels for sites undergoing routine remediation actions with relatively few hazardous substances that also qualify for an exemption from conduction of a simplified or site-specific Terrestrial Ecological Evaluation (TEE). Such is the case for the subject parcel.

3 Remediation Design

The remediation plan for the site utilizes a combination of permanent hard and soft capping, excavation and export of clean soils, import and re-use of clean soils, consolidation and capping, and institutional controls to limit access and exposure to lead and arsenic surface soils on the subject parcel.

3.1 Capping in Place

The purpose of Model Remedy 3 Capping in Place is to prevent exposure to contaminated soils by covering the site with a hard or soft cap. Because of the nature of the proposed site development, Model Remedy 3 is an efficient method of managing a portion of the lead and arsenic surface soils at the site. Capping at the site includes the following project elements:

3.1.1 Hard Cap

Approximately 82 percent of the surface area on the subject parcel is covered with a hard cap comprised of buildings, paved parking areas, and concrete sidewalks (Sheet 5). Areas of hard capping were constructed of no less than 6 inches of compacted gravel finished with concrete or asphalt. This is consistent with the Ecology Model Remedy requirements for hard capping.

3.1.2 Soft Cap

Soft capping occurred on approximately 18 percent of the site. Soft capping includes the landscaping areas around the perimeter of the site (Sheet 5).

- The applicant applied a marker barrier over contaminated surface soils (Photograph 5). The marker barrier used as an underlayment is non-biodegradable and is of a bright color.
- More than 6 inches of clean soils from the deep excavation clean soil stockpile were placed over the marker barrier (Photographs 6 and 7). Clean soils were re-tested by the lab prior to application to ensure MTCA Method A compliance. Test results are included in Attachment D.
- Following application of the clean soils, the landscaping areas were covered with a surface layer of landscaping fabric followed by an additional layer of wood chips (Photographs 8, 9 and 10).

3.1.2.1 Importing and Reuse of Soils

Soft capping utilized clean soils identified during deep excavation at the site. All soft capping soils were lab tested prior to application to ensure that lead and arsenic levels were below the threshold listed in Table 1.; <20 mg/kg (or <20 ppm) for arsenic and <250 mg/kg (or <250 ppm) for lead. Testing results of the re-imported clean soils are included as Attachment D/Form 3 and Form 9.

3.1.2.2 Exporting of Soils

Exporting of approximately 1,000 cu. yards of deep clean soils occurred as part of site preparation. Clean soils were lab tested to ensure that lead and arsenic levels were below the threshold listed in Table 1. Ecology recommended stockpile testing methods were utilized to collect composite samples at the site. *Model Remedies for Cleanup of Former Orchard Properties in Central and*

Eastern Washington July 2021; publication 21-09-006 recommends that 6 composite samples are collected for stockpiles comprised of 1,000-4,999 cubic yards. The applicant collected and tested 10 composite samples; well above Ecology requirements. Stockpile lab results are included as Attachment C/ Form 3 and Form 8. Lab results confirmed that the stockpiled clean soils may be exported and stored outside of a waste management facility. Soils were stockpiled in an appropriate off-site location outside of shoreline jurisdiction by the onsite excavation company Olin Excavation of Entiat, WA.

3.2 Excavation to Clean Soils

As described in detail above, excavation to clean soils occurred in a 150 ft long by 18 ft wide x 10 ft deep trench along the northern property line (Sheet 3). Excavation to a clean soil horizon was initially verified using an XRF during compliance testing and then reverified through lab testing of the clean soils stockpile. Approximately 1,000 cu. yds of deep clean soils were excavated and stockpiled for off-site storage as described above. Compliance testing of the clean soil horizon occurred at 20 sampling locations and at 30 inches in depth within the area of trenching. Compliance testing results are included as Attachment B.

3.3 Consolidation and Capping

The 1,000-cu yd. deep clean soils excavation and trench area were backfilled with contaminated surface soils from across the parcel (Sheets 4 and 5). The area of consolidation was then hard capped by the new building and the paved parking area.

3.4 Remediation Levels

The required remediation levels for arsenic and lead soils per WAC 173-340 Table 740-1 and MTCA Method A for sites with unrestricted land use, as cited in Section 2 above are as follows:

- Arsenic: 20 mg/kg or 20 ppm
- Lead: 250 mg/kg or 250 ppm

The primary pathway for exposure at the site is direct contact with contaminated soils. The placement of engineered hard and soft caps with ongoing maintenance eliminates the direct contact pathway at the site and prevents exposure to arsenic and lead soils. Groundwater is not expected to be affected by former orchard soils as the levels of arsenic and lead are relatively low and confined to near-surface soils.

During the implementation of this Report, any soils imported to or re-used at the site met the threshold of < 20 mg/kg for arsenic and < 250 mg/kg lead when analyzed in a lab. Initial testing for suitability utilized an XRF analyzer. An XRF analyzer was utilized for initial soil suitability analysis during Report implementation as it is accurate, reliable, fast, and portable. Soils that were deemed suitable for soft capping utilizing an XRF analyzer had composite samples sent to a lab for verification prior to application at the site, consistent with guidance in Ecology publication 21-09-006. Lab results are included in this report, as described above.

3.5 In-Progress Inspections

During the installation of the soft cap, the site was monitored by the applicant to observe and document the work, ensuring that the work was completed in conformance with this Report and the model remedy. Photo observations of the work are included below (Photographs 5 through 10).

3.6 Institutional Controls

In addition to hard and soft capping, the excavation, export, and re-use of clean soils, and consolidation and capping, institutional controls were implemented as part of the proposed remediation. Institutional controls include:

- An Environmental Covenant has been prepared for the subject parcel, pursuant to the Model Toxics Control Act (MTCA) chapter 70.105D RCW and the Uniform Environmental Covenants Act (UECA) chapter 64.70 RCW. The Covenant has been prepared by Ecology and demonstrates that there will be no interference with the remedial action, that human health and the environment will remain protected, that the site will remain in a state of continued compliance, and that future property owners are made aware of the necessary remedial action and this Covenant. The Covenant is included as Attachment E.
- The applicant has also completed the Ecology Self Certification Form. The Self Certification Form documents that the applicant has implemented the above-mentioned requirements as part of the site development and in accordance with the Ecology document *Model Remedies for Cleanup of Former Orchard Properties in Central and Eastern Washington July 2021*; publication 21-09-006. The Form is included as Attachment F.

3.6.1 Stormwater Management

All stormwater on the parcel has been managed to utilize the City of Wenatchee sewer system. No infiltration of stormwater will occur on site. Because of the nature of the commercial business, stormwater facilities have been designed to remediate a multitude of toxic and hazardous substances. A SWPPP was prepared for the site and was approved by Ecology. Additionally, dust control methods were implemented at the site during project construction and erosion control BMPs were utilized to prevent dirty water from leaving the project area.

3.6.2 On-going Maintenance

Visual inspections of the hard and soft capping areas will occur on an annual basis to ensure that the site is still in compliance with the Ecology Model Remedy and MTCA Method A requirements. If damage to the hard or soft cap or the underlying marker barrier is found, repairs will occur immediately to re-establish compliance. The stormwater cleanouts will also be inspected to ensure that they are functioning properly and that stormwater is effectively entering the city sewer system. Ecology may perform a site inspection every five years to ensure that institutional controls are still effective.

4 Conclusion

The applicant has developed the subject parcel with an auto repair business. According to the Ecology Dirt Alert online mapping tool, the subject parcel is mapped as being located on former orchard land that may contain arsenic and lead soils from the use of the historic lead arsenate pesticide at the site. Lead arsenate use occurred prior to 1950. The presence of contaminated soils was confirmed during an initial investigation by the Department of Ecology in May of 2022. This initial investigation confirmed that lead and arsenic levels occur above MTCA Method A cleanup levels at various locations across the parcel. For the purpose of this project all surface soils were considered to be contaminated.

This Remedial Action Report (Report) was prepared to demonstrate how lead and arsenic soils were managed during site development utilizing the model remedies described in the Ecology publication *Model Remedies for Cleanup of Former Orchard Properties in Central and Eastern Washington July 2021*; publication 21-09-006. Implementation of this Report ensures that the site has been remediated in accordance with Ecology guidelines and after implementation, no further actions are required. The applicant has entered into the Ecology VCP program and is requesting a No Further Action opinion from Ecology based on the information provided.

5 Limitations

The services described in this report were performed consistent with generally accepted professional consulting principles and practices. No other warranty, expressed or implied, is made. These services were performed consistent with our agreement with our client. This report is solely for the use and information of our client unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

Opinions and recommendations contained in this report are derived, in part, from data gathered by others and from conditions evaluated when services were performed and are intended only for the client, purposes, locations, time frames, and project parameters indicated. We do not warrant and are not responsible for the accuracy or validity of work performed by others or for the impact of changes in environmental standards, practices, or regulations.

Further, this report is limited in scope to the remediation of lead and arsenic in surface soils based on sampling and guidance set forth in Ecology publication *Model Remedies for Cleanup of Former Orchard Properties in Central and Eastern Washington*, April 2021; publication number 21-09-006. This document serves as guidance in supporting the implementation of an appropriate model remedy for remediation of lead and arsenic soils on former orchard lands and does not constitute a formal environmental site analysis.

6 References

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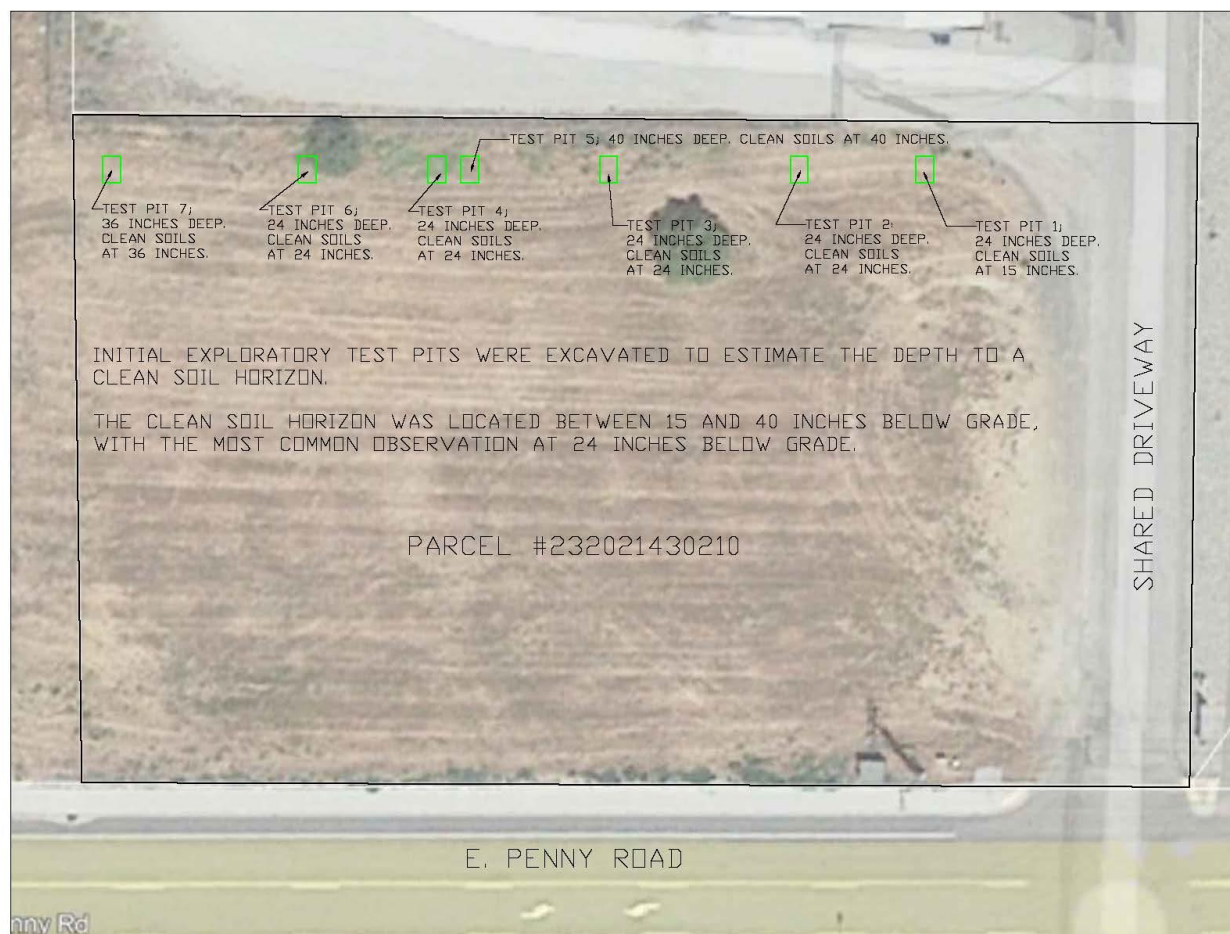
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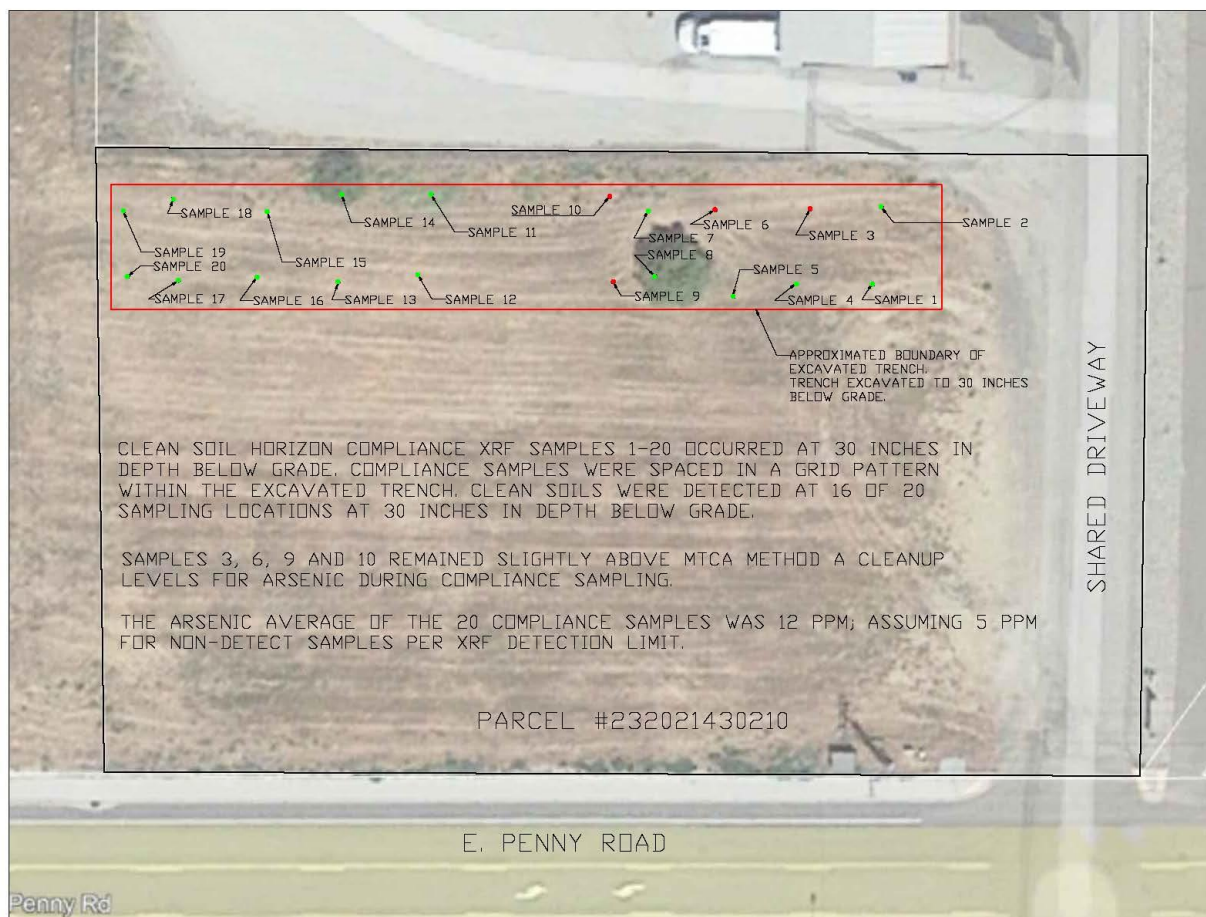
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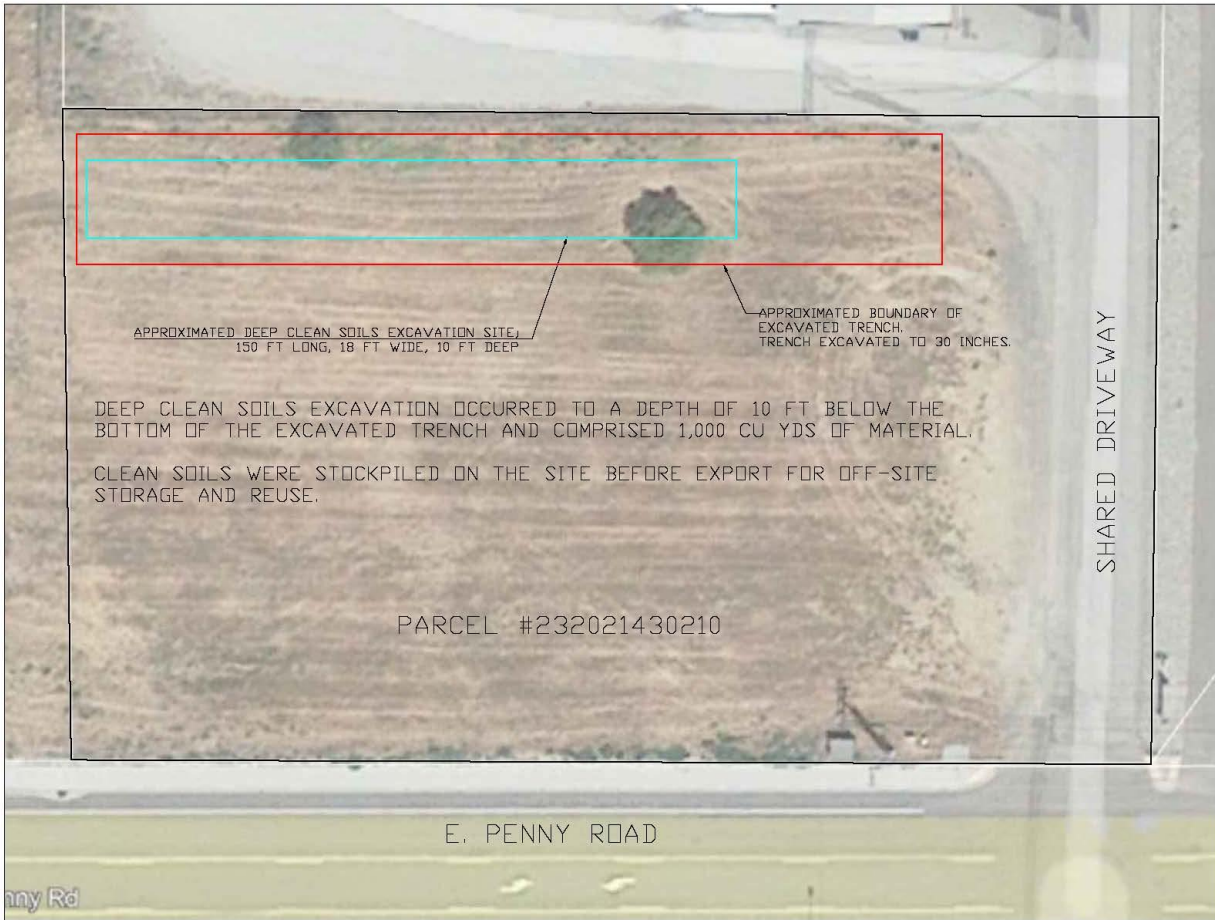
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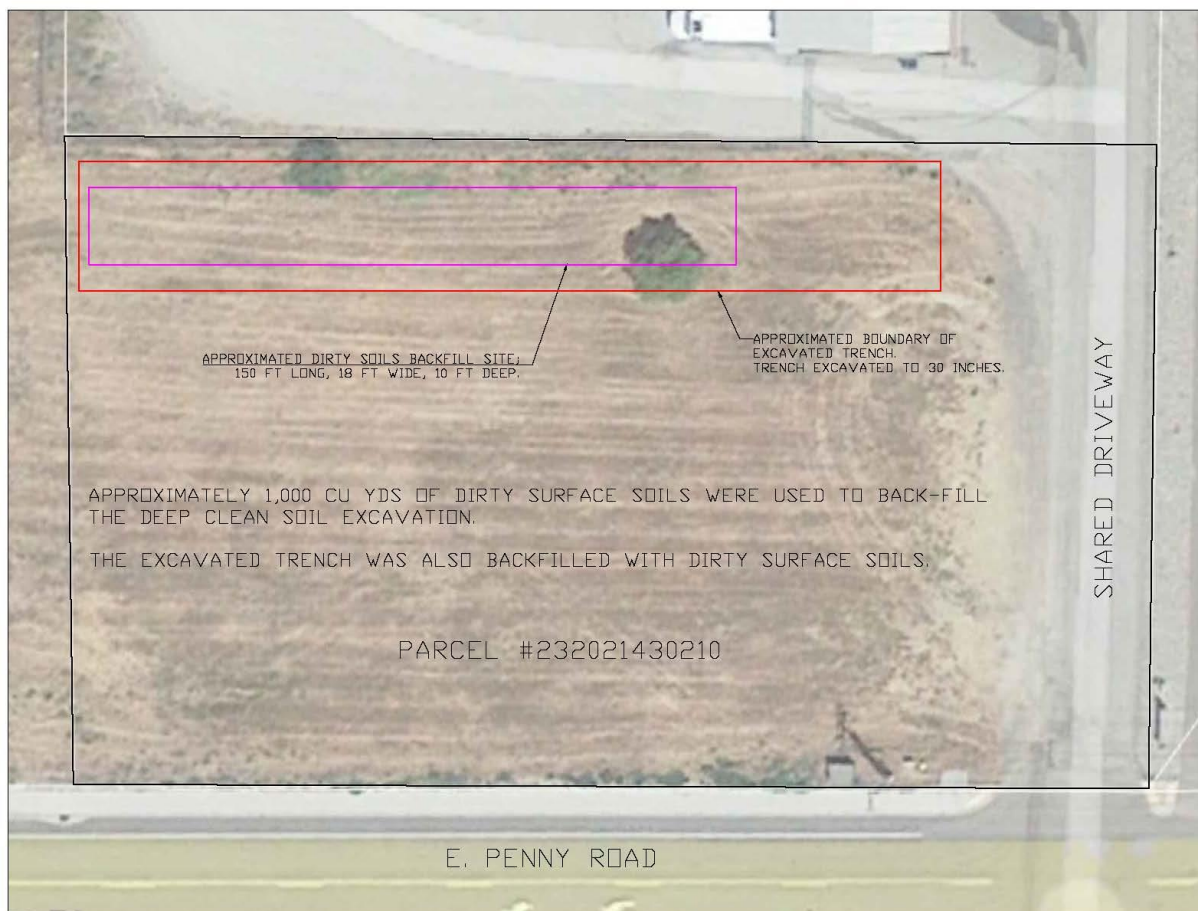
Sheet 1. Location of the initial 7 test pits at the site.



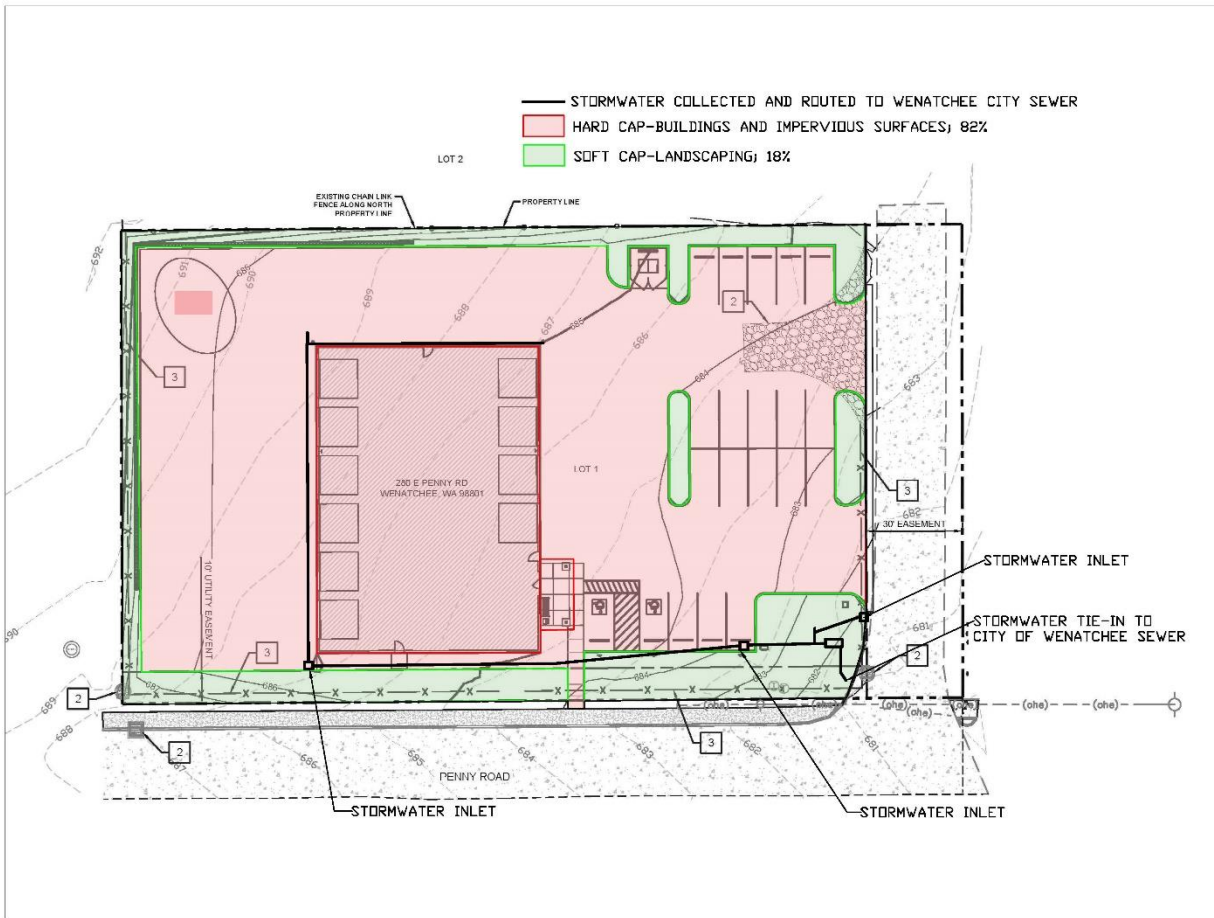
Sheet 2. Location of the 20 compliance sample locations at the site.



Sheet 3. Location of deep clean soil excavation area at the site; approximately 1,000 cubic yards of material.



Sheet 4. Location of dirty soils consolidation area in the clean soil excavation site and the trench area.



Sheet 5. The location of hard and soft cap areas at the site. Stormwater at the site is collected and routed into the City of Wenatchee sewer system.

8 Photos



Photograph 1. Seven test pits were excavated along the northern property line.



Photograph 2. An XRF was used to evaluate soil contamination at the site.



Photograph 3. A 30 ft wide by 200 ft long trench was excavated 30 inches below grade along the northern property line and was compliance tested at 20 sample locations to determine if a clean soil horizon had been reached. Four sample locations did not pass for arsenic only and were marked with orange pin flags (red arrow). However, the average of compliance testing was below MTCA Method A clean up levels.



Photograph 4. Clean soils were excavated from below the clean soil horizon within the trench and stockpiled separately from contaminated surface soils. The deep clean soils were lab tested to verify lead and arsenic levels were below MATCA Method A cleanup levels before being exported off-site for stockpile and reuse in the soft cap.



Photograph 5. A marker barrier was applied in the landscaping areas.



Photograph 6. The marker barrier was capped with 6+ inches of clean soils from the deep excavation clean soil stockpile.



Photograph 7. Depth of clean soils over the marker barrier exceeds 6 inches of depth.



Photograph 8. After installation of the marker material and 6+ inches of clean soils, landscaping areas were further covered with a surface layer of landscaping fabric prior to application of a bark mulch.



Photograph 9. Several inches of bark mulch were installed over the surface layer of landscaping fabric.



Photograph 10. Final site with soft capped landscaping and hard capped pavement and building.

9 Attachment A: Initial Ecology XRF Testing Results

Form 1: Characterization Sampling

Reminder: Keep a copy of the completed forms to pass on to future property owners.

Part 1: Determine your decision units

1. Total property size: 0.9 acres
2. Is the property in an area of arsenic > 100 ppm (see map on inside cover): Yes **No**
3. Check all that apply and identify decision units in any of these cases:
 - ☒ Property is > 0.25 acres
 - ☐ Property currently or historically had a mix of developed and undeveloped land
 - ☐ More than one type of land use is planned for the development
 - ☐ Parts of the property will be play areas, gardens, or other high-use areas
 - ☐ Property has geographic features, such as steep slopes or other unusable areas
 - ☐ Areas have forest duff that need separate sampling
4. On the next page in Table 1, list the decision units on your property and their size. Use Table 2 to determine the number of samples needed for each decision unit.

Part 2: Soil sample depth in upland areas

5. Complete Table 1 on the next page with the sample depths.
 - **At every location:** Take samples from the top 0–6 inches of soil, after clearing away grass, leaves, gravel, or debris on the surface (Figure 3)
 - **At every fourth location (25% of the samples):** Also take a sample from the 6–12 inch depth
 - **If you are sampling in natural areas:** At every location, take one soil sample at the following depths below ground surface: 0–6 inches, 6–12 inches, 12–24 inches, and 24–36 inches
 - **Areas where fill dirt or topsoil was added in the past:** At every fourth location, take a sample from the top 0–6 inches of the original land surface, if it is deeper than 12 inches
 - **If using mixing as a remedy:** At every fourth sample location, take a sample from the depth to which you will mix

Part 3: Overlay a sampling grid for each decision unit

6. Attach a diagram showing property dimensions and locations of decision units.
7. Attach a separate diagram for each decision unit, including dimensions, existing structures, and which structures will remain after development.

Table 1. Characterization sampling plan

Decision unit description (past use, planned use)	Acres/ft ²	# of samples	Sample depth/duff layer
1. The subject parcel is comprised of one decision unit. Ecology staff did initial site testing. Results available on Dirt Alert. Excel sheet with results is attached.	0.9 acres	4	0-6
		7	12
		6	18
2.		2	24
		1	30
3.			
4.			

Hartnett Property																			
Time	Units	Note	Sample	address	city	depth	Arsenic Concentration	Arsenic Detection Limit	Arsenic Cleanup Level	Lead Concentration	Lead Detection Limit	Lead Cleanup Level	Satellites	Altitude	Latitude	Longitude	Grid	Easting	Northing
Tue May 10, 2022 - 17:30:30	ppm	se	1	280 penny	wenatchee	4	25.5726	5.1865	20	294.3883	6.3508	250	4	219.600006	47.466145	-120.330513	10	701171.5	5260421.5
Tue May 10, 2022 - 17:30:56	ppm	se	2	280 penny	wenatchee	12	19.0496	1.9445	20	287.4239	2.0842	250	4	219.600006	47.466129	-120.330521	10	701170.8125	5260420
Tue May 10, 2022 - 17:31:36	ppm	se	3	280 penny	wenatchee	18	18.1409	2.0362	20	19.2836	2.1191	250	5	219	47.46611	-120.330528	10	701170	5260418
Tue May 10, 2022 - 17:32:05	ppm	se	4	280 penny	wenatchee	24	15.3673	1.9256	20	24.3139	2.0888	250	5	218.800003	47.466133	-120.330528	10	701170.125	5260420.5
Tue May 10, 2022 - 17:32:58	ppm	se	5	280 penny	wenatchee	30	7.1927	1.6842	20	9.0101	1.9015	250	5	218.199997	47.466118	-120.330559	10	701167.6875	5260418.5
Tue May 10, 2022 - 17:33:25	ppm	se	6	280 penny	wenatchee	24	9.7876	1.8134	20	14.258	2.0319	250	6	217.399994	47.466118	-120.330505	10	701171.6875	5260418.5
Tue May 10, 2022 - 17:33:57	ppm	se	7	280 penny	wenatchee	18	14.903	2.2999	20	26.9391	2.5296	250	4	215.300003	47.466099	-120.330521	10	701171	5260416.5
Tue May 10, 2022 - 17:35:07	ppm	ne	8	280 penny	wenatchee	18	12.4925	1.7876	20	25.9519	2.024	250	5	210.399994	47.46632	-120.330505	10	701171.0625	5260441
Tue May 10, 2022 - 17:35:40	ppm	ne	9	280 penny	wenatchee	12	20.9982	1.6782	20	10.4061	1.7368	250	6	211	47.466312	-120.330513	10	701170.6875	5260440.5
Tue May 10, 2022 - 17:36:02	ppm	ne	10	280 penny	wenatchee	12	19.6509	1.9044	20	9.4821	1.9544	250	7	210.899994	47.466331	-120.330521	10	701170.125	5260442.5
Tue May 10, 2022 - 17:36:02	ppm	ne	10	280 penny	wenatchee	12	22.6509	1.9044	20	9.4821	1.9544	250	7	210.899994	47.466331	-120.330521	10	701170.125	5260442.5
Tue May 10, 2022 - 17:36:40	ppm	ne	11	280 penny	wenatchee	4	26.8415	3.7865	20	227.5876	4.7473	250	7	210.100006	47.466354	-120.33046	10	701174.3125	5260445
Tue May 10, 2022 - 17:37:01	ppm	ne	12	280 penny	wenatchee	4	28.9871	4.5138	20	271.1104	5.5145	250	8	210.100006	47.466358	-120.330437	10	701176.1875	5260445.5
Tue May 10, 2022 - 17:37:56	ppm	c	13	280 penny	wenatchee	4	27.6305	4.6529	20	285.6026	5.6973	250	7	206.100006	47.466251	-120.330803	10	701149.0625	5260433
Tue May 10, 2022 - 17:38:45	ppm	c	14	280 penny	wenatchee	12	17.6441	2.1035	20	16.2724	2.1902	250	7	205.800003	47.466274	-120.330841	10	701146.125	5260435.5
Tue May 10, 2022 - 17:39:22	ppm	c	15	280 penny	wenatchee	18	16.0631	1.9602	20	28.4348	2.1504	250	6	205.600006	47.466324	-120.330841	10	701145.9375	5260441
Tue May 10, 2022 - 17:40:28	ppm	nw	16	280 penny	wenatchee	18	15.3958	1.7421	20	6.2036	1.7084	250	8	202.699997	47.466175	-120.331032	10	701131.9375	5260423.5
Tue May 10, 2022 - 17:41:03	ppm	nw	17	280 penny	wenatchee	12	23.4311	2.0218	20	8.9952	1.8616	250	8	205.199997	47.466152	-120.331032	10	701132	5260421
Tue May 10, 2022 - 17:42:02	ppm	ne	18	280 penny	wenatchee	12	23.3909	2.1835	20	52.3124	2.4073	250	8	205.199997	47.466362	-120.3311	10	701125.9375	5260444.5
Tue May 10, 2022 - 17:42:44	ppm	ne	19	280 penny	wenatchee	18	15.3971	1.4047	20	13.8679	1.48	250	8	204.699997	47.466347	-120.331116	10	701125	5260442.5

10 Attachment B: Compliance Testing Results

Form 7: Compliance sampling

Reminder: Keep a copy of the completed forms to pass on to future property owners.

1. Record the total acreage for each of the following areas:

Excavated: 6,0000 sq. ft acres

Mixed: N/A acres

Include only areas where soil is accessible for sampling (not paved or built over).

2. Calculate the number of samples needed using Table 1: 4

Table 1: Minimum number of compliance sample locations per decision unit

Sampling area in acres	Number of samples
0.25	4
1	10
5	20
10	30
20	40
100	60
≥100	60 + 1 per 5 acres

* 0.25 acres ~ 11,000 square feet

3. Record sample depth.

Excavated areas = 0–6 inches

Mixed areas = total mixing depth profile: N/A

Samples per sampling location: 1 (one per each 12-inch depth)

20 SAMPLING LOCTIONS IN SHALLOW EXCAVATION AREA. 1 SAMPLE TAKEN PER LOCATION. DATA ATTACHED.

4. Attach a property diagram with compliance sampling grid overlaid (see Chapter 7), showing which areas were cleaned up and the locations of paved or built areas.

MAP INCLUDED IN ATTACHED REMEDIAL ACTION PLAN. EXCAVATION OCCURRED IN A 6,000 SQ. FT AREA ON NORTH END OF SITE.

COMPLIANCE SAMPLING CONFIRMED THAT EXCAVATION TO CLEAN SOILS HAD OCCURRED BEFORE STOCKPILING. COMPLIANCE DATA ATTACHED.

5. Complete the sample inventory.

- List the samples by decision unit on the Compliance Sampling Inventory (page 73). Enter the depth of each sample. When sampling multiple depths at a single location, mark each depth as a separate sample number.
- Next, fill in the date and time. Note any unusual observations (high soil disturbance, heavy rain, etc.) in the Comments column.
- Complete the rest of the columns when you get the sampling results.

6. Determine if arsenic or lead is elevated.

- a) Calculate average arsenic and lead levels for the area sampled and enter them on the inventory sheet. For each decision unit where average arsenic is > 20 ppm, or average lead is > 250 ppm, circle the average.*
- b) Circle every value where maximum arsenic is > 40 ppm and where maximum lead is > 500 ppm.
- c) Attach a copy of the lab results and chain of custody.
- d) For each sampled area with a circled value (maximum or average), note in the Comments column that more cleanup is needed for that area. Return to Chapter 3 to review options for cleaning up those decision units. If no decision units have elevated arsenic or lead, read Chapter 8 for next steps.

Compliance Sampling Inventory

Property address: HARTNETT DEVELOPMENT; PARCEL #23202143210 270 E PENNY ROAD WENATCHEE, WA 98801 Phone: Sampled by: ERON DREW; GRETTE ASSOCIATES, LLC 509-663-6300						Testing parameters (ppm) Pb 250 ppm As 20 ppm Utilizing VANTA XRF Analyzer			
DU no.	Sample no.	Depth	Date	Time	Comments	Arsenic	Avg. arsenic	Lead	Avg. lead
1	1	30" below grade	8/3/22	1 PM	compliance sample after removal of top 30"	ND		20	
1	2					ND		29	
1	3					25		58	
1	4					ND		77	
1	5					ND		13	
1	6					25		ND	
1	7					ND		25	
1	8					16		17	
1	9					34		104	
1	10					25		ND	
1	11					ND		29	
1	12					15		ND	
1	13					14		12	
1	14					ND		ND	
1	15					ND		17	
1	16					ND		12	
1	17					ND		ND	
1	18					16		ND	
1	19					15		ND	
1	20					ND		16	

11 Attachment C: Clean Soils Stockpile Lab Results

Form 5: Capping in place

Reminder: Keep a copy of the completed forms to pass on to future property owners.

1. List the decision units and cap information for each one.

Decision unit	Type of cap	Cap depth	Geotextile used?
1 Impervious Surface Hard Cap	Concrete, pavement and buildings.	6"+	No
1 Landscaping Soft Cap	Clean soils from deep excavation stockpile.	6"+	Yes

2. Prevent soils from escaping the site and plan for worker safety:

- ☒ Follow dust- and erosion-control practices
- ☒ Follow Department of Labor & Industries worker safety regulations

3. Record the soil source:

- ☐ Off-site soils —Supplier: _____

Supplier phone: _____

- ☒ On-site soils DEEP EXCAVATION CLEAN SOILS EXPORTED FOR STOCKPILE AND REUSE IN LANDSCAPING SOFT CAP. LAB TESTING OCCURRED BEFORE EXPORT AND RE-IMPORT.

4. File the environmental covenant:

- ☒ Filed a deed notice with: Cheilan County

Recording number: _____

5. Compile the following attachments:

- ☒ Map showing areas with results above cleanup levels capped and any additional details about the cap a future property owner would need to know
- ☒ Maintenance and monitoring plan
- ☒ A copy of the environmental covenant

Form 8: Stockpile sampling

Reminder: Keep a copy of the completed forms to pass on to future property owners.

Each composite should contain six subsamples mixed together. In Table 1, fill in the number of composite samples needed for each stockpile, based on its size (Table 2).

Table 1. Planning for stockpile sampling

Stockpile identifier	Stockpile volume	# of subsamples	# of composites
Stockpile 1; Excavated Clean Soils From Depth	Approx. 1000 cu yds.	6	10
		6	
		6	
		6	

Table 2. Composites per stockpile

Stockpile volume (cubic yards)	# of composites (arsenic > 100 ppm)*	# of composites (arsenic < 100 ppm)*
< 500	2	2
500–999	4	4
1,000–4,999	8	6
5,000–9,999	14	10
10,000–19,999	20	14
> 20,000	+1 per 4,000 cubic yards	+1 per 5,000 cubic yards

*When removing soils from a property, refer to the map on the inside cover to find the estimated arsenic levels for the area the property is in.

1. Complete the sample inventory.

- List the composite samples by stockpile in the inventory on the next page.
- Fill in the date and time.
- Note any unusual observations in the Comments column.
- Complete the rest of the columns when you get the sampling results.

2. Determine if arsenic or lead is elevated.

- Mark each composite > 20 ppm arsenic or > 250 ppm lead. These segments cannot be reused on the property. See Chapter 8 for next steps.
- Attach a copy of the lab results and chain of custody.

Stockpile Sampling Inventory

[illegible]

Form 3: Excavation and Removal

Reminder: Keep a copy of the completed forms to pass on to future property owners.

1. List decision units being excavated:

There is only one decision unit at the site.

Applicant excavated approx. 1000 cu. yds of clean

soil for export and stockpiling from a 2,700 sq. ft location.

Depth

Approx. 12.5 ft in depth below grade

2. Prevent soils from escaping the site and plan for worker safety:

☒ Make a water source available for dust control

☒ Install erosion-control devices

N/A ☐ Cover trucks carrying contaminated soil

☒ Set up rinsing area for truck wheels and quarry spall at the entrance

☒ Follow Department of Labor & Industries worker safety regulations

3. Record soil disposal information:

Name of landfill facility: N/A exported soils were clean as confirmed by lab testing. Soils were stockpiled at excavator's property for use in soft capping of landscaping areas.

Contact name and phone: James Olin; Olin Excavation 509-784-1126

N/A ☐ Attached a copy of the Waste Disposal Authorization form

4. Record the clean fill soil source:

☐ Off-site soils —Supplier: _____

Supplier phone: _____

☒ On-site soils

Excavation was backfilled with dirty soils from on-site in order to eliminate need for off-site disposal of dirty soils. Only clean soils were exported and stockpiled by Olin Excavation. stockpiled clean soils utilized for

5. Conduct stockpile sampling or imported soil sampling: soft cap in landscaping areas.

☒ Completed stockpile sampling for onsite soils and filled out Form 8

☒ EXPORT SOILS LAB RESULTS ATTACHED; 8/21/22 and 8/30/22 CASCADE ANALYTICAL

☒ Completed imported soil sampling and filled out Form 9, or soils were certified to be clean by the supplier

LAB RESULTS FOR IMPORTED STOCKPILED LANDSCAPING SOILS ARE ATTACHED;5/8/23 Farm Consultants

6. Conduct compliance sampling:

☒ Filled out Form 7

☒ Attached a map showing areas excavated and the depth of excavation and performance sampling locations

MAP OF EXCAVATION AREA IS INCLUDED IN ATTACHED REMEDIAL ACTION PLAN. STOCKPILE TESTING IS INCLUDED AS 10 COMPOSITE LAB SAMPLES. LAB RESULTS ATTACHED. DEPTH OF EXCAVATION OF CLEAN SOILS OCCURRED APPROX. 12.5 FT BELOW GRADE WITHIN LARGER SHALLOW EXCAVATION AREA. COMPLIANCE TESTING FOR LARGER EXCAVATION SITE INCLUDED AS PART OF FORM 7.

August 21, 2022

Sean Hartnett
Sean Hartnett
3419 Crestview Road
Wenatchee, WA 98801

RE: Soil Pb/As Pkg.
Associated Work Orders: WCH0525

Enclosed are the results of analyses for samples received at the laboratory on 8/15/2022. Sample analysis was performed according to Eurofins-Cascade Analytical's quality assurance program.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kyle Johnson For Brianna Buschbach
Quality Manager

Eurofins-Cascade Analytical uses procedures established by EPA, AOAC, APHA, ASTM, and AWWA. Eurofins-Cascade Analytical makes no warranty of any kind. The client assumes all risk and liability from the use of these results. Results relate only to the items tested and the sample(s) received by the laboratory. This analytical report must be reproduced in its entirety. Please review your data in a timely manner. Data gaps or errors will not be the responsibility of the laboratory. Though we do keep all analytical data for several years, samples are disposed of after six weeks.

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Cascade Analytical

1008 W. Ahtanum Rd.
Union Gap, WA 98903
(509) 452-7707
Fax: (509) 452-7773

3019 G.S. Center Rd.
Wenatchee, WA 98801
(509) 662-1888
Fax: (509) 662-8183

Sean Hartnett
3419 Crestview Road
Wenatchee, WA 98801

Project: Soil Pb/As Pkg.
Project Number:
Project Manager: Sean Hartnett

Reported:
08/21/2022 11:22

Samples in this Report

Lab ID	Sample	Matrix	Date Sampled	Date Received
WCH0525-01	1-East	Solid	08/15/2022	08/15/2022
WCH0525-02	2	Solid	08/15/2022	08/15/2022
WCH0525-03	3	Solid	08/15/2022	08/15/2022
WCH0525-04	4	Solid	08/15/2022	08/15/2022
WCH0525-05	5	Solid	08/15/2022	08/15/2022
WCH0525-06	6-West	Solid	08/15/2022	08/15/2022



Cascade Analytical

1008 W. Ahtanum Rd.
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Sean Hartnett
3419 Crestview Road
Wenatchee, WA 98801

Project: Soil Pb/As Pkg.
Project Number:
Project Manager: Sean Hartnett

Reported:
08/21/2022 11:22

Subcontracted Analyses

Eurofins Test America - Seattle

% Solids
As 6010
Metals Prep
Pb 6010
% Solids
As 6010
Metals Prep
Pb 6010
% Solids
As 6010
% Solids
Pb 6010
Pb 6010
As 6010
Metals Prep
Pb 6010
% Solids
As 6010
Metals Prep
Pb 6010
% Solids
As 6010
Metals Prep
Metals Prep

Notes and Definitions

Item	Definition
Dry	Sample results reported on a dry weight basis.
ND	Analyte NOT DETECTED at or above the reporting limit.

ANALYTICAL REPORT

Eurofins Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-117003-1
Client Project/Site: WCH0525

For:

Cascade Analytical Inc
3019 GS Center Road
Wenatchee, Washington 98801

Attn: Brianna Buschbach



Authorized for release by:
8/19/2022 3:15:48 PM

Pauline Matlock, Project Manager
(253)922-2310
Pauline.Matlock@et.eurofinsus.com

LINKS

Review your project
results through



Have a Question?



Visit us at:

www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.



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Case Narrative

Client: Cascade Analytical Inc
Project/Site: WCH0525

Job ID: 580-117003-1

Job ID: 580-117003-1

Laboratory: Eurofins Seattle

Narrative

Job Narrative
580-117003-1

Comments

No additional comments.

Receipt

The samples were received on 8/17/2022 9:45 AM. Unless otherwise noted below, the samples arrived in good condition. The temperature of the cooler at receipt was 22.7° C.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: Cascade Analytical Inc
Project/Site: WCH0525

Job ID: 580-117003-1

Qualifiers

Metals

Qualifier	Qualifier Description
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Cascade Analytical Inc
Project/Site: WCH0525

Job ID: 580-117003-1

Client Sample ID: WCH0525-01
Date Collected: 08/15/22 00:00
Date Received: 08/17/22 09:45

Lab Sample ID: 580-117003-1
Matrix: Solid

General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	92.1		0.1		%			08/17/22 18:10	1
Percent Moisture	7.9		0.1		%			08/17/22 18:10	1

Client Sample Results

Client: Cascade Analytical Inc
Project/Site: WCH0525

Job ID: 580-117003-1

Client Sample ID: WCH0525-01

Lab Sample ID: 580-117003-1

Date Collected: 08/15/22 00:00

Matrix: Solid

Date Received: 08/17/22 09:45

Percent Solids: 92.1

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		3.0		mg/Kg	☼	08/18/22 11:24	08/18/22 22:09	1
Lead	4.3		1.5		mg/Kg	☼	08/18/22 11:24	08/18/22 22:09	1

Client Sample Results

Client: Cascade Analytical Inc
Project/Site: WCH0525

Job ID: 580-117003-1

Client Sample ID: WCH0525-02

Lab Sample ID: 580-117003-2

Date Collected: 08/15/22 00:00

Matrix: Solid

Date Received: 08/17/22 09:45

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	92.3		0.1		%			08/17/22 18:10	1
Percent Moisture	7.7		0.1		%			08/17/22 18:10	1

Client Sample Results

Client: Cascade Analytical Inc
Project/Site: WCH0525

Job ID: 580-117003-1

Client Sample ID: WCH0525-02

Lab Sample ID: 580-117003-2

Date Collected: 08/15/22 00:00

Matrix: Solid

Date Received: 08/17/22 09:45

Percent Solids: 92.3

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		3.0		mg/Kg	☼	08/18/22 11:24	08/18/22 22:34	1
Lead	4.3		1.5		mg/Kg	☼	08/18/22 11:24	08/18/22 22:34	1

Client Sample Results

Client: Cascade Analytical Inc
Project/Site: WCH0525

Job ID: 580-117003-1

Client Sample ID: WCH0525-03
Date Collected: 08/15/22 00:00
Date Received: 08/17/22 09:45

Lab Sample ID: 580-117003-3
Matrix: Solid

General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	92.3		0.1		%			08/17/22 18:10	1
Percent Moisture	7.7		0.1		%			08/17/22 18:10	1

Client Sample Results

Client: Cascade Analytical Inc
Project/Site: WCH0525

Job ID: 580-117003-1

Client Sample ID: WCH0525-03
Date Collected: 08/15/22 00:00
Date Received: 08/17/22 09:45

Lab Sample ID: 580-117003-3
Matrix: Solid
Percent Solids: 92.3

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.8		mg/Kg	☼	08/18/22 11:24	08/18/22 22:37	1
Lead	5.5		1.4		mg/Kg	☼	08/18/22 11:24	08/18/22 22:37	1

Client Sample Results

Client: Cascade Analytical Inc
Project/Site: WCH0525

Job ID: 580-117003-1

Client Sample ID: WCH0525-04

Lab Sample ID: 580-117003-4

Date Collected: 08/15/22 00:00

Matrix: Solid

Date Received: 08/17/22 09:45

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	91.5		0.1		%			08/17/22 18:10	1
Percent Moisture	8.5		0.1		%			08/17/22 18:10	1

Client Sample Results

Client: Cascade Analytical Inc
Project/Site: WCH0525

Job ID: 580-117003-1

Client Sample ID: WCH0525-04

Lab Sample ID: 580-117003-4

Date Collected: 08/15/22 00:00

Matrix: Solid

Date Received: 08/17/22 09:45

Percent Solids: 91.5

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		3.0		mg/Kg	☼	08/18/22 11:24	08/18/22 22:40	1
Lead	6.2		1.5		mg/Kg	☼	08/18/22 11:24	08/18/22 22:40	1

Client Sample Results

Client: Cascade Analytical Inc
Project/Site: WCH0525

Job ID: 580-117003-1

Client Sample ID: WCH0525-05
Date Collected: 08/15/22 00:00
Date Received: 08/17/22 09:45

Lab Sample ID: 580-117003-5
Matrix: Solid

General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	92.6		0.1		%			08/17/22 18:10	1
Percent Moisture	7.4		0.1		%			08/17/22 18:10	1

Client Sample Results

Client: Cascade Analytical Inc
Project/Site: WCH0525

Job ID: 580-117003-1

Client Sample ID: WCH0525-05
Date Collected: 08/15/22 00:00
Date Received: 08/17/22 09:45

Lab Sample ID: 580-117003-5
Matrix: Solid
Percent Solids: 92.6

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		3.1		mg/Kg	☼	08/18/22 11:24	08/18/22 22:43	1
Lead	4.3		1.6		mg/Kg	☼	08/18/22 11:24	08/18/22 22:43	1

Client Sample Results

Client: Cascade Analytical Inc
Project/Site: WCH0525

Job ID: 580-117003-1

Client Sample ID: WCH0525-06
Date Collected: 08/15/22 00:00
Date Received: 08/17/22 09:45

Lab Sample ID: 580-117003-6
Matrix: Solid

General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	92.5		0.1		%			08/17/22 18:10	1
Percent Moisture	7.5		0.1		%			08/17/22 18:10	1

Client Sample Results

Client: Cascade Analytical Inc
Project/Site: WCH0525

Job ID: 580-117003-1

Client Sample ID: WCH0525-06

Lab Sample ID: 580-117003-6

Date Collected: 08/15/22 00:00

Matrix: Solid

Date Received: 08/17/22 09:45

Percent Solids: 92.5

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.9		mg/Kg	☼	08/18/22 11:24	08/18/22 22:46	1
Lead	4.8		1.4		mg/Kg	☼	08/18/22 11:24	08/18/22 22:46	1

QC Sample Results

Client: Cascade Analytical Inc
Project/Site: WCH0525

Job ID: 580-117003-1

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 580-401031/24-A
Matrix: Solid
Analysis Batch: 401183

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 401031

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	Nt		3.0		mg/Kg		08/18/22 11:24	08/18/22 22:00	1
Lead	ND		1.5		mg/Kg		08/18/22 11:24	08/18/22 22:00	1

Lab Sample ID: LCS 580-401031/25-A
Matrix: Solid
Analysis Batch: 401183

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 401031

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	50.0	50.3		mg/Kg		101	80 - 120
Lead	50.0	50.4		mg/Kg		101	80 - 120

Lab Sample ID: LCSD 580-401031/26-A
Matrix: Solid
Analysis Batch: 401183

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 401031

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	50.0	51.7		mg/Kg		103	80 - 120	3	20
Lead	50.0	51.4		mg/Kg		103	80 - 120	2	20

Lab Sample ID: 580-117003-1 MS
Matrix: Solid
Analysis Batch: 401183

Client Sample ID: WCH0525-01
Prep Type: Total/NA
Prep Batch: 401031

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	ND		50.6	53.9		mg/Kg	⚡	102	80 - 120
Lead	4.3		50.6	56.6		mg/Kg	⚡	103	80 - 120

Lab Sample ID: 580-117003-1 MSD
Matrix: Solid
Analysis Batch: 401183

Client Sample ID: WCH0525-01
Prep Type: Total/NA
Prep Batch: 401031

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	ND		47.4	50.4		mg/Kg	⚡	102	80 - 120	7	20
Lead	4.3		47.4	53.7		mg/Kg	⚡	104	80 - 120	5	20

Lab Sample ID: 580-117003-1 DU
Matrix: Solid
Analysis Batch: 401183

Client Sample ID: WCH0525-01
Prep Type: Total/NA
Prep Batch: 401031

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Arsenic	ND		ND		mg/Kg	⚡	NC	20
Lead	4.3		5.41	F5	mg/Kg	⚡	22	20

Eurofins Seattle

Lab Chronicle

Client: Cascade Analytical Inc
Project/Site: WCH0525

Job ID: 580-117003-1

Client Sample ID: WCH0525-01

Lab Sample ID: 580-117003-1

Date Collected: 08/15/22 00:00

Matrix: Solid

Date Received: 08/17/22 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	2540G		1	400928	JHR	EET SEA	08/17/22 18:10

Client Sample ID: WCH0525-01

Lab Sample ID: 580-117003-1

Date Collected: 08/15/22 00:00

Matrix: Solid

Date Received: 08/17/22 09:45

Percent Solids: 92.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			401031	ABP	EET SEA	08/18/22 11:24
Total/NA	Analysis	6010D		1	401183	TMH	EET SEA	08/18/22 22:09

Client Sample ID: WCH0525-02

Lab Sample ID: 580-117003-2

Date Collected: 08/15/22 00:00

Matrix: Solid

Date Received: 08/17/22 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	2540G		1	400928	JHR	EET SEA	08/17/22 18:10

Client Sample ID: WCH0525-02

Lab Sample ID: 580-117003-2

Date Collected: 08/15/22 00:00

Matrix: Solid

Date Received: 08/17/22 09:45

Percent Solids: 92.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			401031	ABP	EET SEA	08/18/22 11:24
Total/NA	Analysis	6010D		1	401183	TMH	EET SEA	08/18/22 22:34

Client Sample ID: WCH0525-03

Lab Sample ID: 580-117003-3

Date Collected: 08/15/22 00:00

Matrix: Solid

Date Received: 08/17/22 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	2540G		1	400928	JHR	EET SEA	08/17/22 18:10

Client Sample ID: WCH0525-03

Lab Sample ID: 580-117003-3

Date Collected: 08/15/22 00:00

Matrix: Solid

Date Received: 08/17/22 09:45

Percent Solids: 92.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			401031	ABP	EET SEA	08/18/22 11:24
Total/NA	Analysis	6010D		1	401183	TMH	EET SEA	08/18/22 22:37

Client Sample ID: WCH0525-04

Lab Sample ID: 580-117003-4

Date Collected: 08/15/22 00:00

Matrix: Solid

Date Received: 08/17/22 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	2540G		1	400928	JHR	EET SEA	08/17/22 18:10

Eurofins Seattle

Lab Chronicle

Client: Cascade Analytical Inc
Project/Site: WCH0525

Job ID: 580-117003-1

Client Sample ID: WCH0525-04

Lab Sample ID: 580-117003-4

Date Collected: 08/15/22 00:00

Matrix: Solid

Date Received: 08/17/22 09:45

Percent Solids: 91.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			401031	ABP	EET SEA	08/18/22 11:24
Total/NA	Analysis	6010D		1	401183	TMH	EET SEA	08/18/22 22:40

Client Sample ID: WCH0525-05

Lab Sample ID: 580-117003-5

Date Collected: 08/15/22 00:00

Matrix: Solid

Date Received: 08/17/22 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	2540G		1	400928	JHR	EET SEA	08/17/22 18:10

Client Sample ID: WCH0525-05

Lab Sample ID: 580-117003-5

Date Collected: 08/15/22 00:00

Matrix: Solid

Date Received: 08/17/22 09:45

Percent Solids: 92.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			401031	ABP	EET SEA	08/18/22 11:24
Total/NA	Analysis	6010D		1	401183	TMH	EET SEA	08/18/22 22:43

Client Sample ID: WCH0525-06

Lab Sample ID: 580-117003-6

Date Collected: 08/15/22 00:00

Matrix: Solid

Date Received: 08/17/22 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	2540G		1	400928	JHR	EET SEA	08/17/22 18:10

Client Sample ID: WCH0525-06

Lab Sample ID: 580-117003-6

Date Collected: 08/15/22 00:00

Matrix: Solid

Date Received: 08/17/22 09:45

Percent Solids: 92.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			401031	ABP	EET SEA	08/18/22 11:24
Total/NA	Analysis	6010D		1	401183	TMH	EET SEA	08/18/22 22:46

Laboratory References:

EET SEA = Eurofins Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Eurofins Seattle

Accreditation/Certification Summary

Client: Cascade Analytical Inc
Project/Site: WCH0525

Job ID: 580-117003-1

Laboratory: Eurofins Seattle

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Washington	State	C788	07-13-23
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
2540G		Solid	Percent Moisture
2540G		Solid	Percent Solids

1
2
3
4
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11

Sample Summary

Client: Cascade Analytical Inc
Project/Site: WCH0525

Job ID: 580-117003-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-117003-1	WCH0525-01	Solid	08/15/22 00:00	08/17/22 09:45
580-117003-2	WCH0525-02	Solid	08/15/22 00:00	08/17/22 09:45
580-117003-3	WCH0525-03	Solid	08/15/22 00:00	08/17/22 09:45
580-117003-4	WCH0525-04	Solid	08/15/22 00:00	08/17/22 09:45
580-117003-5	WCH0525-05	Solid	08/15/22 00:00	08/17/22 09:45
580-117003-6	WCH0525-06	Solid	08/15/22 00:00	08/17/22 09:45

1

2

3

4

5

6

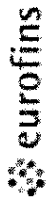
7

8

9

10

11



Cascade Analytical



580-117003 Chain of Custody

SUBCONTRACT ORDER

Sending Laboratory:

Eurofins Cascade Analytical- Wenatchee
3019 GS Center Road
Wenatchee, WA 98801
Phone: 509-662-1888
Fax: 509-662-8183

Project Manager: Brianna Buschbach
BriannaBuschbach@eurofinsUS.com

Subcontracted Laboratory:

Eurofins Test America - Seattle
5755 8th St East
Tacoma, WA 98424
Phone: (253) 922-2310

Work Order: WCH0525

Analysis	Comments
Lab Sample ID: WCH0525-01 Solid Sampled: 08/15/2022 00:00	
% Solids	SM 2540 G
As 6010	EPA 6010D
Metals Prep	EPA 6010D
Pb 6010	EPA 6010D
Containers Supplied:	Please Rush-2 Day
Soil Bag (A)	Please Rush-2 Day

Analysis	Comments
Lab Sample ID: WCH0525-02 Solid Sampled: 08/15/2022 00:00	
% Solids	SM 2540 G
As 6010	EPA 6010D
Metals Prep	EPA 6010D
Pb 6010	EPA 6010D
Containers Supplied:	Please Rush-2 Day
Soil Bag (A)	Please Rush-2 Day

Analysis	Comments
Lab Sample ID: WCH0525-03 Solid Sampled: 08/15/2022 00:00	
% Solids	SM 2540 G
As 6010	EPA 6010D
Pb 6010	EPA 6010D
Metals Prep	EPA 6010D
Containers Supplied:	Please Rush-2 Day
Soil Bag (A)	Please Rush-2 Day

Analysis	Comments
Lab Sample ID: WCH0525-04 Solid Sampled: 08/15/2022 00:00	
% Solids	SM 2540 G
As 6010	EPA 6010D
Metals Prep	EPA 6010D
Pb 6010	EPA 6010D
Containers Supplied:	Please Rush-2 Day
Soil Bag (A)	Please Rush-2 Day

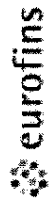
Therm. ID: 188 Cor: 22.7° Unc: 22.1°
Cooler Desc: Box FedEx: P.O.
Packing: Yes UPS: Yes
Cust. Seal: Yes No None Lab Cour: None
Blue Ice, Wet, Dry, Other: None

LS

8/16/22 MM Received By
Date

8/17/22 0945 Date





Cascade Analytical

SUBCONTRACT ORDER (Continued)

Work Order: WCH0525 (Continued)

Analysis			Comments
Lab Sample ID: WCH0525-05 Solid Sampled: 08/15/2022 00:00			
% Solids	SM 2540 G		Please Rush-2 Day
As 6010	EPA 6010D		Please Rush-2 Day
Metals Prep	EPA 6010D		Please Rush-2 Day
Pb 6010	EPA 6010D		Please Rush-2 Day
Containers Supplied: Soil Bag (A)			
Analysis			Comments
Lab Sample ID: WCH0525-06 Solid Sampled: 08/15/2022 00:00			
% Solids	SM 2540 G		Please Rush-2 Day
As 6010	EPA 6010D		Please Rush-2 Day
Metals Prep	EPA 6010D		Please Rush-2 Day
Pb 6010	EPA 6010D		Please Rush-2 Day
Containers Supplied: Soil Bag (A)			

Released By LS Date 8/16/22 Received By [Signature] Date 8/17/22 0945

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Login Sample Receipt Checklist

Client: Cascade Analytical Inc

Job Number: 580-117003-1

Login Number: 117003

List Source: Eurofins Seattle

List Number: 1

Creator: Swoope, Alexandra C

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	Thermal preservation not required.
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



WCH0525

Wenatchee, WA 98801

(509) 452-7707
Fax: (509) 452-7773
1008 W. Ahtanum Rd.
Union Gap, WA 98903

SOIL ANALYSIS ORDER FORM

SAMPLER'S
NAME

A

Fully complete shaded areas only

DATE OF SAMPLING					
M	M	D	D	Y	Y

SEND RESULTS TO:
G. GROWER
A. BILLING ADDRESS
B. BOTH

GEOGRAPHIC ZONE (SEE REVERSE SIDE)

GROWER'S NAME/ADDRESS

E

Hartnett Real Estate
260 penny rd
Hartnett1309@hotmail.com

BILLING NAME/ADDRESS

F

3419 Crestview rd
PHONE NO. 509-679-8585

SAMPLE INFORMATION

G	H	I	J	K	L	M	N	O	P
CLIENT'S SAMPLE IDENTIFICATION	CROP/VARIETY (Enter selection from reverse side)	SOIL DEPTH 1=0-6" 2=6-12" 3=6-18" 4=12-24" 5=24-36"	TREE AGE (Years)	GROP LOAD N=non-producing L=light A=average H=heavy	PRUNING N=none L=light M=medium H=heavy	VIGOR 1=0 2=1-6" 3=7-18" 4=19-35" 5=36+	PREDOMINANT SOIL TYPE 1=sand 2=sandy loam 3=silt loam 4=clay	LAB REQUEST TYPE 1=EWI, 2=EWII 3=EWIII, 4=WWI 5=complete 6=garden 9=your selection	
WCH0525	1-East	PB/AS							
-01	2								
-02	3								
-03	4								
-04	5								
-05	6-west								
-06									

TEST REQUEST	pH	E.C.	B	NO ₃ -N	As	P	K	Ca	Mg	Zn	% OM	Lime Req pH 6.5	SO ₄	Fe	Cu	Mn	Gyp Req	CEC	Exchangeable				Texture
																			K	CA	Mg	Na	
1 E WASH I	✓	✓	✓	✓		✓	✓					✓											
2 E WASH II	✓	✓	✓	✓		✓	✓					✓											
3 E WASH III	✓	✓	✓	✓		✓	✓	✓	✓			✓	✓										
4 W WASH I	✓		✓	✓		✓	✓	✓	✓	✓	✓	✓	✓										
5 COMPLETE	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓							
6 GARDEN	✓			✓		✓	✓				✓	✓											
9 YOUR SELECTION																							
Sample 1																							
Sample 2																							
Sample 3																							
Sample 4																							
Sample 5																							

1	SAMPLE AREA COMMENT	
	CURRENT FERTILIZATION	
2	SAMPLE AREA COMMENT	
	CURRENT FERTILIZATION	
3	SAMPLE AREA COMMENT	
	CURRENT FERTILIZATION	
4	SAMPLE AREA COMMENT	
	CURRENT FERTILIZATION	
5	SAMPLE AREA COMMENT	
	CURRENT FERTILIZATION	



WCH0525

Sample Receipt Form

Date Received: 8/15/22 Time Received: 1700 Initials: JS

Client Name: Hartmett Project Name: soil

Temperature of cooler upon receipt: 23 °C Thermometer ID: #6

Custody seals: Intact Broken None N/A

Chain of Custody Completed:

Client name, address, and phone number;	<u>Yes</u>	No
Date and time of sampling;	<u>Yes</u>	No
Test requests clear;	<u>Yes</u>	No
Completed in ink;	<u>Yes</u>	No
Signed by client;	<u>Yes</u>	No

All samples received: Yes No

All samples intact: Yes No

Sample ID's match COC form: Yes No

Appropriate containers used: Yes No

Sufficient amount of sample for analysis: Yes No

Correct preservative verified: N/A Yes No

Air bubbles in VOC, TTHM, or HAA5 samples: N/A Yes No

Sample(s) exceed hold time: Yes No

Type of coolant: Ice Blue Ice None Other Comment: _____

Shipping Method: FedEx UPS USPS Brett & Sons Hand Delivered CAI Sampled

Shipping Container: E-CA Cooler E-CA Cooler Box Client's Cooler None Other _____

Samples accepted for analysis: Yes No

Reason for Rejection: _____

Name of Person Contacted: _____ Date Contacted: _____

Comments: 6x soil bags

August 30, 2022

Sean Hartnett
Sean Hartnett
3419 Crestview Road
Wenatchee, WA 98801

RE: Soil Pb/As Pkg.
Associated Work Orders: WCH0716

Enclosed are the results of analyses for samples received at the laboratory on 8/19/2022. Sample analysis was performed according to Eurofins-Cascade Analytical's quality assurance program.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kyle Johnson For Brianna Buschbach
Quality Manager

Eurofins-Cascade Analytical uses procedures established by EPA, AOAC, APHA, ASTM, and AWWA. Eurofins-Cascade Analytical makes no warranty of any kind. The client assumes all risk and liability from the use of these results. Results relate only to the items tested and the sample(s) received by the laboratory. This analytical report must be reproduced in its entirety. Please review your data in a timely manner. Data gaps or errors will not be the responsibility of the laboratory. Though we do keep all analytical data for several years, samples are disposed of after six weeks.

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Cascade Analytical

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Union Gap, WA 98903
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Fax: (509) 452-7773

3019 G.S. Center Rd.
Wenatchee, WA 98801
(509) 662-1888
Fax: (509) 662-8183

Sean Hartnett
3419 Crestview Road
Wenatchee, WA 98801

Project: Soil Pb/As Pkg.
Project Number:
Project Manager: Sean Hartnett

Reported:
08/30/2022 09:11

Samples in this Report

Lab ID	Sample	Matrix	Date Sampled	Date Received
WCH0716-01	1 East	Solid	08/19/2022	08/19/2022
WCH0716-02	2	Solid	08/19/2022	08/19/2022
WCH0716-03	3	Solid	08/19/2022	08/19/2022
WCH0716-04	4 West	Solid	08/19/2022	08/19/2022



Cascade Analytical

1008 W. Ahtanum Rd.
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Sean Hartnett
3419 Crestview Road
Wenatchee, WA 98801

Project: Soil Pb/As Pkg.
Project Number:
Project Manager: Sean Hartnett

Reported:
08/30/2022 09:11

Subcontracted Analyses

Eurofins Test America - Seattle

% Solids
As 6010
Metals Prep
Pb 6010
% Solids
As 6010
% Solids
Pb 6010
Pb 6010
As 6010
Metals Prep
Pb 6010
% Solids
As 6010
Metals Prep
Metals Prep

Notes and Definitions

Item	Definition
Dry	Sample results reported on a dry weight basis.
ND	Analyte NOT DETECTED at or above the reporting limit.

ANALYTICAL REPORT

Eurofins Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-117213-1
Client Project/Site: WCH0716

For:

Cascade Analytical Inc
3019 GS Center Road
Wenatchee, Washington 98801

Attn: Brianna Buschbach



Authorized for release by:
8/29/2022 9:20:18 PM

Pauline Matlock, Project Manager
(253)922-2310
Pauline.Matlock@et.eurofinsus.com

LINKS

Review your project
results through



Have a Question?



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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.



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Case Narrative

Client: Cascade Analytical Inc
Project/Site: WCH0716

Job ID: 580-117213-1

Job ID: 580-117213-1

Laboratory: Eurofins Seattle

Narrative

Job Narrative
580-117213-1

Comments

No additional comments.

Receipt

The samples were received on 8/23/2022 9:40 AM. Unless otherwise noted below, the samples arrived in good condition. The temperature of the cooler at receipt was 21.4° C.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: Cascade Analytical Inc
Project/Site: WCH0716

Job ID: 580-117213-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Cascade Analytical Inc
Project/Site: WCH0716

Job ID: 580-117213-1

Client Sample ID: WCH0716-01

Lab Sample ID: 580-117213-1

Date Collected: 08/19/22 00:00

Matrix: Solid

Date Received: 08/23/22 09:40

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	96.1		0.1		%			08/25/22 17:44	1
Percent Moisture	3.9		0.1		%			08/25/22 17:44	1

Client Sample Results

Client: Cascade Analytical Inc
Project/Site: WCH0716

Job ID: 580-117213-1

Client Sample ID: WCH0716-01

Lab Sample ID: 580-117213-1

Date Collected: 08/19/22 00:00

Matrix: Solid

Date Received: 08/23/22 09:40

Percent Solids: 96.1

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.8		mg/Kg	☼	08/25/22 11:12	08/25/22 22:57	1
Lead	4.8		1.4		mg/Kg	☼	08/25/22 11:12	08/25/22 22:57	1

Client Sample Results

Client: Cascade Analytical Inc
Project/Site: WCH0716

Job ID: 580-117213-1

Client Sample ID: WCH0716-02
Date Collected: 08/19/22 00:00
Date Received: 08/23/22 09:40

Lab Sample ID: 580-117213-2
Matrix: Solid

General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	95.4		0.1		%			08/25/22 17:44	1
Percent Moisture	4.6		0.1		%			08/25/22 17:44	1

Client Sample Results

Client: Cascade Analytical Inc
Project/Site: WCH0716

Job ID: 580-117213-1

Client Sample ID: WCH0716-02

Lab Sample ID: 580-117213-2

Date Collected: 08/19/22 00:00

Matrix: Solid

Date Received: 08/23/22 09:40

Percent Solids: 95.4

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		3.0		mg/Kg	☼	08/25/22 11:12	08/25/22 23:00	1
Lead	5.2		1.5		mg/Kg	☼	08/25/22 11:12	08/25/22 23:00	1

Client Sample Results

Client: Cascade Analytical Inc
Project/Site: WCH0716

Job ID: 580-117213-1

Client Sample ID: WCH0716-03
Date Collected: 08/19/22 00:00
Date Received: 08/23/22 09:40

Lab Sample ID: 580-117213-3
Matrix: Solid

General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	95.7		0.1		%			08/25/22 17:44	1
Percent Moisture	4.3		0.1		%			08/25/22 17:44	1

Client Sample Results

Client: Cascade Analytical Inc
Project/Site: WCH0716

Job ID: 580-117213-1

Client Sample ID: WCH0716-03

Lab Sample ID: 580-117213-3

Date Collected: 08/19/22 00:00

Matrix: Solid

Date Received: 08/23/22 09:40

Percent Solids: 95.7

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.7		mg/Kg	☼	08/25/22 11:12	08/25/22 23:03	1
Lead	5.4		1.3		mg/Kg	☼	08/25/22 11:12	08/25/22 23:03	1

Client Sample Results

Client: Cascade Analytical Inc
Project/Site: WCH0716

Job ID: 580-117213-1

Client Sample ID: WCH0716-04
Date Collected: 08/19/22 00:00
Date Received: 08/23/22 09:40

Lab Sample ID: 580-117213-4
Matrix: Solid

General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	95.3		0.1		%			08/25/22 17:44	1
Percent Moisture	4.7		0.1		%			08/25/22 17:44	1

Client Sample Results

Client: Cascade Analytical Inc
Project/Site: WCH0716

Job ID: 580-117213-1

Client Sample ID: WCH0716-04

Lab Sample ID: 580-117213-4

Date Collected: 08/19/22 00:00

Matrix: Solid

Date Received: 08/23/22 09:40

Percent Solids: 95.3

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.8		1.8		mg/Kg	☼	08/25/22 09:13	08/26/22 00:54	1
Lead	4.6		0.90		mg/Kg	☼	08/25/22 09:13	08/26/22 00:54	1

QC Sample Results

Client: Cascade Analytical Inc
Project/Site: WCH0716

Job ID: 580-117213-1

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 580-401660/23-A

Matrix: Solid

Analysis Batch: 402015

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 401660

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	Nt		3.0		mg/Kg		08/24/22 11:27	08/25/22 23:17	1
Lead	ND		1.5		mg/Kg		08/24/22 11:27	08/25/22 23:17	1

Lab Sample ID: LCS 580-401660/24-A

Matrix: Solid

Analysis Batch: 402015

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 401660

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	50.0	49.7		mg/Kg		99	80 - 120
Lead	50.0	52.2		mg/Kg		104	80 - 120

Lab Sample ID: LCSD 580-401660/25-A

Matrix: Solid

Analysis Batch: 402015

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 401660

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	50.0	49.6		mg/Kg		99	80 - 120	0	20
Lead	50.0	51.9		mg/Kg		104	80 - 120	1	20

Lab Sample ID: MB 580-401780/21-A

Matrix: Solid

Analysis Batch: 402015

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 401780

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		3.0		mg/Kg		08/24/22 18:34	08/25/22 22:22	1
Lead	ND		1.5		mg/Kg		08/24/22 18:34	08/25/22 22:22	1

Lab Sample ID: LCS 580-401780/22-A

Matrix: Solid

Analysis Batch: 402015

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 401780

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	50.0	48.6		mg/Kg		97	80 - 120
Lead	50.0	50.9		mg/Kg		102	80 - 120

Lab Sample ID: LCSD 580-401780/23-A

Matrix: Solid

Analysis Batch: 402015

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 401780

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	50.0	50.8		mg/Kg		102	80 - 120	4	20
Lead	50.0	52.1		mg/Kg		104	80 - 120	2	20

Eurofins Seattle

Lab Chronicle

Client: Cascade Analytical Inc
Project/Site: WCH0716

Job ID: 580-117213-1

Client Sample ID: WCH0716-01

Date Collected: 08/19/22 00:00

Date Received: 08/23/22 09:40

Lab Sample ID: 580-117213-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	2540G		1	401918	TMH	EET SEA	08/25/22 17:44

Client Sample ID: WCH0716-01

Date Collected: 08/19/22 00:00

Date Received: 08/23/22 09:40

Lab Sample ID: 580-117213-1

Matrix: Solid

Percent Solids: 96.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			401780	ABP	EET SEA	08/25/22 11:12
Total/NA	Analysis	6010D		1	402015	TMH	EET SEA	08/25/22 22:57

Client Sample ID: WCH0716-02

Date Collected: 08/19/22 00:00

Date Received: 08/23/22 09:40

Lab Sample ID: 580-117213-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	2540G		1	401918	TMH	EET SEA	08/25/22 17:44

Client Sample ID: WCH0716-02

Date Collected: 08/19/22 00:00

Date Received: 08/23/22 09:40

Lab Sample ID: 580-117213-2

Matrix: Solid

Percent Solids: 95.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			401780	ABP	EET SEA	08/25/22 11:12
Total/NA	Analysis	6010D		1	402015	TMH	EET SEA	08/25/22 23:00

Client Sample ID: WCH0716-03

Date Collected: 08/19/22 00:00

Date Received: 08/23/22 09:40

Lab Sample ID: 580-117213-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	2540G		1	401918	TMH	EET SEA	08/25/22 17:44

Client Sample ID: WCH0716-03

Date Collected: 08/19/22 00:00

Date Received: 08/23/22 09:40

Lab Sample ID: 580-117213-3

Matrix: Solid

Percent Solids: 95.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			401780	ABP	EET SEA	08/25/22 11:12
Total/NA	Analysis	6010D		1	402015	TMH	EET SEA	08/25/22 23:03

Client Sample ID: WCH0716-04

Date Collected: 08/19/22 00:00

Date Received: 08/23/22 09:40

Lab Sample ID: 580-117213-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	2540G		1	401918	TMH	EET SEA	08/25/22 17:44

Eurofins Seattle

Lab Chronicle

Client: Cascade Analytical Inc
Project/Site: WCH0716

Job ID: 580-117213-1

Client Sample ID: WCH0716-04
Date Collected: 08/19/22 00:00
Date Received: 08/23/22 09:40

Lab Sample ID: 580-117213-4
Matrix: Solid
Percent Solids: 95.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			401660	ABP	EET SEA	08/25/22 09:13
Total/NA	Analysis	6010D		1	402015	TMH	EET SEA	08/26/22 00:54

Laboratory References:
EET SEA = Eurofins Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Accreditation/Certification Summary

Client: Cascade Analytical Inc
Project/Site: WCH0716

Job ID: 580-117213-1

Laboratory: Eurofins Seattle

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Washington	State	C788	07-13-23
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
2540G		Solid	Percent Moisture
2540G		Solid	Percent Solids

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Sample Summary

Client: Cascade Analytical Inc
Project/Site: WCH0716

Job ID: 580-117213-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-117213-1	WCH0716-01	Solid	08/19/22 00:00	08/23/22 09:40
580-117213-2	WCH0716-02	Solid	08/19/22 00:00	08/23/22 09:40
580-117213-3	WCH0716-03	Solid	08/19/22 00:00	08/23/22 09:40
580-117213-4	WCH0716-04	Solid	08/19/22 00:00	08/23/22 09:40

1

2

3

4

5

6

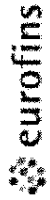
7

8

9

10

11



Cascade Analytical



580-117213 Chain of Custody

SUBCONTRACT ORDER

Sending Laboratory:

Eurofins Cascade Analytical- Wenatchee
3019 GS Center Road
Wenatchee, WA 98801
Phone: 509-662-1888
Fax: 509-662-8183

Project Manager: Brianna Buschbach
BriannaBuschbach@eurofinsUS.com

Subcontracted Laboratory:

Eurofins Test America - Seattle
5755 8th St East
Tacoma, WA 98424
Phone: (253) 922-2310

Work Order: WCH0716

Analysis	Comments
Lab Sample ID: WCH0716-01 Solid Sampled: 08/19/2022 00:00	

% Solids	SM 2540 G	Please 3 Day Rush
As 6010	EPA 6010D	Please 3 Day Rush
Metals Prep	EPA 6010D	Please 3 Day Rush
Pb 6010	EPA 6010D	Please 3 Day Rush

Containers Supplied:

Soil Bag (A)

Analysis	Comments
Lab Sample ID: WCH0716-02 Solid Sampled: 08/19/2022 00:00	

% Solids	SM 2540 G	Please 3 Day Rush
As 6010	EPA 6010D	Please 3 Day Rush
Pb 6010	EPA 6010D	Please 3 Day Rush
Metals Prep	EPA 6010D	Please 3 Day Rush

Containers Supplied:

Soil Bag (A)

Analysis	Comments
Lab Sample ID: WCH0716-03 Solid Sampled: 08/19/2022 00:00	

Solids	SM 2540 G	Please 3 Day Rush
6010	EPA 6010D	Please 3 Day Rush
Metals Prep	EPA 6010D	Please 3 Day Rush
6010	EPA 6010D	Please 3 Day Rush

Containers Supplied:

Soil Bag (A)

Analysis	Comments
Lab Sample ID: WCH0716-04 Solid Sampled: 08/19/2022 00:00	

Solids	SM 2540 G	Please 3 Day Rush
6010	EPA 6010D	Please 3 Day Rush
Metals Prep	EPA 6010D	Please 3 Day Rush
6010	EPA 6010D	Please 3 Day Rush

Containers Supplied:

Soil Bag (A)

Therm. ID: IRS Cor: 21.4 Unc: 2.08
Cooler Desc: BXX FedEx: P.O.
Packing: BAB UPS:
Cust. Seal: Yes No Lab Cour:
Blue Ice, Wet, Dry, None Other:

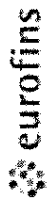
Kami Baker

8/22/22
Date

MM
Received By

0940
8/23/22
Date





Cascade Analytical

SUBCONTRACT ORDER (Continued)

Work Order: WCH0716 (Continued)

Released By Nami Baker Date 8/22/22 Received By [Signature] Date 8/23/22 ⁰⁹⁴⁰

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Login Sample Receipt Checklist

Client: Cascade Analytical Inc

Job Number: 580-117213-1

Login Number: 117213

List Source: Eurofins Seattle

List Number: 1

Creator: Swoope, Alexandra C

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	Thermal preservation not required.
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



WCH0716

Sample Receipt Form

Date Received: 8.19.22 Time Received: 10:45 Initials: RICClient Name: Hartnett Real Estate Project Name: Soil Analysis [Sub-Contract]Temperature of cooler upon receipt: 20 °C Thermometer ID: 6Custody seals: Intact Broken None N/A

Chain of Custody Completed:

Client name, address, and phone number;

Yes No

Date and time of sampling;

Yes No

Test requests clear;

Yes No

Completed in ink;

Yes No

Signed by client;

Yes N/A No

All samples received:

Yes No

All samples intact:

Yes No

Sample ID's match COC form:

Yes No

Appropriate containers used:

Yes No

Sufficient amount of sample for analysis:

Yes No

Correct preservative verified:

N/A Yes No

Air bubbles in VOC, TTHM, or HAA5 samples:

N/A Yes No

Sample(s) exceed hold time:

Yes NoType of coolant: Ice Blue Ice None Other Comment: _____Shipping Method: FedEx UPS USPS Brett & Sons Hand Delivered CAI SampledShipping Container: E-CA Cooler E-CA Cooler Box Client's Cooler None Other BagSamples accepted for analysis: Yes No

Reason for Rejection: _____

Name of Person Contacted: _____ Date Contacted: _____

Comments: 4 x Soil Sample Bags



(509) WCH0716
Fax:
3019
Wenatchee, WA 98801

(509) 452-7707
Fax: (509) 452-7773
1008 W. Ahtanum Rd.
Union Gap, WA 98903



SOIL ANALYSIS ORDER FORM

SAMPLER'S
NAME

A

Fully complete shaded areas only

DATE
OF
SAMPLING

M M D D Y Y

B

SEND
RESULTS
TO:
G. GROWER
A: BILLING
ADDRESS
B: BOTH

GEOGRAPHIC
ZONE
(SEE REVERSE
SIDE)

D

GROWER'S NAME/ADDRESS

E

Hartnett Real Estate
260 Penny rd

BILLING NAME/ADDRESS

F

3419 Crestview rd
Wenatchee WA 98801

PHONE NO.

509-679-8585

SAMPLE INFORMATION

G	H	I	J	K	L	M	N	O	P
	CLIENT'S SAMPLE IDENTIFICATION	CROP/VARIETY (Enter selection from reverse side)	SOIL DEPTH 1=0-6" 2=6-12" 3=6-18" 4=12-24" 5=24-36"	TREE AGE (Years)	GROP LOAD N=non- producing L=light A=average H=heavy	PRUNING N=none L=light M=medium H=heavy	VIGOR 1=0 2=1-6" 3=7-18" 4=19-35" 5=36+	PREDOMINANT SOIL TYPE 1=sand 2=sandy loam 3=silt loam 4=clay	LAB REQUEST TYPE 1=EWI, 2=EWII 3=EWIII, 4=WWI 5=complete 6=garden 9=your selection
WCH0716-01	1 East	A5/PB							
-02	2								
-03	3								
-04	4 West								

TEST REQUEST	pH	E.C.	B	NO ₃ -N	As	P	K	Ca	Mg	Zn	% OM	Lime Req. pH 6.5	S _{0₄}	Fe	Cu	Mn	Gyp Req.	CEC	Exchangeable				Texture
1 E WASH I	✓	✓	✓									✓							K	CA	Mg	Na	
2 E WASH II	✓	✓	✓	✓		✓	✓					✓											
3 E WASH III	✓	✓	✓	✓		✓	✓	✓	✓			✓	✓										
4 W WASH I	✓		✓	✓		✓	✓	✓	✓	✓	✓	✓	✓										
5 COMPLETE	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓							
6 GARDEN	✓			✓		✓	✓				✓	✓											
9 YOUR SELECTION																							
Sample 1																							
Sample 2																							
Sample 3																							
Sample 4																							
Sample 5																							

1	SAMPLE AREA COMMENT
1	CURRENT FERTILIZATION
2	SAMPLE AREA COMMENT
2	CURRENT FERTILIZATION
3	SAMPLE AREA COMMENT
3	CURRENT FERTILIZATION
4	SAMPLE AREA COMMENT
4	CURRENT FERTILIZATION
5	SAMPLE AREA COMMENT
5	CURRENT FERTILIZATION

12 Attachment D: Soft Cap Soils Lab Results

Form 9: Imported soils sampling

Reminder: Keep a copy of the completed forms to pass on to future property owners.

Shorter projects: For projects lasting less than six months, collect one data set from the imported soil source. This should include three composites, with six subsamples in each composite.

Longer projects: If the project lasts longer than six months, collect a new set of three composites, with six subsamples in each composite, every six months.

New soil source: If the soil source changes, then collect a new set of three composites, with six subsamples in each composite.

1. Once you have the results from your three composite samples, enter the arsenic and lead levels into the table below.
2. Attach a copy of the lab results and chain of custody.

Do not import soils from the supplier if any composite sample is > 20 ppm arsenic or > 250 ppm lead.

Soil supplier name: ONSITE DEEP EXCAVATION CLEAN SOILS EXPORTED AND STOCKPILED FOR USE IN Phone: SOFT CAP. Sampled by: Sean Hartnett; lab testing results attached. Landscaping soils.				Testing parameters (ppm) mg/kg	
Sample no.	Date	Time	Notes	Arsenic	Lead
1	5/8/23		Stockpile 1 Entiat	1.97	3.16
2			Stockpile 2 Entiat	3.77	2.90
3			Stockpile 3 Entiat	2.36	2.57
			Stockpile 4 Entiat	4.18	3.30
1					
2					
3					

SOILTEST FARM CONSULTANTS
2925 W DRIGGS DR
MOSES LAKE WA 98837
509-765-1622

Merchant ID: 1600605962
Term ID: 7572

Sale

VISA

XXXXXXXXXXXX3322

Entry Method: Manual

Apprvd: OnLine

Batch#: 000003

05/19/23

07:17:26

CVV2 Code: M

Inv#: 00000001

Appr Code: 003960

Total: \$

168.00

I agree to pay above total amount
according to card issuer agreement
(Merchant agreement if credit voucher)

X Sean Hartnett

Merchant Copy

THANK YOU



EPA 503 Metals

Lab Number: S23-08201
Sampler: SEAN HARTNETT
Date Received: 5/8/2023
Date Reported: 5/19/2023

SOILTEST FARM CONSULTANTS - 1
2925 DRIGGS DR
Moses Lake, WA 98837

Sample ID STOCKPILE 1 ENTIAT

		WAC 173.350.220				WAC 173.308.160	
		Compost				Soil/Biosolid	
Method		Result	Units	MDL	PQL	Limit	EPA 503 Limit
Arsenic	EPA 6010D / EPA 3050B Digest	1.97	mg/kg	1.05	4.20	20	41
Lead	EPA 6010D / EPA 3050B Digest	3.16	mg/kg	0.87	3.48	150	300

Note: "u" indicates that the element was analyzed for but not detected

**ALL LABORATORY TESTING COMPLIES WITH THE PROVISIONS
SET FORTH IN CHAPTER 173-50 WAC. DOE ACCREDITATION #C157**

This is your Invoice S23-08201 Account #: 100100 Reviewed by: K. Bair, PhD, CPSS List Cost: \$42.00



EPA 503 Metals

Lab Number: S23-08202
Sampler: SEAN HARTNETT
Date Received: 5/8/2023
Date Reported: 5/19/2023

SOILTEST FARM CONSULTANTS - 1
2925 DRIGGS DR
Moses Lake, WA 98837

Sample ID STOCKPILE 2 ENTIAT

		WAC 173.350.220				WAC 173.308.160	
		Compost				Soil/Biosolid	
Method		Result	Units	MDL	PQL	Limit	EPA 503 Limit
Arsenic	EPA 6010D / EPA 3050B Digest	3.77	mg/kg	1.05	4.20	20	41
Lead	EPA 6010D / EPA 3050B Digest	2.90	mg/kg	0.87	3.48	150	300

Note: "u" indicates that the element was analyzed for but not detected

**ALL LABORATORY TESTING COMPLIES WITH THE PROVISIONS
SET FORTH IN CHAPTER 173-50 WAC. DOE ACCREDITATION #C157**

This is your Invoice S23-08202 Account #: 100100 Reviewed by: K. Bair, PhD, CPSS List Cost: \$42.00



EPA 503 Metals

Lab Number: S23-08203
Sampler: SEAN HARTNETT
Date Received: 5/8/2023
Date Reported: 5/19/2023

SOILTEST FARM CONSULTANTS - 1
2925 DRIGGS DR
Moses Lake, WA 98837

Sample ID STOCKPILE 3 ENTIAT

		WAC 173.350.220				WAC 173.308.160	
		Compost				Soil/Biosolid	
Method		Result	Units	MDL	PQL	Limit	EPA 503 Limit
Arsenic	EPA 6010D / EPA 3050B Digest	2.36	mg/kg	1.05	4.20	20	41
Lead	EPA 6010D / EPA 3050B Digest	2.57	mg/kg	0.87	3.48	150	300

Note: "u" indicates that the element was analyzed for but not detected

**ALL LABORATORY TESTING COMPLIES WITH THE PROVISIONS
SET FORTH IN CHAPTER 173-50 WAC. DOE ACCREDITATION #C157**

This is your Invoice S23-08203 Account #: 100100 Reviewed by: K. Bair, PhD, CPSS List Cost: \$42.00



EPA 503 Metals

Lab Number: S23-08204
Sampler: SEAN HARTNETT
Date Received: 5/8/2023
Date Reported: 5/19/2023

SOILTEST FARM CONSULTANTS - 1
2925 DRIGGS DR
Moses Lake, WA 98837

Sample ID STOCKPILE 4 ENTIAT

		WAC 173.350.220				WAC 173.308.160	
		Compost				Soil/Biosolid	
Method		Result	Units	MDL	PQL	Limit	EPA 503 Limit
Arsenic	EPA 6010D / EPA 3050B Digest	4.18	mg/kg	1.05	4.20	20	41
Lead	EPA 6010D / EPA 3050B Digest	3.30	mg/kg	0.87	3.48	150	300

Note: "u" indicates that the element was analyzed for but not detected

**ALL LABORATORY TESTING COMPLIES WITH THE PROVISIONS
SET FORTH IN CHAPTER 173-50 WAC. DOE ACCREDITATION #C157**

This is your Invoice S23-08204 Account #: 100100 Reviewed by: K. Bair, PhD, CPSS List Cost: \$42.00

13 Attachment E: Environmental Covenant

To be inserted by Ecology.

14 Attachment F: Ecology Self Certification Form



DEPARTMENT OF
ECOLOGY
State of Washington

Commercial Building Self-Certification Statement Form
Model Remedy Implementation

Parcel Number (APN): 232021430210 Lot Size: 0.9 (Acres)

Parcel Address: 270 E Penny Road City/Zip Code: Wenatchee, WA 98801

Property Owner(s): Hartnett Real Estate LLC Zoning: North Wenatchee Business District (NWBD)

Mailing Address: 3419 Crestview Rd

City/State/Zip Code: Wenatchee, WA 98801

Phone: 509-679-8585 E-mail: hartnett1309@hotmail.com

Contractor/ Builder (if different than owner): Olin Excavation

Company and Mailing Address: 6025 Entiat Rv. Rd ~~Entiat~~ P.O. Box 125

City/State/Zip: Entiat WA 98822 Phone: 509-784-1126

E-mail: Phyllissha@olinelxavation.com

The following Self-Certification Statement (SCS) acknowledges that a Model Remedy was implemented at the parcel(s) listed above in accordance with the Washington State Department of Ecology Model Remedies for Cleanup of Former Orchard Properties in Central and Eastern Washington.

For remediation occurring during individual site development, the Property Owner(s) and Contractor performing the work are required to submit this SCS, signed, notarized, and recorded with the County Auditor, verifying the selected remedy has occurred for the identified parcel(s) listed above.

This SCS is required prior to receiving a Certificate of Occupancy for the commercial construction project.

This SCS pertains only to certification of completion with the identified Model Remedy(ies) required for the above-identified parcel(s) and is not applicable to any other permit or regulatory requirement.

COMMERCIAL BUILDING SELF-CERTIFICATION STATEMENT

CHECKLIST

Check each of the following items and include them as attachments to this certification:

- ☒ Brief description of implemented remedy including verification of cap depths and soil confirmation sampling for excavated areas, as applicable (for example, pre- and post-survey data or other means to demonstrate required cap thickness was attained).
- ☒ Map of the property (obtained from assessor database or similar) with sample locations, if taken.
- ☒ Photos showing components of the completed cleanup action (maximum of ten photos).
- ☒ If samples were taken, analytical lab reports and tabulated data for all samples collected (for example, investigation samples, excavation confirmation samples, and stockpile samples for disposal characterization).

By signing below, I certify the required cleanup of lead and arsenate contamination on the parcel(s) identified above has been completed in accordance with the Department of Ecology requirements.



Signature of Property Owner

9/1/23

Date



Signature of Contractor

9/1/23

Date

State of Washington

County of Chelan

I certify that I know or have satisfactory evidence that Sean M. Hartnett
and Phylisba A. Jegan
(Name of person(s))

is/are the person(s) who appeared before me, and said person(s) acknowledged that (he/she) signed this instrument and acknowledged it to be (his/her) free and voluntary act for the uses and purposes mentioned in the instrument.

COMMERCIAL BUILDING SELF-CERTIFICATION STATEMENT

Dated: 9/1/2023



[Signature]
Signature

Notary Public
Title

My appointment expires: 8.29.2024

To request an ADA accommodation, contact Ecology by phone at 509-406-6931 or email at Rhonda.Luke@ecy.wa.gov, or visit <https://ecology.wa.gov/accessibility>. For Relay Service or TTY call 711 or 877-833-6341.

