ENVIRONMENTAL SUMMARY AND CLOSURE REPORT

Modera Morrison
1120 SE Morrison Street
Portland, Oregon
DEQ LUST File No. 26-21-0394

For
Mill Creek Residential Trust
May 11, 2023

Project: MillCreek-19-04

NV5

May 11, 2023

Mill Creek Residential Trust
720 SW Washington Street, Suite 720
Portland, OR 97205

Attention: Sam Rodriguez

Environmental Summary and Closure Report
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1120 SE Morrison Street
Portland, Oregon
DEQ LUST File No. 26-21-0394
Project: MillCreek-19-04

NV5 is pleased to submit this Environmental Summary and Closure Report for the Modera Morrison site located at 1120 SE Morrison Street in Portland, Oregon (subject property). This report (1) summarizes the measures employed for the excavation, handling, characterization, and management of contaminated soil at the subject property; (2) documents the decommissioning of nine USTs; and (3) documents the results of confirmation soil samples collected from the limits of the excavations. Based on the information presented in this report, on behalf of Mill Creek Residential Trust, we request that DEQ issue an NFA determination for LUST File No. 26-21-0394.

Please call if you have questions or require additional information.

Sincerely,

NV5

Kyle R. Sattler, L.G. (Washington)
Principal Geologist

cc: Kevin Dana, Oregon Department of Environmental Quality
Chad Encinas, Mill Creek Residential Trust

CBS:KRS:kt
Attachments
One copy submitted
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TABLE OF CONTENTS

1.0	INTRODUCTION	1
2.0	SUBJECT PROPERTY REDEVELOPMENT	1
3.0	REGULATORY SCREENING LEVELS	2
	3.1 DEQ RBCs	2
	3.2 Ecological Screening Levels	3
	3.3 DEQ CFSLs	3
4.0	BACKGROUND	3
	4.1 Subject Property History	3
	4.2 Previous Investigations	4
	4.3 Soil Conditions	8
	4.4 Groundwater Conditions	8
5.0	EARTHWORK ACTIVITIES	9
	5.1 Mass Excavation	9
	5.2 Soldier Pile Installation	16
	5.3 Tieback Anchor Installation	17
6.0	FIELD SCREENING AND CHEMICAL ANALYTICAL RESULTS	17
	6.1 UST Waste Characterization Sample Results	18
	6.2 UST Confirmation Soil Sample Results	20
	6.3 Undocumented UST Confirmation Soil Sample Results	21
	6.4 SMA Waste Characterization and Confirmation Soil Sample Results	24
7.0	SCREENING LEVEL RISK ASSESSMENT	26
	7.1 Extent of Residual Contaminated Soil	26
	7.2 Estimated Volume of Residual Contaminated Soil	28
	7.3 Potentially Impacted Receptors	28
	7.4 Site-Specific RBCs	28
	7.5 Engineering Control	30
	7.6 Summary of Screening Level Risk Assessment	30
8.0	MEDIA DISPOSITION	31
	8.1 Disposal of Contaminated Soil	31
	8.2 Disposal of Soil/Fill (Including Debris) Meeting DEQ Clean Fill Criteria	31
9.0	SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS	32
19.0	LIMITATIONS	33

FIGURES

Vicinity Map	Figure 1
Site Plan – Pre-Development	Figure 2
Site Plan – Confirmation Soil Samples	Figure 3
Site Plan – Mass Excavation Limits and Soldier Pile Layout	Figure 4
Site Plan – West Elevation of Building	Figure 5
Site Plan – Residual Contaminated Soil	Figure 6

TABLE OF CONTENTS

TABLES

Summary of Soil Sample Chemical Analytical Results – Petroleum Hydrocarbons — Table 1
Summary of Soil Sample Chemical Analytical Results – VOCs — Table 2
Summary of Soil Sample Chemical Analytical Results – RCRA 8 Total Metals — Table 3
Summary of Soil Sample Chemical Analytical Results – RCRA 8 TCLP Metals — Table 4
Summary of Soil Sample Chemical Analytical Results – PAHs — Table 5
Summary of Soil Sample Chemical Analytical Results – PCBs — Table 6

APPENDICES

Appendix A
Development Plans
Appendix B
Historical Chemical Analytical Results
Appendix C
DEQ SWPE Letter
Appendix D
Waste Management Landfill Tonnage Summary
Appendix E
Subject Property Photographs — Figures E-1 – E-3
Appendix F
LUST Cost Recovery Agreement
Appendix G
Karl Van Zandt's UST Decommissioning Report
Appendix H
Soldier Pile Layout
Tieback Layout
Appendix I
Chemical Analytical Program — I-1
Laboratory Reports
Appendix J
ACM Laboratory Report

ACRONYMS AND ABBREVIATIONS

ACM	asbestos-containing material(s)
AOI	area of interest
AST	aboveground storage tank
BGS	below ground surface
BS	blank spike
BSD	blank spike duplicate
BTEX	benzene, toluene, ethylbenzene, and xylenes
CDF	controlled density fill
cfm	cubic feet per minute
CFSL	Clean Fill Screening Level
COP datum	City of Portland datum
COPC	chemical of potential concern or contaminant of potential concern
DEQ	Oregon Department of Environmental Quality
EPA	U.S. Environmental Protection Agency
ESA	Environmental Site Assessment
HCID	hydrocarbon identification
I.D.	identification
LUST	Leaking Underground Storage Tank
MDL	method detection limit
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
MRL	method reporting limit
MS	matrix spike
MSD	matrix spike duplicate
NA	not applicable
NC	not calculated
NE	not established
NFA	No Further Action
not detected	compound not detected at a concentration equal to or greater than the laboratory method reporting limit or reporting detection limit
OAR	Oregon Administrative Rule
ORRCO	Oil Re-Refining Company, Inc.
PAH	polycyclic aromatic hydrocarbon
PCB	polychlorinated biphenyl
PID	photoionization detector
PLM	polarized light microscopy
ppm	parts per million
QC	quality control
RBC	risk-based concentration
RBDM	*Risk-Based Decision Making for the Remediation of Petroleum-Contaminated Sites*
RCRA	Resource Conservation and Recovery Act
ROW	right-of-way
RPD	relative percent difference

SMA	Soil Management Area
SWMP	Solid and Water Management Plan
SWPE	Solid Waste Permit Exemption
TCLP	toxicity characteristic leaching procedure
TMB	trimethylbenzene
TPH	total petroleum hydrocarbon(s)
UCL	upper confidence limit
UST	underground storage tank
VOC	volatile organic compound

1.0 INTRODUCTION

This report summarizes the management and final disposition of soil removed during earthwork activities conducted at the Modera Morrison site located at 1120 SE Morrison Street in Portland, Oregon (subject property). The subject property encompasses 0.86 acre and includes Tax Lot 5100 of Multnomah County Tax Map 1S1E02BA. The subject property is zoned Central Employment (EX) and has been redeveloped to accommodate a mixed-use building with two below-ground parking levels. The City of Portland designates zone Central Employment (EX) as a high-density, mixed-use zone intended for sites in or near the Central City and in Gateway. The subject property is currently owned by CH Morrison, LLC. Earthwork activities described in this report were conducted in general conformance with the SWMP dated February 19, 2021.[1]

The subject property is shown relative to surrounding physical features on Figure 1. The layout of the subject property prior to redevelopment activities is shown on Figures 2 and 3. The current layout of the subject property is shown on Figure 4. Acronyms and abbreviations used herein are defined above, immediately following the Table of Contents.

2.0 SUBJECT PROPERTY REDEVELOPMENT

The subject property has been redeveloped as a new seven-story, mixed-use building with one level of below-ground parking on the west side of the building and two levels of below-ground parking on the east side of the building. The building footprint encompasses the majority of the city block between SE 11th and 12th Avenues and SE Morrison and SE Belmont Streets and is surrounded by approximately 6- to 12-foot-wide sidewalks on all sides. The parking garages exist beneath the entire building footprint. The mixed-use building includes over 200 residential apartments, numerous commercial spaces, and several amenity spaces. The ground surface of the subject property slopes downward from the east to the west. The lower-most parking garage (level P2) is comprised primarily of automotive parking spaces with a bike storage area near the central portion of the garage. The parking spaces within the upper-most parking garage (level P1) are generally located along the north, central, and east portions of the garage. Retail spaces and bike repair/storage areas encompass the west portion of the upper-most parking garage. The ground floor level (floor 1) consists of the main residential entry, retail space, amenities, an open-air courtyard, and residential units. Residential units will be located on floors 2 through 6. The seventh floor will consist of residential units as well as a club room and roof terrace.

Due to the sloped ground surface (downward from the east to the west) and construction of the below-ground parking levels, the ground floor level on the east side of the building is at approximately the same elevation as SE 12th Avenue (approximately elevation 71 feet, COP datum) and the ground floor level on the west side of the building lies above parking level P1, the bottom of which is at approximately the same elevation as SE 11th Avenue (approximately elevation 58 feet, COP datum). On the west side of the building, only retail spaces exist on the

[1] GeoDesign, Inc., 2021. *Soil and Water Management Plan; Modera Morrison; 1120 SE Morrison Street; Portland, Oregon,* dated February 19, 2021. GeoDesign Project: MillCreek-19-01-05

ground floor level. Development plans showing the layouts for the below-ground parking garages and ground floor level, prepared by SERA Architects, Inc., are presented in Appendix A. The west elevation of the building is shown on Figure 5.

3.0 REGULATORY SCREENING LEVELS

Although a formal conceptual site model and Level I Ecological Risk Assessment were not prepared for the subject property, the following sections present the applicable DEQ regulatory screening levels for soil based on our understanding of the redevelopment and the analytical results of the previous investigations and UST decommissioning activities performed at the subject property.

3.1 DEQ RBCS

DEQ has established generic RBCs for various contaminants, exposure pathways, and receptors to evaluate risk to human health and the environment. Based on our understanding of the redevelopment (Section 2.0), the analytical results of the previous investigations (Section 4.2), and the analytical results of the UST decommissioning activities (Sections 6.1 and 6.2), the following exposure pathways and receptors are considered complete at the subject property:

- *Soil Ingestion, Dermal Contact, and Inhalation:* construction worker and excavation worker receptors
- *Vapor Intrusion into Buildings*: urban residential and occupational receptors
- *Volatilization to Outdoor Air:* urban residential and occupational receptors

The RBCs associated with the above exposure pathways and receptors that were used to compare soil chemical analytical results to in this report are referred herein as the "applicable DEQ RBCs."

The following exposure pathways and receptors are considered incomplete at the subject property:

- Urban residential and occupational receptors are not included as applicable receptors for the *Soil Ingestion, Dermal Contact, and Inhalation* exposure pathway because all of the contaminated soil was removed from the subject property, the footprint of the building encompasses the majority of the subject property, and residual contaminated soil (beneath SE 11th Avenue) is deeper than 3 feet BGS (DEQ considers the *Soil Ingestion, Dermal Contact, and Inhalation* exposure pathway complete for residential, urban residential, and occupational receptors that may come into contact with contaminated soil up to 3 feet BGS).
- The DEQ *Leaching to Groundwater* RBCs are not used for comparison purposes as this exposure pathway is not considered complete since the City of Portland will provide potable water to the subject property (and does so currently to the surrounding properties) and future water supply wells are not planned at the subject property.

Although the *Vapor Intrusion into Buildings* exposure pathway is considered complete for urban residential and occupational receptors, an engineering control in the form of a dedicated ventilation system within the below-ground parking garages, separate from the above-ground

levels, has been installed and operates in accordance with City of Portland requirements, in particular, the air exchange rates. The below-ground ventilated parking garages exist beneath the entire building footprint. Details of the ventilation system are provided in Section 7.5.

Soil and waste characterization samples collected during the earthwork activities described in this report are compared to the applicable DEQ RBCs in Tables 1 through 6. Soil samples collected during previous investigations are compared to the applicable DEQ RBCs in Tables 1 through 5, presented in Appendix B. Soil gas and sub slab vapor samples collected during previous investigations are compared to the applicable DEQ RBCs in Table 6, presented in Appendix B.

3.2 ECOLOGICAL SCREENING LEVELS

A Level I Ecological Risk Assessment has not been completed for the subject property. However, based on the long-term development of the subject property and surrounding sites as industrial, commercial, and high-density urban residential, it is highly unlikely that sensitive ecological habitat or receptors are located at or in the vicinity of the subject property. Therefore, soil, soil gas, and sub-slab vapor chemical analytical results have not been compared to ecological screening levels since ecological exposure pathways are considered incomplete.

3.3 DEQ CFSLS

To facilitate characterization of soil for disposal purposes, soil chemical analytical results were also compared to established DEQ CFSLs, updated February 21, 2019. Soil that does not visually appear contaminated and contains chemical constituents at concentrations less than the DEQ CFSLs can be reused on site or disposed of off site without regulatory restrictions. However, if excavation spoils exhibit physical evidence of contamination (such as staining and/or odor), the spoils would not meet DEQ's definition of "clean fill" regardless of whether chemical constituents were present at concentrations less than DEQ CFSLs. Soil requiring export that does not meet DEQ's definition of "clean fill" must be managed as solid waste and disposed of at a RCRA Subtitle C or D landfill, or other appropriately permitted facility, if exported from the subject property.

4.0 BACKGROUND

The following sections describe the background of the subject property, including a summary of previous investigations conducted at the subject property and a description of the subsurface soil and groundwater conditions at the subject property.

4.1 SUBJECT PROPERTY HISTORY

Our review of historical sources from 1901 through 2022 indicated that the subject property was vacant land until 1901, by which time a residence was constructed on the southeast portion of the subject property. By 1909, additional residences and a telephone office were constructed. By 1924, a bakery was constructed on the southwest portion of the subject property. By 1969, the residences on the east portion of the subject property were demolished and a parking lot was constructed. By 2005, the subject property was occupied by AJP Northwest and A&S Marketing. In 2021, the remaining subject property structures were demolished and construction of the Modera Morrison development began.

4.2 PREVIOUS INVESTIGATIONS

The following sections briefly summarize the findings and conclusions of previous environmental investigations conducted at the subject property based on our review of the following environmental documents:

- *Letter Re: Tank Removal – AJP, Facility #6680,* prepared by O'Sullivan Construction, Inc. (O'Sullivan), dated July 29, 1991
- *Letter Re: AJP Tank Removal and Contamination*, prepared by O'Sullivan, dated April 30, 1992
- *Letter Re: Heating Oil Underground Storage Tank Decommissioning; 1120 SE Morrison Street, Portland, Oregon 97214; Trackit Number 1090867, NRC Job Number 108524,* prepared by NRC, dated December 20, 2016
- *Letter Re: UST Decommissioning and Risk-Based Cleanup for H/O UST; Property Located at 1120 SE Morrison Street, Portland, OR; DEQ File No. 26-16-1462,* prepared by K&S Environmental, Inc. (K&S), dated April 17, 2017
- *Phase I Environmental Site Assessment; Modera Morrison; 1120 SE Morrison Street; Portland, Oregon,* prepared by GeoDesign, Inc. (GeoDesign), dated May 16, 2019
- *Updated Phase II Environmental Site Assessment; Modera Morrison; 1120 SE Morrison Street; Portland, Oregon,* prepared by GeoDesign, dated August 28, 2019
- *Soil and Water Management Plan; Modera Morrison; 1120 SE Morrison Street; Portland, Oregon,* prepared by GeoDesign, dated February 19, 2021

4.2.1 O'Sullivan (1991 and 1992)

In 1991 O'Sullivan decommissioned two 1,000-gallon gasoline USTs on the northwest portion of the subject property (see Figure 3). Approximately 100 cubic yards of soil containing petroleum hydrocarbons were excavated and stored on site. Petroleum hydrocarbons were not detected above laboratory reporting limits in confirmation soil samples collected from the limits of the excavation. O'Sullivan indicated that the excavated soil would be treated on site before being taken off site for disposal. DEQ assigned LUST File No. 26-91-0267 to the incident in 1991.

In a 1992 letter, O'Sullivan indicated that the excavated soil from the release associated with the two 1,000-gallon gasoline USTs (LUST File No. 26-91-0267) was moved to behind the subject property structure (presumably on the east side of the former structure), spread in a 6-inch-thick layer, covered with plastic sheeting, and surrounded by hay bales. The soil was left undisturbed for three months and later sampled and tested for gasoline-range hydrocarbons. Gasoline-range hydrocarbons were not detected above laboratory reporting limits. The final off-site disposition of the treated soil was not documented. DEQ issued an NFA determination for LUST File No. 26-91-0267 in October 1996.

4.2.2 NRC (2016)

In November 2016, a 1,000-gallon heating oil UST was discovered beneath the sidewalk adjacent to the southwest corner of the subject property during ROW construction activities (see Figure 3). The UST was damaged by excavation equipment and approximately 20 gallons of heating oil were released to the subsurface. The UST was subsequently decommissioned by removal. Field evidence of petroleum in soil was observed at the limits of the excavation. Approximately 27 tons of soil were subsequently excavated from the vicinity of the former

heating oil UST and transported to Waste Management's Hillsboro landfill. Soil samples were collected from the limits of the excavation and analyzed for diesel- and oil-range petroleum hydrocarbons. Oil-range hydrocarbons were not detected above laboratory reporting limits in the soil samples submitted for chemical analysis. Diesel-range hydrocarbons were detected in the soil samples submitted for chemical analysis at a maximum concentration of 10,900 mg/kg. Groundwater was not encountered in the excavation during decommissioning activities. NRC reported the release to DEQ, and LUST File No. 26-16-1462 was assigned to the incident. NRC suggested further action was necessary to address the petroleum hydrocarbons in soil within the area of the former heating oil UST. These soils were addressed by K&S in 2017 (discussed in the following section).

4.2.3 K&S (2017)

In April 2017, K&S conducted soil sampling in the vicinity of the former heating oil UST located beneath the sidewalk adjacent to the southwest corner of the subject property. Five soil borings were advanced to a depth of 15 feet BGS, and soil samples were collected from between 9 and 15 feet BGS. Diesel-range hydrocarbons were detected in 3 of the 11 soil samples submitted for chemical analysis at a maximum concentration of 1,980 mg/kg at 13 feet BGS. One soil sample was submitted for chemical analysis of BTEX and PAHs. BTEX and PAHs were not detected at concentrations greater than applicable RBCs. In addition, field evidence of contamination was observed in only one of the borings between 9 and 14 feet BGS. Based on the analytical results of the soil investigation, K&S concluded that the concentrations of the remaining diesel in soil were below the applicable DEQ RBCs at the time of the investigation and that the release associated with LUST File No. 26-16-1462 appeared to qualify for regulatory closure. DEQ issued an NFA determination for LUST File No. 26-16-1462 in June 2016 following review of the report submitted by K&S.

4.2.4 GeoDesign, Inc. (May 2019)

In 2019, GeoDesign conducted a Phase I ESA at the subject property, which identified the following enviromental concerns at the subject property:

- Residual petroleum hydrocarbons in soil associated with a former heating oil UST likely remain in place beneath the sidewalk adjacent to the southwest portion of the subject property (associated with LUST File No. 26-16-1462).
- Two gasoline USTs were formerly located on the northwest portion of the subject property (associated with LUST File No. 26-91-0267). However, it appeared that the USTs were decomissioned by removal and the soil impacted by historical releases was adequately remediated and used as backfill.
- A decommissioned-in-place UST was identifed beneath the east parking area of the subject property (see Figures 2 and 3).
- Historical records identifed one heating oil UST and one heating oil AST located on the subject property. The heating oil AST was not observed during the site reconnaissance.
- Two USTs of unknown contents were identified located in the sidewalk along SE Belmont Street adjacent south of the subject property (see Figures 2 and 3).

- Contaminated groundwater beneath the Piacentini Property, located approximately 130 feet upgradient of the subject property relative to the inferred groundwater flow direction, was identified as potentially impacting groundwater beneath the subject property.
- Suspect circular features were observed in the east-central portion of the subject property parking lot (see Figures 2 and 3).

Based on the results of the Phase I ESA, GeoDesign recommended conducting a Phase II ESA at the subject property (including a geophysical survey) to evaluate potential releases from the former and existing on- and off-site USTs and the suspect circular features (potential drywells). GeoDesign also recommended that the Phase II ESA include a clean fill evaluation to evaluate the quantity of soil that may need to be disposed of as solid waste if exported during future redevelopment.

4.2.5 GeoDesign, Inc. (July and August 2019)

GeoDesign conducted a Phase II ESA of the subject property in May and July 2019 to evaluate the nature and extent of chemical constituents in media at the subject property. The Phase II ESA was conducted in several phases, including (1) the initial on-site investigation that included advancement of 18 soil borings throughout the subject property and analysis of 41 soil samples, advancement of 2 soil gas borings and analysis of 2 soil gas samples at the subject property, and collection and analysis of 1 sub-slab vapor sample; (2) an on-site investigation of fill material beneath the east parking area and an off-site investigation of the USTs located beneath the sidewalk adjacent south of the subject property; and (3) a supplemental investigation of the lead-containing fill beneath the east parking area. The results of each of these investigative phases indicated the following:

- Fill material was identified beneath the east parking area of the subject property to depths of up to approximately 3.5 feet BGS. The fill material generally consisted of clay or gravel and was visually distinguishable from the underlying native soil. The fill material also was commonly present overlying concrete and/or wood debris.
- Lead was detected in soil samples collected from the shallow fill material beneath the east parking area of the subject property at concentrations ranging from 50.6 to 1,580 mg/kg, which exceeded the DEQ CFSL of 28 mg/kg. In addition, the detected concentrations of lead in soil samples DP-26(1-1.5) and DP-32(1-1.5) exceeded the DEQ *Soil Ingestion, Dermal Contact, and Inhalation* RBCs for occupational, construction worker, and excavation worker receptors. TCLP lead results indicated that leachable lead was not detected at concentrations greater than the EPA non-hazardous landfill disposal limit of 5.0 mg/L. Therefore, the lead-containing fill could be managed as non-hazardous waste.
- Gasoline-range hydrocarbons, benzo(a)pyrene, and napthalene were detected in soil sample HA-8(1.3-1.5) at concentrations greater than the corresponding DEQ CFSLs, but less than the applicable DEQ RBCs. Benzo(a)pyrene was also detected in soil samples DP-4(0.5-1.5) and HA-10(0.3-0.7) at a concentration greater than the DEQ CFSL, but less than the applicable DEQ RBCs. These exceedances were only detected in the shallow fill material located on the east portion of the subject property. The locations of boring DP-4 and soil samples HA-8 and HA-10 are shown on Figure 2.

- A geophysical survey confirmed the presence of the footprints of structures formerly located on the east portion of the subject property. The geophysical survey also estimated that fill material beneath the east parking area extended to a maximum depth of approximately 3.5 feet BGS. The shallow fill material was identified as the SMA and is shown on Figure 2.
- Native soil underlying the east fill material did not contain COPCs at concentrations greater than the applicable DEQ RBCs or corresponding CFSLs. The shallow fill material was visibly distinguishable from the underlying native soil.
- Fill material consisting of backfill for former UST excavations or pea gravel was encountered in areas outside of the east parking area to depths of up to approximately 7 feet BGS. Chemical analytial results indicated that COPCs were not detected in the deeper fill material in areas outside of the east parking area.
- Arsenic and cadmium were detected in select samples at concentrations above the corresponding DEQ CFSLs, but based on the calculated 90% UCLs, the detected concentrations appeared to be within naturally occurring concentrations for the area. DEQ issued a letter, dated August 22, 2019, that concluded the soil proposed for excavation at the subject property (with the exception of lead- and benzo(a)pyrene-containing fill within the main east parking lot) is essentially the same as clean fill and is exempt from solid waste permitting regulations pursuant to OAR 340-0093-0080 (2). DEQ's August 22, 2019, letter is presented in Appendix C.
- COPCs were not detected in the soil vapor samples collected from the subject property at concentrations greater than the applicable DEQ RBCs.
- The geophysical survey confirmed the presence of two off-site USTs (beneath the north sidewalk of SE Belmont Street adjacent south of the subject property) and one on-site previously decommissioned-in-place UST (east of the former subject property structure in the east parking area).
- Petroleum hydrocarbons and related constituents were not detected in the limited soil samples collected near the former USTs.
- The geophysical survey did not identify the presence of drywells at the subject property in the areas surveyed.

The locations of the SMA, the Phase II ESA explorations, and the features/USTs identified during the Phase II ESA are shown on Figure 2. A summary of the Phase II ESA chemical analytical results are presented in Tables 1 through 5 of Appendix B.

4.2.6 GeoDesign, Inc. (February 2021)

GeoDesign (now NV5) prepared an SWMP for the subject property, dated February 19, 2021, for use by the construction team and to assist the earthwork contractor with the identification and proper management of known and potentially contaminated soil that could be encountered during construction and earthwork activities. The SWMP identified several areas of contaminated soil (identified as the SMA and AOI #1) and potentially contaminated soil (identified as AOIs #2 and #3) at the subject property, as follows:

- **SMA:** The SMA encompassed the majority of the former east parking area and was associated with fill material likely placed during demolition of the structures formerly located on the subject property. Up to approximately 3.5 feet of fill was encountered in select borings advanced in the east parking lot, containing gasoline-range hydrocarbons, lead, benzo(a)pyrene, and naphthalene at concentrations greater than the applicable DEQ RBCs and/or corresponding CFSLs.
- **AOI #1:** AOI #1 was located on the southwest corner of the subject property and was associated with a heating oil UST formerly located beneath the adjoining sidewalk (LUST File No. 26-16-1462). The heating oil UST was decommissioned by removal and residual petroleum-impacted soil was reportedly left in place.
- **AOI #2:** AOI #2 was associated with two USTs located beneath the sidewalk adjoining the south portion of the subject property.
- **AOI #3:** AOI #3 was associated with a UST that was decommissioned-in-place in the east parking area of the subject property.

The SWMP also included provisions for the handling of potential undocumented USTs that may be encountered during earthwork activities associated with the subject property's redevelopment. As described below in this report, a total of six undocumented USTs were also encountered during the earthwork activities, in addition to the three previously identified in-place USTs described above, bringing the total number of USTs removed from the subject property during redevelopment to nine.

4.3 SOIL CONDITIONS

Subsurface conditions beneath the subject property included fill material from the ground surface to depths of up to approximately 3.5 feet BGS in the vicinity of the east parking area (the SMA) and up to 7 feet BGS in areas outside of the east parking area at the subject property. The fill material was highly variable and consisted of clay, sand, gravel, and/or pea gravel. Brick, concrete, and wood debris was also observed in the fill material beneath the east portion of the subject property. The fill was underlain by alluvial fine-grained soil, including silt, silty sand, and silty gravel, to depths of up to 30 feet BGS.

4.4 GROUNDWATER CONDITIONS

Groundwater was not encountered at the subject property during our limited Phase II ESA activities or the UST decommissioning activities. However, during our geotechnical investigation in February 2017, groundwater was measured at a depth of approximately 45 feet BGS at the subject property. Based on a review of previous reports and topographic maps of the area, shallow groundwater beneath the subject property is anticipated to flow to the west toward the Willamette River. The depth to groundwater may fluctuate in response to seasonal changes, changes in surface topography, water level fluctuation in nearby bodies of water, and other factors (such as dewatering activities at nearby construction sites and/or permanent dewatering systems for below-grade levels of nearby structures).

5.0 EARTHWORK ACTIVITIES

To accommodate the below-grade parking levels, redevelopment included mass excavation of the subject property to a maximum depth of approximately 25 feet BGS. The depth of the elevator pit within the bottom of the mass excavation extended to approximately 30 feet BGS. The mass excavation generated soil that required off-site disposal. In addition to the mass excavation activities, other earthwork activities that generated soil for off-site disposal included soldier pile installation and tieback anchor installation.

All earthwork activities were conducted in general accordance with the SWMP. Soil generated during earthwork activities that exhibited field screening evidence of contamination was managed by one of the following two options: (1) the contaminated soil was segregated and temporarily stockpiled and then loaded into trucks for off-site disposal at a RCRA Subtitle D landfill, or (2) the contaminated soil was loaded directly into trucks for off-site disposal at a RCRA Subtitle D landfill.

Lead- and petroleum-contaminated soil were transported to a RCRA Subtitle D landfill (Waste Management's Hillsboro landfill) and disposed of under profile numbers 1352410R and 1352100R, respectively. A summary of the daily tonnage reports for the soil disposed of at the Hillsboro landfill is presented in Appendix D. Select photographs taken during earthwork activities are presented in Appendix E. The following sections provide a summary of the earthwork activities that generated soil for off-site disposal.

5.1 MASS EXCAVATION

Mass excavation of the subject property included excavating soil to accommodate the below-grade levels of the parking garages during the earthwork activities. The limits of the mass excavation (corresponding with the boundaries of the below-grade parking levels) are shown on Figure 4. The mass excavation was primarily conducted between April 9 and May 12, 2021. Prior to the mass excavation, the topography of the subject property sloped downward from the east to the west. Elevations at the subject property ranged from approximately 73 feet in the northeast corner to 60 feet in the southwest corner (COP datum). The final grade of the bottom of the mass excavation was approximately 47.5 feet (COP datum). Since significant perched water and groundwater were not encountered during the mass excavation activities, dewatering was not necessary.

Mass excavation at the subject property was completed in several phases to accommodate installation of the timber lagging between the soldier piles (discussed in Section 5.2) and installation of the tiebacks (discussed in Section 5.3). In general, each phase of mass excavation along the perimeters of the mass excavation limits were completed in approximately 5-foot depth intervals to accommodate lagging installation and ensure worker safety and adequate support of the soil surrounding the subject property. The central portion of the mass excavation was therefore excavated to final grade prior to the perimeters of the mass excavation.

During the mass excavation activities, six undocumented USTs were encountered at the subject property in addition to the previously identified decommissioned-in-place UST beneath the east parking area of the subject property and the two USTs of unknown contents located beneath the

sidewalk along SE Belmont Street adjacent south of the subject property. Upon discovery of the undocumented USTs, the contractor (DeWitt Construction, Inc.) notified NV5 and hired Spartan Environmental Services LLC (Spartan) to properly decommission the USTs in accordance with OAR 340-122 and 340-150. Spartan hired Karl Van Zandt Environmental Consulting LLC (Karl Van Zandt), who served as the Oregon-licensed UST service provider to properly decommission the previously identified USTs and the undocumented USTs.

Karl Van Zandt subsequently prepared an Initial (Twenty Day) Report Form for UST Cleanup Projects and a soil matrix checklist and scoresheet for the three previously identified USTs (herein referenced as "USTs") and six undocumented USTs (herein referenced as "undocumented USTs") located at the subject property. On May 3, 2021, DEQ was notified of a petroleum leak associated with an UST system at the subject property and assigned the subject property LUST File No. 26-21-0394. Mill Creek Residential Trust entered into a LUST Cost Recovery Agreement with DEQ for LUST File No. 26-21-0394 on June 30, 2022. The Cost Recovery Agreement is presented in Appendix F. The Initial (Twenty Day) Report Form for UST Cleanup Projects and the soil matrix checklist and scoresheet are provided as appendices in Karl Van Zandt's April 3, 2022, UST Decommissioning Report, presented in Appendix G.

Between April 12 and May 6, 2021, Karl Van Zandt supervised the decommissioning (by removal) of the three USTs and the six undocumented USTs at the subject property. A total of 4,300 gallons of liquid waste were pumped from the USTs and undocumented USTs, with the exception of UST #1, using a vacuum truck. The liquid waste was subsequently transported to an ORRCO-permitted facility located at 4150 North Suttle Road in Portland, Oregon, for recycling. After the USTs and undocumented USTs were removed and cleaned, they were transported to either Bob's Metals of Portland, Oregon, or Cherry City Metals of Salem, Oregon, to be salvaged as scrap metal. Karl Van Zandt collected soil samples from overburden soil and confirmation soil samples beneath the USTs and the undocumented USTs. The samples collected by Karl Van Zandt were submitted to Specialty Analytical of Clackamas, Oregon, (Specialty) for analysis. NV5 personnel were on site a total of 20 times to observe the UST and undocumented UST decommissioning activities and to document the management of the soil removed from the vicinities of the USTs and undocumented USTs, as well as from the limits of the mass excavation. NV5 personnel collected confirmation soil samples from beneath two undocumented USTs (identified as formerly containing gasoline), the results of which are discussed in Sections 6.3.3 and 6.3.5.1. The samples collected by NV5 were submitted to Apex Labs of Tigard, Oregon, (Apex) for analysis.

In general, soil samples that exhibited the highest degree of petroleum-related contamination during field screening (significant odors, heavy sheens, and elevated PID readings) were encountered in soil near the northwest, south, and southwest portions of the subject property, in the vicinity of the USTs and undocumented USTs to maximum depths of approximately 14 feet BGS. Shallow contaminated soil and fill material (up to a depth of approximately 3.5 feet BGS) within the SMA was also removed during the mass excavation activities.

The following sections summarize the UST decommissioning activities, the undocumented UST decommissioning activities, and the contaminated soil and debris removal activities within the SMA.

5.1.1 Previously Identified UST Decommissioning Activities

As described above and in Section 4.2.4, NV5 identified a previously decommissioned-in-place UST beneath the east parking area of the subject property and two USTs of unknown contents beneath the sidewalk along SE Belmont Street adjacent south of the subject property. These USTs were identified by Karl Van Zandt, and referenced in his May 3, 2022, UST Decommissioning Report, as UST #1, UST #5, and UST #6, respectively. For simplicity, the following sections refer to these previously identified USTs as UST #1, UST #5, and UST #6. The specific decommissioning activities for each of these USTs are described below.

UST #1

UST #1 was assigned to the decommissioned-in-place UST east of the former building in the east parking area. UST #1 was unearthed on April 13, 2021. Karl Van Zandt identified UST #1 as a 3,000-gallon PS300 boiler fuel tank. UST #1 contained approximately 1,500 gallons of fuel oil and water and approximately 300 gallons of oily solids. The top of UST #1 was approximately 3 feet BGS. UST #1 was removed by Karl Van Zandt on April 16, 2021. Karl Van Zandt collected a sample of the overburden soil that existed above UST #1 (SP2-1), as well as two confirmation soil samples beneath UST #1 (TK1 South and TK1 Center), the results of which are discussed in Section 6.2.1. Fluids from UST #1 were disposed of at ORRCO, and UST #1 was subsequently transferred to Bob's Metals for recycling.

UST #5

UST #5 was identified as the western UST located beneath the sidewalk adjacent south of the former structure. UST #5 was unearthed on April 20, 2021, and measured approximately 4 feet in diameter and 12 feet long. Karl Van Zandt identified UST #5 as a 1,000-gallon PS300 boiler fuel tank. Karl Van Zandt collected a waste characterization sample (12th DeWitt- Tank) representative of the contents within UST #5 (as well as UST #6 and undocumented UST #2, described below and in Section 5.1.2, respectively) to create a waste profile for ORRCO, the results of which are discussed in Section 6.1.1. UST #5 contained approximately 300 gallons of boiler fuel oil and was pumped and cleaned on April 20, 2021. Fluids from UST #5 were disposed of at ORRCO. Karl Van Zandt collected three soil samples from beneath UST #5 [TK5 Center, TK5 West, and TK(5-6)], the results of which are discussed in Section 6.2.2. Sample TK(5-6) was collected in between UST #5 and UST #6 and represents soil immediately east of UST #5 and immediately west of UST #6. UST #5 was subsequently transferred to Cherry City Metals for recycling.

UST #6

UST #6 was identified as the eastern UST located beneath the sidewalk adjacent south of the former structure. UST #6 was unearthed on April 20, 2021, and measured approximately 4 feet in diameter and 12 feet long. Karl Van Zandt identified UST #6 as a 1,000-gallon PS300 boiler fuel tank. Karl Van Zandt collected a waste characterization sample (12th DeWitt- Tank) representative of the contents within UST #6 (as well as UST #5 and undocumented UST #2, described above and in Section 5.1.2, respectively) to create a waste profile for ORRCO, the results of which are discussed in Section 6.1.1. UST #6 contained approximately 300 gallons of boiler fuel oil and was pumped and cleaned on April 20, 2021. Fluids and solids from UST #6 were disposed of at ORRCO. Karl Van Zandt collected three confirmation soil samples from

beneath UST #6 [TK6 Center, TK6 East, and TK(5-6)], the results of which are discussed in Section 6.2.3. UST #6 was subsequently transferred to Cherry City Metals for recycling.

5.1.2 Undocumented UST Decommissioning Activities

Six undocumented USTs were encountered during the mass excavation activities. Each of the six undocumented USTs were sequentially identified by Karl Van Zandt, and referenced in his May 3, 2022 UST Decommissioning Report, as USTs #2, #3, #4, #7, #8 and #9. For simplicity, the following sections refer to these USTs as undocumented USTs #2, #3, #4, #7, #8 and #9. It should be noted that several discrepancies were observed between NV5's field documentation and Karl Van Zandt's field documentation, particularly the size and capacity of some of the undocumented USTs and dates of the UST removal activities. For simplicity, the following sections reference the undocumented USTs' measured dimensions and removal dates as determined by NV5 personnel. The referenced tank capacities and former contents are those estimated by Karl Van Zandt and documented in his May 3, 2022 UST Decommissioning Report presented in Appendix G. Although such discrepancies exist, it is NV5's opinion that these discrepancies do not change the results of the confirmation soil sampling associated with each undocumented UST or our evaluation of risk to the current and future receptors. The specific decommissioning activities for each of these undocumented USTs are described below.

Undocumented UST #2

Undocumented UST #2 was located on the northwest portion of the subject property. This undocumented UST appears to have been located near the formerly decommissioned (by removal) gasoline USTs discussed in Section 4.2.4. Undocumented UST #2 was unearthed on April 12, 2021, and measured approximately 4 feet in diameter and 8 feet long. Undocumented UST #2 was identified by Karl Van Zandt as a 675-gallon heating oil UST containing CDF, located approximately 5 feet BGS. NV5 personnel collected discrete soil sample UST-1 from stockpiled soil associated with UST #2 that exhibited the highest field screening evidence of contamination, and Karl Van Zandt collected a waste characterization sample (12th DeWitt- Tank) representative of the contents within undocumented UST #2 (as well as USTs #5 and #6 described in Section 5.1.1) to create a waste profile for ORRCO, the results of which are discussed in Section 6.1.1. The residual tank contents in undocumented UST #2 were pumped and cleaned on April 16, 2021. Karl Van Zandt collected three confirmation soil samples from beneath undocumented UST #2 (TK2 West, TK2 Center, and TK2 East), the results of which are discussed in Section 6.3.1. Petroleum-contaminated soil associated with undocumented UST #2 and CDF from within UST #2 were disposed of at Waste Management's Hillsboro landfill, and undocumented UST #2 was subsequently transferred to Bob's Metals for recycling on April 17, 2021.

Undocumented UST #3

Undocumented UST #3 was located beneath the sidewalk adjacent west of the former structure. This undocumented UST was unearthed on April 16, 2021, and measured approximately 4 feet in diameter and 12 feet long. Undocumented UST #3 was identified by Karl Van Zandt as a 675-gallon heating oil tank, the top of which was approximately 3.3 feet BGS. Undocumented UST #3 contained approximately 600 gallons of heating oil and was pumped and cleaned on April 20, 2022. Fluids and solids contained in undocumented UST #3 were removed and disposed of at ORRCO. Field screening evidence of petroleum impact was noted in overburden

soil and in soil at the south end of undocumented UST #3. Karl Van Zandt collected three confirmation soil samples from beneath undocumented UST #3 (TK3 North, TK3 Center, and TK3 South), the results of which are discussed in Section 6.3.2. Due to the close proximity of undocumented UST #8, located north of undocumented UST #3, which contained gasoline, NV5 collected sample HOT-SP(042121) from a temporary stockpile comprised of soil that was excavated from the vicinities of undocumented USTs #3 through #6 for analysis of VOCs for disposal profiling purposes, the results of which are discussed in Section 6.1.4. Undocumented UST #3 was subsequently transferred to Cherry City Metals for recycling.

Undocumented UST #4

Undocumented UST #4 was located beneath the sidewalk adjacent west of the former structure, immediately south of undocumented UST #3. Undocumented UST #4 was unearthed on April 16, 2021, and measured approximately 5 feet in diameter and 10 feet long. Undocumented UST #4 was identified by Karl Van Zandt as a 675-gallon heating oil tank, the top of which was approximately 1.5 feet BGS. Undocumented UST #4 contained approximately 300 gallons of heating oil and was pumped and cleaned on April 20, 2021. Fluids and solids contained in undocumented UST #4 were disposed of at ORRCO. Karl Van Zandt collected three confirmation soil samples from beneath undocumented UST #4 (TK4 North, TK4 Center, and TK4 South), the results of which are discussed in Section 6.3.3. In collaboration with Karl Van Zandt, NV5 collected one soil sample (TK4-S7) from beneath undocumented UST #4 for further analysis (discussed in Section 6.3.3) based on the nearby location of undocumented UST #8 that contained gasoline. The results of soil sample TK4-S7 are discussed in Section 6.3.3. Undocumented UST #4 was subsequently transferred to Cherry City Metals for recycling.

Undocumented UST #7

Undocumented UST #7 was located on the northwest portion of the subject property, south of undocumented UST #2. As with undocumented UST #2, this undocumented UST appears to also have been located near the formerly decommissioned (by removal) gasoline UST discussed in Section 4.2.4. Undocumented UST #7 was unearthed on April 20, 2021, and measured approximately 4 feet in diameter and 7 feet long. Undocumented UST #7 was identified by Karl Van Zandt as a 675-gallon heating oil tank. Undocumented UST #7 was previously decommissioned in place and appeared to contain petroleum-impacted CDF. Undocumented UST #7 was removed on April 20, 2021, and placed on plastic sheeting. The CDF was subsequently removed from the UST on site. In collaboration with Karl Van Zandt, NV5 personnel collected a sample (UST-CDF) of the apparent petroleum-impacted CDF for waste characterization purposes, the results of which are discussed in Section 6.1.2.

Field-screening evidence of petroleum-contaminated soil was observed on the bottom of the excavation after removal of undocumented UST #7. Consequently, petroleum-contaminated soil was over-excavated from the bottom of the excavation until field screening evidence of contamination was no longer observed. The remedial excavation associated with undocumented UST #7 extended to approximately 12 feet BGS. Karl Van Zandt collected seven confirmation soil samples from the limits of the remedial excavation (TK7 South, TK7 Center, TK7 North, TK7 East, TK7 West, TK7 North Side, and TK7 South Side), the results of which are discussed in Section 6.3.4. Undocumented UST #7 was subsequently transferred to Cherry City Metals for recycling.

Undocumented UST #8

Undocumented UST #8 was located beneath the sidewalk adjacent southwest of the former structure, north of undocumented UST #3. Undocumented UST #8 was unearthed on April 21, 2022, and measured approximately 3.25 feet in diameter and 9.5 feet long. Undocumented UST #8 was identified by Karl Van Zandt as a 675-gallon gasoline UST, the top of which was approximately 4 feet BGS. Undocumented UST #8 was previously decommissioned in place and was approximately half full of sand that also contained gasoline and water. NV5 personnel collected a sample (UST-Gas) of the apparent gasoline-impacted sand for waste characterization purposes, the results of which are discussed in Section 6.1.3.

Due to construction logistics in the vicinity of undocumented UST #8, undocumented UST #8 was removed on May 6, 2021. Liquid was observed leaking from the bottom of undocumented UST #8 as it was removed, and a plastic tote was placed beneath it to catch the liquid. Undocumented UST #8 was subsequently placed on Karl Van Zandt's plastic-lined trailer and exported from the subject property for cleaning and disposal by Spartan. Karl Van Zandt collected a waste characterization sample (TK8 South) from beneath the south end of undocumented UST #8 that exhibited the highest field screening evidence of gasoline-contamination for waste characterization purposes, the results of which are discussed in Section 6.1.3. Based on the results of waste characterization sample TK8 South and the field screening evidence of gasoline-contaminated soil, NV5 observed interim over-excavation activities until it was no longer feasible to remove additional gasoline-contaminated soil toward the west (due to potential undermining on soil beneath SE 11th Avenue). However, the contractor informed NV5 that additional excavation toward the west in this area would be feasible at a later date when they were ready to install utilities in the area and would be prepared with trench boxes. The interim remedial excavation associated with undocumented UST #8 extended to a maximum depth of approximately 14 feet BGS.

On May 11, 2021, NV5 personnel collected eight confirmation soil samples from the initial limits of the excavation associated with undocumented UST #8, the results of which are discussed in Section 6.3.5.1.[2] Based on continued field screening evidence of gasoline-contaminated soil at the southern bottom of the excavation, additional soil was over-excavated from this area and soil represented by previous confirmation soil sample TK8-BS(11.5) was removed. Additional petroleum-contaminated soil was over-excavated in this area to a depth of approximately 14 feet BGS. NV5 collected an additional confirmation soil sample from the bottom of the over-excavation limits [TK8-BS(14)], the results of which are discussed in Section 6.3.5.1. On May 6, 2021, due to safety concerns and potential undermining of SE 11th Avenue, the interim excavation was temporarily backfilled with clean silty sand that was generated on site.

On March 2, 2022, the contractor was again able to excavate soil in the vicinity of undocumented UST #8 in preparation of underground utilities installations. NV5 observed continued remedial excavation activities west of undocumented UST #8 where residual gasoline-contaminated soil was previously observed on May 11, 2021, prior to backfilling. Additional over-excavation of gasoline-contaminated soil was removed as far to the west of undocumented

[2] TK8-SWE(8), TK8-SWN(7), TK8-SWS(8), TK8-SWW-1(8), TK8-SWW-2(8), TK8-SWW-3(10), TK8-BN(9.5), and TK8-BS(11.5)

UST #8 as possible without encroaching onto SE 11th Avenue. During these over-excavation activities, soil represented by previous confirmation soil samples TK8-SWW-1(8) and TK8-SWW-2(8) were removed and two additional confirmation soil samples [TK8-SWW-4(8) and TK8-SWW-5(8)] were collected from the western most sidewalls near the bottom of the final excavation limits where residual contamination was observed, the results of which are discussed in Section 6.3.5.1.

Undocumented UST #9

Undocumented UST #9 was located on the northwest portion of the subject property, east of undocumented USTs #2 and #7. As with undocumented USTs #2 and #7, this undocumented UST appears to have also been located near the formerly decommissioned (by removal) gasoline UST discussed in Section 4.2.4. Undocumented UST #9 was unearthed on May 6, 2021, and measured approximately 3.5 feet in diameter and 8 feet long. Undocumented UST #9 was identified by Karl Van Zandt as a 500-gallon gasoline UST. Undocumented UST #9 was approximately three-quarters full of sand and liquid. Upon removal, holes were observed in the bottom of undocumented UST #9 and a release was evident due to the field screening evidence of gasoline-contaminated soil within the excavation. Undocumented UST #9 was placed on plastic sheeting prior to being exported off site. NV5 observed the contractor excavate the gasoline-contaminated soil and temporarily stockpile it on site, on plastic sheeting in accordance with the SWMP. Karl Van Zandt instructed the contractor to cut open undocumented UST #9 and remove the sand within the UST and add it to the temporary stockpile of gasoline-contaminated soil. Undocumented UST #9 was subsequently loaded onto Karl Van Zandt's plastic-lined trailer and exported from the subject property for cleaning and disposal by Spartan.

NV5 personnel collected two confirmation soil samples from beneath the ends of undocumented UST #9 [UST-9_BaseN(8) and UST-9_BaseS(8)], the results of which are discussed in Section 6.3.6. On May 7, 2021, NV5 personnel observed the contractor over-excavate gasoline-contaminated soil, performing field screening during the over-excavation activities. The contractor continued to over-excavate gasoline-contaminated soil until the final limits of the remedial excavation encompassed undocumented USTs #2, #7, and #9 and field screening did not indicate residual petroleum impacts. NV5 personnel collected five confirmation soil samples from the final limits of the remedial excavation [NW-PIT-North(8), NW-PIT-West(8), NW-PIT-South(8), NW-PIT-East(8), and NW-PIT-Base(13)], the results of which are discussed in Section 6.3.6.

5.1.3 Removal of Shallow Contaminated Soil Within the SMA

The SMA was divided into four composite sampling areas (COMP-1 through COMP-4), and between April 9 and April 13, 2021, eight test pits were excavated within each composite area for collection of discrete and composite soil samples. Discrete soil samples were collected throughout the fill material exposed in the test pits at approximate 0.5-foot intervals to approximately 2 feet BGS. Composite confirmation soil samples (Comp-1-Native, Comp-2-Native, Comp-3-Native, and Comp-4-Native) were also collected from native soil below the bottom of the fill material within each composite sampling area. Two additional composite confirmation soil samples (Comp-3-Native2 and Comp-3-Native3) were collected from composite sampling area COMP-3 below composite confirmation soil sample Comp-3-Native. The results of the discrete and composite confirmation soil samples are summarized in Section 6.4. Based on the results

of the discrete and composite confirmation soil samples, the contractor proceeded to remove the contaminated fill material from the SMA between April 21 and May 3, 2021. The contaminated fill material was transported to Waste Management's Hillsboro landfill for disposal under profile number 1352410R.

The spoils generated during excavation of the test pits within each composite sampling area were temporarily stockpiled on site in accordance with the SWMP. Discrete soil samples were collected from the temporarily stockpiled spoils and subsequently composited to generate composite characterization soil sample Lead Comp, the results of which are discussed in Section 6.4. Based on the results of composite characterization sample Lead Comp, the temporarily stockpiled spoils were subsequently transported to Waste Management's Hillsboro landfill for disposal under profile number 1352410R.

5.1.4 Removal of Construction Debris within the SMA

Some of the construction debris encountered during excavation of the fill material within the SMA, including plaster with surfacing material and potential sheet vinyl, was considered by NV5 as suspect ACM. NV5 collected sample AS-1 from the plaster and surfacing material and sample AS-2 from the potential sheet vinyl. The suspect ACM samples were submitted to JSE Labs of Tigard, Oregon, for PLM analysis, the results of which are discussed in Section 6.4. Based on the results of the suspect ACM, the fill soil containing the construction debris was disposed of at Waste Management's Hillsboro landfill as general construction debris under profile number 1352410R.

5.2 SOLDIER PILE INSTALLATION

A timber lagging shoring system was installed along the north, east, south, and west limits of the mass excavation to provide lateral support for the ROWs surrounding the subject property. The locations of the soldier piles for the development are shown on Figure 4 and Shoring Plan Sheet SH100, presented in Appendix H. The soldier pile shafts were drilled along the perimeter of the mass excavation using a Bauer BG 24H drill equipped with a 24-inch-diameter continuous flight auger. Once the auger achieved the target depths, a lean mix of concrete was pumped into each shaft as the auger was withdrawn. After each drilled shaft was completed and filled with lean mix concrete, the soldier piles were installed to final grade. A total of 103 soldier piles were installed between April 30 and May 22, 2022. The soldier piles along the east limits of the mass excavation were installed to depths between approximately 24 and 42 feet BGS (between elevations of 22 and 38 feet, COP datum). The soldier piles along the south limits of the mass excavation were installed to depths between approximately 24 and 42 feet BGS (between elevations of 17 and 23 feet, COP datum). The soldier piles along the west limits of the mass excavation were installed to depths between approximately 21 and 25 feet BGS (between elevations of 35 and 46 feet, COP datum). The soldier piles along the north limits of the mass excavation were installed to depths between approximately 25 and 48 feet BGS (between elevations of 13 and 37 feet, COP datum).

Soil spoils generated from the installation of the soldier piles were field screened for physical evidence of petroleum contamination. Physical evidence of contamination (petroleum-like odor, staining, sheen, and/or elevated PID readings) was observed in the spoils generated during the installation of soldier piles 83 through 85 and 101 along the west sidewall of the mass

excavation. The physical evidence of contamination observed in the spoils during installation of soldier piles 83 through 85 was most likely associated with the releases from undocumented USTs #3, #4, and/or #8 (see Section 5.1.2). Spoils generated during installation of these soldier piles were segregated and temporarily stockpiled at the subject property in accordance with the SWMP. The temporary stockpiles of soil spoils were subsequently disposed of at the Waste Management's Hillsboro landfill under profile number 1352100R.

5.3 TIEBACK ANCHOR INSTALLATION

A total of 103 shafts were drilled to install tieback anchors along the north, east, west, and south shoring walls using a KLEMM Bohtechnik KR 806-3 drill attached to a 750 cfm air compressor and a 5/8-inch-diameter water connection. The tieback anchors were constructed of two or three ½-inch-diameter, steel strands that were grouted within the shafts with Type I/II cement using a tremie pipe. One row of 27 tiebacks was installed on the north wall, one row of 25 tiebacks was installed on the east wall, one row of 26 tiebacks was installed on the south wall, and one row of 25 tiebacks was installed on the west wall. The locations of the tiebacks are shown on Sheets SH301 and SH302 in Appendix H.

Soil spoils generated from the installation of the tiebacks were periodically field screened for field evidence of petroleum contamination. Field screening evidence of contamination (petroleum-like odor, sheen, staining, and/or elevated PID readings) was observed in the spoils generated during installation of tiebacks 81 through 84 along the west sidewall. The physical evidence of contamination observed in the spoils during installation of tiebacks 81 through 84 was most likely associated with the releases from undocumented USTs #3, #4, and/or #8 (see Section 5.1.2). Spoils generated during installation of these tiebacks were segregated from the remaining tieback spoils that did not exhibit field screening evidence of contamination for off-site disposal. These temporary stockpiles of soil spoils were subsequently disposed of at Waste Management's Hillsboro landfill under profile number 1352100R.

6.0 FIELD SCREENING AND CHEMICAL ANALYTICAL RESULTS

In accordance with the SWMP, soil generated from the subject property that exhibited physical evidence of contamination (petroleum-like odor, staining, or sheens), regardless of the chemical analytical results, was segregated from soil that did not exhibit physical evidence of contamination or did not exhibit chemical analytical results greater than DEQ CFSLs. In addition, as discussed in Sections 5.1.1 and 5.1.2, Karl Van Zandt collected samples of the contents of the USTs and undocumented USTs that were encountered during the mass excavation activities for waste characterization purposes, and Karl Van Zandt and NV5 personnel collected confirmation soil samples from beneath the USTs and undocumented USTs and from the limits of the associated remedial excavations, as appropriate.

The UST and undocumented UST waste characterization samples and confirmation soil samples collected beneath the USTs and undocumented USTs and from the limits of the associated remedial excavations by Karl Van Zandt were submitted to Specialty. The UST and undocumented UST waste characterization samples and confirmation soil samples collected beneath the USTs and undocumented USTs, from the limits of the associated remedial

excavation limits, and from the mass excavation by NV5 personnel were submitted to Apex. The waste characterization and confirmation soil samples were analyzed for one or more of the following:

- Hydrocarbon Identification by Method NWTPH-HCID
- Gasoline-range hydrocarbons by Method NWTPH-Gx
- Diesel- and oil-range hydrocarbons by Method NWTPH-Dx
- VOCs by EPA Method 8260D
- RCRA 8 total metals by EPA Method 6020B
- RCRA 8 TCLP metals by EPA Methods E1311/6020/7470
- PAHs by EPA Method 8270E SIM
- PCBs by EPA Method 8082A

The analytical results of the UST and undocumented UST waste characterization samples are summarized in Tables 1 through 6. The analytical results of the confirmation soil samples collected beneath the USTs and undocumented USTs, from the associated remedial excavation limits, and from the SMA are summarized in Tables 1 through 3. The Apex analytical laboratory reports are presented in Appendix I. The Specialty analytical laboratory reports are included in Karl Van Zandt's UST decommissioning report presented in Appendix G.

6.1 UST WASTE CHARACTERIZATION SAMPLE RESULTS

A total of five waste characterization samples were collected from the contents of the USTs and the undocumented USTs for disposal profiling purposes. In addition, one composite waste characterization sample was collected from temporarily stockpiled contaminated soil removed from the vicinities of undocumented USTs #3 through #6 for soil disposal profiling purposes. The waste characterization results are summarized in the following sections.

6.1.1 Undocumented UST #2 and USTs #5 and #6

On April 12, 2021, after undocumented UST #2 had been exposed, NV5 personnel collected waste characterization sample UST-1 from stockpiled soil associated with UST #2 that exhibited the highest field screening evidence of contamination. Waste characterization sample UST-1 was analyzed for VOCs and RCRA 8 total metals. VOCs and RCRA 8 total metals were either not detected or were detected at concentrations less than the applicable DEQ RBCs.

On April 16, 2021, after undocumented UST #1 and USTs #5 and #6 had been exposed, Karl Van Zandt collected discrete samples of their contents (presumed as PS300 boiler fuel) and then composited the discrete samples to generate waste characterization sample 12th Dewitt- Tank. Waste characterization sample 12th Dewitt- Tank was analyzed for RCRA 8 total metals and PCBs. Total metals were either not detected or were detected at concentrations less than the applicable DEQ RBCs and corresponding CFSLs. PCBs were not detected. Based on the analytical results, the liquid contents from within undocumented UST #2 and USTs #5 and #6 were subsequently transported to ORRCO for recycling.

6.1.2 Undocumented UST #7

On April 20, 2021, NV5 personnel collected waste characterization sample UST-CDF from the contents (presumably CDF) of undocumented UST #7 for waste disposal characterization

purposes. Waste characterization sample UST-CDF was submitted to Apex for analysis of VOCs, RCRA 8 total metals, and PCBs. Contaminants were either not detected or were detected at concentrations less than applicable DEQ RBCs and corresponding CFSLs. Based on the analytical results, the CDF from within undocumented UST #7 was subsequently transported to Waste Management's Hillsboro landfill for disposal under profile number 1352100R.

6.1.3 Undocumented UST #8

During the excavation activities associated with the removal of undocumented UST #8, field screening evidence of gasoline-range hydrocarbons (elevated PID readings, odor, and sheen) was observed in the soil beneath the undocumented UST. On April 21, 2021, Karl Van Zandt collected waste characterization sample TK8 South from beneath the south end of undocumented UST #8 that exhibited the highest field screening evidence of gasoline-contamination for waste characterization purposes. Waste characterization sample TK8 South was submitted to Specialty for analysis of gasoline-, diesel-, and oil-range hydrocarbons; VOCs; RCRA 8 TCLP metals; and PCBs. Diesel-range hydrocarbons were detected at a concentration of 604 mg/kg, which is less than the applicable DEQ RBCs and the CFSL. Gasoline- and oil-range hydrocarbons were not detected; however, the laboratory's MRL for the Method NWTPH-Gx analysis was raised to 161,000 mg/kg. The VOCs benzene, ethylbenzene, naphthalene, 1,2,4-TMB, 1,3,5-TMB, and total xylenes were detected at concentrations greater than the DEQ *Vapor Intrusion into Building*s RBCs for urban residential and/or occupational receptors and corresponding DEQ CFSLs. Other VOCs were either not detected or were detected at concentrations less than the applicable DEQ RBCs and corresponding CFSLs. TCLP metals were either not detected or were detected at concentrations less than the applicable DEQ RBCs and corresponding CFSLs. PCBs were not detected.

On April 21, 2021, NV5 personnel collected waste characterization sample UST-Gas from the contents of undocumented UST #8 for waste disposal characterization purposes. Waste characterization sample UST-Gas was submitted to Apex for analysis of VOCs, RCRA 8 total metals, and PCBs. Benzene and naphthalene were detected at concentrations of 0.362 mg/kg and 0.206 mg/kg, respectively, which are less than the applicable DEQ RBCs but greater than their corresponding CFSLs. Eight additional VOCs were detected at concentrations less than the applicable DEQ RBCs and corresponding CFSLs. Based on the analytical results, the contents of undocumented UST #8 were subsequently transported to Waste Management's Hillsboro landfill for disposal under profile number 1352100R.

6.1.4 Stockpiled Soil from Undocumented USTs #3 Through #6

On April 21, 2022, NV5 personnel collected discrete samples from temporarily stockpiled contaminated soil that was generated from contaminated soil removed from the vicinities of undocumented USTs #3 through #6. The discrete soil samples collected from the contaminated stockpiles were thoroughly homogenized to create composite soil characterization sample HOT-SP(042121). Composite soil characterization sample HOT-SP(042121) was submitted to Apex for analysis of VOCs, RCRA 8 total metals, and PCBs for disposal profiling purposes. Naphthalene was detected at a concentration of 0.247 mg/kg, which is less than the applicable DEQ RBCs but greater than the CFSL. Other VOCs, RCRA 8 total metals, and PCBs were either not detected or were detected at concentrations less than the applicable DEQ RBCs and corresponding CFSLs. The temporarily stockpiled soil represented by composite soil

characterization sample HOT-SP(042121) was subsequently transported to Waste Management's Hillsboro landfill for disposal under profile number 1352100R.

6.2 UST CONFIRMATION SOIL SAMPLE RESULTS

The analytical results of the confirmation soil samples collected beneath USTs #1, #5, and #6 are presented in Table 1 and in Karl Van Zandt's UST decommissioning report presented in Appendix G. The analytical results for the confirmation soil samples collected from beneath USTs #1, #5, and #6 are summarized below.

6.2.1 UST #1

On April 14, 2021, Karl Van Zandt collected a soil sample from the overburden soil that existed above UST #1 (SP2-1) and submitted the samples to Specialty for analysis of diesel- and oil-range hydrocarbons by Method NWTPH-Dx. Confirmation soil sample SP2-1 contained diesel-range hydrocarbons at a concentration of 27.8 mg/kg, which is less than the applicable DEQ RBCs and the CFSL. Confirmation soil sample SP2-1 contained oil-range hydrocarbons at a concentration of 76.6 mg/kg. DEQ has not established a CFSL or RBCs for oil-range hydrocarbons.

On April 20, 2021, Karl Van Zandt collected two confirmation soil samples from beneath UST #1 (TK1 South and TK1 Center) and submitted the samples to Specialty for analysis of diesel- and oil-range hydrocarbons by Method NWTPH-Dx. Diesel- and oil-range hydrocarbons were not detected in these confirmation soil samples submitted for analysis.

6.2.2 UST #5

Karl Van Zandt collected three confirmation soil samples from beneath UST #5 [TK5 Center, TK5 West, and TK(5-6)] and submitted the samples to Specialty for analysis of diesel- and oil-range hydrocarbons by Method NWTPH-Dx. UST #5 was located directly west of UST #6, so one soil sample [TK(5-6)] was collected to represent soil beneath the east end of UST #5 and the west end of UST #6. Diesel- and oil-range hydrocarbons were not detected in these three confirmation soil samples submitted for analysis.

6.2.3 UST #6

Karl Van Zandt collected three confirmation soil samples from beneath UST #6 [TK(5-6), TK6 Center, and TK6 East] and submitted the samples to Specialty for analysis of diesel- and oil-range hydrocarbons by Method NWTPH-Dx. UST #6 was located directly east of UST #5, so one soil sample [TK(5-6)] was collected to represent soil beneath the east end of UST #5 and the west end of UST #6. Diesel-range hydrocarbons were detected in confirmation sample TK6 Center at a concentration of 31.1 mg/kg, which is less than the applicable DEQ RBCs and the CFSL. Diesel- and oil-range hydrocarbons were otherwise not detected in these confirmation soil samples submitted for analysis.

6.3 UNDOCUMENTED UST CONFIRMATION SOIL SAMPLE RESULTS

The analytical results of the confirmation soil samples collected beneath undocumented USTs #2, #3, #4, #7, #8, and/or #9 are presented in Tables 1 through 3 and in Karl Van Zandt's UST decommissioning report presented in Appendix G. The analytical results for the confirmation soil samples collected from beneath the undocumented USTs are summarized below.

6.3.1 Undocumented UST #2

On April 16, 2021, Karl Van Zandt submitted three confirmation samples from beneath UST #2 (TK2 Center, TK2 West, and TK2 East) to Specialty for analysis of diesel- and oil-range hydrocarbons by Method NWTPH-Dx. Diesel-range hydrocarbons were detected in confirmation soil samples TK2 Center, TK2 West, and TK2 East at concentrations of 30.6 mg/kg, 35.7 mg/kg, and 21.0 mg/kg, respectively. These concentrations are less than the applicable DEQ RBCs and the CFSL. Oil-range hydrocarbons were not detected in these confirmation soil samples submitted for analysis.

6.3.2 Undocumented UST #3

On April 20, 2021, Karl Van Zandt collected three confirmation soil samples from beneath undocumented UST #3 (TK3 North, TK3 Center, and TK3 South) to Specialty for analysis of diesel- and oil-range hydrocarbons by Method NWTPH-Dx. Diesel- and oil-range hydrocarbons were not detected in confirmation soil samples TK3 North and TK3 Center. Diesel- and oil-range hydrocarbons were detected in confirmation soil sample TK3 South at concentrations of 52,300 mg/kg and 643 mg/kg, respectively. Based on the results of confirmation soil sample TK3 South, additional soil was over-excavated from the vicinity of undocumented UST #3 and the petroleum-contaminated soil represented by confirmation soil sample TK3 South was removed.

On April 21, 2021, Karl Van Zandt collected six additional confirmation soil samples from the over-excavation limits.[3] These six additional confirmation soil samples were submitted to Specialty for analysis of diesel- and oil-range hydrocarbons by Method NWTPH-Dx. Confirmation soil samples Excavation TK3 Side 2 West and Excavation TK3 Side 4 East were also submitted for analysis of gasoline-range hydrocarbons by Method NWTPH-Gx. Diesel- and oil-range hydrocarbons were not detected in the six additional confirmation soil samples submitted for analysis, except for diesel-range hydrocarbons detected in confirmation soil sample Excavation TK3 Side 3 East. Diesel-range hydrocarbons were detected in this confirmation soil sample at a concentration of 37.1 mg/kg, which is less than applicable DEQ RBCs and the CFSL. Gasoline-range hydrocarbons were not detected in confirmation soil samples Excavation TK3 Side 2 West and Excavation TK3 Side 4 East submitted for analysis.

6.3.3 Undocumented UST #4

On April 20, 2021, Karl Van Zandt collected three confirmation soil samples from beneath UST #4 (TK4 South, TK4 Center, and TK4 North) and submitted the samples to Specialty for analysis of diesel- and oil-range hydrocarbons by Method NWTPH-Dx. Diesel-range hydrocarbons were detected in confirmation soil samples TK4 South and TK4 Center at concentrations of 345 mg/kg and 33.6 mg/kg, respectively. These concentrations are less than the applicable DEQ RBCs and the CFSL. Diesel- and oil-range hydrocarbons were otherwise not detected in these confirmation soil samples submitted for analysis. In collaboration with Karl Van Zandt, NV5 collected confirmation soil sample TK4-S7 from the same location as Karl Van Zandt's sample TK4 South for further analysis of BTEX and PAHs based on the nearby location of

[3] Excavation TK3 West, Excavation TK3 East, Excavation TK3 Side 1 West, Excavation TK3 Side 2 West, Excavation TK3 Side 3 East, and Excavation TK3 Side 4 East

undocumented UST #8 that contained gasoline. Benzene was detected at a concentration of 0.0127 mg/kg, which is less than the applicable DEQ RBCs and the CFSL. Toluene, ethylbenzene, total xylenes, and PAHs were not detected.

6.3.4 Undocumented UST #7

On April 20, 2021, Karl Van Zandt collected seven confirmation soil samples he collected from the limits of the remedial excavation associated with undocumented UST #7 to Specialty for analysis of diesel- and oil-range hydrocarbons by Method NWTPH-Dx.[4] Diesel- and oil-range hydrocarbons were not detected in these confirmation soil samples submitted for analysis.

6.3.5 Undocumented UST #8

As described in Section 6.1.3, the field screening evidence of petroleum hydrocarbons observed in the soil in the vicinity of undocumented UST #8, as well as the analytical results of waste characterization sample TK8 South, indicated this undocumented UST formerly contained gasoline. An historical release associated with this undocumented UST was the likely source of the soil contaminated with gasoline-range hydrocarbons and associated constituents in the vicinity of this undocumented UST. Due to the extent of gasoline-contaminated soil in the vicinity of undocumented UST #8, and the construction "logistics" in the vicinity of undocumented UST #8, remedial excavation activities were conducted in three separate stages (initial, interim, and final excavation stages). Each stage is summarized in the following sections.

6.3.5.1 Initial Remedial Excavation Limits and Confirmation Sample Results

Based on the results of soil characterization sample TK8 South, NV5 personnel collected eight initial confirmation soil samples from the initial excavation limits associated with undocumented UST #8 and submitted the confirmation soil samples to Apex for analysis of gasoline-range hydrocarbons and RCRA 8 total metals.[5] Select soil samples were also submitted for analysis of VOCs.[6] The analytical results are briefly summarized below.

Gasoline-Range Hydrocarbons

Gasoline-range hydrocarbons were detected at concentrations ranging from 28.8 to 39,500 mg/kg in confirmation soil samples TK8-SWN(7), TK8-SWS(8), TK8-SWW-1(8), TK8-SWW-2(8), and TK8-BS(11.5). Confirmation soil sample TK8-SWW-2(8) collected from the northwest limit of the excavation at 8 feet BGS contained gasoline-range hydrocarbons at a concentration of 39,500 mg/kg. Confirmation soil sample TK8-SWW-1(8) collected from the southwest limit of the excavation at 8 feet BGS contained gasoline-range hydrocarbons at a concentration of 7,500 mg/kg. Confirmation soil sample TK8-SWS(8) collected from the south limit of the excavation at 8 feet BGS contained gasoline-range hydrocarbons at a concentration of 25,100 mg/kg. Confirmation soil sample TK8-BS(11.5) collected from the bottom of the south side of the excavation at 11.5 feet BGS contained gasoline-range hydrocarbons at a concentration of 231 mg/kg. Confirmation soil sample TK8-SWN(7) collected from the north limit of the excavation at 7 feet BGS contained gasoline-range hydrocarbons at a concentration of 28.8 mg/kg.

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[4] TK7 South, TK7 Center, TK7 North, TK7 East, TK7 West, TK7 North Side, and TK 7 South Side

[5] TK8-SWE(8), TK8-SWN(7), TK8-SWS(8), TK8-SWW-1(8), TK8-SWW-2(8), TK8-SWW-3(10), TK8-BN(9.5), and TK8-BS(11.5)

[6] TK8-SWN(7), TK8-SWS(8), TK8-SWW-1(8), TK8-SWW-2(8), and TK8-BS(11.5)

The concentrations of gasoline-range hydrocarbons detected in these soil samples exceed the DEQ *Vapor Intrusion into Buildings* RBC for urban residential receptors and the DEQ CFSL, with the exception of confirmation soil sample TK8-SWN(7). In addition, the concentrations of gasoline-range hydrocarbons detected in samples TK8-SWS(8) and TK8-SWW-2(8) also exceeded the DEQ *Soil Ingestion, Dermal Contact, and Inhalation* RBCs for construction workers. Gasoline-range hydrocarbons were either not detected or were detected at concentrations less than applicable DEQ RBCs and/or the CFSL in confirmation soil samples TK8-SWE(8), TK8-SWN(7), TK8-SWW-3(10), and TK8-BN(9.5).

VOCs

VOCs were either not detected or were detected at concentrations less than the applicable DEQ RBCs and corresponding CFSLs, with the exception of up to nine VOCs detected in confirmation soil samples TK8-SWS(8), TK8-SWW-1(8), TK8-SWW-2(8), and TK8-BS(11.5). The VOCs were detected in these samples ranged from 0.338 mg/kg [naphthalene detected in confirmation soil sample TK8-BS(11.5)] to 1,720 mg/kg total [total xylenes detected in confirmation sample TK8-SWW-2(8)]. The concentrations of VOCs exceeded the DEQ *Vapor Intrusion into Buildings* RBC for urban residential and/or occupational receptors and/or the corresponding CFSLs.

RCRA 8 Total Metals

RCRA 8 total metals were either not detected or were detected at concentrations less than the applicable DEQ RBCs and the corresponding CFSLs, with the exception of arsenic detected in confirmation soil sample TK8-SWE(8) and cadmium and lead detected in confirmation soil sample TK8-SWW-2(8). Arsenic was detected in confirmation soil sample TK8-SWE(8) at a concentration of 8.94 mg/kg, which slightly exceeds the DEQ-established background concentration for arsenic in the area of the subject property of 8.8 mg/kg (the DEQ CFSL). However, since the detected concentration of arsenic in confirmation soil sample TK8-SWE(8) is only 0.14 mg/kg greater than the DEQ CFSL of 8.8 mg/kg, and the concentrations of arsenic in the remaining seven confirmation soil samples collected from the initial limits of the excavation associated with undocumented UST #8 ranged between 4.66 and 8.33 mg/kg, it is our opinion that the detected concentration of arsenic in confirmation soil sample TK8-SWE(8) is naturally occurring and generally consistent with the background concentration of arsenic in the Portland Basin (8.8 mg/kg). Cadmium and lead were detected in confirmation soil sample TK8-SWW-2(8) at concentrations of 1.75 mg/kg and 62.5 mg/kg, respectively.

6.3.5.2 Interim Remedial Excavation Limits and Confirmation Sample Results

Based on the field screening evidence of gasoline-range hydrocarbons observed at the southern base of the excavation associated with undocumented UST #8, additional soil was over-excavated from the southern base of the initial excavation limit and soil represented by confirmation soil sample TK8-BS(11.5) was removed. Additional petroleum-contaminated soil was over-excavated to a depth of approximately 14 feet BGS. NV5 collected an additional confirmation soil sample from the bottom of the over-excavation limits [TK8-BS(14)]. This confirmation soil sample was also submitted to Apex for analysis of gasoline-range hydrocarbons and RCRA 8 total metals. Gasoline-range hydrocarbons were not detected in this confirmation soil sample. RCRA 8 total metals were either not detected or were detected at concentrations less than applicable DEQ RBCs and corresponding CFSLs.

6.3.5.3 Final Remedial Excavation Limits and Confirmation Sample Results

On March 2, 2022, NV5 again observed over-excavation activities in the vicinity of undocumented UST #8. Additional over-excavation of gasoline-contaminated soil was removed as far to the west of undocumented UST #8 as possible, without undermining SE 11th Avenue. During these final over-excavation activities, soil represented by confirmation soil samples TK8-SWS(8), TK8-SWW-1(8), TK8-SWW-2(8), and TK8-BS(11.5) were removed and two additional confirmation soil samples [TK8-SWW-4(8) and TK8-SWW-5(8)] were collected from the western sidewalls near the bottom of undocumented UST #8, where the highest field screening evidence of gasoline-contamination was observed. These two additional confirmation soil samples were submitted to Apex for analysis of gasoline-range hydrocarbons, VOCs, and RCRA 8 total metals. Gasoline-range hydrocarbons were detected in confirmation soil sample TK8-SWW-5(8) at a concentration of 12,300 mg/kg, greater than the DEQ *Soil Ingestion, Dermal Contact, and Inhalation* RBC for construction worker receptors, the DEQ *Vapor Intrusion into Buildings* RBC for urban residential receptors, and the DEQ CFSLs. Gasoline-range hydrocarbons were not detected in confirmation soil sample TK8-SWW-4(8). The VOCs 1,3,5-TMB and total xylenes were detected in confirmation soil sample TK8-SWW-5(8) at concentrations of 12.9 mg/kg and 3.83 mg/kg, respectively. These concentrations are less than applicable DEQ RBCs but greater than the corresponding DEQ CFSLs. VOCs were not detected in confirmation soil sample TK8-SWW-4(8). RCRA 8 total metals were either not detected or were detected at concentrations less than the applicable DEQ RBCs and corresponding CFSLs.

6.3.6 Undocumented UST #9

On May 6, 2021, NV5 personnel collected two confirmation soil samples [UST-9_BaseN(8) and UST-9_BaseS(8)] from beneath the north and south ends of undocumented UST #9, respectively, and submitted the samples to Apex for qualitative hydrocarbon analysis. Gasoline- and diesel-range hydrocarbons were qualitatively detected in the two confirmation soil samples analyzed. On May 7, 2021, NV5 personnel observed DeWitt over-excavate petroleum-contaminated soil in the vicinity of undocumented UST #9 and field screened the excavated soil. DeWitt continued to excavate petroleum-contaminated soil until the remedial excavation encompassed the area beneath undocumented USTs #2 and #7 and field screening evidence of petroleum-contamination was no longer apparent. NV5 personnel collected five confirmation soil samples from the new limits of the remedial excavation [NW-PIT-North(8), NW-PIT-East(8), NW-PIT-South(8), NW-PIT-West(8), and NW-PIT-Base(13)] and submitted them to Apex for chemical analysis of gasoline-range hydrocarbons, VOCs, and RCRA 8 total metals. Gasoline-range hydrocarbons and VOCs were not detected in the confirmation soil samples submitted for analysis. RCRA 8 total metals were either not detected or were detected at concentrations less than the applicable DEQ RBCs and the corresponding CFSLs.

6.4 SMA WASTE CHARACTERIZATION AND CONFIRMATION SOIL SAMPLE RESULTS

As described in Section 5.1.3, the SMA was divided into four composite sampling areas (COMP-1 through COMP-4), and between April 9 and April 13, 2021, eight test pits were excavated within each composite area for collection of discrete and composite soil samples. Discrete soil samples were collected from the test pits throughout the fill material within the SMA at approximate 0.5-foot intervals to approximately 2 feet BGS. In addition, four composite confirmation soil samples (Comp-1-Native, Comp-2-Native, Comp-3-Native, and Comp-4-Native) were generated by homogenizing discrete soil samples collected from the native soil below the

bottom of the fill material within each composite sampling area. The discrete soil samples collected from composite sampling area COMP-1[7] and the composite confirmation soil samples were submitted to Apex for analysis of total lead by EPA Method 6020B.

Total lead was detected in each of the discrete soil samples collected from composite sampling area COMP-1 at concentrations less than applicable DEQ RBCs and the CFSL, except for discrete sample TP-6(2). Total lead was detected in discrete sample TP-6(2) at a concentration of 36.1 mg/kg, which is less than the applicable DEQ RBCs, but greater than the DEQ CFSL. Total lead was detected in composite confirmation soil samples Comp-1-Native and Comp-2-Native at concentrations less than the applicable DEQ RBCs and CFSL. Total lead was detected in composite confirmation soil sample Comp-3-Native at a concentration of 36.5 mg/kg, which is less than the applicable DEQ RBCs but greater than the DEQ CFSL.

Based on the results of composite confirmation soil sample Comp-3-Native, two additional composite confirmation soil samples were generated from composite sampling area COMP-3 by homogenizing discrete soil samples collected at depths between 2 and 3 feet BGS (Comp-3-Native2) and between 3 and 4 feet BGS (Comp-3-Native3). Total lead was detected in composite sample Comp-3-Native2 at a concentration of 33.0 mg/kg, which is less than the corresponding DEQ RBCs but greater than the DEQ CFSL. Total lead was detected in composite confirmation soil sample Comp-3-Native3 at a concentration of 15.5 mg/kg, which is less than the applicable DEQ RBCs and the CFSL.

On April 12, 2021, NV5 collected a composite waste characterization sample (Lead Comp) from the temporarily stockpiled lead-impacted fill spoils generated during excavation of the test pits within composite sampling areas COMP-1 through COMP-4 for disposal profiling purposes. Waste characterization sample Lead Comp was submitted to Apex for analysis of total lead by EPA Method 6020B. Total lead was detected in this sample at a concentration of 643 mg/kg, which was less than the applicable DEQ RBCs but greater than the DEQ CFSL.

Between April 21 and May 3, 2021, based on the results of the composite samples collected from each composite sampling area, lead-impacted fill was removed to depths of approximately 1 foot BGS within composite sampling areas COMP-1 and COMP-2, to approximately 3 feet BGS within composite sampling area COMP-3, and to approximately 4 feet BGS within composite sampling area COMP-4. Based on the results of waste characterization sample Lead Comp, the lead-impacted fill was transported to Waste Management's Hillsboro landfill for disposal under profile number 1352410R.

Some of the construction debris encountered during the excavation of the fill material within the SMA was considered by NV5 as suspect ACM. NV5 collected sample AS-1 from plaster and surfacing material and sample AS-2 from potential sheet vinyl. The suspect ACM samples were submitted to JSE Labs for PLM analysis. Asbestos was not identified in sample AS-1, and less than 1 percent chrysotile was identified in sample AS-2. The ACM sample results are shown in

[7] TP-1(1), TP-2(0.5), TP-3(1), TP-4(1), TP-5(1.5), TP-6(2), TP-7(0.5), and TP-8(0.5)

JSE Lab's laboratory report presented in Appendix J. Based on the results of the suspect ACM, the fill soil containing the construction debris was disposed of at Waste Management's Hillsboro landfill as general construction debris.

7.0 SCREENING LEVEL RISK ASSESSMENT

As described in Sections 6.3.5 and presented in Tables 1 through 3, residual soil contamination remains at the subject property in the vicinity of undocumented UST #8. Specifically, after over-excavation activities, soil represented by confirmation soil samples TK8-SWS(8), TK8-SWW-1(8), TK8-SWW-2(8), TK8-BS(11.5), and TK8-SWW-5(8) exhibited concentrations of gasoline-range hydrocarbons greater than the DEQ *Vapor Intrusion Into Buildings* RBCs for urban residential receptors. In addition, soil represented by confirmation soil samples TK8-SWS(8), TK8-SWW-1(8), TK8-SWW-2(8), and TK8-BS(11.5) exhibited concentrations of VOCs (including benzene, 1,2-dichloroethane, ethylbenzene, naphthalene, 1,2,4-TMB, 1,3,5-TMB and/or total xylenes) greater than the DEQ *Vapor Intrusion Into Buildings* RBCs for urban residential receptors. Soil represented by confirmation soil samples TK8-SWS(8), TK8-SWW-2(8), and TK8-SWW-5(8) also exhibited concentrations of gasoline-range hydrocarbons greater than the DEQ *Soil Ingestion, Dermal Contact, and Inhalation* RBCs for construction worker receptors. Arsenic was detected in confirmation soil sample TK8-SWE(8) at a concentration of 8.94 mg/kg, which slightly exceeds the DEQ-established background concentration for arsenic in the area of the subject property of 8.8 mg/kg (the DEQ CFSL). However, since the detected concentration of arsenic in confirmation soil sample TK8-SWE(8) is only 0.14 mg/kg greater than the DEQ CFSL of 8.8 mg/kg, and the concentrations of arsenic in the remaining ten confirmation soil samples collected from the limits of the remedial excavation associated with undocumented UST #8 range between 2.58 and 8.33 mg/kg, it is our opinion that the detected concentration of arsenic in confirmation soil sample TK8-SWE(8) is naturally occurring and generally consistent with the background concentration of arsenic in the Portland Basin (8.8 mg/kg). Cadmium and lead were detected in confirmation soil sample TK8-SWW-2(8) at concentrations of 1.75 mg/kg and 62.5 mg/kg, respectively, which are less than the applicable DEQ RBCs but greater than the corresponding DEQ CFSLs.

7.1 EXTENT OF RESIDUAL CONTAMINATED SOIL

Based on the results of the confirmation soil samples collected from the remedial excavation associated with undocumented UST #8, the lateral extent of the residual gasoline-contaminated soil north, east, and south of undocumented UST #8 have been delineated. The known lateral extent of the residual gasoline-contaminated soil is conservatively defined by the following confirmation samples:

- To the north by TK8-SWN(7)
- To the east by TK8-SWE(8)
- To the south by TK3 North

The vertical extent of the residual gasoline-contaminated soil has also been delineated and is defined by the following confirmation soil samples:

- From 8 to 9.5 feet BGS near the north portion of the remedial excavation by TK8-BN(9.5)
- From 8 to 14 feet BGS near the south portion of the remedial excavation by TK8-BS(14)
- From 8 to 10 feet BGS near the southwest portion of the remedial excavation by TK8-SWW-3(10)

Based on the above lateral and vertical delineation information, the lateral extent of the residual gasoline-contaminated soil west of confirmation soil sample TK8-SWW-5(8) is unknown. However, NV5 calculated the contamination reduction rate using the analytical results from confirmation soil samples TK8-SWW-2(8) and TK8-SWW-5(8) to estimate the lateral extent of the residual gasoline-contaminated soil west of confirmation sample TK8-SWW-5(8). Although the concentration of gasoline-range hydrocarbons (12,300 mg/kg) detected in confirmation soil sample TK8-SWW-5(8) exceeds the DEQ *Vapor Intrusion Into Buildings* RBC for urban residential receptors and the DEQ *Soil Ingestion, Dermal Contact, and Inhalation* RBCs for construction worker receptors, it is significantly less than the concentration of gasoline-range hydrocarbons detected in confirmation soil sample TK8-SWW-2(8) that was removed during over-excavation activities, which also exceeds the DEQ *Vapor Intrusion Into Buildings* RBC for urban residential receptors and the DEQ *Soil Ingestion, Dermal Contact, and Inhalation* RBCs for construction worker receptors. As shown on Figure 6, confirmation soil sample TK8-SWW-5(8) was collected along the final southwest limit of the remedial excavation associated with undocumented UST #8, while confirmation soil sample TK8-SWW-2(8) was collected beneath the southwest corner of undocumented UST #8, approximately 6 feet east of confirmation sample TK8-SWW-5(8).

NV5 calculated the contamination reduction rate using the following simple formula, as suggested in DEQ guidance:

$$R = A_1 - A_2 / D$$

Where: A_1 = Initial sampling point analytical result [TK8-SWW-2(8) = 39,500 mg/kg]
A_2 = Additional delineation sampling point analytical result [TK8-SWW-5(8) = 12,300 mg/kg]
D = Distance between A_1 and A_2 (6 feet)
R = Rate of contamination reduction

Using the above formula, NV5 calculated a contamination reduction rate of 4,533 mg/kg per foot. NV5 estimated the lateral distance west of confirmation sample TK8-SSW-5(8) where the expected gasoline-range hydrocarbons would equal 94 mg/kg (the applicable DEQ RBC for the *Vapor Intrusion into Buildings* exposure pathway) using the following simple formula:

$$ED = (A_2 - B) / R$$

Where: A_2 = Additional delineation sampling point analytical result [TK8-SWW-5(8) = 12,300 mg/kg]
B = Delineation end point concentration (94 mg/kg)
R = Rate of contamination reduction

Using the above formula, NV5 calculated the estimated distance from confirmation soil sample TK8-SWW-5(8) to 94 mg/kg at 2.7 feet. Therefore, the total estimated lateral distance from confirmation soil sample TK8-SWW-2(8) to 94 mg/kg [D (6 feet) + ED (2.7 feet) is 8.7 feet (approximately 9 feet). The estimated vertical and lateral extents of the residual gasoline-contaminated soil are shown on Figures 5 and 6, respectively.

7.2 ESTIMATED VOLUME OF RESIDUAL CONTAMINATED SOIL

Multiplying the estimated lateral residual extents (conservatively estimated as 20 feet by 20 feet, 400 square feet) by the estimated vertical residual extent (estimated from 8 to 14 feet BGS) yields an estimated volume of residual gasoline-contaminated soil of approximately 90 in-place cubic yards. By comparison, the total volume of soil and construction debris removed from the subject property during the mass excavation activities was approximately 30,000 cubic yards. Therefore, the volume of residual soil contamination is less than 1 percent of the total volume of soil removed during construction of the subject property.

7.3 POTENTIALLY IMPACTED RECEPTORS

As shown on Figure 5, the bottom of undocumented UST #8 (as well as the bottom of undocumented USTs # 3 and #4) located adjacent west of parking garage level P2 was at approximate elevations ranging from 50 to 51.5 feet (COP datum). As also shown on Figure 5, the depth of the gasoline-contamination from the release associated with undocumented UST #8 appears to have extended approximately 14 feet BGS [to approximately elevation 44 feet (COP datum)], to the approximate bottom of the rock section prepared beneath the concrete floor slab of parking garage level P2. Gasoline-contaminated soil was not encountered at this elevation during excavation for the rock section in this area. Consequently, residual gasoline-contaminated soil is not present beneath the structure.

As described in Section 2.0, retail spaces occupy the west portion of parking garage level P1 (the level immediately above parking garage level P2). Residential units only occupy a portion of the spaces along the west portion of floor 1 (the floor immediately above parking garage level P1). Therefore, the vapors from the residual soil contamination would have to migrate vertically and/or horizontally through the basement floor slab or wall of parking garage level P2, then up through the floor of parking garage level P1, then through the floor of floor 1 to impact urban residential receptors. In our opinion, based on the configuration of the structure near the residual soil contamination, it is highly unlikely that the vapors from the residual soil adjacent west of the parking garage will enter the residential spaces on floor 1. Nonetheless, we conservatively included urban residential receptors as potentially being impacted due to the presence of the residual gasoline-contaminated soil adjacent west of the structure.

7.4 SITE-SPECIFIC RBCS

DEQ guidance allows re-calculation of generic RBCs considering site-specific characteristics. Excluding the waste characterization samples, and confirmation soil samples TK8-SWS(8), TK8-SWW-1(8), TK8-SWW-2(8), and TK8-BS(11.5) that represent gasoline-contaminated soil that was removed during remedial excavation activities (Sections 6.1.3, 6.1.4, and 6.3.5), only gasoline-range hydrocarbons detected in confirmation soil sample TK8-SWW-5(8) exceeds the

DEQ *Soil Ingestion, Dermal Contact, and Inhalation* RBCs for construction workers, the DEQ *Volatilization to Outdoor Air* RBC for urban residential receptors, and the DEQ *Vapor Intrusion into Buildings* RBC for urban residential receptors.

Since residual gasoline-contaminated soil remains at the subject property at concentrations exceeding the generic DEQ RBCs for TPH as gasoline-range hydrocarbons, NV5 calculated site-specific RBCs for TPH as gasoline-range hydrocarbons by adjusting the Site Parameter "Depth to Water (cm)" from 300 cm (DEQ's default parameter) to a site-specific Site Parameter of 1,371 cm (45 feet, as groundwater was measured at a depth of 45 feet BGS during our geotechnical investigation). In addition, NV5 adjusted numerous Soil Contamination Parameters, as follows:

- Adjusted "Thickness of Contaminated Surface Soils (cm)" from 100 cm (DEQ's default parameter) to 0 cm as there is currently no contaminated surface soil (DEQ considers surface soil from 0 to 3 feet BGS) at the subject property.
- Adjusted "Fraction of Site with Surface Soil Contamination" from 0.50 percent (DEQ's default parameter) to 0 percent as there is currently no contaminated surface soil (DEQ considers surface soil from 0 to 3 feet BGS) at the subject property.
- Adjusted "Thickness of Subsurface Contamination (cm)" from 200 cm (DEQ's default parameter) to 183 cm as there is currently a maximum thickness of approximately 6 feet (183 cm) of residual gasoline-contaminated subsurface soil beneath the west portion of the subject property, as shown on Figures 5 and 6.
- Adjusted "Fraction of Site with Subsurface Vol. To Outdoor Air" from 100 percent (DEQ's default parameter) to a conservative 10 percent, which equates to the approximate percentage of "open" space associated with the tree vaults located within the hardscaped area (the sidewalk) surrounding the structure.
- Adjusted "Thickness of Clean Soil Under Building (cm)" from 100 cm (DEQ's default parameter) to 945 cm, the estimated vertical distance (31 feet) between the bottom of parking garage level 2 and the groundwater table.
- Adjusted "Thickness of Contaminated Soils Under Building (cm)" from 200 cm (DEQ's default parameter) to 0 cm as there is currently no contaminated soil under the structure at the subject property.
- Adjusted "Fraction of Contaminated Soils Under Building" from 50 percent (DEQ's default parameter) to 0 percent as there is currently no contaminated soils under the structure at the subject property.

The generic DEQ RBC for gasoline-range hydrocarbons was re-calculated based on the site-specific parameter adjustments noted above as well as the site-specific product data [from confirmation soil sample TK8-SWW-2(8), the sample that exhibited the highest contaminant concentrations] that was entered into DEQ's online "Product Data" worksheet. Using the site-specific product data from confirmation soil sample TK8-SWW-2(8) to calculate a site-specific TPH RBC is considered very conservative, as soil represented by this sample was removed during over-excavation activities.

Considering the above site-specific parameters and the conservative site-specific product data, the calculated site-specific DEQ *Soil Ingestion, Dermal Contact, and Inhalation* RBC value for

construction workers, the site-specific DEQ *Volatilization to Outdoor Air* RBC value for urban residential receptors, and the site-specific DEQ *Vapor Intrusion into Building*s RBC value for urban residential receptors changed from the corresponding DEQ generic RBC values as follows:

- The calculated site-specific DEQ *Soil Ingestion, Dermal Contact, and Inhalation* RBC for construction workers changed from 9,700 mg/kg (the generic RBCs) to 15,000 mg/kg and (the site-specific RBC).
- The calculated site-specific DEQ *Volatilization to Outdoor Air* RBC for urban residential receptors changed from 5,900 mg/kg (the generic RBC) to 51,000 mg/kg (the site-specific RBC)
- The calculated site-specific DEQ *Vapor Intrusion into Building*s RBC for urban residential receptors changed from 94 mg/kg (the generic RBC) to ">Max" (the site-specific RBC). DEQ's note ">Max" indicates that the substance RBC for the exposure pathway is calculated at a concentration greater than 1,000,000 mg/kg or 1,000,000 mg/L. Therefore, DEQ does not consider the substance will pose unacceptable risks in this scenario.

The calculated gasoline-range hydrocarbon site-specific DEQ *Soil Ingestion, Dermal Contact, and Inhalation* RBC for construction worker receptors and the site-specific DEQ *Volatilization to Outdoor Air* and *Vapor Intrusion into Building*s RBCs for urban residential receptors is presented in Table 1.

Based on the calculated site-specific RBC values noted above, the residual gasoline-range hydrocarbon-contaminated soil at the subject property does not present unacceptable risk to current or future applicable receptors.

7.5 ENGINEERING CONTROL

The below-ground parking garage is equipped with a ventilation system, separate from the ventilation systems for the above-ground floors, and operates continuously in compliance with Oregon Mechanical Specialty Code 404.1 and International Mechanical Code 404.2 requirements (also the City of Portland's requirements) of 0.05 cfm per square foot of floor area (under low speed operation) and 0.75 cfm per square foot of floor area (under high speed operation). Although the DEQ *Vapor Intrusion Into Building*s exposure pathway is technically complete, it is NV5's opinion that an actual vapor intrusion risk is not reasonably likely, given the forced air circulation in the parking garage and the three barriers the vapors would have to pass through (the basement slab and/or foundation sidewalls of the parking garage level P2, the floor of parking garage level P1, and the floor of floor 1). The ventilation system within the parking garage will continuously operate, and if carbon monoxide and/or nitrogen oxide are detected via sensors at concentrations greater than 25 ppm and 0.2 ppm, respectively, the ventilation system will be ramped up to high speed.

7.6 SUMMARY OF SCREENING LEVEL RISK ASSESSMENT

In our opinion, the residual gasoline-contaminated soil associated with the release from undocumented UST #8 will not present unacceptable risk to future receptors given the rationale described in Sections 7.1 through 7.5 and presented below:

- The concentrations of residual gasoline-range hydrocarbons do not exceed the calculated site-specific RBCs for the *Vapor Intrusion into Buildings* and *Volatilization to Outdoor Air* exposure pathways for urban residential receptors or for the *Soil Ingestion, Dermal Contact, and Inhalation* exposure pathway for construction worker receptors.
- The configuration of parking garage levels P1 and P2 and the first floor of the structure make it highly unlikely that the vapors from the residual gasoline-contaminated soil adjacent west of the parking garage will enter the residential spaces on floor 1.
- The continuously operating engineering control (ventilation systems for parking garage levels P1 and P2 that are separate from the ventilation systems for the floors above the parking garage levels).

Based on the results of the screening level risk assessment, it is our opinion that additional over-excavation of the residual gasoline-contaminated soil associated with undocumented UST #8 is not necessary to prevent unacceptable risk to future receptors.

8.0 MEDIA DISPOSITION

Between April 23, 2021, and March 2, 2022, a total of 916.39 tons of petroleum-contaminated soil, a total of 1,499.04 tons of lead-contaminated soil, and a total of approximately 38,000 tons of soil and construction debris that met DEQ's clean fill screening criteria were generated during the following redevelopment activities and exported from the subject property for disposal:

- Mass excavation (including excavation of clean soil and petroleum-contaminated soil associated with releases from select USTs and undocumented USTs and lead-contaminated fill within the SMA)
- Installation of soldier piles
- Installation of tieback anchors
- Over-excavation of petroleum-contaminated soil (beyond the limits of the mass excavation) associated with undocumented UST #8

Disposal of the clean soil and contaminated soil/fill are described in the following sections.

8.1 DISPOSAL OF CONTAMINATED SOIL

Between April 23, 2021, and March 2, 2022, a total of 916.39 tons of petroleum-contaminated soil and between April 19 and May 7, 2021, a total of 1,499.04 tons of lead-contaminated soil were either temporarily stockpiled on site or direct-loaded in accordance with the SWMP and subsequently transported and disposed of as non-hazardous waste at the Hillsboro landfill under Waste Management profile numbers 1352100R (petroleum-contaminated soil) and 1352410R (lead-impacted soil). A summary of the daily tonnage reports for the petroleum-contaminated soil and lead-impacted soil transported to the Hillsboro landfill are presented in Appendix D.

8.2 DISPOSAL OF SOIL/FILL (INCLUDING DEBRIS) MEETING DEQ CLEAN FILL CRITERIA

Between approximately February 10 and April 25, 2022, an estimated 40,000 tons of soil, fill, and construction debris meeting DEQ's clean fill criteria were transported off site to one of two disposal locations. The quantities of soil, fill, and construction debris meeting DEQ's clean fill criteria and their associated disposal locations are summarized below.

Clean Fill Disposal Location	Estimated Clean Soil, Fill, and Debris Disposal (tons)
Site One, LLC 10311 NE 72nd Avenue Vancouver, Washington	13,000
Scappoose Sand & Gravel 33485 NE Crown Zellerbach Road Scappoose, Oregon	27,000

9.0 SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

NV5 assisted with the implementation of the SWMP during the subject property redevelopment activities. In our professional opinion, the activities discussed herein were conducted in general conformance with the SWMP. Further action does not appear warranted at this time. If future ground-disturbing activities are planned at the subject property, they should be performed in accordance with the SWMP.

During the redevelopment activities at the subject property, a total of 916.39 tons of soil exhibiting field screening evidence of contamination were exported from the subject property and disposed of at the Hillsboro landfill under Waste Management profile number 135210OR. In addition, a total of 1,499.04 tons of lead-contaminated soil was disposed of as non-hazardous waste at the Hillsboro landfill under Waste Management profile number 135241OR. Three known USTs (identified during previous investigations) and six undocumented USTs (LUST File No. 26-21-0394) were properly decommissioned during redevelopment of the subject property.

The only residual gasoline-contaminated soil that remains in place is located adjacent west of the current structure, generally beneath current hardscapes. This residual gasoline-contaminated soil is most likely from a former release associated with undocumented UST #8. Gasoline-range hydrocarbons remain at concentrations greater than the DEQ *Volatilization to Outdoor Air* and *Vapor Intrusion into Buildings* generic RBCs for urban residential receptors and at concentrations greater than the DEQ *Soil Ingestion, Dermal Contact, and Inhalation* generic RBC for construction workers.

In our opinion, based on the configuration of the structure near the residual soil contamination, and the construction of an engineering control (dedicated ventilation systems within the below-ground parking garages, separate from the above-ground levels, operating in accordance with City of Portland requirements, in particular, the air exchange rates), it is highly unlikely that the vapors from the residual gasoline-contaminated soil adjacent west of the structure will enter the residential spaces on floor 1. Nonetheless, we conservatively included urban residential receptors as potentially being impacted due to the presence of the residual gasoline-contaminated soil adjacent west of the structure.

DEQ guidance allows re-calculation of generic RBCs considering site-specific characteristics. NV5 calculated site-specific RBCs for the *Volatilization to Outdoor Air* and *Vapor Intrusion into Buildings* generic RBCs for urban residential receptors and the *Soil Ingestion, Dermal Contact,*

and Inhalation generic RBC for construction workers. Considering the adjusted site-specific parameters and conservative site-specific product data used for the calculations, the calculated site-specific RBCs values changed from the generic RBC values as follows:

- The DEQ *Soil Ingestion, Dermal Contact, and Inhalation* RBC for construction workers changed from 9,700 mg/kg (the generic RBCs) to 15,000 mg/kg and (the site-specific RBC).
- The DEQ *Volatilization to Outdoor Air* RBC for urban residential receptors changed from 5,900 mg/kg (the generic RBC) to 51,000 mg/kg (the site-specific RBC).
- The DEQ *Vapor Intrusion into Buildings* RBC for urban residential receptors changed from 94 mg/kg (the generic RBC) to ">Max" (the site-specific RBC).

Based on the calculated site-specific RBC values noted above, the residual gasoline-range hydrocarbon-contaminated soil at the subject property does not present unacceptable risk to current or future applicable receptors.

In NV5's opinion, the extent of the residual contamination at the subject property has been delineated, both laterally and vertically, to the degree where the residually contaminated soil concentrations are less than the applicable calculated site-specific DEQ RBCs, and the contamination is stable. NV5 concludes that the contamination is stable based on the following:

- Free product was not observed in the soil at the subject property.
- Groundwater was not encountered at the subject property during historical investigations or earthwork activities.
- Residual soil concentrations in the unsaturated zone are generally immobile.
- The primary sources of the contamination (the previously identified USTs and the undocumented USTs) and most of the secondary source (contaminated soil) have been removed.

It is NV5's opinion that since the extent of the residual contamination at the subject property has been delineated to the degree where the residually contaminated soil concentrations are less than the applicable calculated site-specific DEQ RBCs, and the contamination is stable, further delineation is not necessary at the subject property. Based on the information presented in this report, on behalf of Mill Creek Residential Trust, we respectfully request that DEQ issue an NFA determination for LUST File No. 26-21-0394.

10.0 LIMITATIONS

This report has been prepared for use by Mill Creek Residential Trust. This report is not intended for use by others, and the information contained herein is not applicable to other sites. Reliance by other parties must be approved by NV5 in accordance with our standard contractual process for third-party reliance. Our interpretations of subsurface conditions are based on data from select soil samples collected from this limited area. The results of the analyses only indicate the presence or absence of those chemical constituents analyzed in those discrete sample locations. It is always possible that contamination could exist between the widely spaced exploration

locations. Analytical data from the laboratory samples should only be considered as indicators of subject property conditions and not a guarantee of the absence of subsurface impact in areas not sampled.

The conclusions presented in this report are based on our observations made during field investigations and chemical analytical data. The findings of this assessment should be considered as a professional opinion based on our evaluation of select and limited data.

Within the limitations of scope, schedule, and budget, our services have been executed in accordance with the generally accepted environmental science practices in this area at the time this report was prepared. No warranty or other conditions, express or implied, should be understood.

♦ ♦ ♦

Please call if you have questions or require additional information.

Sincerely,

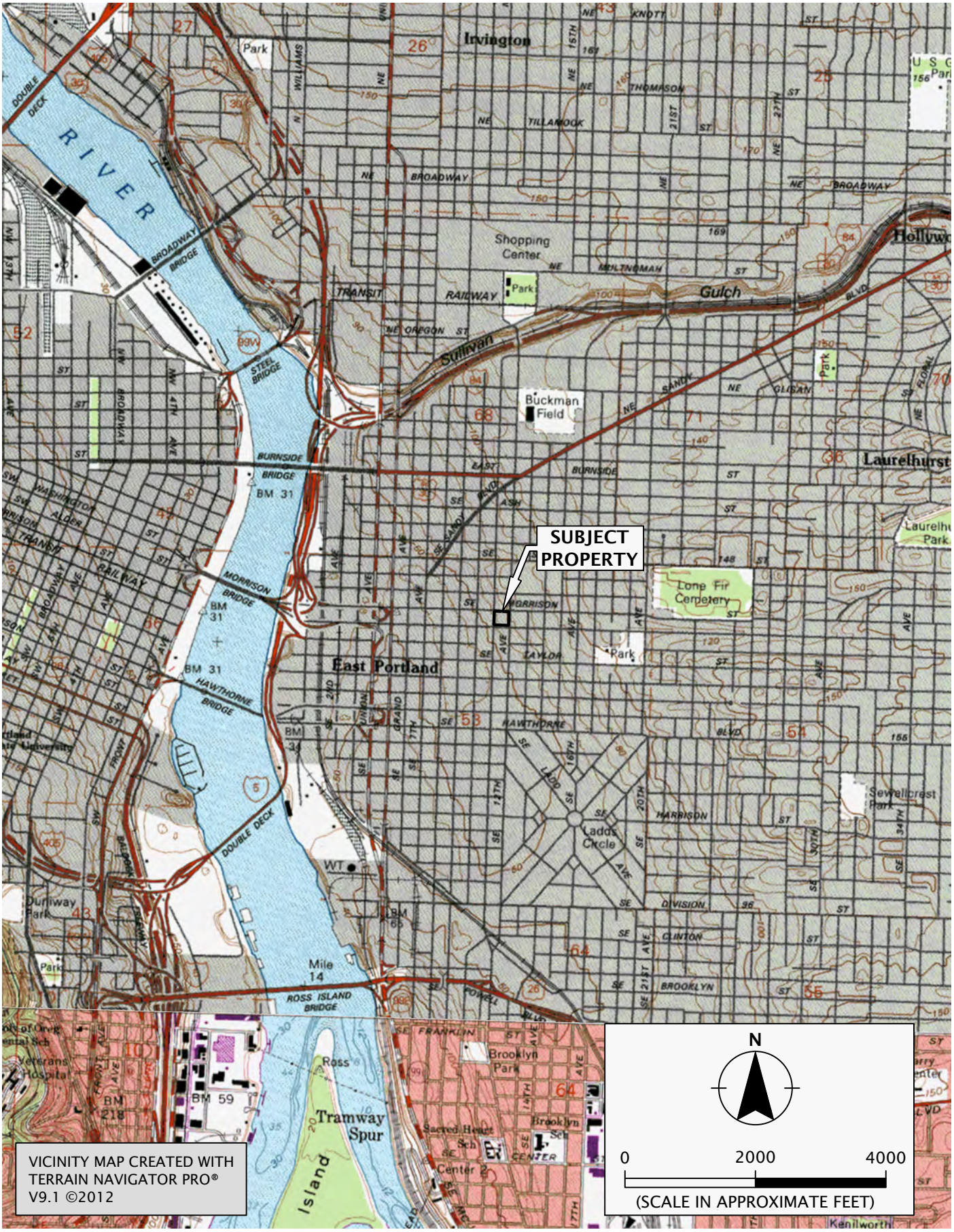
NV5

Caroline B. Siegel
Environmental Staff

Erik A. Hedberg, P.E.
Associate Engineer

Kyle R. Sattler, L.G. (Washington)
Principal Geologist

FIGURES



NV5	MILLCREEK-19-04	**VICINITY MAP**	
	MAY 2023	MODERA MORRISON PORTLAND, OR	**FIGURE 1**

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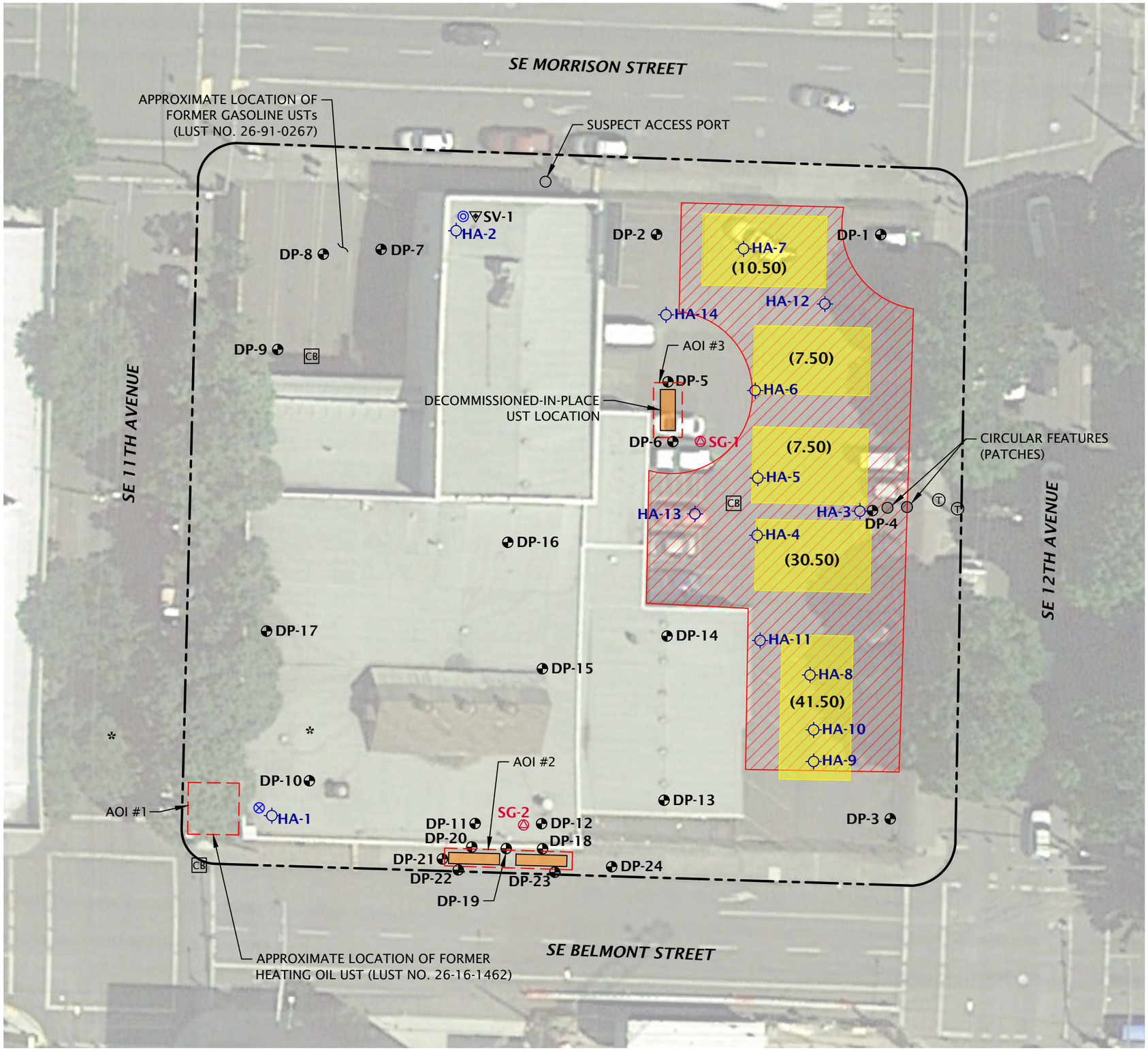
File Name: J:\M-R\MillCreek\MillCreek-19\MillCreek-19-04\Figures\CAD\MillCreek-19-04-VM01.dwg | Layout: FIGURE 1



LEGEND:

- SUBJECT PROPERTY BOUNDARY
- DP-1 DIRECT-PUSH BORING (2019)
- HA-1 HAND AUGER BORING (2019)
- SG-1 SOIL GAS BORING (2019)
- SV-1 SUB-SLAB VAPOR POINT (2019)
- CB CATCH BASIN
- T POLE-MOUNTED TRANSFORMER
- FLOOR DRAIN IN OFFICE BASEMENT
- FLOOR DRAIN IN WAREHOUSE BATHROOM
- UST
- SMA - APPROXIMATELY 2 TO 41.5 INCHES THICK
- (7.50) APPROXIMATE EXTENT OF REMNANT STRUCTURE FOUNDATION SUSPECTED OF CONTAINING LEAD EXCEEDING DEQ CFSL - THICKNESS SHOWN IN INCHES
- AREA OF INTEREST

N

0 30 60

(SCALE IN FEET)

SITE PLAN BASED ON AERIAL PHOTOGRAPH OBTAINED FROM GOOGLE EARTH PRO®, MARCH 22, 2019

SITE PLAN - PRE-DEVELOPMENT

MODERA MORRISON
PORTLAND, OR

FIGURE 2

MILLCREEK-19-04

MAY 2023

NV5

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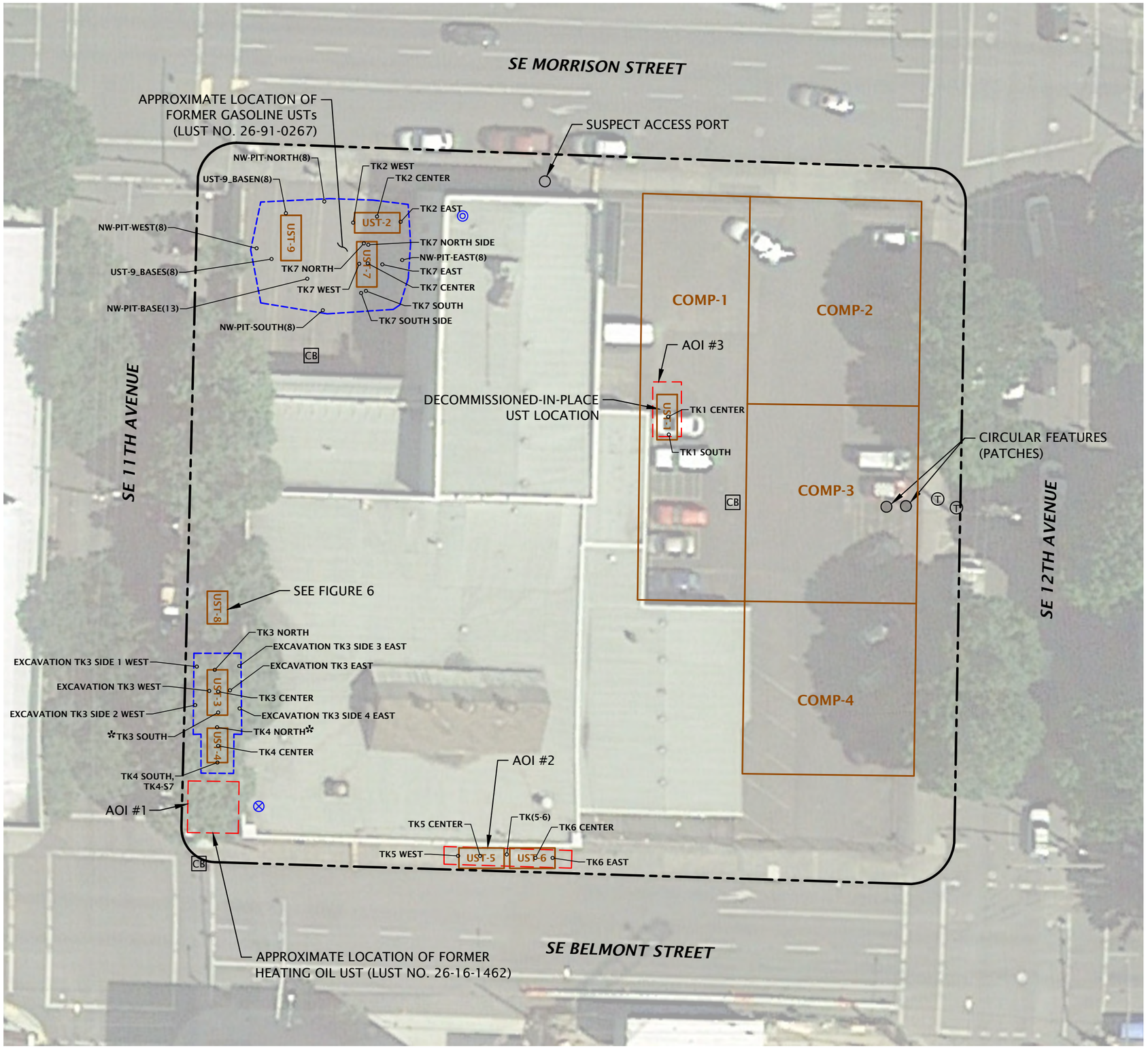
File Name: J:\M-R\MillCreek\MillCreek-19\MillCreek-19-04\Figures\CAD\MillCreek-19-04-SP03.dwg | Layout: FIGURE 2



LEGEND:

- SUBJECT PROPERTY BOUNDARY
- CB — CATCH BASIN
- T — POLE-MOUNTED TRANSFORMER
- FLOOR DRAIN IN OFFICE BASEMENT
- FLOOR DRAIN IN WAREHOUSE BATHROOM
- AREA OF INTEREST
- REMEDIAL EXCAVATION AREA
- TK1 CENTER — CONFIRMATION SOIL SAMPLE
- * — SOIL REPRESENTED BY THIS SAMPLE WAS REMOVED DURING OVER-EXCAVATION ACTIVITIES
- COMP-1 — SMA COMPOSITE AREA

NOTE:
SOIL SAMPLE SP2-1 WAS COLLECTED FROM A STOCKPILE OF SOIL GENERATED DURING REMOVAL OF OVERBURDEN SOIL ABOVE UST #1.

N

0 30 60

(SCALE IN FEET)

SITE PLAN BASED ON AERIAL PHOTOGRAPH OBTAINED FROM GOOGLE EARTH PRO®, MARCH 22, 2019

SITE PLAN - CONFIRMATION SOIL SAMPLES

FIGURE 3

MODERA MORRISON
PORTLAND, OR

MILLCREEK-19-04

MAY 2023

NV5

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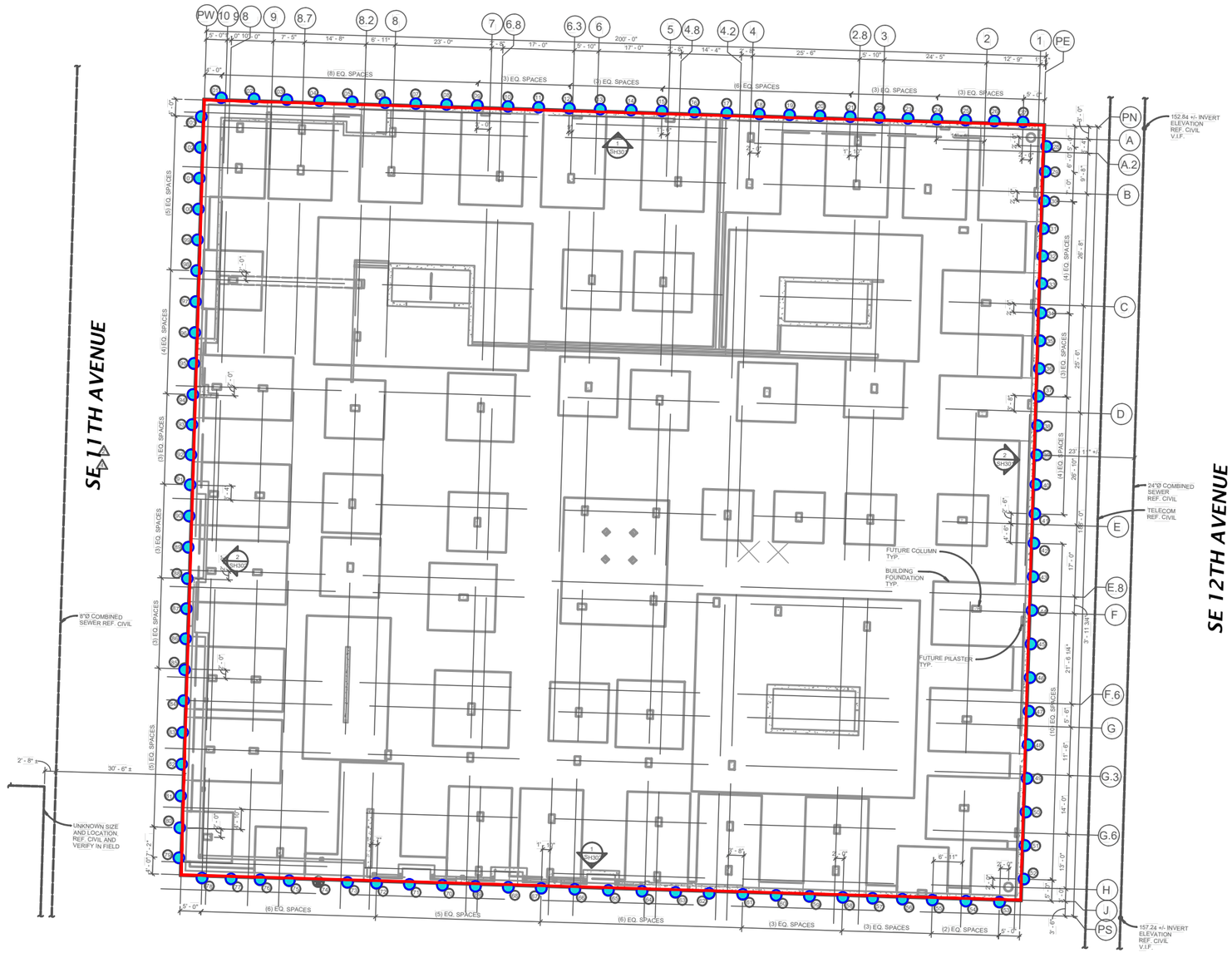

LEGEND:

- LIMITS OF MASS EXCAVATION
- SOLDIER PILE

SITE PLAN BASED ON PDF OF SHORING PLAN SH100 DATED MARCH 30, 2022, PREPARED BY SERA DESIGN AND ARCHITECTURE, INC.

SITE PLAN - MASS EXCAVATION LIMITS AND SOLDIER PILE LAYOUT

MODERA MORRISON
PORTLAND, OR

FIGURE 4

MILLCREEK-19-04

MAY 2023

NV5

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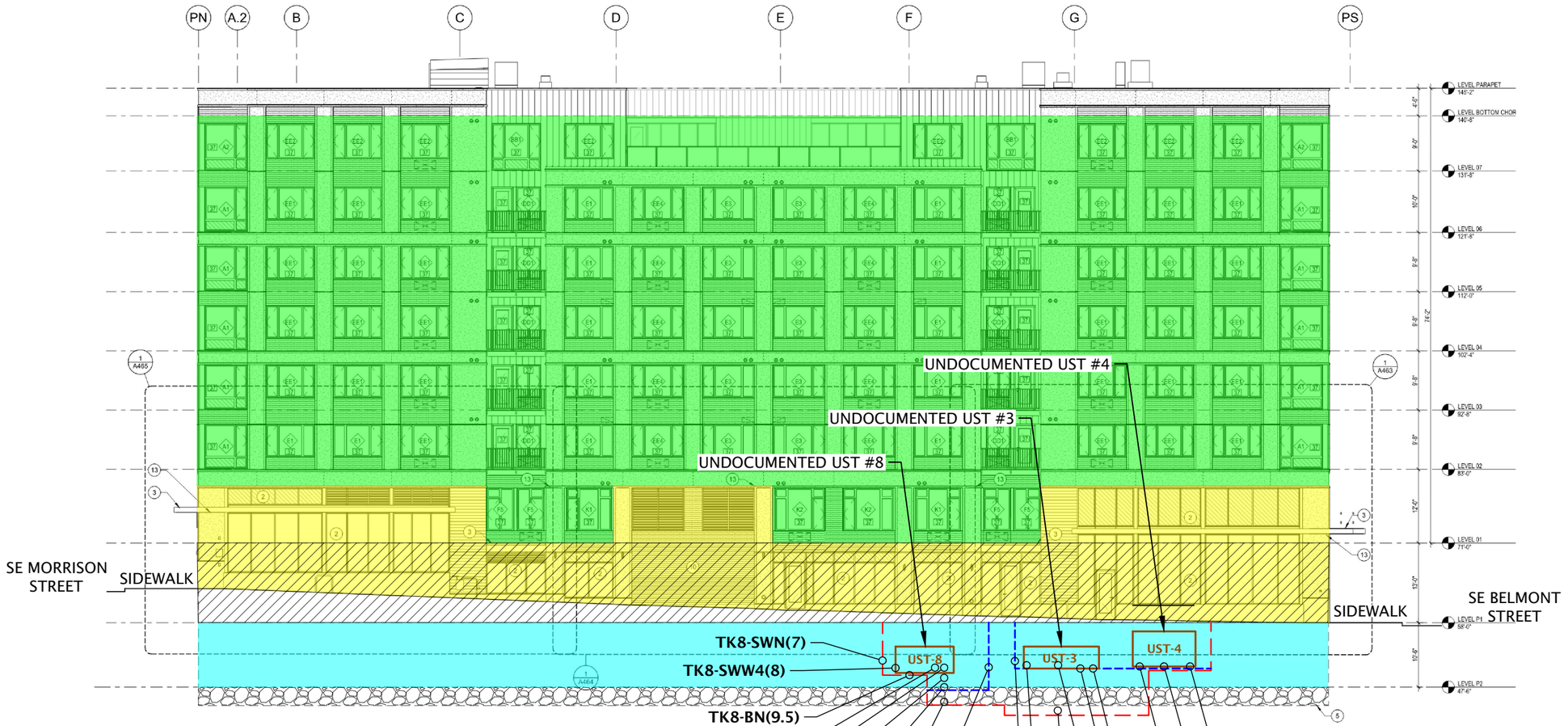
File Name: J:\M-R\MillCreek\MillCreek-19\MillCreek-19-04\Figures\CAD\MillCreek-19-04-SP03.dwg | Layout: FIGURE 4



LEGEND:

- INTERIM REMEDIAL EXCAVATION LIMITS
- FINAL EXCAVATION LIMITS
- BASE ROCK
- BELOW-GROUND PARKING GARAGE (LEVEL P2)
- PARTIAL BELOW-GROUND PARKING GARAGE (LEVEL P1) AND/OR RETAIL (OCCUPATIONAL) SPACE
- RETAIL (OCCUPATIONAL) SPACES
- URBAN RESIDENTIAL UNITS
- **TK8-SWN(7)** CONFIRMATION SOIL SAMPLE
- * SOIL REPRESENTED BY THIS SAMPLE WAS REMOVED DURING OVER-EXCAVATION ACTIVITIES

0 20 40
(SCALE IN FEET)

NOTE:
SITE PLAN BASED ON IMAGE OF SHEET A304 EXTERIOR ELEVATIONS WEST DATED MARCH 30, 2020, PREPARED BY SERA ARCHITECTURE

SITE PLAN - WEST ELEVATION OF BUILDING

MODERA MORRISON
PORTLAND, OR

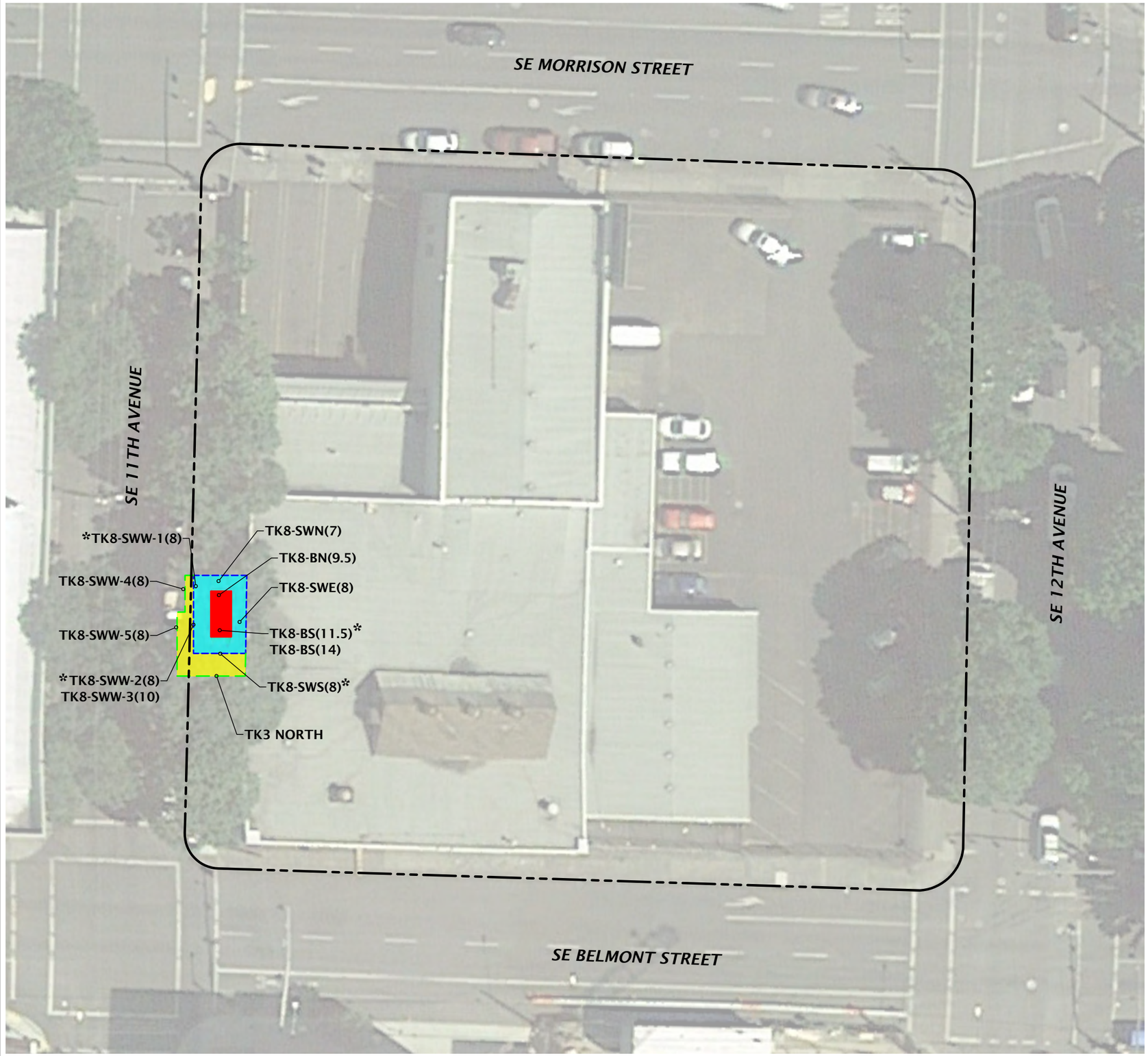
FIGURE 5

MILLCREEK-19-04

MAY 2023

NW5

Printed By: mmiller | Print Date: 5/11/2023 2:35:10 PM
File Name: J:\M-R\MillCreek\MillCreek-19\MillCreek-19-04\Figures\CAD\MillCreek-19-04-SP03.dwg | Layout: FIGURE 5



LEGEND:

- SUBJECT PROPERTY BOUNDARY
- FORMER UST #8
- INITIAL EXCAVATION LIMITS
- FINAL EXCAVATION LIMITS
- **TK8-SWN(7)** CONFIRMATION SOIL SAMPLE
- * SOIL REPRESENTED BY THIS SAMPLE WAS REMOVED DURING OVER-EXCAVATION ACTIVITIES

N

0 30 60

(SCALE IN FEET)

SITE PLAN BASED ON AERIAL PHOTOGRAPH OBTAINED FROM GOOGLE EARTH PRO®, MARCH 22, 2019

SITE PLAN - RESIDUAL CONTAMINATED SOIL

MODERA MORRISON
PORTLAND, OR

FIGURE 6

MILLCREEK-19-04

MAY 2023

NV5

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TABLES

TABLE 1
Summary of Soil Sample Chemical Analytical Results
Petroleum Hydrocarbons
Modera Morrison
1120 SE Morrison Street
Portland, Oregon

Sample I.D.	UST I.D.	Sample Date	Hydrocarbon Identification Method NWTPH-HCID (mg/kg)			Gasoline-Range Hydrocarbons Method NWTPH-Gx (mg/kg)	Diesel- and Oil-Range Hydrocarbons Method NWTPH-Dx (mg/kg)	
			Gasoline-Range	Diesel-Range	Oil-Range		Diesel-Range	Oil-Range
Karl Van Zandt Environmental Consulting (2021)								
Waste Characterization Samples								
TK8 South	UST #8	04/21/21	--	--	--	161,000 U	**604**	326 U
Confirmation Soil Samples								
SP2-1	UST #1	04/14/21	--	--	--	--	**27.8**	**76.7**
TK1 South		04/20/21	--	--	--	--	19.8 U	66.0 U
TK1 Center		04/20/21	--	--	--	--	21.4 U	71.3 U
TK2 Center	Undocumented UST #2	04/14/21	--	--	--	--	**30.6**	67.7 U
TK2 West		04/16/21	--	--	--	--	**35.7**	60.6 U
TK2 East		04/16/21	--	--	--	--	**21.0**	60.3 U
TK3 North	Undocumented UST #3	04/20/21	--	--	--	--	19.6 U	65.5 U
TK3 Center		04/20/21	--	--	--	--	19.0 U	63.4 U
TK3 South		04/20/21	--	--	--	--	**52,300**	**643**
TK4 South	Undocumented UST #4	04/20/21	--	--	--	--	**345**	63.5 U
TK4 Center		04/20/21	--	--	--	--	**33.6**	64.4 U
TK4 North		04/20/21	--	--	--	--	19.0 U	63.4 U
TK5 Center	UST #5	04/20/21	--	--	--	--	20.5 U	68.5 U
TK5 West		04/20/21	--	--	--	--	19.0 U	63.4 U
TK(5-6)	USTs #5 and #6	04/20/21	--	--	--	--	17.6 U	58.7 U
TK6 Center	UST #6	04/20/21	--	--	--	--	**31.1**	64.6 U
TK6 East		04/20/21	--	--	--	--	18.6 U	62.0 U

TABLE 1
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Petroleum Hydrocarbons
Modera Morrison
1120 SE Morrison Street
Portland, Oregon

Sample I.D.	UST I.D.	Sample Date	Hydrocarbon Identification Method NWTPH-HCID (mg/kg)			Gasoline-Range Hydrocarbons Method NWTPH-Gx (mg/kg)	Diesel- and Oil-Range Hydrocarbons Method NWTPH-Dx (mg/kg)	
			Gasoline-Range	Diesel-Range	Oil-Range		Diesel-Range	Oil-Range
TK7 South	Undocumented UST #7	04/20/21	--	--	--	--	17.0 U	56.6 U
TK7 Center		04/20/21	--	--	--	--	18.2 U	60.8 U
TK7 North		04/20/21	--	--	--	--	18.1 U	60.2 U
TK7 East		04/20/21	--	--	--	--	19.8 U	66.0 U
TK7 West		04/20/21	--	--	--	--	21.3 U	71.1 U
TK7 North Side		04/20/21	--	--	--	--	19.4 U	64.8 U
TK7 South Side		04/20/21	--	--	--	--	18.1 U	60.3 U
Excavation TK3 West	Undocumented UST #3	04/21/21	--	--	--	--	18.9 U	62.9 U
Excavation TK3 East		04/21/21	--	--	--	--	19.0 U	63.3 U
Excavation TK3 Side 1 West		04/21/21	--	--	--	--	17.4 U	58.0 U
Excavation TK3 Side 2 West		04/21/21	--	--	--	64.2 U	17.1 U	57.1 U
Excavation TK3 Side 3 East		04/21/21	--	--	--	--	**37.1**	59.8 U
Excavation TK3 Side 4 East		04/21/21	--	--	--	80.7 U	19.6 U	65.3 U
NV5 (2021 - 2022)								
Confirmation Soil Samples								
UST-9_BaseN(8)	Undocumented UST #9	05/06/21	**DET**	**DET**	ND	--	--	--
UST-9_BaseS(8)		05/06/21	**DET**	**DET**	ND	--	--	--

TABLE 1
Summary of Soil Sample Chemical Analytical Results
Petroleum Hydrocarbons
Modera Morrison
1120 SE Morrison Street
Portland, Oregon

Sample I.D.	UST I.D.	Sample Date	Hydrocarbon Identification Method NWTPH-HCID (mg/kg)			Gasoline-Range Hydrocarbons Method NWTPH-Gx (mg/kg)		Diesel- and Oil-Range Hydrocarbons Method NWTPH-Dx (mg/kg)	
			Gasoline-Range	Diesel-Range	Oil-Range			Diesel-Range	Oil-Range
NW-PIT-North(8)	Undocumented USTs #2, #7, and #9	05/07/21	--	--	--	6.46	U	--	--
NW-PIT-East(8)		05/07/21	--	--	--	7.07	U	--	--
NW-PIT-South(8)		05/07/21	--	--	--	6.72	U	--	--
NW-PIT-West(8)		05/07/21	--	--	--	6.86	U	--	--
NW-PIT-Base(13)		05/07/21	--	--	--	6.15	U	--	--
TK8-SWE(8)	Undocumented UST #8	05/11/21	--	--	--	6.69	U	--	--
TK8-SWN(7)		05/11/21	--	--	--	**28.8**		--	--
TK8-SWS(8)		05/11/21	--	--	--	**25,100**		--	--
TK8-SWW-1(8)		05/11/21	--	--	--	**7,500**		--	--
TK8-SWW-2(8)		05/11/21	--	--	--	**39,500**		--	--
TK8-SWW-3(10)		05/11/21	--	--	--	7.19	U	--	--
TK8-BN(9.5)		05/11/21	--	--	--	7.01	U	--	--
TK8-BS(11.5)		05/11/21	--	--	--	**231**		--	--
TK8-BS(14)		05/11/21	--	--	--	6.53	U	--	--
TK8-SWW-5(8)		03/02/22	--	--	--	**12,300**		--	--
TK8-SWW-4(8)		03/02/22	--	--	--	7.15	U	--	--

TABLE 1
Summary of Soil Sample Chemical Analytical Results
Petroleum Hydrocarbons
Modera Morrison
1120 SE Morrison Street
Portland, Oregon

Sample I.D.	UST I.D.	Sample Date	Hydrocarbon Identification Method NWTPH-HCID (mg/kg)			Gasoline-Range Hydrocarbons Method NWTPH-Gx (mg/kg)	Diesel- and Oil-Range Hydrocarbons Method NWTPH-Dx (mg/kg)	
			Gasoline-Range	Diesel-Range	Oil-Range		Diesel-Range	Oil-Range
DEQ Generic RBCs[1]								
Soil Ingestion, Dermal Contact, and Inhalation								
Construction Worker			NE	NE	NE	9,700	4,600	NE
Excavation Worker			NE	NE	NE	>Max	>Max	NE
Calculated Site-Specific Construction Worker			NC	NC	NC	15,000	>Max	NE
Volatilization to Outdoor Air								
Urban Residential			NE	NE	NE	5,900	>Max	NE
Occupational			NE	NE	NE	69,000	>Max	NE
Calculated Site-Specific Urban Residential			NE	NE	NE	51,000	>Max	NE
Vapor Intrusion into Buildings								
Urban Residential			NE	NE	NE	94	>Max	NE
Occupational			NE	NE	NE	>Max	>Max	NE
Calculated Site-Specific Urban Residential			NC	NC	NC	>Max	NC	NC
DEQ CFSLs[2]			NE	NE	NE	31	1,100	NE

TABLE 1
Summary of Soil Sample Chemical Analytical Results
Petroleum Hydrocarbons
Modera Morrison
1120 SE Morrison Street
Portland, Oregon

Sample I.D.	UST I.D.	Sample Date	Hydrocarbon Identification Method NWTPH-HCID (mg/kg)			Gasoline-Range Hydrocarbons Method NWTPH-Gx (mg/kg)	Diesel- and Oil-Range Hydrocarbons Method NWTPH-Dx (mg/kg)	
			Gasoline-Range	Diesel-Range	Oil-Range		Diesel-Range	Oil-Range

Notes:
1. DEQ Generic RBCs dated May 2018
2. DEQ CFSLs dated February 21, 2019
DET: analyte was qualitatively detected
>Max: The constituent RBC for this pathway is calculated as greater than 1,000,000 mg/kg or 1,000,000 mg/L. Therefore, this substance is deemed not to pose risks in this scenario.
ND: not detected at concentrations greater than the reporting or detection limit shown
U: Not detected. Reporting or detection limit shown.
Bolding indicates analyte detection.
Gray shading indicates analyte detection at a concentration greater than generic DEQ RBCs and CFSLs.
Yellow shading indicates analyte detection at a concentration greater than generic DEQ RBCs and CFSLs. However, the reported concentration does not exceed the calculated site-specific RBCs; therefore, this analyte concentration does not present unacceptable risk via this exposure pathway.
Blue shading indicates soil represented by sample was removed during remedial excavation activities.
--: not analyzed

TABLE 2
Summary of Soil Sample Chemical Analytical Results
VOCs
Modera Morrison
1120 SE Morrison Street
Portland, Oregon

Sample I.D.	UST I.D.	Sample Date	VOCs[1] EPA Method 8260D (mg/kg)												
			Benzene	n-Butylbenzene	sec-Butylbenzene	1,2-Dichloroethane	Ethylbenzene	Isopropylbenzene	4-Isopropylbenzene	Naphthalene	n-Propylbenzene	Toluene	1,2,4-TMB	1,3,5-TMB	Total Xylenes
Karl Van Zandt Environmental Consulting (2021)															
Waste Characterization Samples [2]															
TK8 South	Undocumented UST #8	04/21/21	**6.29**	–	–	0.161 U	**65.3**	**18.3**	–	**30.1**	**38.0**	**17.1**	**209**	**82.2**	**382**
NV5 (2021 - 2022)															
Waste Characterization Samples [2]															
UST-1	Undocumented UST #2	04/12/21	0.0158 U	**2.56**	**0.863**	0.0396 U	**0.0971**	**0.244**	**0.846**	**4.90**	**1.23**	0.0792 U	**43.9**	**15.4**	**0.881**
UST-CDF	Undocumented UST #7	04/20/21	0.0137 U	0.0684 U	0.0684 U	0.0342 U	0.0342 U	0.0684 U	0.0684 U	0.137 U	0.0342 U	0.0684 U	**0.121**	0.0684 U	0.103 U
HOT-SP(042121)	Undocumented USTs #3 and #4; USTs #5 and #6	04/21/21	0.0157 U	0.0786 U	0.0786 U	0.0393 U	0.0393 U	0.0983 U	**0.0884**	**0.247**	0.0393 U	0.0786 U	**0.321**	**0.115**	0.118 U
UST-Gas	Undocumented UST #8	04/21/21	**0.362**	**0.0916**	0.0786 U	0.0393 U	**0.206**	0.0786 U	**0.104**	**0.206**	**0.144**	**0.717**	**1.09**	**0.324**	**1.35**
Confirmation Soil Samples															
NW-PIT-North(8)	Undocumented USTs #2, #7, and #9	05/07/21	0.0129 U	0.0646 U	0.0646 U	0.0323 U	0.0323 U	0.0646 U	0.0646 U	0.129 U	0.0323 U	0.0646 U	0.0646 U	0.0646 U	0.0969 U
NW-PIT-East(8)		05/07/21	0.0141 U	0.0707 U	0.0707 U	0.0353 U	0.0353 U	0.0707 U	0.0707 U	0.141 U	0.0353 U	0.0707 U	0.0707 U	0.0707 U	0.106 U
NW-PIT-South(8)		05/07/21	0.0134 U	0.0672 U	0.0672 U	0.0336 U	0.0336 U	0.0672 U	0.0672 U	0.134 U	0.0336 U	0.0672 U	0.0672 U	0.0672 U	0.1008 U
NW-PIT-West(8)		05/07/21	0.0137 U	0.0686 U	0.0686 U	0.0343 U	0.0343 U	0.0686 U	0.0686 U	0.137 U	0.0343 U	0.0686 U	0.0686 U	0.0686 U	0.1029 U
NW-PIT-Base(13)		05/07/21	0.0123 U	0.0615 U	0.0615 U	0.0308 U	0.0308 U	0.0615 U	0.0615 U	0.123 U	0.0308 U	0.0615 U	0.0615 U	0.0615 U	0.0923 U

TABLE 2
Summary of Soil Sample Chemical Analytical Results
VOCs
Modera Morrison
1120 SE Morrison Street
Portland, Oregon

Sample I.D.	UST I.D.	Sample Date	VOCs[1] EPA Method 8260D (mg/kg) Benzene	n-Butylbenzene	sec-Butylbenzene	1,2-Dichloroethane	Ethylbenzene	Isopropylbenzene	4-Isopropylbenzene	Naphthalene	n-Propylbenzene	Toluene	1,2,4-TMB	1,3,5-TMB	Total Xylenes
TK8-SWN(7)	Undocumented UST #8	05/11/21	0.0175 U	--	--	0.0437 U	0.0437 U	0.0873 U	--	0.175 U	--	0.0873 U	0.0873 U	0.0873 U	0.131 U
TK8-SWS(8)		05/11/21	**58.0**	--	--	1.43 U	**144**	**36.9**	--	**47.9**	--	**332**	**364**	**119**	**800**
TK8-SWW-1(8)		05/11/21	**7.51**	--	--	0.737 U	**27.6**	**8.61**	--	**7.37**	--	**7.84**	**108**	**4.98**	**95.5**
TK8-SWW-2(8)		05/11/21	**276**	--	--	**11.8**	**282**	**61.6**	--	**57.2**	--	**1,090**	**676**	**199**	**1,720**
TK8-BS(11.5)		05/11/21	**0.624**	--	--	0.0324 U	0.268 U	0.0719 U	--	**0.338**	--	**0.519**	**1.41**	**0.488**	**1.92**
TK4-S7	Undocumented UST #4	05/11/21	**0.0127**	--	--	--	0.0245 U	--	--	--	--	0.0490 U	--	--	0.0735 U
TK8-SWW-5(8)	Undocumented UST #8	03/02/22	0.145 U	--	--	0.362 U	0.362 U	0.725 U	--	1.45 U	--	0.725 U	**4.85**	**12.9**	**3.83**
TK8-SWW-4(8)		03/02/22	0.0143 U	--	--	0.0358 U	0.0358 U	0.0715 U	--	0.143 U	--	0.0715 U	0.0715 U	0.0715 U	0.107 U
DEQ Generic RBCs[3]															
Soil Ingestion, Dermal Contact, and Inhalation															
Construction Worker			380	NE	NE	200	1,700	27,000	NE	580	NE	28,000	2,900	2,900	20,000
Excavation Worker			11,000	NE	NE	5,600	49,000	750,000	NE	16,000	NE	770,000	81,000	81,000	560,000
Volatilization to Outdoor Air															
Urban Residential			27	NE	NE	8.1	85	>Csat	NE	15	NE	>Csat	>Csat	>Csat	>Csat
Occupational			50	NE	NE	15	160	>Csat	NE	83	NE	>Csat	>Csat	>Csat	>Csat
Vapor Intrusion into Buildings															
Urban Residential			0.38	NE	NE	0.18	3.0	>Csat	NE	15	NE	>Csat	140	98	160
Occupational			2.1	NE	NE	1.0	17	>Csat	NE	83	NE	>Csat	>Csat	>Csat	>Csat
DEQ CFSLs[4]			0.023	190	350	0.0028	0.22	96	NE	0.077	72	23	10	11	1.4

TABLE 2
Summary of Soil Sample Chemical Analytical Results
VOCs
Modera Morrison
1120 SE Morrison Street
Portland, Oregon

Sample I.D.	UST I.D.	Sample Date	VOCs[1] EPA Method 8260D (mg/kg)												
			Benzene	n-Butylbenzene	sec-Butylbenzene	1,2-Dichloroethane	Ethylbenzene	Isopropylbenzene	4-Isopropylbenzene	Naphthalene	n-Propylbenzene	Toluene	1,2,4-TMB	1,3,5-TMB	Total Xylenes

Notes:
1. Only VOCs detected during this investigation are listed. For a complete listing of VOCs, refer to the laboratory reports in Appendix I.
2. Waste characterization samples are not compared to DEQ RBCs or CFSLs.
3. DEQ Generic RBCs dated May 2018
4. DEQ CFSLs dated February 21, 2019

>Csat: This soil RBC exceeds the limit of three-phase equilibrium partitioning. Refer to Appendix D of DEQ's RBDM guidance document for the corresponding value of Csat. Soil concentrations in excess of Csat indicate that free product might be present.
U: Not detected. Reporting or detection limit shown.
Bolding indicates analyte detection.
Gray shading indicates analyte detection at a concentration greater than DEQ CFSLs.
Blue shading indicates soil represented by sample was removed during remedial excavation activities.
--: not analyzed

TABLE 3
Summary of Soil Sample Chemical Analytical Results
RCRA 8 Total Metals
Modera Morrison
1120 SE Morrison Street
Portland, Oregon

Sample I.D.	UST I.D.	Sample Date	RCRA 8 Total Metals EPA Method 6020B (mg/kg)							
			Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
Karl Van Zandt Environmental Consulting (2021)										
Waste Characterization Samples [1]										
12th Dewitt- Tank	Undocumented UST #2; USTs #5 and #6	04/16/21	1.10 U	**1.17**	0.110 U	1.10 U	**1.08**	0.0105 U	1.10 U	0.110 U
NV5 (2021 - 2022)										
Waste Characterization Samples [1]										
Lead Comp	NA	04/12/21	--	--	--	--	**643**	--	--	--
UST-1	Undocumented UST #2	04/12/21	**12.3**	**233**	0.297 U	**33.0**	**80.6**	0.119 U	1.49 U	0.297 U
UST-CDF	Undocumented UST #7	04/20/21	**1.79**	**92.1**	0.257 U	**8.01**	**2.62**	0.103 U	1.28 U	0.257 U
HOT-SP(042121)	Undocumented USTs #3 and #4; USTs #5 and #6	04/21/21	**8.46**	**188**	0.269 U	**21.2**	**13.3**	0.108 U	1.35 U	0.269 U
UST-Gas	Undocumented UST #8	04/21/21	**6.13**	**184**	**0.814**	**22.1**	**29.7**	0.115 U	1.43 U	0.287 U
Confirmation Soil Samples										
TP-1(1)	NA	04/09/21	--	--	--	--	**19.7**	--	--	--
TP-2(0.5)		04/09/21	--	--	--	--	**10.3**	--	--	--
TP-3(1)		04/09/21	--	--	--	--	**12.7**	--	--	--
TP-4(1)		04/09/21	--	--	--	--	**9.90**	--	--	--
TP-5(1.5)		04/09/21	--	--	--	--	**15.6**	--	--	--
TP-6(2)		04/09/21	--	--	--	--	**36.1**	--	--	--

TABLE 3
Summary of Soil Sample Chemical Analytical Results
RCRA 8 Total Metals
Modera Morrison
1120 SE Morrison Street
Portland, Oregon

Sample I.D.	UST I.D.	Sample Date	RCRA 8 Total Metals EPA Method 6020B (mg/kg)							
			Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
TP-7(0.5)	NA	04/09/21	--	--	--	--	18.0	--	--	--
TP-8(0.5)		04/09/21	--	--	--	--	22.9	--	--	--
Comp-1-Native		04/09/21	--	--	--	--	13.4	--	--	--
Comp-3-Native2		04/12/21	--	--	--	--	33.0	--	--	--
Comp-3-Native3		04/12/21	--	--	--	--	15.5	--	--	--
Comp-2-Native		04/13/21	--	--	--	--	13.8	--	--	--
Comp-3-Native		04/13/21	--	--	--	--	36.5	--	--	--
Comp-4-Native		04/13/21	--	--	--	--	17.8	--	--	--
NW-PIT-North(8)	Undocumented USTs #2, #7, and #9	05/07/21	6.14	159	0.242 U	23.7	10.9	0.0967 U	1.21 U	0.242 U
NW-PIT-East(8)		05/07/21	5.53	150	0.277 U	14.6	8.27	0.111 U	1.39 U	0.277 U
NW-PIT-South(8)		05/07/21	4.75	143	0.270 U	14.3	8.35	0.108 U	1.35 U	0.270 U
NW-PIT-West(8)		05/07/21	3.95	119	0.253 U	15.9	7.11	0.101 U	1.26 U	0.253 U
NW-PIT-Base(13)		05/07/21	4.00	118	0.233 U	11.9	7.85	0.0930 U	1.16 U	0.233 U
TK8-SWE(8)	Undocumented UST #8	05/11/21	8.94	180	0.252 U	19.2	11.9	0.101 U	1.26 U	0.252 U
TK8-SWN(7)		05/11/21	4.82	133	0.274 U	15.4	8.29	0.110 U	1.37 U	0.274 U
TK8-SWS(8)		05/11/21	8.33	169	0.261 U	19.2	18.4	0.105 U	1.31 U	0.261 U
TK8-SWW-1(8)		05/11/21	5.61	186	0.268 U	22.7	21.7	0.107 U	1.34 U	0.268 U
TK8-SWW-2(8)		05/11/21	4.66	133	1.75	15.6	62.5	0.0998 U	1.25 U	0.249 U
TK8-SWW-3(10)		05/11/21	5.78	1.24	0.246 U	15.7	8.94	0.0986 U	1.23 U	0.246 U
TK8-BN(9.5)		05/11/21	4.66	140	0.238 U	11.7	6.30	0.0952 U	1.19 U	0.238 U
TK8-BS(11.5)		05/11/21	6.04	128	0.271 U	19.4	13.9	0.108 U	1.35 U	0.271 U
TK8-BS(14)		05/11/21	2.58	118	0.238 U	8.75	5.11	0.0951 U	1.19 U	0.238 U
TK8-SWW-5(8)		03/02/22	4.66	127	0.277 U	15.9	11.7	0.111 U	1.39 U	0.277 U
TK8-SWW-4(8)		03/02/22	4.97	117	0.276 U	13.9	7.85	0.110 U	1.38 U	0.276 U

TABLE 3
Summary of Soil Sample Chemical Analytical Results
RCRA 8 Total Metals
Modera Morrison
1120 SE Morrison Street
Portland, Oregon

Sample I.D.	UST I.D.	Sample Date	RCRA 8 Total Metals EPA Method 6020B (mg/kg)							
			Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
DEQ Generic RBCs[2]										
Soil Ingestion, Dermal Contact, and Inhalation										
Construction Worker			15	69,000	350	530,000	800	110	NE	1,800
Excavation Worker			420	>Max	9,700	>Max	800	2,900	NE	49,000
Volatilization to Outdoor Air										
Urban Residential			NV	NV	NV	NV	NV	NV	NE	NV
Occupational			NV	NV	NV	NV	NV	NV	NE	NV
Vapor Intrusion into Buildings										
Urban Residential			NV	NV	NV	NV	NV	NV	NE	NV
Occupational			NV	NV	NV	NV	NV	NV	NE	NV
DEQ CFSLs[3]			8.8	730	1.6	100	28	0.07	0.68	0.33

Notes:
1. Waste characterization samples are not compared to DEQ RBCs or CFSLs.
2. DEQ Generic RBCs dated May 2018
3. DEQ CFSLs dated February 21, 2019
>Max: The constituent RBC for this pathway is calculated as greater than 1,000,000 mg/kg or 1,000,000 mg/L. Therefore, this substance is deemed not to pose risks in this scenario.
NV: chemical is considered non-volatile
U: Not detected. Reporting or detection limit shown.
Bolding indicates analyte detection.
Gray shading indicates analyte detection at a concentration greater than DEQ CFSLs.
Blue shading indicates soil represented by sample was removed during remedial excavation activities.
--: not analyzed

TABLE 4
Summary of Soil Sample Chemical Analytical Results
RCRA 8 TCLP Metals
Modera Morrison
1120 SE Morrison Street
Portland, Oregon

Sample I.D.	UST I.D.	Sample Date	RCRA 8 TCLP Metals EPA Methods E1311/6020/7470 (mg/kg)							
			Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
Karl Van Zandt Environmental Consulting (2021)										
Waste Characterization Samples										
TK8 South	Undocumented UST #8	04/21/21	**0.00981**	**1.10**	0.00500 U	0.00500 U	**0.0116**	0.000500 U	0.0500 U	0.00500 U
DEQ Generic RBCs[1]										
Soil Ingestion, Dermal Contact, and Inhalation										
Construction Worker			15	69,000	350	530,000	800	110	NE	1,800
Excavation Worker			420	>Max	9,700	>Max	800	2,900	NE	49,000
Volatilization to Outdoor Air										
Urban Residential			NV	NV	NV	NV	NV	NV	NE	NV
Occupational			NV	NV	NV	NV	NV	NV	NE	NV
Vapor Intrusion into Buildings										
Urban Residential			NV	NV	NV	NV	NV	NV	NE	NV
Occupational			NV	NV	NV	NV	NV	NV	NE	NV
DEQ CFSLs[2]			8.8	790	0.63	76	28	0.23	0.71	0.82

Notes:
1. DEQ Generic RBCs dated May 2018
2. DEQ CFSLs dated February 21, 2019
>Max: The constituent RBC for this pathway is calculated as greater than 1,000,000 mg/kg or 1,000,000 mg/L. Therefore, this substance is deemed not to pose risks in this scenario.
NV: chemical is considered non-volatile
U: Not detected. Reporting or detection limit shown.
Bolding indicates analyte detection.

TABLE 5
Summary of Soil Sample Chemical Analytical Results
PAHs
Modera Morrison
1120 SE Morrison Street
Portland, Oregon

Sample I.D.	UST I.D.	Sample Date	PAHs EPA Method 8270E SIM (mg/kg)																		
			Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(g,h,i)perylene	2-Chloronaphthalene	Chrysene	Dibenz(a,h)anthracene	Dibenzofuran	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene	Phenanthrene	Pyrene
NV5 (2021 - 2022)																					
Waste Characterization Samples																					
TK4-S7	Undocumented UST #4	05/11/21	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U
DEQ Generic RBCs[1]																					
Soil Ingestion, Dermal Contact, and Inhalation																					
Construction Worker			21,000	NE	110,000	170	17	170	1,700	NE	NE	17,000	17	NE	10,000	14,000	170	NE	NE	580	NE	7,500
Excavation Worker			590,000	NE	>Max	4,800	490	4,900	49,000	NE	NE	490,000	490	NE	280,000	390,000	4,900	NE	NE	16,000	NE	210,000
Volatilization to Outdoor Air																					
Urban Residential			>Max	NE	>Max	>Csat	NV	NV	NV	NE	NE	NV	NV	NE	NV	>Max	NV	NE	NE	15	NE	>Max
Occupational			>Max	NE	>Max	>Csat	NV	NV	NV	NE	NE	NV	NV	NE	NV	>Max	NV	NE	NE	83	NE	>Max
Vapor Intrusion into Buildings																					
Urban Residential			>Max	NE	>Max	>Csat	NV	NV	NV	NE	NE	NV	NV	NE	NV	>Max	NV	NE	NE	15	NE	>Max
Occupational			>Max	NE	>Max	>Csat	NV	NV	NV	NE	NE	NV	NV	NE	NV	>Max	NV	NE	NE	83	NE	>Max
DEQ CFSLs[2]			0.25	120	6.8	0.73	0.11	1.1	11	25	230	3.1	0.11	0.002	10	3.7	1.1	0.36	11	0.077	5.5	10

Notes:
1. DEQ Generic RBCs dated May 2018
2. DEQ CFSLs dated February 21, 2019
>Csat: This soil RBC exceeds the limit of three-phase equilibrium partitioning. Refer to Appendix D of DEQ's RBDM guidance document for the corresponding value of Csat. Soil concentrations in excess of Csat indicate that free product might be present
>Max: The constituent RBC for this pathway is calculated as greater than 1,000,000 mg/kg or 1,000,000 mg/L. Therefore, this substance is deemed not to pose risks in this scenario.
NV: chemical is considered non-volatile
U: Not detected. Reporting or detection limit shown.

TABLE 6
Summary of Soil Sample Chemical Analytical Results
PCBs
Modera Morrison
1120 SE Morrison Street
Portland, Oregon

Sample I.D.	UST I.D.	Sample Date	PCBs EPA Method 8082A (mg/kg)						
			Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260
Karl Van Zandt Environmental Consulting (2021)									
Waste Characterization Samples									
12th Dewitt- Tank	Undocumented UST #2; USTs #5 and #6	04/16/21	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
TK8 South	Undocumented UST #8	04/21/21	0.0000500 U	0.0000500 U	0.0000500 U	0.0000500 U	0.0000500 U	0.0000500 U	0.0000500 U
NV5 (2021 - 2022)									
Waste Characterization Samples									
UST-1	Undocumented UST #2	04/12/21	0.0136 U	0.0136 U	0.0136 U	0.0136 U	0.0136 U	0.0136 U	0.0136 U
UST-CDF	Undocumented UST #7	04/20/21	0.0121 U	0.0121 U	0.0121 U	0.0121 U	0.0121 U	0.0121 U	0.0121 U
HOT-SP(042121)	Undocumented USTs #3 and #4; USTs #5 and #6	04/21/21	0.0126 U	0.0126 U	0.0126 U	0.0126 U	0.0126 U	0.0126 U	0.0126 U
UST-Gas	Undocumented UST #8	04/21/21	0.0125 U	0.0125 U	0.0125 U	0.0125 U	0.0125 U	0.0125 U	0.0125 U
DEQ Generic RBCs[1]									
Soil Ingestion, Dermal Contact, and Inhalation									
Construction Worker			4.9						
Excavation Worker			140						

TABLE 6
Summary of Soil Sample Chemical Analytical Results
PCBs
Modera Morrison
1120 SE Morrison Street
Portland, Oregon

Sample I.D.	UST I.D.	Sample Date	PCBs EPA Method 8082A (mg/kg)						
			Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260
Volatilization to Outdoor Air									
Urban Residential			>Csat						
Occupational			>Csat						
Vapor Intrusion into Buildings									
Urban Residential			>Csat						
Occupational			>Csat						
DEQ CFSLs[2]			1.1	0.0048	0.0048	0.041	0.0073	0.041	0.24

Notes:
1. DEQ Generic RBCs dated May 2018
2. DEQ CFSLs dated February 21, 2019

>Csat: This soil RBC exceeds the limit of three-phase equilibrium partitioning. Refer to Appendix D of DEQ's RBDM guidance document for the corresponding value of Csat. Soil concentrations in excess of Csat indicate that free product might be present.

U: Not detected. Reporting or detection limit shown.

APPENDIX A

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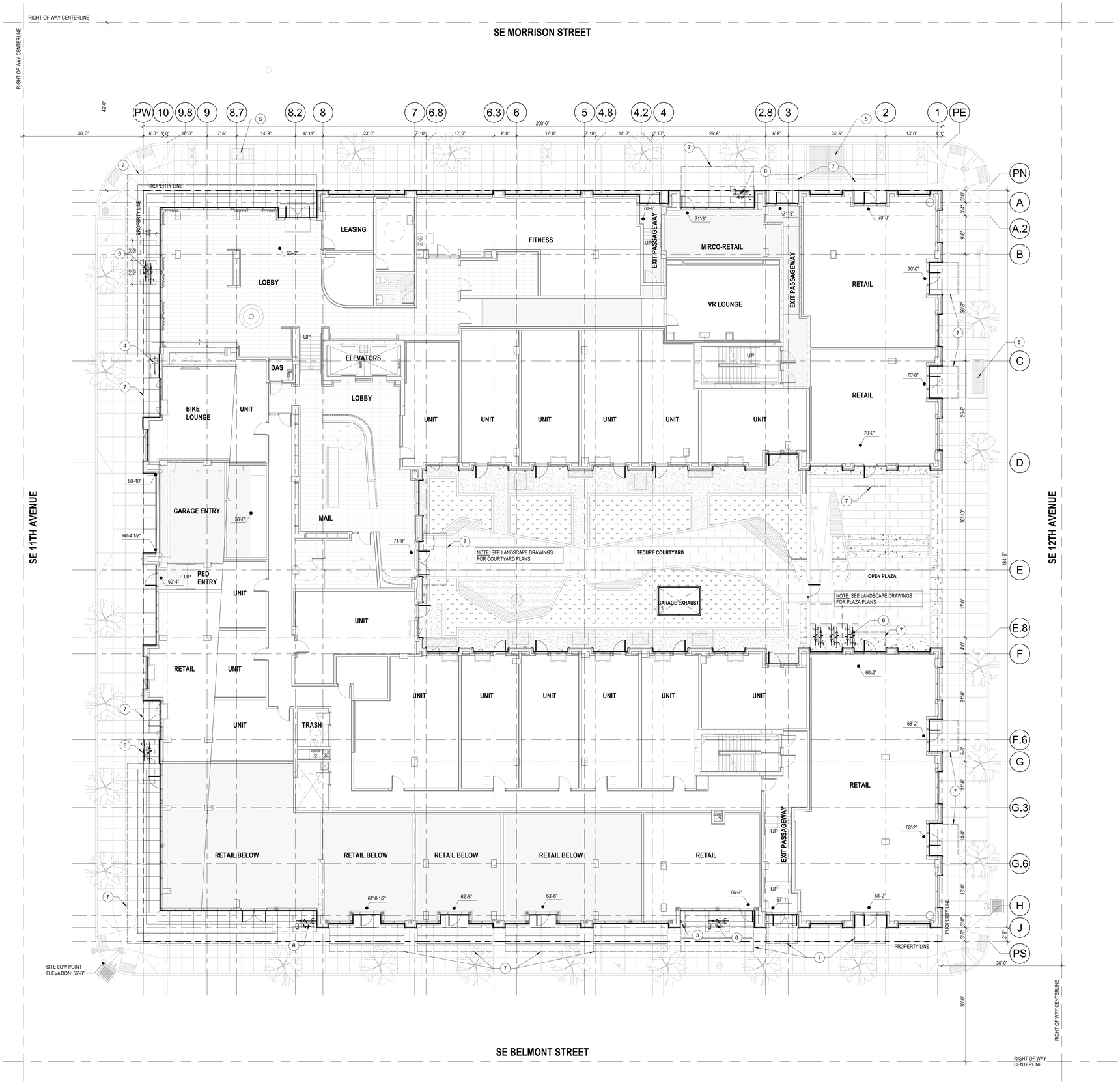

1 SITE PLAN
1" = 10'-0"

GENERAL NOTES - SITE PLAN

A. SITE PLAN KEYED NOTES APPLY TO SHEETS A051. ALL KEYED NOTES MAY NOT OCCUR ON THIS SHEET AND DO NOT APPLY TO ANY OTHER SHEETS EXCEPT THOSE NOTED.

B. ARCHITECTURAL REFERENCE ELEVATIONS ARE ACTUAL SEA LEVEL. SEE CIVIL DRAWINGS FOR SITE GRADING AND PRIMARY FLOOR ELEVATIONS..

C. REFERENCE CIVIL AND LANDSCAPE DRAWINGS FOR ADDITIONAL SITEWORK INFORMATION.

D. WORK IN THE RIGHT OF WAY IS SHOWN FOR REFERENCE ONLY. REFER TO SEPARATE RIGHT OF WAY IMPROVEMENT DRAWINGS FOR INFORMATION.

E. REFERENCE ELECTRICAL SPECIFICATIONS FOR LIGHTING SCHEDULE.

KEYED NOTES - SITE

1 ALIGN
3 FIRE DEPARTMENT CONNECTION, SEE FIRE PROTECTION DRAWINGS
4 NATURAL GAS REGULATOR, SEE CIVIL DRAWINGS
5 SEE CIVIL DRAWINGS FOR VAULT
6 12 93 10 SHORT TERM "STAPLE" BIKE RACKS PER CITY OF PORTLAND STANDARDS.
7 LINE OF CANOPY PROJECTION (ABOVE)

LEGEND - SITE PLAN

- NEW LANDSCAPE PAVER AREA, SEE LANDSCAPE DRAWINGS
- LANDSCAPE GRAVEL, SEE LANDSCAPE DRAWINGS
- NEW CONCRETE SIDEWALK PAVING IN R.O.W. SEE CIVIL DRAWINGS
- CONCRETE PAVING, SEE LANDSCAPE DRAWINGS
- LANDSCAPE AREAS, SEE LANDSCAPE DRAWINGS

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ISSUE DATE: 30 MAR 2020
PROJECT NO: 1903019

CONSTRUCTION SET

SITE PLAN
A051

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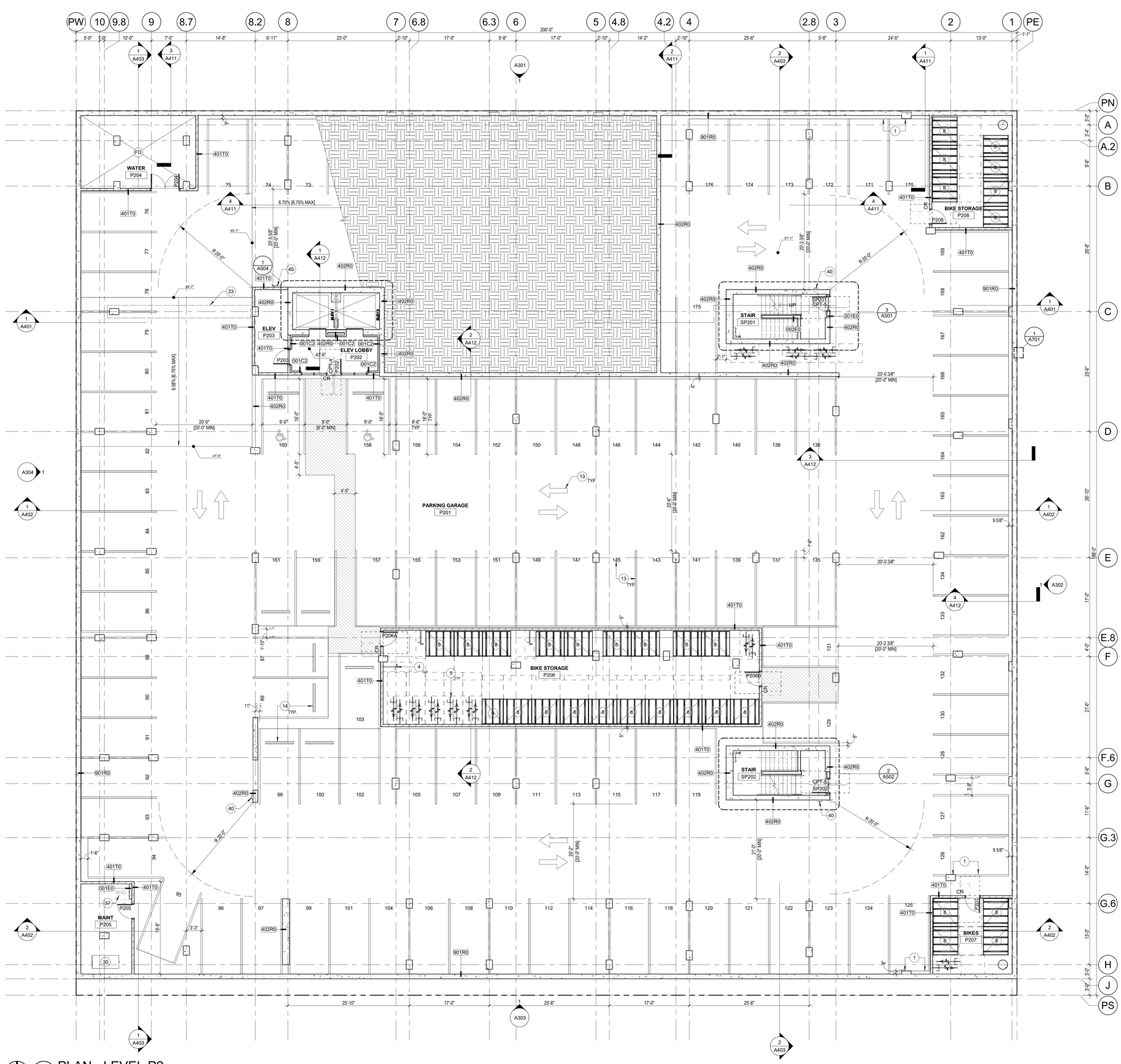

GENERAL NOTES - FLOOR PLAN

A. FLOOR PLAN KEYED NOTES APPLY TO SHEETS A1P2-A107. ALL KEYED NOTES MAY NOT OCCUR ON THIS SHEET AND DO NOT APPLY TO ANY OTHER SHEETS EXCEPT THOSE NOTED.

B. ARCHITECTURAL REFERENCE ELEVATION ARE ACTUAL SEA LEVEL. SEE CIVIL DRAWINGS.

C. SEE SHEET A002, A003 AND A005 FOR ASSEMBLIES

D. GRIDS ARE FOR REFERENCE ONLY. CONTRACTOR TO SET CONTROL POINTS FOR LAYOUT.

E. SEE SHEET A801 FOR DETAILS OF TRANSITIONS BETWEEN FLOORING MATERIALS

F. SEE SHEETS G801 - G804 FOR ACCESS INFORMATION AND REQUIREMENTS

G. DWELLING UNITS ARE DESIGNATED ANSI B, OPTION A UNO.

KEYED NOTES - FLOOR PLANS

1 ALIGN
2 05 50 00 - STEEL CANOPY ABOVE/BELOW
3 22 40 00 - HOSE BIB
4 12 93 10 WALL MOUNTED BIKE RACK
5 12 93 10 FLOOR MOUNTED BIKE RACK (ADA COMPLIANT)
6 12 93 10 BIKE STACKING RACK (6)
7 RETAIL DEMISING WALLS (DASHED) AND FLOOR OVERBUILD BY FUTURE TENANT N.I.C.
8 12 93 10 BIKE STACKING RACK (8)
9 12 92 10 BIKE REPAIR STATION
10 22 30 00 TRENCH DRAIN
11 SHAFT ABOVE
12 FRAMING ONLY AT RETAIL FURRING WALLS
13 09 90 00 PARKING STRIPING. CENTER STALL STRIPING ON COLUMN CENTERLINE WHERE OCCURS, UNO.
14 32 17 13 WHEEL STOP
15 10 51 43 TENANT STORAGE LOCKER
16 11 82 26 TRASH COMPACTOR
17 NATURAL GAS REGULATOR, SEE CIVIL DRAWINGS
18 NORTHWEST NATURAL KNOX BOX
19 PGE KNOX BOX
20 08 71 00 TENANT ACCESS SYSTEM
21 08 71 00 ADA ACTUATOR
22 FIRE KNOX BOX
23 OUTLINE OF BEAM ABOVE
24 GAS SHUT OFF AND TIMER WITH SIGNAGE, INSTALLATION PER PFC SECTION 308.3 AND PF&R GAS BURNING OPEN FLAME APPLIANCES DESIGN GUIDE
25 10 55 00 RETAIL MAIL BOXES
26 SEE LANDSCAPE DRAWINGS FOR PLAZA PLANS
27 10 55 00 USPS KNOX BOX
28 11 82 26 TRASH COMPACTOR CONTROL BOX
29 CONTINUOUS 2X6 WALL GUARD AT 8" AFF, SEE 11/A861.
30 GREASE INTERCEPTOR, SEE PLUMBING DRAWINGS.
31 ALIGN F.O. WALL FINISH WITH SLAB EDGE.
32 5/8" GYPSUM BOARD ENCLOSURE OF EXPOSED ELECTRICAL CABLES, COORDINATE WITH ELECTRICIAN IN THE FIELD. TYP ALL ELECTRICAL CLOSETS.
33 22 10 05 - OVERFLOW DRAIN, SEE PLUMBING DRAWINGS.
34 22 10 05 -STORMWATER RUNNEL
35 26 00 00 EV CHARGING STATION
36 26 00 00 EV CHARGING STATION (FUTURE)
37 22 00 00 WASHER/DRYER, SEE PLUMBING DRAWINGS.
38 05 50 00 STEEL GRATE
39 11 12 00 BOLLARD
40 10 44 00 FIRE EXTINGUISHER CABINET (SURFACE MOUNTED).
41 10 44 00 FIRE EXTINGUISHER CABINET (RECESSED).
42 FLOOR OUTLET PROVIDE POWER, DATA AND PHONE
43 FLOOR OUTLET PROVIDE POWER AND DATA
44 PLYWOOD FOR EQUIPMENT MOUNTING, FIELD VERIFY SIZE AND LOCATION
45 11 23 00 - COMMERICAL LAUNDRY EQUIPMENT - OFCI
46 PARTIAL HEIGHT BARRIER WALL
47 GAS METERS, SEE PLUMBING DRAWINGS.

LEGEND - FLOOR PLAN

- 07 18 00 - TRAFFIC COATING
- 03 30 00 - CONCRETE OVERBUILD OVER FOAM (BY FUTURE TENANT WHERE OCCURS AT RETAIL AREAS)
- 07 14 00 - FLUID-APPLIED WATERPROOFING
- 09 67 00 - FLUID APPLIED FLOORING
- 09 65 66 - RESILIENT ATHLETIC FLOORING
- 09 64 00 - WOOD FLOORING
- 09 30 00 - TILE
- 03 30 00 - CONCRETE WALL OR COLUMN, SEE PARTITION TYPE 402R0, UNO.
- 09 90 00 STRIPING
- TYPICAL UNIT, SEE FIRST OCCURRENCE ON LOWEST FLOOR
- CR — 28 13 00 - SECURITY CARD READER LOCATION
- 09 21 16 - SHAFT WALLS, SEE SHEET A031
- SHAFT NUMBER
- CD — 22 00 00 - COURTYARD DRAIN BELOW PAVERS, SEE PLUMBING & SLAB PLAN
- FD — 22 00 00 - FLOOR DRAIN, SEE PLUMBING
- FM — FLOOR MONUMENT, SEE ELECTRICAL DRAWINGS SEE SLAB PLANS FOR LOCATIONS

1 PLAN - LEVEL P2
1/8" = 1'-0"

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PARKING LEVEL P2 PLAN

A1P2

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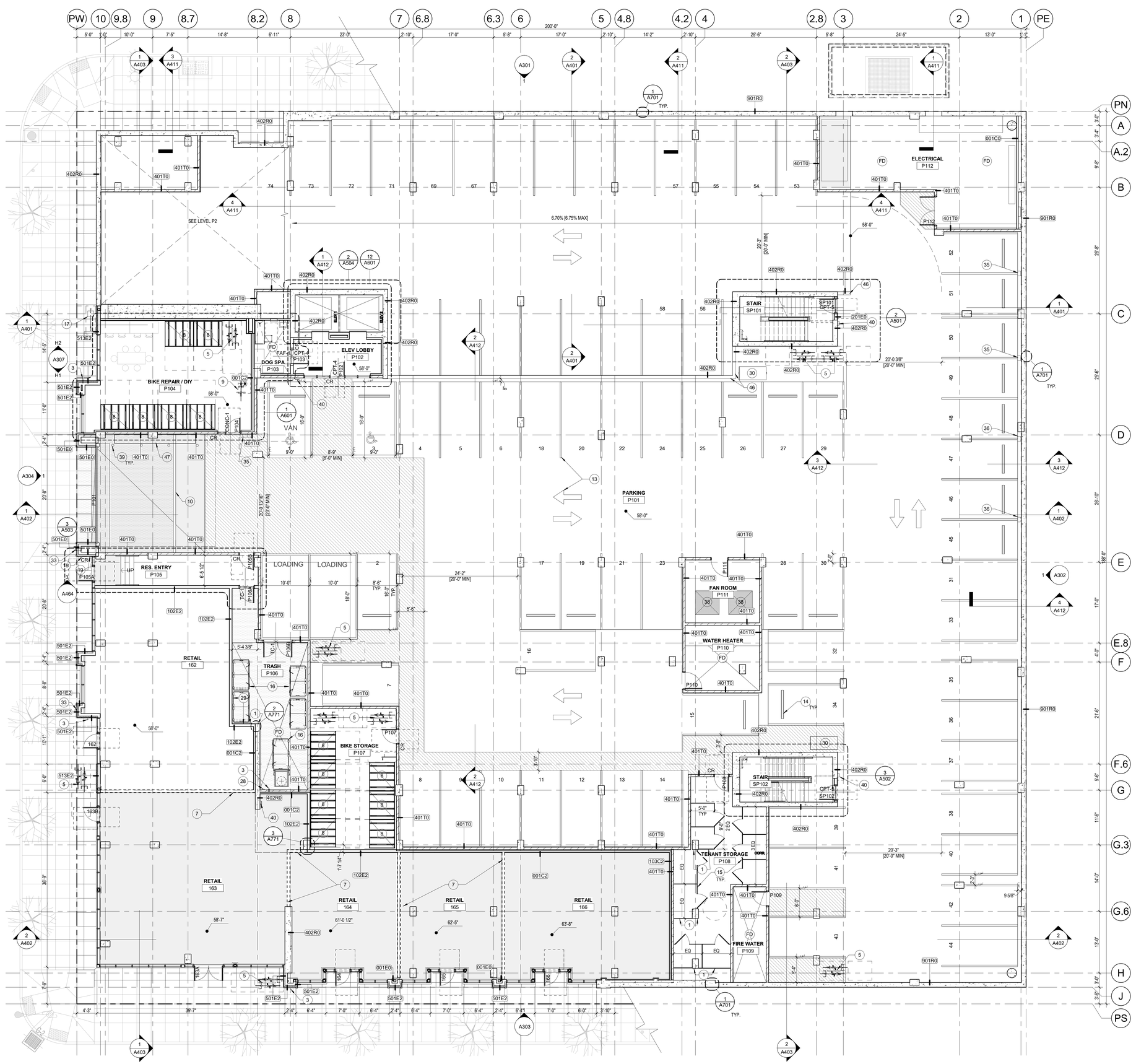

1 PLAN - LEVEL P1
1/8" = 1'-0"

GENERAL NOTES - FLOOR PLAN

A. FLOOR PLAN KEYED NOTES APPLY TO SHEETS A1P2-A107. ALL KEYED NOTES MAY NOT OCCUR ON THIS SHEET AND DO NOT APPLY TO ANY OTHER SHEETS EXCEPT THOSE NOTED.

B. ARCHITECTURAL REFERENCE ELEVATION ARE ACTUAL SEA LEVEL. SEE CIVIL DRAWINGS.

C. SEE SHEET A002, A003 AND A005 FOR ASSEMBLIES

D. GRIDS ARE FOR REFERENCE ONLY. CONTRACTOR TO SET CONTROL POINTS FOR LAYOUT.

E. SEE SHEET A801 FOR DETAILS OF TRANSITIONS BETWEEN FLOORING MATERIALS

F. SEE SHEETS G801 - G804 FOR ACCESS INFORMATION AND REQUIREMENTS

G. DWELLING UNITS ARE DESIGNATED ANSI B, OPTION A UNO.

KEYED NOTES - FLOOR PLANS

1 ALIGN
2 05 50 00 - STEEL CANOPY ABOVE/BELOW
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4 12 93 10 WALL MOUNTED BIKE RACK
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6 12 93 10 BIKE STACKING RACK (6)
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8 12 93 10 BIKE STACKING RACK (8)
9 12 92 10 BIKE REPAIR STATION
10 22 30 00 TRENCH DRAIN
11 SHAFT ABOVE
12 FRAMING ONLY AT RETAIL FURRING WALLS
13 09 90 00 PARKING STRIPING. CENTER STALL STRIPING ON COLUMN CENTERLINE WHERE OCCURS, UNO.
14 32 17 13 WHEEL STOP
15 10 51 43 TENANT STORAGE LOCKER
16 11 82 26 TRASH COMPACTOR
17 NATURAL GAS REGULATOR, SEE CIVIL DRAWINGS
18 NORTHWEST NATURAL KNOX BOX
19 PGE KNOX BOX
20 08 71 00 TENANT ACCESS SYSTEM
21 08 71 00 ADA ACTUATOR
22 FIRE KNOX BOX
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25 10 55 00 RETAIL MAIL BOXES
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27 10 55 00 USPS KNOX BOX
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30 GREASE INTERCEPTOR, SEE PLUMBING DRAWINGS.
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34 22 10 05 -STORMWATER RUNNEL
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36 26 00 00 EV CHARGING STATION (FUTURE)
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47 GAS METERS, SEE PLUMBING DRAWINGS.

LEGEND - FLOOR PLAN

- 07 18 00 - TRAFFIC COATING
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- 09 65 66 - RESILIENT ATHLETIC FLOORING
- 09 64 00 - WOOD FLOORING
- 09 30 00 - TILE
- 03 30 00 - CONCRETE WALL OR COLUMN, SEE PARTITION TYPE 402R0, UNO.
- 09 90 00 STRIPING
- TYPICAL UNIT, SEE FIRST OCCURRENCE ON LOWEST FLOOR
- CR 28 13 00 - SECURITY CARD READER LOCATION
- 09 21 16 - SHAFT WALLS, SEE SHEET A031; SHAFT NUMBER
- CD 22 00 00 - COURTYARD DRAIN BELOW PAVERS, SEE PLUMBING & SLAB PLAN
- FD 22 00 00 - FLOOR DRAIN, SEE PLUMBING
- FLOOR MONUMENT, SEE ELECTRICAL DRAWINGS SEE SLAB PLANS FOR LOCATIONS

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A1P1

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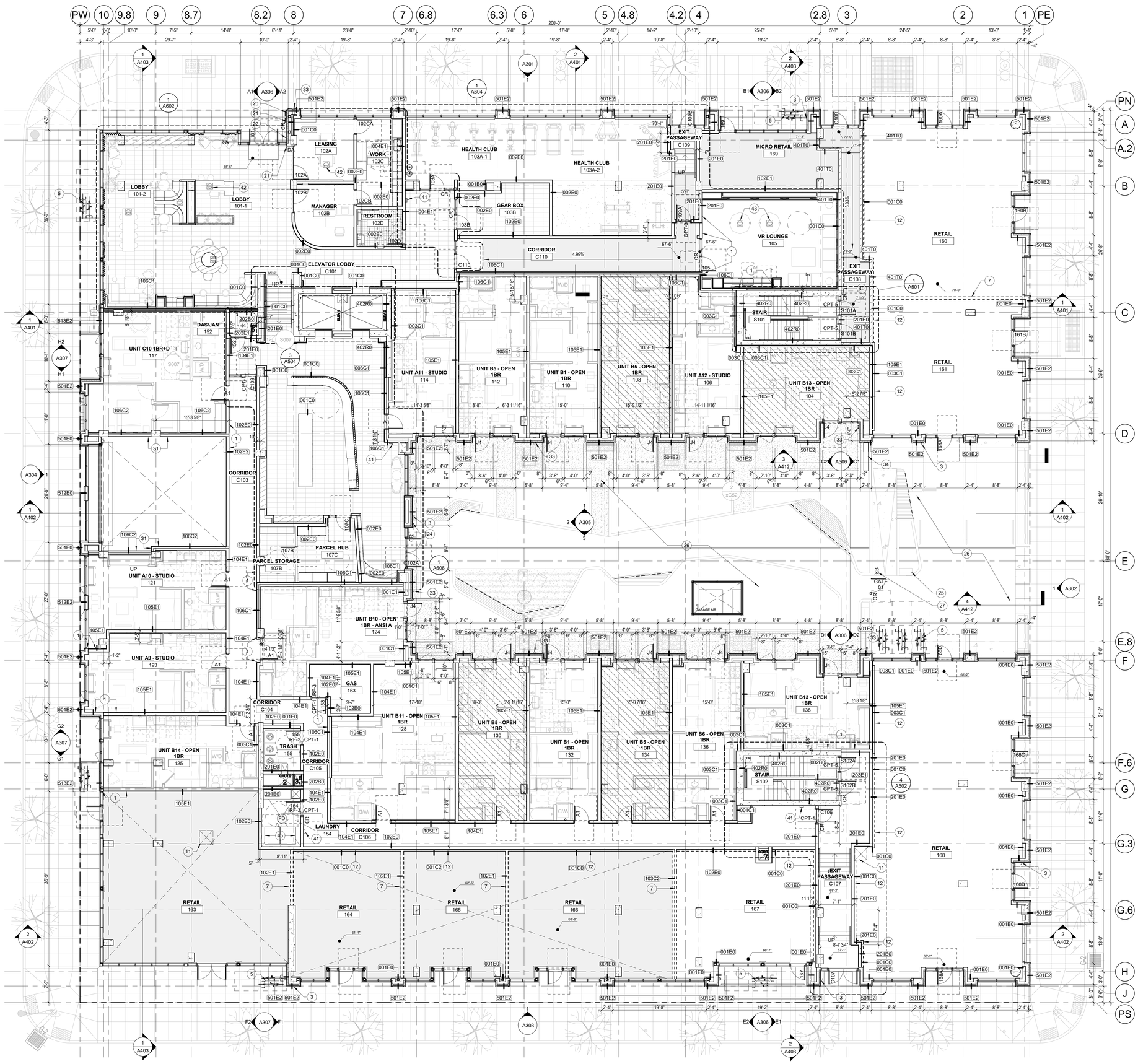

PLAN - LEVEL 1
1/8" = 1'-0"

GENERAL NOTES - FLOOR PLAN

A. FLOOR PLAN KEYED NOTES APPLY TO SHEETS A1P2-A107. ALL KEYED NOTES MAY NOT OCCUR ON THIS SHEET AND DO NOT APPLY TO ANY OTHER SHEETS EXCEPT THOSE NOTED.

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KEYED NOTES - FLOOR PLANS

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37 22 00 00 WASHER/DRYER, SEE PLUMBING DRAWINGS.
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44 PLYWOOD FOR EQUIPMENT MOUNTING, FIELD VERIFY SIZE AND LOCATION
45 11 23 00 - COMMERICAL LAUNDRY EQUIPMENT - OFCI
46 PARTIAL HEIGHT BARRIER WALL
47 GAS METERS, SEE PLUMBING DRAWINGS.
48 07 41 13 - METAL ROOF PANELS

LEGEND - FLOOR PLAN

- 07 18 00 - TRAFFIC COATING
- 03 30 00 - CONCRETE OVERBUILD OVER FOAM (BY FUTURE TENANT WHERE OCCURS AT RETAIL AREAS)
- 07 14 00 - FLUID-APPLIED WATERPROOFING
- 09 67 00 - FLUID APPLIED FLOORING
- 09 65 66 - RESILIENT ATHLETIC FLOORING
- 09 64 00 - WOOD FLOORING
- 09 30 00 - TILE
- 03 30 00 - CONCRETE WALL OR COLUMN, SEE PARTITION TYPE 402R0, UNO.
- 09 90 00 STRIPING
- TYPICAL UNIT, SEE A650 SERIES. UNIT ORIENTATION VARY AS INDICATED ON THIS SHEET.
- CR 28 13 00 - SECURITY CARD READER LOCATION
- 09 21 16 - SHAFT WALLS, SEE SHEET A031. SHAFT NUMBER
- CD 22 00 00 - COURTYARD DRAIN BELOW PAVERS, SEE PLUMBING & SLAB PLAN.
- FD 22 00 00 - FLOOR DRAIN, SEE PLUMBING DRAWINGS.
- FLOOR MONUMENT SEE ELECTRICAL DRAWINGS, SEE SLAB PLANS FOR LOCATIONS.

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FLOOR PLAN
LEVEL 1

A101

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APPENDIX B

TABLE 1
Summary of Soil Sample Chemical Analytical Results
Petroleum Hydrocarbons
Modera Morrison
1120 SE Morrison Street
Portland, Oregon

Sample I.D. (depth in feet BGS)	Sample Date	Hydrocarbon Identification by Method NWTPH-HCID (mg/kg)			Gasoline-Range Hydrocarbons by Method NWTPH-Gx (mg/kg)	Diesel- and Oil-Range Hydrocarbons by Method NWTPH-Dx (mg/kg)	
		Gasoline-Range	Diesel-Range	Oil-Range		Diesel-Range	Oil-Range
DP-5(8.5-9.5)	05/11/19	23.9 U	59.7 U	119 U	--	--	--
DP-5(13-14)	05/11/19	22.0 U	55.0 U	110 U	--	--	--
DP-6(8-9)	05/11/19	25.0 U	62.6 U	125 U	--	--	--
DP-6(12.5-13.5)	05/11/19	25.0 U	62.6 U	125 U	--	--	--
DP-7(6.5-7.5)	05/11/19	18.4 U	46.1 U	92.2 U	--	--	--
DP-7(11.5-12.5)	05/11/19	21.9 U	54.8 U	110 U	--	--	--
DP-11(10-11)	05/11/19	22.2 U	55.4 U	111 U	--	--	--
DP-11(18-19)	05/11/19	21.6 U	53.9 U	108 U	--	--	--
DP-12(12-13)	05/11/19	21.9 U	54.7 U	109 U	--	--	--
DP-12(16-17)	05/11/19	21.1 U	52.7 U	105 U	--	--	--
DP-18(10-11)	07/18/19	22.4 U	56.1 U	112 U	--	--	--
DP-19(11-12)	07/18/19	22.0 U	54.9 U	110 U	--	--	--
DP-20(10-11)	07/18/19	21.5 U	53.8 U	108 U	--	--	--
DP-21(10-11)	07/18/19	22.2 U	55.4 U	111 U	--	--	--
DP-21(13-14)	07/18/19	20.1 U	50.3 U	101 U	--	--	--
DP-22(10-11)	07/18/19	23.5 U	58.6 U	117 U	--	--	--
DP-22(12.5-13.5)	07/18/19	21.8 U	54.4 U	109 U	--	--	--
DP-23(10-11)	07/18/19	22.1 U	55.3 U	111 U	--	--	--
DP-23(11-12)	07/18/19	23.4 U	58.5 U	117 U	--	--	--
DP-24(12-13)	07/18/19	23.6 U	58.9 U	118 U	--	--	--
DP-24(16-17)	07/18/19	26.3 U	65.8 U	132 U	--	--	--
HA-1(15-15.5)	05/15/19	22.5 U	56.3 U	113 U	--	--	--
HA-8(1.3-1.5)	07/30/19	--	--	--	**57.7**	**26.5**	**157**
HA-10(0.3-0.7)	07/30/19	--	--	--	5.82 U	25.0 U	**94.3**
DEQ Generic RBCs[1]							
Soil Ingestion, Dermal Contact, and Inhalation							
Occupational		NE	NE	NE	20,000	14,000	NE
Construction Worker		NE	NE	NE	9,700	4,600	NE
Excavation Worker		NE	NE	NE	>Max	>Max	NE
Volatilization to Outdoor Air							
Occupational		NE	NE	NE	>Max	>Max	NE
Vapor Intrusion into Buildings							
Occupational		NE	NE	NE	>Max	>Max	NE
DEQ CFSLs[2]		NE	NE	NE	31	1,100	NE

Notes:

1. DEQ Generic RBCs dated May 2018
2. DEQ CFSLs dated February 21, 2019

>Max: The constituent RBC for this pathway is calculated as greater than 1,000,000 mg/kg or 1,000,000 mg/L. Therefore, this substance is deemed not to pose risks in this scenario.

NE: not established

U: Not detected. Reporting or detection limit shown.

Bolding indicates analyte detection.

Shading indicates analyte detection at a concentration greater than DEQ CFSL.

--: not analyzed

TABLE 2
Summary of Soil Sample Chemical Analytical Results
VOCs
Modera Morrison
1120 SE Morrison Street
Portland, Oregon

Sample I.D. (depth in feet BGS)	Sample Date	VOCs[1] by EPA Methods 5035A/8260C (mg/kg)							
		1,2,4-TMB		1,3,5-TMB		m-p-Xylenes		o-Xylenes	
DP-1(0.5-1.5)	05/11/19	0.0692	U	0.0692	U	0.0692	U	0.0346	U
DP-1(11.5-12.5)	05/11/19	0.0593	U	0.0593	U	0.0593	U	0.0297	U
DP-2(1-2)	05/11/19	0.0652	U	0.0652	U	0.0652	U	0.0326	U
DP-2(12-13)	05/11/19	0.0683	U	0.0683	U	0.0683	U	0.0342	U
DP-3(1-2)	05/11/19	0.0619	U	0.0619	U	0.0619	U	0.0309	U
DP-3(12-13)	05/11/19	0.0854	U	0.0854	U	0.0854	U	0.0427	U
DP-4(0.5-1.5)	05/11/19	0.0572	U	0.0572	U	0.0572	U	0.0286	U
DP-4(8-9)	05/11/19	0.0732	U	0.0732	U	0.0732	U	0.0366	U
DP-4(11.5-12.5)	05/11/19	0.0743	U	0.0743	U	0.0743	U	0.0372	U
DP-5(1-2)	05/11/19	0.064	U	0.064	U	0.064	U	0.032	U
DP-5(8.5-9.5)	05/11/19	0.0701	U	0.0701	U	0.0701	U	0.035	U
DP-5(13-14)	05/11/19	0.0713	U	0.0713	U	0.0713	U	0.0356	U
DP-6(1-2)	05/11/19	0.0658	U	0.0658	U	0.0658	U	0.0329	U
DP-6(8-9)	05/11/19	0.0822	U	0.0822	U	0.0822	U	0.0411	U
DP-6(12.5-13.5)	05/11/19	0.0745	U	0.0745	U	0.0745	U	0.0373	U
DP-7(1-2)	05/11/19	0.0634	U	0.0634	U	0.0634	U	0.0317	U
DP-7(6.5-7.5)	05/11/19	0.0634	U	0.0634	U	0.0634	U	0.0317	U
DP-7(11.5-12.5)	05/11/19	0.0472	U	0.0472	U	0.0472	U	0.0236	U
DP-8(1.5-2.5)	05/11/19	0.0765	U	0.0765	U	0.0765	U	0.0382	U
DP-8(8-9)	05/11/19	0.067	U	0.067	U	0.067	U	0.0335	U
DP-8(11.5-12.5)	05/11/19	0.0628	U	0.0628	U	0.0628	U	0.0314	U
DP-9(1-2)	05/11/19	0.0773	U	0.0773	U	0.0773	U	0.0386	U
DP-9(8-9)	05/11/19	0.077	U	0.077	U	0.077	U	0.0385	U
DP-10(2-3)	05/11/19	0.0772	U	0.0772	U	0.0772	U	0.0386	U
DP-10(13-14)	05/11/19	0.0659	U	0.0659	U	0.0659	U	0.033	U
DP-11(3-4)	05/11/19	0.0578	U	0.0578	U	0.0578	U	0.0289	U
DP-11(10-11)	05/11/19	0.0771	U	0.0771	U	0.0771	U	0.0385	U
DP-11(18-19)	05/11/19	0.0723	U	0.0723	U	0.0723	U	0.0362	U
DP-12(1-2)	05/11/19	0.0843	U	0.0843	U	0.0843	U	0.0421	U
DP-12(12-13)	05/11/19	0.0661	U	0.0661	U	0.0661	U	0.033	U
DP-12(16-17)	05/11/19	0.0663	U	0.0663	U	0.0663	U	0.0332	U
DP-13(4-5)	05/11/19	0.074	U	0.074	U	0.074	U	0.037	U

TABLE 2
Summary of Soil Sample Chemical Analytical Results
VOCs
Modera Morrison
1120 SE Morrison Street
Portland, Oregon

Sample I.D. (depth in feet BGS)	Sample Date	VOCs[1] by EPA Methods 5035A/8260C (mg/kg)			
		1,2,4-TMB	1,3,5-TMB	m-p-Xylenes	o-Xylenes
DP-13(9-10)	05/11/19	0.074 U	0.074 U	0.074 U	0.037 U
DP-14(2-3)	05/11/19	0.0768 U	0.0768 U	0.0768 U	0.0384 U
DP-14(11-12)	05/11/19	0.0835 U	0.0835 U	0.0835 U	0.0417 U
DP-15(4-5)	05/11/19	0.0809 U	0.0809 U	0.0809 U	0.0404 U
DP-16(2-3)	05/11/19	0.0654 U	0.0654 U	0.0654 U	0.0327 U
DP-19(11-12)	07/18/19	0.0752 U	0.0752 U	0.113 U	
DP-23(11-12)	07/18/19	0.0724 U	0.0724 U	0.109 U	
HA-1(2-2.5)	05/15/19	0.0669 U	0.0669 U	0.0669 U	0.0334 U
HA-1(12-12.5)	05/15/19	0.0687 U	0.0687 U	0.0687 U	0.0343 U
HA-1(15-15.5)	05/15/19	0.0683 U	0.0683 U	0.0683 U	0.0341 U
HA-2(2-2.5)	05/15/19	0.0683 U	0.0683 U	0.0683 U	0.0342 U
HA-8(1.3-1.5)	07/30/19	**0.134**	**0.0752**	**0.119**	**0.0678**
HA-10(0.3-0.7)	07/30/19	0.0582 U	0.0582 U	0.0582 U	0.0291 U
DEQ Generic RBCs[2]					
Soil Ingestion, Dermal Contact, and Inhalation					
Occupational		6,900	6,900	25,000	25,000
Construction Worker		2,900	2,900	20,000	20,000
Excavation Worker		81,000	81,000	560,000	560,000
Volatilization to Outdoor Air					
Occupational		>Csat	>Csat	>Csat	>Csat
Vapor Intrusion into Buildings					
Occupational		>Csat	>Csat	>Csat	>Csat
DEQ CFSLs[3]		10	11	1.4	1.4

Notes:

1. Only VOCs detected are listed.
2. DEQ Generic RBCs dated May 2018
3. DEQ CFSLs dated February 21, 2019

>Csat: This soil RBC exceeds the limit of three-phase equilibrium partitioning. Refer to Appendix D of DEQ's *Risk-Based Decision Making for the Remediation of Petroleum-Contaminated Sites* guidance document for the corresponding value of Csat. Soil concentrations in excess of Csat indicate that free product might be present.

TMB: trimethylbenzene

Bolding indicates analyte detection.

U: Not detected. Reporting or detection limit shown.

TABLE 3
Summary of Soil Sample Chemical Analytical Results
RCRA 8 Total Metals and Leachable Lead
Modera Morrison
1120 SE Morrison Street
Portland, Oregon

Sample I.D. (depth in feet BGS)	Sample Date	Fill/Native	RCRA 8 Total Metals by EPA Method 6020A (ICP-MS) (mg/kg)								Leachable Lead by EPA Methods 1311/6020A (ICP-MS) (mg/L)
			Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver	
DP-1(0.5-1.5)	05/11/19	Native	5.38	179	0.358	19.1	10.8	0.105 U	1.32 U	0.264 U	--
DP-1(11.5-12.5)	05/11/19	Native	3.9	122	0.805	10.6	7.02	0.0964 U	1.20 U	0.241 U	--
DP-2(1-2)	05/11/19	Native	12.0	187	0.534	24.4	14.0	0.104 U	1.30 U	0.260 U	--
DP-2(12-13)	05/11/19	Native	5.8	151	0.931	17.6	8.53	0.110 U	1.38 U	0.276 U	--
DP-3(1-2)	05/11/19	Native	11.7	215	0.615	26.1	14.9	0.107 U	1.34 U	0.268 U	--
DP-3(12-13)	05/11/19	Native	5.35	150	0.698	16.4	8.83	0.111 U	1.38 U	0.277 U	--
DP-4(0.5-1.5)	05/11/19	Fill	7.75	183	0.431	15.0	194	0.101 U	1.26 U	0.252 U	0.0500 U
DP-4(8-9)	05/11/19	Native	8.87	186	1.05	21.0	11.9	0.114 U	1.43 U	0.286 U	--
DP-4(11.5-12.5)	05/11/19	Native	4.16	122	0.693	11.1	6.64	0.0991 U	1.24 U	0.248 U	--
DP-5(1-2)	05/11/19	Fill	9.54	190	0.545	21.3	28.3	0.109 U	1.36 U	0.273 U	--
DP-5(8.5-9.5)	05/11/19	Native	9.06	164	0.784	23.8	11.1	0.117 U	1.47 U	0.293 U	--
DP-5(13-14)	05/11/19	Native	5.67	157	0.800	20.1	7.32	0.105 U	1.32 U	0.263 U	--
DP-6(1-2)	05/11/19	Native	13.0	171	0.634	25.0	15.3	0.105 U	1.32 U	0.263 U	--
DP-6(8-9)	05/11/19	Native	8.43	178	0.842	26.3	10.5	0.108 U	1.35 U	0.270 U	--
DP-6(12.5-13.5)	05/11/19	Native	6.21	145	0.839	18.2	8.40	0.106 U	1.32 U	0.265 U	--
DP-7(1-2)	05/11/19	Fill	1.10 U	34.1	0.220 U	4.90	3.06	0.0879 U	1.10 U	0.220 U	--
DP-7(6.5-7.5)	05/11/19	Fill	3.32	86.8	0.504	10.9	14.8	0.0944 U	1.18 U	0.236 U	--
DP-7(11.5-12.5)	05/11/19	Native	4.56	118	0.689	11.5	19.5	0.100 U	1.25 U	0.250 U	--
DP-8(1.5-2.5)	05/11/19	Native	9.9	182	0.899 U	21.2	15.0	0.118 U	1.48 U	0.296 U	--
DP-8(8-9)	05/11/19	Native	4.36	132	0.79	11.5	7.56	0.0982 U	1.23 U	0.246 U	--
DP-8(11.5-12.5)	05/11/19	Native	3.89	114	0.552	11.6	5.08	0.0889 U	1.11 U	0.222 U	--
DP-9(1-2)	05/11/19	Native	11.2	201	0.92	22.8	15.9	0.124 U	1.55 U	0.311 U	--
DP-9(8-9)	05/11/19	Native	5.36	140	0.784	18.8	7.96	0.108 U	1.35 U	0.269 U	--
DP-10(2-3)	05/11/19	Native	7.37	132	0.326	19.6	13.8	0.102 U	1.27 U	0.254 U	--
DP-10(13-14)	05/11/19	Native	7.11	208	0.929	22.8	9.44	0.107 U	1.34 U	0.267 U	--
DP-11(3-4)	05/11/19	Native	9.11	199	0.624	25.1	13.6	0.110 U	1.38 U	0.276 U	--
DP-11(10-11)	05/11/19	Native	3.86	132	0.557	12.3	5.67	0.0980 U	1.22 U	0.245 U	--
DP-11(18-19)	05/11/19	Native	3.98	106	0.587	11.9	5.57	0.0985 U	1.23 U	0.246 U	--
DP-12(1-2)	05/11/19	Native	11.3	176	1.08	29.1	14.2	0.112 U	1.39 U	0.279 U	--

TABLE 3
Summary of Soil Sample Chemical Analytical Results
RCRA 8 Total Metals and Leachable Lead
Modera Morrison
1120 SE Morrison Street
Portland, Oregon

Sample I.D. (depth in feet BGS)	Sample Date	Fill/Native	RCRA 8 Total Metals by EPA Method 6020A (ICP-MS) (mg/kg)								Leachable Lead by EPA Methods 1311/6020A (ICP-MS) (mg/L)
			Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver	
DP-12(12-13)	05/11/19	Native	4.79	141	0.711	15.1	5.69	0.0981 U	1.23 U	0.245 U	--
DP-12(16-17)	05/11/19	Native	4.18	109	0.607	11.3	5.69	0.0947 U	1.18 U	0.237 U	--
DP-13(4-5)	05/11/19	Native	12.3	179	0.974	24.3	15.1	0.109 U	1.37 U	0.273 U	--
DP-13(9-10)	05/11/19	Native	4.89	127	0.801	14.4	7.16	0.108 U	1.35 U	0.269 U	--
DP-14(2-3)	05/11/19	Native	11.4	231	1.06	28.5	14.3	0.116 U	1.46 U	0.291 U	--
DP-14(11-12)	05/11/19	Native	4.78	129	0.853	14.9	7.48	0.113 U	1.42 U	0.284 U	--
DP-15(4-5)	05/11/19	Native	12.1	206	1.01	26.4	15.8	0.115 U	1.44 U	0.288 U	--
DP-16(2-3)	05/15/19	Native	11.9	176	0.837	28.3	15.2	0.110 U	1.38 U	0.275 U	--
DP-25(1-1.5)	07/18/19	Fill	--	--	--	--	50.6	--	--	--	--
DP-25(4-4.5)	07/18/19	Native	--	--	--	--	12.8	--	--	--	--
DP-26(1-1.5)	07/18/19	Fill	--	--	--	--	991	--	--	--	0.350
DP-26(2-2.5)	07/18/19	Native	--	--	--	--	17.6	--	--	--	--
DP-27(1-1.5)	07/18/19	Fill	--	--	--	--	146	--	--	--	--
DP-27(2-2.5)	07/18/19	Native	--	--	--	--	15.5	--	--	--	--
DP-28(1-1.5)	07/18/19	Fill	--	--	--	--	80	--	--	--	--
DP-28(2-2.5)	07/18/19	Native	--	--	--	--	15.4	--	--	--	--
DP-29(1-1.5)	07/18/19	Native	--	--	--	--	12.0	--	--	--	--
DP-29(2-2.5)	07/18/19	Native	--	--	--	--	13.8	--	--	--	--
DP-30(1-1.5)	07/18/19	Fill	--	--	--	--	59.8	--	--	--	--
DP-30(2-2.5)	07/18/19	Native	--	--	--	--	16.0	--	--	--	--
DP-31(1-1.5)	07/18/19	Fill	--	--	--	--	92.3	--	--	--	--
DP-31(2-2.5)	07/18/19	Native	--	--	--	--	17.6	--	--	--	--
DP-32(1-1.5)	07/18/19	Fill	--	--	--	--	1,580	--	--	--	0.173
DP-32(2-2.5)	07/18/19	Native	--	--	--	--	15.5	--	--	--	--
HA-1(2-2.5)	05/15/19	Native	10.3	121	0.318	22.5	21.7	0.100 U	1.25 U	0.251 U	--
HA-1(12-12.5)	05/15/19	Native	8.87	200	0.521	26.8	11.1	0.101 U	1.27 U	0.254 U	--
HA-1(15-15.5)	05/15/19	Native	6.21	153	0.612	17.3	9.54	0.105 U	1.31 U	0.263 U	--
HA-2(2-2.5)	05/15/19	Native	4.32	144	0.628	11.9	8.06	0.100 U	1.26 U	0.251 U	--
HA-3	07/30/19	NA	--	--	--	--	--	--	--	--	--

TABLE 3
Summary of Soil Sample Chemical Analytical Results
RCRA 8 Total Metals and Leachable Lead
Modera Morrison
1120 SE Morrison Street
Portland, Oregon

Sample I.D. (depth in feet BGS)	Sample Date	Fill/Native	RCRA 8 Total Metals by EPA Method 6020A (ICP-MS) (mg/kg)								Leachable Lead by EPA Methods 1311/6020A (ICP-MS) (mg/L)
			Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver	
HA-4(0.5-1)	07/30/19	Fill	--	--	--	--	67.5	--	--	--	--
HA-5(0.3-0.7)	07/30/19	Fill	--	--	--	--	52.2	--	--	--	--
HA-5(0.7-1.2)	07/30/19	Native	--	--	--	--	14.6	--	--	--	--
HA-6(0.5-1)	07/30/19	Native	--	--	--	--	12.6	--	--	--	--
HA-6(1-1.5)	07/30/19	Native	--	--	--	--	16.8	--	--	--	--
HA-7(0.2-0.7)	07/30/19	Fill	--	--	--	--	131	--	--	--	0.0500 U
HA-7(1-1.5)	07/30/19	Native	--	--	--	--	16.9	--	--	--	--
HA-8(1-1.3)	07/30/19	Fill	--	--	--	--	54.6	--	--	--	--
HA-8(1.3-1.5)	07/30/19	Fill	--	--	--	--	94.6	--	--	--	--
HA-9(0.5-1)	07/30/19	Native	--	--	--	--	15.7	--	--	--	--
HA-10(0.3-0.7)	07/30/19	Fill	--	--	--	--	232	--	--	--	0.106
HA-11(0.5-1)	07/30/19	Fill	--	--	--	--	329	--	--	--	0.0560
HA-11(1-1.5)	07/30/19	Native	--	--	--	--	12.7	--	--	--	--
HA-12(1-1.5)	07/30/19	Native	--	--	--	--	16.5	--	--	--	--
HA-13(0.5-1)	07/30/19	Fill	--	--	--	--	108	--	--	--	--
HA-13(1-1.5)	07/30/19	Native	--	--	--	--	14.8	--	--	--	--
HA-14(0.5-1)	07/30/19	Native	--	--	--	--	12.0	--	--	--	--
HA-14(1-1.5)	07/30/19	Native	--	--	--	--	11.3	--	--	--	--
90% UCL [1]			*8.039 [2]*		*0.75 [3]*		*13.18 [4]*				
DEQ Generic RBCs [5]											
Soil Ingestion, Dermal Contact, and Inhalation											
Occupational			1.9	220,000	1,100	>Max	800	350	NE	5,800	NE
Construction Worker			15	69,000	350	530,000	800	110	NE	1,800	NE
Excavation Worker			420	>Max	9,700	>Max	800	2,900	NE	49,000	NE
Volatilization to Outdoor Air											
Occupational			NV	NV	NV	NV	NV	NV	NE	NV	NE
Vapor Intrusion into Buildings											
Occupational			NV	NV	NV	NV	NV	NV	NE	NV	NE
EPA Maximum Threshold Limits [6]			100	2,000	20	100	100	4	20	100	NA

TABLE 3
Summary of Soil Sample Chemical Analytical Results
RCRA 8 Total Metals and Leachable Lead
Modera Morrison
1120 SE Morrison Street
Portland, Oregon

Sample I.D. (depth in feet BGS)	Sample Date	Fill/Native	RCRA 8 Total Metals by EPA Method 6020A (ICP-MS) (mg/kg)								Leachable Lead by EPA Methods 1311/6020A (ICP-MS) (mg/L)
			Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver	
EPA TCLP Limits[7]			NA	NA	NA	NA	NA	NA	NA	NA	5.0
DEQ CFSLs[8]			8.8	790	0.63	76	28	0.23	0.71	2.6	NA

Notes:

1. Calculated 90% UCL based on data size, data distribution, and skewness, as recommended in DEQ's Internal Management Directive updated on February 21, 2019. The calculated 90% UCLs exclude data from DP-4(0.5-1.5), DP-25(1-1.5), DP-26(1-1.5), DP-27(1-1.5), DP-28(1-1.5), DP-30(1-1.5), DP-31(1-1.5), DP-32(1-1.5), HA-4(0.5-1), HA-5(0.0-0.7), HA-7(0.2-0.7), HA-8(1-1.3), HA-8(1.3-1.5), HA-10(0.3-0.7), HA-11(0.5-1), and HA-13(0.5-1).
2. ProUCL-recommended use of the Gamma KM Adjusted Gamma 90% UCL value for this analytes data set.
3. ProUCL-recommended use of the Normal KM Student's-t 90% UCL value for this analytes data set.
4. ProUCL-recommended use of the Normal Student's-t 90% UCL value for this analytes data set.
5. DEQ Generic RBCs dated May 2018
6. Section 1.2 of EPA Method 1311 (TCLP) allows for a total constituent analysis in lieu of the TCLP extraction. The maximum allowable limits equate to 20 times the maximum leachable limit.
7. Analytes exceeding the maximum leachable limits are defined as toxicity characteristic hazardous waste.
8. DEQ CFSLs dated February 21, 2019

>Max: The constituent RBC for this pathway is calculated as greater than 1,000,000 mg/kg or 1,000,000 mg/L. Therefore, this substance is deemed not to pose risks in this scenario.
NA: not applicable
NE: not established
NV: chemical is considered non-volatile
U: Not detected. Reporting or detection limit shown.
Bolding indicates analyte detection.
Gray shading indicates analyte detection at a concentration greater than DEQ CFSLs.
Orange shading indicates analyte detection at a concentration greater than DEQ RBCs and CFSLs.
--: not analyzed

TABLE 4
Summary of Soil Sample Chemical Analytical Results
PAHs
Modera Morrison
1120 SE Morrison Street
Portland, Oregon

Sample I.D. (depth in feet BGS)	Sample Date	PAHs by EPA Method 8270D SIM (mg/kg)																	
		Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Dibenzofuran	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene	Phenanthrene	Pyrene
DP-1(0.5-1.5)	05/11/19	0.0103 U	0.0103 U	0.0103 U	**0.0217**	**0.0211**	**0.0315**	**0.0201**	0.0103 U	**0.0283**	0.0103 U	0.0103 U	**0.0407**	0.0103 U	**0.0181**	0.0103 U	0.0103 U	0.0103 U	**0.0256**	**0.0508**
DP-1(11.5-12.5)	05/11/19	0.00973 U	0.00973 U	0.00973 U	0.00973 U	0.00973 U	0.00973 U	0.00973 U	0.00973 U	0.00973 U	0.00973 U	0.00973 U	0.00973 U	0.00973 U	0.00973 U	0.00973 U	0.00973 U	0.00973 U	0.00973 U	0.00973 U
DP-2(1-2)	05/11/19	0.0107 U	0.0107 U	0.0107 U	0.0107 U	0.0107 U	0.0107 U	0.0107 U	0.0107 U	0.0107 U	0.0107 U	0.0107 U	0.0107 U	0.0107 U	0.0107 U	0.0107 U	0.0107 U	0.0107 U	0.0107 U	0.0107 U
DP-2(12-13)	05/11/19	0.0123 U	0.0123 U	0.0123 U	0.0123 U	0.0123 U	0.0123 U	0.0123 U	0.0123 U	0.0123 U	0.0123 U	0.0123 U	0.0123 U	0.0123 U	0.0123 U	0.0123 U	0.0123 U	0.0123 U	0.0123 U	0.0123 U
DP-3(1-2)	05/11/19	0.0106 U	0.0106 U	0.0106 U	0.0106 U	0.0106 U	0.0106 U	0.0106 U	0.0106 U	0.0106 U	0.0106 U	0.0106 U	0.0106 U	0.0106 U	0.0106 U	0.0106 U	0.0106 U	0.0106 U	0.0106 U	0.0106 U
DP-3(12-13)	05/11/19	0.0119 U	0.0119 U	0.0119 U	0.0119 U	0.0119 U	0.0119 U	0.0119 U	0.0119 U	0.0119 U	0.0119 U	0.0119 U	0.0119 U	0.0119 U	0.0119 U	0.0119 U	0.0119 U	0.0119 U	0.0119 U	0.0119 U
DP-4(0.5-1.5)	05/11/19	**0.0127**	**0.197**	**0.0842**	**0.343**	**0.682**	**0.779**	**0.703**	**0.206**	**0.705**	**0.073**	0.0111 U	**1.67**	**0.0605**	**0.604**	**0.0859**	**0.0364**	**0.0267**	**1.26**	**2.15**
DP-4(8-9)	05/11/19	0.0111 U	0.0111 U	0.0111 U	0.0111 U	0.0111 U	0.0111 U	0.0111 U	0.0111 U	0.0111 U	0.0111 U	0.0111 U	0.0111 U	0.0111 U	0.0111 U	0.0111 U	0.0111 U	0.0111 U	0.0111 U	0.0111 U
DP-4(11.5-12.5)	05/11/19	0.0117 U	0.0117 U	0.0117 U	0.0117 U	0.0117 U	0.0117 U	0.0117 U	0.0117 U	0.0117 U	0.0117 U	0.0117 U	0.0117 U	0.0117 U	0.0117 U	0.0117 U	0.0117 U	0.0117 U	0.0117 U	0.0117 U
DP-5(1-2)	05/11/19	0.0122 U	0.0122 U	0.0122 U	0.0122 U	0.0122 U	0.0122 U	0.0122 U	0.0122 U	0.0122 U	0.0122 U	0.0122 U	0.0122 U	0.0122 U	0.0122 U	0.0122 U	0.0122 U	0.0122 U	0.0122 U	0.0122 U
DP-5(8.5-9.5)	05/11/19	0.0109 U	0.0109 U	0.0109 U	0.0109 U	0.0109 U	0.0109 U	0.0109 U	0.0109 U	0.0109 U	0.0109 U	0.0109 U	0.0109 U	0.0109 U	0.0109 U	0.0109 U	0.0109 U	0.0109 U	0.0109 U	0.0109 U
DP-5(13-14)	05/11/19	0.0113 U	0.0113 U	0.0113 U	0.0113 U	0.0113 U	0.0113 U	0.0113 U	0.0113 U	0.0113 U	0.0113 U	0.0113 U	0.0113 U	0.0113 U	0.0113 U	0.0113 U	0.0113 U	0.0113 U	0.0113 U	0.0113 U
DP-6(1-2)	05/11/19	0.0109 U	0.0109 U	0.0109 U	0.0109 U	0.0109 U	0.0109 U	0.0109 U	0.0109 U	0.0109 U	0.0109 U	0.0109 U	0.0109 U	0.0109 U	0.0109 U	0.0109 U	0.0109 U	0.0109 U	0.0109 U	0.0109 U
DP-6(8-9)	05/11/19	0.0109 U	0.0109 U	0.0109 U	0.0109 U	0.0109 U	0.0109 U	0.0109 U	0.0109 U	0.0109 U	0.0109 U	0.0109 U	0.0109 U	0.0109 U	0.0109 U	0.0109 U	0.0109 U	0.0109 U	0.0109 U	0.0109 U
DP-6(12.5-13.5)	05/11/19	0.0118 U	0.0118 U	0.0118 U	0.0118 U	0.0118 U	0.0118 U	0.0118 U	0.0118 U	0.0118 U	0.0118 U	0.0118 U	0.0118 U	0.0118 U	0.0118 U	0.0118 U	0.0118 U	0.0118 U	0.0118 U	0.0118 U
DP-7(1-2)	05/11/19	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U
DP-7(6.5-7.5)	05/11/19	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U
DP-7(11.5-12.5)	05/11/19	0.00959 U	0.00959 U	0.00959 U	0.00959 U	0.00959 U	0.00959 U	0.00959 U	0.00959 U	0.00959 U	0.00959 U	0.00959 U	0.00959 U	0.00959 U	0.00959 U	0.00959 U	0.00959 U	0.00959 U	0.00959 U	0.00959 U
DP-8(1.5-2.5)	05/11/19	0.0119 U	0.0119 U	0.0119 U	0.0119 U	0.0119 U	0.0119 U	0.0119 U	0.0119 U	0.0119 U	0.0119 U	0.0119 U	0.0119 U	0.0119 U	0.0119 U	0.0119 U	0.0119 U	0.0119 U	0.0119 U	0.0119 U
DP-8(8-9)	05/11/19	0.00971 U	0.00971 U	0.00971 U	0.00971 U	0.00971 U	0.00971 U	0.00971 U	0.00971 U	0.00971 U	0.00971 U	0.00971 U	0.00971 U	0.00971 U	0.00971 U	0.00971 U	0.00971 U	0.00971 U	0.00971 U	0.00971 U
DP-8(11.5-12.5)	05/11/19	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U
DP-9(1-2)	05/11/19	0.0123 U	0.0123 U	0.0123 U	0.0123 U	0.0123 U	0.0123 U	0.0123 U	0.0123 U	0.0123 U	0.0123 U	0.0123 U	0.0123 U	0.0123 U	0.0123 U	0.0123 U	0.0123 U	0.0123 U	0.0123 U	0.0123 U
DP-9(8-9)	05/11/19	0.0113 U	0.0113 U	0.0113 U	0.0113 U	0.0113 U	0.0113 U	0.0113 U	0.0113 U	0.0113 U	0.0113 U	0.0113 U	0.0113 U	0.0113 U	0.0113 U	0.0113 U	0.0113 U	0.0113 U	0.0113 U	0.0113 U
DP-10(2-3)	05/11/19	0.0115 U	0.0115 U	0.0115 U	0.0115 U	0.0115 U	0.0115 U	0.0115 U	0.0115 U	0.0115 U	0.0115 U	0.0115 U	0.0115 U	0.0115 U	0.0115 U	0.0115 U	0.0115 U	0.0115 U	0.0115 U	0.0115 U
DP-10(13-14)	05/11/19	0.00998 U	0.00998 U	0.00998 U	0.00998 U	0.00998 U	0.00998 U	**0.0135**	0.00998 U	0.00998 U	0.00998 U	0.00998 U	0.00998 U	0.00998 U	**0.014**	0.00998 U	0.00998 U	0.00998 U	0.00998 U	0.00998 U
DP-11(3-4)	05/11/19	0.00983 U	0.00983 U	0.00983 U	0.00983 U	0.00983 U	0.00983 U	0.00983 U	0.00983 U	0.00983 U	0.00983 U	0.00983 U	0.00983 U	0.00983 U	0.00983 U	0.00983 U	0.00983 U	0.00983 U	0.00983 U	0.00983 U
DP-11(10-11)	05/11/19	0.00943 U	0.00943 U	0.00943 U	0.00943 U	0.00943 U	0.00943 U	0.00943 U	0.00943 U	0.00943 U	0.00943 U	0.00943 U	0.00943 U	0.00943 U	0.00943 U	0.00943 U	0.00943 U	0.00943 U	0.00943 U	0.00943 U
DP-11(18-19)	05/11/19	0.0116 U	0.0116 U	0.0116 U	0.0116 U	0.0116 U	0.0116 U	0.0116 U	0.0116 U	0.0116 U	0.0116 U	0.0116 U	0.0116 U	0.0116 U	0.0116 U	0.0116 U	0.0116 U	0.0116 U	0.0116 U	0.0116 U
DP-12(1-2)	05/11/19	0.0119 U	0.0119 U	0.0119 U	0.0119 U	0.0119 U	0.0119 U	0.0119 U	0.0119 U	0.0119 U	0.0119 U	0.0119 U	0.0119 U	0.0119 U	0.0119 U	0.0119 U	0.0119 U	0.0119 U	0.0119 U	0.0119 U
DP-12(12-13)	05/11/19	0.0103 U	0.0103 U	0.0103 U	0.0103 U	0.0103 U	0.0103 U	0.0103 U	0.0103 U	0.0103 U	0.0103 U	0.0103 U	0.0103 U	0.0103 U	0.0103 U	0.0103 U	0.0103 U	0.0103 U	0.0103 U	0.0103 U
DP-12(16-17)	05/11/19	0.00992 U	0.00992 U	0.00992 U	0.00992 U	0.00992 U	0.00992 U	0.00992 U	0.00992 U	0.00992 U	0.00992 U	0.00992 U	0.00992 U	0.00992 U	0.00992 U	0.00992 U	0.00992 U	0.00992 U	0.00992 U	0.00992 U
DP-13(4-5)	05/11/19	0.0115 U	0.0115 U	0.0115 U	0.0115 U	0.0115 U	0.0115 U	0.0115 U	0.0115 U	0.0115 U	0.0115 U	0.0115 U	0.0115 U	0.0115 U	0.0115 U	0.0115 U	0.0115 U	0.0115 U	0.0115 U	0.0115 U
DP-13(9-10)	05/11/19	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U	0.0104 U
DP-14(2-3)	05/11/19	0.0116 U	0.0116 U	0.0116 U	0.0116 U	0.0116 U	0.0116 U	0.0116 U	0.0116 U	0.0116 U	0.0116 U	0.0116 U	0.0116 U	0.0116 U	0.0116 U	0.0116 U	0.0116 U	0.0116 U	0.0116 U	0.0116 U

TABLE 4
Summary of Soil Sample Chemical Analytical Results
PAHs
Modera Morrison
1120 SE Morrison Street
Portland, Oregon

Sample I.D. (depth in feet BGS)	Sample Date	PAHs by EPA Method 8270D SIM (mg/kg)																		
		Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Dibenzofuran	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene	Phenanthrene	Pyrene
DP-14(11-12)	05/11/19	0.0124 U	0.0124 U	0.0124 U	0.0124 U	0.0124 U	0.0124 U	0.0124 U	0.0124 U	0.0124 U	0.0124 U	0.0124 U	0.0124 U	0.0124 U	0.0124 U	0.0124 U	0.0124 U	0.0124 U	0.0124 U	0.0124 U
DP-15(4-5)	05/11/19	0.0113 U	0.0113 U	0.0113 U	0.0113 U	0.0113 U	0.0113 U	0.0113 U	0.0113 U	0.0113 U	0.0113 U	0.0113 U	0.0113 U	0.0113 U	0.0113 U	0.0113 U	0.0113 U	0.0113 U	0.0113 U	0.0113 U
DP-16(2-3)	05/11/19	0.0119 U	0.0119 U	0.0119 U	0.0119 U	0.0119 U	0.0119 U	0.0119 U	0.0119 U	0.0119 U	0.0119 U	0.0119 U	0.0119 U	0.0119 U	0.0119 U	0.0119 U	0.0119 U	0.0119 U	0.0119 U	0.0119 U
DP-19(11-12)	07/18/19	0.0106 U	0.0106 U	0.0106 U	0.0106 U	0.0106 U	0.0106 U	0.0106 U	0.0106 U	0.0106 U	0.0106 U	0.0106 U	0.0106 U	0.0106 U	0.0106 U	0.0106 U	0.0106 U	0.0106 U	0.0106 U	0.0106 U
DP-23(11-12)	07/18/19	0.0115 U	0.0115 U	0.0115 U	0.0115 U	0.0115 U	0.0115 U	0.0115 U	0.0115 U	0.0115 U	0.0115 U	0.0115 U	0.0115 U	0.0115 U	0.0115 U	0.0115 U	0.0115 U	0.0115 U	0.0115 U	0.0115 U
HA-1(2-2.5)	05/15/19	0.0101 U	0.0101 U	0.0101 U	0.0101 U	0.0101 U	**0.0109**	0.0101 U	0.0101 U	0.0101 U	0.0101 U	0.0101 U	0.0101 U	0.0101 U	0.0101 U	0.0101 U	0.0101 U	0.0101 U	0.0101 U	**0.012**
HA-1(12-12.5)	05/15/19	0.0118 U	0.0118 U	0.0118 U	0.0118 U	0.0118 U	0.0118 U	0.0118 U	0.0118 U	0.0118 U	0.0118 U	0.0118 U	0.0118 U	0.0118 U	0.0118 U	0.0118 U	0.0118 U	0.0118 U	0.0118 U	0.0118 U
HA-1(15-15.5)	05/15/19	0.0103 U	0.0103 U	0.0103 U	0.0103 U	0.0103 U	0.0103 U	0.0103 U	0.0103 U	0.0103 U	0.0103 U	0.0103 U	0.0103 U	0.0103 U	0.0103 U	0.0103 U	0.0103 U	0.0103 U	0.0103 U	0.0103 U
HA-2(2-2.5)	05/15/19	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U
HA-8(1.3-1.5)	07/30/19	0.0108 U	**0.0267**	**0.0185**	**0.0696**	**0.116**	**0.146**	**0.0432**	**0.111**	**0.136**	**0.0165**	0.0108 U	**0.183**	**0.0111**	**0.0912**	**0.0920**	**0.138**	**0.108**	**0.170**	**0.231**
HA-10(0.3-0.7)	07/30/19	0.00968 U	**0.0237**	**0.0121**	**0.0637**	**0.127**	**0.166**	**0.0481**	**0.125**	**0.134**	**0.0135**	0.00968 U	**0.228**	0.00968 U	**0.104**	0.00968 U	0.00968 U	**0.0285**	**0.157**	**0.275**
DEQ Generic RBCs[1]																				
Soil Ingestion, Dermal Contact, and Inhalation																				
Occupational		70,000	NE	350,000	21	2.1	21	210	NE	2,100	2.1	NE	30,000	47,000	21	NE	NE	23	NE	23,000
Construction Worker		21,000	NE	110,000	170	17	170	1,700	NE	17,000	17	NE	10,000	14,000	170	NE	NE	580	NE	7,500
Excavation Worker		590,000	NE	>Max	4,800	490	4,900	49,000	NE	490,000	490	NE	280,000	390,000	4,900	NE	NE	16,000	NE	210,000
Volatilization to Outdoor Air																				
Occupational		>Max	NE	>Max	>Csat	NV	NV	NV	NE	NV	NV	NE	NV	>Max	NV	NE	NE	83	NE	>Max
Vapor Intrusion into Buildings																				
Occupational		>Max	NE	>Max	>Csat	NV	NV	NV	NE	NV	NV	NE	NV	>Max	NV	NE	NE	83	NE	>Max
DEQ CFSLs[2]		0.25	120	6.8	0.73	0.11	1.1	11	25	3.1	0.11	0.002	10	3.7	1.1	0.36	11	0.077	5.5	10

Notes:
1. DEQ Generic RBCs dated May 2018
2. DEQ CFSLs dated February 21, 2019
>Csat: This soil RBC exceeds the limit of three-phase equilibrium partitioning. Refer to Appendix D of DEQ's *Risk-Based Decision Making for the Remediation of Petroleum-Contaminated Sites* guidance document for the corresponding value of Csat. Soil concentrations in excess of Csat indicate that free product might be present.
>Max: The constituent RBC for this pathway is calculated as greater than 1,000,000 mg/kg or 1,000,000 mg/L. Therefore, this substance is deemed not to pose risks in this scenario.
NE: not established
NV: chemical is considered non-volatile
U: Not detected. Reporting or detection limit shown.
Bolding indicates analyte detection.
Shading indicates analyte detection at a concentration greater than DEQ CFSLs.

TABLE 5
Summary of Soil Sample Chemical Analytical Results
PCBs
Modera Morrison
1120 SE Morrison Street
Portland, Oregon

Sample I.D. (depth in feet BGS)	Sample Date	PCBs by EPA Method 8082A (mg/kg)													
		Aroclor 1016		Aroclor 1221		Aroclor 1232		Aroclor 1242		Aroclor 1248		Aroclor 1254		Aroclor 1260	
DP-1(0.5-1.5)	05/11/19	0.0117	U	0.0117	U	0.0117	U	0.0117	U	0.0117	U	0.0117	U	0.0117	U
DP-1(11.5-12.5)	05/11/19	0.0111	U	0.0111	U	0.0111	U	0.0111	U	0.0111	U	0.0111	U	0.0111	U
DP-2(1-2)	05/11/19	0.0118	U	0.0118	U	0.0118	U	0.0118	U	0.0118	U	0.0118	U	0.0118	U
DP-2(12-13)	05/11/19	0.0127	U	0.0127	U	0.0127	U	0.0127	U	0.0127	U	0.0127	U	0.0127	U
DP-3(1-2)	05/11/19	0.0119	U	0.0119	U	0.0119	U	0.0119	U	0.0119	U	0.0119	U	0.0119	U
DP-3(12-13)	05/11/19	0.0127	U	0.0127	U	0.0127	U	0.0127	U	0.0127	U	0.0127	U	0.0127	U
DP-4(0.5-1.5)	05/11/19	0.0115	U	0.0115	U	0.0115	U	0.0115	U	0.0115	U	0.0115	U	0.0115	U
DP-4(8-9)	05/11/19	0.0108	U	0.0108	U	0.0108	U	0.0108	U	0.0108	U	0.0108	U	0.0108	U
DP-4(11.5-12.5)	05/11/19	0.0125	U	0.0125	U	0.0125	U	0.0125	U	0.0125	U	0.0125	U	0.0125	U
DP-5(1-2)	05/11/19	0.0112	U	0.0112	U	0.0112	U	0.0112	U	0.0112	U	0.0112	U	0.0112	U
DP-5(8.5-9.5)	05/11/19	0.0117	U	0.0117	U	0.0117	U	0.0117	U	0.0117	U	0.0117	U	0.0117	U
DP-5(13-14)	05/11/19	0.0125	U	0.0125	U	0.0125	U	0.0125	U	0.0125	U	0.0125	U	0.0125	U
DP-6(1-2)	05/11/19	0.0112	U	0.0112	U	0.0112	U	0.0112	U	0.0112	U	0.0112	U	0.0112	U
DP-6(8-9)	05/11/19	0.0127	U	0.0127	U	0.0127	U	0.0127	U	0.0127	U	0.0127	U	0.0127	U
DP-6(12.5-13.5)	05/11/19	0.012	U	0.012	U	0.012	U	0.012	U	0.012	U	0.012	U	0.012	U
DP-7(1-2)	05/11/19	0.011	U	0.011	U	0.011	U	0.011	U	0.011	U	0.011	U	0.011	U
DP-7(6.5-7.5)	05/11/19	0.0101	U	0.0101	U	0.0101	U	0.0101	U	0.0101	U	0.0101	U	0.0101	U
DP-7(11.5-12.5)	05/11/19	0.00955	U	0.00955	U	0.00955	U	0.00955	U	0.00955	U	0.00955	U	0.00955	U
DP-8(1.5-2.5)	05/11/19	0.0118	U	0.0118	U	0.0118	U	0.0118	U	0.0118	U	0.0118	U	0.0118	U
DP-8(8-9)	05/11/19	0.0107	U	0.0107	U	0.0107	U	0.0107	U	0.0107	U	0.0107	U	0.0107	U
DP-8(11.5-12.5)	05/11/19	0.0113	U	0.0113	U	0.0113	U	0.0113	U	0.0113	U	0.0113	U	0.0113	U

TABLE 5
Summary of Soil Sample Chemical Analytical Results
PCBs
Modera Morrison
1120 SE Morrison Street
Portland, Oregon

Sample I.D. (depth in feet BGS)	Sample Date	PCBs by EPA Method 8082A (mg/kg)						
		Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260
DP-9(1-2)	05/11/19	0.0136 U	0.0136 U	0.0136 U	0.0136 U	0.0136 U	0.0136 U	0.0136 U
DP-9(8-9)	05/11/19	0.0121 U	0.0121 U	0.0121 U	0.0121 U	0.0121 U	0.0121 U	0.0121 U
DP-10(2-3)	05/11/19	0.0126 U	0.0126 U	0.0126 U	0.0126 U	0.0126 U	0.0126 U	0.0126 U
DP-10(13-14)	05/11/19	0.0116 U	0.0116 U	0.0116 U	0.0116 U	0.0116 U	0.0116 U	0.0116 U
DP-11(3-4)	05/11/19	0.0112 U	0.0112 U	0.0112 U	0.0112 U	0.0112 U	0.0112 U	0.0112 U
DP-11(10-11)	05/11/19	0.0107 U	0.0107 U	0.0107 U	0.0107 U	0.0107 U	0.0107 U	0.0107 U
DP-11(18-19)	05/11/19	0.0125 U	0.0125 U	0.0125 U	0.0125 U	0.0125 U	0.0125 U	0.0125 U
DP-12(1-2)	05/11/19	0.0132 U	0.0132 U	0.0132 U	0.0132 U	0.0132 U	0.0132 U	0.0132 U
DP-12(12-13)	05/11/19	0.0112 U	0.0112 U	0.0112 U	0.0112 U	0.0112 U	0.0112 U	0.0112 U
DP-12(16-17)	05/11/19	0.0108 U	0.0108 U	0.0108 U	0.0108 U	0.0108 U	0.0108 U	0.0108 U
DP-13(4-5)	05/11/19	0.0123 U	0.0123 U	0.0123 U	0.0123 U	0.0123 U	0.0123 U	0.0123 U
DP-13(9-10)	05/11/19	0.0118 U	0.0118 U	0.0118 U	0.0118 U	0.0118 U	0.0118 U	0.0118 U
DP-14(2-3)	05/11/19	0.0131 U	0.0131 U	0.0131 U	0.0131 U	0.0131 U	0.0131 U	0.0131 U
DP-14(11-12)	05/11/19	0.0132 U	0.0132 U	0.0132 U	0.0132 U	0.0132 U	0.0132 U	0.0132 U
DP-15(4-5)	05/11/19	0.0129 U	0.0129 U	0.0129 U	0.0129 U	0.0129 U	0.0129 U	0.0129 U
DP-16(2-3)	05/11/19	0.0127 U	0.0127 U	0.0127 U	0.0127 U	0.0127 U	0.0127 U	0.0127 U
HA-1(2-2.5)	05/15/19	0.0117 U	0.0117 U	0.0117 U	0.0117 U	0.0117 U	0.0117 U	0.0117 U
HA-1(12-12.5)	05/15/19	0.0124 U	0.0124 U	0.0124 U	0.0124 U	0.0124 U	0.0124 U	0.0124 U
HA-1(15-15.5)	05/15/19	0.0118 U	0.0118 U	0.0118 U	0.0118 U	0.0118 U	0.0118 U	0.0118 U
HA-2(2-2.5)	05/15/19	0.0113 U	0.0113 U	0.0113 U	0.0113 U	0.0113 U	0.0113 U	0.0113 U

TABLE 5
Summary of Soil Sample Chemical Analytical Results
PCBs
Modera Morrison
1120 SE Morrison Street
Portland, Oregon

Sample I.D. (depth in feet BGS)	Sample Date	PCBs by EPA Method 8082A (mg/kg)						
		Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260
HA-8(1.3-1.5)	07/30/19	0.0102 U	0.0102 U	0.0102 U	0.0102 U	0.0102 U	0.0102 U	0.0102 U
HA-10(0.3-0.7)	07/30/19	0.0101 U	0.0101 U	0.0101 U	0.0101 U	0.0101 U	0.0101 U	0.0101 U
DEQ Generic RBCs[1]								
Soil Ingestion, Dermal Contact, and Inhalation								
Occupational		0.59						
Construction Worker		4.9						
Excavation Worker		140						
Volatilization to Outdoor Air								
Occupational		>Csat						
Vapor Intrusion into Buildings								
Occupational		>Csat						
DEQ CFSLs[2]		1.1	0.0048	0.0048	0.041	0.0073	0.041	0.24

Notes:

1. DEQ Generic RBCs dated May 2018
2. DEQ CFSLs dated February 21, 2019

>Csat: This soil RBC exceeds the limit of three-phase equilibrium partitioning. Refer to Appendix D of DEQ's *Risk-Based Decision Making for the Remediation of Petroleum-Contaminated Sites* guidance document for the corresponding value of Csat. Soil concentrations in excess of Csat indicate that free product might be present.

U: Not detected. Reporting or detection limit shown.

TABLE 6
Summary of Soil Gas and Sub-Slab Vapor Sample Chemical Analytical Results
Gasoline-Range Hydrocarbons and VOCs
Modera Morrison
1120 SE Morrison Street
Portland, Oregon

Sample I.D.	Sample Date	Gasoline-Range Hydrocarbons by EPA Method TO-15 (µg/m³)	VOCs by EPA Method TO-15 (µg/m³)												
			Acetone	Allyl Chloride	Benzene	Benzyl Chloride	Bromochloromethane	Bromoform	Bromomethane	1,3-Butadiene	2-Butanone (MEK)	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene
SG-1(15)	05/11/19	413 U	**38.7**	1.25 U	**4.91**	2.08 U	2.68 U	12.4 U	1.55 U	8.85 U	7.37 U	**3.78**	2.52 U	1.85 U
SG-2(15)	05/11/19	**454**	**60.8**	1.25 U	**8.4**	2.08 U	2.68 U	12.4 U	1.55 U	8.85 U	7.37 U	**3.29**	2.52 U	1.85 U
SV-1	05/11/19	413 U	**104**	1.25 U	1.28 U	2.08 U	2.68 U	12.4 U	1.55 U	8.85 U	7.37 U	1.24 U	2.52 U	1.85 U
DEQ Generic RBCs[1]														
Vapor Intrusion into Buildings														
Occupational		1,700,000	NE	NE	1,600	NE	NE	11,000	22,000	NE	NE	NE	2,000	220,000

TABLE 6
Summary of Soil Gas and Sub-Slab Vapor Sample Chemical Analytical Results
Gasoline-Range Hydrocarbons and VOCs
Modera Morrison
1120 SE Morrison Street
Portland, Oregon

Sample I.D.	Sample Date	VOCs by EPA Method TO-15 (µg/m³)																			
		Chloroethane		Chloroform		Chloromethane	2-Chlorotoluene		Cyclohexane		Chlorodibromomethane (Dibromochloromethane)		1,2-Dibromoethane		1,2-Dichlorobenzene		1,3-Dichlorobenzene		1,4-Dichlorobenzene		Dichlorodifluoromethane	1,1-Dichloroethane		1,2-Dichloroethane	
SG-1(15)	05/11/19	1.06	U	1.95	U	**10.1**	2.06	U	1.38	U	3.4	U	3.08	U	2.4	U	2.4	U	2.4	U	**3.59**	1.59	U	1.62	U
SG-2(15)	05/11/19	1.06	U	1.95	U	**2.79**	2.06	U	**7.24**		3.4	U	3.08	U	2.4	U	2.4	U	2.4	U	**4.22**	1.59	U	1.62	U
SV-1	05/11/19	1.06	U	1.95	U	**1.12**	2.06	U	1.38	U	3.4	U	3.08	U	2.4	U	2.4	U	2.4	U	**2.83**	1.59	U	1.62	U
DEQ Generic RBCs[1]																									
Vapor Intrusion into Buildings																									
Occupational		43,800,000		530		390,000	NE		NE		450		20		880,000		NE		1,100		NE	7,700		470	

TABLE 6
Summary of Soil Gas and Sub-Slab Vapor Sample Chemical Analytical Results
Gasoline-Range Hydrocarbons and VOCs
Modera Morrison
1120 SE Morrison Street
Portland, Oregon

Sample I.D.	Sample Date	VOCs by EPA Method TO-15 (µg/m³)													
		1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,2-Dichloropropane	cis-1,3-Dichloropropene	trans-1,3-Dichloropropene	1,2-Dichlorotetrafluoroethane	1,4-Dioxane	Ethanol	Ethylbenzene	4-Ethyltoluene	Heptane	Hexachloro-1,3-butadiene	n-Hexane
SG-1(15)	05/11/19	1.6 U	1.59 U	1.59 U	1.85 U	1.82 U	1.82 U	2.8 U	1.44 U	**33.1**	1.73 U	1.96 U	1.64 U	13.5 U	**2.85**
SG-2(15)	05/11/19	1.6 U	1.59 U	1.59 U	1.85 U	1.82 U	1.82 U	2.8 U	1.44 U	**59**	1.73 U	1.96 U	**5.53**	13.5 U	**26.4**
SV-1	05/11/19	1.6 U	1.59 U	1.59 U	1.85 U	1.82 U	1.82 U	2.8 U	1.44 U	**35.2**	**3.6**	**2.77**	1.64 U	13.5 U	**3.29**
DEQ Generic RBCs[1]															
Vapor Intrusion into Buildings															
Occupational		880,000	>Pv	>Pv	NE	NE	NE	NE	2,500	NE	4,900	NE	NE	NE	NE

TABLE 6
Summary of Soil Gas and Sub-Slab Vapor Sample Chemical Analytical Results
Gasoline-Range Hydrocarbons and VOCs
Modera Morrison
1120 SE Morrison Street
Portland, Oregon

Sample I.D.	Sample Date	VOCs by EPA Method TO-15 (µg/m³)																			
		iso-Propylbenzene		4-Methyl-2-pentanone		MTBE		Methylene Chloride (Dichloromethane)		Methyl Butyl Ketone		Methyl Methacrylate		Naphthalene		2-Propanol		Propene		Styrene		1,1,1,2-Tetrachloroethane		Tetrachloroethane		Tetrahydrofuran		Toluene
SG-1(15)	05/11/19	1.97	U	10.2	U	1.44	U	**5.22**		10.2	U	1.64	U	6.6	U	**9.25**		**46.9**		1.7	U	2.75	U	**16.3**		1.18	U	**5.16**
SG-2(15)	05/11/19	1.97	U	10.2	U	1.44	U	**2.83**		10.2	U	1.64	U	6.6	U	**41.6**		1.38	U	**1.89**		2.75	U	**31.4**		1.18	U	**7.87**
SV-1	05/11/19	1.97	U	10.2	U	1.44	U	**2.38**		10.2	U	1.64	U	6.6	U	**12.5**		1.38	U	1.7	U	2.75	U	**6.27**		**2.73**		**4.72**
DEQ Generic RBCs[1]																												
Vapor Intrusion into Buildings																												
Occupational		1,800,000		NE		47,000		1,200,000		NE		NE		360		NE		NE		4,400,000		NE		NE		NE		21,900,000

TABLE 6
Summary of Soil Gas and Sub-Slab Vapor Sample Chemical Analytical Results
Gasoline-Range Hydrocarbons and VOCs
Modera Morrison
1120 SE Morrison Street
Portland, Oregon

Sample I.D.	Sample Date	VOCs by EPA Method TO-15 (µg/m³)												
		1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	TCE	Trichlorofluoromethane	1,2,4-TMB	1,3,5-TMB	2,2,4-Trimethylpentane	1,1,2-Trichlorotrifluoroethane (Freon 113)	Vinyl Chloride	Vinyl Bromide	Vinyl Acetate	Total Xylenes
SG-1(15)	05/11/19	9.33 U	2.18 U	2.18 U	2.14 U	2.25 U	1.96 U	1.96 U	1.87 U	3.07 U	1.02 U	1.75 U	1.41 U	5.2 U
SG-2(15)	05/11/19	9.33 U	2.18 U	2.18 U	2.14 U	2.25 U	1.96 U	1.96 U	1.87 U	3.07 U	1.02 U	1.75 U	1.41 U	**5.97**
SV-1	05/11/19	9.33 U	2.18 U	2.18 U	2.14 U	2.25 U	**17.6**	**4.99**	1.87 U	3.07 U	1.02 U	1.75 U	1.41 U	**22.9**
DEQ Generic RBCs[1]														
Vapor Intrusion into Buildings														
Occupational		NE	21,900,000	770	2,900	3,100,000	260,000	260,000	NE	131,400,000	2,800	NE	NE	440,000

Notes:
1. DEQ Generic RBCs dated May 2018
>Pv: The air concentration reported for the RBC exceeds the vapor pressure of the pure chemical. It can be assumed that this constituent cannot create an unnacceptable risk by this pathway.
U: Not detected. Reporting or detection limit shown.
Bolding indicates analyte detection.

APPENDIX C

Oregon

Kate Brown, Governor

Department of Environmental Quality
Northwest Region
700 NE Multnomah Street, Suite 600
Portland, OR 97232
(503) 229-5263
FAX (503) 229-6945
TTY 711

August 22, 2019

Cassidy Bolger c/o Jason O'Donnel (GeoDesign, Inc.)
Mill Creek Residential Trust
220 NW 2nd Avenue, Suite 900
Portland, Oregon 97209
cbolger@mcrtrust.com
jodonnell@geodesigninc.com

Re: Soil Excavation: Modera Morrison redevelopment project
1120 SE Morrison Street in Portland, Oregon
Solid Waste Permit Exemption
Clackamas County, Oregon

Dear Mr. Bolger and Mr. O'Donnell:

DEQ has received and reviewed the request for a solid waste permit exemption determination from GeoDesign, Inc. (GeoDesign) on behalf of Modera Morrison, received on July 30, 2019. The request is to reuse soil excavated from the Modera Morrison redevelopment project.

The soil will be generated during excavation for an underground parking lot. Redevelopment will include construction of a seven-story apartment building with commercial and retail spaces on the first floor.

GeoDesign performed soil sampling in May of 2019. Field activities included collecting a total of 41 soil samples from 17 soil borings and two hand auger locations. The results showed one soil sample, from boring DP-4, contained concentrations of lead and benzo(a)pyrene concentrations above clean fill. Cadmium concentrations were slightly above the clean fill screening level and are likely naturally occurring. The remaining results showed soils are below the clean fill screening levels. GeoDesign calculated a 90% Upper Confidence Limit for lead and showed that the bulked material meets clean fill screening levels. This analysis is noted in DEQ's Clean Fill Determinations manual as an appropriate method. Additionally, GeoDesign's results report notes that the soil sample collected from DP-4 will be removed and disposed of as non-clean fill.

DEQ used the criteria set forth in Oregon Administrative Rule (OAR) 340-0093-0080 (2) and DEQ's internal management directive regarding clean fill.

Based on DEQ's review, DEQ concludes that the soil proposed for excavation is essentially the same as clean fill and is exempt from solid waste permitting regulations pursuant to OAR 340-0093-0080 (2).

The conditions of approval for this solid waste permit exemption are as follows:

1. This exemption determination is made for the specific waste outlined in the July 30, 2019 application.
2. Grass, sod, brush and other vegetation are biodegradable and are not considered clean fill and must be disposed at a DEQ permitted disposal site authorized to receive this type of waste.

3. Clean fill consists only of material consisting of soil, rock, concrete, brick, building block, tile or asphalt paving, which do not contain contaminants which could adversely impact the waters of the State or public health. Any material encountered during excavation that does not meet this definition is not considered clean fill and not included in this permit exemption.
4. Placement areas must be cleared and stripped of all vegetation prior to placement of soils.

If the information that DEQ evaluated to conclude that a permit exemption is applicable changes, you may need to apply for a solid waste letter authorization or beneficial use approval. This solid waste permit exemption will be void and the waste subject to regulation as a solid waste for any of the following reasons:

1. There are changes to the waste described in the application.
2. New or additional information indicates a potential change in the level of risk to the environment.

Thank you for working with DEQ through this process. Please feel free to contact Heather Kuoppamaki at 503-229-5125 or kuoppamaki.heather@deq.state.or.us or me at 503-229-5072 or obrien.audrey@deq.state.or.us if you have any questions.

Sincerely,

Audrey M O'Brien

Audrey O'Brien
Northwest Region Environmental Partnerships Manager

cc: Heather Kuoppamaki, DEQ NWR Senior Environmental Engineer (kuoppamaki.heather@deq.state.or.us)

State of Oregon
Department of Environmental Quality
Northwest Region

Memorandum

To: File

Date: July 30, 2019

From: Heather Kuoppamaki, PE
Solid Waste Engineer - NWR

Subject: Solid Waste Permit Exemption
Modera Morrison
1120 SE Morrison
Portland, OR
Multnomah County, Oregon

GeoDesign submitted an application for a Solid Waste Permit Exemption Determination, on behalf of Modera Morrison, for reuse of soil excavated during development of the Modera Morrison redevelopment project located at 1120 SE Morrison Street in Portland, Oregon.

Evaluation Highlights

GeoDesign conducted Phase I and Phase II ESAs at this property.

The Phase I ESA identified historic underground storage tanks containing gasoline and heating oil. Based on the results of the Phase I, GeoDesign conducted a Phase II ESA. The Phase II ESA including analyzing soil from the proposed excavation area. Soils from varying depths were sampled and analyzed for some or all of the following:

- VOCs by EPA Methods 5035A/8260C
- PCBs by EPA Method 8082A
- RCRA 8 total metals by EPA Method 6020A (ICP-MS)
- Leachable lead by EPA Methods 1311/6020A (ICP-MS)
- PAHs by EPA Method 8270D SIM

Soils from one isolated area (boring DP-4 from 0.5-1.5 feet bgs), had concentrations of lead and benzo(a)pyrene exceeding clean fill screening levels. The soils from this area will be segregated and not reused as clean fill.

The 90% UCL for cadmium was 0.75 mg/kg which exceed the clean fill screening level (0.63 mg/kg). The clean fill screening level is based on background concentrations. The risk based screening level for cadmium for residential use (20 mg/kg). GeoDesign presents a professional opinion that the cadmium concentrations are naturally occurring.

The detection limit for several of the constituents was higher than the clean fill screening level. However, no other indications of contamination were noted in the analytical data.

Based on the information presented, with the removal of soils near DP-5 from 0.5-1.5 feet below ground surface, the excavated soils are essentially the same as clean fill.

APPENDIX D

Date	Profile #	Manifest/ Additional Documents	Ticket #	Material	Facility	Carrier	Vehicle	Tons/Tonnes	Mat. Quantity	Mat. Unit
04/23/2021	135210OR	NA	1600271	Cont. Soil - Petroleum, PMT is RGC	Hillsboro Landfill		203-PUP	27.2	27.20	TON
04/27/2021	135210OR	NA	1600655	Cont. Soil - Petroleum, PMT is RGC	Hillsboro Landfill		203-PUP	34.79	34.79	TON
04/27/2021	135210OR	NA	1600736	Cont. Soil - Petroleum, PMT is RGC	Hillsboro Landfill		203-PUP	37.49	37.49	TON
04/27/2021	135210OR	NA	1600806	Cont. Soil - Petroleum, PMT is RGC	Hillsboro Landfill		203-PUP	35.45	35.45	TON
04/28/2021	135210OR	NA	1600882	Cont. Soil - Petroleum, PMT is RGC	Hillsboro Landfill		203-PUP	33.93	33.93	TON
04/28/2021	135210OR	NA	1600894	Cont. Soil - Petroleum, PMT is RGC	Hillsboro Landfill		20-115-PUP	24.7	24.70	TON
04/28/2021	135210OR	NA	1600954	Cont. Soil - Petroleum, PMT is RGC	Hillsboro Landfill		203-PUP	32.78	32.78	TON
04/28/2021	135210OR	NA	1601000	Cont. Soil -	Hillsboro Landfill		20-115-	28.19	28.19	TON

Date	Profile #	Manifest/ Additional Documents	Ticket #	Material	Facility	Carrier	Vehicle	Tons/Tonnes	Mat. Quantity	Mat. Unit
				Petroleum, PMT is RGC			PUP			
04/28/2021	135210OR	NA	1601028	Cont. Soil - Petroleum, PMT is RGC	Hillsboro Landfill		203-PUP	35.67	35.67	TON
04/28/2021	135210OR	NA	1601072	Cont. Soil - Petroleum, PMT is RGC	Hillsboro Landfill		20-115-PUP	27.32	27.32	TON
04/29/2021	135210OR	NA	1601234	Cont. Soil - Petroleum, PMT is RGC	Hillsboro Landfill		203-PUP	34.13	34.13	TON
04/29/2021	135210OR	na	1601246	Cont. Soil - Petroleum, PMT is RGC	Hillsboro Landfill		201-PUP	32.76	32.76	TON
04/29/2021	135210OR	NA	1601299	Cont. Soil - Petroleum, PMT is RGC	Hillsboro Landfill		203-PUP	38.41	38.41	TON
04/29/2021	135210OR	NA	1601310	Cont. Soil - Petroleum, PMT is RGC	Hillsboro Landfill		201-PUP	36.44	36.44	TON
04/30/2021	135210OR	NA	1601525	Cont. Soil - Petroleum, PMT is RGC	Hillsboro Landfill		20-115-PUP	30.88	30.88	TON

Date	Profile #	Manifest/ Additional Documents	Ticket #	Material	Facility	Carrier	Vehicle	Tons/Tonnes	Mat. Quantity	Mat. Unit
04/30/2021	135210OR	NA	1601592	Cont. Soil - Petroleum, PMT is RGC	Hillsboro Landfill		20-115	34.7	34.70	TON
05/03/2021	135210OR	na	1601702	Cont. Soil - Petroleum, PMT is RGC	Hillsboro Landfill		20-115-PUP	30.95	30.95	TON
05/03/2021	135210OR	NA	1601752	Cont. Soil - Petroleum, PMT is RGC	Hillsboro Landfill		20-115-PUP	24.31	24.31	TON
05/03/2021	135210OR	NA	1601803	Cont. Soil - Petroleum, PMT is RGC	Hillsboro Landfill		20-115-PUP	28.12	28.12	TON
05/07/2021	135210OR	NA	1602679	Cont. Soil - Petroleum, PMT is RGC	Hillsboro Landfill		201-SOLO	17.09	17.09	TON
05/07/2021	135210OR	NA	1602687	Cont. Soil - Petroleum, PMT is RGC	Hillsboro Landfill		203-SOLO	19.16	19.16	TON
05/07/2021	135210OR	na	1602696	Cont. Soil - Petroleum, PMT is RGC	Hillsboro Landfill		518-SOLO	15.99	15.99	TON
05/07/2021	135210OR	NA	1602703	Cont. Soil - Petroleum,	Hillsboro Landfill		11-SOLO	20.1	20.10	TON

Date	Profile #	Manifest/ Additional Documents	Ticket #	Material	Facility	Carrier	Vehicle	Tons/Tonnes	Mat. Quantity	Mat. Unit
05/07/2021	135210OR	NA	1602709	Cont. Soil - Petroleum, PMT is RGC	Hillsboro Landfill		9H-SOLO	18.96	18.96	TON
05/07/2021	135210OR	na	1602719	Cont. Soil - Petroleum, PMT is RGC	Hillsboro Landfill		20-115	20.05	20.05	TON
05/07/2021	135210OR	NA	1602730	Cont. Soil - Petroleum, PMT is RGC	Hillsboro Landfill	DUMP TRUCK	20-SOLO	16.37	16.37	TON
05/07/2021	135210OR	NA	1602726	Cont. Soil - Petroleum, PMT is RGC	Hillsboro Landfill	TRUCKING	56	15.18	15.18	TON
05/07/2021	135210OR	NA	1602747	Cont. Soil - Petroleum, PMT is RGC	Hillsboro Landfill		201-SOLO	13.74	13.74	TON
05/07/2021	135210OR	NA	1602742	Cont. Soil - Petroleum, PMT is RGC	Hillsboro Landfill		3-SOLO	16.2	16.20	TON
05/07/2021	135210OR	NA	1602749	Cont. Soil - Petroleum, PMT is RGC	Hillsboro Landfill		14-H-SOLO	15.88	15.88	TON

Date	Profile #	Manifest/ Additional Documents	Ticket #	Material	Facility	Carrier	Vehicle	Tons/Tonnes	Mat. Quantity	Mat. Unit
05/07/2021	135210OR	NA	1602774	Cont. Soil - Petroleum, PMT is RGC	Hillsboro Landfill		11-SOLO	16.56	16.56	TON
05/07/2021	135210OR	NA	1602775	Cont. Soil - Petroleum, PMT is RGC	Hillsboro Landfill		9H-SOLO	15.46	15.46	TON
05/07/2021	135210OR	NA	1602778	Cont. Soil - Petroleum, PMT is RGC	Hillsboro Landfill	TRUCKING	56	15.36	15.36	TON
05/07/2021	135210OR	NA	1602783	Cont. Soil - Petroleum, PMT is RGC	Hillsboro Landfill		203-SOLO	15.25	15.25	TON
05/10/2021	135210OR	NA	1602838	Cont. Soil - Petroleum, PMT is RGC	Hillsboro Landfill		14-SOLO	13.21	13.21	TON
05/12/2021	135210OR	NA	1603494	Cont. Soil - Petroleum, PMT is RGC	Hillsboro Landfill		201-PUP	31.86	31.86	TON
03/02/2022	135210OR	NA	1634992	Cont. Soil - Petroleum, PMT is RGC	Hillsboro Landfill		32-SOLO	11.75	11.75	TON

Customer Summary Report

Hillsboro Landfill - S03305 (USA) 04/01/2021 12:00 AM - 04/25/2023 11:59 PM Operation Type: All

Customer: All - Ticket Type: All - Customer Type: All - PMT Category: All - Profile: 135241OR

Ticket Date	Ticket ID	Customer	Generator	Profile	Truck	Material	Tons
4/19/2021	1599140	DEWITT CONSTRUCTION INC	168-MILL CREEK RESIDENTIAL TR	135241OR	203-PUP	ENVCLEANUP SPWPCS-Tons	33.18
4/19/2021	1599189	DEWITT CONSTRUCTION INC	168-MILL CREEK RESIDENTIAL TR	135241OR	203-PUP	ENVCLEANUP SPWPCS-Tons	29.93
4/19/2021	1599235	DEWITT CONSTRUCTION INC	168-MILL CREEK RESIDENTIAL TR	135241OR	203-PUP	ENVCLEANUP SPWPCS-Tons	32.10
4/19/2021	1599298	DEWITT CONSTRUCTION INC	168-MILL CREEK RESIDENTIAL TR	135241OR	203-PUP	ENVCLEANUP SPWPCS-Tons	32.47
4/20/2021	1599472	DEWITT CONSTRUCTION INC	168-MILL CREEK RESIDENTIAL TR	135241OR	20-115-PUP	ENVCLEANUP SPWPCS-Tons	28.91
4/20/2021	1599523	DEWITT CONSTRUCTION INC	168-MILL CREEK RESIDENTIAL TR	135241OR	20-115	ENVCLEANUP SPWPCS-Tons	35.35
4/21/2021	1599583	DEWITT CONSTRUCTION INC	168-MILL CREEK RESIDENTIAL TR	135241OR	203-PUP	ENVCLEANUP SPWPCS-Tons	37.24
4/21/2021	1599634	DEWITT CONSTRUCTION INC	168-MILL CREEK RESIDENTIAL TR	135241OR	203-PUP	ENVCLEANUP SPWPCS-Tons	29.02
4/21/2021	1599684	DEWITT CONSTRUCTION INC	168-MILL CREEK RESIDENTIAL TR	135241OR	203-PUP	ENVCLEANUP SPWPCS-Tons	31.29
4/21/2021	1599720	DEWITT CONSTRUCTION INC	168-MILL CREEK RESIDENTIAL TR	135241OR	20-115-PUP	ENVCLEANUP SPWPCS-Tons	21.29
4/21/2021	1599737	DEWITT CONSTRUCTION INC	168-MILL CREEK RESIDENTIAL TR	135241OR	203-PUP	ENVCLEANUP SPWPCS-Tons	32.23
4/22/2021	1599820	DEWITT CONSTRUCTION INC	168-MILL CREEK RESIDENTIAL TR	135241OR	203-PUP	ENVCLEANUP SPWPCS-Tons	32.82
4/22/2021	1599829	DEWITT CONSTRUCTION INC	168-MILL CREEK RESIDENTIAL TR	135241OR	407-PUP	ENVCLEANUP SPWPCS-Tons	28.80
4/22/2021	1599892	DEWITT CONSTRUCTION INC	168-MILL CREEK RESIDENTIAL TR	135241OR	203-PUP	ENVCLEANUP SPWPCS-Tons	32.01
4/22/2021	1599934	DEWITT CONSTRUCTION INC	168-MILL CREEK RESIDENTIAL TR	135241OR	407-PUP	ENVCLEANUP SPWPCS-Tons	28.94
4/22/2021	1599970	DEWITT CONSTRUCTION INC	168-MILL CREEK RESIDENTIAL TR	135241OR	203-PUP	ENVCLEANUP SPWPCS-Tons	33.70
4/22/2021	1600019	DEWITT CONSTRUCTION INC	168-MILL CREEK RESIDENTIAL TR	135241OR	407-PUP	ENVCLEANUP SPWPCS-Tons	27.42
4/22/2021	1600029	DEWITT CONSTRUCTION INC	168-MILL CREEK RESIDENTIAL TR	135241OR	203-PUP	ENVCLEANUP SPWPCS-Tons	30.57
4/23/2021	1600113	DEWITT CONSTRUCTION INC	168-MILL CREEK RESIDENTIAL TR	135241OR	203-PUP	ENVCLEANUP SPWPCS-Tons	31.84
4/27/2021	1600643	DEWITT CONSTRUCTION INC	168-MILL CREEK RESIDENTIAL TR	135241OR	201-PUP	ENVCLEANUP SPWPCS-Tons	33.44
4/27/2021	1600721	DEWITT CONSTRUCTION INC	168-MILL CREEK RESIDENTIAL TR	135241OR	201-PUP	ENVCLEANUP SPWPCS-Tons	34.90
4/27/2021	1600788	DEWITT CONSTRUCTION INC	168-MILL CREEK RESIDENTIAL TR	135241OR	201-PUP	ENVCLEANUP SPWPCS-Tons	33.82
4/28/2021	1600887	DEWITT CONSTRUCTION INC	168-MILL CREEK RESIDENTIAL TR	135241OR	3008-PUP	ENVCLEANUP SPWPCS-Tons	30.52
4/28/2021	1600895	DEWITT CONSTRUCTION INC	168-MILL CREEK RESIDENTIAL TR	135241OR	201-PUP	ENVCLEANUP SPWPCS-Tons	35.32
4/28/2021	1600909	DEWITT CONSTRUCTION INC	168-MILL CREEK RESIDENTIAL TR	135241OR	21-PUP	ENVCLEANUP SPWPCS-Tons	31.11
4/28/2021	1600923	DEWITT CONSTRUCTION INC	168-MILL CREEK RESIDENTIAL TR	135241OR	1-PUP	ENVCLEANUP SPWPCS-Tons	34.22
4/28/2021	1600959	DEWITT CONSTRUCTION INC	168-MILL CREEK RESIDENTIAL TR	135241OR	3008-PUP	ENVCLEANUP SPWPCS-Tons	26.11
4/28/2021	1600981	DEWITT CONSTRUCTION INC	168-MILL CREEK RESIDENTIAL TR	135241OR	201-PUP	ENVCLEANUP SPWPCS-Tons	32.43
4/28/2021	1600994	DEWITT CONSTRUCTION INC	168-MILL CREEK RESIDENTIAL TR	135241OR	21-PUP	ENVCLEANUP SPWPCS-Tons	30.67
4/28/2021	1600996	DEWITT CONSTRUCTION INC	168-MILL CREEK RESIDENTIAL TR	135241OR	1-PUP	ENVCLEANUP SPWPCS-Tons	27.33
4/28/2021	1601036	DEWITT CONSTRUCTION INC	168-MILL CREEK RESIDENTIAL TR	135241OR	3008-PUP	ENVCLEANUP SPWPCS-Tons	27.77
4/28/2021	1601051	DEWITT CONSTRUCTION INC	168-MILL CREEK RESIDENTIAL TR	135241OR	21-PUP	ENVCLEANUP SPWPCS-Tons	31.16
4/28/2021	1601057	DEWITT CONSTRUCTION INC	168-MILL CREEK RESIDENTIAL TR	135241OR	1-PUP	ENVCLEANUP SPWPCS-Tons	31.38
4/28/2021	1601066	DEWITT CONSTRUCTION INC	168-MILL CREEK RESIDENTIAL TR	135241OR	201-PUP	ENVCLEANUP SPWPCS-Tons	31.78

4/28/2021	1601116	DEWITT CONSTRUCTION INC	168-MILL CREEK RESIDENTIAL TR	135241OR	21-PUP	ENVCLEANUP SPWPCS-Tons	32.02
4/28/2021	1601117	DEWITT CONSTRUCTION INC	168-MILL CREEK RESIDENTIAL TR	135241OR	1-PUP	ENVCLEANUP SPWPCS-Tons	32.41
4/30/2021	1601443	DEWITT CONSTRUCTION INC	168-MILL CREEK RESIDENTIAL TR	135241OR	201-PUP	ENVCLEANUP SPWPCS-Tons	32.67
4/30/2021	1601453	DEWITT CONSTRUCTION INC	168-MILL CREEK RESIDENTIAL TR	135241OR	21-PUP	ENVCLEANUP SPWPCS-Tons	31.53
4/30/2021	1601495	DEWITT CONSTRUCTION INC	168-MILL CREEK RESIDENTIAL TR	135241OR	203-PUP	ENVCLEANUP SPWPCS-Tons	36.29
4/30/2021	1601503	DEWITT CONSTRUCTION INC	168-MILL CREEK RESIDENTIAL TR	135241OR	201-PUP	ENVCLEANUP SPWPCS-Tons	33.32
4/30/2021	1601511	DEWITT CONSTRUCTION INC	168-MILL CREEK RESIDENTIAL TR	135241OR	21-PUP	ENVCLEANUP SPWPCS-Tons	32.06
4/30/2021	1601552	DEWITT CONSTRUCTION INC	168-MILL CREEK RESIDENTIAL TR	135241OR	203-PUP	ENVCLEANUP SPWPCS-Tons	30.43
4/30/2021	1601564	DEWITT CONSTRUCTION INC	168-MILL CREEK RESIDENTIAL TR	135241OR	201-PUP	ENVCLEANUP SPWPCS-Tons	33.03
4/30/2021	1601573	DEWITT CONSTRUCTION INC	168-MILL CREEK RESIDENTIAL TR	135241OR	21-PUP	ENVCLEANUP SPWPCS-Tons	30.57
4/30/2021	1601598	DEWITT CONSTRUCTION INC	168-MILL CREEK RESIDENTIAL TR	135241OR	203-PUP	ENVCLEANUP SPWPCS-Tons	33.22
4/30/2021	1601610	DEWITT CONSTRUCTION INC	168-MILL CREEK RESIDENTIAL TR	135241OR	201-PUP	ENVCLEANUP SPWPCS-Tons	32.13
4/30/2021	1601613	DEWITT CONSTRUCTION INC	168-MILL CREEK RESIDENTIAL TR	135241OR	21-PUP	ENVCLEANUP SPWPCS-Tons	31.71
5/7/2021	1602768	DEWITT CONSTRUCTION INC	168-MILL CREEK RESIDENTIAL TR	135241OR	55-SOLO	ENVCLEANUP SPWPCS-Tons	16.58
TOTALS:	**48 loads**						**1,499.04**

APPENDIX E

EXCAVATING TEST PITS WITHIN SMA ON APRIL 9, 2021

UNDOCUMENTED UST #2 UNEARTHED ON APRIL 12, 2021

NV5	MILLCREEK-19-04	**SUBJECT PROPERTY PHOTOGRAPHS**	
	MAY 2023	MODERA MORRISON PORTLAND, OR	**FIGURE E-1**

PUMPING CONTENTS OF UST #1 ON APRIL 20, 2021

USTS LOADED ONTO TRUCK FOR DISPOSAL ON APRIL 21, 2021

NV5	MILLCREEK-19-04	**SUBJECT PROPERTY PHOTOGRAPHS**	
	MAY 2023	MODERA MORRISON PORTLAND, OR	**FIGURE E-2**

REMEDIAL EXCAVATION ENCOMPASSING UNDOCUMENTED USTS #2, #7, AND #9 EXCAVATED ON MAY 7, 2021

REMOVING UNDOCUMENTED UST #8 ON MAY 11, 2021

N|V|5	MILLCREEK-19-04	**SUBJECT PROPERTY PHOTOGRAPHS**	
	MAY 2023	MODERA MORRISON PORTLAND, OR	**FIGURE E-3**

APPENDIX F

State of Oregon
Department of
Environmental
Quality

OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY
LEAKING UNDERGROUND STORAGE TANK PROGRAM

LUST Cost Recovery Agreement

This document serves as an agreement between the undersigned (hereinafter "you") and the Department of Environmental Quality (DEQ) regarding DEQ review and oversight of the investigation and/or cleanup of petroleum (hazardous substances) at the property located at:

Facility Name: Mill Creek Residential Trust

Address: 1120 SE Morrison Street

Portland, Oregon 97214

DEQ File No.: LUST No. 26-21-0394

DEQ agrees to review environmental documents submitted by you or on your behalf regarding the investigation and/or cleanup of the above-referenced site. Additional details regarding DEQ oversight will be established upon review of the initial site data.

DEQ requires that persons requesting DEQ review and oversight of investigation and cleanup activities agree to the terms of this cost recovery agreement and pay project oversight costs.

DEQ project oversight costs will include direct costs and indirect costs. Direct costs include site-specific expenses and legal costs. Indirect costs are those general management and support costs of the DEQ, including the Land Quality Division (LQ), allocable to DEQ oversight of this agreement and not charged as direct, site-specific costs. Indirect charges are based on a percentage of direct personal services costs. Review and oversight costs shall not include any unreasonable costs or costs not otherwise recoverable by DEQ under ORS 465.255.

DEQ costs are due within thirty (30) days of issuance of the monthly statement, by a check made payable to the "Department of Environmental Quality". Nine percent interest shall be charged on past due accounts.

Electing not to enter into this agreement does not release you from any responsibility that you might have for any reporting requirements, investigation and/or cleanup of petroleum (hazardous substances) at the above – referenced facility. This does not preclude the DEQ from conducting audits or inspections of all or portions of the investigation and cleanup activities associated with this facility. Enforcement action may be initiated if any violation of Oregon Administrative Rules (OAR) or Oregon Revised Statutes (ORS) is found.

DEQ File No: LUST No. 26-21-0394

Either DEQ or you may terminate this agreement by giving 15 days advance written notice to the other. Only those costs incurred or obligated by DEQ prior to the effective date of any termination of the agreement shall be recoverable under this agreement. Termination of this agreement will not affect any other right DEQ may have for recovery of costs under any applicable law.

You will hold DEQ harmless for any claims (including but not limited to claims of property damage or personal injury) arising from DEQ review and/or oversight activities under this agreement.

This agreement is not and shall not be construed to be an admission by you of any liability under ORS 465.255 or any other law or as a waiver by you of any defense to such liability. This agreement is not and shall not be construed to be a waiver, release, or settlement of claims that DEQ may have against you or any other responsible person nor is this agreement a waiver of any enforcement authority that DEQ may have.

The DEQ Tanks Program will be responsible for the review and oversight of the investigation and cleanup activities associated with the property. Please refer all site-specific inquiries to the DEQ Regional Offices in Northwest Region – Portland, Western Region – Salem or Eastern Region – Bend. For locations and phone numbers of the regional offices, please see the DEQ Regional Office list at http://www.deq.state.or.us/about/locations.htm

All inquiries regarding cost recovery and/or invoices should be directed to Dawn Ismerio at 503-229-5812.

If the terms of this agreement are acceptable, please have it executed by an authorized officer in the space provided below. In order to more effectively schedule your project, please return this agreement within 30 days of receipt to the regional office responsible for your site.

Accepted and agreed to this 30 day of June, 2022

By: Sam Rodriguez

Title: Senior Managing Director

Please provide the following information as to where the invoices should be sent.

Individual Name: Jennifer Sugarman

Title: Development Administrator

Company Name: Mill Creek Residential

Mail Address: 720 SW Washington St. Suite 720

City, State, Zip: Portland, OR 97205

Phone Number: 503-928-3948

E-mail Address: jsugarman@mcrtrust.com

APPENDIX G

KARL VAN ZANDT ENVIRONMENTAL CONSULTING
1523 Georgia AVE SE, Salem, Oregon
Karlvanzandt@gmail.com
Cell (503) 302-4078
Salem, Oregon
Serving the Mid-Willamette Valley

Underground Storage Tank Decommissioning Report

DEQ File 26-21-0394

Date: 4/3/22

Site: Mill Creek Residential Trust
1120 SE Morrison Street
Portland, OR 97214

Submitted to:

Cassidy Bolger
Mill Creek Residential Trust
1120 SE Morrison Street
Portland, Oregon 97214

Oregon DEQ Tank Program
700 NE Multnomah St # 600
Portland, Oregon 97232

Appendix 1

- DEQ May 3, 2021 Release Notification Letter
- DEQ Release Form General Information LUST Site
- DEQ Lust Cost Recovery
- DEQ 20 Day Report Form
- DEQ Soil Matrix Checklist
- DEQ Fact Sheet for Cost Recovery

Appendix 2

- Topographic Map Street Map
- Aerial Photographs
- Site Diagram
- Site Sample Diagrams Tanks 1 to 9
- Site Photographs

Appendix 3

- Soil Disposal Receipts Hillsboro Landfill
- Cherry City Metals
- Orrco Fluid Recycling

Appendix 4

- 1. Specialty Analytical 2104117
- 2. Specialty Analytical 2104118
- 3. Specialty Analytical 2104142
- 4. Specialty Analytical 2104143
- 5. Specialty Analytical 2104162
- 6. Specialty Analytical 2104163
- 7. Specialty Analytical 2104164
- 8. Specialty Analytical 2104165
- 9. Specialty Analytical 2104170
- 10. Specialty Analytical 2104171
- 11. Specialty Analytical 2104112
- 12. APEX A1E0409

Introduction.

On 4/14/21, Spartan Environmental Services LLC, and Karl Van Zandt Environmental Consulting LLC, was asked to inspect 4 discovered underground storage tanks at the subject property. At the end of the project 5 additional underground storage tanks were discovered.

Background is that Dewitt Construction was hired as the main contractor to re-develop an entire city block on the east side of Portland for Mill Creek Residential Trust. The property is boundaries are SE Morrison to the north, SE Belmont to the south, east is SE 12th, and west in SE 11th. GeoDesign was performing environmental engineering services with Dewitt to over see the removal of lead impacted and petroleum impacted soils. GeoDesign completed several direct push borings in 2019 prior to my involvement in the project.

With my arrival on the 4/14/21, all the buildings had been removed, and excavation was in progress to build the foundation for a new structure. All overburden soil excavated during foundation excavation process was being screened for petroleum and metals by GeoDesign, environmental engineers. Dewitt excavators loaded up impacted soil and hauled to either a clean soil site or Hillsboro Landfill.

Spartan Environmental and Karl Van Zandt disposed of liquid wastes from the underground tanks at ORRCO of Portland. A site-specific disposal manifest at Orrco was generated after the PS300 from the tanks was tested for hazardous waste. The heating oil did not need to be analyzed by the lab. No liquid gasoline waste fuel was generated, the gasoline had been absorbed into concrete slurry fill, and hauled to the landfill as solid waste.

SUMMARY OF TANK DECOMMISSIONING TOTAL OF 9 UNDERGROUND TANKS

Tank One (1) was a 3,000-gallon underground UST, which was originally suppling boiler fuel, PS300. This tank was located near the northeast corner of the property. The tank was constructed out of 3/8 thick steel with rivets attachments. The tank was 15 feet long and 6 feet wide. The tank had a central manway opening. The tank contained 1200 gallons of boiler fuel oil (PS300). The tank was pumped out and cleaned with high pressure water, prior to the removal of the tank. Fluids and solids from the tank were disposed of at ORRCO. The tank was sold for scrap metal to Bob's Metals in Portland. Three soil samples collected by Karl Van Zandt were analyzed by Specialty Analytical and found not to have any significant amounts of petroleum impacts. Two soil samples were collected under the tank and one soil sample of the overburden.

Tank Two (2) was a 675-gallon underground UST, which was heating oil tank that formerly contained diesel. This tank was located near the northwest corner of the property. The tank was constructed out of 12-gauge steel. The tank had been filled with sandy concrete slurry, and by all appearance the tank had been cleaned via triple rinsing prior to filling. The tank was 8 feet long and 4 feet wide. The tank steel top and sides were removed, and the concrete inside of the tank was removed. The tank was cut into pieces and taken to Bob's Metals in Portland. The concrete debris from inside of the tank was taken to Waste Management in Hillsboro by the Dewitt dump truck. Three soil samples collected by Karl Van Zandt were analyzed by Specialty Analytical and found not to have any significant amounts of petroleum impacts.

Tank Three (3) was a 675-gallon heating oil tank that which was originally suppling fuel oil, diesel. This tank was near the southwest corner of the property (10 feet north). The tank was constructed out of 12-

gauge steel. The tank was 8 feet long and 4 feet wide. The tanks contained 600 gallons of fuel oil (diesel). The tank was pumped out and cleaned with high pressure water, prior to the removal of the tank. Fluids and solids from the tank were disposed of at ORRCO. The tank was sold for scrap metal to Cherry City Metals in Salem. Three soil samples were collected by Karl Van Zandt were analyzed by Specialty Analytical and found to have any significant amounts of petroleum impacts. The tank leaked only at the south end, and a cleanup excavation was completed. All soil that was impacted was removed from the south end of tank, the excavation was 16 feet deep. Confirmation soil tests showed no diesel, no heavy oil and no gasoline contamination was detected. The soil was taken by Dewitt dump truck under permit to Hillsboro Landfill.

Tank Four (4) was a 675-gallon heating oil tank that which was originally suppling fuel oil, diesel. This tank was on the southwest corner of the property (laying next to tank 3). The tank was constructed out of 12-gauge steel. The tank was 8 feet long and 4 feet wide. The tanks contained 300 gallons of fuel oil (diesel). The tank was pumped out and cleaned with high pressure water, prior to the removal of the tank. Fluids and solids from the tank were disposed of at ORRCO. The tank was sold for scrap metal to Cherry City Metals in Salem. Three soil samples were collected by Karl Van Zandt were analyzed by Specialty Analytical and found Not to have any significant amounts of petroleum impacts.

Tank five (5) was a 1,000-gallon underground UST, which was originally suppling boiler fuel, PS300. This tank was located on the south side of the property under the sidewalk. The tank was constructed out of 1/4 thick steel with rivets attachments. The tank was 12 feet long and 4 feet wide. The tank contained 300 gallons of fuel oil. The tank was pumped out and cleaned with high pressure water, prior to the removal of the tank. Fluids and solids from the tank were disposed of at ORRCO. The tank was sold for scrap metal to Cherry City Metals in Salem. Three soil samples collected by Karl Van Zandt were analyzed by Specialty Analytical and found not to have any significant amounts of petroleum impacts. Three samples were collected under the tank.

Tank six (6) was a 1,000-gallon underground UST, which was originally suppling boiler fuel, PS300. This tank was located on the south side of the property under the sidewalk. The tank was constructed out of 1/4 thick steel with rivets attachments. The tank was 12 feet long and 4 feet wide. The tank contained 300 gallons of fuel oil. The tank was pumped out and cleaned with high pressure water, prior to the removal of the tank. Fluids and solids from the tank were disposed of at ORRCO. The tank was sold for scrap metal to Cherry City Metals in Salem. Three soil samples collected by Karl Van Zandt were analyzed by Specialty Analytical and found not to have any significant amounts of petroleum impacts. Three samples were collected under the tank.

Tank Seven (7) was a 675-gallon heating oil tank that which was originally suppling fuel oil, diesel. This tank was near the northwest corner of the property buried under and adjacent to tank 2. The tank was constructed out of 12-gauge steel. The tank was 8 feet long and 4 feet wide. The tanks contained fuel oil (diesel) impacted concrete slurry and sand. The tank was pulled from the ground and set on plastic, and oily concrete and was removed from the tank. There was leakage into the soil below the tank, which was immediately removed from under the tank. The cleanup excavation was completed to a depth of twelve 12 feet. Impacted soil and concrete from the tank were disposed of at Hillsboro Landfill. The tank was sold for scrap metal to Cherry City Metals in Salem. After cleanup seven (7) soil samples were collected by Karl Van Zandt were analyzed by Specialty Analytical and found Not to have any significant amounts of petroleum impacts remaining after cleanup.

Tank eight (8) was a 675-gallon gasoline tank which had been partially decommissioned with concrete slurry and sand. This tank was buried next to tank 3, and this tank lay 8 feet north of tank three, along the sidewalk. Due to the unknown nature of the soil contamination at the south end of tank 8, one soil samples was collected and analyzed for hazardous waste. The landfill requested this soil analysis. Dewitt used this sample to characterize for the soil disposal permit when cleanup occurred. Karl Van Zandt worked with the client to get a UST Decommissioning permit after registering the tank. The tank was removed from the ground and placed directly into a dump trailer, and rushed off site due to the volatile gassy concrete was trapped inside the tank. The tank was taken to Spartan facility and cut and cleaned. The concrete was allowed to aerate for 20 days, and taken to Hillsboro Landfill. The steel tank was taken to Cherry City Metals. Karl Van Zandt and GeoDesign directed the soil cleanup under tank 8. When it appeared that all of the gasoline impacted soil had been removed GeoDesign tested the soil in the cleanup pit. 35 tons of soil was taken to Hillsboro Landfill, on 5/7/22.

Tank nine (9) was a 500-gallon gasoline tank which had been decommissioned with a concrete slurry fill. This tank was buried under the access ramp near the northwest corner of the property. The tank was constructed out of 12-gauge steel. The tank was 6 feet long and 4 feet wide. The tank was removed from the ground and placed directly into a dump trailer, and rushed off site due to the volatile gassy concrete stuck inside of the tank. The tank was taken to Spartan facility and cut and cleaned. The concrete was allowed to aerate for 20 days, and taken to Hillsboro Landfill. The steel tank was taken to Cherry City Metals. Geodesign collected soil samples from under the tank to confirm that the tank did not leak.

Tank Decommissioning's 1 to 9

Associated contractors:

Spartan Environmental Services, KC Schraf 503.383.8412, Karl Van Zandt Environmental Consulting, Karl Van Zandt 503.302.4078, Oil ReRefinning (ORRCO) 503.546.3560, Hillsboro Landfill soil disposal facility 503.519.3959, Specialty Analytical Lab, soil testing, 503.667.1331. Cherry City Metals 503.588.0721. Bob's Metals 503.295.3636. Dewitt 360.726.7178

Tank ONE:

On April 14, 2021, while completing an earth moving during a demolition project Dewitt Construction uncovered a 3000 gallon underground tank. Karl Van Zandt Environmental Consulting was contacted by Spartan Environmental Services, and then dispatched Karl Van Zandt DEQ licensed environmental supervisor from Spartan to assess the tanks and collect soil samples. These soil samples were used to confirm if there was any soil contamination. Karl Van Zandt also collected a samples of the spent fuel PS300 from inside three tanks to obtain a waste manifest profile for ORRCO.

Over burden from above the top of tank one was side cast into an approximately 4 cubic yard pile, one soil sample was obtained and tested. No significant soil contamination was detected in the overburden soil pile. As a precaution this soil was taken to Hillsboro Landfill with other surface cleanup soil. The

company that was directing the surface soil cleanup was GeoDesign, and the soil hauled to landfill under a permit that Dewitt held.

4/16/21 Karl Van Zandt supervised the pumping and cleaning of Tank One, 1500 gallons of fuel oil and water, and another 300 gallons of oily solids were removed from the tank. 4/17/21 Dewitt Construction had Bob's Metals remove the tank for recycling.

Table A. Tank One Soil Sample Results

Results of soil samples in mg/Kg or parts per million (ppm)

Date	Lab ID	Sample ID	Depth	Diesel	Lube Oil
4/20/21	2104162-1	TK-1 South	120 inches	Not detected	Not detected
4/20/21	2104162-2	TH-1 Center (north end)	100 inches	Not detected	Not detected
4/14/21	2104117-1	Soil Pile TK1	1 foot	27.8 ppm	76.7 ppm

Tank TWO:

On April 14, 2021, while completing an earth moving during a demolition project Dewitt Construction uncovered a 675-gallon underground tank. Karl Van Zandt Environmental Consulting was contacted by Spartan Environmental Services, and then dispatched Karl Van Zandt DEQ licensed environmental supervisor from Spartan to assess the tanks and collect soil samples. These soil samples were used to confirm if there was any soil contamination.

Over burden from above the top of tank one was side cast into an approximately 2 cubic yard pile, and significant soil contamination was detected in the overburden soil pile.

4/16/21 Karl Van Zandt supervised the removal of tank the tank was full of sandy concrete slurry. The tank concrete fill was taken to Hillsboro Landfill with other surface cleanup soil. The company that was directing the surface soil cleanup was GeoDesign, had a site specific landfill disposal permit with Dewitt. 4/17/21 Dewitt Construction had Bob's Metals remove the tank for recycling.

Table B. Tank Two Soil Sample Results

Results of soil samples in mg/Kg or parts per million (ppm)

Date	Lab ID	Sample ID	Depth	Diesel	Lube Oil
4/16/21	2104142-1	TK2 West	7.0 feet	35.7 ppm	Not detected
4/16/21	2104142-2	TK2 East	7.0 feet	21.0 ppm	Not detected
4/14/21	2104118-1	TK2 Center	7.75 feet	30.6 ppm	Not detected

Tank Three:

On April 20, 2021, while completing an earth moving during a demolition project Dewitt Construction uncovered a 675-gallon underground tank. Tank Three (3) was a 675-gallon heating oil tank that which was originally suppling fuel oil, diesel. This tank was near the southwest corner of the property (10 feet north). The tank was constructed out of 12-gauge steel. The tank was 8 feet long and 4 feet wide. The tanks contained 600 gallons of fuel oil (diesel). The tank was pumped out and cleaned with high pressure water, prior to the removal of the tank. Fluids and solids from the tank were disposed of at ORRCO. The tank was sold for scrap metal to Cherry City Metals in Salem. Three soil samples were collected by Karl Van Zandt were analyzed by Specialty Analytical and found to have significant amounts of petroleum impacts. The tank leaked only at the south end, and a cleanup excavation was completed. All soil that was impacted was removed from the south end of tank, the excavation was 16 feet deep. Confirmation soil tests showed no diesel, no heavy oil and no gasoline contamination was detected. The soil was taken by Dewitt under permit to Hillsboro Landfill, and approximately 25 cubic yards of soil from under tank 3 was removed.

Table C. Tank Three Soil Sample Results

Results of soil samples in mg/Kg or parts per million (ppm)

Date	Lab ID	Sample ID	Depth	Diesel	Lube Oil
4/20/21	2104165-1	TK 3 North	7.0 feet	Not detected	Not detected
4/20/21	2104165-2	TK 3 Center	7.0 feet	Not detected	Not detected
4/20/21	2104165-3	TK 3 South	7.0 feet	52,300 ppm	643 ppm

Table D. Tank Three Cleanup Confirmation Soil Sample Results

Results of soil samples in mg/Kg or parts per million (ppm)

Date	Lab ID	Sample ID	Depth	Diesel / Lube	Gasoline
4/21/21	2104171-1	Excavation TK3 West	16 feet	Not detected/ Not detected	Not detected
4/21/21	2104171-2	Excavation TK3 East	16 feet	Not detected/ Not detected	Not detected
4/21/21		Excavation TK3 Side 1 west	6 feet	Not detected/ Not detected	N/A
4/21/21		Excavation TK3 Side 2 west	7 feet	Not detected/ Not detected	N/A
4/21/21		Excavation TK3 Side 3 east	6 feet	37.1 ppm/ Not detected	N/A
4/21/21		Excavation TK3 Side 4 east	6 feet	Not detected/ Not detected	N/A

Tank FOUR:

On April 20, 2021, Tank Four (4) was a 675-gallon heating oil tank that was also decommissioned by removal. This tank was on the southwest corner of the property (lying next to tank 3). The tank was constructed out of 12-gauge steel. The tank was 8 feet long and 4 feet wide. The tanks contained 300 gallons of fuel oil (diesel). The tank was pumped out and cleaned with high pressure water, prior to the removal of the tank. Fluids and solids from the tank were disposed of at ORRCO. The tank was sold for scrap metal to Cherry City Metals in Salem. Three soil samples were collected by Karl Van Zandt were analyzed by Specialty Analytical and found Not to have any significant amounts of petroleum impacts over 500 ppm.

500 ppm is the soil matrix cleanup level set for the subject property, Soil Matrix Score Sheet is included in the appendix.

Table E. Tank Four Soil Sample Results

Results of soil samples in mg/Kg or parts per million (ppm)

Date	Lab ID	Sample ID	Depth	Diesel	Lube Oil
4/20/21	2104165-4	TK 4 North	7.0 feet	345 ppm	Not detected
4/20/21	2104165-5	TK 4 Center	7.0 feet	33.6 ppm	Not detected
4/20/21	2104165-6	TK 4 South	7.0 feet	Not detected	Not detected

Tanks Five and Six:

On April 20, 2021, while completing site assessment tanks 5 and 6 were observed too have fill ports in the sidewalk. Tanks 5 and 6 were placed end to end. So only one soil sample was collected where the two ends meet.

Tank five (5) was a 1,000-gallon underground UST, which was originally suppling boiler fuel, PS300. This tank was located on the south side of the property under the sidewalk. The tank was constructed out of 1/4 thick steel with rivets attachments. The tank was 12 feet long and 4 feet wide. The tank contained 300 gallons of fuel oil. The tank was pumped out and cleaned with high pressure water, prior to the removal of the tank. Fluids and solids from the tank were disposed of at ORRCO. The tank was sold for scrap metal to Cherry City Metals in Salem. Three soil samples collected by Karl Van Zandt were analyzed by Specialty Analytical and found not to have any significant amounts of petroleum impacts. Three samples were collected under the tank.

Tank six (6) was a 1,000-gallon underground UST, which was originally suppling boiler fuel, PS300. This tank was located on the south side of the property under the sidewalk. The tank was constructed out of 1/4 thick steel with rivets attachments. The tank was 12 feet long and 4 feet wide. The tank contained 300 gallons of fuel oil. The tank was pumped out and cleaned with high pressure water, prior to the removal of the tank. Fluids and solids from the tank were disposed of at ORRCO. The tank was sold for scrap metal to Cherry City Metals in Salem. Three soil samples collected by Karl Van Zandt were

analyzed by Specialty Analytical and found not to have any significant amounts of petroleum impacts. Three samples were collected under the tank.

Table F. Tank Five and Tank Six Soil Sample Results

Results of soil samples in mg/Kg or parts per million (ppm)

Date	Lab ID	Sample ID	Depth	Diesel	Lube Oil
4/20/21	2104163-1	TK 6 North	71 inches	Not detected	Not detected
4/20/21	2104163-2	TK 6 Center	6.0 feet	31.1 ppm	Not detected
4/20/21	2104163-3	TK (5-6)	70 inches	Not detected	Not detected
4/20/21	2104163-4	TK 5 West	70 inches	Not detected	Not detected
4/20/21	2104163-5	TK 5 Center	74 inches	Not detected	Not detected

Tank Seven:

On April 20, 2021, while excavating out an access ramp another decommissioned inplace underground storage tank was discovered.

Tank Seven (7) was a 675-gallon heating oil tank that which was originally suppling fuel oil, diesel. This tank was near the northwest corner of the property buried adjacent to former tank 2. The tank was constructed out of 12-gauge steel. The tank was 8 feet long and 4 feet wide. The tanks contained fuel oil (diesel) impacted concrete slurry and sand. The tank was pulled from the ground and set on plastic, and oil concrete and was removed from the tank. There was leakage into the soil below the tank, which was immediately removed from under the tank, no soil sample of the most contaminated soil was collected. The cleanup excavation was completed to a depth of twelve 12 feet. Impacted soil and concrete from the tank were disposed of at Hillsboro Landfill. The tank was sold for scrap metal to Cherry City Metals in Salem. After cleanup seven (7) soil samples were collected by Karl Van Zandt were analyzed by Specialty Analytical and found Not to have any significant amounts of petroleum impacts remaining after cleanup.

The amount of cleanup was approximately 20 cubic yards.

Table G. Tank Seven Soil Sample Results

Results of soil samples in mg/Kg or parts per million (ppm)

Date	Lab ID	Sample ID	Depth	Diesel	Lube Oil
4/20/21	2104164-1	TK7- South	12 ft	Not detected	Not detected
4/20/21	2104164-2	TK7- Center	12 ft	Not detected	Not detected
4/20/21	2104164-3	TK7- North	12 ft	Not detected	Not detected
4/20/21	2104164-4	TK7- East Side	6 ft	Not detected	Not detected
4/20/21	2104164-5	TK7- West Side	7 ft	Not detected	Not detected
4/20/21	2104164-6	TK7- North Side	6 ft	Not detected	Not detected
4/20/21	2104164-7	TK7- South Side	7 ft	Not detected	Not detected

Tank Eight :

On April 21, 2021, while excavating out contaminated soil at tank 3, tank 8 was discovered. On 5/1/21 tank 8 was removed from the ground.

Tank eight (8) was a 675-gallon gasoline tank which had been partially decommissioned with concrete slurry and sand. This tank was buried next to tank 3, and this tank lay 8 feet north of tank three, along the sidewalk. Due to the unknown nature of the soil contamination at the south end of tank 8, one soil samples were collected and analyzed for hazardous waste. The landfill requested this soil analysis, specialty analytical report 2104172. Dewitt used this sample to characterize for the soil disposal permit when cleanup occurred. Karl Van Zandt worked with the client to get a UST Decommissioning permit after registering the tank. The tank was removed from the ground and placed directly into a dump trailer and rushed off site due to the volatile gassy concrete. The tank was taken to Spartan facility and cut and cleaned. The concrete was allowed to aerate for 20 days and taken to Hillsboro Landfill. The steel tank was taken to Cherry City Metals. Karl Van Zandt and Geode sign directed the soil cleanup under tank 8. Geodis tested the soil in the cleanup pit. The amount of cleanup is unknown GeoDesign and Dewitt directed the cleanup. Below is a table of the draft report results from APEX Lab completed by Geodesign. The soil excavation was 14.0 ft when the cleanup was completed.

Table H. Tank Eight Soil Sample Results

Results of soil samples in mg/Kg or parts per million (ppm)

Date	Lab ID	Sample ID	Depth	Gasoline
5/11/21	A1E0409-1	TK8- Side East	8 ft	Not detected
5/11/21	A1E0409-2	TK-8- Side North	7 ft	28.8 ppm
5/11/21	A1E0409-3	TK-8- Side South	8 ft	25,100 ppm
5/11/21	A1E0409-4	TK-8- Side West	8 ft	7500 ppm
5/11/21	A1E0409-5	TK-8- Side 2 West	8 ft	39,500 ppm
5/11/21	A1E0409-6	TK-8- Side 3 West	10 ft	Not detected
5/11/21	A1E0409-7	TK-8- Bottom North	9.5 ft	Not detected
5/11/21	A1E0409-8	TK-8- Bottom South	11.5 ft	231 ppm
5/11/21	A1E0409-9	TK-8- Bottom South	14.0 ft	Not detected

Tank Nine :

On April 29, 2021, while excavating the ramp, tank 9 was discovered. Tank nine (9) was a 500-gallon gasoline tank which had been decommissioned with a concrete slurry fill. This tank was buried under the access ramp near the northwest corner of the property. The tank was constructed out of 12-gauge steel. The tank was 6 feet long and 4 feet wide. The tank was removed from the ground and placed directly into a dump trailer and rushed off site due to the volatile gassy concrete. The tank was taken to Spartan facility and cut and cleaned. The concrete was allowed to aerate for 20 days and taken to Hillsboro Landfill. The steel tank was taken to Cherry City Metals. GeoDesign collected soil samples from under the tank to confirm that the tank did not leak. I have no soil sample results from GeoDesign.

Analysis, Conclusions, and Recommendations

The removal of the nine tanks, has allowed access for the building of the planned structure. Excavation cleanup removed the soil impacted by the petroleum underground tanks. The soil excavation cleanup process removed the impacted soil from the site and transferred to Hillsboro Landfill.

The next phase would be a prepare a Corrective Action Report from GeoDesign, to be submitted to Oregon DEQ Project manager, for review. This report would include details of the 2019 investigation, the metals in the soil cleanup, and the missing soil disposal receipts. GeoDesign would also need to provide all applicable Laboratory Data Reports (finals and not drafts) from Apex Laboratories. The first step after the submittal of this report would be to get a DEQ Project Manager, and Mill Creek Residential Trust representative would need to sign a DEQ Cost Recovery Agreement.

From my experience the conclusion to the project would involve DEQ project manager, review and answering any questions the manager would have. Concluding with a new NO FURTHER ACTION Letter for the site. This could take 6 months to a year for the DEQ to complete.

Sincerely

Karl Van Zandt

Karl Van Zandt, Environmental Project Manager

c. 503.302.4078

email Karlvanzandt@gmail.com

Appendix 1

- DEQ May 3, 2021 Release Notification Letter
- DEQ Release Form General Information LUST Site
- DEQ Lust Cost Recovery
- DEQ 20 Day Report Form
- DEQ Soil Matrix Checklist
- DEQ Fact Sheet for Cost Recovery

Oregon
Kate Brown, Governor

Department of Environmental Quality
Northwest Region
700 NE Multnomah Street, Suite 600
Portland, OR 97232
(503) 229-5263
FAX (503) 229-6945
TTY 711

May 3, 2021

Cassidy Bolger
Mill Creek Residential Trust
1120 SE Morrison Street
Portland, OR 97214

RE: Cleanup Needed for Petroleum Leak
Mill Creek Residential Trust
1120 SE Morrison Street, Portland, OR
DEQ File No.: 26-21-0394

Dear Mr. Bolger,

The Oregon Department of Environmental Quality (DEQ) was notified on May 3, 2021 of a petroleum leak associated with an underground storage tank system at 1120 SE Morrison Street, Portland, Oregon. This leak appears to have contaminated soil and/or groundwater with petroleum products.

We understand that you have current or past ownership or operational responsibility for the property and the underground storage tank system. Oregon law considers you a responsible party for environmental cleanup, and you are required to clean up this contamination to a level that protects human health and the environment. If you believe you are not a responsible party for this petroleum leak, please contact us immediately so that we can review the ownership and facility operation records for the property.

If you choose to hire and rely upon a qualified contractor or consultant, DEQ recommends that you still become familiar with Oregon's environmental cleanup requirements. A copy of the Underground Storage Tank Cleanup Manual and other guidance documents can be obtained by calling our toll-free number at 1-800-742-7878 or by visiting the following web sites:

https://www.oregon.gov/deq/FilterDocs/USTCleanupManual.pdf
https://www.oregon.gov/deq/tanks/Pages/Cleanup-Guidance.aspx

We are committed to helping you achieve a cost-effective environmental cleanup of the release from this underground storage tank system. When the cleanup of this petroleum release meets Oregon standards, DEQ will be able to close the file by issuing a "No Further Action" letter to you.

You will need DEQ oversight for your work to help you make sure that your environmental cleanup meets minimum regulatory and technical standards. Oregon law requires DEQ to invoice responsible parties for staff time spent on oversight of cleanup projects. DEQ tracks and bills for this time monthly, beginning with the reporting of the release and continuing through project oversight and final site closure. Staff time may include reviewing reports, preparing correspondence, answering technical questions, meeting with you or your contractor, site inspections, and enforcement actions.

Please complete, sign, and submit the enclosed Cost Recovery Agreement if you would like to expedite assignment of a DEQ project manager to your project. Even if you do not sign the agreement, you are still responsible for investigation and/or cleanup of the contamination, as well as for DEQ oversight costs. Note that DEQ staff workloads are heavy and there may be a delay in assigning your cleanup project to a project manager.

Please also complete and return the enclosed 20-day Report within twenty (20) days from the date of this letter, as required under Oregon Administrative Rule (OAR) 340-122-0225(3). You also have additional reporting obligations, as listed in the attachment, including due dates for various documents that you will need to provide to DEQ.

We realize that environmental cleanups are expensive and that our requirements can be difficult to understand, so please do not hesitate to contact the DEQ with any questions you may have. Please reference the DEQ file number and site name listed above in all inquiries and reports. If you have any questions, please contact our Program Coordinator, Ximena Cruz-Cuevas, at (503) 229-6811.

Sincerely,

Kevin Parrett, Manager
DEQ NWR Cleanup and Tanks

Enclosures

Oregon Department of Environmental Quality
Mill Creek Residential Trust

Summary Information

General Site Information

26-21-0394

Site Name:	Mill Creek Residential Trust
Address:	1120 SE Morrison St PORTLAND, 97214
County:	MULTNOMAH
Project Manager	N/A - Currently Unassigned.

Basic Incident Information

Received Date:	05/03/2021
Status:	UNASSIGNED
Tank Type:	Regulated Tank
UST Facility Id:	6680

Assessment Information

Cause of Release:	CORROSION	**Source of Release:**	TANK	**Discovery Method:**	DECOMMISSIONING
Media Effected		**Contaminants Released**			
>Soil		>Heating Oil			

Management Information

Release Stopped Date:	**Cleanup Start Date:**	**Cleanup End Date:**

This website application cannot be made compliant with the Americans with Disabilities Act. We apologize for any inconvenience and invite you to contact DEQ at 800-452-4011 or email deqinfo@deq.state.or.us for assistance in accessing this site

Department of Environmental Quality
700 NE Multnomah Street, Suite 600 Portland, OR 97232
Hours: Mon-Fri, 8 a.m.-5 p.m

Email: DEQInfo@deq.state.or.us | Phone: 503-229-5696 | Fax: 503-229-6124

OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY
UNDERGROUND STORAGE TANK PROGRAM

State of Oregon Department of Environmental Quality

Initial (Twenty Day) Report Form for UST Cleanup Projects

This report is due twenty (20) days from the date of the release.

DEQ USTC File No. 26-21-0394

DEQ Facility ID No. 6680

Site Name: Mill Creek Residential Trust

Site Address: 1120 SE Morrison St. Portland, OR 97214

INITIAL CLEANUP INFORMATION

(1) Type of contamination (check √ all that apply):

☒ Gasoline ☒ Diesel ☐ Waste Oil ☒ Heating Oil

☐ Other (specify) _____

(2) Estimate quantity of release (based on information known to date – • select only one):

○ <100 gal. ⊗ 100-499 gal. ○ 500-999 gal. ○ 1,000-5,000 gal. ○ >5,000 gal.

SITE INFORMATION (check √ yes or √ no)

(3) ☐ Y ☒ N Did any water enter the excavation? If yes, please describe and identify the depth to groundwater in feet below ground surface: _____

(4) ☐ Y ☒ N Was a sheen or odor observed on any water in the excavation?

Note: If groundwater is encountered, soil samples from the soil/water interface must be collected and analyzed for BTEX and by the appropriate TPH method.

At sites where diesel or other non-gasoline products have been released, the water may also have to be screened or tested for polynuclear aromatic hydrocarbons (PAHs). *Please refer to OAR 340-122-0218.*

(5) ☐ Y ☒ N Was water pumped from the excavation?

☐ Y ☒ N If yes, did groundwater recharge within 24 hours after pumping?

Please describe the pumping procedure and disposal option selected for the purged excavation water:

(6) ☒ Y ☐ N Were any water samples collected from the excavation? If yes, please describe:
THERE WERE NINE TANKS; SEE Report

(7) ☒ Y ☐ N Have any soil and/or water sample results been received at this time?

If so, please attach any lab reports.
SEE Report

IF GROUNDWATER HAS BEEN ENCOUNTERED, PLEASE ANSWER QUESTIONS #8-13, BELOW.
IF NO WATER HAS BEEN ENCOUNTERED, PLEASE SKIP TO QUESTION #14

(8) What are the known uses of groundwater within a 500-foot radius of the release site (check √ all that apply)?

[√] non-use [ ] industrial [ ] agricultural [ ] drinking supply

(9) If groundwater in this area is being used as a drinking water supply, please check √ the type and size of population served by the supply:

[ ] Community (community well used for drinking water year round – • select only one)

size: ◯ <1,000 people ◯ 1,000 - 5,000 people ◯ >5,000 people

[ ] Intermittent use (public water used for drinking water only on a part-time basis – • select only one)

size: ◯ <50 people ◯ 50 - 300 people ◯ > 300 people

[ ] Private wells (individual private well or wells used for drinking water – • select only one)

size: ◯ <10 people ◯ 10 - 25 people ◯ >25 people

(10) [ ] Y [√] N Is there any evidence this water supply has been or is likely to be impacted from the petroleum product release? If yes, estimate how difficult it would be to replace the existing supply:

[ ] bottled water is the only alternative

[ ] on-site water treatment; bulk water delivery; new wells are available

[ ] able to connect to existing water supply

[ ] do not know what alternatives would be available

(11) [ ] Y [√] N Are/were vapors present in on-site or nearby buildings? If yes:

A. Are you monitoring and/or mitigating any potential fire and safety hazards posed by vapors and free product? Explain:

_____

B. Estimate the number of people potentially affected by vapors – • select only one:

◯ 1-2 people ◯ 3-10 people ◯ >10 people

(12) [ ] Y [√] N Are vapors or is petroleum contamination present in the utility corridors? If yes, please explain:

_____

(13) [ ] Y [√] N Are natural areas located within 1/4 mile of the site? If so, please describe types (parks, rivers, wetlands, sensitive habitats, *etc.*) and proximity: _____

_____

(14) [ ] Y [√] N If groundwater was not encountered in the excavation, do you believe that this cleanup project can be conducted under the requirements for an UST Cleanup Matrix site? If yes, then refer to OAR 340-122-0305 through 0360.

AREA/SITE CONDITIONS:

(15) Mean annual rainfall: ◯ <20 inches ✓ 20-45 inches ◯ >45 inches

(16) Soil type(s) of the naturally occurring soils, not the backfill around the tank -- • select only one:

◯ clays, compact tills, shales, and unfractured metamorphic and igneous rocks

✓ sandy loams, loamy sands, silty clays, clay loams, moderately permeable limestone, dolomite, sandstones, moderately fractured igneous and metamorphic rock

◯ fine and silty sands, sands and gravels, highly fractured igneous and metamorphic rock, permeable basalts and lavas, karst limestones and dolomites

SOIL MANAGEMENT

(17) If soil sample results have been received:

☑ Y ☐ N Will the level of contamination detected require removal of contaminated soil for treatment or disposal?

(18) All contaminated soil temporarily stockpiled on-site prior to treatment or disposal must be contained within a bermed area, kept covered, and the entire area secured to prevent unauthorized access by the public. If you haven't done this, please explain why:

Note: It is a violation to stockpile petroleum contaminated soil (PCS) on-site for greater than 30 days without a DEQ Solid Waste Letter Authorization (SWLA) Permit.

(19) If contaminated soil is currently stockpiled on-site, please indicate when disposal will occur or when treatment will begin: _____

(20) Estimated volume of contaminated soil (specify tons or cubic yards): Unknown

(21) Intended disposition of soils (please • select only one):

◯ On-site/off-site treatment, Solid Waste Letter Authorization Permit Application attached.

◯ Thermal treatment off-site at an authorized facility.
Facility name: _____

⊗ Landfill disposal.
Name of Landfill: Hillsboro Landfill

Note: Please attach additional information as necessary to explain any unusual circumstances associated with this project.

This initial report is intended to provide the Department with the basic initial information about activities associated with the release. Future reports should provide a more detailed and complete picture of the cleanup project.

Please be aware that a DEQ permit/authorization is required for the following activities:

1) Soil aeration, bioremediation (on-site or off-site), or on-site thermal treatment.

2) Water discharges to a stream/storm drain from the excavation or treatment tank.

If these activities will be included in your cleanup project, contact the regional DEQ office for the appropriate application forms, information on permit fees and guidance documents.

THIS REPORT WAS PREPARED BY:

Individual: Karl VanZandt Date: 4-4-22

Company: Karl VanZandt Environmental Phone: 5033024078

Address: 1523 Georgia Ave SE

City: Salem, Or 97302 State OR Zip 97302

1. Please return this form to the regional office in which the site is located. If you have questions, call the contact person in your regional office.

2. For all tanks, <u>except heating oil tanks</u>, you must submit an *UST Decommissioning Checklist and Site Assessment Report* to the appropriate regional office <u>within 30 days</u> of the UST decommissioning. Failure to do so can result in delays to your project and may result in continued billing for the annual tank permit fees.

3. Addresses and phone numbers for the regional offices can be found in the *UST Cleanup Manual* or viewed and downloaded from this DEQ Webpage: <u>http://www.deq.state.or.us/about/locations.htm</u>

4. Copies of the *UST Cleanup Manual* and other UST program forms and checklists can be viewed and downloaded from DEQ's Website: <u>http://www.deq.state.or.us/lq/tanks/ust/index.htm</u>

or in the Portland area by calling Steve Paiko at 503-229-6652

or outside the Portland area leaving a message on the UST Help Line (toll-free in Oregon) at 1-800-742-7878

<u>KEEP A COPY OF THIS REPORT FOR YOUR FACILITY RECORDS</u>

State of Oregon Department of Environmental Quality

OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY
LEAKING UNDERGROUND STORAGE TANK PROGRAM

LUST Cost Recovery Agreement

This document serves as an agreement between the undersigned (hereinafter "you") and the Department of Environmental Quality (DEQ) regarding DEQ review and oversight of the investigation and/or cleanup of petroleum (hazardous substances) at the property located at:

Facility Name: Mill Creek Residential Trust

Address: 1120 SE Morrison St.
Portland, OR 97214

DEQ File No.: 26-21-0394

DEQ agrees to review environmental documents submitted by you or on your behalf regarding the investigation and/or cleanup of the above-referenced site. Additional details regarding DEQ oversight will be established upon review of the initial site data.

DEQ requires that persons requesting DEQ review and oversight of investigation and cleanup activities agree to the terms of this cost recovery agreement and pay project oversight costs.

DEQ project oversight costs will include direct costs and indirect costs. Direct costs include site-specific expenses and legal costs. Indirect costs are those general management and support costs of the DEQ, including the Land Quality Division (LQ), allocable to DEQ oversight of this agreement and not charged as direct, site-specific costs. Indirect charges are based on a percentage of direct personal services costs. Review and oversight costs shall not include any unreasonable costs or costs not otherwise recoverable by DEQ under ORS 465.255.

DEQ costs are due within thirty (30) days of issuance of the monthly statement, by a check made payable to the "Department of Environmental Quality". Nine percent interest shall be charged on past due accounts.

Electing not to enter into this agreement does not release you from any responsibility that you might have for any reporting requirements, investigation and/or cleanup of petroleum (hazardous substances) at the above – referenced facility. This does not preclude the DEQ from conducting audits or inspections of all or portions of the investigation and cleanup activities associated with this facility. Enforcement action may be initiated if any violation of Oregon Administrative Rules (OAR) or Oregon Revised Statutes (ORS) is found.

DEQ File No: 26-21-0394

Either DEQ or you may terminate this agreement by giving 15 days advance written notice to the other. Only those costs incurred or obligated by DEQ prior to the effective date of any termination of the agreement shall be recoverable under this agreement. Termination of this agreement will not affect any other right DEQ may have for recovery of costs under any applicable law.

You will hold DEQ harmless for any claims (including but not limited to claims of property damage or personal injury) arising from DEQ review and/or oversight activities under this agreement.

This agreement is not and shall not be construed to be an admission by you of any liability under ORS 465.255 or any other law or as a waiver by you of any defense to such liability. This agreement is not and shall not be construed to be a waiver, release, or settlement of claims that DEQ may have against you or any other responsible person nor is this agreement a waiver of any enforcement authority that DEQ may have.

The DEQ Tanks Program will be responsible for the review and oversight of the investigation and cleanup activities associated with the property. Please refer all site-specific inquiries to the DEQ Regional Offices in Northwest Region – Portland, Western Region – Salem or Eastern Region – Bend. For locations and phone numbers of the regional offices, please see the DEQ Regional Office list at http://www.deq.state.or.us/about/locations.htm

All inquiries regarding cost recovery and/or invoices should be directed to Dawn Ismerio at 503-229-5812.

If the terms of this agreement are acceptable, please have it executed by an authorized officer in the space provided below. In order to more effectively schedule your project, please return this agreement within 30 days of receipt to the regional office responsible for your site.

Accepted and agreed to this _____ day of _____, 20_____

By: _____

Title: _____

Please provide the following information as to where the invoices should be sent.

Complete

Individual Name: _____

Title: _____

Company Name: _____

Mail Address: _____

City, State, Zip: _____

Phone Number: _____

E-mail Address: _____

OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY
Underground Storage Tank Program

SOIL MATRIX CHECKLIST AND SOIL MATRIX SCORESHEET

State of Oregon Department of Environmental Quality

☑ 1. The release of petroleum has been reported to the DEQ (0220).

☑ 2. The matrix score sheet has been completed for this site, unless the site is cleaned up to the most stringent cleanup level (0320).

☑ 3. The required hydrocarbon identification test (NWTPH-HCID) has been performed (0335(3)), and, if detectable levels were found, the appropriate analytical method or methods have been used to measure the levels of contamination (0218).

☑ 4. A sketch has been made of this site (0345(1)) which clearly shows:

- ☑ a. The location of all buildings and other key features, both man-made and natural;
- ☑ b. The names of adjacent streets and properties;
- ☑ c. The location of all excavations including those that were for the removal of tanks and associated piping as well as those that were strictly for the removal of contaminated soils;
- ☑ d. The location of all product storage tanks, lines and dispensers, including those that were decommissioned as well as those that remain on the site; and
- ☑ e. All soil and water sample locations.

☑ 5. If any contaminated soil exceeding matrix limits has been left on site, the reason for leaving this soil has been explained and the requirements of 0340(1)(f) and 0355(4) have been met.

☐ 6. If water was present in the tank pit, the Department was notified, the water was pumped from the pit, and the requirements of 0340(4) have been met.

☑ 7. All soil and/or water samples have been collected, coded, stored and shipped as specified in the rules, and proper chain-of-custody forms have been filled out (0345).

☐ 8. If a release from a waste oil tank was discovered, at least one sample has been analyzed by the methods specified in 0218(1)(b)(D).

☐ 9. If a tank was decommissioned in place, the Department gave prior approval for a site-specific sampling plan (0340(5)).

☑ 10. A report has been prepared which includes a detailed description of everything that was observed and performed at the site, contains all of the information required by the rules (0360), and presents findings and recommendations which are consistent with Department regulations.

SOIL MATRIX SCORE SHEET

1.	Depth to Groundwater		
	< 25 feet	(10)	7
	25 - 50 feet	(7)	
	51 - 100 feet	(4)	
	> 100 feet	(1)	
2.	Mean Annual Precipitation		
	> 45 inches	(10)	4
	20 - 45 inches	(4)	
	< 20 inches	(1)	
3.	Native Soil Type		
	Course sands, gravels	(10)	5
	Silts, fine sands	(5)	
	Clays	(1)	
4.	Sensitivity of Uppermost Aquifer	(10)	4
	Sole Source	(7)	
	Current Potable	(4)	
	Future Potable	(1)	
	Non-potable		
5.	Potential Receptors		
	Many, near	(10)	10
	Medium	(5)	
	Few, far	(1)	
	TOTAL SCORE	=	30

MATRIX SCORE	Cleanup Level (ppm TPH)	
	Gasoline	Diesel
Level 1: > 40 pts.	40	100
Level 2: 25 - 40 pts.	80	500
Level 3: < 25 pts.	130	1000

Fact Sheet

Leaking Underground Storage Tank Invoicing for Cleanup Program Costs

State of Oregon
Department of
Environmental
Quality

Leaking Underground
Storage Tanks/
Environment Cleanup
Program
700 NE Multnomah St.
Suite 600
Portland, OR 97232
Phone: 503-229-5696
800-452-4011
Fax: 503-229-6124
Contact: Lani Akers
www.oregon.gov/DEQ

Who pays and why?

Owners and operators of facilities or property contaminated by hazardous substances are responsible, under Oregon law, for cleaning up the site. The Oregon Department of Environmental Quality ensures that the cleanup is done in a way that protects human health and the environment. Oregon law requires that those responsible for the contamination reimburse DEQ's costs of carrying out this responsibility.

What DEQ costs are charged to responsible parties?

Cleanup and hazardous waste laws authorize DEQ is authorized to charge all reasonable costs attributable to or associated with cleanup or hazardous waste activities at a particular site. DEQ accounts for these costs as direct and indirect costs.

Direct costs are expenditures made specifically for the site, such as cost to travel to the site, and DEQ staff time directly associated with the site including time spent to:

- Consult with the owner and/or environmental consultants;
- Review data and reports describing the type and extent of contamination;
- Review proposed cleanup actions;
- Provide information about the site and opportunities for the public to comment on the cleanup; and
- Provide comments and/or direction on the preferred cleanup method or remedy.

Indirect costs are those that support the operation of the program in general, but not directly related to specific projects. Examples of indirect costs are:

- Office space, equipment and supplies;
- Non-site-specific activities of project staff, such as training and program administrative activities;
- Clerical, computer network, time accounting, invoicing and grants management;
- Management and supervision;
- Development of technical guidance and policies; and
- A share of DEQ centralized services, such as accounting, budgeting, human resources, and information systems.

DEQ charges for two types of indirect charges. One is costs incurred by the DEQ Land Quality Division and the other is Land Quality's share of DEQ-wide costs. Both the Land Quality and DEQ agency indirect rates are designed to charge each project its share of all indirect costs.

How are indirect rates established?

DEQ establishes the Land Quality rate by calculating the pool of program costs and dividing by the wages and benefits charged to site cleanup work. This produces a factor that can be applied to the salary and benefit charges for each project invoiced.

The DEQ agency indirect rate is negotiated annually with the federal Environmental Protection Agency, so that indirect costs can be charged against federal grants and cooperative agreements. EPA requires that this indirect rate be charged to all DEQ activities regardless of funding source.

Rates as of Oct. 1, 2018 are:

- Land Quality indirect rate: 206%
- DEQ agency indirect rate: 20.7%

As of October 1, 2018, the estimated average hourly rate for employee time, including indirect costs, is $200.

How are individual site costs calculated?

DEQ's accounting systems record the time each employee works on a project. Staff time is charged to the project using the actual hourly cost of the wages and benefits (such as taxes and health insurance) for each employee. Indirect costs are then added to this hourly rate as a percent of directly-charged personnel costs. Separate costs incurred specifically for that cleanup project, such as supplies and travel expenses, are also recorded and invoiced as direct costs.

Oversight cost estimates

Individuals and businesses cleaning up property with DEQ review or oversight typically enter into some type of agreement with DEQ. The agreement varies depending on the nature of the cleanup or the statutory authority under which the cleanup is carried out. The document specifies the type of oversight or technical assistance to be provided by DEQ and the terms of payment for that oversight.

A written estimate of oversight costs is available for a specified timeframe or phase of a project to responsible parties in the Voluntary Cleanup, Site

Last Updated: October 2018
By: Mitch Frister

Response and Hazardous Waste programs. DEQ will also provide, on request, a written explanation when actual costs exceed projected costs by more than 20 percent.

What do invoices look like?

Employee wages, benefits and indirect charges are combined on one line called "personal services." Direct charges for costs such as supplies and travel are listed separately. Current and past due amounts are detailed.

A report that shows the number of direct hours charged by each employee and the nature of the work performed is available from DEQ on request. The back of the invoice contains a general description of costs and a name and number to call if there are any questions.

When are payments due?

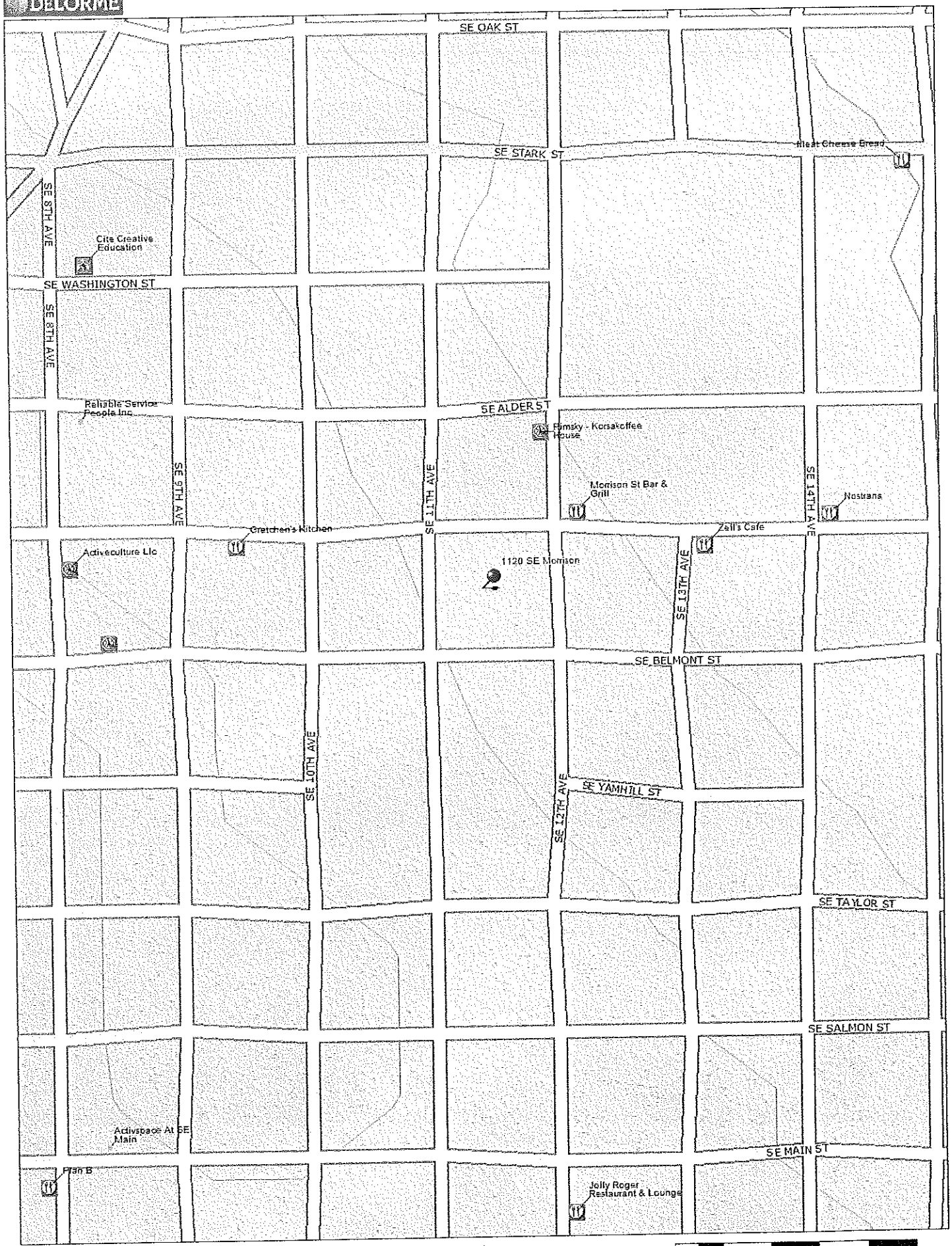
Payments are due 30 calendar days from the date of the invoice. Interest will be charged on past due amounts. DEQ is required by law to pursue collection of unpaid balances by assignment of the debt to the Oregon Department of Revenue or an independent collection agency or directly by recording liens on property owned by the responsible party.

Alternative formats

Documents can be provided upon request in an alternate format for individuals with disabilities or in a language other than English for people with limited English skills. To request a document in another format or language, call DEQ in Portland at 503-229-5696, or toll-free in Oregon at 1-800-452-4011, ext. 5696; or email deqinfo@deq.state.or.us.

Appendix 2

- Topographic Map Street Map
- Aerial Photographs
- Site Diagram
- Site Sample Diagrams Tanks 1 to 9
- Site Photographs



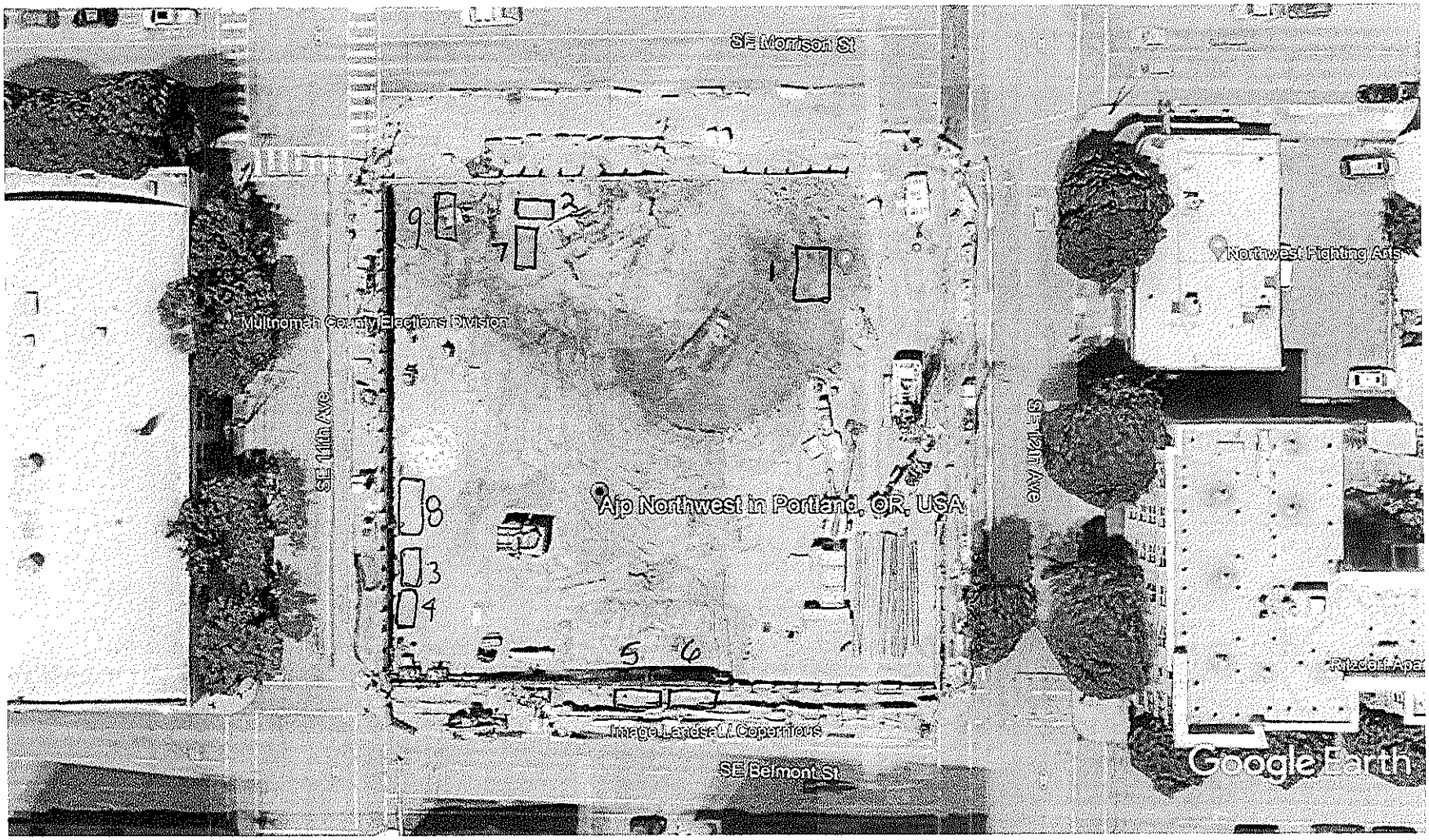
Data use subject to license.

© DeLorme, Topo North America™ 9

ft

0 100 200 300 400 500

Aerial Photo before the building was demolished at 1120 SE Morrison



Aerial view tank location at construction site

LEGEND:

- PROPERTY BOUNDARY
- DP-1 DIRECT-PUSH BORING (2019)
- HA-1 HAND AUGER BORING (2019)
- SG-1 SOIL GAS BORING (2019)
- SV-1 SUB-SLAB VAPOR POINT (2019)
- CB CATCH BASIN
- T POLE-MOUNTED TRANSFORMER
- FLOOR DRAIN IN OFFICE BASEMENT
- FLOOR DRAIN IN WAREHOUSE BATHROOM
- UST
- SMA - APPROXIMATELY 2 TO 41.5 INCHES THICK
- (7.50) APPROXIMATE EXTENT OF REMNANT STRUCTURE FOUNDATION SUSPECTED OF CONTAINING LEAD EXCEEDING CFSL - THICKNESS SHOWN IN INCHES
- AREA OF INTEREST

N

0 30 60

(SCALE IN FEET)

SITE PLAN BASED ON AERIAL PHOTOGRAPH OBTAINED FROM GOOGLE EARTH PRO®, MARCH 22, 2019

SITE PLAN - SMA AND AOIs

MILLCREEK-19-01-05

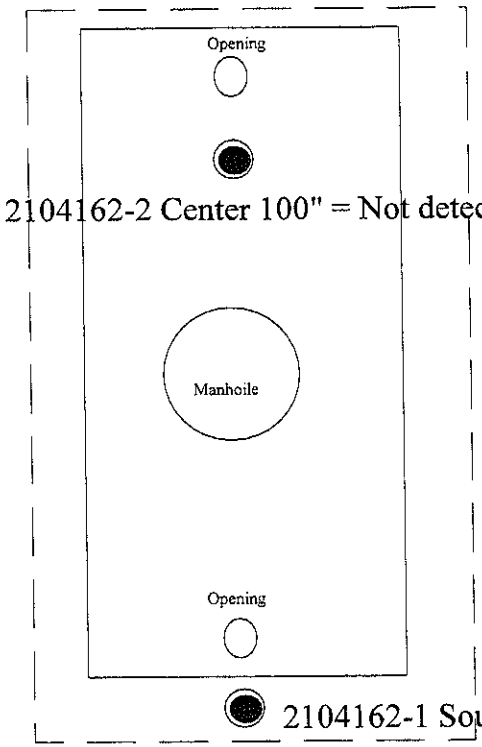
DECEMBER 2019

MODERA MORRISON
PORTLAND, OR

FIGURE 3

GeoDesign NW
AN NV5 COMPANY

File Name: J:\M R\MillCreek\MillCreek-19\MillCreek-19-01\MillCreek-19-01-05-SWMP\Figures\CAD\MillCreek-19-01-05-SP01.dwg | Layout: FIGURE 3



2104162-2 Center 100" = Not detected

2104162-1 South 120" = Not detected

2104162-3 Soil Pile 1 ft = 27.8 ppm/ 76.7 ppm

Scale in feet

5 10 15 ft

North

Sample

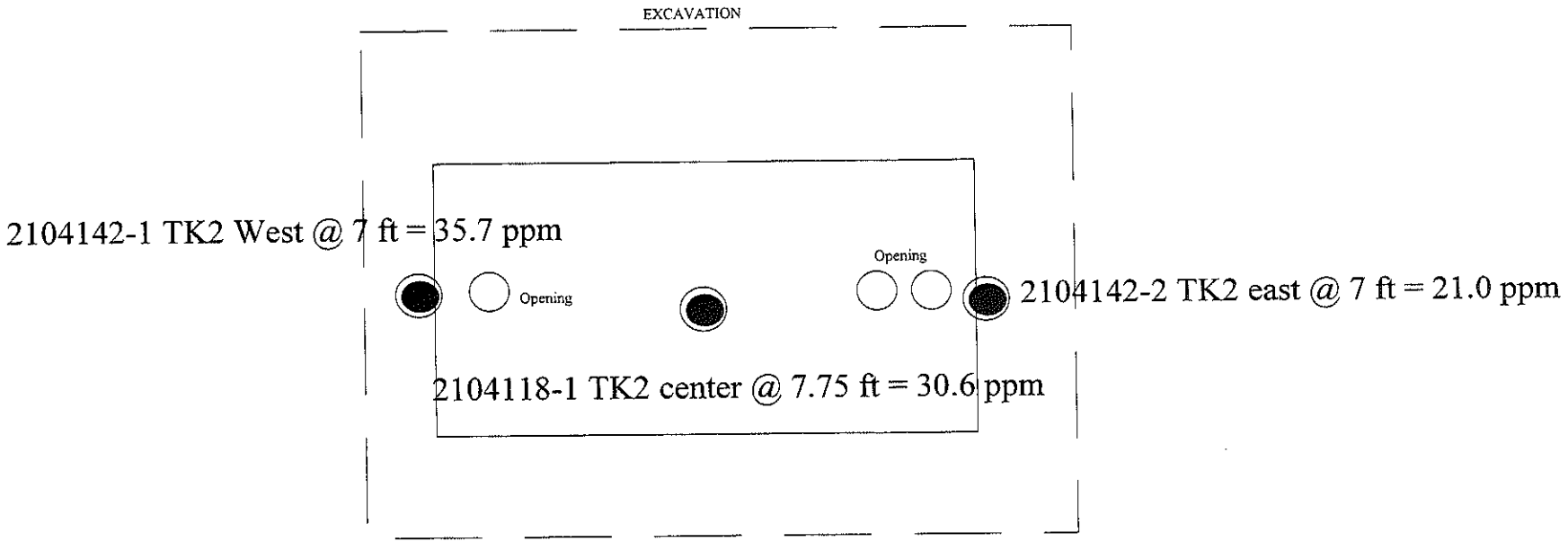
Tank

Spartan Environmental Services LLC

TITLE: Site Drawing -TANK 1
1120 SE Morrison Portland

SIZE	CAGE CODE	DWG NO	REV
A0		SOIL SAMPLE RESULTS	4/4/22

SCALE SHEET



North

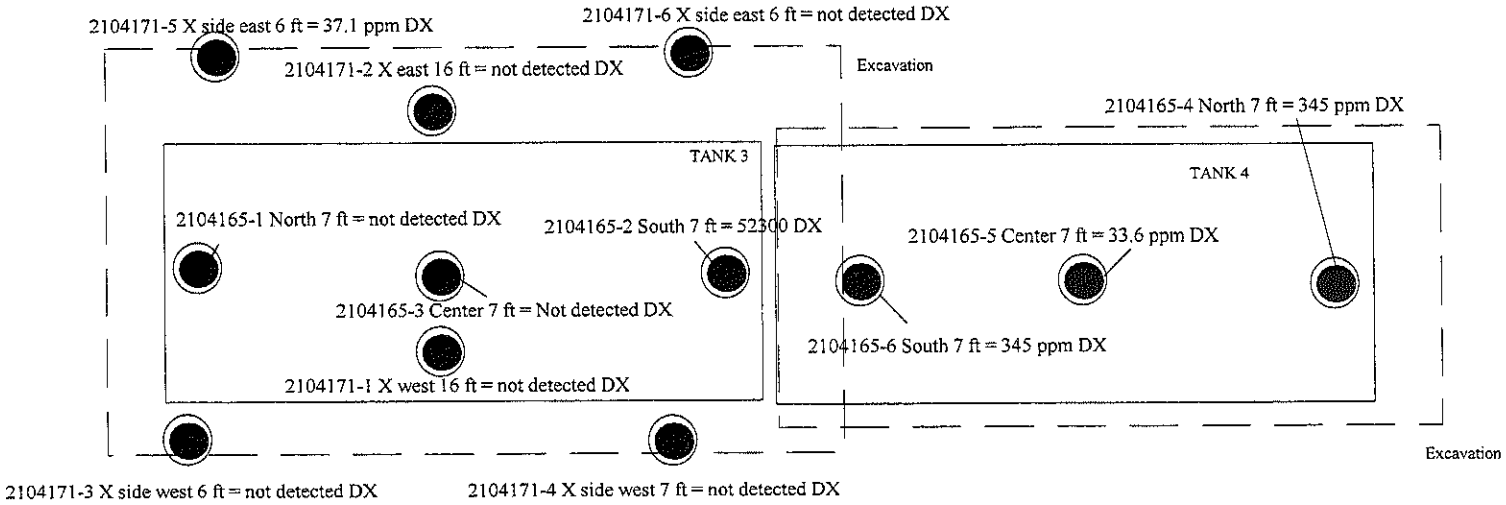
Sample

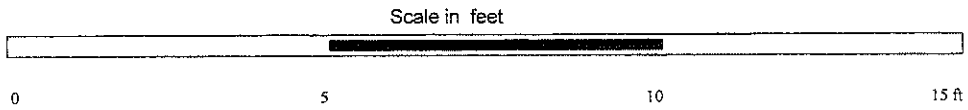
Tank

Spartan Environmental Services LLC

TITLE
Site Drawing -TANK 2
1120 SE Morrison Portland

SIZE	CAGE CODE	DWG NO	REV
A0		SOIL SAMPLE RESULTS	4/4/22
SCALE		SHEET	





North

Sample

Tank

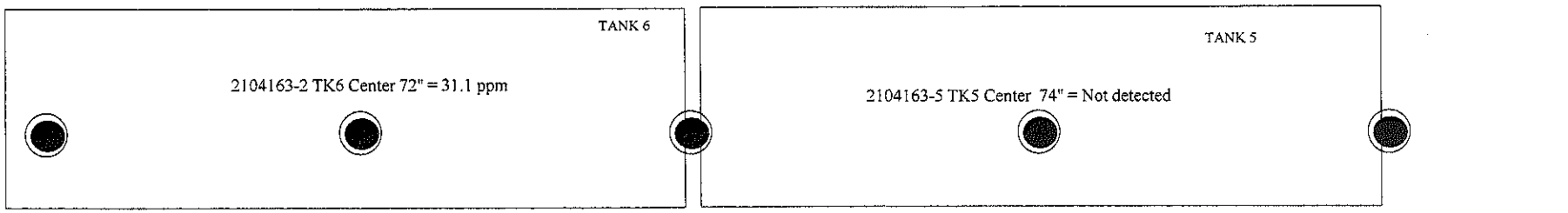
Spartan Environmental Services LLC

TITLE

Site Drawing -TANK 3 and 4
1120 SE Morrison Portland

SIZE	CAGE CODE	DWG NO	REV
A0		SOIL SAMPLE RESULTS	4/4/22
SCALE		SHEET	

Samples for TPH-Dx (diesel and heavy oil)



04163-1 TK6 North 71" = Not detected

2104163-3 TK5-6 70" = Not detected

2104163-4 TK5 West 70" = Not detected

Scale in feet

0 5 10 15 ft

South

Sample

Tank

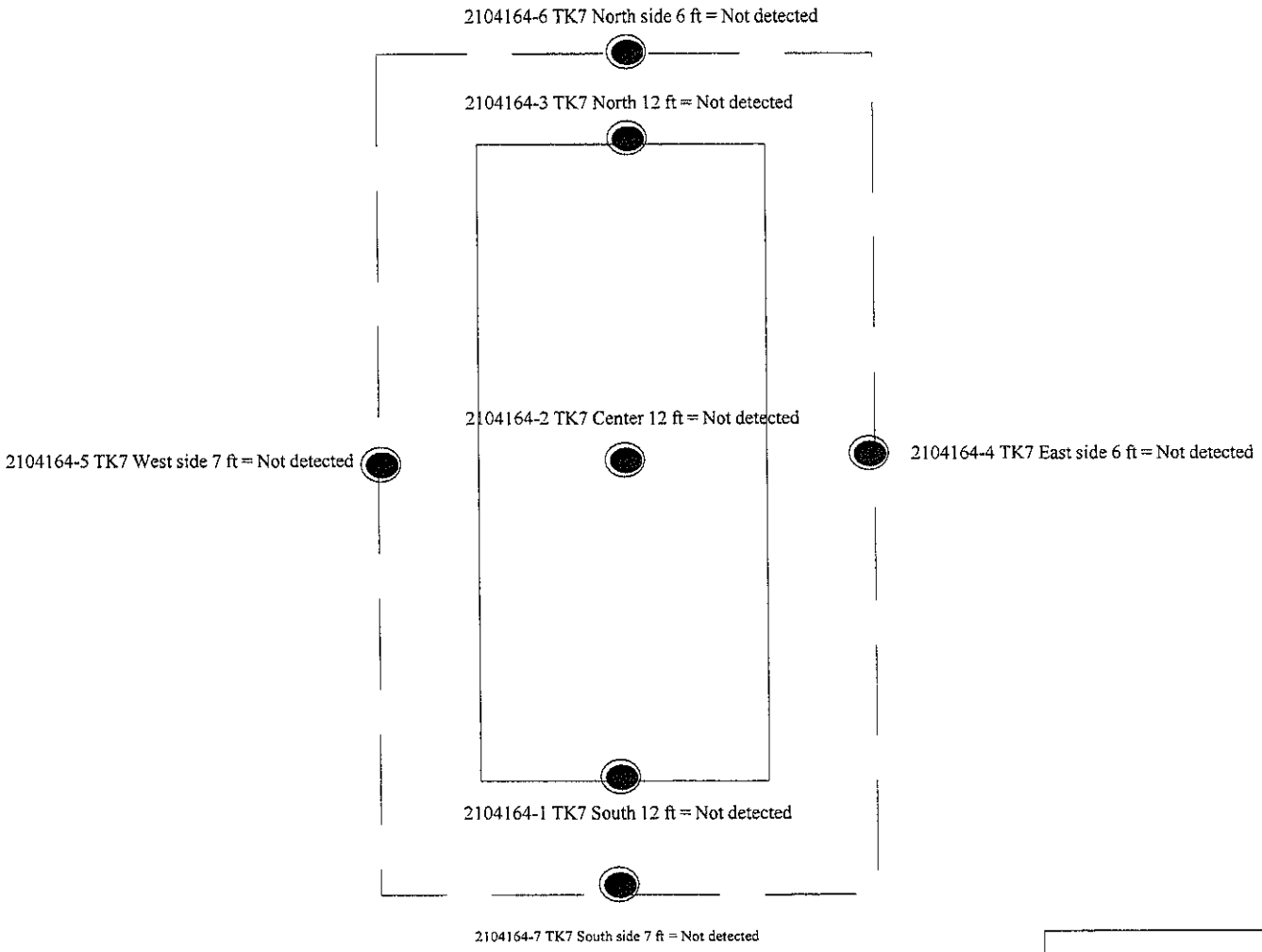
Spartan Environmental Services LLC

TITLE

Site Drawing -TANK 5 and 6
1120 SE Morrison Portland

SIZE	CAGE CODE	DWG NO	REV
A0		SOIL SAMPLE RESULTS	4/4/22
SCALE		SHEET	

Samples for TPH-Dx (diesel and heavy oil)



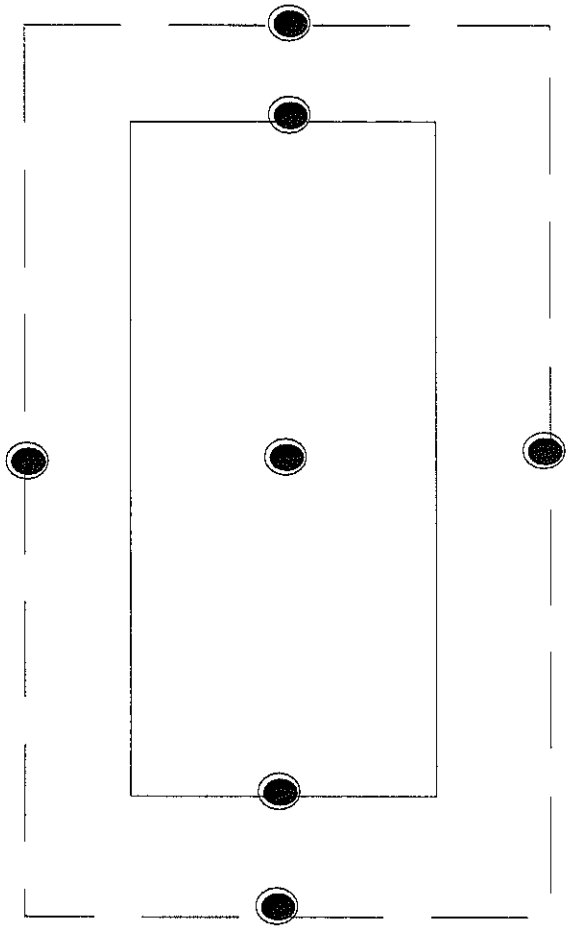
Spartan Environmental Services LLC

TITLE: Site Drawing -TANK 7
1120 SE Morrison Portland

SIZE	CAGE CODE	DWG NO	REV
A0		SOIL SAMPLE RESULTS	4/4/22
SCALE		SHEET	

Samples for TPH-Gx (Gasoline)

Sample collected by GeoDesign and not reported



2104164-7 TK7 South side 7 ft = Not detected

North

Scale in feet

0 5 10 15 ft

Sample

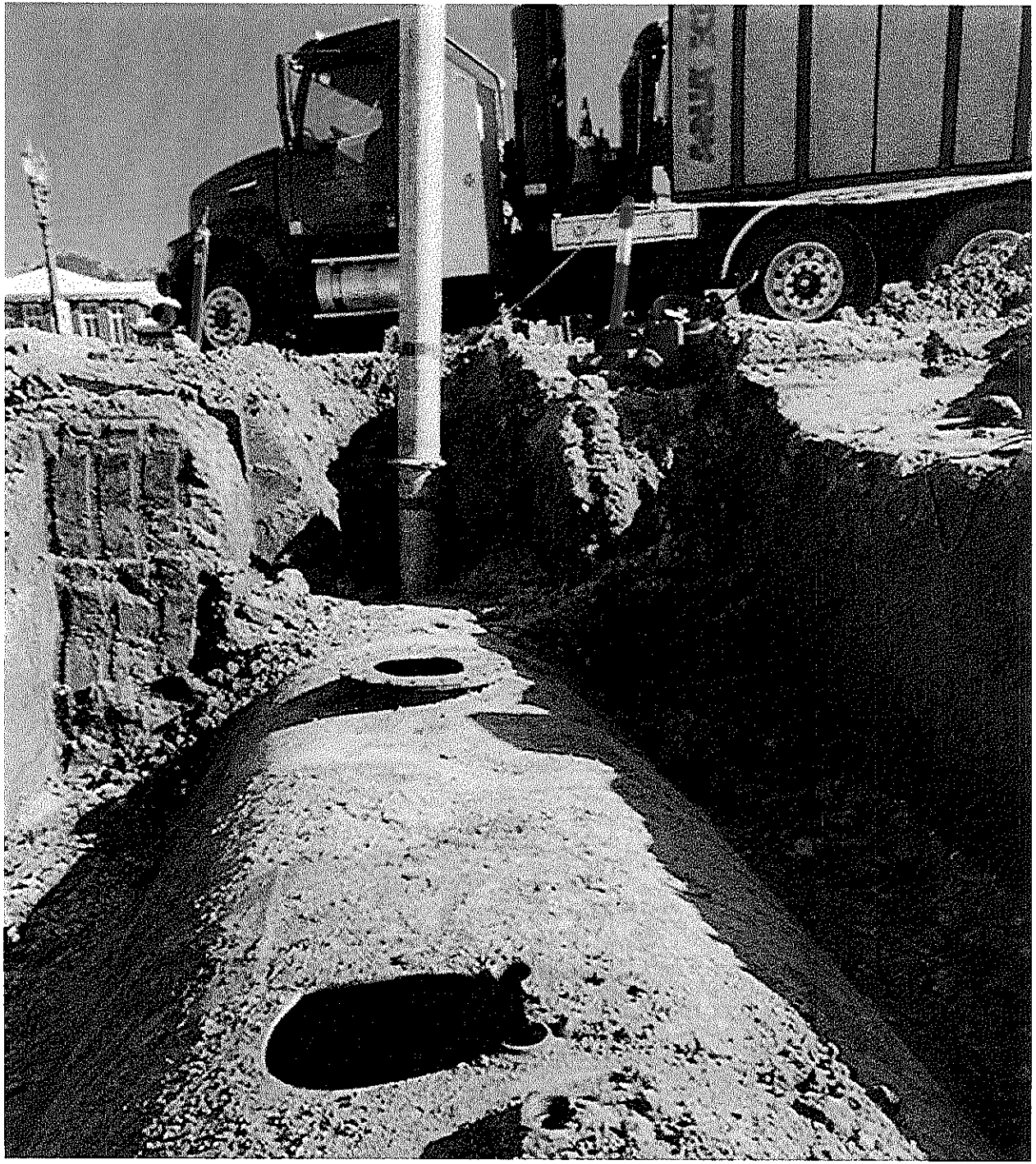
Tank

Spartan Environmental Services LLC

TITLE

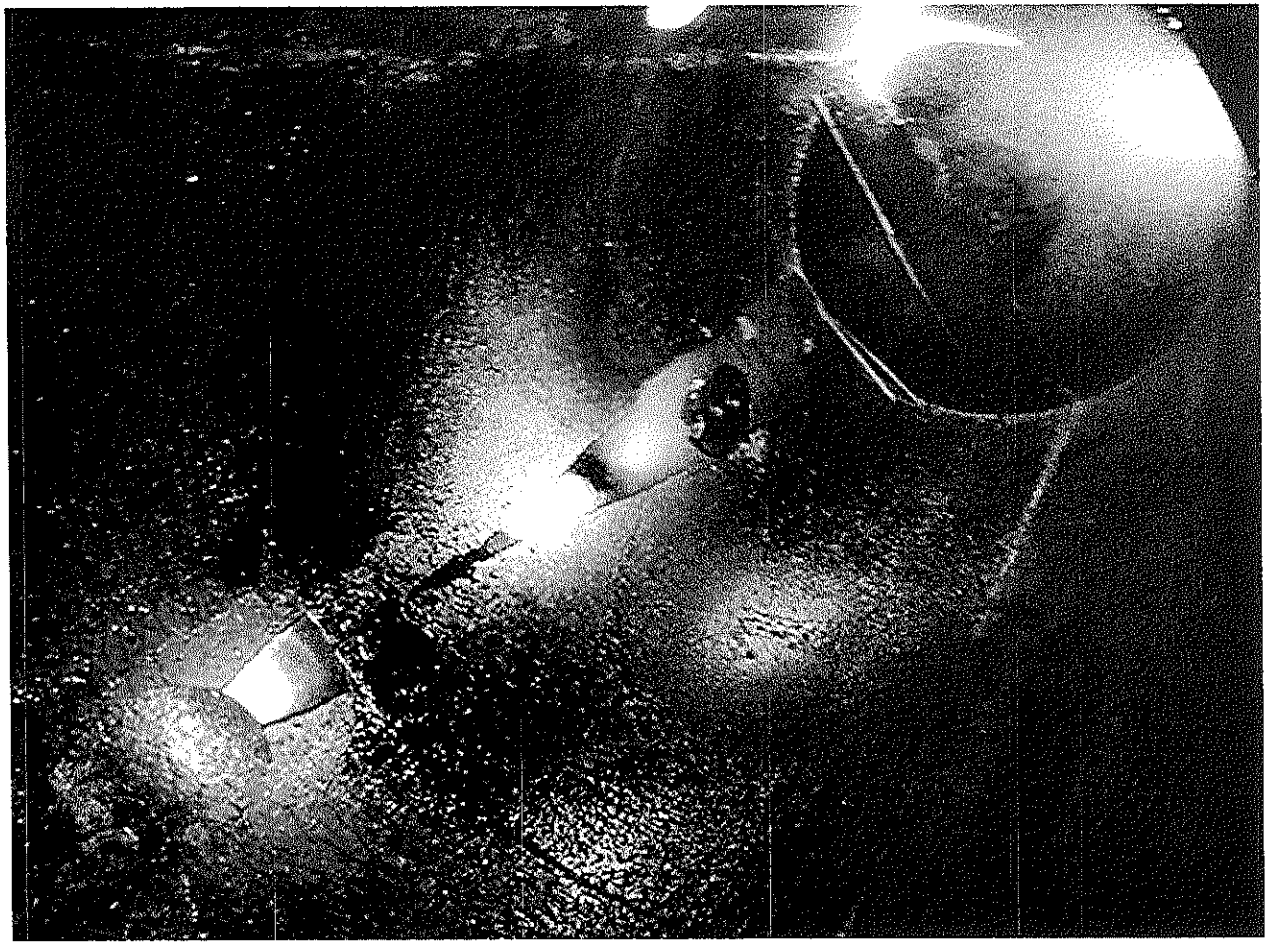
Site Drawing -TANK 9
1120 SE Morrison Portland

SIZE	CAGE CODE	DWG NO	REV
A0		SOIL SAMPLE RESULTS	4/4/22
SCALE		SHEET	

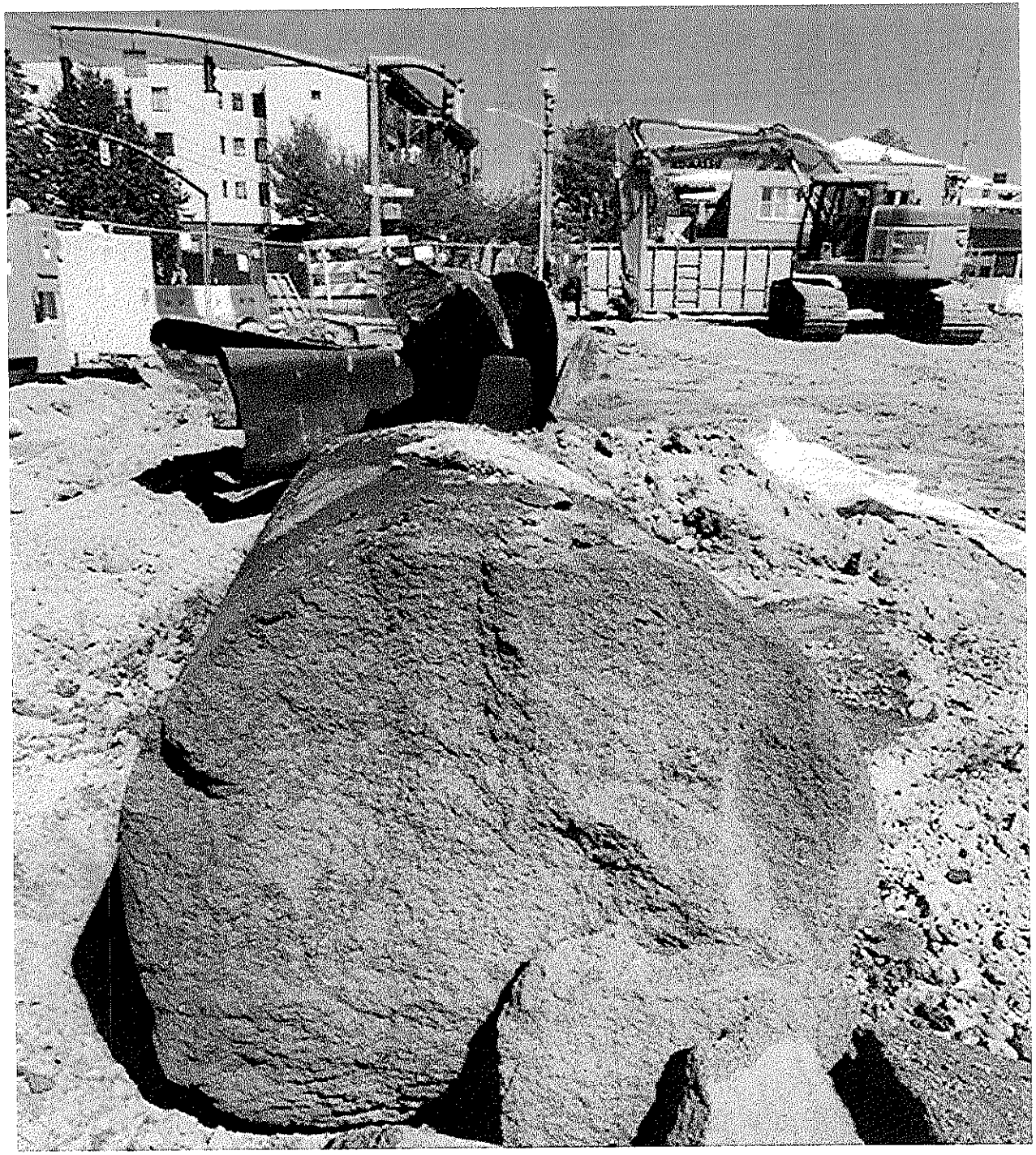


View of TANK 1

View of TANK 1



View of TANK 1 interior

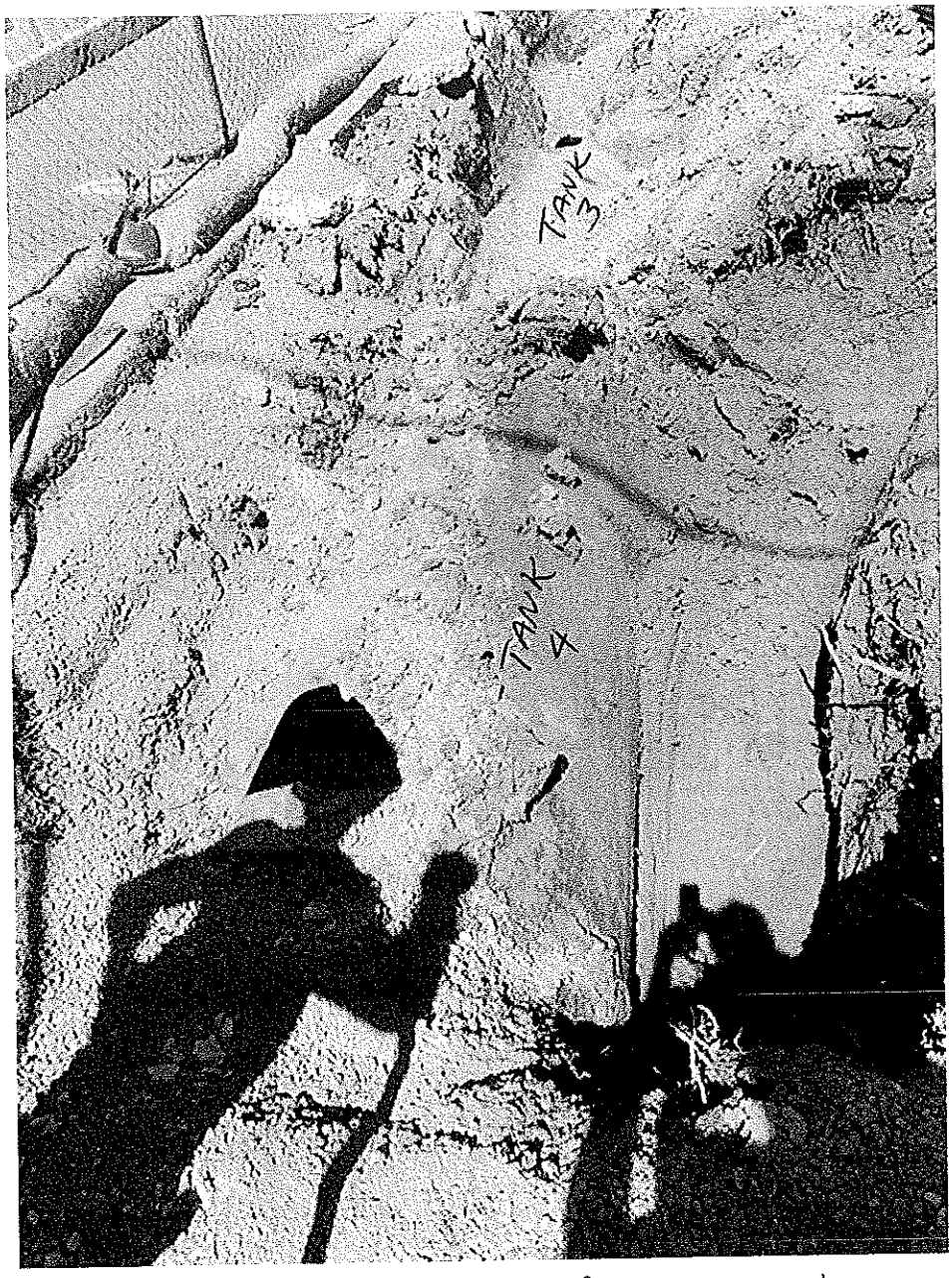


TANK 2 Filled with CDF

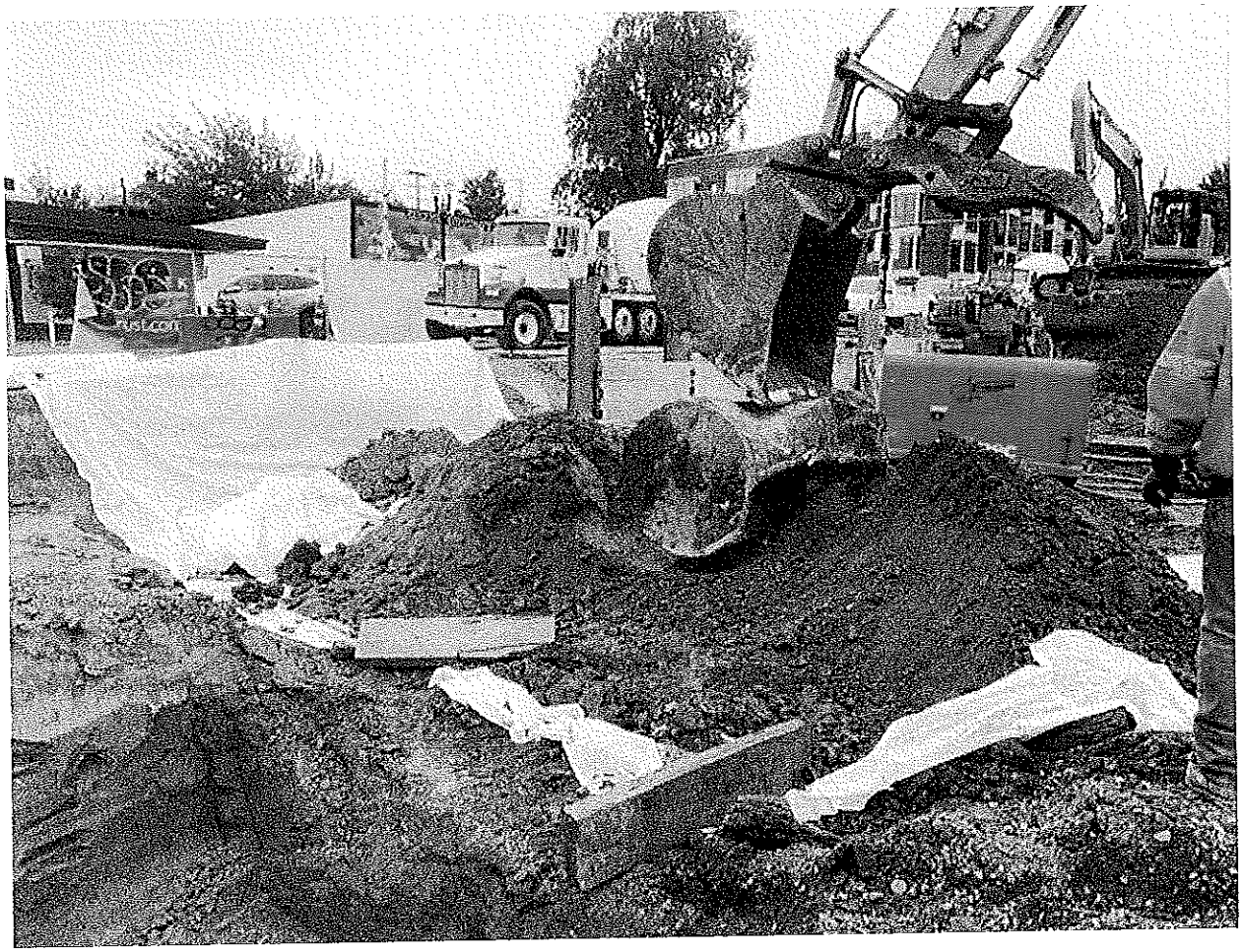
TANK 2 Removal / background

TANK 2

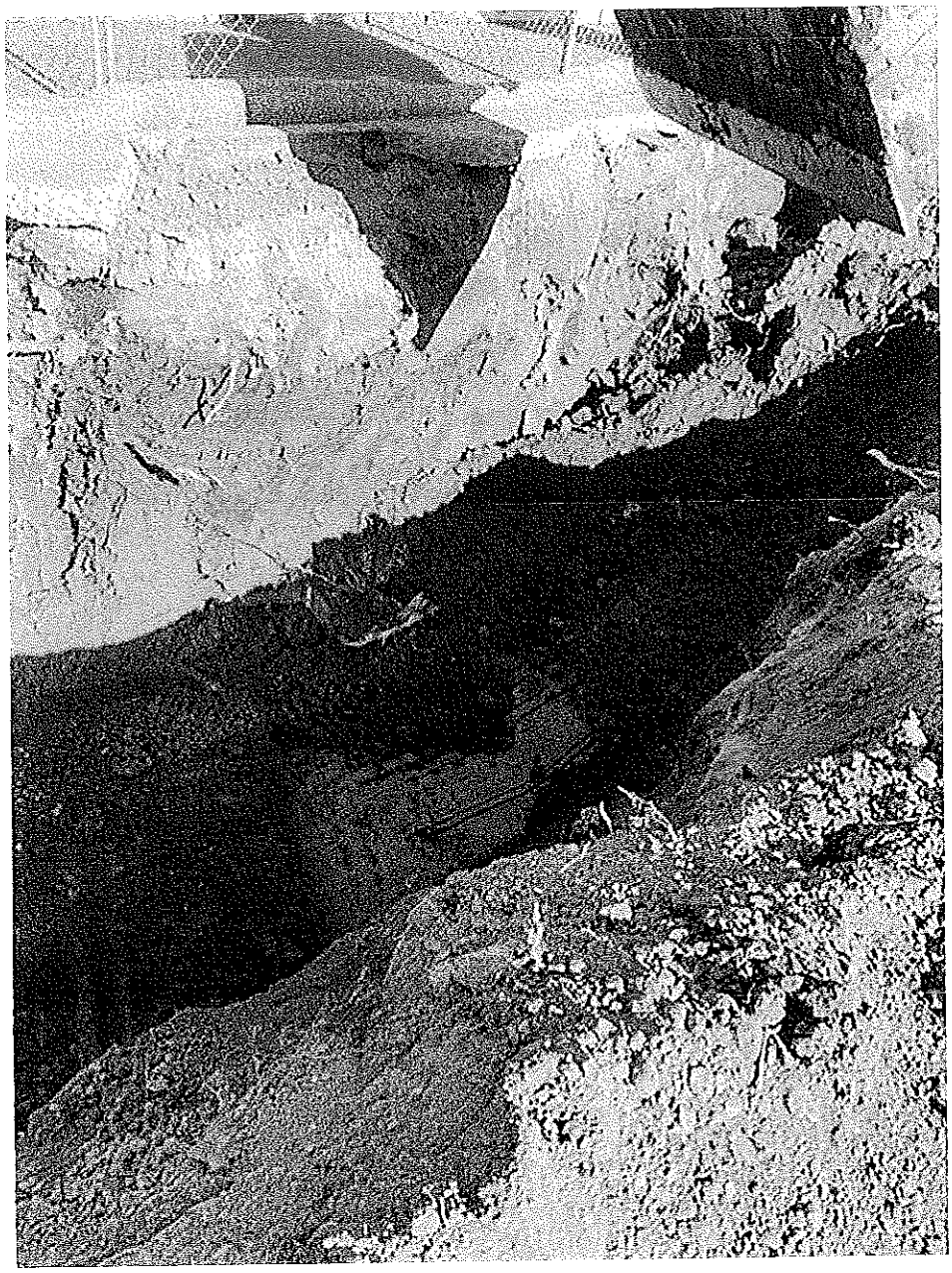
TANK 2



View of TANK 3 & 4 before removal

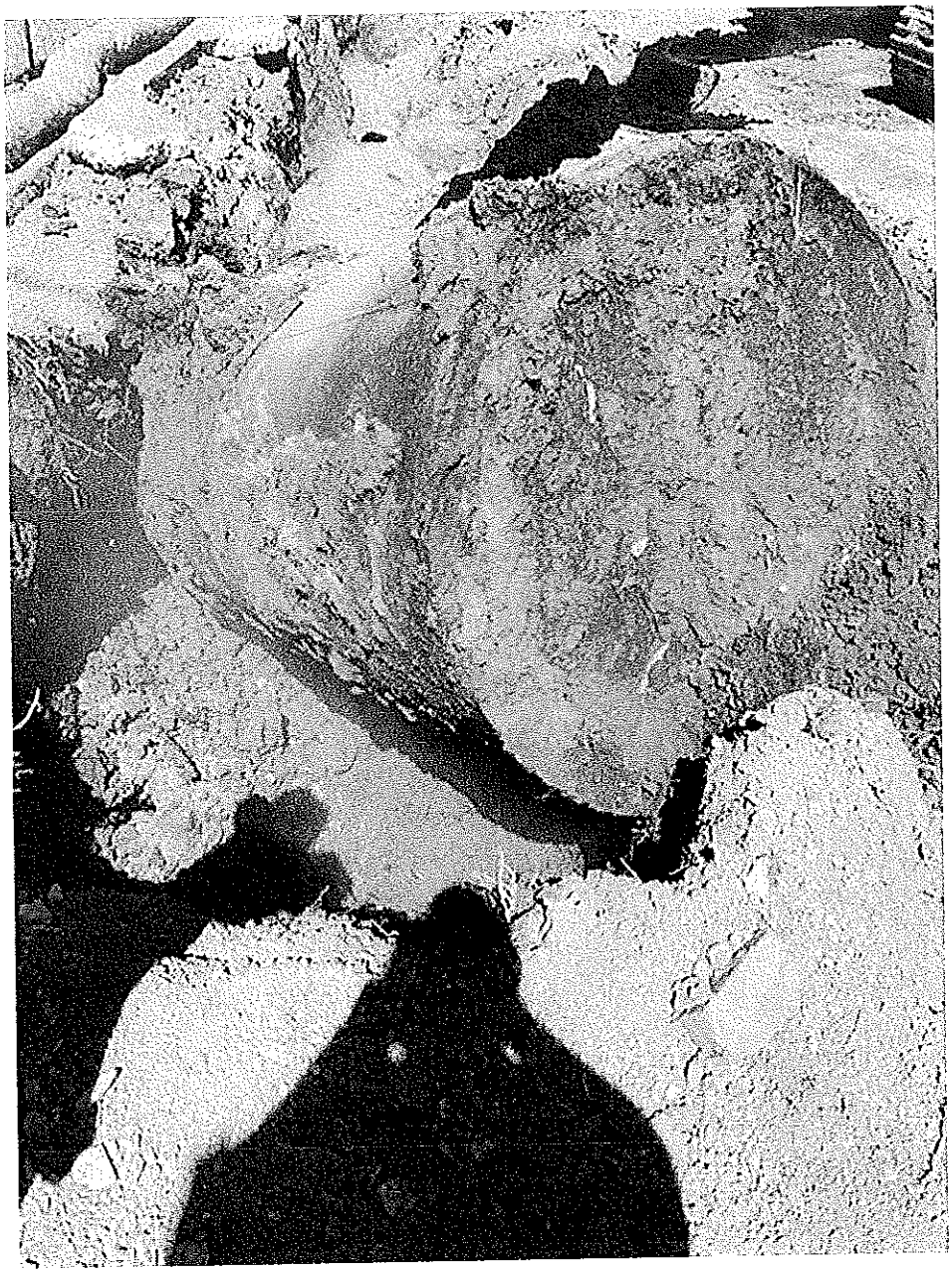


View of TANK 3 Removal

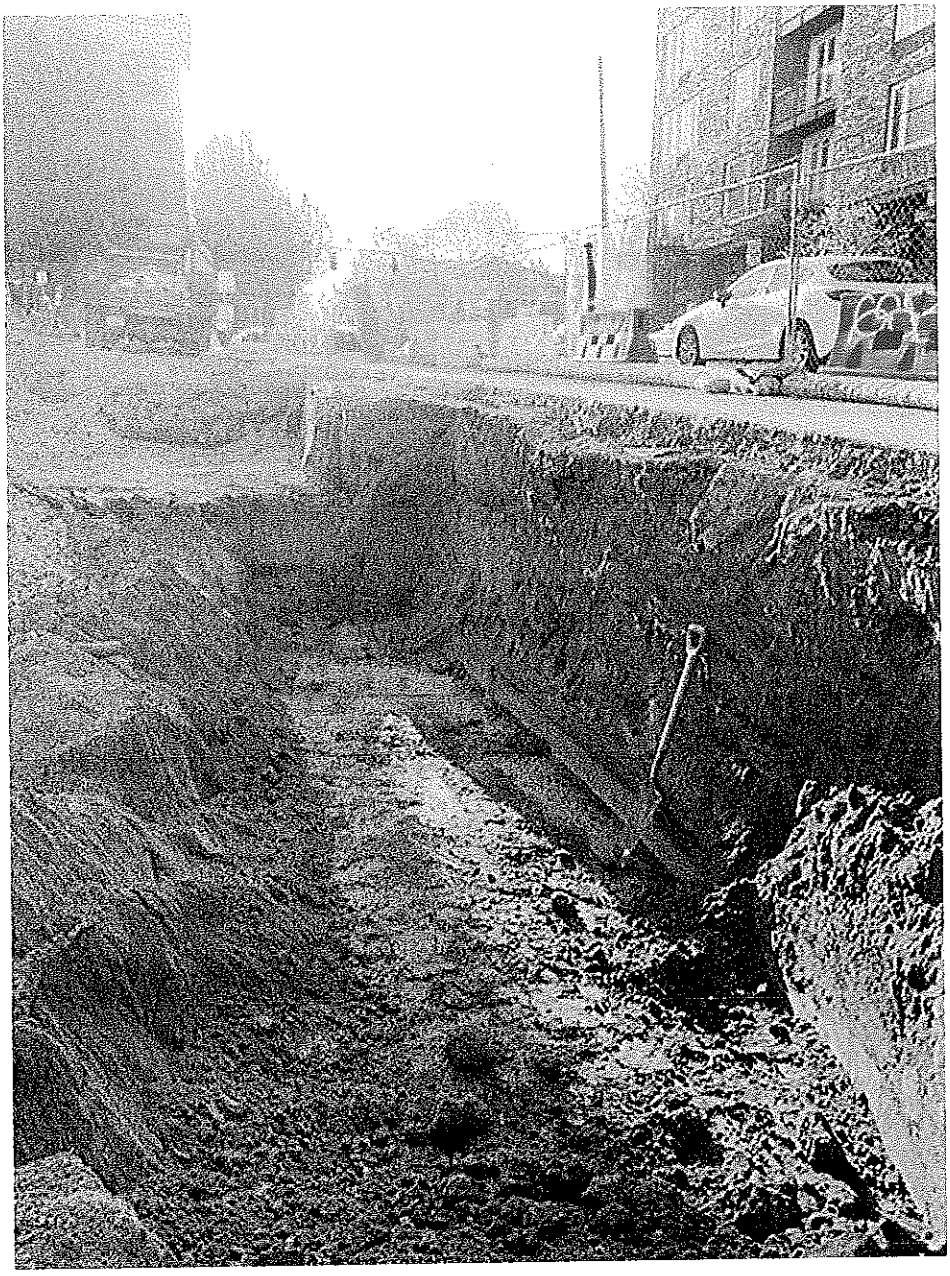


TANK 3 After Removal, a SMALL STAined area of Heating Oil contamination that was Removed.

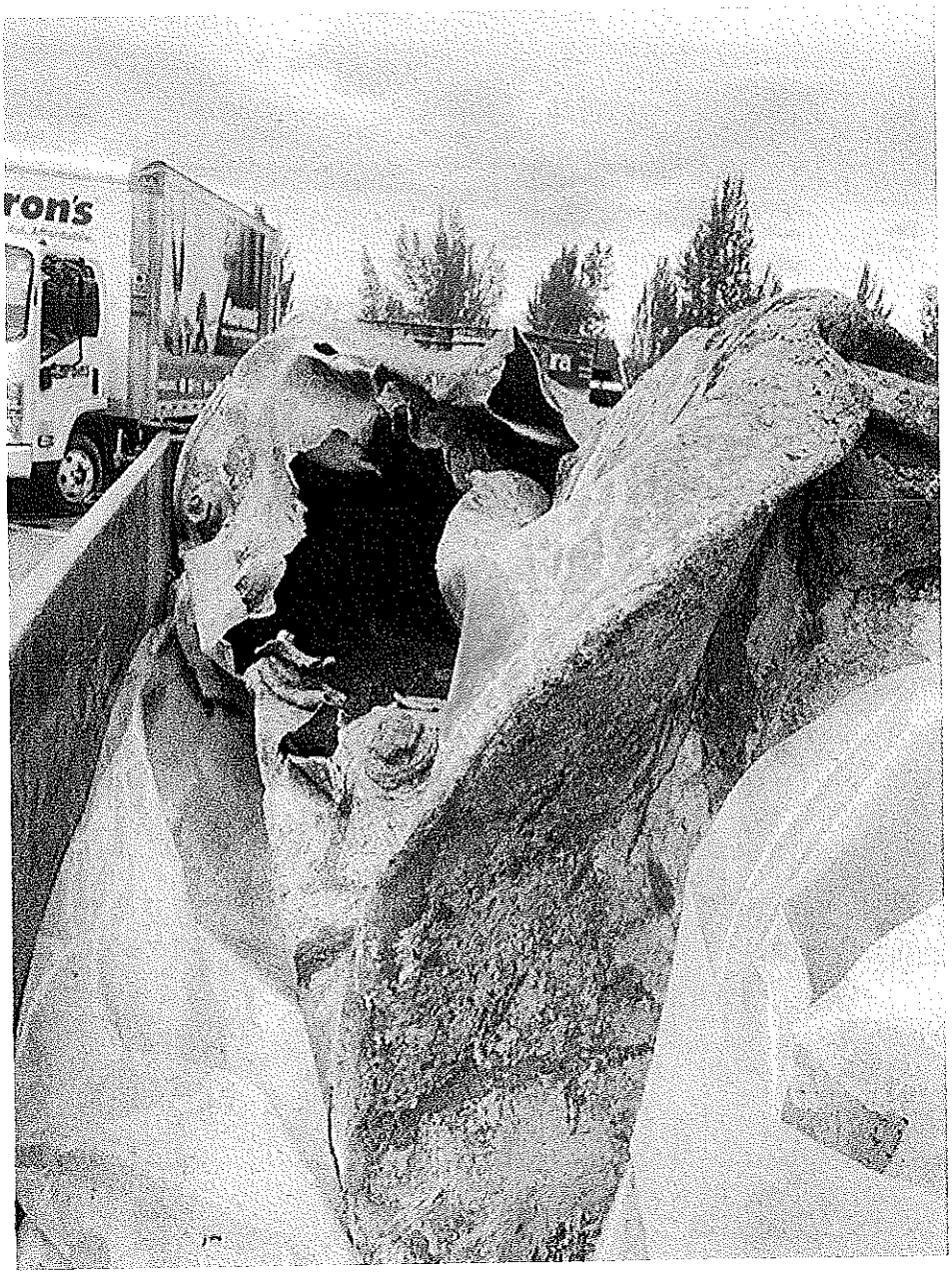
TANK 4 EXCAVATION AFTER REMOVAL



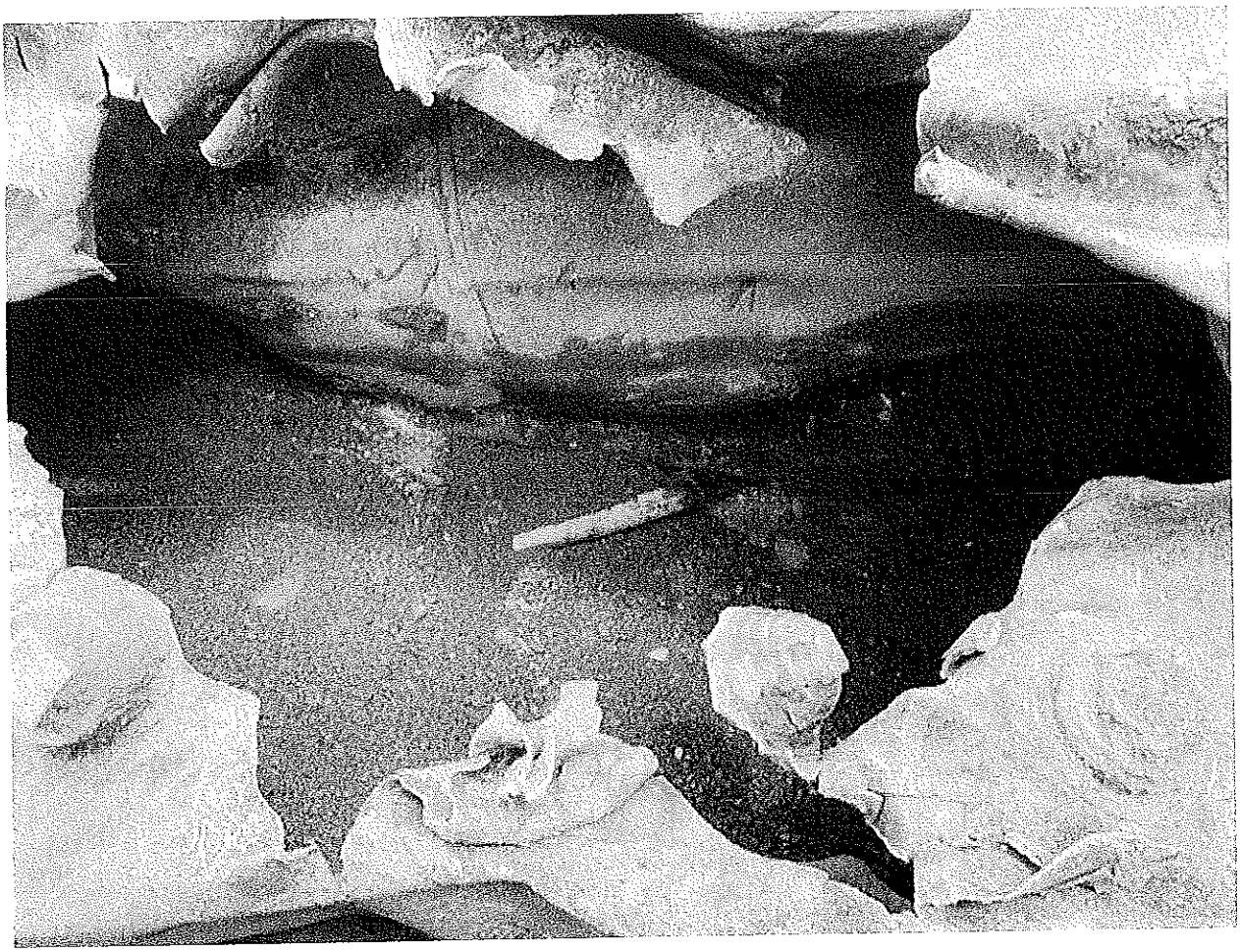
TANK 4 Removal



View of Excavation under Tanks 5 & 6 after Removal.



TANK 7 Removed & placed into dump trailer

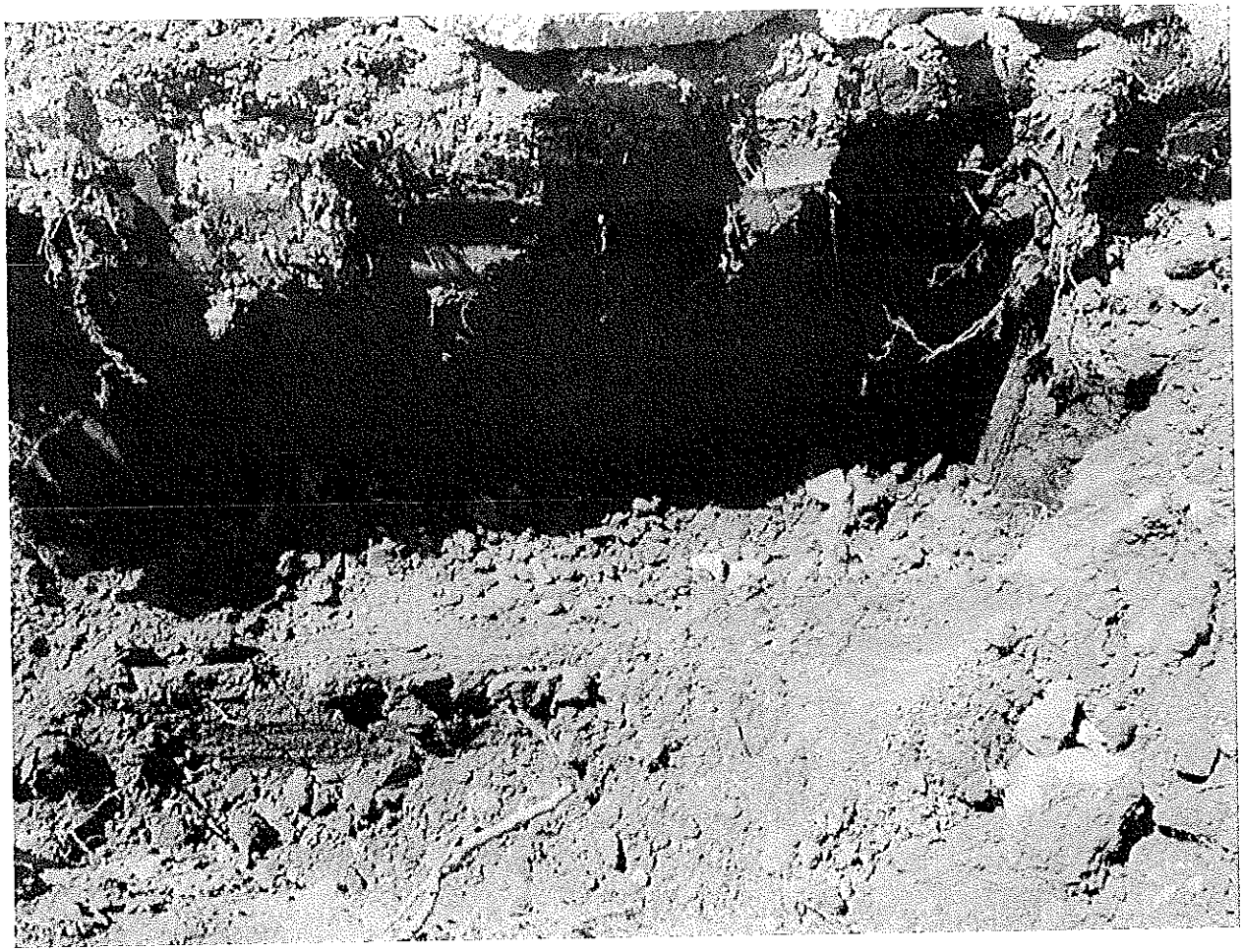


TANK 7 Removed & placed into dump trailer

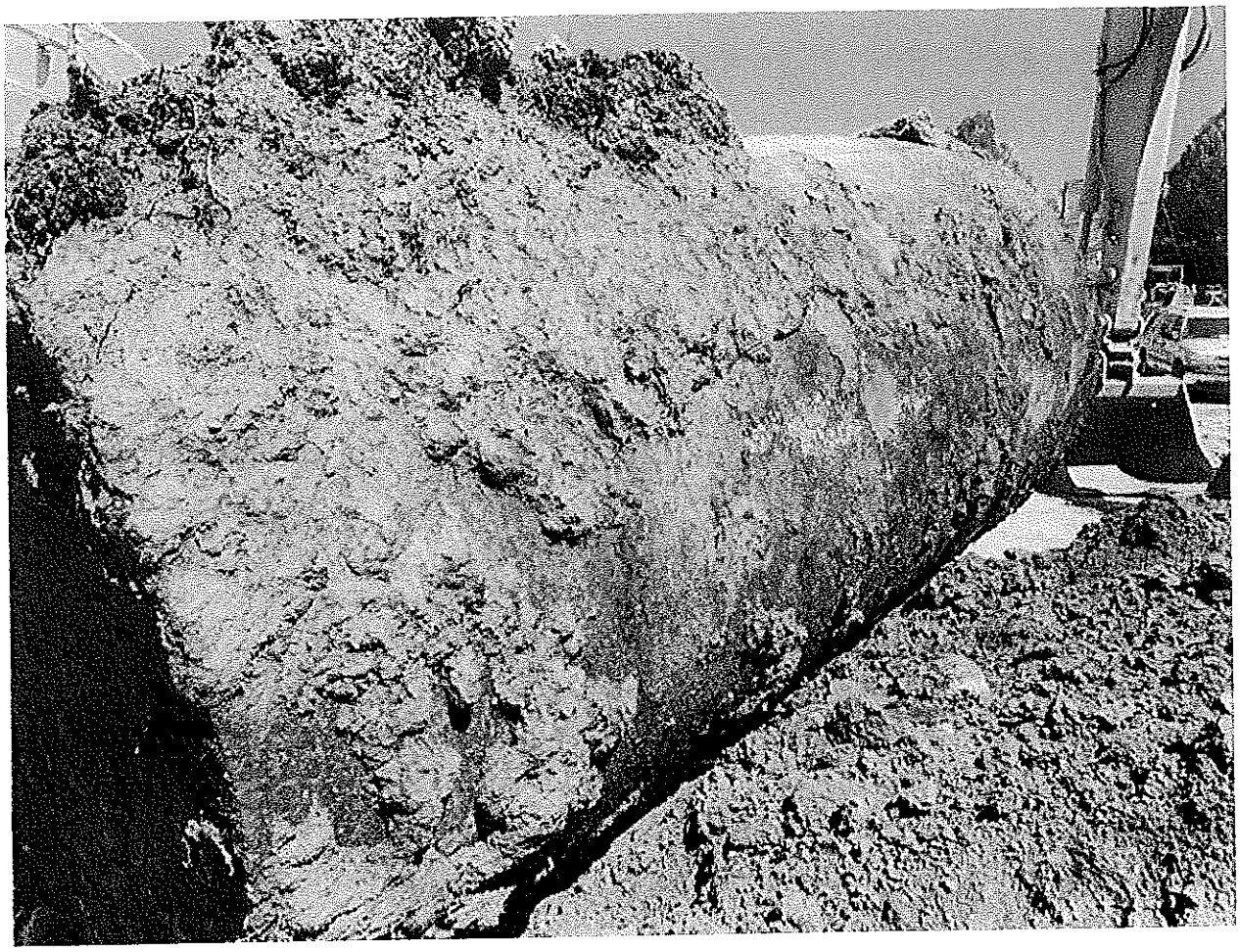
EXCAVATION under TANK 7

TANK 7 Emptied of sand & concrete

TANK 8 Removed from ground



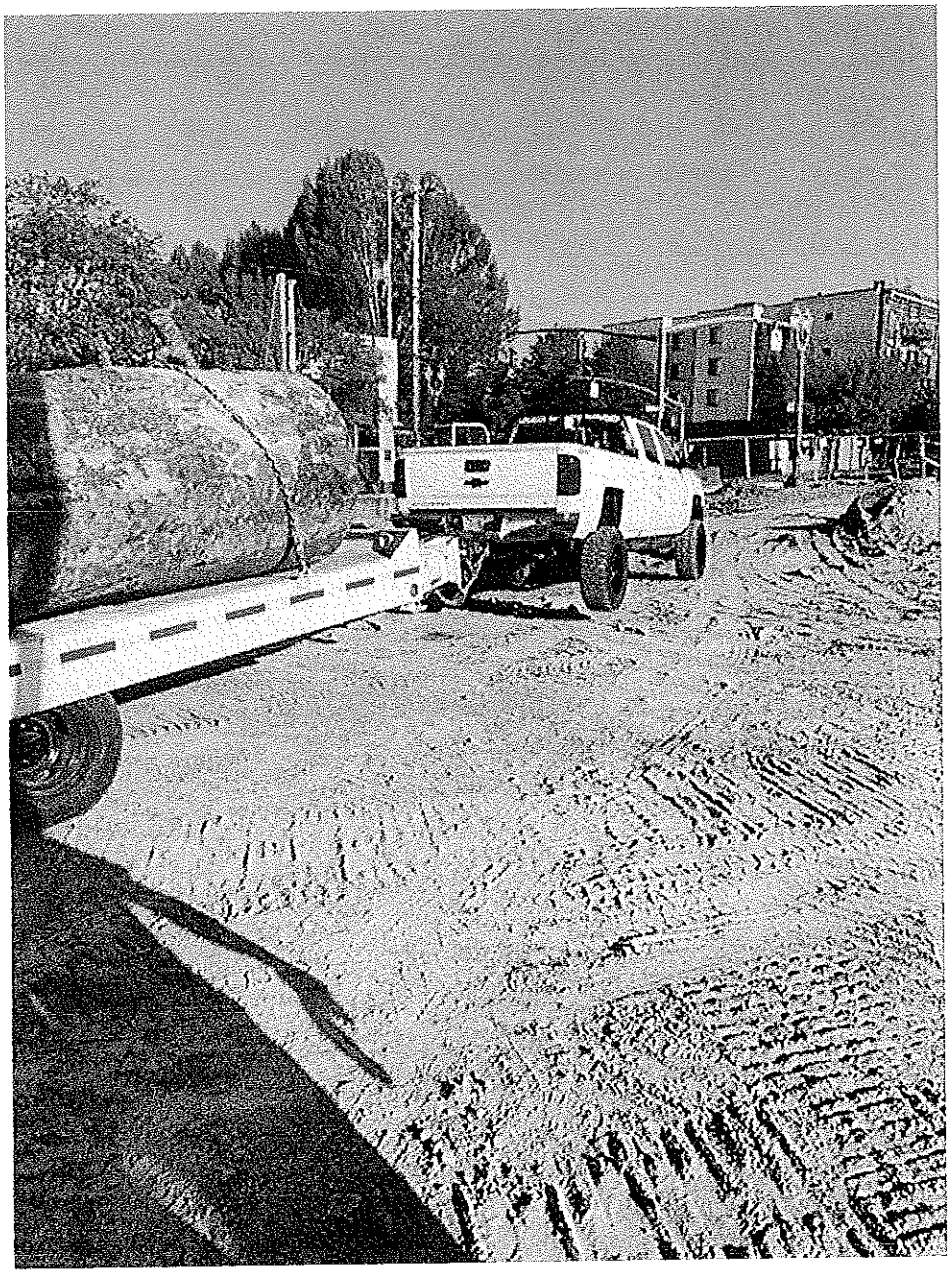
Soil under Excavation for Tank 8



View of Tank 8 after removal

TANK 8

Bob's Recycling TRUCK loaded with TANK!



TANKS HAULED off By SPARTAN Environmental for Recycling.

Appendix 3

- Soil Disposal Receipts Hillsboro Landfill
- Cherry City Metals
- Orrco Fluid Recycling

WASTE MANAGEMENT

Hillsboro Landfill, Inc
3205 SE Minter Bridge
Hillsboro, OR, 97123
Ph: (503)-640-9427

Original
Ticket# 1599472

Customer Name DEWITT CONSTRUCTION INC DEWIT
Ticket Date 04/20/2021
Payment Type Credit Account
Manual Ticket#
Hauling Ticket#
Route
State Waste Code
Manifest NA
Destination
PO
Profile 135241OR (LF01: Non-Hazardous Contaminated Soil & Debris)
Generator 168-MILL CREEK RESIDENTIAL TR MILL CREEK RESIDENTIAL TRUST 1120 SE MORRISION

Carrier DEWITT CONSTRUCTION
Vehicle# 20-115-PUP
Container
Driver RICK
Check#
Billing # 0003532
Gen EPA ID

Grid

Volume

	Time	Scale	Operator	Inbound
In	04/20/2021 11:37:55	Inbound 2	amarti22	
Out	04/20/2021 12:05:17	Outbound	EDESMART	

Gross	95280 lb
Tare	37460 lb
Net	57820 lb
Tons	28.91

Comments

Consumer Comments? We want to know. Please call.

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	ENVCLEANUP SPWPCS-	100	28.91	Tons				MULT-IN
2	EVF-P6-Environment	100		%				MULT-IN

Total Tax
Total Ticket

Driver's Signature

WASTE MANAGEMENT

Hillsboro Landfill, Inc
3205 SE Minter Bridge
Hillsboro, OR, 97123
Ph: (503)-640-9427

Original
Ticket# 1599523

Customer Name DEWITT CONSTRUCTION INC DEWIT
Ticket Date 04/20/2021
Payment Type Credit Account
Manual Ticket#
Hauling Ticket#
Route
State Waste Code
Manifest NA
Destination
PO
Profile 135241OR (LF01: Non-Hazardous Contaminated Soil & Debris)
Generator 168-MILL CREEK RESIDENTIAL TR MILL CREEK RESIDENTIAL TRUST 1120 SE MORRISION

Carrier DEWITT CONSTRUCTION
Vehicle# 20-115
Container
Driver RICK
Check#
Billing # 0003532
Gen EPA ID

Grid

Volume

	Time	Scale	Operator	Inbound		
In	04/20/2021 13:51:19	Inbound 2	EDESMART		Gross	98240 lb
Out	04/20/2021 13:51:19		EDESMART		Tare	27540 lb
					Net	70700 lb
					Tons	35.35

Comments

Consumer Comments? We want to know. Please call.

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	ENVCLEANUP SPWPCS-	100	35.35	Tons				MULT-IN
2	EVF-P6-Environment	100		%				MULT-IN

Total Tax
Total Ticket

Driver's Signature

WASTE MANAGEMENT

Hillsboro Landfill, Inc
3205 SE Minter Bridge
Hillsboro, OR, 97123
Ph: (503)-640-9427

Original
Ticket# 1599737

Customer Name DEWITT CONSTRUCTION INC DEWIT
Ticket Date 04/21/2021
Payment Type Credit Account
Manual Ticket#
Hauling Ticket#
Route
State Waste Code
Manifest NA
Destination
PO
Profile 135241OR (LF01: Non-Hazardous Contaminated Soil & Debris)
Generator 168-MILL CREEK RESIDENTIAL TR MILL CREEK RESIDENTIAL TRUST 1120 SE MORRISION

Carrier SWAG ENTERPRISES LLC
Vehicle# 203-PUP
Container
Driver BROCK
Check#
Billing # 0003532
Gen EPA ID

Grid

Volume

	Time	Scale	Operator	Inbound		
In	04/21/2021 13:44:51	Inbound 2	JPRIME		Gross	104560 lb
Out	04/21/2021 13:44:51		JPRIME		Tare	40100 lb
					Net	64460 lb
					Tons	32.23

Comments

Consumer Comments? We want to know. Please call.

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	ENVCLEANUP SPWPCS-	100	32.23	Tons				MULT-IN
2	EVF-P6-Environment	100		%				

Total Tax
Total Ticket

Driver`s Signature

WASTE MANAGEMENT

Hillsboro Landfill, Inc
3205 SE Minter Bridge
Hillsboro, OR, 97123
Ph: (503)-640-9427

Original
Ticket# 1599720

Customer Name DEWITT CONSTRUCTION INC DEWIT
Ticket Date 04/21/2021
Payment Type Credit Account
Manual Ticket#
Hauling Ticket#
Route
State Waste Code
Manifest NA
Destination
PO
Profile 135241OR (LF01: Non-Hazardous Contaminated Soil & Debris)
Generator 168-MILL CREEK RESIDENTIAL TR MILL CREEK RESIDENTIAL TRUST 1120 SE MORRISION

Carrier DEWITT CONSTRUCTION
Vehicle# 20-115-PUP
Container
Driver RICK
Check#
Billing # 0003532
Gen EPA ID

Grid

Volume

	Time	Scale	Operator	Inbound		
In	04/21/2021 13:04:09	Inbound 2	EDESMART		Gross	80040 lb
Out	04/21/2021 13:04:09		EDESMART		Tare	37460 lb
					Net	42580 lb
					Tons	21.29

Comments

Consumer Comments? We want to know. Please call.

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	ENVCLEANUP SPWPCS-	100	21.29	Tons				MULT-IN
2	EVF-P6-Environment	100		%				

Total Tax
Total Ticket

Driver`s Signature

WASTE MANAGEMENT

Hillsboro Landfill, Inc
3205 SE Minter Bridge
Hillsboro, OR, 97123
Ph: (503)-640-9427

Original
Ticket# 1599684

Customer Name DEWITT CONSTRUCTION INC DEWIT
Ticket Date 04/21/2021
Payment Type Credit Account
Manual Ticket#
Hauling Ticket#
Route
State Waste Code
Manifest NA
Destination
PO
Profile 135241OR (LF01: Non-Hazardous Contaminated Soil & Debris)
Generator 168-MILL CREEK RESIDENTIAL TR MILL CREEK RESIDENTIAL TRUST 1120 SE MORRISION

Carrier SWAG ENTERPRISES LLC
Vehicle# 203-PUP
Container
Driver BROCK
Check#
Billing # 0003532
Gen EPA ID

Grid

Volume

	Time	Scale	Operator	Inbound		
In	04/21/2021 11:48:07	Inbound 2	EDESMART		Gross	102680 lb
Out	04/21/2021 11:48:07		EDESMART		Tare	40100 lb
					Net	62580 lb
					Tons	31.29

Comments

Consumer Comments? We want to know. Please call.

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	ENVCLEANUP SPWPCS-	100	31.29	Tons				MULT-IN
2	EVF-P6-Environment	100		%				MULT-IN

Total Tax
Total Ticket

Driver`s Signature

WASTE MANAGEMENT

Hillsboro Landfill, Inc
3205 SE Minter Bridge
Hillsboro, OR, 97123
Ph: (503)-640-9427

Original
Ticket# 1599634

Customer Name	DEWITT CONSTRUCTION INC DEWIT	Carrier	SWAG ENTERPRISES LLC		
Ticket Date	04/21/2021	Vehicle#	203-PUP	Volume	
Payment Type	Credit Account	Container			
Manual Ticket#		Driver	BROCK		
Hauling Ticket#		Check#			
Route		Billing #	0003532		
State Waste Code		Gen EPA ID			
Manifest	NA				
Destination		Grid			
PO					
Profile	135241OR (LF01: Non-Hazardous Contaminated Soil & Debris)				
Generator	168-MILL CREEK RESIDENTIAL TR MILL CREEK RESIDENTIAL TRUST 1120 SE MORRISION				

	Time	Scale	Operator	Inbound		
In	04/21/2021 09:53:22	Inbound 1	JPRIME		Gross	98140 lb
Out	04/21/2021 09:53:22		JPRIME		Tare	40100 lb
					Net	58040 lb
					Tons	29.02

Comments

Consumer Comments? We want to know. Please call.

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	ENVCLEANUP SPWPCS-	100	29.02	Tons				MULT-IN
2	EVF-P6-Environment	100		%				

Total Tax
Total Ticket

Driver`s Signature

WASTE MANAGEMENT

Hillsboro Landfill, Inc
3205 SE Minter Bridge
Hillsboro, OR, 97123
Ph: (503)-640-9427

Original
Ticket# 1599583

Customer Name DEWITT CONSTRUCTION INC DEWIT
Ticket Date 04/21/2021
Payment Type Credit Account
Manual Ticket#
Hauling Ticket#
Route
State Waste Code
Manifest na
Destination
PO
Profile 135241OR (LF01: Non-Hazardous Contaminated Soil & Debris)
Generator 168-MILL CREEK RESIDENTIAL TR MILL CREEK RESIDENTIAL TRUST 1120 SE MORRISION

Carrier SWAG ENTERPRISES LLC
Vehicle# 203-PUP
Container
Driver BROCK
Check#
Billing # 0003532
Gen EPA ID

Grid

Volume

	Time	Scale	Operator	Inbound
In	04/21/2021 07:59:49	Inbound 1	JPRIME	
Out	04/21/2021 07:59:49		JPRIME	

Gross	114580 lb
Tare	40100 lb
Net	74480 lb
Tons	37.24

Comments

Consumer Comments? We want to know. Please call.

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	ENVCLEANUP SPWPCS-	100	37.24	Tons				MULT-IN
2	EVF-P6-Environment	100		%				MULT-IN

Total Tax
Total Ticket

Driver`s Signature

WASTE MANAGEMENT

Hillsboro Landfill, Inc
3205 SE Minter Bridge
Hillsboro, OR, 97123
Ph: (503)-640-9427

Original
Ticket# 1602687

Customer Name	DEWITT CONSTRUCTION INC DEWIT	Carrier	SWAG ENTERPRISES LLC		
Ticket Date	05/07/2021	Vehicle#	203-SOLO	Volume	
Payment Type	Credit Account	Container			
Manual Ticket#		Driver	BROCK		
Hauling Ticket#		Check#			
Route		Billing #	0003532		
State Waste Code		Gen EPA ID			
Manifest	NA				
Destination		Grid			
PO					
Profile	135210OR (LF02: Non-Hazardous Contaminated Soil)				
Generator	168-MILL CREEK RESIDENTIAL TR MILL CREEK RESIDENTIAL TRUST 1120 SE MORRISION				

	Time	Scale	Operator	Inbound		
In	05/07/2021 11:34:53	Inbound 2	amarti22		Gross	66380 lb
Out	05/07/2021 11:53:28	Outbound	JPRIME		Tare	28060 lb
					Net	38320 lb
					Tons	19.16

Comments

Consumer Comments? We want to know. Please call.

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Cont Soil Pet-RGC-	100	19.16	Tons				MULT-IN
2	EVF-P6-Environment	100		%				MULT-IN

Total Tax
Total Ticket

Driver's Signature

WASTE MANAGEMENT

Hillsboro Landfill, Inc
3205 SE Minter Bridge
Hillsboro, OR, 97123
Ph: (503)-640-9427

Original
Ticket# 1602749

Customer Name DEWITT CONSTRUCTION INC DEWIT
Ticket Date 05/07/2021
Payment Type Credit Account
Manual Ticket#
Hauling Ticket#
Route
State Waste Code
Manifest NA
Destination
PO
Profile 135210OR (LF02: Non-Hazardous Contaminated Soil)
Generator 168-MILL CREEK RESIDENTIAL TR MILL CREEK RESIDENTIAL TRUST 1120 SE MORRISION

Carrier Mike Herberger
Vehicle# 14-H-SOLO
Container
Driver NICK
Check#
Billing # 0003532
Gen EPA ID

Grid

Volume

	Time	Scale	Operator	Inbound		
In	05/07/2021 13:36:49	Inbound 2	JPRIME		Gross	60920 lb
Out	05/07/2021 13:55:30	Outbound	JPRIME		Tare	29160 lb
					Net	31760 lb
					Tons	15.88

Comments

Consumer Comments? We want to know. Please call.

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Cont Soil Pet-RGC-	100	15.88	Tons				MULT-IN
2	EVF-P6-Environment	100		%				MULT-IN

Total Tax
Total Ticket

Driver's Signature Nick

CCM
CHERRY CITY METALS
SCRAP METAL RECYCLING

P.O. Box 5191
Salem, OR 97304-0191
(503) 588-0721

Material Purchase Ticket

Ticket # **1138339**

Date: 6/8/21 12:48 pm
Scale: Truck Inbound
Weighmaster Elizabeth

General Customer

Tracking ID 546gjq

Driver's License Number:
Vehicle Tag:

Item	Gross	Tare	Net LB	Price UM	Total
Unprepared	1,080.00	0.00	**1,080.0** LB	**140.000** Ton	**75.60**

Vehicle Gross Weight	13,640.0 LB
Vehicle Tare Weight	12,560.0 LB
Load Net Weight	**1,080.0** LB
Item/s Net Weight	**1,080.0** LB
Weight Difference	**0.0** LB

Total Payment (Cash) - $75.60

Please Sign Here:
Por Favor Firme Aqui: _____

I have read the current list of materials Cherry City Metals will not accept for regulatory and environmental reasons. I warrant that the materials I am selling Cherry City Metals do not contain any of the materials described on the list or contain any of the materials described on the list or contain hazardous or toxic wastes for which disposal in a municipal is landfill is restricted or prohibited. I warrant that all materials, including tanks, sealed motors and metal borings, have been fully and lawfully drained of all oils and oil products. I further warrant that any items that contained ozone depleting compounds such as CFC's or Freon, have been emptied in accordance with applicable laws.

I, the under signed, hereby declare that the property that is subject to this transaction is not, to the best of my knowledge, stolen property. I understand that this statement is made under penalty of perjury and may be used as evidence in court. I acknowledge that for the payment I received in full, I sell and convey title to the materials to Cherry City Metals. I also understand that Cherry City Metals is not responsible for the accidents to the materials or to vehicles while loading or unloading.

I agree to indemnify and hold harmless Cherry City Metals against all claims and expenses arising out of any breach of these warranties.

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•CHERRY CITY METALS•
SCRAP METAL RECYCLING

P.O. Box 5191
Salem, OR 97304-0191
(503) 588-0721

Material Purchase Ticket

Ticket # **1130228**

Date: 4/21/21 3:50 pm
Scale: Truck Inbound
Weighmaster Lacey

General Customer

Tracking ID 305kxe

Driver's License Number:
Vehicle Tag:

Item	Gross	Tare	Net LB	Price UM	Total
Unprepared	1,200.00	0.00	**1,200.0** LB	**140.000** Ton	**84.00**

Vehicle Gross Weight	15,540.0 LB
Vehicle Tare Weight	14,340.0 LB
Load Net Weight	**1,200.0** LB
Item/s Net Weight	**1,200.0** LB
Weight Difference	**0.0** LB

Total Payment (Cash) - $84.00

Please Sign Here:
Por Favor Firme Aqui: _____

I have read the current list of materials Cherry City Metals will not accept for regulatory and environmental reasons. I warrant that the materials I am selling Cherry City Metals do not contain any of the materials described on the list or contain any of the materials described on the list or contain hazardous or toxic wastes for which disposal in a municipal is landfill is restricted or prohibited. I warrant that all materials, including tanks, sealed motors and metal borings, have been fully and lawfully drained of all oils and oil products. I further warrant that any items that contained ozone depleting compounds such as CFC's or Freon, have been emptied in accordance with applicable laws.

I, the under signed, hereby declare that the property that is subject to this transaction is not, to the best of my knowledge, stolen property. I understand that this statement is made under penalty of perjury and may be used as evidence in court. I acknowledge that for the payment I received in full, I sell and convey title to the materials to Cherry City Metals. I also understand that Cherry City Metals is not responsible for the accidents to the materials or to vehicles while loading or unloading.

I agree to indemnify and hold harmless Cherry City Metals against all claims and expenses arising out of any breach of these warranties.

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Oil Re-refining Company, Inc

Oil Re-Refining Company, Inc
4150 N. Suttle Road
Portland, Oregon 97217-7717

Orrco™
The oil recycler.

Invoice

Date	Invoice #
4/21/2021	438862

Bill To	Ship To
Enviroprobe Northwest 1523 Georgia Ave SE Salem, OR 97302	Karl Van Zandt 1120 SW Morrison Portland OR 97204 PDX DEwitt Site

Resell Expires	

Option	P.O. Number	Terms	Due Date	Ship Date	Bill of Lading	Account #
Email		10 Days Net	5/1/2021	4/20/2021	R1210420006	19415

Item Code	Description	U/M	Quantity	Price Each	Amount
XRF Analysis T...	XRF Analysis Testing In House	Ea	1	20.00	[redacted]
Wastewater (fue...	For recycling, Flash Point > 200 F. CDT test:	Gal	2,000	0.50	
Oily Solids (gall...	For recycling, Flash Point > 200 F. CDT test:	Gal	500	2.25	

Total $[redacted]

Phone #	Fax #	E-mail
503-286-8352	503-286-5027	ar@orrcorecycles.com

We accept all major credit cards.

148733
503 307 9846

Oil Re-refining Company, Inc

Oil Re-Refining Company, Inc
4150 N. Suttle Road
Portland, Oregon 97217-7717

Orrco
The oil recycler.

Invoice

Date	Invoice #
4/20/2021	438821

Bill To	Ship To
Enviroprobe Northwest 1523 Georgia Ave SE Salem, OR 97302	Karl Van Zandt 1120 SE Morrison Portland OR 97204

Resell Expires	

Option	P.O. Number	Terms	Due Date	Ship Date	Bill of Lading	Account #
		10 Days Net	4/30/2021	4/16/2021	R1210416007	19415

Item Code	Description	U/M	Quantity	Price Each	Amount
Truck Wash Out	Truck Wash Out	Ea	3	65.00	[redacted]
XRF Analysis T...	XRF Analysis Testing In House	Ea	1	20.00	[redacted]
Wastewater (fue...	For recycling, Flash Point > 200 F. CDT test:	Gal	1,500	0.50	[redacted]
Oily Solids (gall...	For recycling, Flash Point > 200 F. CDT test:	Gal	300	2.25	[redacted]

Total $[redacted]

Phone #	Fax #	E-mail
503-286-8352	503-286-5027	ar@orrcorecycles.com

We accept all major credit cards.

Appendix 4

- 1. Specialty Analytical 2104117
- 2. Specialty Analytical 2104118
- 3. Specialty Analytical 2104142
- 4. Specialty Analytical 2104143
- 5. Specialty Analytical 2104162
- 6. Specialty Analytical 2104163
- 7. Specialty Analytical 2104164
- 8. Specialty Analytical 2104165
- 9. Specialty Analytical 2104170
- 10. Specialty Analytical 2104171
- 11. Specialty Analytical 2104112
- 12. APEX A1E0409

Specialty Analytical
9011 SE Jannsen Rd
Clackamas, OR 97015
TEL: (503) 607-1331
Website: www.specialtyanalytical.com

April 15, 2021

Karl VanZandt
Karl VanZandt
1523 Georgia Ave SE
Salem, OR 97302
TEL: (503) 302-4078
FAX:

RE: 12th Dewitt

Order No.: 2104117

Dear Karl VanZandt:

There were no problems with the analysis and all data for associated QC met EPA or laboratory specifications, except where noted in the Case Narrative, or as qualified with flags. Results apply only to the samples analyzed. Without approval of the laboratory, the reproduction of this report is only permitted in its entirety.

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

Sincerely,

Marty French
Lab Director

Specialty Analytical

WO#: **2104117**
Date Reported: **4/15/2021**

CLIENT: Karl VanZandt
Project: 12th Dewitt

Lab ID: 2104117-001
Client Sample ID 12th Dewitt - SP2-1

Matrix: SOIL
Collection Date: 4/14/2021 11:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
NWTPH-DX				**NWTPH-DX**	**SW3545A**	Analyst: **TB**
Diesel	27.8	17.4		mg/Kg-dry	1	4/15/2021 10:35:00 AM
Lube Oil	76.7	58.1		mg/Kg-dry	1	4/15/2021 10:35:00 AM
Surr: o-Terphenyl	86.1	50 - 150		%Rec	1	4/15/2021 10:35:00 AM

QC SUMMARY REPORT

WO#: **2104117**

4/15/2021

Specialty Analytical

Client: Karl VanZandt
Project: 12th Dewitt

TestCode: **NWTPHDX_S**

Sample ID: **CCV-1**	SampType: **CCV**	TestCode: **NWTPHDX_S**	Units: **mg/Kg**	Prep Date:	RunNo: **40012**
Client ID: **CCV**	Batch ID: **17712**	TestNo: **NWTPH-Dx**	**SW3545A**	Analysis Date: **4/14/2021**	SeqNo: **514970**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1050	15.0	1000	0	105	85	115				
Lube Oil	443	50.0	500.0	0	88.7	85	115				

Sample ID: **MB-17712**	SampType: **MBLK**	TestCode: **NWTPHDX_S**	Units: **mg/Kg**	Prep Date: **4/13/2021**	RunNo: **40012**
Client ID: **PBS**	Batch ID: **17712**	TestNo: **NWTPH-Dx**	**SW3545A**	Analysis Date: **4/14/2021**	SeqNo: **514971**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	15.0									
Lube Oil	ND	50.0									
Surr: o-Terphenyl	25.0		33.33		75.1	50	150				

Sample ID: **LCS-17712**	SampType: **LCS**	TestCode: **NWTPHDX_S**	Units: **mg/Kg**	Prep Date: **4/13/2021**	RunNo: **40012**
Client ID: **LCSS**	Batch ID: **17712**	TestNo: **NWTPH-Dx**	**SW3545A**	Analysis Date: **4/14/2021**	SeqNo: **514972**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	130	15.0	166.7	0	78.0	76.3	125				
Lube Oil	124	50.0	166.7	0	74.6	69.9	127				

Qualifiers: H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits

QC SUMMARY REPORT

WO#: **2104117**

4/15/2021

Specialty Analytical

Client: Karl VanZandt
Project: 12th Dewitt

TestCode: **NWTPHDX_S**

Sample ID: **2104096-001ADUP** SampType: **DUP** TestCode: **NWTPHDX_S** Units: **mg/Kg-dry** Prep Date: **4/13/2021** RunNo: **40012**
Client ID: **BatchQC** Batch ID: **17712** TestNo: **NWTPH-Dx** **SW3545A** Analysis Date: **4/14/2021** SeqNo: **514974**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	977	16.2						811.1	18.5	20	
Lube Oil	143	54.1						110.7	25.3	20	RM,MI

Sample ID: **CCV-3** SampType: **CCV** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: RunNo: **40012**
Client ID: **CCV** Batch ID: **17712** TestNo: **NWTPH-Dx** **SW3545A** Analysis Date: **4/15/2021** SeqNo: **515037**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	997	15.0	1000	0	99.7	85	115				
Lube Oil	460	50.0	500.0	0	92.0	85	115				

Sample ID: **CCB-17712** SampType: **CCB** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: RunNo: **40012**
Client ID: **CCB** Batch ID: **17712** TestNo: **NWTPH-Dx** **SW3545A** Analysis Date: **4/15/2021** SeqNo: **515038**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	15.0									
Lube Oil	ND	50.0									
Surr: o-Terphenyl	25.0		33.33		75.1	50	150				

Qualifiers: H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits

QC SUMMARY REPORT

WO#: **2104117**

4/15/2021

Specialty Analytical

Client: Karl VanZandt
Project: 12th Dewitt

TestCode: **NWTPHDX_S**

Sample ID: **CCV-4** SampType: **CCV** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: RunNo: **40012**
Client ID: **CCV** Batch ID: **17712** TestNo: **NWTPH-Dx** **SW3545A** Analysis Date: **4/15/2021** SeqNo: **515043**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1290	15.0	1333	0	96.8	85	115				
Lube Oil	600	50.0	666.7	0	90.0	85	115				

Qualifiers: H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits

Specialty Analytical
9011 SE Jannsen Rd
Clackamas, Oregon 97015
TEL: 503-607-1331 FAX: 503-607-1336
Website: www.specialtyanalytical.com

Sample Receipt Checklist

Client Name VANZANDT_KARL Work Order Number 2104117

RcptNo: 1 Date and Time Received 4/14/2021 12:48:23 PM Received by: Katherine Lynch

Completed by Reviewed by:

Completed Date: 4/14/2021 12:51:00 PM Reviewed Date: 4/14/2021 4:50:03 PM

Carrier name: Client

Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	Not Present ☐
Are matrices correctly identified on Chain of custody?	Yes ☑	No ☐	
Is it clear what analyses were requested?	Yes ☑	No ☐	
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Samples in proper container/bottle?	Yes ☑	No ☐	
Were correct preservatives used and noted?	Yes ☐	No ☐	NA ☑
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
Were container lables complete (ID, Pres, Date)?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
All samples received at a temp. of > 0° C to 6.0° C?	Yes ☐	No ☑	NA ☐
Response when temperature is outside of range:	Samples were collected the same day and chilled.		
Preservative added to bottles:			
Sample Temp. taken and recorded upon receipt?	Yes ☑	No ☐	To 14.5 °C
Water - Were bubbles absent in VOC vials?	Yes ☐	No ☐	No Vials ☑
Water - Was there Chlorine Present?	Yes ☐	No ☐	NA ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	NA ☑
Are Samples considered acceptable?	Yes ☑	No ☐	
Custody Seals present?	Yes ☐	No ☑	
Traffic Report or Packing Lists present?	Yes ☐	No ☑	
Airbill or Sticker?	Air Bill ☐	Sticker ☐	Not Present ☑
Airbill No:			
Sample Tags Present?	Yes ☐	No ☑	
Sample Tags Listed on COC?	Yes ☐	No ☑	
Tag Numbers:			
Sample Condition?	Intact ☑	Broken ☐	Leaking ☐

Case Number: SDG: SAS:

Adjusted? _____ Checked by

Any No and/or NA (not applicable) response must be detailed in the comments section be

Specialty Analytical
9011 SE Jannsen Ra
Clackamas, Oregon 97015
TEL: 503-607-1331 FAX: 503-607-133(
Website: www.specialtyanalytical.com

Sample Receipt Checklist

Client Contacted? ☐ Yes ☑ No ☐ NA Person Contacted:

Contact Mode: ☐ Phone: ☐ Fax: ☐ Email: ☐ In Person:

Comments:
2 oz subsampled and frozen

Client Instructions:

Date Contacted: Contacted By:

Regarding:

CorrectiveAction:

www.specialtyanalytical.com

Chain of Custody Record

Specialty Analytical
9011 SE Jannsen Rd
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336

Date: 4/14/21 | Page: 1 of: 1 | Laboratory Project No (internal): 2104117

Project Name: 12th Dewitt | Temperature on Receipt: 14.5 °C

Client: Karl VanZandt | Project No: 12th Dewitt | PO No: 12th Dewitt | Cooling: Cooler + Ice | Shipped Via: Client

Address: 1523 GEORGIA Ave SE | Collected by: Karl VanZandt | Custody Seal: Y (N) Intact / Broken Cooler / Bottle

City, State, Zip: Salem, OR 97302 | State Collected: (OR) WA OTHER | MDL TIER IV EDD

Telephone: 503 302 4078 | Report To (PM): Karl VanZandt | Sample Disposal: ☐ Return to client ☑ Disposal by lab (after 60 days)

AP Email: KarlVanZandt@gmail.com | PM Email: KarlVanZandt@gmail.com

	Sample Name	Sample Date	Sample Time	Sample Matrix*	# of Containers	Requested Tests: TPH-DX	Comments
1	12th Dewitt-SP2-1	4/14/21	1130	Soil	1	X	
2							
3							
4							
5							
6							
7							
8							
9							
10							

*Matrix: A=Air, AQ=Aqueous, L=Liquid, O=Oil, P=Product, S=Soil, SD=Sediment, SL=Solid, W=Water, DW=Drinking Water, GW=Ground Water, SW=Storm Water, WW=Waste Water, M=Miscellaneous

Turn-around Time: Standard (5-7 Business): ____ 3 Day: ____ 2 Day: ____ Next Day: X Same Day: ____

Expedited turn-around requests should be coordinated in advance

Relinquished	Date/Time	Received	Date/Time
x Karl VanZandt	4/14/21 12:42	x	4-14-2021 1242
x		x	
x		x	

Specialty Analytical
9011 SE Jannsen Ra
Clackamas, Oregon 97015
TEL: 503-607-1331 FAX: 503-607-133(
Website: www.specialtyanalytical.com

Definition Only

WO#: **2104117**

Date: **4/15/2021**

Definitions:

Specialty Analytical

9011 SE Jannsen Rd
Clackamas, OR 97015
TEL: (503) 607-1331
Website: www.specialtyanalytical.com

April 21, 2021

Karl VanZandt
Karl VanZandt
1523 Georgia Ave SE
Salem, OR 97302
TEL: (503) 302-4078
FAX:

RE: 12th Dewitt

Order No.: 2104118

Dear Karl VanZandt:

There were no problems with the analysis and all data for associated QC met EPA or laboratory specifications, except where noted in the Case Narrative, or as qualified with flags. Results apply only to the samples analyzed. Without approval of the laboratory, the reproduction of this report is only permitted in its entirety.

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

Sincerely,

Marty French
Lab Director

Specialty Analytical

WO#: **2104118**
Date Reported: **4/21/2021**

CLIENT: Karl VanZandt
Project: 12th Dewitt

Lab ID: 2104118-001 **Matrix:** SOIL
Client Sample ID 12th Dewitt-TK2C-92 **Collection Date:** 4/14/2021 11:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
NWTPH-DX				**NWTPH-DX**	**SW3545A**	Analyst: **TB**
Diesel	30.6	20.3	A1	mg/Kg-dry	1	4/15/2021 11:20:00 AM
Lube Oil	ND	67.7		mg/Kg-dry	1	4/15/2021 11:20:00 AM
Surr: o-Terphenyl	84.3	50 - 150		%Rec	1	4/15/2021 11:20:00 AM

QC SUMMARY REPORT

WO#: **2104118**

4/21/2021

Specialty Analytical

Client: Karl VanZandt
Project: 12th Dewitt

TestCode: **NWTPHDX_S**

Sample ID: **CCV-1**	SampType: **CCV**	TestCode: **NWTPHDX_S**	Units: **mg/Kg**	Prep Date:	RunNo: **40012**
Client ID: **CCV**	Batch ID: **17712**	TestNo: **NWTPH-Dx**	**SW3545A**	Analysis Date: **4/14/2021**	SeqNo: **514970**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1050	15.0	1000	0	105	85	115				
Lube Oil	443	50.0	500.0	0	88.7	85	115				

Sample ID: **MB-17712**	SampType: **MBLK**	TestCode: **NWTPHDX_S**	Units: **mg/Kg**	Prep Date: **4/13/2021**	RunNo: **40012**
Client ID: **PBS**	Batch ID: **17712**	TestNo: **NWTPH-Dx**	**SW3545A**	Analysis Date: **4/14/2021**	SeqNo: **514971**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	15.0									
Lube Oil	ND	50.0									
Surr: o-Terphenyl	25.0		33.33		75.1	50	150				

Sample ID: **LCS-17712**	SampType: **LCS**	TestCode: **NWTPHDX_S**	Units: **mg/Kg**	Prep Date: **4/13/2021**	RunNo: **40012**
Client ID: **LCSS**	Batch ID: **17712**	TestNo: **NWTPH-Dx**	**SW3545A**	Analysis Date: **4/14/2021**	SeqNo: **514972**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	130	15.0	166.7	0	78.0	76.3	125				
Lube Oil	124	50.0	166.7	0	74.6	69.9	127				

Qualifiers: H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits

QC SUMMARY REPORT

WO#: **2104118**

4/21/2021

Specialty Analytical

Client: Karl VanZandt
Project: 12th Dewitt

TestCode: **NWTPHDX_S**

Sample ID: **2104096-001ADUP** SampType: **DUP** TestCode: **NWTPHDX_S** Units: **mg/Kg-dry** Prep Date: **4/13/2021** RunNo: **40012**
Client ID: **BatchQC** Batch ID: **17712** TestNo: **NWTPH-Dx** **SW3545A** Analysis Date: **4/14/2021** SeqNo: **514974**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	977	16.2						811.1	18.5	20	
Lube Oil	143	54.1						110.7	25.3	20	RM,MI

Sample ID: **CCV-3** SampType: **CCV** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: RunNo: **40012**
Client ID: **CCV** Batch ID: **17712** TestNo: **NWTPH-Dx** **SW3545A** Analysis Date: **4/15/2021** SeqNo: **515037**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	997	15.0	1000	0	99.7	85	115				
Lube Oil	460	50.0	500.0	0	92.0	85	115				

Sample ID: **CCB-17712** SampType: **CCB** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: RunNo: **40012**
Client ID: **CCB** Batch ID: **17712** TestNo: **NWTPH-Dx** **SW3545A** Analysis Date: **4/15/2021** SeqNo: **515038**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	15.0									
Lube Oil	ND	50.0									
Surr: o-Terphenyl	25.0		33.33		75.1	50	150				

Qualifiers: H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits

QC SUMMARY REPORT

WO#: **2104118**

4/21/2021

Specialty Analytical

Client: Karl VanZandt
Project: 12th Dewitt

TestCode: **NWTPHDX_S**

Sample ID: **CCV-4** SampType: **CCV** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: RunNo: **40012**
Client ID: **CCV** Batch ID: **17712** TestNo: **NWTPH-Dx** **SW3545A** Analysis Date: **4/15/2021** SeqNo: **515043**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1290	15.0	1333	0	96.8	85	115				
Lube Oil	600	50.0	666.7	0	90.0	85	115				

Qualifiers: H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits

Specialty Analytical
9011 SE Jannsen Rd
Clackamas, Oregon 97015
TEL: 503-607-1331 FAX: 503-607-1336
Website: www.specialtyanalytical.com

Sample Receipt Checklist

Client Name VANZANDT_KARL

Work Order Number 2104118

RcptNo: 1

Date and Time Received 4/14/2021 12:51:13 PM

Received by: Katherine Lynch

Completed by

Reviewed by:

Completed Date: 4/14/2021 12:52:12 PM

Reviewed Date: 4/14/2021 2:11:01 PM

Carrier name: Client

Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	Not Present ☐
Are matrices correctly identified on Chain of custody?	Yes ☑	No ☐	
Is it clear what analyses were requested?	Yes ☑	No ☐	
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Samples in proper container/bottle?	Yes ☑	No ☐	
Were correct preservatives used and noted?	Yes ☐	No ☐	NA ☑
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
Were container lables complete (ID, Pres, Date)?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
All samples received at a temp. of > 0° C to 6.0° C?	Yes ☐	No ☑	NA ☐

Response when temperature is outside of range: Samples were collected the same day and chilled.

Preservative added to bottles:	Yes ☑	No ☐	To 14.5 °C
Sample Temp. taken and recorded upon receipt?	Yes ☐	No ☐	No Vials ☑
Water - Were bubbles absent in VOC vials?	Yes ☐	No ☐	NA ☑
Water - Was there Chlorine Present?	Yes ☐	No ☐	NA ☑
Water - pH acceptable upon receipt?	Yes ☑	No ☐	
Are Samples considered acceptable?	Yes ☐	No ☑	
Custody Seals present?	Yes ☐	No ☑	
Traffic Report or Packing Lists present?	Air Bill ☐	Sticker ☐	Not Present ☑
Airbill or Sticker?			
Airbill No:			
Sample Tags Present?	Yes ☐	No ☑	
Sample Tags Listed on COC?	Yes ☐	No ☑	
Tag Numbers:			
Sample Condition?	Intact ☑	Broken ☐	Leaking ☐

Case Number: SDG: SAS:

Adjusted? _____ Checked by

Any No and/or NA (not applicable) response must be detailed in the comments section be

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Sample Receipt Checklist

Client Contacted? ☐ Yes ☑ No ☐ NA Person Contacted:

Contact Mode: ☐ Phone: ☐ Fax: ☐ Email: ☐ In Person:

Comments:
2 oz subsampled and frozen

Client Instructions:

Date Contacted: Contacted By:

Regarding:

CorrectiveAction:

Specialty Analytical
9011 SE Jannsen Rd
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336

Chain of Custody Record

Date: 4/14/21 Page: 1 of: 1
Laboratory Project No (Internal): 2104118
Project Name: 12th Dewitt
Temperature on Receipt: 14.5 °C
Project No: 12th Dewitt PO No:
Cooling: Cooler+Ice Shipped Via: Client
Collected by: Karl VanZandt
Custody Seal: Y / (N) Intact / Broken Cooler / Bottle
State Collected: (OR) WA OTHER
MDL TIER IV EDD
Report To (PM): Karl VanZandt
Sample Disposal: ☐ Return to client ☒ Disposal by lab (after 60 days)
Client: Karl VanZandt
Address: 1523 Georgia Ave SE
City, State, Zip: Salem, OR 97302
Telephone: 5033024078
AP Email: Karl VanZandt
PM Email: KarlVanZandt@gmail.com

	Sample Name	Sample Date	Sample Time	Sample Matrix*	# of Containers	Requested Tests: TPH - Dx	Comments
1	12th Dewitt-TH22C-92	4/14/21	11:15	Soil	X	X	
2							
3							
4							
5							
6							
7							
8							
9							
10							

*Matrix: A=Air, AQ=Aqueous, L=Liquid, O=Oil, P=Product, S=Soil, SD=Sediment, SL=Solid, W=Water, DW=Drinking Water, GW=Ground Water, SW=Storm Water, WW=Waste Water, M=Miscellaneous

Turn-around Time: Standard (5-7 Business): X 3 Day: ____ 2 Day: ____ Next Day: ____ Same Day: ____
Expedited turn-around requests should be coordinated in advance

Relinquished	Date/Time	Received	Date/Time
x Karl VanZandt	4/14/21 12:54	x	4-14-2021 12:53
x		x	
x		x	

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Website: www.specialtyanalytical.com

Definition Only

WO#: **2104118**
Date: **4/21/2021**

Definitions:

KEY TO FLAGS

A: This sample contains a Gasoline Range Organic not identified as a specific hydrocarbon product. The result was qualified against gasoline calibration standards.

A1: This sample contains a Diesel Range Organic not identified as a specific hydrocarbon product. The result was qualified against diesel calibration standards.

A2: This sample contains a Lube Oil Range Organic not identified as a specific hydrocarbon product. The result was qualified against lube oil calibration standards.

A3: The results was determined to be Non-Detect based on hydrocarbon pattern recognition. The product was carry-over from another hydrocarbon type.

A4: The product appears to be aged or degraded.

B: The blank exhibited a positive result greater than the reporting limit for this compound.

CN: See Case Narrative.

E: Result exceeds the calibration range for this compound. The result should be considered an estimate.

F: The positive result for this hydrocarbon is due to single component contamination. The product does not match any hydrocarbon in the fuels library.

FS: Follow-up testing is suggested.

G: Result may be biased high due to biogenic interferences. Clean up is recommended.

H: Sample was analyzed outside recommended holding time.

HT: □At client's request, samples was analyzed outside of recommended holding time.

HP: Sample was analyzed outside recommended holding time due to VOA having pH >2.

J: The results for this analyte is between the MDL and the PQL and should be considered an

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Definition Only

WO#: **2104118**
Date: **4/21/2021**

Definitions:

estimated concentration.

K: Diesel result is biased high due to amount of Oil contained in the sample.

L: Diesel result is biased high due to amount of Gasoline contained in the sample.

M: Oil result is biased high due to amount of Diesel contained in the sample.

N: Gasoline result is biased high due to amount of Diesel contained in the sample.

MC: Sample concentration is greater than 4x the spiked value, the spiked value is considered insignificant.

MI: Result is outside control limits due to matrix interference.

NH: Sample matrix is non-homogeneous

MSA: Value determined by Method of Standard Addition.

O: Laboratory Control Standard (LCS) exceeded laboratory control limits but meets CCV criteria. Data meets EPA requirements.

Q: Detection levels elevated due to sample matrix.

R: RPD control limits were exceeded

RF: Duplicate failed due to result being at or near the method-reporting limit.

RP: Matrix spike values exceed established QC limits; post digestion spike is in control.

S: Recovery is outside control limits.

SC: CCV or LCS exceeded high recovery control limits, but associated samples are non-detect. Data meets EPA requirements.

SL: LCS exceeded recovery control limits, but associated MS/MSD passing. Data meets EPA requirements.

3

Specialty Analytical

9011 SE Jannsen Rd
Clackamas, OR 97015
TEL: (503) 607-1331
Website: www.specialtyanalytical.com

April 19, 2021

Karl VanZandt
Karl VanZandt
1523 Georgia Ave SE
Salem, OR 97302
TEL: (503) 302-4078
FAX:

RE: 12th Dewitt

Order No.: 2104142

Dear Karl VanZandt:

There were no problems with the analysis and all data for associated QC met EPA or laboratory specifications, except where noted in the Case Narrative, or as qualified with flags. Results apply only to the samples analyzed. Without approval of the laboratory, the reproduction of this report is only permitted in its entirety.

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

Sincerely,

Marty French
Lab Director

Specialty Analytical

WO#: **2104142**
Date Reported: **4/19/2021**

CLIENT: Karl VanZandt
Project: 12th Dewitt

Lab ID: 2104142-001 **Matrix:** SOIL
Client Sample ID 12th Dewitt - TK2W7.0 **Collection Date:** 4/16/2021 12:30:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
NWTPH-DX				**NWTPH-DX**	**SW3545A**	Analyst: **TB**
Diesel	35.7	18.2		mg/Kg-dry	1	4/19/2021 11:25:00 AM
Lube Oil	ND	60.6		mg/Kg-dry	1	4/19/2021 11:25:00 AM
Surr: o-Terphenyl	83.3	50 - 150		%Rec	1	4/19/2021 11:25:00 AM

Lab ID: 2104142-002 **Matrix:** SOIL
Client Sample ID 12th Dewitt - TK2E7.0 **Collection Date:** 4/16/2021 12:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
NWTPH-DX				**NWTPH-DX**	**SW3545A**	Analyst: **TB**
Diesel	21.0	18.1		mg/Kg-dry	1	4/19/2021 11:48:00 AM
Lube Oil	ND	60.3		mg/Kg-dry	1	4/19/2021 11:48:00 AM
Surr: o-Terphenyl	86.1	50 - 150		%Rec	1	4/19/2021 11:48:00 AM

Qualifiers: H Holding times for preparation or analysis exceeded

QC SUMMARY REPORT

WO#: **2104142**

4/19/2021

Specialty Analytical

Client: Karl VanZandt
Project: 12th Dewitt

TestCode: **NWTPHDX_S**

Sample ID: **CCV-1** SampType: **CCV** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: RunNo: **40060**
Client ID: **CCV** Batch ID: **17750** TestNo: **NWTPH-Dx** **SW3545A** Analysis Date: **4/19/2021** SeqNo: **515507**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1060	15.0	1000	0	106	85	115				
Lube Oil	487	50.0	500.0	0	97.3	85	115				

Sample ID: **MB-17750** SampType: **MBLK** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: **4/16/2021** RunNo: **40060**
Client ID: **PBS** Batch ID: **17750** TestNo: **NWTPH-Dx** **SW3545A** Analysis Date: **4/19/2021** SeqNo: **515508**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	15.0									
Lube Oil	ND	50.0									
Surr: o-Terphenyl	28.0		33.33		84.0	50	150				

Sample ID: **LCS-17750** SampType: **LCS** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: **4/16/2021** RunNo: **40060**
Client ID: **LCSS** Batch ID: **17750** TestNo: **NWTPH-Dx** **SW3545A** Analysis Date: **4/19/2021** SeqNo: **515509**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	144	15.0	166.7	0	86.6	76.3	125				
Lube Oil	123	50.0	166.7	0	73.8	69.9	127				

Qualifiers: H Holding times for preparation or analysis exceeded

QC SUMMARY REPORT

WO#: **2104142**

4/19/2021

Specialty Analytical

Client: Karl VanZandt
Project: 12th Dewitt

TestCode: **NWTPHDX_S**

Sample ID: **2104142-002ADUP** SampType: **DUP** TestCode: **NWTPHDX_S** Units: **mg/Kg-dry** Prep Date: **4/16/2021** RunNo: **40060**
Client ID: **12th Dewitt - TK2E7.** Batch ID: **17750** TestNo: **NWTPH-Dx** **SW3545A** Analysis Date: **4/19/2021** SeqNo: **515512**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	22.2	18.1						20.99	5.59	20	
Lube Oil	ND	60.3						0	0	20	

Sample ID: **CCV-2** SampType: **CCV** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: RunNo: **40060**
Client ID: **CCV** Batch ID: **17750** TestNo: **NWTPH-Dx** **SW3545A** Analysis Date: **4/19/2021** SeqNo: **515513**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1360	15.0	1333	0	102	85	115				
Lube Oil	593	50.0	666.7	0	89.0	85	115				

Qualifiers: H Holding times for preparation or analysis exceeded

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Website: www.specialtyanalytical.com

Sample Receipt Checklist

Client Name VANZANDT_KARL Work Order Number 2104142

RcptNo: 1 Date and Time Received 4/16/2021 2:03:37 PM Received by: Katherine Lynch

Completed by Reviewed by:

Completed Date: 4/16/2021 2:05:06 PM Reviewed Date: 4/19/2021 11:58:43 AM

Carrier name: Client

Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	Not Present ☐
Are matrices correctly identified on Chain of custody?	Yes ☑	No ☐	
Is it clear what analyses were requested?	Yes ☑	No ☐	
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Samples in proper container/bottle?	Yes ☑	No ☐	
Were correct preservatives used and noted?	Yes ☐	No ☐	NA ☑
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
Were container lables complete (ID, Pres, Date)?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
All samples received at a temp. of > 0° C to 6.0° C?	Yes ☑	No ☐	NA ☐
Response when temperature is outside of range:			
Preservative added to bottles:			
Sample Temp. taken and recorded upon receipt?	Yes ☑	No ☐	To °C
Water - Were bubbles absent in VOC vials?	Yes ☐	No ☐	No Vials ☑
Water - Was there Chlorine Present?	Yes ☐	No ☐	NA ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	NA ☑
Are Samples considered acceptable?	Yes ☑	No ☐	
Custody Seals present?	Yes ☐	No ☑	
Traffic Report or Packing Lists present?	Yes ☐	No ☑	
Airbill or Sticker?	Air Bill ☐	Sticker ☐	Not Present ☑
Airbill No:			
Sample Tags Present?	Yes ☐	No ☑	
Sample Tags Listed on COC?	Yes ☐	No ☑	
Tag Numbers:			
Sample Condition?	Intact ☑	Broken ☐	Leaking ☐

Case Number: SDG: SAS:

Adjusted? _____ Checked by

Any No and/or NA (not applicable) response must be detailed in the comments section be

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Sample Receipt Checklist

Client Contacted? ☐ Yes ☑ No ☐ NA Person Contacted: Comments:

Contact Mode: ☐ Phone: ☐ Fax: ☐ Email: ☐ In Person:

Client Instructions:

Date Contacted: Contacted By:

Regarding:

CorrectiveAction:

Chain of Custody Record

Specialty Analytical
9011 SE Jannsen Rd
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336

Date: 4/16/21 Page: 1 of: 1

Project Name: 12th Dewitt

Project No: 12th Dewitt PO No: 12th Dewitt

Collected by: Karl VanZandt

State Collected: OR WA OTHER

Report To (PM): KVZ

Laboratory Project No (internal): 2104142

Temperature on Receipt: 5.9 °C

Cooling: Cooler + Ice Shipped Via: Client

Custody Seal: Y / N Intact / Broken Cooler / Bottle

MDL TIER IV EDD

Sample Disposal: ☐ Return to client ☒ Disposal by lab (after 60 days)

Client: Karl VanZandt

Address: 1523 Georgia Ave SE

City, State, Zip: Salem, OR 97302

Telephone: 5033024028

AP Email: KarlVanZandt@gmail.com

PM Email: KarlVanZandt@gmail.com

	Sample Name	Sample Date	Sample Time	Sample Matrix*	# of Containers	Requested Tests: TPH Dx	Comments
1	12th Dewitt-TK2W7.0	4/16/21	12:30	Soil	1	X	
2	12th Dewitt-TK2E7.0	4/16/21	12:15	Soil	1	X	
3							
4							
5							
6							
7							
8							
9							
10							

*Matrix: A=Air, AQ=Aqueous, L=Liquid, O=Oil, P=Product, S=Soil, SD=Sediment, SL=Solid, W=Water, DW=Drinking Water, GW=Ground Water, SW=Storm Water, WW=Waste Water, M=Miscellaneous

Turn-around Time: Standard (5-7 Business): _____ 3 Day: _____ 2 Day: _____ Next Day: _____ Same Day: X

Expedited turn-around requests should be coordinated in advance

Relinquished	Date/Time	Received	Date/Time
x Karl VanZandt	4/16/21 1300	x	4-16-2021 1330
x		x	
x		x	

Specialty Analytical
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Clackamas, Oregon 97015
TEL: 503-607-1331 FAX: 503-607-1336
Website: www.specialtyanalytical.com

Definition Only

WO#: **2104142**
Date: **4/19/2021**

Definitions:

KEY TO FLAGS

A: This sample contains a Gasoline Range Organic not identified as a specific hydrocarbon product. The result was qualified against gasoline calibration standards.

A1: This sample contains a Diesel Range Organic not identified as a specific hydrocarbon product. The result was qualified against diesel calibration standards.

A2: This sample contains a Lube Oil Range Organic not identified as a specific hydrocarbon product. The result was qualified against lube oil calibration standards.

A3: The results was determined to be Non-Detect based on hydrocarbon pattern recognition. The product was carry-over from another hydrocarbon type.

A4: The product appears to be aged or degraded.

B: The blank exhibited a positive result greater than the reporting limit for this compound.

CN: See Case Narrative.

E: Result exceeds the calibration range for this compound. The result should be considered an estimate.

F: The positive result for this hydrocarbon is due to single component contamination. The product does not match any hydrocarbon in the fuels library.

FS: Follow-up testing is suggested.

G: Result may be biased high due to biogenic interferences. Clean up is recommended.

H: Sample was analyzed outside recommended holding time.

HT: □At client's request, samples was analyzed outside of recommended holding time.

HP: Sample was analyzed outside recommended holding time due to VOA having pH >2.

J: The results for this analyte is between the MDL and the PQL and should be considered an

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Definition Only

WO#: **2104142**
Date: **4/19/2021**

Definitions:

estimated concentration.

K: Diesel result is biased high due to amount of Oil contained in the sample.

L: Diesel result is biased high due to amount of Gasoline contained in the sample.

M: Oil result is biased high due to amount of Diesel contained in the sample.

N: Gasoline result is biased high due to amount of Diesel contained in the sample.

MC: Sample concentration is greater than 4x the spiked value, the spiked value is considered insignificant.

MI: Result is outside control limits due to matrix interference.

NH: Sample matrix is non-homogeneous

MSA: Value determined by Method of Standard Addition.

O: Laboratory Control Standard (LCS) exceeded laboratory control limits but meets CCV criteria. Data meets EPA requirements.

Q: Detection levels elevated due to sample matrix.

R: RPD control limits were exceeded

RF: Duplicate failed due to result being at or near the method-reporting limit.

RP: Matrix spike values exceed established QC limits; post digestion spike is in control.

S: Recovery is outside control limits.

SC: CCV or LCS exceeded high recovery control limits, but associated samples are non-detect. Data meets EPA requirements.

SL: LCS exceeded recovery control limits, but associated MS/MSD passing. Data meets EPA requirements.

4

Specialty Analytical

9011 SE Jannsen Rd
Clackamas, OR 97015
TEL: (503) 607-1331
Website: www.specialtyanalytical.com

April 20, 2021

Karl VanZandt
Karl VanZandt
1523 Georgia Ave SE
Salem, OR 97302
TEL: (503) 302-4078
FAX:

RE: Dewitt / 12th Dewitt

Order No.: 2104143

Dear Karl VanZandt:

There were no problems with the analysis and all data for associated QC met EPA or laboratory specifications, except where noted in the Case Narrative, or as qualified with flags. Results apply only to the samples analyzed. Without approval of the laboratory, the reproduction of this report is only permitted in its entirety.

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

Sincerely,

Marty French
Lab Director

Specialty Analytical

WO#: **2104143**
Date Reported: **4/20/2021**

CLIENT: Karl VanZandt
Project: Dewitt / 12th Dewitt

Lab ID: 2104143-001 **Matrix:** OIL
Client Sample ID 12th Dewitt-Tank **Collection Date:** 4/16/2021 12:30:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
RCRA_8_S				**SW 6020B**	**SW3050B**	Analyst: **AW**
ICP/MS METALS-TOTAL RECOVERABLE						
Arsenic	ND	1.10		mg/Kg	10	4/19/2021 12:23:45 PM
Barium	1.17	0.552		mg/Kg	10	4/19/2021 12:23:45 PM
Cadmium	ND	0.110		mg/Kg	10	4/19/2021 12:23:45 PM
Chromium	ND	1.10		mg/Kg	10	4/19/2021 12:23:45 PM
Lead	1.08	0.276		mg/Kg	10	4/19/2021 12:23:45 PM
Selenium	ND	1.10		mg/Kg	10	4/19/2021 12:23:45 PM
Silver	ND	0.110		mg/Kg	10	4/19/2021 12:23:45 PM
RCRA_8_S				**SW 7471B**	**SW 7471B**	Analyst: **AW**
TOTAL MERCURY						
Mercury	ND	0.0105		mg/Kg	1	4/19/2021 10:23:54 AM
PCB'S IN OIL				**SW 8082A**	**SW3580A**	Analyst: **JRC**
Aroclor 1016	ND	1.00		mg/Kg	1	4/19/2021 1:40:00 PM
Aroclor 1221	ND	1.00		mg/Kg	1	4/19/2021 1:40:00 PM
Aroclor 1232	ND	1.00		mg/Kg	1	4/19/2021 1:40:00 PM
Aroclor 1242	ND	1.00		mg/Kg	1	4/19/2021 1:40:00 PM
Aroclor 1248	ND	1.00		mg/Kg	1	4/19/2021 1:40:00 PM
Aroclor 1254	ND	1.00		mg/Kg	1	4/19/2021 1:40:00 PM
Aroclor 1260	ND	1.00		mg/Kg	1	4/19/2021 1:40:00 PM
Aroclor 1262	ND	1.00		mg/Kg	1	4/19/2021 1:40:00 PM
Aroclor 1268	ND	1.00		mg/Kg	1	4/19/2021 1:40:00 PM
Surr: Decachlorobiphenyl	23.8	76.3 - 151	SMI	%Rec	1	4/19/2021 1:40:00 PM

Qualifiers: H Holding times for preparation or analysis exceeded S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

WO#: **2104143**

4/20/2021

Specialty Analytical

Client: Karl VanZandt

Project: Dewitt / 12th Dewitt

TestCode: **6020_S**

Sample ID: **ICV** SampType: **ICV** TestCode: **6020_S** Units: **mg/Kg** Prep Date: RunNo: **40061**

Client ID: **ICV** Batch ID: **17753** TestNo: **SW 6020B** **SW3050B** Analysis Date: **4/19/2021** SeqNo: **515514**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	4.95	0.100	5.00	0	99.1	90	110				
Barium	4.96	0.0500	5.00	0	99.1	90	110				
Cadmium	5.04	0.0100	5.00	0	101	90	110				
Chromium	4.98	0.100	5.00	0	99.5	90	110				
Lead	4.88	0.0250	5.00	0	97.6	90	110				
Selenium	4.97	0.100	5.00	0	99.5	90	110				
Silver	5.06	0.0100	5.00	0	101	90	110				

Sample ID: **CCV** SampType: **CCV** TestCode: **6020_S** Units: **mg/Kg** Prep Date: RunNo: **40061**

Client ID: **CCV** Batch ID: **17753** TestNo: **SW 6020B** **SW3050B** Analysis Date: **4/19/2021** SeqNo: **515520**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	5.00	0.100	5.00	0	100	90	110				
Barium	5.02	0.0500	5.00	0	100	90	110				
Cadmium	4.97	0.0100	5.00	0	99.5	90	110				
Chromium	5.11	0.100	5.00	0	102	90	110				
Lead	4.93	0.0250	5.00	0	98.7	90	110				
Selenium	5.01	0.100	5.00	0	100	90	110				
Silver	5.17	0.0100	5.00	0	103	90	110				

Qualifiers: H Holding times for preparation or analysis exceeded S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

WO#: **2104143**

4/20/2021

Specialty Analytical

Client: Karl VanZandt
Project: Dewitt / 12th Dewitt

TestCode: **6020_S**

Sample ID: **MB-17753** SampType: **MBLK** TestCode: **6020_S** Units: **mg/Kg** Prep Date: **4/19/2021** RunNo: **40061**
Client ID: **PBS** Batch ID: **17753** TestNo: **SW 6020B** **SW3050B** Analysis Date: **4/19/2021** SeqNo: **515522**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.100									
Barium	ND	0.0500									
Cadmium	ND	0.0100									
Chromium	ND	0.100									
Lead	ND	0.0250									
Selenium	ND	0.100									
Silver	ND	0.0100									

Sample ID: **LCS-17753** SampType: **LCS** TestCode: **6020_S** Units: **mg/Kg** Prep Date: **4/19/2021** RunNo: **40061**
Client ID: **LCSS** Batch ID: **17753** TestNo: **SW 6020B** **SW3050B** Analysis Date: **4/19/2021** SeqNo: **515523**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	5.00	1.00	5.00	0	100	73.4	120				
Barium	4.90	0.500	5.00	0	98.1	80	120				
Cadmium	5.26	0.100	5.00	0	105	80	120				
Chromium	5.12	1.00	5.00	0	102	80	120				
Lead	4.88	0.250	5.00	0	97.6	80	120				
Selenium	5.07	1.00	5.00	0	101	79.5	119				
Silver	4.89	0.100	5.00	0	97.7	70	130				

Qualifiers: H Holding times for preparation or analysis exceeded S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

WO#: **2104143**

4/20/2021

Specialty Analytical

Client: Karl VanZandt
Project: Dewitt / 12th Dewitt

TestCode: **6020_S**

Sample ID: **2104139-001ADUP** SampType: **DUP** TestCode: **6020_S** Units: **mg/Kg-dry** Prep Date: **4/19/2021** RunNo: **40061**
Client ID: **BatchQC** Batch ID: **17753** TestNo: **SW 6020B** **SW3050B** Analysis Date: **4/19/2021** SeqNo: **515525**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	8.07	2.53						7.60	5.99	20	
Barium	192	1.27						180	6.48	20	
Cadmium	3.96	0.253						3.64	8.33	20	
Chromium	82.8	2.53						76.6	7.71	20	
Lead	241	0.633						224	7.27	20	
Selenium	ND	2.53						0	0	20	
Silver	4.29	0.253						3.98	7.35	20	

Sample ID: **2104139-001AMS** SampType: **MS** TestCode: **6020_S** Units: **mg/Kg-dry** Prep Date: **4/19/2021** RunNo: **40061**
Client ID: **BatchQC** Batch ID: **17753** TestNo: **SW 6020B** **SW3050B** Analysis Date: **4/19/2021** SeqNo: **515526**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	22.1	2.58	12.9	7.60	112	70	130				
Barium	212	1.29	12.9	180	249	70	130				SMC
Cadmium	17.2	0.258	12.9	3.64	105	70	130				
Chromium	102	2.58	12.9	76.6	194	70	130				SMC
Lead	258	0.644	12.9	224	266	70	130				SMC
Selenium	14.1	2.58	12.9	0.639	104	70	130				
Silver	17.6	0.258	12.9	3.98	106	70	130				

Qualifiers: H Holding times for preparation or analysis exceeded S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

WO#: 2104143

4/20/2021

Specialty Analytical

Client: Karl VanZandt
Project: Dewitt / 12th Dewitt

TestCode: 6020_S

Sample ID: **2104139-001AMSD** SampType: **MSD** TestCode: **6020_S** Units: **mg/Kg-dry** Prep Date: **4/19/2021** RunNo: **40061**
Client ID: **BatchQC** Batch ID: **17753** TestNo: **SW 6020B** **SW3050B** Analysis Date: **4/19/2021** SeqNo: **515527**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	22.4	2.60	13.0	7.60	114	70	130	22.1	1.35	20	
Barium	218	1.30	13.0	180	289	70	130	212	2.55	20	SMC
Cadmium	17.5	0.260	13.0	3.64	106	70	130	17.2	1.59	20	
Chromium	103	2.60	13.0	76.6	206	70	130	102	1.74	20	SMC
Lead	267	0.651	13.0	224	329	70	130	258	3.27	20	SMC
Selenium	14.3	2.60	13.0	0.639	105	70	130	14.1	1.57	20	
Silver	18.2	0.260	13.0	3.98	109	70	130	17.6	3.71	20	

Sample ID: **CCV** SampType: **CCV** TestCode: **6020_S** Units: **mg/Kg** Prep Date: RunNo: **40061**
Client ID: **CCV** Batch ID: **17753** TestNo: **SW 6020B** **SW3050B** Analysis Date: **4/19/2021** SeqNo: **515530**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	4.96	0.100	5.00	0	99.3	90	110				
Barium	4.94	0.0500	5.00	0	98.8	90	110				
Cadmium	4.96	0.0100	5.00	0	99.2	90	110				
Chromium	5.17	0.100	5.00	0	103	90	110				
Lead	4.88	0.0250	5.00	0	97.6	90	110				
Selenium	5.02	0.100	5.00	0	100	90	110				
Silver	5.14	0.0100	5.00	0	103	90	110				

Qualifiers: H Holding times for preparation or analysis exceeded S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

WO#: **2104143**

4/20/2021

Specialty Analytical

Client: Karl VanZandt
Project: Dewitt / 12th Dewitt

TestCode: **6020_S**

Sample ID: **CCV** SampType: **CCV** TestCode: **6020_S** Units: **mg/Kg** Prep Date: RunNo: **40061**
Client ID: **CCV** Batch ID: **17753** TestNo: **SW 6020B** **SW3050B** Analysis Date: **4/19/2021** SeqNo: **515536**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	4.94	0.100	5.00	0	98.8	90	110				
Barium	5.02	0.0500	5.00	0	100	90	110				
Cadmium	5.00	0.0100	5.00	0	100	90	110				
Chromium	5.19	0.100	5.00	0	104	90	110				
Lead	4.92	0.0250	5.00	0	98.3	90	110				
Selenium	5.00	0.100	5.00	0	99.9	90	110				
Silver	5.13	0.0100	5.00	0	103	90	110				

Sample ID: **ICV** SampType: **ICV** TestCode: **6020_S** Units: **mg/Kg** Prep Date: RunNo: **40061**
Client ID: **ICV** Batch ID: **17753** TestNo: **SW 6020B** **SW3050B** Analysis Date: **4/20/2021** SeqNo: **515698**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	5.10	0.100	5.00	0	102	90	110				
Barium	5.03	0.0500	5.00	0	101	90	110				
Cadmium	5.02	0.0100	5.00	0	100	90	110				
Chromium	4.99	0.100	5.00	0	99.9	90	110				
Lead	4.84	0.0250	5.00	0	96.8	90	110				
Selenium	5.13	0.100	5.00	0	103	90	110				
Silver	5.19	0.0100	5.00	0	104	90	110				

Qualifiers: H Holding times for preparation or analysis exceeded S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

WO#: **2104143**

4/20/2021

Specialty Analytical

Client: Karl VanZandt
Project: Dewitt / 12th Dewitt

TestCode: **6020_S**

Sample ID: **CCV** SampType: **CCV** TestCode: **6020_S** Units: **mg/Kg** Prep Date: RunNo: **40061**
Client ID: **CCV** Batch ID: **17753** TestNo: **SW 6020B** **SW3050B** Analysis Date: **4/20/2021** SeqNo: **515704**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	4.96	0.100	5.00	0	99.3	90	110				
Barium	5.01	0.0500	5.00	0	100	90	110				
Cadmium	5.02	0.0100	5.00	0	100	90	110				
Chromium	4.98	0.100	5.00	0	99.6	90	110				
Lead	4.87	0.0250	5.00	0	97.3	90	110				
Selenium	4.98	0.100	5.00	0	99.6	90	110				
Silver	5.07	0.0100	5.00	0	101	90	110				

Sample ID: **CCV** SampType: **CCV** TestCode: **6020_S** Units: **mg/Kg** Prep Date: RunNo: **40061**
Client ID: **CCV** Batch ID: **17753** TestNo: **SW 6020B** **SW3050B** Analysis Date: **4/20/2021** SeqNo: **515708**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	5.00	0.100	5.00	0	100	90	110				
Barium	5.01	0.0500	5.00	0	100	90	110				
Cadmium	4.98	0.0100	5.00	0	99.6	90	110				
Chromium	5.04	0.100	5.00	0	101	90	110				
Lead	4.92	0.0250	5.00	0	98.3	90	110				
Selenium	5.04	0.100	5.00	0	101	90	110				
Silver	5.08	0.0100	5.00	0	102	90	110				

Qualifiers: H Holding times for preparation or analysis exceeded S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

WO#: **2104143**

4/20/2021

Specialty Analytical

Client: Karl VanZandt
Project: Dewitt / 12th Dewitt

TestCode: **8082_O**

Sample ID: **CCV-R40064** SampType: **CCV** TestCode: **8082_O** Units: **mg/Kg** Prep Date: RunNo: **40064**
Client ID: **CCV** Batch ID: **17751** TestNo: **SW 8082A** **SW3580A** Analysis Date: **4/19/2021** SeqNo: **515544**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	10.4	1.00	10.00	0	104	85	115				

Sample ID: **MB-17751** SampType: **MBLK** TestCode: **8082_O** Units: **mg/Kg** Prep Date: **4/16/2021** RunNo: **40064**
Client ID: **PBW** Batch ID: **17751** TestNo: **SW 8082A** **SW3580A** Analysis Date: **4/19/2021** SeqNo: **515545**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	ND	1.00									
Aroclor 1221	ND	1.00									
Aroclor 1232	ND	1.00									
Aroclor 1242	ND	1.00									
Aroclor 1248	ND	1.00									
Aroclor 1254	ND	1.00									
Aroclor 1260	ND	1.00									
Aroclor 1262	ND	1.00									
Aroclor 1268	ND	1.00									
Surr: Decachlorobiphenyl	188		1000		18.8	76.3	151				S

Qualifiers: H Holding times for preparation or analysis exceeded S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

WO#: **2104143**

4/20/2021

Specialty Analytical

Client: Karl VanZandt
Project: Dewitt / 12th Dewitt

TestCode: **8082_O**

Sample ID: **CCV-R40064** SampType: **CCV** TestCode: **8082_O** Units: **mg/Kg** Prep Date: RunNo: **40064**
Client ID: **CCV** Batch ID: **17751** TestNo: **SW 8082A** **SW3580A** Analysis Date: **4/19/2021** SeqNo: **515710**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	9.63	1.00	10.00	0	96.3	85	115				

Qualifiers: H Holding times for preparation or analysis exceeded S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

WO#: **2104143**

4/20/2021

Specialty Analytical

Client: Karl VanZandt
Project: Dewitt / 12th Dewitt

TestCode: **HG_CTS**

Sample ID: **MB-17752**	SampType: **MBLK**	TestCode: **HG_CTS**	Units: **mg/Kg**	Prep Date: **4/19/2021**	RunNo: **40052**
Client ID: **PBS**	Batch ID: **17752**	TestNo: **SW 7471B**	**SW 7471B**	Analysis Date: **4/19/2021**	SeqNo: **515465**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.0100									

Sample ID: **LCS-17752**	SampType: **LCS**	TestCode: **HG_CTS**	Units: **mg/Kg**	Prep Date: **4/19/2021**	RunNo: **40052**
Client ID: **LCSS**	Batch ID: **17752**	TestNo: **SW 7471B**	**SW 7471B**	Analysis Date: **4/19/2021**	SeqNo: **515466**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.363	0.0100	0.400	0	90.8	80	120				

Sample ID: **LCSD-17752**	SampType: **LCSD**	TestCode: **HG_CTS**	Units: **mg/Kg**	Prep Date: **4/19/2021**	RunNo: **40052**
Client ID: **LCSS02**	Batch ID: **17752**	TestNo: **SW 7471B**	**SW 7471B**	Analysis Date: **4/19/2021**	SeqNo: **515467**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.396	0.0100	0.400	0	99.1	80	120	0.363	8.79	20	

Sample ID: **2104139-001ADUP**	SampType: **DUP**	TestCode: **HG_CTS**	Units: **mg/Kg-dry**	Prep Date: **4/19/2021**	RunNo: **40052**
Client ID: **BatchQC**	Batch ID: **17752**	TestNo: **SW 7471B**	**SW 7471B**	Analysis Date: **4/19/2021**	SeqNo: **515469**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0493	0.0252						0.0536	8.18	20	

Qualifiers: H Holding times for preparation or analysis exceeded S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Specialty Analytical

WO#: **2104143**
4/20/2021

Client: Karl VanZandt
Project: Dewitt / 12th Dewitt **TestCode:** **HG_CTS**

Sample ID: **2104139-001ADUP**	SampType: **DUP**	TestCode: **HG_CTS**	Units: **mg/Kg-dry**	Prep Date: **4/19/2021**	RunNo: **40052**
Client ID: **BatchQC**	Batch ID: **17752**	TestNo: **SW 7471B**	**SW 7471B**	Analysis Date: **4/19/2021**	SeqNo: **515469**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID: **2104139-001AMS**	SampType: **MS**	TestCode: **HG_CTS**	Units: **mg/Kg-dry**	Prep Date: **4/19/2021**	RunNo: **40052**
Client ID: **BatchQC**	Batch ID: **17752**	TestNo: **SW 7471B**	**SW 7471B**	Analysis Date: **4/19/2021**	SeqNo: **515470**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.810	0.0279	1.12	0.0536	67.7	75	125				SMI

Sample ID: **2104139-001AMSD**	SampType: **MSD**	TestCode: **HG_CTS**	Units: **mg/Kg-dry**	Prep Date: **4/19/2021**	RunNo: **40052**
Client ID: **BatchQC**	Batch ID: **17752**	TestNo: **SW 7471B**	**SW 7471B**	Analysis Date: **4/19/2021**	SeqNo: **515471**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.825	0.0260	1.04	0.0536	74.2	75	125	0.810	1.87	20	SMI

Sample ID: **CCV**	SampType: **CCV**	TestCode: **HG_CTS**	Units: **mg/Kg**	Prep Date:	RunNo: **40052**
Client ID: **CCV**	Batch ID: **17752**	TestNo: **SW 7471B**	**SW 7471B**	Analysis Date: **4/19/2021**	SeqNo: **515474**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.402	0.0100	0.400	0	101	90	110				

Qualifiers: H Holding times for preparation or analysis exceeded S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

WO#: **2104143**

4/20/2021

Specialty Analytical

Client: Karl VanZandt
Project: Dewitt / 12th Dewitt

TestCode: **HG_CTS**

Sample ID: **CCV** SampType: **CCV** TestCode: **HG_CTS** Units: **mg/Kg** Prep Date: RunNo: **40052**
Client ID: **CCV** Batch ID: **17752** TestNo: **SW 7471B** **SW 7471B** Analysis Date: **4/20/2021** SeqNo: **515664**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.406	0.0100	0.400	0	102	90	110				

Qualifiers: H Holding times for preparation or analysis exceeded S Spike Recovery outside accepted recovery limits

Specialty Analytical
9011 SE Jannsen Rd
Clackamas, Oregon 97015
TEL: 503-607-1331 FAX: 503-607-1336
Website: www.specialtyanalytical.com

Sample Receipt Checklist

Client Name VANZANDT_KARL Work Order Number 2104143

RcptNo: 1 Date and Time Received 4/16/2021 2:05:09 PM Received by: Katherine Lynch

Completed by Reviewed by:

Completed Date: 4/16/2021 2:07:01 PM Reviewed Date: 4/19/2021 1:29:24 PM

Carrier name: Client

Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	Not Present ☐
Are matrices correctly identified on Chain of custody?	Yes ☑	No ☐	
Is it clear what analyses were requested?	Yes ☑	No ☐	
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Samples in proper container/bottle?	Yes ☑	No ☐	
Were correct preservatives used and noted?	Yes ☐	No ☐	NA ☑
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
Were container lables complete (ID, Pres, Date)?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
All samples received at a temp. of > 0° C to 6.0° C?	Yes ☑	No ☐	NA ☐
Response when temperature is outside of range:			
Preservative added to bottles:			
Sample Temp. taken and recorded upon receipt?	Yes ☑	No ☐	To 5.9 °C
Water - Were bubbles absent in VOC vials?	Yes ☐	No ☐	No Vials ☑
Water - Was there Chlorine Present?	Yes ☐	No ☐	NA ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	NA ☑
Are Samples considered acceptable?	Yes ☑	No ☐	
Custody Seals present?	Yes ☐	No ☑	
Traffic Report or Packing Lists present?	Yes ☐	No ☑	
Airbill or Sticker?	Air Bill ☐	Sticker ☐	Not Present ☑
Airbill No:			
Sample Tags Present?	Yes ☐	No ☑	
Sample Tags Listed on COC?	Yes ☐	No ☑	
Tag Numbers:			
Sample Condition?	Intact ☑	Broken ☐	Leaking ☐

Case Number: SDG: SAS:

Adjusted? _____ Checked by

Any No and/or NA (not applicable) response must be detailed in the comments section be _____

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Sample Receipt Checklist

Client Contacted? ☐ Yes ☑ No ☐ NA Person Contacted: Comments:

Contact Mode: ☐ Phone: ☐ Fax: ☐ Email: ☐ In Person:

Client Instructions:

Date Contacted: Contacted By:

Regarding:

CorrectiveAction:

Chain of Custody Record

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Fax: 503-607-1336

Date: 4/16/21 | Page: 1 of: 1 | Laboratory Project No (internal): 2104143

Project Name: Dewitt | Temperature on Receipt: 5.9 °C

Project No: 12th Dewitt | PO No: 12th Dewitt | Cooling: Cobalt Ice | Shipped Via: Client

Client: Karl VanZandt | Collected by: Karl VanZandt | Custody Seal: Y / (N) Intact / Broken Cooler / Bottle

Address: 1523 Georgia Ave SE | State Collected: (OR) WA OTHER | MDL TIER IV EDD

City, State, Zip: Salem, OR 97302 | Report To (PM): Karl VanZandt | Sample Disposal: ☐ Return to client ☒ Disposal by lab (after 60 days)

Telephone: 5053024078 | PM Email: KarlVanZandt@gmail.com

AP Email: KarlVanZandt@gmail.com

	Sample Name	Sample Date	Sample Time	Sample Matrix*	# of Containers	Requested Tests: PCB, RCRA 8	Comments
1	12th Dewitt-TANK	4/16/21	12:30	Oil	1	X X	
2							
3							
4							
5							
6							
7							
8							
9							
10							

*Matrix: A=Air, AQ=Aqueous, L=Liquid, O=Oil, P=Product, S=Soil, SD=Sediment, SL=Solid, W=Water, DW=Drinking Water, GW=Ground Water, SW=Storm Water, WW=Waste Water, M=Miscellaneous

Turn-around Time: Standard (5-7 Business): ____ 3 Day: ____ 2 Day: ____ Next Day: ~~X~~ Same Day: X

Expedited turn-around requests should be coordinated in advance

Relinquished	Date/Time	Received	Date/Time
x Karl VanZandt	4/16/21 1:30pm	x	4-16-2021 1330
x		x	
x		x	

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Definition Only

WO#: **2104143**
Date: **4/20/2021**

Definitions:

KEY TO FLAGS

A: This sample contains a Gasoline Range Organic not identified as a specific hydrocarbon product. The result was qualified against gasoline calibration standards.

A1: This sample contains a Diesel Range Organic not identified as a specific hydrocarbon product. The result was qualified against diesel calibration standards.

A2: This sample contains a Lube Oil Range Organic not identified as a specific hydrocarbon product. The result was qualified against lube oil calibration standards.

A3: The results was determined to be Non-Detect based on hydrocarbon pattern recognition. The product was carry-over from another hydrocarbon type.

A4: The product appears to be aged or degraded.

B: The blank exhibited a positive result greater than the reporting limit for this compound.

CN: See Case Narrative.

E: Result exceeds the calibration range for this compound. The result should be considered an estimate.

F: The positive result for this hydrocarbon is due to single component contamination. The product does not match any hydrocarbon in the fuels library.

FS: Follow-up testing is suggested.

G: Result may be biased high due to biogenic interferences. Clean up is recommended.

H: Sample was analyzed outside recommended holding time.

HT: □At client's request, samples was analyzed outside of recommended holding time.

HP: Sample was analyzed outside recommended holding time due to VOA having pH >2.

J: The results for this analyte is between the MDL and the PQL and should be considered an

Definitions:

estimated concentration.

K: Diesel result is biased high due to amount of Oil contained in the sample.

L: Diesel result is biased high due to amount of Gasoline contained in the sample.

M: Oil result is biased high due to amount of Diesel contained in the sample.

N: Gasoline result is biased high due to amount of Diesel contained in the sample.

MC: Sample concentration is greater than 4x the spiked value, the spiked value is considered insignificant.

MI: Result is outside control limits due to matrix interference.

NH: Sample matrix is non-homogeneous

MSA: Value determined by Method of Standard Addition.

O: Laboratory Control Standard (LCS) exceeded laboratory control limits but meets CCV criteria. Data meets EPA requirements.

Q: Detection levels elevated due to sample matrix.

R: RPD control limits were exceeded

RF: Duplicate failed due to result being at or near the method-reporting limit.

RP: Matrix spike values exceed established QC limits; post digestion spike is in control.

S: Recovery is outside control limits.

SC: CCV or LCS exceeded high recovery control limits, but associated samples are non-detect. Data meets EPA requirements.

SL: LCS exceeded recovery control limits, but associated MS/MSD passing. Data meets EPA requirements.

5

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Website: www.specialtyanalytical.com

April 23, 2021

Karl VanZandt
Karl VanZandt
1523 Georgia Ave SE
Salem, OR 97302
TEL: (503) 302-4078
FAX:

RE: 12th Dewitt

Order No.: 2104162

Dear Karl VanZandt:

There were no problems with the analysis and all data for associated QC met EPA or laboratory specifications, except where noted in the Case Narrative, or as qualified with flags. Results apply only to the samples analyzed. Without approval of the laboratory, the reproduction of this report is only permitted in its entirety.

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

Sincerely,

Marty French
Lab Director

Specialty Analytical

WO#: **2104162**
Date Reported: **4/23/2021**

CLIENT: Karl VanZandt
Project: 12th Dewitt

Lab ID: 2104162-001 **Matrix:** SOIL
Client Sample ID TK1-S-120 **Collection Date:** 4/20/2021 8:52:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
NWTPH-DX				**NWTPH-DX**	**SW3550C**	Analyst: **TB**
Diesel	ND	19.8		mg/Kg-dry	1	4/22/2021 9:23:00 AM
Lube Oil	ND	66.0		mg/Kg-dry	1	4/22/2021 9:23:00 AM
Surr: o-Terphenyl	90.4	50 - 150		%Rec	1	4/22/2021 9:23:00 AM

Lab ID: 2104162-002 **Matrix:** SOIL
Client Sample ID TK1-C-110 **Collection Date:** 4/20/2021 10:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
NWTPH-DX				**NWTPH-DX**	**SW3550C**	Analyst: **TB**
Diesel	ND	21.4		mg/Kg-dry	1	4/22/2021 9:45:00 AM
Lube Oil	ND	71.3		mg/Kg-dry	1	4/22/2021 9:45:00 AM
Surr: o-Terphenyl	90.3	50 - 150		%Rec	1	4/22/2021 9:45:00 AM

Qualifiers: H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits

QC SUMMARY REPORT

WO#: **2104162**

4/23/2021

Specialty Analytical

Client: Karl VanZandt
Project: 12th Dewitt

TestCode: **NWTPHDX_S**

Sample ID: **CCV-2** SampType: **CCV** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: RunNo: **40107**
Client ID: **CCV** Batch ID: **17767** TestNo: **NWTPH-Dx** **SW3550C** Analysis Date: **4/22/2021** SeqNo: **516247**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1400	15.0	1333	0	105	85	115				
Lube Oil	601	50.0	666.7	0	90.2	85	115				

Sample ID: **MB-17767** SampType: **MBLK** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: **4/21/2021** RunNo: **40107**
Client ID: **PBS** Batch ID: **17767** TestNo: **NWTPH-Dx** **SW3550C** Analysis Date: **4/22/2021** SeqNo: **516248**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	15.0									
Lube Oil	ND	50.0									
Surr: o-Terphenyl	30.0		33.33		89.9	50	150				

Sample ID: **LCS-17767** SampType: **LCS** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: **4/21/2021** RunNo: **40107**
Client ID: **LCSS** Batch ID: **17767** TestNo: **NWTPH-Dx** **SW3550C** Analysis Date: **4/22/2021** SeqNo: **516249**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	175	15.0	166.7	0	105	76.3	125				
Lube Oil	135	50.0	166.7	0	80.8	69.9	127				

Qualifiers: H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits

QC SUMMARY REPORT

WO#: **2104162**

4/23/2021

Specialty Analytical

Client: Karl VanZandt
Project: 12th Dewitt

TestCode: **NWTPHDX_S**

Sample ID: **2104165-001ADUP** SampType: **DUP** TestCode: **NWTPHDX_S** Units: **mg/Kg-dry** Prep Date: **4/21/2021** RunNo: **40107**
Client ID: **BatchQC** Batch ID: **17767** TestNo: **NWTPH-Dx** **SW3550C** Analysis Date: **4/22/2021** SeqNo: **516251**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	19.6						0	0	20	
Lube Oil	ND	65.5						0	0	20	

Sample ID: **2104165-002ADUP** SampType: **DUP** TestCode: **NWTPHDX_S** Units: **mg/Kg-dry** Prep Date: **4/21/2021** RunNo: **40107**
Client ID: **BatchQC** Batch ID: **17767** TestNo: **NWTPH-Dx** **SW3550C** Analysis Date: **4/22/2021** SeqNo: **516253**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	19.0						0	0	20	RRF
Lube Oil	ND	63.4						0	0	20	

Sample ID: **CCV-3** SampType: **CCV** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: RunNo: **40107**
Client ID: **CCV** Batch ID: **17767** TestNo: **NWTPH-Dx** **SW3550C** Analysis Date: **4/23/2021** SeqNo: **516258**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1080	15.0	1000	0	108	85	115				
Lube Oil	475	50.0	500.0	0	95.1	85	115				

Qualifiers: H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits

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Sample Receipt Checklist

Client Name VANZANDT_KARL

Work Order Number 2104162

RcptNo: 1

Date and Time Received 4/21/2021 8:38:21 AM

Received by: Katherine Lynch

Completed by

Reviewed by:

Completed Date: 4/21/2021 8:55:57 AM

Reviewed Date: 4/21/2021 3:37:06 PM

Carrier name: Client

Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	Not Present ☐
Are matrices correctly identified on Chain of custody?	Yes ☑	No ☐	
Is it clear what analyses were requested?	Yes ☑	No ☐	
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Samples in proper container/bottle?	Yes ☑	No ☐	
Were correct preservatives used and noted?	Yes ☐	No ☐	NA ☑
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
Were container lables complete (ID, Pres, Date)?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
All samples received at a temp. of > 0° C to 6.0° C?	Yes ☑	No ☐	NA ☐
Response when temperature is outside of range:			
Preservative added to bottles:			
Sample Temp. taken and recorded upon receipt?	Yes ☑	No ☐	To 5.1 °C
Water - Were bubbles absent in VOC vials?	Yes ☐	No ☐	No Vials ☑
Water - Was there Chlorine Present?	Yes ☐	No ☐	NA ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	NA ☑
Are Samples considered acceptable?	Yes ☑	No ☐	
Custody Seals present?	Yes ☐	No ☑	
Traffic Report or Packing Lists present?	Yes ☐	No ☑	
Airbill or Sticker?	Air Bill ☐	Sticker ☐	Not Present ☑
Airbill No:			
Sample Tags Present?	Yes ☐	No ☑	
Sample Tags Listed on COC?	Yes ☐	No ☑	
Tag Numbers:			
Sample Condition?	Intact ☑	Broken ☐	Leaking ☐

Case Number: SDG: SAS:

Adjusted? _____ Checked by

Any No and/or NA (not applicable) response must be detailed in the comments section be

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Sample Receipt Checklist

Client Contacted? ☐ Yes ☑ No ☐ NA Person Contacted: Comments:

Contact Mode: ☐ Phone: ☐ Fax: ☐ Email: ☐ In Person:

Client Instructions:

Date Contacted: Contacted By:

Regarding:

CorrectiveAction:

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Phone: 503-607-1331
Fax: 503-607-1336

Chain of Custody Record

Date: 4/20/21 | Page: 1 of: 1 | Laboratory Project No (internal): 2104162

Client: Karl Van Zandt Environmental | Project Name: 12th Dewitt | Temperature on Receipt: 5.1 °C

Address: 1523 Georgia Ave SE | Project No: 12th Dewitt | PO No: 12th Dewitt | Cooling: cooler + ice | Shipped Via: Client

City, State, Zip: Salem Oregon 97302 | Collected by: karl vanzandt | Custody Seal: Y / (N) Intact / Broken Cooler / Bottle

Telephone: 503.302.4078 | State Collected: OR ✔ WA ☐ OTHER | MDL ☐ TIER IV ☐ EDD ☐

AP Email: karlvanzandt@gmail.com | Report To (PM): karl vanzandt | Sample Disposal: ☐ Return to client ☒ Disposal by lab (after 60 days)

PM Email: karlvanzandt@gmail.com

	Sample Name	Sample Date	Sample Time	Sample Matrix*	# of Containers	Requested Tests: tph-dx	Comments
1	TK1-S-120	4/20/21	8:52	soil	1	✔	
2	TK1-C-110	4/20/21	10:10	soil	1	✔	
3							
4							
5							
6							
7							
8							
9							
10							

*Matrix: A=Air, AQ=Aqueous, L=Liquid, O=Oil, P=Product, S=Soil, SD=Sediment, SL=Solid, W=Water, DW=Drinking Water, GW=Ground Water, SW=Storm Water, WW=Waste Water, M=Miscellaneous

Turn-around Time: Standard (5-7 Business): ☒ 3 Day: ☐ 2 Day: ☐ Next Day: ✔ Same Day: ☐

Expedited turn-around requests should be coordinated in advance

Relinquished	Date/Time	Received	Date/Time
x Karl Van Zandt	4/21/21 8 am	x	4-21-21 8:30
x		x	
x		x	

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Definition Only

WO#: **2104162**
Date: **4/23/2021**

Definitions:

KEY TO FLAGS

A: This sample contains a Gasoline Range Organic not identified as a specific hydrocarbon product. The result was qualified against gasoline calibration standards.

A1: This sample contains a Diesel Range Organic not identified as a specific hydrocarbon product. The result was qualified against diesel calibration standards.

A2: This sample contains a Lube Oil Range Organic not identified as a specific hydrocarbon product. The result was qualified against lube oil calibration standards.

A3: The results was determined to be Non-Detect based on hydrocarbon pattern recognition. The product was carry-over from another hydrocarbon type.

A4: The product appears to be aged or degraded.

B: The blank exhibited a positive result greater than the reporting limit for this compound.

CN: See Case Narrative.

E: Result exceeds the calibration range for this compound. The result should be considered an estimate.

F: The positive result for this hydrocarbon is due to single component contamination. The product does not match any hydrocarbon in the fuels library.

FS: Follow-up testing is suggested.

G: Result may be biased high due to biogenic interferences. Clean up is recommended.

H: Sample was analyzed outside recommended holding time.

HT: □At client's request, samples was analyzed outside of recommended holding time.

HP: Sample was analyzed outside recommended holding time due to VOA having pH >2.

J: The results for this analyte is between the MDL and the PQL and should be considered an

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Definition Only

WO#: **2104162**

Date: **4/23/2021**

Definitions:

estimated concentration.

K: Diesel result is biased high due to amount of Oil contained in the sample.

L: Diesel result is biased high due to amount of Gasoline contained in the sample.

M: Oil result is biased high due to amount of Diesel contained in the sample.

N: Gasoline result is biased high due to amount of Diesel contained in the sample.

MC: Sample concentration is greater than 4x the spiked value, the spiked value is considered insignificant.

MI: Result is outside control limits due to matrix interference.

NH: Sample matrix is non-homogeneous

MSA: Value determined by Method of Standard Addition.

O: Laboratory Control Standard (LCS) exceeded laboratory control limits but meets CCV criteria. Data meets EPA requirements.

Q: Detection levels elevated due to sample matrix.

R: RPD control limits were exceeded

RF: Duplicate failed due to result being at or near the method-reporting limit.

RP: Matrix spike values exceed established QC limits; post digestion spike is in control.

S: Recovery is outside control limits.

SC: CCV or LCS exceeded high recovery control limits, but associated samples are non-detect. Data meets EPA requirements.

SL: LCS exceeded recovery control limits, but associated MS/MSD passing. Data meets EPA requirements.

6

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Website: www.specialtyanalytical.com

April 23, 2021

Karl VanZandt
Karl VanZandt
1523 Georgia Ave SE
Salem, OR 97302
TEL: (503) 302-4078
FAX:

RE: 12th Dewitt

Order No.: 2104163

Dear Karl VanZandt:

There were no problems with the analysis and all data for associated QC met EPA or laboratory specifications, except where noted in the Case Narrative, or as qualified with flags. Results apply only to the samples analyzed. Without approval of the laboratory, the reproduction of this report is only permitted in its entirety.

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

Sincerely,

Marty French
Lab Director

Specialty Analytical

WO#: **2104163**
Date Reported: **4/23/2021**

CLIENT: Karl VanZandt
Project: 12th Dewitt

Lab ID: 2104163-001 **Matrix:** SOIL
Client Sample ID TK6-E-71 **Collection Date:** 4/20/2021 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
NWTPH-DX				**NWTPH-DX SW3550C**		Analyst: **TB**
Diesel	ND	18.6		mg/Kg-dry	1	4/22/2021 10:08:00 AM
Lube Oil	ND	62.0		mg/Kg-dry	1	4/22/2021 10:08:00 AM
Surr: o-Terphenyl	90.8	50 - 150		%Rec	1	4/22/2021 10:08:00 AM

Lab ID: 2104163-002 **Matrix:** SOIL
Client Sample ID TK6-C-72 **Collection Date:** 4/20/2021 8:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
NWTPH-DX				**NWTPH-DX SW3550C**		Analyst: **TB**
Diesel	31.1	19.4		mg/Kg-dry	1	4/22/2021 10:30:00 AM
Lube Oil	ND	64.6		mg/Kg-dry	1	4/22/2021 10:30:00 AM
Surr: o-Terphenyl	91.6	50 - 150		%Rec	1	4/22/2021 10:30:00 AM

Lab ID: 2104163-003 **Matrix:** SOIL
Client Sample ID TK6-5-70 **Collection Date:** 4/20/2021 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
NWTPH-DX				**NWTPH-DX SW3550C**		Analyst: **TB**
Diesel	ND	17.6		mg/Kg-dry	1	4/22/2021 10:52:00 AM
Lube Oil	ND	58.7		mg/Kg-dry	1	4/22/2021 10:52:00 AM
Surr: o-Terphenyl	86.2	50 - 150		%Rec	1	4/22/2021 10:52:00 AM

Lab ID: 2104163-004 **Matrix:** SOIL
Client Sample ID TK5-W-70 **Collection Date:** 4/20/2021 8:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
NWTPH-DX				**NWTPH-DX SW3550C**		Analyst: **TB**
Diesel	ND	19.0		mg/Kg-dry	1	4/22/2021 11:15:00 AM
Lube Oil	ND	63.4		mg/Kg-dry	1	4/22/2021 11:15:00 AM
Surr: o-Terphenyl	90.2	50 - 150		%Rec	1	4/22/2021 11:15:00 AM

Qualifiers: H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits

Specialty Analytical

WO#: **2104163**
Date Reported: **4/23/2021**

CLIENT: Karl VanZandt
Project: 12th Dewitt

Lab ID: 2104163-005
Client Sample ID TK5-C-74

Matrix: SOIL
Collection Date: 4/20/2021 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
NWTPH-DX				**NWTPH-DX**	**SW3550C**	Analyst: **TB**
Diesel	ND	20.5		mg/Kg-dry	1	4/22/2021 11:37:00 AM
Lube Oil	ND	68.5		mg/Kg-dry	1	4/22/2021 11:37:00 AM
Surr: o-Terphenyl	89.4	50 - 150		%Rec	1	4/22/2021 11:37:00 AM

Qualifiers: H Holding times for preparation or analysis exceeded

R RPD outside accepted recovery limits

QC SUMMARY REPORT

WO#: **2104163**

4/23/2021

Specialty Analytical

Client: Karl VanZandt
Project: 12th Dewitt

TestCode: **NWTPHDX_S**

Sample ID: **CCV-2** SampType: **CCV** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: RunNo: **40107**
Client ID: **CCV** Batch ID: **17767** TestNo: **NWTPH-Dx** **SW3550C** Analysis Date: **4/22/2021** SeqNo: **516247**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1400	15.0	1333	0	105	85	115				
Lube Oil	601	50.0	666.7	0	90.2	85	115				

Sample ID: **MB-17767** SampType: **MBLK** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: **4/21/2021** RunNo: **40107**
Client ID: **PBS** Batch ID: **17767** TestNo: **NWTPH-Dx** **SW3550C** Analysis Date: **4/22/2021** SeqNo: **516248**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	15.0									
Lube Oil	ND	50.0									
Surr: o-Terphenyl	30.0		33.33		89.9	50	150				

Sample ID: **LCS-17767** SampType: **LCS** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: **4/21/2021** RunNo: **40107**
Client ID: **LCSS** Batch ID: **17767** TestNo: **NWTPH-Dx** **SW3550C** Analysis Date: **4/22/2021** SeqNo: **516249**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	175	15.0	166.7	0	105	76.3	125				
Lube Oil	135	50.0	166.7	0	80.8	69.9	127				

Qualifiers: H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits

QC SUMMARY REPORT

WO#: **2104163**

4/23/2021

Specialty Analytical

Client: Karl VanZandt
Project: 12th Dewitt

TestCode: **NWTPHDX_S**

Sample ID: **2104165-001ADUP** SampType: **DUP** TestCode: **NWTPHDX_S** Units: **mg/Kg-dry** Prep Date: **4/21/2021** RunNo: **40107**
Client ID: **BatchQC** Batch ID: **17767** TestNo: **NWTPH-Dx** **SW3550C** Analysis Date: **4/22/2021** SeqNo: **516251**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	19.6						0	0	20	
Lube Oil	ND	65.5						0	0	20	

Sample ID: **2104165-002ADUP** SampType: **DUP** TestCode: **NWTPHDX_S** Units: **mg/Kg-dry** Prep Date: **4/21/2021** RunNo: **40107**
Client ID: **BatchQC** Batch ID: **17767** TestNo: **NWTPH-Dx** **SW3550C** Analysis Date: **4/22/2021** SeqNo: **516253**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	19.0						0	0	20	RRF
Lube Oil	ND	63.4						0	0	20	

Sample ID: **CCV-3** SampType: **CCV** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: RunNo: **40107**
Client ID: **CCV** Batch ID: **17767** TestNo: **NWTPH-Dx** **SW3550C** Analysis Date: **4/23/2021** SeqNo: **516258**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1080	15.0	1000	0	108	85	115				
Lube Oil	475	50.0	500.0	0	95.1	85	115				

Qualifiers: H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits

Specialty Analytical
9011 SE Jannsen Rd
Clackamas, Oregon 97015
TEL: 503-607-1331 FAX: 503-607-1336
Website: www.specialtyanalytical.com

Sample Receipt Checklist

Client Name VANZANDT_KARL

Work Order Number 2104163

RcptNo: 1

Date and Time Received 4/21/2021 8:39:39 AM

Received by: Katherine Lynch

Completed by

Reviewed by:

Completed Date: 4/21/2021 8:56:18 AM

Reviewed Date: 4/21/2021 3:31:41 PM

Carrier name: Client

Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	Not Present ☐
Are matrices correctly identified on Chain of custody?	Yes ☑	No ☐	
Is it clear what analyses were requested?	Yes ☑	No ☐	
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Samples in proper container/bottle?	Yes ☑	No ☐	
Were correct preservatives used and noted?	Yes ☐	No ☐	NA ☑
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
Were container labels complete (ID, Pres, Date)?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
All samples received at a temp. of > 0° C to 6.0° C?	Yes ☑	No ☐	NA ☐
Response when temperature is outside of range:			
Preservative added to bottles:			
Sample Temp. taken and recorded upon receipt?	Yes ☑	No ☐	To 5.1 °C
Water - Were bubbles absent in VOC vials?	Yes ☐	No ☐	No Vials ☑
Water - Was there Chlorine Present?	Yes ☐	No ☐	NA ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	NA ☑
Are Samples considered acceptable?	Yes ☑	No ☐	
Custody Seals present?	Yes ☐	No ☑	
Traffic Report or Packing Lists present?	Yes ☐	No ☑	
Airbill or Sticker?	Air Bill ☐	Sticker ☐	Not Present ☑
Airbill No:			
Sample Tags Present?	Yes ☐	No ☑	
Sample Tags Listed on COC?	Yes ☐	No ☑	
Tag Numbers:			
Sample Condition?	Intact ☑	Broken ☐	Leaking ☐

Case Number: SDG: SAS:

Adjusted? _____ Checked by

Any No and/or NA (not applicable) response must be detailed in the comments section be

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Sample Receipt Checklist

Client Contacted? ☐ Yes ☑ No ☐ NA Person Contacted: Comments:

Contact Mode: ☐ Phone: ☐ Fax: ☐ Email: ☐ In Person:

Client Instructions:

Date Contacted: Contacted By:

Regarding:

CorrectiveAction:

Specialty Analytical
9011 SE Jannsen Rd
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336

Chain of Custody Record

Date: 4/20/21 | Page: 1 of: 1 | Laboratory Project No (internal): 21041163

Project Name: 12th Dewitt | Temperature on Receipt: 5.1 °C

Client: Karl Van Zandt Environmental | Project No: 12th Dewitt | PO No: 12th Dewitt | Cooling: Cool + Ice | Shipped Via: Client

Address: 1523 Georgia Ave SE | Collected by: karl vanzandt | Custody Seal: Y / N Intact / Broken Cooler / Bottle

City, State, Zip: Salem Oregon 97302 | State Collected: OR ✔ WA ☐ OTHER | MDL ☐ TIER IV ☐ EDD ☐

Telephone: 503.302.4078 | Report To (PM): karl vanzandt | Sample Disposal: ☐ Return to client ☒ Disposal by lab (after 60 days)

AP Email: karlvanzandt@gmail.com | PM Email: karlvanzandt@gmail.com

Sample Name	Sample Date	Sample Time	Sample Matrix*	# of Containers	Requested Tests: tph-dx	Comments
1 TK6-E-71	4/20/21	900	soil	1	✔	
2 TK6-C-72	4/20/21	840	soil	1	✔	
3 TK6-5-70	4/20/21	850	soil	1	✔	
4 TK5-W-70	4/20/21	855	soil	1	✔	
5 TK5-C-74	4/20/21	845	soil	1	✔	
6						
7						
8						
9						
10						

*Matrix: A=Air, AQ=Aqueous, L=Liquid, O=Oil, P=Product, S=Soil, SD=Sediment, SL=Solid, W=Water, DW=Drinking Water, GW=Ground Water, SW=Storm Water, WW=Waste Water, M=Miscellaneous

Turn-around Time: Standard (5-7 Business): ✔ | 3 Day: ☐ | 2 Day: ☐ | ~~Next Day:~~ ☐ | Same Day: ☐

Expedited turn-around requests should be coordinated in advance

Relinquished	Date/Time	Received	Date/Time
x Karl Van Zandt	4/21/21 8 am	x	4-21-21 8:30
x		x	
x		x	

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Website: www.specialtyanalytical.com

Definition Only

WO#: **2104163**
Date: **4/23/2021**

Definitions:

KEY TO FLAGS

A: This sample contains a Gasoline Range Organic not identified as a specific hydrocarbon product. The result was qualified against gasoline calibration standards.

A1: This sample contains a Diesel Range Organic not identified as a specific hydrocarbon product. The result was qualified against diesel calibration standards.

A2: This sample contains a Lube Oil Range Organic not identified as a specific hydrocarbon product. The result was qualified against lube oil calibration standards.

A3: The results was determined to be Non-Detect based on hydrocarbon pattern recognition. The product was carry-over from another hydrocarbon type.

A4: The product appears to be aged or degraded.

B: The blank exhibited a positive result greater than the reporting limit for this compound.

CN: See Case Narrative.

E: Result exceeds the calibration range for this compound. The result should be considered an estimate.

F: The positive result for this hydrocarbon is due to single component contamination. The product does not match any hydrocarbon in the fuels library.

FS: Follow-up testing is suggested.

G: Result may be biased high due to biogenic interferences. Clean up is recommended.

H: Sample was analyzed outside recommended holding time.

HT: □At client's request, samples was analyzed outside of recommended holding time.

HP: Sample was analyzed outside recommended holding time due to VOA having pH >2.

J: The results for this analyte is between the MDL and the PQL and should be considered an

Definitions:

estimated concentration.

K: Diesel result is biased high due to amount of Oil contained in the sample.

L: Diesel result is biased high due to amount of Gasoline contained in the sample.

M: Oil result is biased high due to amount of Diesel contained in the sample.

N: Gasoline result is biased high due to amount of Diesel contained in the sample.

MC: Sample concentration is greater than 4x the spiked value, the spiked value is considered insignificant.

MI: Result is outside control limits due to matrix interference.

NH: Sample matrix is non-homogeneous

MSA: Value determined by Method of Standard Addition.

O: Laboratory Control Standard (LCS) exceeded laboratory control limits but meets CCV criteria. Data meets EPA requirements.

Q: Detection levels elevated due to sample matrix.

R: RPD control limits were exceeded

RF: Duplicate failed due to result being at or near the method-reporting limit.

RP: Matrix spike values exceed established QC limits; post digestion spike is in control.

S: Recovery is outside control limits.

SC: CCV or LCS exceeded high recovery control limits, but associated samples are non-detect. Data meets EPA requirements.

SL: LCS exceeded recovery control limits, but associated MS/MSD passing. Data meets EPA requirements.

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Chain of Custody Record

Specialty Analytical
9011 SE Jannsen Rd
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Phone: 503-607-1331
Fax: 503-607-1336

Date: 4/20/21 | Page: 1 of: 1 | Laboratory Project No (internal): 2104163

Project Name: 12th Dewitt | Temperature on Receipt: 5.1 °C

Client: Karl Van Zandt Environmental | Project No: 12th Dewitt | PO No: 12th Dewitt | Cooling: Cool + Ice | Shipped Via: Client

Address: 1523 Georgia Ave SE | Collected by: karl vanzandt | Custody Seal: Y / N Intact / Broken Cooler / Bottle

City, State, Zip: Salem Oregon 97302 | State Collected: OR ✔ WA ☐ OTHER | MDL ☐ TIER IV ☐ EDD ☐

Telephone: 503.302.4078 | Report To (PM): karl vanzandt | Sample Disposal: ☐ Return to client ☒ Disposal by lab (after 60 days)

AP Email: karlvanzandt@gmail.com | PM Email: karlvanzandt@gmail.com

Sample Name	Sample Date	Sample Time	Sample Matrix*	# of Containers	tph-dx	Requested Tests	Comments
1 TK6-E-71	4/20/21	900	soil	1	✔		
2 TK6-C-72	4/20/21	840	soil	1	✔		
3 TK6-5-70	4/20/21	850	soil	1	✔		
4 TK5-W-70	4/20/21	855	soil	1	✔		
5 TK5-C-74	4/20/21	845	soil	1	✔		
6							
7							
8							
9							
10							

*Matrix A=Air, AQ=Aqueous, L=Liquid, O=Oil, P=Product, S=Soil, SD=Sediment, SL=Solid, W=Water, DW=Drinking Water, GW=Ground Water, SW=Storm Water, WW=Waste Water, M=Miscellaneous

Turn-around Time: Standard (5-7 Business): ✔ 3 Day: ☐ 2 Day: ☐ ~~Next Day:~~ ☐ Same Day: ☐

Expedited turn-around requests should be coordinated in advance

Relinquished	Date/Time	Received	Date/Time
x Karl Van Zandt	4/21/21 8 am	x	4-21-21 8:30
x		x	
x		x	

7

Specialty Analytical

9011 SE Jannsen Rd
Clackamas, OR 97015
TEL: (503) 607-1331
Website: www.specialtyanalytical.com

April 23, 2021

Karl VanZandt
Karl VanZandt
1523 Georgia Ave SE
Salem, OR 97302
TEL: (503) 302-4078
FAX:

RE: 12th Dewitt

Order No.: 2104164

Dear Karl VanZandt:

There were no problems with the analysis and all data for associated QC met EPA or laboratory specifications, except where noted in the Case Narrative, or as qualified with flags. Results apply only to the samples analyzed. Without approval of the laboratory, the reproduction of this report is only permitted in its entirety.

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

Sincerely,

Marty French
Lab Director

Specialty Analytical

WO#: **2104164**
Date Reported: **4/23/2021**

CLIENT: Karl VanZandt
Project: 12th Dewitt

Lab ID: 2104164-001 **Matrix:** SOIL
Client Sample ID TK7-S12 **Collection Date:** 4/20/2021 1:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
NWTPH-DX				**NWTPH-DX SW3550C**		Analyst: **TB**
Diesel	ND	17.0		mg/Kg-dry	1	4/22/2021 11:59:00 AM
Lube Oil	ND	56.6		mg/Kg-dry	1	4/22/2021 11:59:00 AM
Surr: o-Terphenyl	88.4	50 - 150		%Rec	1	4/22/2021 11:59:00 AM

Lab ID: 2104164-002 **Matrix:** SOIL
Client Sample ID TK7-C12 **Collection Date:** 4/20/2021 1:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
NWTPH-DX				**NWTPH-DX SW3550C**		Analyst: **TB**
Diesel	ND	18.2		mg/Kg-dry	1	4/22/2021 12:22:00 PM
Lube Oil	ND	60.8		mg/Kg-dry	1	4/22/2021 12:22:00 PM
Surr: o-Terphenyl	89.3	50 - 150		%Rec	1	4/22/2021 12:22:00 PM

Lab ID: 2104164-003 **Matrix:** SOIL
Client Sample ID TK7-N12 **Collection Date:** 4/20/2021 1:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
NWTPH-DX				**NWTPH-DX SW3550C**		Analyst: **TB**
Diesel	ND	18.1		mg/Kg-dry	1	4/22/2021 12:44:00 PM
Lube Oil	ND	60.2		mg/Kg-dry	1	4/22/2021 12:44:00 PM
Surr: o-Terphenyl	88.6	50 - 150		%Rec	1	4/22/2021 12:44:00 PM

Lab ID: 2104164-004 **Matrix:** SOIL
Client Sample ID TK7-E6 **Collection Date:** 4/20/2021 1:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
NWTPH-DX				**NWTPH-DX SW3550C**		Analyst: **TB**
Diesel	ND	19.8		mg/Kg-dry	1	4/22/2021 1:06:00 PM
Lube Oil	ND	66.0		mg/Kg-dry	1	4/22/2021 1:06:00 PM
Surr: o-Terphenyl	89.5	50 - 150		%Rec	1	4/22/2021 1:06:00 PM

Qualifiers: H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits

CLIENT: Karl VanZandt
Project: 12th Dewitt

Lab ID: 2104164-005 **Matrix:** SOIL
Client Sample ID TK7-W7 **Collection Date:** 4/20/2021 1:24:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
NWTPH-DX				**NWTPH-DX**	**SW3550C**	Analyst: **TB**
Diesel	ND	21.3		mg/Kg-dry	1	4/22/2021 1:29:00 PM
Lube Oil	ND	71.1		mg/Kg-dry	1	4/22/2021 1:29:00 PM
Surr: o-Terphenyl	86.9	50 - 150		%Rec	1	4/22/2021 1:29:00 PM

Lab ID: 2104164-006 **Matrix:** SOIL
Client Sample ID TK7-N6 **Collection Date:** 4/20/2021 1:23:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
NWTPH-DX				**NWTPH-DX**	**SW3550C**	Analyst: **TB**
Diesel	ND	19.4		mg/Kg-dry	1	4/22/2021 1:51:00 PM
Lube Oil	ND	64.8		mg/Kg-dry	1	4/22/2021 1:51:00 PM
Surr: o-Terphenyl	87.6	50 - 150		%Rec	1	4/22/2021 1:51:00 PM

Lab ID: 2104164-007 **Matrix:** SOIL
Client Sample ID TK7-S7 **Collection Date:** 4/20/2021 1:22:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
NWTPH-DX				**NWTPH-DX**	**SW3550C**	Analyst: **TB**
Diesel	ND	18.1		mg/Kg-dry	1	4/22/2021 2:16:00 PM
Lube Oil	ND	60.3		mg/Kg-dry	1	4/22/2021 2:16:00 PM
Surr: o-Terphenyl	88.1	50 - 150		%Rec	1	4/22/2021 2:16:00 PM

Qualifiers: H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits

QC SUMMARY REPORT

WO#: **2104164**

4/23/2021

Specialty Analytical

Client: Karl VanZandt
Project: 12th Dewitt

TestCode: **NWTPHDX_S**

Sample ID: **CCV-2** SampType: **CCV** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: RunNo: **40107**
Client ID: **CCV** Batch ID: **17767** TestNo: **NWTPH-Dx** **SW3550C** Analysis Date: **4/22/2021** SeqNo: **516247**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1400	15.0	1333	0	105	85	115				
Lube Oil	601	50.0	666.7	0	90.2	85	115				

Sample ID: **MB-17767** SampType: **MBLK** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: **4/21/2021** RunNo: **40107**
Client ID: **PBS** Batch ID: **17767** TestNo: **NWTPH-Dx** **SW3550C** Analysis Date: **4/22/2021** SeqNo: **516248**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	15.0									
Lube Oil	ND	50.0									
Surr: o-Terphenyl	30.0		33.33		89.9	50	150				

Sample ID: **LCS-17767** SampType: **LCS** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: **4/21/2021** RunNo: **40107**
Client ID: **LCSS** Batch ID: **17767** TestNo: **NWTPH-Dx** **SW3550C** Analysis Date: **4/22/2021** SeqNo: **516249**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	175	15.0	166.7	0	105	76.3	125				
Lube Oil	135	50.0	166.7	0	80.8	69.9	127				

Qualifiers: H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits

QC SUMMARY REPORT

WO#: **2104164**

4/23/2021

Specialty Analytical

Client: Karl VanZandt
Project: 12th Dewitt

TestCode: **NWTPHDX_S**

Sample ID: **2104165-001ADUP** SampType: **DUP** TestCode: **NWTPHDX_S** Units: **mg/Kg-dry** Prep Date: **4/21/2021** RunNo: **40107**
Client ID: **BatchQC** Batch ID: **17767** TestNo: **NWTPH-Dx** **SW3550C** Analysis Date: **4/22/2021** SeqNo: **516251**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	19.6						0	0	20	
Lube Oil	ND	65.5						0	0	20	

Sample ID: **2104165-002ADUP** SampType: **DUP** TestCode: **NWTPHDX_S** Units: **mg/Kg-dry** Prep Date: **4/21/2021** RunNo: **40107**
Client ID: **BatchQC** Batch ID: **17767** TestNo: **NWTPH-Dx** **SW3550C** Analysis Date: **4/22/2021** SeqNo: **516253**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	19.0						0	0	20	RRF
Lube Oil	ND	63.4						0	0	20	

Sample ID: **CCV-3** SampType: **CCV** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: RunNo: **40107**
Client ID: **CCV** Batch ID: **17767** TestNo: **NWTPH-Dx** **SW3550C** Analysis Date: **4/23/2021** SeqNo: **516258**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1080	15.0	1000	0	108	85	115				
Lube Oil	475	50.0	500.0	0	95.1	85	115				

Qualifiers: H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits

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Website: www.specialtyanalytical.com

Sample Receipt Checklist

Client Name VANZANDT_KARL

Work Order Number 2104164

RcptNo: 1

Date and Time Received 4/21/2021 8:43:14 AM

Received by: Katherine Lynch

Completed by

Reviewed by:

Completed Date: 4/21/2021 8:56:34 AM

Reviewed Date:

Carrier name: Client

Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	Not Present ☐
Are matrices correctly identified on Chain of custody?	Yes ☑	No ☐	
Is it clear what analyses were requested?	Yes ☑	No ☐	
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Samples in proper container/bottle?	Yes ☑	No ☐	
Were correct preservatives used and noted?	Yes ☐	No ☐	NA ☑
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
Were container lables complete (ID, Pres, Date)?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
All samples received at a temp. of > 0° C to 6.0° C?	Yes ☑	No ☐	NA ☐
Response when temperature is outside of range:			
Preservative added to bottles:			
Sample Temp. taken and recorded upon receipt?	Yes ☑	No ☐	To 5.1 °C
Water - Were bubbles absent in VOC vials?	Yes ☐	No ☐	No Vials ☑
Water - Was there Chlorine Present?	Yes ☐	No ☐	NA ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	NA ☑
Are Samples considered acceptable?	Yes ☑	No ☐	
Custody Seals present?	Yes ☐	No ☑	
Traffic Report or Packing Lists present?	Yes ☐	No ☑	
Airbill or Sticker?	Air Bill ☐	Sticker ☐	Not Present ☑
Airbill No:			
Sample Tags Present?	Yes ☐	No ☑	
Sample Tags Listed on COC?	Yes ☐	No ☑	
Tag Numbers:			
Sample Condition?	Intact ☑	Broken ☐	Leaking ☐

Case Number: SDG: SAS:

Adjusted? _____ Checked by

Any No and/or NA (not applicable) response must be detailed in the comments section be

Specialty Analytical
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Clackamas, Oregon 97015
TEL: 503-607-1331 FAX: 503-607-1336
Website: www.specialtyanalytical.com

Sample Receipt Checklist

Client Contacted? ☐ Yes ☑ No ☐ NA Person Contacted: Comments:

Contact Mode: ☐ Phone: ☐ Fax: ☐ Email: ☐ In Person:

Client Instructions:

Date Contacted: Contacted By:

Regarding:

CorrectiveAction:

Chain of Custody Record

Specialty Analytical
9011 SE Jannsen Rd
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336

Date: 4/20/21 | Page: 1 of: 1 | Laboratory Project No (internal): 2104164

Client: Karl Van Zandt Environmental | Project Name: 12th Dewitt | Temperature on Receipt: 5.1 °C

Address: 1523 Georgia Ave SE | Project No: 12th Dewitt | PO No: 12th Dewitt | Cooling: Cooler Ice | Shipped Via: Client

City, State, Zip: Salem Oregon 97302 | Collected by: karl vanzandt | Custody Seal: Y / (N) Intact / Broken Cooler / Bottle

Telephone: 503.302.4078 | State Collected: OR ✔ WA ☐ OTHER | MDL ☐ TIER IV ☐ EDD ☐

AP Email: karlvanzandt@gmail.com | Report To (PM): karl vanzandt | Sample Disposal: ☐ Return to client ☒ Disposal by lab (after 60 days)

PM Email: karlvanzandt@gmail.com

Sample Name	Sample Date	Sample Time	Sample Matrix*	# of Containers	Requested Tests: tph-dx	Comments
1 TK7-S12	4/20/21	110	soil	1	✔	
2 TK7-C12	4/20/21	105	soil	1	✔	
3 TK7-N12	4/20/21	100	soil	1	✔	
4 TK7-E6	4/20/21	130	soil	1	✔	
5 TK7-W7	4/20/21	124	soil	1	✔	
6 TK7-N6	4/20/21	123	soil	1	✔	
7 TK7-S7	4/20/21	122	soil	1	✔	
8						
9						
10						

*Matrix: A=Air, AQ=Aqueous, L=Liquid, O=Oil, P=Product, S=Soil, SD=Sediment, SL=Solid, W=Water, DW=Drinking Water, GW=Ground Water, SW=Storm Water, WW=Waste Water, M=Miscellaneous

Turn-around Time: Standard (5-7 Business): ☐ 3 Day: ☐ 2 Day: ☐ Next Day: ☑ Same Day: ☑

Expedited turn-around requests should be coordinated in advance

Relinquished	Date/Time	Received	Date/Time
x Karl Van Zandt	4/21/21 8 am	x	4-21-21 9:30
Relinquished	Date/Time	Received	Date/Time
x		x	
Relinquished	Date/Time	Received	Date/Time
x		x	

Specialty Analytical
9011 SE Jannsen Rd
Clackamas, Oregon 97015
TEL: 503-607-1331 FAX: 503-607-1336
Website: www.specialtyanalytical.com

Definition Only

WO#: **2104164**

Date: **4/23/2021**

Definitions:

KEY TO FLAGS

A: This sample contains a Gasoline Range Organic not identified as a specific hydrocarbon product. The result was qualified against gasoline calibration standards.

A1: This sample contains a Diesel Range Organic not identified as a specific hydrocarbon product. The result was qualified against diesel calibration standards.

A2: This sample contains a Lube Oil Range Organic not identified as a specific hydrocarbon product. The result was qualified against lube oil calibration standards.

A3: The results was determined to be Non-Detect based on hydrocarbon pattern recognition. The product was carry-over from another hydrocarbon type.

A4: The product appears to be aged or degraded.

B: The blank exhibited a positive result greater than the reporting limit for this compound.

CN: See Case Narrative.

E: Result exceeds the calibration range for this compound. The result should be considered an estimate.

F: The positive result for this hydrocarbon is due to single component contamination. The product does not match any hydrocarbon in the fuels library.

FS: Follow-up testing is suggested.

G: Result may be biased high due to biogenic interferences. Clean up is recommended.

H: Sample was analyzed outside recommended holding time.

HT: □At client's request, samples was analyzed outside of recommended holding time.

HP: Sample was analyzed outside recommended holding time due to VOA having pH >2.

J: The results for this analyte is between the MDL and the PQL and should be considered an

Definitions:

estimated concentration.

K: Diesel result is biased high due to amount of Oil contained in the sample.

L: Diesel result is biased high due to amount of Gasoline contained in the sample.

M: Oil result is biased high due to amount of Diesel contained in the sample.

N: Gasoline result is biased high due to amount of Diesel contained in the sample.

MC: Sample concentration is greater than 4x the spiked value, the spiked value is considered insignificant.

MI: Result is outside control limits due to matrix interference.

NH: Sample matrix is non-homogeneous

MSA: Value determined by Method of Standard Addition.

O: Laboratory Control Standard (LCS) exceeded laboratory control limits but meets CCV criteria. Data meets EPA requirements.

Q: Detection levels elevated due to sample matrix.

R: RPD control limits were exceeded

RF: Duplicate failed due to result being at or near the method-reporting limit.

RP: Matrix spike values exceed established QC limits; post digestion spike is in control.

S: Recovery is outside control limits.

SC: CCV or LCS exceeded high recovery control limits, but associated samples are non-detect. Data meets EPA requirements.

SL: LCS exceeded recovery control limits, but associated MS/MSD passing. Data meets EPA requirements.

8

Specialty Analytical

9011 SE Jannsen Rd
Clackamas, OR 97015
TEL: (503) 607-1331
Website: www.specialtyanalytical.com

April 26, 2021

Karl VanZandt
Karl VanZandt
1523 Georgia Ave SE
Salem, OR 97302
TEL: (503) 302-4078
FAX

RE: 12th Dewitt

Order No.: 2104165

Dear Karl VanZandt:

There were no problems with the analysis and all data for associated QC met EPA or laboratory specifications, except where noted in the Case Narrative, or as qualified with flags. Results apply only to the samples analyzed. Without approval of the laboratory, the reproduction of this report is only permitted in its entirety.

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

Sincerely,

Marty French
Lab Director

Specialty Analytical

WO#: **2104165**
Date Reported: **4/26/2021**

CLIENT: Karl VanZandt
Project: 12th Dewitt

Lab ID: 2104165-001 **Matrix:** SOIL
Client Sample ID TK3-N7 **Collection Date:** 4/20/2021 2:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
NWTPH-DX				**NWTPH-DX**	**SW3550C**	Analyst: **TB**
Diesel	ND	19.6		mg/Kg-dry	1	4/22/2021 7:46:00 PM
Lube Oil	ND	65.5		mg/Kg-dry	1	4/22/2021 7:46:00 PM
Surr: o-Terphenyl	86.6	50 - 150		%Rec	1	4/22/2021 7:46:00 PM

Lab ID: 2104165-002 **Matrix:** SOIL
Client Sample ID TK3-C7 **Collection Date:** 4/20/2021 2:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
NWTPH-DX				**NWTPH-DX**	**SW3550C**	Analyst: **TB**
Diesel	ND	19.0		mg/Kg-dry	1	4/22/2021 8:32:00 PM
Lube Oil	ND	63.4		mg/Kg-dry	1	4/22/2021 8:32:00 PM
Surr: o-Terphenyl	87.7	50 - 150		%Rec	1	4/22/2021 8:32:00 PM

Lab ID: 2104165-003 **Matrix:** SOIL
Client Sample ID TK3-S7 **Collection Date:** 4/20/2021 2:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
NWTPH-DX				**NWTPH-DX**	**SW3550C**	Analyst: **TB**
Diesel	52300	3880		mg/Kg-dry	200	4/23/2021 1:13:00 PM
Lube Oil	643	64.7	A2	mg/Kg-dry	1	4/22/2021 9:17:00 PM
Surr: o-Terphenyl	889	50 - 150	SMI	%Rec	1	4/22/2021 9:17:00 PM

Lab ID: 2104165-004 **Matrix:** SOIL
Client Sample ID TK4-S7 **Collection Date:** 4/20/2021 2:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
NWTPH-DX				**NWTPH-DX**	**SW3550C**	Analyst: **TB**
Diesel	345	19.0	A1	mg/Kg-dry	1	4/23/2021 12:50:00 PM
Lube Oil	ND	63.5	A2	mg/Kg-dry	1	4/23/2021 12:50:00 PM
Surr: o-Terphenyl	133	50 - 150		%Rec	1	4/23/2021 12:50:00 PM

Specialty Analytical

CLIENT: Karl VanZandt
Project: 12th Dewitt

Lab ID: 2104165-005 **Matrix:** SOIL
Client Sample ID TK4-C7 **Collection Date:** 4/20/2021 2:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
NWTPH-DX				**NWTPH-DX**	**SW3550C**	Analyst: **TB**
Diesel	33.6	19.3		mg/Kg-dry	1	4/23/2021 12:28:00 PM
Lube Oil	ND	64.4		mg/Kg-dry	1	4/22/2021 10:02:00 PM
Surr: o-Terphenyl	96.0	50 - 150		%Rec	1	4/22/2021 10:02:00 PM

Lab ID: 2104165-006 **Matrix:** SOIL
Client Sample ID TK4-N7 **Collection Date:** 4/20/2021 2:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
NWTPH-DX				**NWTPH-DX**	**SW3550C**	Analyst: **TB**
Diesel	ND	19.0		mg/Kg-dry	1	4/22/2021 10:25:00 PM
Lube Oil	ND	63.4		mg/Kg-dry	1	4/22/2021 10:25:00 PM
Surr: o-Terphenyl	88.7	50 - 150		%Rec	1	4/22/2021 10:25:00 PM

QC SUMMARY REPORT

WO#: 2104165

4/26/2021

Specialty Analytical

Client: Karl VanZandt
Project: 12th Dewitt

TestCode: **NWTPHDX_S**

Sample ID **CCV-2**	SampType: **CCV**	TestCode: **NWTPHDX_S**	Units: **mg/Kg**	Prep Date:	RunNo: **40107**
Client ID: **CCV**	Batch ID: **17767**	TestNo: **NWTPH-Dx**	**SW3550C**	Analysis Date: **4/22/2021**	SeqNo: **516247**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1400	15.0	1333	0	105	85	115				
Lube Oil	601	50.0	666.7	0	90.2	85	115				

Sample ID **MB-17767**	SampType: **MBLK**	TestCode: **NWTPHDX_S**	Units: **mg/Kg**	Prep Date: **4/21/2021**	RunNo: **40107**
Client ID: **PBS**	Batch ID: **17767**	TestNo: **NWTPH-Dx**	**SW3550C**	Analysis Date: **4/22/2021**	SeqNo: **516248**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	15.0									
Lube Oil	ND	50.0									
Surr: o-Terphenyl	30.0		33.33		89.9	50	150				

Sample ID **LCS-17767**	SampType: **LCS**	TestCode: **NWTPHDX_S**	Units: **mg/Kg**	Prep Date: **4/21/2021**	RunNo: **40107**
Client ID: **LCSS**	Batch ID: **17767**	TestNo: **NWTPH-Dx**	**SW3550C**	Analysis Date: **4/22/2021**	SeqNo: **516249**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	175	15.0	166.7	0	105	76.3	125				
Lube Oil	135	50.0	166.7	0	80.8	69.9	127				

QC SUMMARY REPORT

WO#: **2104165**

4/26/2021

Specialty Analytical

Client: Karl VanZandt
Project: 12th Dewitt

TestCode: **NWTPHDX_S**

Sample ID **2104165-001ADUP** SampType: **DUP** TestCode: **NWTPHDX_S** Units: **mg/Kg-dry** Prep Date: **4/21/2021** RunNo: **40107**
Client ID: **TK3-N7** Batch ID: **17767** TestNo: **NWTPH-Dx** **SW3550C** Analysis Date: **4/22/2021** SeqNo: **516251**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	19.6						0	0	20	
Lube Oil	ND	65.5						0	0	20	

Sample ID **2104165-002ADUP** SampType: **DUP** TestCode: **NWTPHDX_S** Units: **mg/Kg-dry** Prep Date: **4/21/2021** RunNo: **40107**
Client ID: **TK3-C7** Batch ID: **17767** TestNo: **NWTPH-Dx** **SW3550C** Analysis Date: **4/22/2021** SeqNo: **516253**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	19.0						0	0	20	RRF
Lube Oil	ND	63.4						0	0	20	

Sample ID **CCV-4** SampType: **CCV** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: RunNo: **40107**
Client ID: **CCV** Batch ID: **17767** TestNo: **NWTPH-Dx** **SW3550C** Analysis Date: **4/23/2021** SeqNo: **516360**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1060	15.0	1000	0	107	85	115				
Lube Oil	481	50.0	500.0	0	96.1	85	115				

QC SUMMARY REPORT

WO#: **2104165**

4/26/2021

Specialty Analytical

Client: Karl VanZandt
Project: 12th Dewitt

TestCode: **NWTPHDX_S**

Sample ID **CCB-R40107**	SampType: **CCB**	TestCode: **NWTPHDX_S**	Units: **mg/Kg**	Prep Date:	RunNo: **40107**
Client ID: **CCB**	Batch ID: **17767**	TestNo: **NWTPH-Dx**	**SW3550C**	Analysis Date: **4/23/2021**	SeqNo: **516361**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	15.0									
Lube Oil	ND	50.0									
Surr: o-Terphenyl	29.6		33.33		88.8	50	150				

Sample ID **CCV-5**	SampType: **CCV**	TestCode: **NWTPHDX_S**	Units: **mg/Kg**	Prep Date:	RunNo: **40107**
Client ID: **CCV**	Batch ID: **17767**	TestNo: **NWTPH-Dx**	**SW3550C**	Analysis Date: **4/23/2021**	SeqNo: **516365**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1380	15.0	1333	0	104	85	115				
Lube Oil	593	50.0	666.7	0	89.0	85	115				

Specialty Analytical
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Website: www.specialtyanalytical.com

Sample Receipt Checklist

Client Name VANZANDT_KARL

Work Order Numbe 2104165

RcptNo: 1 Date and Time Receive 4/21/2021 8:46:03 AM Received by Katherine Lynch

Completed by

Reviewed by:

Completed Date: 4/21/2021 8:56:52 AM

Reviewed Date: 4/21/2021 3:25:53 PM

Carrier name Client

Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	Not Presen ☐
Are matrices correctly identified on Chain of custody?	Yes ☑	No ☐	
Is it clear what analyses were requested?	Yes ☑	No ☐	
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Presen ☑
Samples in proper container/bottle?	Yes ☑	No ☐	
Were correct preservatives used and noted?	Yes ☐	No ☐	NA ☑
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
Were container lables complete (ID, Pres, Date)?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
All samples received at a temp. of > 0° C to 6.0° C?	Yes ☑	No ☐	NA ☐
Response when temperature is outside of range:			
Preservative added to bottles:			
Sample Temp. taken and recorded upon receipt?	Yes ☑	No ☐	To 5.1 °
Water - Were bubbles absent in VOC vials?	Yes ☐	No ☐	No Vials ☑
Water - Was there Chlorine Present?	Yes ☐	No ☐	NA ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	NA ☑
Are Samples considered acceptable?	Yes ☑	No ☐	
Custody Seals present?	Yes ☐	No ☑	
Traffic Report or Packing Lists present?	Yes ☐	No ☑	
Airbill or Sticker?	Air Bill ☐	Sticker ☐	Not Present ☑
Airbill No:			
Sample Tags Present?	Yes ☐	No ☑	
Sample Tags Listed on COC?	Yes ☐	No ☑	
Tag Numbers:			
Sample Condition?	Intact ☑	Broken ☐	Leaking ☐

Case Number: SDG: SAS:

Adjusted? _____ Checked b

Any No and/or NA (not applicable) response must be detailed in the comments section be

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Sample Receipt Checklist

Client Contacted? ☐ Yes ☑ No ☐ NA Person Contacted: Comments:

Contact Mode: ☐ Phone: ☐ Fax: ☐ Email: ☐ In Person:

Client Instructions:

Date Contacted: Contacted By:

Regarding:

CorrectiveAction:

Chain of Custody Record

Specialty Analytical
9011 SE Jannsen Rd
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336

Date: 4/20/21 | Page: 1 of: 1 | Laboratory Project No (internal): 2104165

Project Name: 12th Dewitt | Temperature on Receipt: 5.1 °C

Client: Karl Van Zandt Environmental | Project No: 12th Dewitt | PO No: 12th Dewitt | Cooling: Cooler + Ice | Shipped Via: client

Address: 1523 Georgia Ave SE | Collected by: karl vanzandt | Custody Seal: Y (N) Intact / Broken Cooler / Bottle

City, State, Zip: Salem Oregon 97302 | State Collected: OR ✔ WA ☐ OTHER | MDL ☐ TIER IV ☐ EDD ☐

Telephone: 503.302.4078 | Report To (PM): karl vanzandt | Sample Disposal: ☐ Return to client ☒ Disposal by lab (after 60 days)

AP Email: karlvanzandt@gmail.com | PM Email: karlvanzandt@gmail.com

Sample Name	Sample Date	Sample Time	Sample Matrix*	# of Containers	tph-dx	Requested Tests	Comments
1 TK3-N7	4/20/21	210	soil	1	✔		
2 TK3-C7	4/20/21	205	soil	1	✔		
3 TK3-S7	4/20/21	200	soil	1	✔		
4 TK4-S7	4/20/21	230	soil	1	✔		
5 TK4-C7	4/20/21	220	soil	1	✔		
6 TK4-N7	4/20/21	215	soil	1	✔		
7							
8							
9							
10							

*Matrix: A=Air, AQ=Aqueous, L=Liquid, O=Oil, P=Product, S=Soil, SD=Sediment, SL=Solid, W=Water, DW=Drinking Water, GW=Ground Water, SW=Storm Water, WW=Waste Water, M=Miscellaneous

Turn-around Time: Standard (5-7 Business): ✔ 3 Day: ☐ 2 Day: ☐ ~~Next Day~~: ✔ Same Day: ☐

Expedited turn-around requests should be coordinated in advance

Relinquished	Date/Time	Received	Date/Time
x Karl Van Zandt	4/21/21 8 am	x	4-21-2021 0:30
x		x	
x		x	

Specialty Analytical
9011 SE Jannsen Rd
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TEL: 503-607-1331 FAX: 503-607-1336
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Definition Only

WO#: **2104165**
Date: **4/26/2021**

Definitions:

KEY TO FLAGS

A: This sample contains a Gasoline Range Organic not identified as a specific hydrocarbon product. The result was qualified against gasoline calibration standards.

A1: This sample contains a Diesel Range Organic not identified as a specific hydrocarbon product. The result was qualified against diesel calibration standards.

A2: This sample contains a Lube Oil Range Organic not identified as a specific hydrocarbon product. The result was qualified against lube oil calibration standards.

A3: The results was determined to be Non-Detect based on hydrocarbon pattern recognition. The product was carry-over from another hydrocarbon type.

A4: The product appears to be aged or degraded.

B: The blank exhibited a positive result greater than the reporting limit for this compound.

CN: See Case Narrative.

E: Result exceeds the calibration range for this compound. The result should be considered an estimate.

F: The positive result for this hydrocarbon is due to single component contamination. The product does not match any hydrocarbon in the fuels library.

FS: Follow-up testing is suggested.

G: Result may be biased high due to biogenic interferences. Clean up is recommended.

H: Sample was analyzed outside recommended holding time.

HT: □At client's request, samples was analyzed outside of recommended holding time.

HP: Sample was analyzed outside recommended holding time due to VOA having pH >2.

J: The results for this analyte is between the MDL and the PQL and should be considered an

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Definition Only

WO#: **2104165**
Date: **4/26/2021**

Definitions:

estimated concentration.

K: Diesel result is biased high due to amount of Oil contained in the sample.

L: Diesel result is biased high due to amount of Gasoline contained in the sample.

M: Oil result is biased high due to amount of Diesel contained in the sample.

N: Gasoline result is biased high due to amount of Diesel contained in the sample.

MC: Sample concentration is greater than 4x the spiked value, the spiked value is considered insignificant.

MI: Result is outside control limits due to matrix interference.

NH: Sample matrix is non-homogeneous

MSA: Value determined by Method of Standard Addition.

O: Laboratory Control Standard (LCS) exceeded laboratory control limits but meets CCV criteria. Data meets EPA requirements.

Q: Detection levels elevated due to sample matrix.

R: RPD control limits were exceeded

RF: Duplicate failed due to result being at or near the method-reporting limit.

RP: Matrix spike values exceed established QC limits; post digestion spike is in control.

S: Recovery is outside control limits.

SC: CCV or LCS exceeded high recovery control limits, but associated samples are non-detect. Data meets EPA requirements.

SL: LCS exceeded recovery control limits, but associated MS/MSD passing. Data meets EPA requirements.

9

Specialty Analytical

9011 SE Jannsen Rd
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Website: www.specialtyanalytical.com

April 26, 2021

Karl VanZandt
Karl VanZandt
1523 Georgia Ave SE
Salem, OR 97302
TEL: (503) 302-4078
FAX

RE: Karl VanZandt / 12th Dewitt

Order No.: 2104170

Dear Karl VanZandt:

There were no problems with the analysis and all data for associated QC met EPA or laboratory specifications, except where noted in the Case Narrative, or as qualified with flags. Results apply only to the samples analyzed. Without approval of the laboratory, the reproduction of this report is only permitted in its entirety.

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

Sincerely,

Marty French
Lab Director

Specialty Analytical

CLIENT: Karl VanZandt
Project: Karl VanZandt / 12th Dewitt

Lab ID: 2104170-001 **Matrix:** SOIL
Client Sample ID TK3-1SWW6 **Collection Date:** 4/21/2021 11:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
NWTPH-DX				**NWTPH-DX SW3550C**	Analyst: **TB**	
Diesel	ND	18.9		mg/Kg-dry	1	4/22/2021 11:55:00 PM
Lube Oil	ND	62.9		mg/Kg-dry	1	4/22/2021 11:55:00 PM
Surr: o-Terphenyl	87.5	50 - 150		%Rec	1	4/22/2021 11:55:00 PM

Lab ID: 2104170-002 **Matrix:** SOIL
Client Sample ID TK3-2SWW7 **Collection Date:** 4/21/2021 11:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
NWTPH-DX				**NWTPH-DX SW3550C**	Analyst: **TB**	
Diesel	ND	19.0		mg/Kg-dry	1	4/23/2021 12:06:00 PM
Lube Oil	ND	63.3		mg/Kg-dry	1	4/23/2021 12:06:00 PM
Surr: o-Terphenyl	88.0	50 - 150		%Rec	1	4/23/2021 12:06:00 PM

Lab ID: 2104170-003 **Matrix:** SOIL
Client Sample ID TK3-3SWE6 **Collection Date:** 4/21/2021 11:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
NWTPH-DX				**NWTPH-DX SW3550C**	Analyst: **TB**	
Diesel	37.1	17.9		mg/Kg-dry	1	4/23/2021 12:40:00 AM
Lube Oil	ND	59.8		mg/Kg-dry	1	4/23/2021 12:40:00 AM
Surr: o-Terphenyl	99.3	50 - 150		%Rec	1	4/23/2021 12:40:00 AM

Lab ID: 2104170-004 **Matrix:** SOIL
Client Sample ID TK3-4SWE6 **Collection Date:** 4/21/2021 11:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
NWTPH-DX				**NWTPH-DX SW3550C**	Analyst: **TB**	
Diesel	ND	17.4		mg/Kg-dry	1	4/23/2021 1:02:00 AM
Lube Oil	ND	58.0		mg/Kg-dry	1	4/23/2021 1:02:00 AM
Surr: o-Terphenyl	88.7	50 - 150		%Rec	1	4/23/2021 1:02:00 AM

QC SUMMARY REPORT

WO#: **2104170**

4/26/2021

Specialty Analytical

Client: Karl VanZandt
Project: Karl VanZandt / 12th Dewitt

TestCode: **NWTPHDX_S**

Sample ID **CCV-1**	SampType: **CCV**	TestCode: **NWTPHDX_S**	Units: **mg/Kg**	Prep Date:	RunNo: **40112**
Client ID: **CCV**	Batch ID: **17771**	TestNo: **NWTPH-Dx**	**SW3550C**	Analysis Date: **4/22/2021**	SeqNo: **516166**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1060	15.0	1000	0	106	85	115				
Lube Oil	488	50.0	500.0	0	97.5	85	115				

Sample ID **CCV-2**	SampType: **CCV**	TestCode: **NWTPHDX_S**	Units: **mg/Kg**	Prep Date:	RunNo: **40112**
Client ID: **CCV**	Batch ID: **17771**	TestNo: **NWTPH-Dx**	**SW3550C**	Analysis Date: **4/22/2021**	SeqNo: **516259**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1400	15.0	1333	0	105	85	115				
Lube Oil	601	50.0	666.7	0	90.2	85	115				

Sample ID **MB-17771**	SampType: **MBLK**	TestCode: **NWTPHDX_S**	Units: **mg/Kg**	Prep Date: **4/21/2021**	RunNo: **40112**
Client ID: **PBS**	Batch ID: **17771**	TestNo: **NWTPH-Dx**	**SW3550C**	Analysis Date: **4/22/2021**	SeqNo: **516260**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	15.0									
Lube Oil	ND	50.0									
Surr: o-Terphenyl	28.7		33.33		86.1	50	150				

QC SUMMARY REPORT

WO#: **2104170**

4/26/2021

Specialty Analytical

Client: Karl VanZandt
Project: Karl VanZandt / 12th Dewitt

TestCode: **NWTPHDX_S**

Sample ID **LCS-17771** SampType: **LCS** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: **4/21/2021** RunNo: **40112**
Client ID: **LCSS** Batch ID: **17771** TestNo: **NWTPH-Dx** **SW3550C** Analysis Date: **4/22/2021** SeqNo: **516261**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	176	15.0	166.7	0	105	76.3	125				
Lube Oil	138	50.0	166.7	0	82.8	69.9	127				

Sample ID **2104166-002ADUP** SampType: **DUP** TestCode: **NWTPHDX_S** Units: **mg/Kg-dry** Prep Date: **4/21/2021** RunNo: **40112**
Client ID: **BatchQC** Batch ID: **17771** TestNo: **NWTPH-Dx** **SW3550C** Analysis Date: **4/22/2021** SeqNo: **516264**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	20.9						0	0	20	RRF
Lube Oil	ND	69.7						0	0	20	

Sample ID **2104170-004ADUP** SampType: **DUP** TestCode: **NWTPHDX_S** Units: **mg/Kg-dry** Prep Date: **4/21/2021** RunNo: **40112**
Client ID: **TK3-4SWE6** Batch ID: **17771** TestNo: **NWTPH-Dx** **SW3550C** Analysis Date: **4/23/2021** SeqNo: **516269**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	17.4						0	0	20	
Lube Oil	ND	58.0						0	0	20	

QC SUMMARY REPORT

Specialty Analytical

WO#: **2104170**
4/26/2021

Client: Karl VanZandt
Project: Karl VanZandt / 12th Dewitt **TestCode:** **NWTPHDX_S**

Sample ID **CCV-5** SampType: **CCV** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: RunNo: **40112**
Client ID: **CCV** Batch ID: **17771** TestNo: **NWTPH-Dx** **SW3550C** Analysis Date: **4/23/2021** SeqNo: **516366**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1060	15.0	1000	0	107	85	115				
Lube Oil	481	50.0	500.0	0	96.1	85	115				

Sample ID **CCB-R40112** SampType: **CCB** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: RunNo: **40112**
Client ID: **CCB** Batch ID: **17771** TestNo: **NWTPH-Dx** **SW3550C** Analysis Date: **4/23/2021** SeqNo: **516367**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	15.0									
Lube Oil	ND	50.0									
Surr: o-Terphenyl	29.6		33.33		88.8	50	150				

Sample ID **CCV-6** SampType: **CCV** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: RunNo: **40112**
Client ID: **CCV** Batch ID: **17771** TestNo: **NWTPH-Dx** **SW3550C** Analysis Date: **4/23/2021** SeqNo: **516370**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1380	15.0	1333	0	104	85	115				
Lube Oil	593	50.0	666.7	0	89.0	85	115				

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Website: www.specialtyanalytical.com

Sample Receipt Checklist

Client Name VANZANDT_KARL Work Order Numbe 2104170

RcptNo: 1 Date and Time Receive 4/21/2021 1:07:00 PM Received by Julie Clay

Completed by Reviewed by:

Completed Date: 4/21/2021 1:09:07 PM Reviewed Date: 4/21/2021 3:22:17 PM

Carrier name Client

Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	Not Presen ☐
Are matrices correctly identified on Chain of custody?	Yes ☑	No ☐	
Is it clear what analyses were requested?	Yes ☑	No ☐	
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Presen ☑
Samples in proper container/bottle?	Yes ☑	No ☐	
Were correct preservatives used and noted?	Yes ☑	No ☐	NA ☐
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
Were container lables complete (ID, Pres, Date)?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
All samples received at a temp. of > 0° C to 6.0° C?	Yes ☐	No ☑	NA ☐
Response when temperature is outside of range:	Samples were collected the same day and chilled.		
Preservative added to bottles:			
Sample Temp. taken and recorded upon receipt?	Yes ☑	No ☐	To 19.2 °
Water - Were bubbles absent in VOC vials?	Yes ☐	No ☐	No Vials ☑
Water - Was there Chlorine Present?	Yes ☐	No ☐	NA ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	NA ☑
Are Samples considered acceptable?	Yes ☑	No ☐	
Custody Seals present?	Yes ☐	No ☑	
Traffic Report or Packing Lists present?	Yes ☐	No ☑	
Airbill or Sticker?	Air Bill ☐	Sticker ☐	Not Present ☑
Airbill No:			
Sample Tags Present?	Yes ☐	No ☑	
Sample Tags Listed on COC?	Yes ☐	No ☑	
Tag Numbers:			
Sample Condition?	Intact ☑	Broken ☐	Leaking ☐

Case Number: SDG: SAS:

Adjusted? _____ Checked b

Any No and/or NA (not applicable) response must be detailed in the comments section be

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Sample Receipt Checklist

Client Contacted? ☐ Yes ☑ No ☐ NA Person Contacted: Comments:

Contact Mode: ☐ Phone: ☐ Fax: ☐ Email: ☐ In Person:

Client Instructions:

Date Contacted: Contacted By:

Regarding:

CorrectiveAction:

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Fax: 503-607-1336

Chain of Custody Record

Date: 4/21/21 | Page: of: | Laboratory Project No (internal): 210470

Project Name: Karl VanZandt | Temperature on Receipt: 19.2 °C

Client: Karl VanZandt | Project No: 12th Dewitt | PO No: 12th Dewitt | Cooling: On ice | Shipped Via: Client

Address: 1523 Georgia Ave SE | Collected by: Karl VanZandt | Custody Seal: Y (N) Intact / Broken Cooler / Bottle

City, State, Zip: Salem, OR 97302 | State Collected: (OR) WA OTHER | MDL TIER iV EDD

Telephone: 503 302 4075 | Report To (PM): K VanZandt | Sample Disposal: ☐ Return to client ☐ Disposal by lab (after 60 days)

AP Email: KarlVanZandt@gmail.com | PM Email: KarlVanZandt@gmail.com

	Sample Name	Sample Date	Sample Time	Sample Matrix*	# of Containers	Requested Tests: TPH-Dx	Comments
1	TK 3-1SWW6	4/21/21	1140	Soil	1	X	
2	TK 3-2SWW7	4/21/21	1150	Soil	1	X	
3	TK 3-3SWE6	4/21/21	11:10	Soil	1	X	
4	TK 3-4SWE6	4/21/21	11:20	Soil	1	X	
5							
6							
7							
8							
9							
10							

*Matrix: A=Air, AQ=Aqueous, L=Liquid, O=Oil, P=Product, S=Soil, SD=Sediment, SL=Solid, W=Water, DW=Drinking Water, GW=Ground Water, SW=Storm Water, WW=Waste Water, M=Miscellaneous

Turn-around Time: Standard (5-7 Business): ____ 3 Day: X 2 Day: ____ Next Day: ____ Same Day: X

Expedited turn-around requests should be coordinated in advance

Relinquished	Date/Time	Received	Date/Time
x Karl VanZandt	4/21/21 130p	x	4/21/21 130p
x	Date/Time	x	Date/Time
x	Date/Time	x	Date/Time

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Definition Only

WO#: **2104170**
Date: **4/26/2021**

Definitions:

KEY TO FLAGS

A: This sample contains a Gasoline Range Organic not identified as a specific hydrocarbon product. The result was qualified against gasoline calibration standards.

A1: This sample contains a Diesel Range Organic not identified as a specific hydrocarbon product. The result was qualified against diesel calibration standards.

A2: This sample contains a Lube Oil Range Organic not identified as a specific hydrocarbon product. The result was qualified against lube oil calibration standards.

A3: The results was determined to be Non-Detect based on hydrocarbon pattern recognition. The product was carry-over from another hydrocarbon type.

A4: The product appears to be aged or degraded.

B: The blank exhibited a positive result greater than the reporting limit for this compound.

CN: See Case Narrative.

E: Result exceeds the calibration range for this compound. The result should be considered an estimate.

F: The positive result for this hydrocarbon is due to single component contamination. The product does not match any hydrocarbon in the fuels library.

FS: Follow-up testing is suggested.

G: Result may be biased high due to biogenic interferences. Clean up is recommended.

H: Sample was analyzed outside recommended holding time.

HT: □At client's request, samples was analyzed outside of recommended holding time.

HP: Sample was analyzed outside recommended holding time due to VOA having pH >2.

J: The results for this analyte is between the MDL and the PQL and should be considered an

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Definition Only

WO#: **2104170**
Date: **4/26/2021**

Definitions:

estimated concentration.

K: Diesel result is biased high due to amount of Oil contained in the sample.

L: Diesel result is biased high due to amount of Gasoline contained in the sample.

M: Oil result is biased high due to amount of Diesel contained in the sample.

N: Gasoline result is biased high due to amount of Diesel contained in the sample.

MC: Sample concentration is greater than 4x the spiked value, the spiked value is considered insignificant.

MI: Result is outside control limits due to matrix interference.

NH: Sample matrix is non-homogeneous

MSA: Value determined by Method of Standard Addition.

O: Laboratory Control Standard (LCS) exceeded laboratory control limits but meets CCV criteria. Data meets EPA requirements.

Q: Detection levels elevated due to sample matrix.

R: RPD control limits were exceeded

RF: Duplicate failed due to result being at or near the method-reporting limit.

RP: Matrix spike values exceed established QC limits; post digestion spike is in control.

S: Recovery is outside control limits.

SC: CCV or LCS exceeded high recovery control limits, but associated samples are non-detect. Data meets EPA requirements.

SL: LCS exceeded recovery control limits, but associated MS/MSD passing. Data meets EPA requirements.

10

Specialty Analytical

9011 SE Jannsen Rd
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Website: www.specialtyanalytical.com

April 23, 2021

Karl VanZandt
Karl VanZandt
1523 Georgia Ave SE
Salem, OR 97302
TEL: (503) 302-4078
FAX:

RE: 12th Dewitt / 12th Dewitt

Order No.: 2104171

Dear Karl VanZandt:

There were no problems with the analysis and all data for associated QC met EPA or laboratory specifications, except where noted in the Case Narrative, or as qualified with flags. Results apply only to the samples analyzed. Without approval of the laboratory, the reproduction of this report is only permitted in its entirety.

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

Sincerely,

Marty French
Lab Director

Specialty Analytical

WO#: **2104171**
Date Reported: **4/23/2021**

CLIENT: Karl VanZandt
Project: 12th Dewitt / 12th Dewitt

Lab ID: 2104171-001
Client Sample ID EXTK3-W16
Matrix: SOIL
Collection Date: 4/21/2021 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
NWTPH-DX				**NWTPH-DX SW3550C** Analyst: **TB**		
Diesel	ND	17.1		mg/Kg-dry	1	4/23/2021 3:16:00 AM
Lube Oil	ND	57.1		mg/Kg-dry	1	4/23/2021 3:16:00 AM
Surr: o-Terphenyl	88.8	50 - 150		%Rec	1	4/23/2021 3:16:00 AM
NWTPH-GX				**NWTPH-GX SW 5035** Analyst: **TB**		
Gasoline	ND	64.2		mg/Kg-dry	1	4/21/2021 11:36:00 PM
Surr: 4-Bromofluorobenzene	100	50 - 150		%Rec	1	4/21/2021 11:36:00 PM

Lab ID: 2104171-002
Client Sample ID EXTK3-E16
Matrix: SOIL
Collection Date: 4/21/2021 11:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
NWTPH-DX				**NWTPH-DX SW3550C** Analyst: **TB**		
Diesel	ND	19.6		mg/Kg-dry	1	4/23/2021 3:39:00 AM
Lube Oil	ND	65.3		mg/Kg-dry	1	4/23/2021 3:39:00 AM
Surr: o-Terphenyl	97.7	50 - 150		%Rec	1	4/23/2021 3:39:00 AM
NWTPH-GX				**NWTPH-GX SW 5035** Analyst: **TB**		
Gasoline	ND	80.7		mg/Kg-dry	1	4/22/2021 12:23:00 AM
Surr: 4-Bromofluorobenzene	100	50 - 150		%Rec	1	4/22/2021 12:23:00 AM

Qualifiers: H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

QC SUMMARY REPORT

WO#: **2104171**

4/23/2021

Specialty Analytical

Client: Karl VanZandt

Project: 12th Dewitt / 12th Dewitt

TestCode: **NWTPHDX_S**

Sample ID: **CCV-1** SampType: **CCV** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: RunNo: **40112**

Client ID: **CCV** Batch ID: **17771** TestNo: **NWTPH-Dx** **SW3550C** Analysis Date: **4/22/2021** SeqNo: **516166**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1060	15.0	1000	0	106	85	115				
Lube Oil	488	50.0	500.0	0	97.5	85	115				

Sample ID: **CCV-2** SampType: **CCV** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: RunNo: **40112**

Client ID: **CCV** Batch ID: **17771** TestNo: **NWTPH-Dx** **SW3550C** Analysis Date: **4/22/2021** SeqNo: **516259**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1400	15.0	1333	0	105	85	115				
Lube Oil	601	50.0	666.7	0	90.2	85	115				

Sample ID: **MB-17771** SampType: **MBLK** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: **4/21/2021** RunNo: **40112**

Client ID: **PBS** Batch ID: **17771** TestNo: **NWTPH-Dx** **SW3550C** Analysis Date: **4/22/2021** SeqNo: **516260**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	15.0									
Lube Oil	ND	50.0									
Surr: o-Terphenyl	28.7		33.33		86.1	50	150				

Qualifiers: H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits

QC SUMMARY REPORT

WO#: 2104171

4/23/2021

Specialty Analytical

Client: Karl VanZandt

Project: 12th Dewitt / 12th Dewitt

TestCode: NWTPHDX_S

Sample ID: **LCS-17771** SampType: **LCS** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: **4/21/2021** RunNo: **40112**

Client ID: **LCSS** Batch ID: **17771** TestNo: **NWTPH-Dx** **SW3550C** Analysis Date: **4/22/2021** SeqNo: **516261**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	176	15.0	166.7	0	105	76.3	125				
Lube Oil	138	50.0	166.7	0	82.8	69.9	127				

Sample ID: **2104166-002ADUP** SampType: **DUP** TestCode: **NWTPHDX_S** Units: **mg/Kg-dry** Prep Date: **4/21/2021** RunNo: **40112**

Client ID: **BatchQC** Batch ID: **17771** TestNo: **NWTPH-Dx** **SW3550C** Analysis Date: **4/22/2021** SeqNo: **516264**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	20.9						0	0	20	RRF
Lube Oil	ND	69.7						0	0	20	

Sample ID: **2104170-004ADUP** SampType: **DUP** TestCode: **NWTPHDX_S** Units: **mg/Kg-dry** Prep Date: **4/21/2021** RunNo: **40112**

Client ID: **BatchQC** Batch ID: **17771** TestNo: **NWTPH-Dx** **SW3550C** Analysis Date: **4/23/2021** SeqNo: **516269**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	17.4						0	0	20	
Lube Oil	ND	58.0						0	0	20	

Qualifiers: H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits

QC SUMMARY REPORT

WO#: **2104171**

4/23/2021

Specialty Analytical

Client: Karl VanZandt
Project: 12th Dewitt / 12th Dewitt

TestCode: **NWTPHDX_S**

Sample ID: **CCV-3**	SampType: **CCV**	TestCode: **NWTPHDX_S**	Units: **mg/Kg**	Prep Date:	RunNo: **40112**
Client ID: **CCV**	Batch ID: **17771**	TestNo: **NWTPH-Dx**	**SW3550C**	Analysis Date: **4/23/2021**	SeqNo: **516270**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1080	15.0	1000	0	108	85	115				
Lube Oil	475	50.0	500.0	0	95.1	85	115				

Sample ID: **CCV-4**	SampType: **CCV**	TestCode: **NWTPHDX_S**	Units: **mg/Kg**	Prep Date:	RunNo: **40112**
Client ID: **CCV**	Batch ID: **17771**	TestNo: **NWTPH-Dx**	**SW3550C**	Analysis Date: **4/23/2021**	SeqNo: **516274**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1380	15.0	1333	0	103	85	115				
Lube Oil	601	50.0	666.7	0	90.1	85	115				

Qualifiers: H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits

QC SUMMARY REPORT

WO#: 2104171

4/23/2021

Specialty Analytical

Client: Karl VanZandt

Project: 12th Dewitt / 12th Dewitt

TestCode: NWTPHGX_5035

Sample ID: **CCV-1** SampType: **CCV** TestCode: **NWTPHGX_5** Units: **mg/Kg** Prep Date: RunNo: **40105**

Client ID: **CCV** Batch ID: **17772** TestNo: **NWTPH-Gx** **SW 5035** Analysis Date: **4/21/2021** SeqNo: **516049**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	103	50.0	100.0	0	103	80	120				

Sample ID: **MB-17772** SampType: **MBLK** TestCode: **NWTPHGX_5** Units: **mg/Kg** Prep Date: **4/21/2021** RunNo: **40105**

Client ID: **PBS** Batch ID: **17772** TestNo: **NWTPH-Gx** **SW 5035** Analysis Date: **4/21/2021** SeqNo: **516050**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	50.0									
Surr: 4-Bromofluorobenzene	8.75		10.00		87.5	50	150				

Sample ID: **LCS-17772** SampType: **LCS** TestCode: **NWTPHGX_5** Units: **mg/Kg** Prep Date: **4/21/2021** RunNo: **40105**

Client ID: **LCSS** Batch ID: **17772** TestNo: **NWTPH-Gx** **SW 5035** Analysis Date: **4/21/2021** SeqNo: **516051**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	53.2	50.0	62.50	0	85.1	53.5	121				

Sample ID: **2104171-001ADUP** SampType: **DUP** TestCode: **NWTPHGX_5** Units: **mg/Kg-dry** Prep Date: **4/21/2021** RunNo: **40105**

Client ID: **EXTK3-W16** Batch ID: **17772** TestNo: **NWTPH-Gx** **SW 5035** Analysis Date: **4/21/2021** SeqNo: **516053**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers: H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits

QC SUMMARY REPORT

WO#: **2104171**

4/23/2021

Specialty Analytical

Client: Karl VanZandt
Project: 12th Dewitt / 12th Dewitt

TestCode: **NWTPHGX_5035**

Sample ID: **2104171-001ADUP** SampType: **DUP** TestCode: **NWTPHGX_5** Units: **mg/Kg-dry** Prep Date: **4/21/2021** RunNo: **40105**
Client ID: **EXTK3-W16** Batch ID: **17772** TestNo: **NWTPH-Gx** **SW 5035** Analysis Date: **4/21/2021** SeqNo: **516053**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	64.2						0	0	20	

Sample ID: **CCV-2** SampType: **CCV** TestCode: **NWTPHGX_5** Units: **mg/Kg** Prep Date: RunNo: **40105**
Client ID: **CCV** Batch ID: **17772** TestNo: **NWTPH-Gx** **SW 5035** Analysis Date: **4/22/2021** SeqNo: **516056**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	170	50.0	150.0	0	113	80	120				

Qualifiers: H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits

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Website: www.specialtyanalytical.com

Sample Receipt Checklist

Client Name VANZANDT_KARL Work Order Number 2104171

RcptNo: 1 Date and Time Received 4/21/2021 1:11:51 PM Received by: Julie Clay

Completed by Reviewed by:

Completed Date: 4/21/2021 1:12:31 PM Reviewed Date: 4/21/2021 3:21:16 PM

Carrier name: Client

Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	Not Present ☐
Are matrices correctly identified on Chain of custody?	Yes ☑	No ☐	
Is it clear what analyses were requested?	Yes ☑	No ☐	
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Samples in proper container/bottle?	Yes ☑	No ☐	
Were correct preservatives used and noted?	Yes ☑	No ☐	NA ☐
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
Were container lables complete (ID, Pres, Date)?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
All samples received at a temp. of > 0° C to 6.0° C?	Yes ☐	No ☑	NA ☐
Response when temperature is outside of range:	Samples were collected the same day and chilled.		
Preservative added to bottles:			
Sample Temp. taken and recorded upon receipt?	Yes ☑	No ☐	To 19.2°C
Water - Were bubbles absent in VOC vials?	Yes ☐	No ☐	No Vials ☑
Water - Was there Chlorine Present?	Yes ☐	No ☐	NA ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	NA ☑
Are Samples considered acceptable?	Yes ☑	No ☐	
Custody Seals present?	Yes ☐	No ☑	
Traffic Report or Packing Lists present?	Yes ☐	No ☑	
Airbill or Sticker?	Air Bill ☐	Sticker ☐	Not Present ☑
Airbill No:			
Sample Tags Present?	Yes ☐	No ☑	
Sample Tags Listed on COC?	Yes ☐	No ☑	
Tag Numbers:			
Sample Condition?	Intact ☑	Broken ☐	Leaking ☐

Case Number: SDG: SAS:

Adjusted? _____ Checked by

Any No and/or NA (not applicable) response must be detailed in the comments section be

Specialty Analytical
9011 SE Jannsen Rd
Clackamas, Oregon 97015
TEL: 503-607-1331 FAX: 503-607-1336
Website: www.specialtyanalytical.com

Sample Receipt Checklist

Client Contacted? ☐ Yes ☑ No ☐ NA Person Contacted: Comments:

Contact Mode: ☐ Phone: ☐ Fax: ☐ Email: ☐ In Person:

Client Instructions:

Date Contacted: Contacted By:

Regarding:

CorrectiveAction:

Specialty Analytical
9011 SE Jannsen Rd
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336

Chain of Custody Record

Date: Page: of:

Project Name: 12th Dewitt

Project No: 12th Dewitt PO No: 12th Dewitt

Collected by: Karl VanZandt

State Collected: (OR) WA OTHER

Report To (PM): Karl VanZandt

PM Email: KarlVanZANDT@gmail.com

Laboratory Project No (internal): 2104171

Temperature on Receipt: 19.2 °C

Cooling: on ice Shipped Via: Client

Custody Seal: Y (N) Intact / Broken Cooler / Bottle

MDL TIER IV EDD

Sample Disposal: ☐ Return to client ☐ Disposal by lab (after 60 days)

Client: Karl VanZandt

Address: 1523 Georgia Ave SE

City, State, Zip: Salem, OR 97302

Telephone: 503 302 4078

AP Email: KarlVanZandt

	Sample Name	Sample Date	Sample Time	Sample Matrix*	# of Containers	Requested Tests Dx	Qx	Comments
1	EXTK3-W16	4/21/21	1100	Soil	1	✓	✓	
2	EXTK3-E16	4/21/21	1105	Soil	1	✓	✓	
3								
4								
5								
6								
7								
8								
9								
10								

*Matrix: A=Air, AQ=Aqueous, L=Liquid, O=Oil, P=Product, S=Soil, SD=Sediment, SL=Solid, W=Water, DW=Drinking Water, GW=Ground Water, SW=Storm Water, WW=Waste Water, M=Miscellaneous

Turn-around Time: Standard (5-7 Business): _____ 3 Day: _____ 2 Day: _____ Next Day: _____ Same Day: X

Expedited turn-around requests should be coordinated in advance

Relinquished	Date/Time	Received	Date/Time
x Karl VanZandt	4/21/21 1330	x	4/21/21 1:30p
x		x	
x		x	

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Definition Only

WO#: **2104171**

Date: **4/23/2021**

Definitions:

KEY TO FLAGS

A: This sample contains a Gasoline Range Organic not identified as a specific hydrocarbon product. The result was qualified against gasoline calibration standards.

A1: This sample contains a Diesel Range Organic not identified as a specific hydrocarbon product. The result was qualified against diesel calibration standards.

A2: This sample contains a Lube Oil Range Organic not identified as a specific hydrocarbon product. The result was qualified against lube oil calibration standards.

A3: The results was determined to be Non-Detect based on hydrocarbon pattern recognition. The product was carry-over from another hydrocarbon type.

A4: The product appears to be aged or degraded.

B: The blank exhibited a positive result greater than the reporting limit for this compound.

CN: See Case Narrative.

E: Result exceeds the calibration range for this compound. The result should be considered an estimate.

F: The positive result for this hydrocarbon is due to single component contamination. The product does not match any hydrocarbon in the fuels library.

FS: Follow-up testing is suggested.

G: Result may be biased high due to biogenic interferences. Clean up is recommended.

H: Sample was analyzed outside recommended holding time.

HT: □At client's request, samples was analyzed outside of recommended holding time.

HP: Sample was analyzed outside recommended holding time due to VOA having pH >2.

J: The results for this analyte is between the MDL and the PQL and should be considered an

Definitions:

estimated concentration.

K: Diesel result is biased high due to amount of Oil contained in the sample.

L: Diesel result is biased high due to amount of Gasoline contained in the sample.

M: Oil result is biased high due to amount of Diesel contained in the sample.

N: Gasoline result is biased high due to amount of Diesel contained in the sample.

MC: Sample concentration is greater than 4x the spiked value, the spiked value is considered insignificant.

MI: Result is outside control limits due to matrix interference.

NH: Sample matrix is non-homogeneous

MSA: Value determined by Method of Standard Addition.

O: Laboratory Control Standard (LCS) exceeded laboratory control limits but meets CCV criteria. Data meets EPA requirements.

Q: Detection levels elevated due to sample matrix.

R: RPD control limits were exceeded

RF: Duplicate failed due to result being at or near the method-reporting limit.

RP: Matrix spike values exceed established QC limits; post digestion spike is in control.

S: Recovery is outside control limits.

SC: CCV or LCS exceeded high recovery control limits, but associated samples are non-detect. Data meets EPA requirements.

SL: LCS exceeded recovery control limits, but associated MS/MSD passing. Data meets EPA requirements.

11

Specialty Analytical

9011 SE Jannsen Rd
Clackamas, OR 97015
TEL: (503) 607-1331
Website: www.specialtyanalytical.com

April 28, 2021

Karl VanZandt
Karl VanZandt
1523 Georgia Ave SE
Salem, OR 97302
TEL: (503) 302-4078
FAX:

RE: 12th Dewitt / 12th Dewitt

Order No.: 2104172

Dear Karl VanZandt:

There were no problems with the analysis and all data for associated QC met EPA or laboratory specifications, except where noted in the Case Narrative, or as qualified with flags. Results apply only to the samples analyzed. Without approval of the laboratory, the reproduction of this report is only permitted in its entirety.

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

Sincerely,

Marty French
Lab Director

Specialty Analytical

WO#: **2104172**
Date Reported: **4/28/2021**

CLIENT: Karl VanZandt
Project: 12th Dewitt / 12th Dewitt

Lab ID: 2104172-001 **Matrix:** SOIL
Client Sample ID TK8-S8 **Collection Date:** 4/21/2021 12:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
NWTPH-DX				**NWTPH-DX**	**SW3550C**	Analyst: **TB**
Diesel	604	97.8	A1	mg/Kg-dry	5	4/23/2021 2:19:00 PM
Lube Oil	ND	326	Q	mg/Kg-dry	5	4/23/2021 2:19:00 PM
Surr: o-Terphenyl	97.5	50 - 150		%Rec	5	4/23/2021 2:19:00 PM
NWTPH-GX				**NWTPH-GX**	**SW 5035**	Analyst: **TB**
Gasoline	ND	161000		mg/Kg-dry	2000	4/22/2021 6:34:00 PM
Surr: 4-Bromofluorobenzene	102	50 - 150		%Rec	2000	4/22/2021 6:34:00 PM
TCLP METALS				**E1311/6020**	**SW3010A**	Analyst: **AW**
ICP/MS METALS-TCLP LEACHED						
Arsenic, TCLP	0.00981	0.00500		mg/L	10	4/22/2021 12:12:29 PM
Barium, TCLP	1.10	0.0500		mg/L	10	4/22/2021 12:12:29 PM
Cadmium, TCLP	ND	0.00500		mg/L	10	4/22/2021 12:12:29 PM
Chromium, TCLP	ND	0.00500		mg/L	10	4/22/2021 12:12:29 PM
Lead, TCLP	0.0116	0.00500		mg/L	10	4/22/2021 12:12:29 PM
Selenium, TCLP	ND	0.0500		mg/L	10	4/22/2021 12:12:29 PM
Silver, TCLP	ND	0.00500		mg/L	10	4/22/2021 12:12:29 PM
TCLP METALS				**1311/7470**	**245.7**	Analyst: **AW**
CVAF MERCURY-TCLP LEACHED						
Mercury	ND	0.000500		mg/L	1	4/26/2021 12:57:15 PM
RBC VOLATILES				**SW8260D**	**SW 5035**	Analyst: **CK**
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
1,2,4-Trimethylbenzene	209	16.1		mg/Kg-dry	1000	4/23/2021 4:25:00 PM
1,2-Dibromoethane	ND	0.161	Q	mg/Kg-dry	10	4/23/2021 5:10:00 PM
1,2-Dichloroethane	ND	0.161	Q	mg/Kg-dry	10	4/23/2021 5:10:00 PM
1,3,5-Trimethylbenzene	82.2	16.1		mg/Kg-dry	1000	4/23/2021 4:25:00 PM
Benzene	6.29	1.61		mg/Kg-dry	100	4/23/2021 4:48:00 PM
Ethylbenzene	65.3	16.1		mg/Kg-dry	1000	4/23/2021 4:25:00 PM
Isopropylbenzene	18.3	1.61		mg/Kg-dry	100	4/23/2021 4:48:00 PM
m,p-Xylene	257	32.2		mg/Kg-dry	1000	4/23/2021 4:25:00 PM
Methyl tert-butyl ether	ND	0.161	Q	mg/Kg-dry	10	4/23/2021 5:10:00 PM
Naphthalene	30.1	16.1		mg/Kg-dry	1000	4/23/2021 4:25:00 PM
n-Propylbenzene	38.0	16.1		mg/Kg-dry	1000	4/23/2021 4:25:00 PM
o-Xylene	125	16.1		mg/Kg-dry	1000	4/23/2021 4:25:00 PM
Toluene	17.1	1.61		mg/Kg-dry	100	4/23/2021 4:48:00 PM
Surr: 1,2-Dichloroethane-d4	80.4	71.5 - 124		%Rec	10	4/23/2021 5:10:00 PM
Surr: 4-Bromofluorobenzene	94.8	75.7 - 122		%Rec	10	4/23/2021 5:10:00 PM

Qualifiers:
E Value above quantitation range
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

CLIENT: Karl VanZandt
Project: 12th Dewitt / 12th Dewitt

RBC VOLATILES			**SW8260D**	**SW 5035**	Analyst: **CK**
VOLATILE ORGANIC COMPOUNDS BY GC/MS					
Surr: Dibromofluoromethane	75.0	64.3 - 124	%Rec	10	4/23/2021 5:10:00 PM
Surr: Toluene-d8	108	74.9 - 120	%Rec	10	4/23/2021 5:10:00 PM
PCB'S IN SOLIDS			**SW 8082A**	**SW 3545A**	Analyst: **TB**
Aroclor 1016	ND	0.0000500	mg/Kg	1	4/27/2021 10:32:00 PM
Aroclor 1221	ND	0.0000500	mg/Kg	1	4/27/2021 10:32:00 PM
Aroclor 1232	ND	0.0000500	mg/Kg	1	4/27/2021 10:32:00 PM
Aroclor 1242	ND	0.0000500	mg/Kg	1	4/27/2021 10:32:00 PM
Aroclor 1248	ND	0.0000500	mg/Kg	1	4/27/2021 10:32:00 PM
Aroclor 1254	ND	0.0000500	mg/Kg	1	4/27/2021 10:32:00 PM
Aroclor 1260	ND	0.0000500	mg/Kg	1	4/27/2021 10:32:00 PM
Aroclor 1262	ND	0.0000500	mg/Kg	1	4/27/2021 10:32:00 PM
Aroclor 1268	ND	0.0000500	mg/Kg	1	4/27/2021 10:32:00 PM
Surr: Decachlorobiphenyl	79.0	56.5 - 130	%Rec	1	4/27/2021 10:32:00 PM

Qualifiers:

E Value above quantitation range
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

WO#: **2104172**

4/28/2021

Specialty Analytical

Client: Karl VanZandt
Project: 12th Dewitt / 12th Dewitt

TestCode: **6020_TCLP**

Sample ID: **ICV** SampType: **ICV** TestCode: **6020_TCLP** Units: **mg/L** Prep Date: RunNo: **40109**
Client ID: **ICV** Batch ID: **17780** TestNo: **E1311/6020** **SW3010A** Analysis Date: **4/22/2021** SeqNo: **516100**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic, TCLP	0.0496	0.000100	0.0500	0	99.2	90	110				
Barium, TCLP	0.0502	0.00100	0.0500	0	100	90	110				
Cadmium, TCLP	0.0503	0.000100	0.0500	0	101	90	110				
Chromium, TCLP	0.0500	0.000100	0.0500	0	100	90	110				
Lead, TCLP	0.0483	0.000100	0.0500	0	96.5	90	110				
Selenium, TCLP	0.0501	0.00100	0.0500	0	100	90	110				
Silver, TCLP	0.0501	0.000100	0.0500	0	100	90	110				

Sample ID: **CCV** SampType: **CCV** TestCode: **6020_TCLP** Units: **mg/L** Prep Date: RunNo: **40109**
Client ID: **CCV** Batch ID: **17780** TestNo: **E1311/6020** **SW3010A** Analysis Date: **4/22/2021** SeqNo: **516106**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic, TCLP	0.0498	0.000100	0.0500	0	99.6	90	110				
Barium, TCLP	0.0498	0.00100	0.0500	0	99.5	90	110				
Cadmium, TCLP	0.0506	0.000100	0.0500	0	101	90	110				
Chromium, TCLP	0.0500	0.000100	0.0500	0	100	90	110				
Lead, TCLP	0.0486	0.000100	0.0500	0	97.3	90	110				
Selenium, TCLP	0.0500	0.00100	0.0500	0	99.9	90	110				
Silver, TCLP	0.0506	0.000100	0.0500	0	101	90	110				

Qualifiers:
E Value above quantitation range
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

WO#: **2104172**

4/28/2021

Specialty Analytical

Client: Karl VanZandt
Project: 12th Dewitt / 12th Dewitt

TestCode: **6020_TCLP**

Sample ID: **MB-17780** SampType: **MBLK** TestCode: **6020_TCLP** Units: **mg/L** Prep Date: **4/22/2021** RunNo: **40109**
Client ID: **PBW** Batch ID: **17780** TestNo: **E1311/6020** **SW3010A** Analysis Date: **4/22/2021** SeqNo: **516108**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic, TCLP	ND	0.000100									
Barium, TCLP	ND	0.00100									
Cadmium, TCLP	ND	0.000100									
Chromium, TCLP	ND	0.000100									
Lead, TCLP	ND	0.000100									
Selenium, TCLP	ND	0.00100									
Silver, TCLP	ND	0.000100									

Sample ID: **LCS-17780** SampType: **LCS** TestCode: **6020_TCLP** Units: **mg/L** Prep Date: **4/22/2021** RunNo: **40109**
Client ID: **LCSW** Batch ID: **17780** TestNo: **E1311/6020** **SW3010A** Analysis Date: **4/22/2021** SeqNo: **516109**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic, TCLP	0.0510	0.000100	0.0500	0	102	80	120				
Barium, TCLP	0.0506	0.00100	0.0500	0	101	80	120				
Cadmium, TCLP	0.0533	0.000100	0.0500	0	107	80	120				
Chromium, TCLP	0.0483	0.000100	0.0500	0	96.5	80	120				
Lead, TCLP	0.0497	0.000100	0.0500	0	99.5	80	120				
Selenium, TCLP	0.0518	0.00100	0.0500	0	104	80	120				
Silver, TCLP	0.0512	0.000100	0.0500	0	102	80	120				

Qualifiers:
E Value above quantitation range
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

WO#: **2104172**

4/28/2021

Specialty Analytical

Client: Karl VanZandt
Project: 12th Dewitt / 12th Dewitt

TestCode: **6020_TCLP**

Sample ID: **2104154-001ADUP** SampType: **DUP** TestCode: **6020_TCLP** Units: **mg/L** Prep Date: **4/22/2021** RunNo: **40109**
Client ID: **BatchQC** Batch ID: **17780** TestNo: **E1311/6020** **SW3010A** Analysis Date: **4/22/2021** SeqNo: **516111**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic, TCLP	0.00674	0.00500						0.0111	48.7	20	RRF
Barium, TCLP	1.08	0.0500						1.05	3.00	20	
Cadmium, TCLP	ND	0.00500						0	0	20	RRF
Chromium, TCLP	0.0147	0.00500						0.0131	11.6	20	
Lead, TCLP	0.0196	0.00500						0.0205	4.08	20	
Selenium, TCLP	ND	0.0500						0	0	20	RRF
Silver, TCLP	ND	0.00500						0	0	20	RRF

Sample ID: **2104154-001AMS** SampType: **MS** TestCode: **6020_TCLP** Units: **mg/L** Prep Date: **4/22/2021** RunNo: **40109**
Client ID: **BatchQC** Batch ID: **17780** TestNo: **E1311/6020** **SW3010A** Analysis Date: **4/22/2021** SeqNo: **516112**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic, TCLP	0.260	0.00500	0.250	0.0111	99.4	70	130				
Barium, TCLP	1.26	0.0500	0.250	1.05	85.1	70	130				
Cadmium, TCLP	0.255	0.00500	0.250	0.000471	102	70	130				
Chromium, TCLP	0.258	0.00500	0.250	0.0131	97.8	70	130				
Lead, TCLP	0.259	0.00500	0.250	0.0205	95.3	70	130				
Selenium, TCLP	0.257	0.0500	0.250	0.0176	95.8	70	130				
Silver, TCLP	0.248	0.00500	0.250	0.00390	97.4	70	130				

Qualifiers:
E Value above quantitation range
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

WO#: **2104172**

4/28/2021

Specialty Analytical

Client: Karl VanZandt

Project: 12th Dewitt / 12th Dewitt

TestCode: **6020_TCLP**

Sample ID: **2104154-001AMSD** SampType: **MSD** TestCode: **6020_TCLP** Units: **mg/L** Prep Date: **4/22/2021** RunNo: **40109**

Client ID: **BatchQC** Batch ID: **17780** TestNo: **E1311/6020** **SW3010A** Analysis Date: **4/22/2021** SeqNo: **516113**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic, TCLP	0.263	0.00500	0.250	0.0111	101	70	130	0.260	1.23	20	
Barium, TCLP	1.26	0.0500	0.250	1.05	83.8	70	130	1.26	0.262	20	
Cadmium, TCLP	0.250	0.00500	0.250	0.000471	99.7	70	130	0.255	1.96	20	
Chromium, TCLP	0.260	0.00500	0.250	0.0131	98.6	70	130	0.258	0.808	20	
Lead, TCLP	0.261	0.00500	0.250	0.0205	96.1	70	130	0.259	0.775	20	
Selenium, TCLP	0.263	0.0500	0.250	0.0176	98.0	70	130	0.257	2.14	20	
Silver, TCLP	0.249	0.00500	0.250	0.00390	98.0	70	130	0.248	0.589	20	

Sample ID: **CCV** SampType: **CCV** TestCode: **6020_TCLP** Units: **mg/L** Prep Date: RunNo: **40109**

Client ID: **CCV** Batch ID: **17780** TestNo: **E1311/6020** **SW3010A** Analysis Date: **4/22/2021** SeqNo: **516115**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic, TCLP	0.0500	0.000100	0.0500	0	100	90	110				
Barium, TCLP	0.0500	0.00100	0.0500	0	100	90	110				
Cadmium, TCLP	0.0500	0.000100	0.0500	0	100	90	110				
Chromium, TCLP	0.0500	0.000100	0.0500	0	100	90	110				
Lead, TCLP	0.0501	0.000100	0.0500	0	100	90	110				
Selenium, TCLP	0.0500	0.00100	0.0500	0	100	90	110				
Silver, TCLP	0.0514	0.000100	0.0500	0	103	90	110				

Qualifiers:

E Value above quantitation range

H Holding times for preparation or analysis exceeded

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

WO#: **2104172**

4/28/2021

Specialty Analytical

Client: Karl VanZandt
Project: 12th Dewitt / 12th Dewitt

TestCode: **8082LL_S**

Sample ID: **CCV2 PCB PWS-10**	SampType: **CCV**	TestCode: **8082LL_S**	Units: **mg/Kg**	Prep Date:	RunNo: **40168**
Client ID: **CCV**	Batch ID: **17775**	TestNo: **SW 8082A**	**SW 3545A**	Analysis Date: **4/27/2021**	SeqNo: **516862**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	0.0727	0.0000500	0.0667	0	109	85	115				

Sample ID: **MB-17775**	SampType: **MBLK**	TestCode: **8082LL_S**	Units: **mg/Kg**	Prep Date: **4/21/2021**	RunNo: **40168**
Client ID: **PBS**	Batch ID: **17775**	TestNo: **SW 8082A**	**SW 3545A**	Analysis Date: **4/27/2021**	SeqNo: **516863**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	ND	0.0000500									
Aroclor 1221	ND	0.0000500									
Aroclor 1232	ND	0.0000500									
Aroclor 1242	ND	0.0000500									
Aroclor 1248	ND	0.0000500									
Aroclor 1254	ND	0.0000500									
Aroclor 1260	ND	0.0000500									
Aroclor 1262	ND	0.0000500									
Aroclor 1268	ND	0.0000500									
Surr: Decachlorobiphenyl	8.33		6.667		125	56.5	130				

Qualifiers:
E Value above quantitation range
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

WO#: 2104172

4/28/2021

Specialty Analytical

Client: Karl VanZandt
Project: 12th Dewitt / 12th Dewitt

TestCode: 8082LL_S

Sample ID: **LCS-17775** SampType: **LCS** TestCode: **8082LL_S** Units: **mg/Kg** Prep Date: **4/21/2021** RunNo: **40168**
Client ID: **LCSS** Batch ID: **17775** TestNo: **SW 8082A** **SW 3545A** Analysis Date: **4/27/2021** SeqNo: **516864**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	0.0873	0.0000500	0.0667	0	131	44.3	137				

Sample ID: **2104160-005BMS** SampType: **MS** TestCode: **8082LL_S** Units: **mg/Kg** Prep Date: **4/21/2021** RunNo: **40168**
Client ID: **BatchQC** Batch ID: **17775** TestNo: **SW 8082A** **SW 3545A** Analysis Date: **4/27/2021** SeqNo: **516865**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	0.101	0.0000500	0.0667	0	152	56.6	123				SMI

Sample ID: **2104160-005BMSD** SampType: **MSD** TestCode: **8082LL_S** Units: **mg/Kg** Prep Date: **4/21/2021** RunNo: **40168**
Client ID: **BatchQC** Batch ID: **17775** TestNo: **SW 8082A** **SW 3545A** Analysis Date: **4/27/2021** SeqNo: **516866**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	0.104	0.0000500	0.0667	0	156	56.6	123	0.101	2.60	20	SMI

Sample ID: **CCV3 PCB PWS-10** SampType: **CCV** TestCode: **8082LL_S** Units: **mg/Kg** Prep Date: RunNo: **40168**
Client ID: **CCV** Batch ID: **17775** TestNo: **SW 8082A** **SW 3545A** Analysis Date: **4/28/2021** SeqNo: **516878**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016/1260	0.0713	0.0000500	0.0667	0	107	85	115				

Qualifiers:
E Value above quantitation range
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

WO#: 2104172

4/28/2021

Specialty Analytical

Client: Karl VanZandt

Project: 12th Dewitt / 12th Dewitt

TestCode: **8082LL_S**

Sample ID: **CCV3 PCB PWS-10** SampType: **CCV** TestCode: **8082LL_S** Units: **mg/Kg** Prep Date: RunNo: **40168**

Client ID: **CCV** Batch ID: **17775** TestNo: **SW 8082A** **SW 3545A** Analysis Date: **4/28/2021** SeqNo: **516878**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:

E Value above quantitation range

S Spike Recovery outside accepted recovery limits

H Holding times for preparation or analysis exceeded

R RPD outside accepted recovery limits

QC SUMMARY REPORT

WO#: **2104172**

4/28/2021

Specialty Analytical

Client: Karl VanZandt

Project: 12th Dewitt / 12th Dewitt

TestCode: **8260_5035**

Sample ID: **CCV MSVWS-3043** SampType: **CCV** TestCode: **8260_5035** Units: **mg/Kg** Prep Date: RunNo: **40132**

Client ID: **CCV** Batch ID: **17785** TestNo: **SW8260D** **SW 5035** Analysis Date: **4/23/2021** SeqNo: **516381**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trimethylbenzene	0.0766	0.0100	0.0800	0	95.7	80	120				
1,2-Dibromoethane	0.0842	0.0100	0.0800	0	105	80	120				
1,2-Dichloroethane	0.0912	0.0100	0.0800	0	114	80	120				
1,3,5-Trimethylbenzene	0.0763	0.0100	0.0800	0	95.4	80	120				
Benzene	0.0867	0.0100	0.0800	0	108	80	120				
Ethylbenzene	0.0775	0.0100	0.0800	0	96.9	80	120				
Isopropylbenzene	0.0774	0.0100	0.0800	0	96.8	80	120				
m,p-Xylene	0.155	0.0200	0.160	0	97.0	80	120				
Methyl tert-butyl ether	0.0827	0.0100	0.0800	0	103	80	120				
Naphthalene	0.0889	0.0100	0.0800	0	111	80	120				
n-Propylbenzene	0.0761	0.0100	0.0800	0	95.2	80	120				
o-Xylene	0.0782	0.0100	0.0800	0	97.8	80	120				
Toluene	0.0774	0.0100	0.0800	0	96.7	80	120				

Sample ID: **LCS MSVWS-3044** SampType: **LCS** TestCode: **8260_5035** Units: **mg/Kg** Prep Date: RunNo: **40132**

Client ID: **LCSS** Batch ID: **17785** TestNo: **SW8260D** **SW 5035** Analysis Date: **4/23/2021** SeqNo: **516382**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trimethylbenzene	0.0447	0.0100	0.0400	0	112	70	130				
1,2-Dibromoethane	0.0411	0.0100	0.0400	0	103	70	130				
1,2-Dichloroethane	0.0403	0.0100	0.0400	0	101	70	130				

Qualifiers:

E Value above quantitation range

H Holding times for preparation or analysis exceeded

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

WO#: **2104172**

4/28/2021

Specialty Analytical

Client: Karl VanZandt
Project: 12th Dewitt / 12th Dewitt

TestCode: **8260_5035**

Sample ID: **LCS MSVWS-3044** SampType: **LCS** TestCode: **8260_5035** Units: **mg/Kg** Prep Date: RunNo: **40132**
Client ID: **LCSS** Batch ID: **17785** TestNo: **SW8260D** **SW 5035** Analysis Date: **4/23/2021** SeqNo: **516382**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,3,5-Trimethylbenzene	0.0449	0.0100	0.0400	0	112	70	130				
Benzene	0.0410	0.0100	0.0400	0	102	74.3	136				
Ethylbenzene	0.0415	0.0100	0.0400	0	104	70	130				
Isopropylbenzene	0.0419	0.0100	0.0400	0	105	70	130				
m,p-Xylene	0.0892	0.0200	0.0800	0	112	70	130				
Methyl tert-butyl ether	0.0406	0.0100	0.0400	0	102	70	130				
Naphthalene	0.0463	0.0100	0.0400	0	116	70	130				
n-Propylbenzene	0.0452	0.0100	0.0400	0	113	70	130				
o-Xylene	0.0419	0.0100	0.0400	0	105	70	130				
Toluene	0.0418	0.0100	0.0400	0	104	75.1	123				

Sample ID: **LCSD MSVWS-3044** SampType: **LCSD** TestCode: **8260_5035** Units: **mg/Kg** Prep Date: RunNo: **40132**
Client ID: **LCSS02** Batch ID: **17785** TestNo: **SW8260D** **SW 5035** Analysis Date: **4/23/2021** SeqNo: **516383**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trimethylbenzene	0.0416	0.0100	0.0400	0	104	70	130	0.0447	7.04	20	
1,2-Dibromoethane	0.0411	0.0100	0.0400	0	103	70	130	0.0411	0.0487	20	
1,2-Dichloroethane	0.0396	0.0100	0.0400	0	99.1	70	130	0.0403	1.73	20	
1,3,5-Trimethylbenzene	0.0418	0.0100	0.0400	0	104	70	130	0.0449	7.13	20	
Benzene	0.0396	0.0100	0.0400	0	98.9	74.3	136	0.0410	3.58	20	
Ethylbenzene	0.0402	0.0100	0.0400	0	101	70	130	0.0415	3.16	20	

Qualifiers:
E Value above quantitation range
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

WO#: **2104172**

4/28/2021

Specialty Analytical

Client: Karl VanZandt

Project: 12th Dewitt / 12th Dewitt **TestCode:** **8260_5035**

Sample ID: **LCSD MSVWS-3044** SampType: **LCSD** TestCode: **8260_5035** Units: **mg/Kg** Prep Date: RunNo: **40132**

Client ID: **LCSS02** Batch ID: **17785** TestNo: **SW8260D** **SW 5035** Analysis Date: **4/23/2021** SeqNo: **516383**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Isopropylbenzene	0.0405	0.0100	0.0400	0	101	70	130	0.0419	3.25	20	
m,p-Xylene	0.0829	0.0200	0.0800	0	104	70	130	0.0892	7.32	20	
Methyl tert-butyl ether	0.0450	0.0100	0.0400	0	113	70	130	0.0406	10.2	20	
Naphthalene	0.0427	0.0100	0.0400	0	107	70	130	0.0463	8.07	20	
n-Propylbenzene	0.0393	0.0100	0.0400	0	98.2	70	130	0.0452	13.9	20	
o-Xylene	0.0404	0.0100	0.0400	0	101	70	130	0.0419	3.67	20	
Toluene	0.0397	0.0100	0.0400	0	99.2	75.1	123	0.0418	5.06	20	

Sample ID: **MB** SampType: **MBLK** TestCode: **8260_5035** Units: **mg/Kg** Prep Date: RunNo: **40132**

Client ID: **PBS** Batch ID: **17785** TestNo: **SW8260D** **SW 5035** Analysis Date: **4/23/2021** SeqNo: **516384**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trimethylbenzene	ND	0.0100									
1,2-Dibromoethane	ND	0.0100									
1,2-Dichloroethane	ND	0.0100									
1,3,5-Trimethylbenzene	ND	0.0100									
Benzene	ND	0.0100									
Ethylbenzene	ND	0.0100									
Isopropylbenzene	ND	0.0100									
m,p-Xylene	ND	0.0200									
Methyl tert-butyl ether	ND	0.0100									

Qualifiers:

E Value above quantitation range

H Holding times for preparation or analysis exceeded

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

WO#: 2104172

4/28/2021

Specialty Analytical

Client: Karl VanZandt
Project: 12th Dewitt / 12th Dewitt

TestCode: 8260_5035

Sample ID: **MB** SampType: **MBLK** TestCode: **8260_5035** Units: **mg/Kg** Prep Date: RunNo: **40132**
Client ID: **PBS** Batch ID: **17785** TestNo: **SW8260D** **SW 5035** Analysis Date: **4/23/2021** SeqNo: **516384**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	ND	0.0100									
n-Propylbenzene	ND	0.0100									
o-Xylene	ND	0.0100									
Toluene	ND	0.0100									
Surr: 1,2-Dichloroethane-d4	93.5		100.0		93.5	71.5	124				
Surr: 4-Bromofluorobenzene	99.1		100.0		99.1	75.7	122				
Surr: Dibromofluoromethane	104		100.0		104	64.3	124				
Surr: Toluene-d8	101		100.0		101	74.9	120				

Sample ID: **2104172-001AMS** SampType: **MS** TestCode: **8260_5035** Units: **mg/Kg-dry** Prep Date: RunNo: **40132**
Client ID: **TK8-S8** Batch ID: **17785** TestNo: **SW8260D** **SW 5035** Analysis Date: **4/23/2021** SeqNo: **516419**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trimethylbenzene	80.0	1.61	6.43	55.9	374	70	130				SMC
1,2-Dibromoethane	7.49	1.61	6.43	0	117	70	130				
1,2-Dichloroethane	6.62	1.61	6.43	0	103	70	130				
1,3,5-Trimethylbenzene	51.7	1.61	6.43	34.0	276	70	130				SMC
Benzene	12.6	1.61	6.43	6.29	98.0	71.7	147				
Ethylbenzene	44.1	1.61	6.43	28.5	242	70	130				SMC
Isopropylbenzene	26.9	1.61	6.43	18.3	133	70	130				SMI
m,p-Xylene	108	3.22	12.9	66.8	322	70	130				SMC

Qualifiers:
E Value above quantitation range
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

WO#: **2104172**

4/28/2021

Specialty Analytical

Client: Karl VanZandt
Project: 12th Dewitt / 12th Dewitt

TestCode: **8260_5035**

Sample ID: **2104172-001AMS** SampType: **MS** TestCode: **8260_5035** Units: **mg/Kg-dry** Prep Date: RunNo: **40132**
Client ID: **TK8-S8** Batch ID: **17785** TestNo: **SW8260D** **SW 5035** Analysis Date: **4/23/2021** SeqNo: **516419**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether	8.07	1.61	6.43	0	125	70	130				
Naphthalene	42.4	1.61	6.43	28.9	209	70	130				SMC
n-Propylbenzene	43.3	1.61	6.43	30.9	192	70	130				SMC
o-Xylene	72.6	1.61	6.43	47.1	398	70	130				SMC
Toluene	27.7	1.61	6.43	17.1	165	75.8	153				SMI

Sample ID: **2104172-001AMSD** SampType: **MSD** TestCode: **8260_5035** Units: **mg/Kg-dry** Prep Date: RunNo: **40132**
Client ID: **TK8-S8** Batch ID: **17785** TestNo: **SW8260D** **SW 5035** Analysis Date: **4/23/2021** SeqNo: **516455**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trimethylbenzene	82.9	1.61	6.43	55.9	419	70	130	80.0	3.57	20	SMC
1,2-Dibromoethane	7.13	1.61	6.43	0	111	70	130	7.49	4.95	20	
1,2-Dichloroethane	6.94	1.61	6.43	0	108	70	130	6.62	4.74	20	
1,3,5-Trimethylbenzene	54.4	1.61	6.43	34.0	318	70	130	51.7	5.05	20	SMC
Benzene	12.3	1.61	6.43	6.29	93.8	71.7	147	12.6	2.18	20	
Ethylbenzene	45.3	1.61	6.43	28.5	261	70	130	44.1	2.67	20	SMC
Isopropylbenzene	27.3	1.61	6.43	18.3	140	70	130	26.9	1.61	20	SMI
m,p-Xylene	109	3.22	12.9	66.8	331	70	130	108	1.01	20	SMC
Methyl tert-butyl ether	7.85	1.61	6.43	0	122	70	130	8.07	2.71	20	
Naphthalene	42.5	1.61	6.43	28.9	211	70	130	42.4	0.186	20	SMC
n-Propylbenzene	43.9	1.61	6.43	30.9	202	70	130	43.3	1.50	20	SMC

Qualifiers:
E Value above quantitation range
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

WO#: **2104172**

4/28/2021

Specialty Analytical

Client: Karl VanZandt
Project: 12th Dewitt / 12th Dewitt

TestCode: **8260_5035**

Sample ID: **2104172-001AMSD** SampType: **MSD** TestCode: **8260_5035** Units: **mg/Kg-dry** Prep Date: RunNo: **40132**
Client ID: **TK8-S8** Batch ID: **17785** TestNo: **SW8260D** **SW 5035** Analysis Date: **4/23/2021** SeqNo: **516455**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
o-Xylene	74.1	1.61	6.43	47.1	421	70	130	72.6	2.03	20	SMC
Toluene	28.1	1.61	6.43	17.1	170	75.8	153	27.7	1.15	20	SMI

Qualifiers:

E Value above quantitation range
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Specialty Analytical

WO#: **2104172**

4/28/2021

Client: Karl VanZandt

Project: 12th Dewitt / 12th Dewitt **TestCode:** **HG_TCLP**

Sample ID: **MB-17798**	SampType: **MBLK**	TestCode: **HG_TCLP**	Units: **mg/L**	Prep Date: **4/26/2021**	RunNo: **40137**
Client ID: **PBW**	Batch ID: **17798**	TestNo: **1311/7470**	**245.7**	Analysis Date: **4/26/2021**	SeqNo: **516475**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.000100									

Sample ID: **LCS-17798**	SampType: **LCS**	TestCode: **HG_TCLP**	Units: **mg/L**	Prep Date: **4/26/2021**	RunNo: **40137**
Client ID: **LCSW**	Batch ID: **17798**	TestNo: **1311/7470**	**245.7**	Analysis Date: **4/26/2021**	SeqNo: **516476**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00402	0.000100	0.00400	0	100	85.4	116				

Sample ID: **2104172-001BDUP**	SampType: **DUP**	TestCode: **HG_TCLP**	Units: **mg/L**	Prep Date: **4/26/2021**	RunNo: **40137**
Client ID: **TK8-S8**	Batch ID: **17798**	TestNo: **1311/7470**	**245.7**	Analysis Date: **4/26/2021**	SeqNo: **516478**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.000500						0	0	20	

Sample ID: **2104172-001BMS**	SampType: **MS**	TestCode: **HG_TCLP**	Units: **mg/L**	Prep Date: **4/26/2021**	RunNo: **40137**
Client ID: **TK8-S8**	Batch ID: **17798**	TestNo: **1311/7470**	**245.7**	Analysis Date: **4/26/2021**	SeqNo: **516479**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0225	0.000500	0.0200	0	113	69.5	125				

Qualifiers:

E Value above quantitation range

H Holding times for preparation or analysis exceeded

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

WO#: **2104172**

4/28/2021

Specialty Analytical

Client: Karl VanZandt
Project: 12th Dewitt / 12th Dewitt

TestCode: **HG_TCLP**

Sample ID: **2104172-001BMS**	SampType: **MS**	TestCode: **HG_TCLP**	Units: **mg/L**	Prep Date: **4/26/2021**	RunNo: **40137**
Client ID: **TK8-S8**	Batch ID: **17798**	TestNo: **1311/7470**	**245.7**	Analysis Date: **4/26/2021**	SeqNo: **516479**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID: **2104172-001BMSD**	SampType: **MSD**	TestCode: **HG_TCLP**	Units: **mg/L**	Prep Date: **4/26/2021**	RunNo: **40137**
Client ID: **TK8-S8**	Batch ID: **17798**	TestNo: **1311/7470**	**245.7**	Analysis Date: **4/26/2021**	SeqNo: **516480**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0232	0.000500	0.0200	0	116	69.5	125	0.0225	2.91	20	

Sample ID: **CCV**	SampType: **CCV**	TestCode: **HG_TCLP**	Units: **mg/L**	Prep Date:	RunNo: **40137**
Client ID: **CCV**	Batch ID: **17798**	TestNo: **1311/7470**	**245.7**	Analysis Date: **4/26/2021**	SeqNo: **516483**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00403	0.000100	0.00400	0	101	90	110				

Qualifiers:
E Value above quantitation range
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

WO#: **2104172**

4/28/2021

Specialty Analytical

Client: Karl VanZandt
Project: 12th Dewitt / 12th Dewitt

TestCode: **NWTPHDX_S**

Sample ID: **CCV-2**	SampType: **CCV**	TestCode: **NWTPHDX_S**	Units: **mg/Kg**	Prep Date:	RunNo: **40112**
Client ID: **CCV**	Batch ID: **17771**	TestNo: **NWTPH-Dx**	**SW3550C**	Analysis Date: **4/22/2021**	SeqNo: **516259**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1400	15.0	1333	0	105	85	115				
Lube Oil	601	50.0	666.7	0	90.2	85	115				

Sample ID: **MB-17771**	SampType: **MBLK**	TestCode: **NWTPHDX_S**	Units: **mg/Kg**	Prep Date: **4/21/2021**	RunNo: **40112**
Client ID: **PBS**	Batch ID: **17771**	TestNo: **NWTPH-Dx**	**SW3550C**	Analysis Date: **4/22/2021**	SeqNo: **516260**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	15.0									
Lube Oil	ND	50.0									
Surr: o-Terphenyl	28.7		33.33		86.1	50	150				

Sample ID: **LCS-17771**	SampType: **LCS**	TestCode: **NWTPHDX_S**	Units: **mg/Kg**	Prep Date: **4/21/2021**	RunNo: **40112**
Client ID: **LCSS**	Batch ID: **17771**	TestNo: **NWTPH-Dx**	**SW3550C**	Analysis Date: **4/22/2021**	SeqNo: **516261**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	176	15.0	166.7	0	105	76.3	125				
Lube Oil	138	50.0	166.7	0	82.8	69.9	127				

Qualifiers:
E Value above quantitation range
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Specialty Analytical

WO#: **2104172**
4/28/2021

Client: Karl VanZandt
Project: 12th Dewitt / 12th Dewitt **TestCode:** **NWTPHDX_S**

Sample ID: **2104166-002ADUP** SampType: **DUP** TestCode: **NWTPHDX_S** Units: **mg/Kg-dry** Prep Date: **4/21/2021** RunNo: **40112**
Client ID: **BatchQC** Batch ID: **17771** TestNo: **NWTPH-Dx** **SW3550C** Analysis Date: **4/22/2021** SeqNo: **516264**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	20.9						0	0	20	RRF
Lube Oil	ND	69.7						0	0	20	

Sample ID: **2104170-004ADUP** SampType: **DUP** TestCode: **NWTPHDX_S** Units: **mg/Kg-dry** Prep Date: **4/21/2021** RunNo: **40112**
Client ID: **BatchQC** Batch ID: **17771** TestNo: **NWTPH-Dx** **SW3550C** Analysis Date: **4/23/2021** SeqNo: **516269**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	17.4						0	0	20	
Lube Oil	ND	58.0						0	0	20	

Sample ID: **CCV-3** SampType: **CCV** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: RunNo: **40112**
Client ID: **CCV** Batch ID: **17771** TestNo: **NWTPH-Dx** **SW3550C** Analysis Date: **4/23/2021** SeqNo: **516270**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1080	15.0	1000	0	108	85	115				
Lube Oil	475	50.0	500.0	0	95.1	85	115				

Qualifiers:
E Value above quantitation range
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Specialty Analytical

WO#: **2104172**
4/28/2021

Client: Karl VanZandt
Project: 12th Dewitt / 12th Dewitt **TestCode: NWTPHDX_S**

Sample ID: **CCV-5** SampType: **CCV** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: RunNo: **40112**
Client ID: **CCV** Batch ID: **17771** TestNo: **NWTPH-Dx** **SW3550C** Analysis Date: **4/23/2021** SeqNo: **516366**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1060	15.0	1000	0	107	85	115				
Lube Oil	481	50.0	500.0	0	96.1	85	115				

Sample ID: **CCB-R40112** SampType: **CCB** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: RunNo: **40112**
Client ID: **CCB** Batch ID: **17771** TestNo: **NWTPH-Dx** **SW3550C** Analysis Date: **4/23/2021** SeqNo: **516367**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	15.0									
Lube Oil	ND	50.0									
Surr: o-Terphenyl	29.6		33.33		88.8	50	150				

Sample ID: **CCV-6** SampType: **CCV** TestCode: **NWTPHDX_S** Units: **mg/Kg** Prep Date: RunNo: **40112**
Client ID: **CCV** Batch ID: **17771** TestNo: **NWTPH-Dx** **SW3550C** Analysis Date: **4/23/2021** SeqNo: **516370**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1380	15.0	1333	0	104	85	115				
Lube Oil	593	50.0	666.7	0	89.0	85	115				

Qualifiers:
E Value above quantitation range
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

WO#: **2104172**

4/28/2021

Specialty Analytical

Client: Karl VanZandt
Project: 12th Dewitt / 12th Dewitt

TestCode: **NWTPHGX_5035**

Sample ID: **CCV-1**	SampType: **CCV**	TestCode: **NWTPHGX_5**	Units: **mg/Kg**	Prep Date:	RunNo: **40105**
Client ID: **CCV**	Batch ID: **17772**	TestNo: **NWTPH-Gx**	**SW 5035**	Analysis Date: **4/21/2021**	SeqNo: **516049**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	103	50.0	100.0	0	103	80	120				

Sample ID: **MB-17772**	SampType: **MBLK**	TestCode: **NWTPHGX_5**	Units: **mg/Kg**	Prep Date: **4/21/2021**	RunNo: **40105**
Client ID: **PBS**	Batch ID: **17772**	TestNo: **NWTPH-Gx**	**SW 5035**	Analysis Date: **4/21/2021**	SeqNo: **516050**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	50.0									
Surr: 4-Bromofluorobenzene	8.75		10.00		87.5	50	150				

Sample ID: **LCS-17772**	SampType: **LCS**	TestCode: **NWTPHGX_5**	Units: **mg/Kg**	Prep Date: **4/21/2021**	RunNo: **40105**
Client ID: **LCSS**	Batch ID: **17772**	TestNo: **NWTPH-Gx**	**SW 5035**	Analysis Date: **4/21/2021**	SeqNo: **516051**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	53.2	50.0	62.50	0	85.1	53.5	121				

Sample ID: **2104171-001ADUP**	SampType: **DUP**	TestCode: **NWTPHGX_5**	Units: **mg/Kg-dry**	Prep Date: **4/21/2021**	RunNo: **40105**
Client ID: **BatchQC**	Batch ID: **17772**	TestNo: **NWTPH-Gx**	**SW 5035**	Analysis Date: **4/21/2021**	SeqNo: **516053**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:
E Value above quantitation range
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Specialty Analytical

WO#: **2104172**
4/28/2021

Client: Karl VanZandt
Project: 12th Dewitt / 12th Dewitt **TestCode:** **NWTPHGX_5035**

Sample ID: **2104171-001ADUP** SampType: **DUP** TestCode: **NWTPHGX_5** Units: **mg/Kg-dry** Prep Date: **4/21/2021** RunNo: **40105**
Client ID: **BatchQC** Batch ID: **17772** TestNo: **NWTPH-Gx** **SW 5035** Analysis Date: **4/21/2021** SeqNo: **516053**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	64.2						0	0	20	

Sample ID: **CCV-3** SampType: **CCV** TestCode: **NWTPHGX_5** Units: **mg/Kg** Prep Date: RunNo: **40105**
Client ID: **CCV** Batch ID: **17772** TestNo: **NWTPH-Gx** **SW 5035** Analysis Date: **4/22/2021** SeqNo: **516292**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	99.5	50.0	100.0	0	99.5	80	120				

Sample ID: **CCB-R40105** SampType: **CCB** TestCode: **NWTPHGX_5** Units: **mg/Kg** Prep Date: RunNo: **40105**
Client ID: **CCB** Batch ID: **17772** TestNo: **NWTPH-Gx** **SW 5035** Analysis Date: **4/22/2021** SeqNo: **516293**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	50.0									
Surr: 4-Bromofluorobenzene	5.20		5.000		104	50	150				

Sample ID: **CCV-4** SampType: **CCV** TestCode: **NWTPHGX_5** Units: **mg/Kg** Prep Date: RunNo: **40105**
Client ID: **CCV** Batch ID: **17772** TestNo: **NWTPH-Gx** **SW 5035** Analysis Date: **4/22/2021** SeqNo: **516295**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:
E Value above quantitation range
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Specialty Analytical

WO#: **2104172**
4/28/2021

Client: Karl VanZandt
Project: 12th Dewitt / 12th Dewitt **TestCode:** **NWTPHGX_5035**

Sample ID: **CCV-4** SampType: **CCV** TestCode: **NWTPHGX_5** Units: **mg/Kg** Prep Date: RunNo: **40105**
Client ID: **CCV** Batch ID: **17772** TestNo: **NWTPH-Gx** **SW 5035** Analysis Date: **4/22/2021** SeqNo: **516295**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	145	50.0	150.0	0	96.9	80	120				

Qualifiers:
E Value above quantitation range
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

Specialty Analytical
9011 SE Jannsen Rd
Clackamas, Oregon 97015
TEL: 503-607-1331 FAX: 503-607-1336
Website: www.specialtyanalytical.com

Sample Receipt Checklist

Client Name VANZANDT_KARL Work Order Number 2104172

RcptNo: 1 Date and Time Received 4/21/2021 1:13:46 PM Received by: Julie Clay

Completed by Reviewed by:

Completed Date: 4/21/2021 1:14:14 PM Reviewed Date: 4/21/2021 3:16:14 PM

Carrier name: Client

Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	Not Present ☐
Are matrices correctly identified on Chain of custody?	Yes ☑	No ☐	
Is it clear what analyses were requested?	Yes ☑	No ☐	
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Samples in proper container/bottle?	Yes ☑	No ☐	
Were correct preservatives used and noted?	Yes ☑	No ☐	NA ☐
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
Were container lables complete (ID, Pres, Date)?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
All samples received at a temp. of > 0° C to 6.0° C?	Yes ☐	No ☑	NA ☐
Response when temperature is outside of range:	Samples were collected the same day and chilled.		
Preservative added to bottles:			
Sample Temp. taken and recorded upon receipt?	Yes ☑	No ☐	To 19.2 °C
Water - Were bubbles absent in VOC vials?	Yes ☐	No ☐	No Vials ☑
Water - Was there Chlorine Present?	Yes ☐	No ☐	NA ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	NA ☑
Are Samples considered acceptable?	Yes ☑	No ☐	
Custody Seals present?	Yes ☐	No ☑	
Traffic Report or Packing Lists present?	Yes ☐	No ☑	
Airbill or Sticker?	Air Bill ☐	Sticker ☐	Not Present ☑
Airbill No:			
Sample Tags Present?	Yes ☐	No ☑	
Sample Tags Listed on COC?	Yes ☐	No ☑	
Tag Numbers:			
Sample Condition?	Intact ☑	Broken ☐	Leaking ☐

Case Number: SDG: SAS:

Adjusted? _____ Checked by

Any No and/or NA (not applicable) response must be detailed in the comments section be

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Sample Receipt Checklist

Client Contacted? ☐ Yes ☑ No ☐ NA Person Contacted: Comments:

Contact Mode: ☐ Phone: ☐ Fax: ☐ Email: ☐ In Person:

Client Instructions:

Date Contacted: Contacted By:

Regarding:

CorrectiveAction:

Specialty Analytical
9011 SE Jannsen Rd
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336

Chain of Custody Record

Date: 4/21/21 | Page: of: | Laboratory Project No (internal): 2104172
Project Name: 12th Dewitt | Temperature on Receipt: 19.2 °C
Client: Karl VanZandt | Project No: 12th Dewitt PO No: 12th Dewitt | Cooling: On ice Shipped Via: Client
Address: 1523 Georgia Ave SE | Collected by: Karl VanZandt | Custody Seal: Y / N Intact / Broken Cooler / Bottle
City, State, Zip: Salem, OR 97302 | State Collected: OR WA OTHER | MDL TIER IV EDD
Telephone: 5033024078 | Report To (PM): Karl VanZandt@gmail.com | Sample Disposal: ☐ Return to client ☐ Disposal by lab (after 60 days)
AP Email: KarlVanZandt@gmail.com | PM Email: KarlVanZandt@gmail.com

	Sample Name	Sample Date	Sample Time	Sample Matrix*	# of Containers	Requested Tests: DX	GX	TCLP-RCRA 8	[illegible]	RBDM VOC	PCB's	Comments
1	TK8-58	4/21/21	1200	Soil	1	X	X	X	X	X	X	
2												
3												
4												
5												
6												
7												
8												
9												
10												

*Matrix: A=Air, AQ=Aqueous, L=Liquid, O=Oil, P=Product, S=Soil, SD=Sediment, SL=Solid, W=Water, DW=Drinking Water, GW=Ground Water, SW=Storm Water, WW=Waste Water, M=Miscellaneous

Turn-around Time: Standard (5-7 Business): _____ 3 Day: X 2 Day: _____ Next Day: _____ Same Day: _____
Expedited turn-around requests should be coordinated in advance

Relinquished	Date/Time	Received	Date/Time
x Karl VanZandt	1530 4/21/21	x	4/21/21 1530 p
x		x	
x		x	

Specialty Analytical
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TEL: 503-607-1331 FAX: 503-607-1336
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Definition Only

WO#: **2104172**
Date: **4/28/2021**

Definitions:

KEY TO FLAGS

A: This sample contains a Gasoline Range Organic not identified as a specific hydrocarbon product. The result was qualified against gasoline calibration standards.

A1: This sample contains a Diesel Range Organic not identified as a specific hydrocarbon product. The result was qualified against diesel calibration standards.

A2: This sample contains a Lube Oil Range Organic not identified as a specific hydrocarbon product. The result was qualified against lube oil calibration standards.

A3: The results was determined to be Non-Detect based on hydrocarbon pattern recognition. The product was carry-over from another hydrocarbon type.

A4: The product appears to be aged or degraded.

B: The blank exhibited a positive result greater than the reporting limit for this compound.

CN: See Case Narrative.

E: Result exceeds the calibration range for this compound. The result should be considered an estimate.

F: The positive result for this hydrocarbon is due to single component contamination. The product does not match any hydrocarbon in the fuels library.

FS: Follow-up testing is suggested.

G: Result may be biased high due to biogenic interferences. Clean up is recommended.

H: Sample was analyzed outside recommended holding time.

HT: □At client's request, samples was analyzed outside of recommended holding time.

HP: Sample was analyzed outside recommended holding time due to VOA having pH >2.

J: The results for this analyte is between the MDL and the PQL and should be considered an

Definitions:

estimated concentration.

K: Diesel result is biased high due to amount of Oil contained in the sample.

L: Diesel result is biased high due to amount of Gasoline contained in the sample.

M: Oil result is biased high due to amount of Diesel contained in the sample.

N: Gasoline result is biased high due to amount of Diesel contained in the sample.

MC: Sample concentration is greater than 4x the spiked value, the spiked value is considered insignificant.

MI: Result is outside control limits due to matrix interference.

NH: Sample matrix is non-homogeneous

MSA: Value determined by Method of Standard Addition.

O: Laboratory Control Standard (LCS) exceeded laboratory control limits but meets CCV criteria. Data meets EPA requirements.

Q: Detection levels elevated due to sample matrix.

R: RPD control limits were exceeded

RF: Duplicate failed due to result being at or near the method-reporting limit.

RP: Matrix spike values exceed established QC limits; post digestion spike is in control.

S: Recovery is outside control limits.

SC: CCV or LCS exceeded high recovery control limits, but associated samples are non-detect. Data meets EPA requirements.

SL: LCS exceeded recovery control limits, but associated MS/MSD passing. Data meets EPA requirements.

12

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

Monday, May 24, 2021

Kyle Sattler
GeoDesign, Inc.
9450 SW Commerce Circle
Wilsonville, OR 97070

RE: A1E0409 - Modera Morrison - Millcreek-19-04

Thank you for using Apex Laboratories. We greatly appreciate your business and strive to provide the highest quality services to the environmental industry.

Enclosed are the results of analyses for work order A1E0409, which was received by the laboratory on 5/11/2021 at 2:45:00PM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: pnerenberg@apex-labs.com, or by phone at 503-718-2323.

Please note: All samples will be disposed of within 30 days of sample receipt, unless prior arrangements have been made.

Cooler Receipt Information

(See Cooler Receipt Form for details)

Cooler#1 1.9 degC

APEX LABORATORIES

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

GeoDesign, Inc.	Project: Modera Morrison	
9450 SW Commerce Circle	Project Number: Millcreek-19-04	Report ID:
Wilsonville, OR 97070	Project Manager: Kyle Sattler	A1E0409 - 05 24 21 1153

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TK8-SWE(8)	A1E0409-01	Soil	05/11/21 11:55	05/11/21 14:45
TK8-SWN(7)	A1E0409-02	Soil	05/11/21 12:00	05/11/21 14:45
TK8-SWS(8)	A1E0409-03	Soil	05/11/21 12:10	05/11/21 14:45
TK8-SWW-1(8)	A1E0409-04	Soil	05/11/21 12:20	05/11/21 14:45
TK8-SWW-2(8)	A1E0409-05	Soil	05/11/21 12:40	05/11/21 14:45
TK8-SWW-3(10)	A1E0409-06	Soil	05/11/21 13:00	05/11/21 14:45
TK8-BN(9.5)	A1E0409-07	Soil	05/11/21 12:25	05/11/21 14:45
TK8-BS(11.5)	A1E0409-08	Soil	05/11/21 12:30	05/11/21 14:45
TK8-BS(14)	A1E0409-09	Soil	05/11/21 13:30	05/11/21 14:45
TK4-S7	A1E0409-10	Soil	05/11/21 13:45	05/11/21 14:45

DRAFT REPORT

The results provided in this report are PRELIMINARY and are subject to change based on subsequent analysis, QC validation or final data review. Please use these results with the understanding that they may have not been finalized by the laboratory.

APEX LABORATORIES

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

GeoDesign, Inc.	Project: Modera Morrison	
9450 SW Commerce Circle	Project Number: Millcreek-19-04	Report ID:
Wilsonville, OR 97070	Project Manager: Kyle Sattler	A1E0409 - 05 24 21 1153

ANALYTICAL SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
TK8-SWE(8) (A1E0409-01)				**Matrix: Soil**		**Batch: 1050555**		
Gasoline Range Organics	ND	---	6.69	mg/kg dry	50	05/17/21 12:58	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 96 %*	*Limits: 50-150 %*		*1*	*05/17/21 12:58*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)		*123 %*	*50-150 %*		*1*	*05/17/21 12:58*	*NWTPH-Gx (MS)*	
TK8-SWN(7) (A1E0409-02)				**Matrix: Soil**		**Batch: 1050555**		
Gasoline Range Organics	**28.8**	---	8.73	mg/kg dry	50	05/17/21 13:52	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 110 %*	*Limits: 50-150 %*		*1*	*05/17/21 13:52*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)		*123 %*	*50-150 %*		*1*	*05/17/21 13:52*	*NWTPH-Gx (MS)*	
TK8-SWS(8) (A1E0409-03RE1)				**Matrix: Soil**		**Batch: 1050611**		
Gasoline Range Organics	**25100**	---	1590	mg/kg dry	10000	05/18/21 18:40	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 114 %*	*Limits: 50-150 %*		*1*	*05/18/21 18:40*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)		*98 %*	*50-150 %*		*1*	*05/18/21 18:40*	*NWTPH-Gx (MS)*	
TK8-SWW-1(8) (A1E0409-04RE1)				**Matrix: Soil**		**Batch: 1050611**		
Gasoline Range Organics	**7500**	---	147	mg/kg dry	1000	05/18/21 19:34	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 155 %*	*Limits: 50-150 %*		*1*	*05/18/21 19:34*	*NWTPH-Gx (MS)*	*S-02*
1,4-Difluorobenzene (Sur)		*101 %*	*50-150 %*		*1*	*05/18/21 19:34*	*NWTPH-Gx (MS)*	
TK8-SWW-2(8) (A1E0409-05RE1)				**Matrix: Soil**		**Batch: 1050611**		
Gasoline Range Organics	**39500**	---	1540	mg/kg dry	10000	05/18/21 19:07	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 114 %*	*Limits: 50-150 %*		*1*	*05/18/21 19:07*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)		*93 %*	*50-150 %*		*1*	*05/18/21 19:07*	*NWTPH-Gx (MS)*	
TK8-SWW-3(10) (A1E0409-06)				**Matrix: Soil**		**Batch: 1050555**		
Gasoline Range Organics	ND	---	7.19	mg/kg dry	50	05/17/21 14:19	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 97 %*	*Limits: 50-150 %*		*1*	*05/17/21 14:19*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)		*119 %*	*50-150 %*		*1*	*05/17/21 14:19*	*NWTPH-Gx (MS)*	
TK8-BN(9.5) (A1E0409-07)				**Matrix: Soil**		**Batch: 1050555**		
Gasoline Range Organics	ND	---	7.01	mg/kg dry	50	05/17/21 14:46	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 101 %*	*Limits: 50-150 %*		*1*	*05/17/21 14:46*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)		*121 %*	*50-150 %*		*1*	*05/17/21 14:46*	*NWTPH-Gx (MS)*	
TK8-BS(11.5) (A1E0409-08)				**Matrix: Soil**		**Batch: 1050555**		

DRAFT REPORT

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APEX LABORATORIES

Apex Laboratories, LLC
6700 S.W. Sandburg Street
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ORELAP ID: OR100062

ANALYTICAL REPORT

GeoDesign, Inc.	Project: Modera Morrison	
9450 SW Commerce Circle	Project Number: Millcreek-19-04	Report ID:
Wilsonville, OR 97070	Project Manager: Kyle Sattler	A1E0409 - 05 24 21 1153

ANALYTICAL SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
TK8-BS(11.5) (A1E0409-08)				**Matrix: Soil**		**Batch: 1050555**		
Gasoline Range Organics	**231**	---	6.48	mg/kg dry	50	05/17/21 15:13	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 108 %*	*Limits: 50-150 %*		*1*	*05/17/21 15:13*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)		*119 %*	*50-150 %*		*1*	*05/17/21 15:13*	*NWTPH-Gx (MS)*	
TK8-BS(14) (A1E0409-09)				**Matrix: Soil**		**Batch: 1050555**		
Gasoline Range Organics	ND	---	6.53	mg/kg dry	50	05/17/21 15:40	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 95 %*	*Limits: 50-150 %*		*1*	*05/17/21 15:40*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)		*120 %*	*50-150 %*		*1*	*05/17/21 15:40*	*NWTPH-Gx (MS)*	

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ANALYTICAL REPORT

GeoDesign, Inc. 9450 SW Commerce Circle Wilsonville, OR 97070	Project: Modera Morrison Project Number: Millcreek-19-04 Project Manager: Kyle Sattler	Report ID: A1E0409 - 05 24 21 1153

ANALYTICAL SAMPLE RESULTS

BTEX Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
TK4-S7 (A1E0409-10)				**Matrix: Soil**		**Batch: 1050555**		V-15
Benzene	**0.0127**	---	0.00980	mg/kg dry	50	05/17/21 18:53	5035A/8260D	
Toluene	ND	---	0.0490	mg/kg dry	50	05/17/21 18:53	5035A/8260D	
Ethylbenzene	ND	---	0.0245	mg/kg dry	50	05/17/21 18:53	5035A/8260D	
Xylenes, total	ND	---	0.0735	mg/kg dry	50	05/17/21 18:53	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*110 %*	*Limits: 80-120 %*	*1*	*05/17/21 18:53*	*5035A/8260D*	
Toluene-d8 (Surr)			*106 %*	*80-120 %*	*1*	*05/17/21 18:53*	*5035A/8260D*	
4-Bromofluorobenzene (Surr)			*95 %*	*79-120 %*	*1*	*05/17/21 18:53*	*5035A/8260D*	

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DRAFT REPORT, DATA SUBJECT TO CHANGE

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ANALYTICAL REPORT

GeoDesign, Inc. 9450 SW Commerce Circle Wilsonville, OR 97070	Project: **Modera Morrison** Project Number: **Millcreek-19-04** Project Manager: **Kyle Sattler**	**Report ID:** **A1E0409 - 05 24 21 1153**

ANALYTICAL SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E SIM

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
TK4-S7 (A1E0409-10)				**Matrix: Soil**		**Batch: 1050489**		
Acenaphthene	ND	---	0.0104	mg/kg dry	1	05/14/21 12:25	EPA 8270E SIM	
Acenaphthylene	ND	---	0.0104	mg/kg dry	1	05/14/21 12:25	EPA 8270E SIM	
Anthracene	ND	---	0.0104	mg/kg dry	1	05/14/21 12:25	EPA 8270E SIM	
Benz(a)anthracene	ND	---	0.0104	mg/kg dry	1	05/14/21 12:25	EPA 8270E SIM	
Benzo(a)pyrene	ND	---	0.0104	mg/kg dry	1	05/14/21 12:25	EPA 8270E SIM	
Benzo(b)fluoranthene	ND	---	0.0104	mg/kg dry	1	05/14/21 12:25	EPA 8270E SIM	
Benzo(k)fluoranthene	ND	---	0.0104	mg/kg dry	1	05/14/21 12:25	EPA 8270E SIM	
Benzo(g,h,i)perylene	ND	---	0.0104	mg/kg dry	1	05/14/21 12:25	EPA 8270E SIM	
Chrysene	ND	---	0.0104	mg/kg dry	1	05/14/21 12:25	EPA 8270E SIM	
Dibenz(a,h)anthracene	ND	---	0.0104	mg/kg dry	1	05/14/21 12:25	EPA 8270E SIM	
Fluoranthene	ND	---	0.0104	mg/kg dry	1	05/14/21 12:25	EPA 8270E SIM	
Fluorene	ND	---	0.0104	mg/kg dry	1	05/14/21 12:25	EPA 8270E SIM	
Indeno(1,2,3-cd)pyrene	ND	---	0.0104	mg/kg dry	1	05/14/21 12:25	EPA 8270E SIM	
1-Methylnaphthalene	ND	---	0.0104	mg/kg dry	1	05/14/21 12:25	EPA 8270E SIM	
2-Methylnaphthalene	ND	---	0.0104	mg/kg dry	1	05/14/21 12:25	EPA 8270E SIM	
Naphthalene	ND	---	0.0104	mg/kg dry	1	05/14/21 12:25	EPA 8270E SIM	
Phenanthrene	ND	---	0.0104	mg/kg dry	1	05/14/21 12:25	EPA 8270E SIM	
Pyrene	ND	---	0.0104	mg/kg dry	1	05/14/21 12:25	EPA 8270E SIM	
Dibenzofuran	ND	---	0.0104	mg/kg dry	1	05/14/21 12:25	EPA 8270E SIM	
Surrogate: 2-Fluorobiphenyl (Surr)		*Recovery:*	*75 %*	*Limits: 44-120 %*	*1*	*05/14/21 12:25*	*EPA 8270E SIM*	
p-Terphenyl-d14 (Surr)			*77 %*	*54-127 %*	*1*	*05/14/21 12:25*	*EPA 8270E SIM*	

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ANALYTICAL REPORT

GeoDesign, Inc. 9450 SW Commerce Circle Wilsonville, OR 97070	Project: Modera Morrison Project Number: Millcreek-19-04 Project Manager: Kyle Sattler	Report ID: A1E0409 - 05 24 21 1153

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
TK8-SWE(8) (A1E0409-01)				**Matrix: Soil**				
Batch: 1050458								
Arsenic	**8.94**	---	1.26	mg/kg dry	10	05/13/21 16:08	EPA 6020B	
Barium	**180**	---	1.26	mg/kg dry	10	05/13/21 16:08	EPA 6020B	
Cadmium	ND	---	0.252	mg/kg dry	10	05/13/21 16:08	EPA 6020B	
Chromium	**19.2**	---	1.26	mg/kg dry	10	05/13/21 16:08	EPA 6020B	
Lead	**11.9**	---	0.252	mg/kg dry	10	05/13/21 16:08	EPA 6020B	
Mercury	ND	---	0.101	mg/kg dry	10	05/13/21 16:08	EPA 6020B	
Selenium	ND	---	1.26	mg/kg dry	10	05/13/21 16:08	EPA 6020B	
Silver	ND	---	0.252	mg/kg dry	10	05/13/21 16:08	EPA 6020B	
TK8-SWN(7) (A1E0409-02)				**Matrix: Soil**				
Batch: 1050458								
Arsenic	**4.82**	---	1.37	mg/kg dry	10	05/13/21 16:32	EPA 6020B	
Barium	**133**	---	1.37	mg/kg dry	10	05/13/21 16:32	EPA 6020B	
Cadmium	ND	---	0.274	mg/kg dry	10	05/13/21 16:32	EPA 6020B	
Chromium	**15.4**	---	1.37	mg/kg dry	10	05/13/21 16:32	EPA 6020B	
Lead	**8.29**	---	0.274	mg/kg dry	10	05/13/21 16:32	EPA 6020B	
Mercury	ND	---	0.110	mg/kg dry	10	05/13/21 16:32	EPA 6020B	
Selenium	ND	---	1.37	mg/kg dry	10	05/13/21 16:32	EPA 6020B	
Silver	ND	---	0.274	mg/kg dry	10	05/13/21 16:32	EPA 6020B	
TK8-SWS(8) (A1E0409-03)				**Matrix: Soil**				
Batch: 1050458								
Arsenic	**8.33**	---	1.31	mg/kg dry	10	05/13/21 16:36	EPA 6020B	
Barium	**169**	---	1.31	mg/kg dry	10	05/13/21 16:36	EPA 6020B	
Cadmium	ND	---	0.261	mg/kg dry	10	05/13/21 16:36	EPA 6020B	
Chromium	**19.2**	---	1.31	mg/kg dry	10	05/13/21 16:36	EPA 6020B	
Lead	**18.4**	---	0.261	mg/kg dry	10	05/13/21 16:36	EPA 6020B	
Mercury	ND	---	0.105	mg/kg dry	10	05/13/21 16:36	EPA 6020B	
Selenium	ND	---	1.31	mg/kg dry	10	05/13/21 16:36	EPA 6020B	
Silver	ND	---	0.261	mg/kg dry	10	05/13/21 16:36	EPA 6020B	
TK8-SWW-1(8) (A1E0409-04)				**Matrix: Soil**				
Batch: 1050458								

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: Modera Morrison	
9450 SW Commerce Circle	Project Number: Millcreek-19-04	Report ID:
Wilsonville, OR 97070	Project Manager: Kyle Sattler	A1E0409 - 05 24 21 1153

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
TK8-SWW-1(8) (A1E0409-04)				**Matrix: Soil**				
Arsenic	**5.61**	---	1.34	mg/kg dry	10	05/13/21 16:41	EPA 6020B	
Barium	**186**	---	1.34	mg/kg dry	10	05/13/21 16:41	EPA 6020B	
Cadmium	ND	---	0.268	mg/kg dry	10	05/13/21 16:41	EPA 6020B	
Chromium	**22.7**	---	1.34	mg/kg dry	10	05/13/21 16:41	EPA 6020B	
Lead	**21.7**	---	0.268	mg/kg dry	10	05/13/21 16:41	EPA 6020B	
Mercury	ND	---	0.107	mg/kg dry	10	05/13/21 16:41	EPA 6020B	
Selenium	ND	---	1.34	mg/kg dry	10	05/13/21 16:41	EPA 6020B	
Silver	ND	---	0.268	mg/kg dry	10	05/13/21 16:41	EPA 6020B	
TK8-SWW-2(8) (A1E0409-05)				**Matrix: Soil**				
Batch: 1050458								
Arsenic	**4.66**	---	1.25	mg/kg dry	10	05/13/21 16:46	EPA 6020B	
Barium	**133**	---	1.25	mg/kg dry	10	05/13/21 16:46	EPA 6020B	
Cadmium	**1.75**	---	0.249	mg/kg dry	10	05/13/21 16:46	EPA 6020B	
Chromium	**15.6**	---	1.25	mg/kg dry	10	05/13/21 16:46	EPA 6020B	
Lead	**62.5**	---	0.249	mg/kg dry	10	05/13/21 16:46	EPA 6020B	
Mercury	ND	---	0.0998	mg/kg dry	10	05/13/21 16:46	EPA 6020B	
Selenium	ND	---	1.25	mg/kg dry	10	05/13/21 16:46	EPA 6020B	
Silver	ND	---	0.249	mg/kg dry	10	05/13/21 16:46	EPA 6020B	
TK8-SWW-3(10) (A1E0409-06)				**Matrix: Soil**				
Batch: 1050458								
Arsenic	**5.78**	---	1.23	mg/kg dry	10	05/13/21 16:51	EPA 6020B	
Barium	**124**	---	1.23	mg/kg dry	10	05/13/21 16:51	EPA 6020B	
Cadmium	ND	---	0.246	mg/kg dry	10	05/13/21 16:51	EPA 6020B	
Chromium	**15.7**	---	1.23	mg/kg dry	10	05/13/21 16:51	EPA 6020B	
Lead	**8.94**	---	0.246	mg/kg dry	10	05/13/21 16:51	EPA 6020B	
Mercury	ND	---	0.0986	mg/kg dry	10	05/13/21 16:51	EPA 6020B	
Selenium	ND	---	1.23	mg/kg dry	10	05/13/21 16:51	EPA 6020B	
Silver	ND	---	0.246	mg/kg dry	10	05/13/21 16:51	EPA 6020B	
TK8-BN(9.5) (A1E0409-07)				**Matrix: Soil**				
Batch: 1050458								
Arsenic	**4.66**	---	1.19	mg/kg dry	10	05/13/21 16:55	EPA 6020B	

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ANALYTICAL REPORT

GeoDesign, Inc.
9450 SW Commerce Circle
Wilsonville, OR 97070

Project: Modera Morrison
Project Number: Millcreek-19-04
Project Manager: Kyle Sattler

Report ID:
A1E0409 - 05 24 21 1153

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
TK8-BN(9.5) (A1E0409-07)				**Matrix: Soil**				
Barium	**140**	---	1.19	mg/kg dry	10	05/13/21 16:55	EPA 6020B	
Cadmium	ND	---	0.238	mg/kg dry	10	05/13/21 16:55	EPA 6020B	
Chromium	**11.7**	---	1.19	mg/kg dry	10	05/13/21 16:55	EPA 6020B	
Lead	**6.30**	---	0.238	mg/kg dry	10	05/13/21 16:55	EPA 6020B	
Mercury	ND	---	0.0952	mg/kg dry	10	05/13/21 16:55	EPA 6020B	
Selenium	ND	---	1.19	mg/kg dry	10	05/13/21 16:55	EPA 6020B	
Silver	ND	---	0.238	mg/kg dry	10	05/13/21 16:55	EPA 6020B	
TK8-BS(11.5) (A1E0409-08)				**Matrix: Soil**				
Batch: 1050458								
Arsenic	**6.04**	---	1.35	mg/kg dry	10	05/13/21 17:00	EPA 6020B	
Barium	**128**	---	1.35	mg/kg dry	10	05/13/21 17:00	EPA 6020B	
Cadmium	ND	---	0.271	mg/kg dry	10	05/13/21 17:00	EPA 6020B	
Chromium	**19.4**	---	1.35	mg/kg dry	10	05/13/21 17:00	EPA 6020B	
Lead	**13.9**	---	0.271	mg/kg dry	10	05/13/21 17:00	EPA 6020B	
Mercury	ND	---	0.108	mg/kg dry	10	05/13/21 17:00	EPA 6020B	
Selenium	ND	---	1.35	mg/kg dry	10	05/13/21 17:00	EPA 6020B	
Silver	ND	---	0.271	mg/kg dry	10	05/13/21 17:00	EPA 6020B	
TK8-BS(14) (A1E0409-09)				**Matrix: Soil**				
Batch: 1050458								
Arsenic	**2.58**	---	1.19	mg/kg dry	10	05/13/21 17:05	EPA 6020B	
Barium	**118**	---	1.19	mg/kg dry	10	05/13/21 17:05	EPA 6020B	
Cadmium	ND	---	0.238	mg/kg dry	10	05/13/21 17:05	EPA 6020B	
Chromium	**8.75**	---	1.19	mg/kg dry	10	05/13/21 17:05	EPA 6020B	
Lead	**5.11**	---	0.238	mg/kg dry	10	05/13/21 17:05	EPA 6020B	
Mercury	ND	---	0.0951	mg/kg dry	10	05/13/21 17:05	EPA 6020B	
Selenium	ND	---	1.19	mg/kg dry	10	05/13/21 17:05	EPA 6020B	
Silver	ND	---	0.238	mg/kg dry	10	05/13/21 17:05	EPA 6020B	

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ANALYTICAL REPORT

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9450 SW Commerce Circle
Wilsonville, OR 97070

Project: Modera Morrison
Project Number: Millcreek-19-04
Project Manager: Kyle Sattler

Report ID:
A1E0409 - 05 24 21 1153

ANALYTICAL SAMPLE RESULTS

Percent Dry Weight

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
TK8-SWE(8) (A1E0409-01)				Matrix: Soil		Batch: 1050441		
% Solids	82.6	---	1.00	%	1	05/14/21 08:18	EPA 8000D	
TK8-SWN(7) (A1E0409-02)				Matrix: Soil		Batch: 1050441		
% Solids	78.3	---	1.00	%	1	05/14/21 08:18	EPA 8000D	
TK8-SWS(8) (A1E0409-03)				Matrix: Soil		Batch: 1050441		
% Solids	78.2	---	1.00	%	1	05/14/21 08:18	EPA 8000D	
TK8-SWW-1(8) (A1E0409-04)				Matrix: Soil		Batch: 1050441		
% Solids	74.1	---	1.00	%	1	05/14/21 08:18	EPA 8000D	
TK8-SWW-2(8) (A1E0409-05)				Matrix: Soil		Batch: 1050441		
% Solids	78.0	---	1.00	%	1	05/14/21 08:18	EPA 8000D	
TK8-SWW-3(10) (A1E0409-06)				Matrix: Soil		Batch: 1050441		
% Solids	85.8	---	1.00	%	1	05/14/21 08:18	EPA 8000D	
TK8-BN(9.5) (A1E0409-07)				Matrix: Soil		Batch: 1050441		
% Solids	90.1	---	1.00	%	1	05/14/21 08:18	EPA 8000D	
TK8-BS(11.5) (A1E0409-08)				Matrix: Soil		Batch: 1050441		
% Solids	77.2	---	1.00	%	1	05/14/21 08:18	EPA 8000D	
TK8-BS(14) (A1E0409-09)				Matrix: Soil		Batch: 1050441		
% Solids	91.6	---	1.00	%	1	05/14/21 08:18	EPA 8000D	
TK4-S7 (A1E0409-10)				Matrix: Soil		Batch: 1050441		
% Solids	95.9	---	1.00	%	1	05/14/21 08:18	EPA 8000D	

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ANALYTICAL REPORT

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9450 SW Commerce Circle
Wilsonville, OR 97070

Project: Modera Morrison
Project Number: Millcreek-19-04
Project Manager: Kyle Sattler

Report ID:
A1E0409 - 05 24 21 1153

QUALITY CONTROL (QC) SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050555 - EPA 5035A							Soil					
Blank (1050555-BLK1)			Prepared: 05/17/21 09:00 Analyzed: 05/17/21 12:31									
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	0.0667	mg/kg wet	1	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 96 %*	*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*120 %*	*50-150 %*			*"*					
LCS (1050555-BS2)			Prepared: 05/17/21 09:00 Analyzed: 05/17/21 12:04									
NWTPH-Gx (MS)												
Gasoline Range Organics	28.9	---	5.00	mg/kg wet	50	25.0	---	116	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 91 %*	*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*113 %*	*50-150 %*			*"*					
Duplicate (1050555-DUP1)			Prepared: 05/11/21 11:55 Analyzed: 05/17/21 13:25									
QC Source Sample: TK8-SWE(8) (A1E0409-01)												
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	14.3	mg/kg dry	50	---	ND	---	---	---	30%	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 97 %*	*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*123 %*	*50-150 %*			*"*					
Batch 1050611 - EPA 5035A							Soil					
Blank (1050611-BLK1)			Prepared: 05/18/21 09:00 Analyzed: 05/18/21 11:35									
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	3.33	mg/kg wet	50	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 95 %*	*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*96 %*	*50-150 %*			*"*					
LCS (1050611-BS2)			Prepared: 05/18/21 09:00 Analyzed: 05/18/21 11:08									
NWTPH-Gx (MS)												
Gasoline Range Organics	22.9	---	5.00	mg/kg wet	50	25.0	---	91	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 97 %*	*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*98 %*	*50-150 %*			*"*					
Duplicate (1050611-DUP1)			Prepared: 05/10/21 11:30 Analyzed: 05/18/21 21:22									

DRAFT REPORT

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APEX LABORATORIES

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0409 - 05 24 21 1153**

QUALITY CONTROL (QC) SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050611 - EPA 5035A							**Soil**					
Duplicate (1050611-DUP1)			Prepared: 05/10/21 11:30 Analyzed: 05/18/21 21:22									
QC Source Sample: Non-SDG (A1E0576-11)												
Gasoline Range Organics	ND	---	31.8	mg/kg dry	50	---	ND	---	---	---	30%	R-06
Surr: 4-Bromofluorobenzene (Sur)		*Recovery: 107 %*	*Limits: 50-150 %*				*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*96 %*	*50-150 %*			"					
Duplicate (1050611-DUP2)			Prepared: 05/04/21 10:00 Analyzed: 05/18/21 22:15									**TEMP**
QC Source Sample: Non-SDG (A1E0225-20)												
Gasoline Range Organics	ND	---	15.0	mg/kg dry	50	---	ND	---	---	---	30%	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery: 108 %*	*Limits: 50-150 %*				*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*95 %*	*50-150 %*			"					

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0409 - 05 24 21 1153**

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050555 - EPA 5035A							**Soil**					
Blank (1050555-BLK1)			Prepared: 05/17/21 09:00 Analyzed: 05/17/21 12:31									
5035A/8260D												
Benzene	ND	---	0.000133	mg/kg wet	1	---	---	---	---	---	---	
Toluene	ND	---	0.000667	mg/kg wet	1	---	---	---	---	---	---	
Ethylbenzene	ND	---	0.000333	mg/kg wet	1	---	---	---	---	---	---	
Xylenes, total	ND	---	0.00100	mg/kg wet	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 107 %*	*Limits: 80-120 %*			*Dilution: 1x*					
Toluene-d8 (Surr)			*108 %*	*80-120 %*			*"*					
4-Bromofluorobenzene (Surr)			*92 %*	*79-120 %*			*"*					
LCS (1050555-BS1)			Prepared: 05/17/21 09:00 Analyzed: 05/17/21 11:37									
5035A/8260D												
Benzene	1.18	---	0.0100	mg/kg wet	50	1.00	---	118	80-120%	---	---	
Toluene	1.12	---	0.0500	mg/kg wet	50	1.00	---	112	80-120%	---	---	
Ethylbenzene	1.09	---	0.0250	mg/kg wet	50	1.00	---	109	80-120%	---	---	
Xylenes, total	3.24	---	0.0750	mg/kg wet	50	3.00	---	108	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 102 %*	*Limits: 80-120 %*			*Dilution: 1x*					
Toluene-d8 (Surr)			*106 %*	*80-120 %*			*"*					
4-Bromofluorobenzene (Surr)			*87 %*	*79-120 %*			*"*					
Duplicate (1050555-DUP1)			Prepared: 05/11/21 11:55 Analyzed: 05/17/21 13:25									
QC Source Sample: TK8-SWE(8) (A1E0409-01)												
5035A/8260D												
Benzene	ND	---	0.0287	mg/kg dry	50	---	ND	---	---	---	30%	
Toluene	ND	---	0.143	mg/kg dry	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	---	0.0717	mg/kg dry	50	---	ND	---	---	---	30%	
Xylenes, total	ND	---	0.215	mg/kg dry	50	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 111 %*	*Limits: 80-120 %*			*Dilution: 1x*					
Toluene-d8 (Surr)			*108 %*	*80-120 %*			*"*					
4-Bromofluorobenzene (Surr)			*93 %*	*79-120 %*			*"*					
Matrix Spike (1050555-MS1)			Prepared: 05/11/21 16:25 Analyzed: 05/17/21 19:20									V-15
QC Source Sample: TK4-S7 (A1E0409-10)												
5035A/8260D												

DRAFT REPORT

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc. 9450 SW Commerce Circle Wilsonville, OR 97070	Project: **Modera Morrison** Project Number: **Millcreek-19-04** Project Manager: **Kyle Sattler**	**Report ID:** **A1E0409 - 05 24 21 1153**

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050555 - EPA 5035A							**Soil**					
Matrix Spike (1050555-MS1)			Prepared: 05/11/21 16:25 Analyzed: 05/17/21 19:20									V-15
QC Source Sample: TK4-S7 (A1E0409-10)												
Benzene	1.11	---	0.00980	mg/kg dry	50	1.15	0.0127	96	77-121%	---	---	
Toluene	0.981	---	0.0490	mg/kg dry	50	1.15	0.0456	82	77-121%	---	---	
Ethylbenzene	0.905	---	0.0245	mg/kg dry	50	1.15	0.0162	78	76-122%	---	---	
Xylenes, total	2.75	---	0.0735	mg/kg dry	50	3.44	0.0700	78	78-124%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 107 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*104 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*90 %*		*79-120 %*			*"*				

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DRAFT REPORT, DATA SUBJECT TO CHANGE

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ORELAP ID: OR100062

ANALYTICAL REPORT

GeoDesign, Inc. 9450 SW Commerce Circle Wilsonville, OR 97070	Project: Modera Morrison Project Number: Millcreek-19-04 Project Manager: Kyle Sattler	Report ID: A1E0409 - 05 24 21 1153

QUALITY CONTROL (QC) SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E SIM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050489 - EPA 3546							Soil					
Blank (1050489-BLK1)			Prepared: 05/14/21 08:28 Analyzed: 05/14/21 11:33									
EPA 8270E SIM												
Acenaphthene	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Acenaphthylene	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Anthracene	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Benz(a)anthracene	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Benzo(a)pyrene	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Benzo(b)fluoranthene	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Benzo(k)fluoranthene	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Benzo(g,h,i)perylene	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Chrysene	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Dibenz(a,h)anthracene	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Fluoranthene	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Fluorene	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Indeno(1,2,3-cd)pyrene	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
1-Methylnaphthalene	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
2-Methylnaphthalene	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Naphthalene	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Phenanthrene	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Pyrene	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Dibenzofuran	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Surr: 2-Fluorobiphenyl (Surr)			*Recovery: 92 %*	*Limits: 44-120 %*				*Dilution: 1x*				
p-Terphenyl-d14 (Surr)			*84 %*	*54-127 %*				*"*				
LCS (1050489-BS1)			Prepared: 05/14/21 08:28 Analyzed: 05/14/21 11:59									
EPA 8270E SIM												
Acenaphthene	0.737	---	0.0100	mg/kg wet	1	0.800	---	92	40-123%	---	---	
Acenaphthylene	0.780	---	0.0100	mg/kg wet	1	0.800	---	98	32-132%	---	---	
Anthracene	0.710	---	0.0100	mg/kg wet	1	0.800	---	89	47-123%	---	---	
Benz(a)anthracene	0.719	---	0.0100	mg/kg wet	1	0.800	---	90	49-126%	---	---	
Benzo(a)pyrene	0.710	---	0.0100	mg/kg wet	1	0.800	---	89	45-129%	---	---	
Benzo(b)fluoranthene	0.658	---	0.0100	mg/kg wet	1	0.800	---	82	45-132%	---	---	
Benzo(k)fluoranthene	0.626	---	0.0100	mg/kg wet	1	0.800	---	78	47-132%	---	---	
Benzo(g,h,i)perylene	0.618	---	0.0100	mg/kg wet	1	0.800	---	77	43-134%	---	---	
Chrysene	0.712	---	0.0100	mg/kg wet	1	0.800	---	89	50-124%	---	---	

DRAFT REPORT

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503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

GeoDesign, Inc.
9450 SW Commerce Circle
Wilsonville, OR 97070

Project: Modera Morrison
Project Number: Millcreek-19-04
Project Manager: Kyle Sattler

Report ID:
A1E0409 - 05 24 21 1153

QUALITY CONTROL (QC) SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E SIM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050489 - EPA 3546							Soil					
LCS (1050489-BS1)			Prepared: 05/14/21 08:28		Analyzed: 05/14/21 11:59							
Dibenz(a,h)anthracene	0.724	---	0.0100	mg/kg wet	1	0.800	---	91	45-134%	---	---	
Fluoranthene	0.698	---	0.0100	mg/kg wet	1	0.800	---	87	50-127%	---	---	
Fluorene	0.701	---	0.0100	mg/kg wet	1	0.800	---	88	43-125%	---	---	
Indeno(1,2,3-cd)pyrene	0.678	---	0.0100	mg/kg wet	1	0.800	---	85	45-133%	---	---	
1-Methylnaphthalene	0.697	---	0.0100	mg/kg wet	1	0.800	---	87	40-120%	---	---	
2-Methylnaphthalene	0.701	---	0.0100	mg/kg wet	1	0.800	---	88	38-122%	---	---	
Naphthalene	0.656	---	0.0100	mg/kg wet	1	0.800	---	82	35-123%	---	---	
Phenanthrene	0.684	---	0.0100	mg/kg wet	1	0.800	---	85	50-121%	---	---	
Pyrene	0.697	---	0.0100	mg/kg wet	1	0.800	---	87	47-127%	---	---	
Dibenzofuran	0.705	---	0.0100	mg/kg wet	1	0.800	---	88	44-120%	---	---	
Surr: 2-Fluorobiphenyl (Surr)			*Recovery: 96 %*		*Limits: 44-120 %*			*Dilution: 1x*				
p-Terphenyl-d14 (Surr)			*85 %*		*54-127 %*			*"*				
Duplicate (1050489-DUP1)			Prepared: 05/14/21 08:28		Analyzed: 05/14/21 12:50							
QC Source Sample: TK4-S7 (A1E0409-10)												
EPA 8270E SIM												
Acenaphthene	ND	---	0.0102	mg/kg dry	1	---	ND	---	---	---	30%	
Acenaphthylene	ND	---	0.0102	mg/kg dry	1	---	ND	---	---	---	30%	
Anthracene	ND	---	0.0102	mg/kg dry	1	---	ND	---	---	---	30%	
Benz(a)anthracene	ND	---	0.0102	mg/kg dry	1	---	ND	---	---	---	30%	
Benzo(a)pyrene	ND	---	0.0102	mg/kg dry	1	---	ND	---	---	---	30%	
Benzo(b)fluoranthene	ND	---	0.0102	mg/kg dry	1	---	ND	---	---	---	30%	
Benzo(k)fluoranthene	ND	---	0.0102	mg/kg dry	1	---	ND	---	---	---	30%	
Benzo(g,h,i)perylene	ND	---	0.0102	mg/kg dry	1	---	ND	---	---	---	30%	
Chrysene	ND	---	0.0102	mg/kg dry	1	---	ND	---	---	---	30%	
Dibenz(a,h)anthracene	ND	---	0.0102	mg/kg dry	1	---	ND	---	---	---	30%	
Fluoranthene	ND	---	0.0102	mg/kg dry	1	---	ND	---	---	---	30%	
Fluorene	ND	---	0.0102	mg/kg dry	1	---	ND	---	---	---	30%	
Indeno(1,2,3-cd)pyrene	ND	---	0.0102	mg/kg dry	1	---	ND	---	---	---	30%	
1-Methylnaphthalene	ND	---	0.0102	mg/kg dry	1	---	ND	---	---	---	30%	
2-Methylnaphthalene	ND	---	0.0102	mg/kg dry	1	---	ND	---	---	---	30%	
Naphthalene	ND	---	0.0102	mg/kg dry	1	---	ND	---	---	---	30%	
Phenanthrene	ND	---	0.0102	mg/kg dry	1	---	ND	---	---	---	30%	
Pyrene	ND	---	0.0102	mg/kg dry	1	---	ND	---	---	---	30%	

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ANALYTICAL REPORT

GeoDesign, Inc. 9450 SW Commerce Circle Wilsonville, OR 97070	Project: **Modera Morrison** Project Number: **Millcreek-19-04** Project Manager: **Kyle Sattler**	**Report ID:** A1E0409 - 05 24 21 1153

QUALITY CONTROL (QC) SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E SIM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050489 - EPA 3546							Soil					
Duplicate (1050489-DUP1)			Prepared: 05/14/21 08:28 Analyzed: 05/14/21 12:50									
QC Source Sample: TK4-S7 (A1E0409-10)												
Dibenzofuran	ND	---	0.0102	mg/kg dry	1	---	ND	---	---	---	30%	
Surr: 2-Fluorobiphenyl (Surr)			*Recovery: 79 %*	*Limits: 44-120 %*			*Dilution: 1x*					
p-Terphenyl-d14 (Surr)			*73 %*	*54-127 %*			*"*					
Matrix Spike (1050489-MS1)			Prepared: 05/14/21 08:28 Analyzed: 05/14/21 13:16									
QC Source Sample: TK4-S7 (A1E0409-10)												
EPA 8270E SIM												
Acenaphthene	0.678	---	0.0103	mg/kg dry	1	0.827	ND	82	40-123%	---	---	
Acenaphthylene	0.722	---	0.0103	mg/kg dry	1	0.827	ND	87	32-132%	---	---	
Anthracene	0.646	---	0.0103	mg/kg dry	1	0.827	ND	78	47-123%	---	---	
Benz(a)anthracene	0.648	---	0.0103	mg/kg dry	1	0.827	ND	78	49-126%	---	---	
Benzo(a)pyrene	0.601	---	0.0103	mg/kg dry	1	0.827	ND	73	45-129%	---	---	
Benzo(b)fluoranthene	0.585	---	0.0103	mg/kg dry	1	0.827	ND	71	45-132%	---	---	
Benzo(k)fluoranthene	0.580	---	0.0103	mg/kg dry	1	0.827	ND	70	47-132%	---	---	
Benzo(g,h,i)perylene	0.546	---	0.0103	mg/kg dry	1	0.827	ND	66	43-134%	---	---	
Chrysene	0.664	---	0.0103	mg/kg dry	1	0.827	ND	80	50-124%	---	---	
Dibenz(a,h)anthracene	0.655	---	0.0103	mg/kg dry	1	0.827	ND	79	45-134%	---	---	
Fluoranthene	0.625	---	0.0103	mg/kg dry	1	0.827	ND	76	50-127%	---	---	
Fluorene	0.644	---	0.0103	mg/kg dry	1	0.827	ND	78	43-125%	---	---	
Indeno(1,2,3-cd)pyrene	0.606	---	0.0103	mg/kg dry	1	0.827	ND	73	45-133%	---	---	
1-Methylnaphthalene	0.641	---	0.0103	mg/kg dry	1	0.827	ND	77	40-120%	---	---	
2-Methylnaphthalene	0.647	---	0.0103	mg/kg dry	1	0.827	ND	78	38-122%	---	---	
Naphthalene	0.616	---	0.0103	mg/kg dry	1	0.827	ND	74	35-123%	---	---	
Phenanthrene	0.623	---	0.0103	mg/kg dry	1	0.827	ND	75	50-121%	---	---	
Pyrene	0.617	---	0.0103	mg/kg dry	1	0.827	ND	75	47-127%	---	---	
Dibenzofuran	0.648	---	0.0103	mg/kg dry	1	0.827	ND	78	44-120%	---	---	
Surr: 2-Fluorobiphenyl (Surr)			*Recovery: 86 %*	*Limits: 44-120 %*			*Dilution: 1x*					
p-Terphenyl-d14 (Surr)			*74 %*	*54-127 %*			*"*					

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ANALYTICAL REPORT

GeoDesign, Inc.
9450 SW Commerce Circle
Wilsonville, OR 97070

Project: Modera Morrison
Project Number: Millcreek-19-04
Project Manager: Kyle Sattler

Report ID:
A1E0409 - 05 24 21 1153

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050458 - EPA 3051A							Soil					
Blank (1050458-BLK1)			Prepared: 05/13/21 10:53 Analyzed: 05/13/21 15:44									
EPA 6020B												
Arsenic	ND	---	0.962	mg/kg wet	10	---	---	---	---	---	---	
Barium	ND	---	0.962	mg/kg wet	10	---	---	---	---	---	---	
Cadmium	ND	---	0.192	mg/kg wet	10	---	---	---	---	---	---	
Chromium	ND	---	0.962	mg/kg wet	10	---	---	---	---	---	---	
Lead	ND	---	0.192	mg/kg wet	10	---	---	---	---	---	---	
Mercury	ND	---	0.0769	mg/kg wet	10	---	---	---	---	---	---	
Selenium	ND	---	0.962	mg/kg wet	10	---	---	---	---	---	---	
Silver	ND	---	0.192	mg/kg wet	10	---	---	---	---	---	---	
LCS (1050458-BS1)			Prepared: 05/13/21 10:53 Analyzed: 05/13/21 15:49									
EPA 6020B												
Arsenic	47.4	---	1.00	mg/kg wet	10	50.0	---	95	80-120%	---	---	
Barium	48.8	---	1.00	mg/kg wet	10	50.0	---	98	80-120%	---	---	
Cadmium	48.2	---	0.200	mg/kg wet	10	50.0	---	96	80-120%	---	---	
Chromium	46.7	---	1.00	mg/kg wet	10	50.0	---	93	80-120%	---	---	
Lead	46.5	---	0.200	mg/kg wet	10	50.0	---	93	80-120%	---	---	
Mercury	0.884	---	0.0800	mg/kg wet	10	1.00	---	88	80-120%	---	---	
Selenium	21.4	---	1.00	mg/kg wet	10	25.0	---	86	80-120%	---	---	
Silver	24.5	---	0.200	mg/kg wet	10	25.0	---	98	80-120%	---	---	
Duplicate (1050458-DUP1)			Prepared: 05/13/21 10:53 Analyzed: 05/13/21 16:22									
QC Source Sample: TK8-SWE(8) (A1E0409-01)												
EPA 6020B												
Arsenic	8.94	---	1.28	mg/kg dry	10	---	8.94	---	---	0.07	20%	
Barium	176	---	1.28	mg/kg dry	10	---	180	---	---	2	20%	
Cadmium	ND	---	0.257	mg/kg dry	10	---	ND	---	---	---	20%	
Chromium	20.3	---	1.28	mg/kg dry	10	---	19.2	---	---	5	20%	
Lead	11.2	---	0.257	mg/kg dry	10	---	11.9	---	---	6	20%	
Mercury	ND	---	0.103	mg/kg dry	10	---	ND	---	---	---	20%	
Selenium	ND	---	1.28	mg/kg dry	10	---	ND	---	---	---	20%	
Silver	ND	---	0.257	mg/kg dry	10	---	ND	---	---	---	20%	
Matrix Spike (1050458-MS1)			Prepared: 05/13/21 10:53 Analyzed: 05/13/21 16:27									

DRAFT REPORT

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APEX LABORATORIES

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

GeoDesign, Inc.
9450 SW Commerce Circle
Wilsonville, OR 97070

Project: Modera Morrison
Project Number: Millcreek-19-04
Project Manager: Kyle Sattler

Report ID:
A1E0409 - 05 24 21 1153

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050458 - EPA 3051A							**Soil**					
Matrix Spike (1050458-MS1)			Prepared: 05/13/21 10:53 Analyzed: 05/13/21 16:27									
QC Source Sample: TK8-SWE(8) (A1E0409-01)												
EPA 6020B												
Arsenic	68.8	---	1.27	mg/kg dry	10	63.3	8.94	95	75-125%	---	---	
Barium	241	---	1.27	mg/kg dry	10	63.3	180	96	75-125%	---	---	
Cadmium	60.0	---	0.253	mg/kg dry	10	63.3	ND	95	75-125%	---	---	
Chromium	81.6	---	1.27	mg/kg dry	10	63.3	19.2	98	75-125%	---	---	
Lead	68.6	---	0.253	mg/kg dry	10	63.3	11.9	90	75-125%	---	---	
Mercury	1.15	---	0.101	mg/kg dry	10	1.27	ND	91	75-125%	---	---	
Selenium	26.9	---	1.27	mg/kg dry	10	31.7	ND	85	75-125%	---	---	
Silver	30.0	---	0.253	mg/kg dry	10	31.7	ND	95	75-125%	---	---	

DRAFT REPORT

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ANALYTICAL REPORT

GeoDesign, Inc.
9450 SW Commerce Circle
Wilsonville, OR 97070

Project: Modera Morrison
Project Number: Millcreek-19-04
Project Manager: Kyle Sattler

Report ID:
A1E0409 - 05 24 21 1153

QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050441 - Total Solids (Dry Weight)							Soil					
Duplicate (1050441-DUP1)			Prepared: 05/13/21 09:03 Analyzed: 05/14/21 08:18									
QC Source Sample: Non-SDG (A1D0451-04)												
% Solids	**78.7**	---	1.00	%	1	---	78.4	---	---	0.4	10%	
Duplicate (1050441-DUP2)			Prepared: 05/13/21 09:03 Analyzed: 05/14/21 08:18									
QC Source Sample: Non-SDG (A1E0285-02)												
% Solids	**97.1**	---	1.00	%	1	---	97.1	---	---	0.004	10%	
Duplicate (1050441-DUP3)			Prepared: 05/13/21 09:03 Analyzed: 05/14/21 08:18									
QC Source Sample: TK8-SWE(8) (A1E0409-01)												
EPA 8000D												
% Solids	**83.0**	---	1.00	%	1	---	82.6	---	---	0.6	10%	
Duplicate (1050441-DUP4)			Prepared: 05/13/21 09:03 Analyzed: 05/14/21 08:18									
QC Source Sample: Non-SDG (A1E0466-01)												
% Solids	**88.5**	---	1.00	%	1	---	87.8	---	---	0.7	10%	
Duplicate (1050441-DUP5)			Prepared: 05/13/21 09:03 Analyzed: 05/14/21 08:18									
QC Source Sample: Non-SDG (A1E0469-08)												
% Solids	**81.5**	---	1.00	%	1	---	82.3	---	---	1	10%	
Duplicate (1050441-DUP6)			Prepared: 05/13/21 09:03 Analyzed: 05/14/21 08:18									
QC Source Sample: Non-SDG (A1E0487-01)												
% Solids	**72.2**	---	1.00	%	1	---	71.9	---	---	0.4	10%	
Duplicate (1050441-DUP7)			Prepared: 05/13/21 09:03 Analyzed: 05/14/21 08:18									
QC Source Sample: Non-SDG (A1E0492-02)												
% Solids	**81.2**	---	1.00	%	1	---	82.7	---	---	2	10%	

No Client related Batch QC samples analyzed for this batch. See notes page for more information.

DRAFT REPORT

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ORELAP ID: OR100062

ANALYTICAL REPORT

GeoDesign, Inc.
9450 SW Commerce Circle
Wilsonville, OR 97070

Project: Modera Morrison
Project Number: Millcreek-19-04
Project Manager: Kyle Sattler

Report ID:
A1E0409 - 05 24 21 1153

SAMPLE PREPARATION INFORMATION

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Prep: EPA 5035A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1050555							
A1E0409-01	Soil	NWTPH-Gx (MS)	05/11/21 11:55	05/11/21 11:55	5.37g/5mL	5g/5mL	0.93
A1E0409-02	Soil	NWTPH-Gx (MS)	05/11/21 12:00	05/11/21 12:00	4.34g/5mL	5g/5mL	1.15
A1E0409-06	Soil	NWTPH-Gx (MS)	05/11/21 13:00	05/11/21 13:00	4.58g/5mL	5g/5mL	1.09
A1E0409-07	Soil	NWTPH-Gx (MS)	05/11/21 12:25	05/11/21 12:25	4.29g/5mL	5g/5mL	1.17
A1E0409-08	Soil	NWTPH-Gx (MS)	05/11/21 12:30	05/11/21 12:30	6.47g/5mL	5g/5mL	0.77
A1E0409-09	Soil	NWTPH-Gx (MS)	05/11/21 13:30	05/11/21 13:30	4.49g/5mL	5g/5mL	1.11
Batch: 1050611							
A1E0409-03RE1	Soil	NWTPH-Gx (MS)	05/11/21 12:10	05/11/21 12:10	4.89g/5mL	5g/5mL	1.02
A1E0409-04RE1	Soil	NWTPH-Gx (MS)	05/11/21 12:20	05/11/21 12:20	6g/5mL	5g/5mL	0.83
A1E0409-05RE1	Soil	NWTPH-Gx (MS)	05/11/21 12:40	05/11/21 12:40	5.08g/5mL	5g/5mL	0.98

BTEX Compounds by EPA 8260D

Prep: EPA 5035A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1050555							
A1E0409-10	Soil	5035A/8260D	05/11/21 13:45	05/11/21 16:25	5.57g/5mL	5g/5mL	0.90

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E SIM

Prep: EPA 3546

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1050489							
A1E0409-10	Soil	EPA 8270E SIM	05/11/21 13:45	05/14/21 08:28	10.01g/5mL	10g/5mL	1.00

Total Metals by EPA 6020B (ICPMS)

Prep: EPA 3051A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1050458							
A1E0409-01	Soil	EPA 6020B	05/11/21 11:55	05/13/21 10:53	0.481g/50mL	0.5g/50mL	1.04
A1E0409-02	Soil	EPA 6020B	05/11/21 12:00	05/13/21 10:53	0.465g/50mL	0.5g/50mL	1.08
A1E0409-03	Soil	EPA 6020B	05/11/21 12:10	05/13/21 10:53	0.489g/50mL	0.5g/50mL	1.02
A1E0409-04	Soil	EPA 6020B	05/11/21 12:20	05/13/21 10:53	0.503g/50mL	0.5g/50mL	0.99
A1E0409-05	Soil	EPA 6020B	05/11/21 12:40	05/13/21 10:53	0.514g/50mL	0.5g/50mL	0.97
A1E0409-06	Soil	EPA 6020B	05/11/21 13:00	05/13/21 10:53	0.473g/50mL	0.5g/50mL	1.06

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ANALYTICAL REPORT

GeoDesign, Inc. 9450 SW Commerce Circle Wilsonville, OR 97070	Project: Modera Morrison Project Number: Millcreek-19-04 Project Manager: Kyle Sattler	Report ID: A1E0409 - 05 24 21 1153

SAMPLE PREPARATION INFORMATION

Total Metals by EPA 6020B (ICPMS)

Prep: EPA 3051A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
A1E0409-07	Soil	EPA 6020B	05/11/21 12:25	05/13/21 10:53	0.466g/50mL	0.5g/50mL	1.07
A1E0409-08	Soil	EPA 6020B	05/11/21 12:30	05/13/21 10:53	0.478g/50mL	0.5g/50mL	1.05
A1E0409-09	Soil	EPA 6020B	05/11/21 13:30	05/13/21 10:53	0.459g/50mL	0.5g/50mL	1.09

Percent Dry Weight

Prep: Total Solids (Dry Weight)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1050441							
A1E0409-01	Soil	EPA 8000D	05/11/21 11:55	05/13/21 09:03			NA
A1E0409-02	Soil	EPA 8000D	05/11/21 12:00	05/13/21 09:03			NA
A1E0409-03	Soil	EPA 8000D	05/11/21 12:10	05/13/21 09:03			NA
A1E0409-04	Soil	EPA 8000D	05/11/21 12:20	05/13/21 09:03			NA
A1E0409-05	Soil	EPA 8000D	05/11/21 12:40	05/13/21 09:03			NA
A1E0409-06	Soil	EPA 8000D	05/11/21 13:00	05/13/21 09:03			NA
A1E0409-07	Soil	EPA 8000D	05/11/21 12:25	05/13/21 09:03			NA
A1E0409-08	Soil	EPA 8000D	05/11/21 12:30	05/13/21 09:03			NA
A1E0409-09	Soil	EPA 8000D	05/11/21 13:30	05/13/21 09:03			NA
A1E0409-10	Soil	EPA 8000D	05/11/21 13:45	05/13/21 09:03			NA

DRAFT REPORT

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ANALYTICAL REPORT

GeoDesign, Inc. 9450 SW Commerce Circle Wilsonville, OR 97070	Project: Modera Morrison Project Number: Millcreek-19-04 Project Manager: Kyle Sattler	Report ID: A1E0409 - 05 24 21 1153

QUALIFIER DEFINITIONS

Client Sample and Quality Control (QC) Sample Qualifier Definitions:

Apex Laboratories

R-06	Reporting level raised due to possible carryover from a previous sample.
S-02	Surrogate recovery cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.
TEMP	Sample(s) received outside of recommended temperature. See Case Narrative.
V-15	Sample aliquot was subsampled from the sample container. The subsampled aliquot was preserved in the laboratory within 48 hours of sampling.

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APEX LABORATORIES

ANALYTICAL REPORT

GeoDesign, Inc. 9450 SW Commerce Circle Wilsonville, OR 97070	Project: Modera Morrison Project Number: Millcreek-19-04 Project Manager: Kyle Sattler	Report ID: A1E0409 - 05 24 21 1153

REPORTING NOTES AND CONVENTIONS:

Abbreviations:

DET Analyte DETECTED at or above the detection or reporting limit.

ND Analyte NOT DETECTED at or above the detection or reporting limit.

NR Result Not Reported

RPD Relative Percent Difference. RPDs for Matrix Spikes and Matrix Spike Duplicates are based on concentration, not recovery.

Detection Limits: Limit of Detection (LOD)

Limits of Detection (LODs) are normally set at a level of one half the validated Limit of Quantitation (LOQ).
If no value is listed ('-----'), then the data has not been evaluated below the Reporting Limit.

Reporting Limits: Limit of Quantitation (LOQ)

Validated Limits of Quantitation (LOQs) are reported as the Reporting Limits for all analyses where the LOQ, MRL, PQL or CRL are requested. The LOQ represents a level at or above the low point of the calibration curve, that has been validated according to Apex Laboratories' comprehensive LOQ policies and procedures.

Reporting Conventions:

Basis: Results for soil samples are generally reported on a 100% dry weight basis.
The Result Basis is listed following the units as " dry", " wet", or " " (blank) designation.

" dry" Sample results and Reporting Limits are reported on a dry weight basis. (i.e. "ug/kg dry")
See Percent Solids section for details of dry weight analysis.

" wet" Sample results and Reporting Limits for this analysis are normally dry weight corrected, but have not been modified in this case.

" " Results without 'wet' or 'dry' designation are not normally dry weight corrected. These results are considered 'As Received'.

QC Source:

In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) may be analyzed to demonstrate accuracy and precision of the extraction batch.

Non-Client Batch QC Samples (Duplicates and Matrix Spike/Duplicates) may not be included in this report. Please request a Full QC report if this data is required.

Miscellaneous Notes:

" --- " QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.

" *** " Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

Blanks:

Standard practice is to evaluate the results from Blank QC Samples down to a level equal to ½ the Reporting Limit (RL).
-For Blank hits falling between ½ the RL and the RL (J flagged hits), the associated sample and QC data will receive a 'B-02' qualifier.
-For Blank hits above the RL, the associated sample and QC data will receive a 'B' qualifier, per Apex Laboratories' Blank Policy.
For further details, please request a copy of this document.

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GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	A1E0409 - 05 24 21 1153

REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks (Cont.):

Sample results flagged with a 'B' or 'B-02' qualifier are potentially biased high if the sample results are less than ten times the level found in the blank for inorganic analyses, or less than five times the level found in the blank for organic analyses.

'B' and 'B-02' qualifications are only applied to sample results detected above the Reporting Level.

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

Water samples containing significant amounts of sediment are decanted or separated prior to extraction, and only the water portion analyzed, unless otherwise directed by the client.

Soil and Sediment Samples:

Soil and Sediment samples containing significant amounts of water are decanted prior to extraction, and only the solid portion analyzed, unless otherwise directed by the client.

Sampling and Preservation Notes:

Certain regulatory programs, such as National Pollutant Discharge Elimination System (NPDES), require that activities such as sample filtration (for dissolved metals, orthophosphate, hexavalent chromium, etc.) and testing of short hold analytes (pH, Dissolved Oxygen, etc.) be performed in the field (on-site) within a short time window. In addition, sample matrix spikes are required for some analyses, and sufficient volume must be provided, and billable site specific QC requested, if this is required. All regulatory permits should be reviewed to ensure that these requirements are being met.

Data users should be aware of which regulations pertain to the samples they submit for testing. If related sample collection activities are not approved for a particular regulatory program, results should be considered estimates. Apex Laboratories will qualify these analytes according to the most stringent requirements, however results for samples that are for non-regulatory purposes may be acceptable.

Samples that have been filtered and preserved at Apex Laboratories per client request are listed in the preparation section of the report with the date and time of filtration listed.

Apex Laboratories maintains detailed records on sample receipt, including client label verification, cooler temperature, sample preservation, hold time compliance and field filtration. Data is qualified as necessary, and the lack of qualification indicates compliance with required parameters.

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ANALYTICAL REPORT

GeoDesign, Inc. 9450 SW Commerce Circle Wilsonville, OR 97070	Project: Modera Morrison Project Number: Millcreek-19-04 Project Manager: Kyle Sattler	Report ID: A1E0409 - 05 24 21 1153

LABORATORY ACCREDITATION INFORMATION

ORELAP Certification ID: OR100062 (Primary Accreditation)
EPA ID: OR01039

All methods and analytes reported from work performed at Apex Laboratories are included on Apex Laboratories' ORELAP Scope of Certification, with the exception of any analyte(s) listed below:

Apex Laboratories

Matrix	Analysis	TNI_ID	Analyte	TNI_ID	Accreditation

All reported analytes are included in Apex Laboratories' current ORELAP scope.

Secondary Accreditations

Apex Laboratories also maintains reciprocal accreditation with non-TNI states (Washington DOE), as well as other state specific accreditations not listed here.

Subcontract Laboratory Accreditations

Subcontracted data falls outside of Apex Laboratories' Scope of Accreditation.
Please see the Subcontract Laboratory report for full details, or contact your Project Manager for more information.

Field Testing Parameters

Results for Field Tested data are provded by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.

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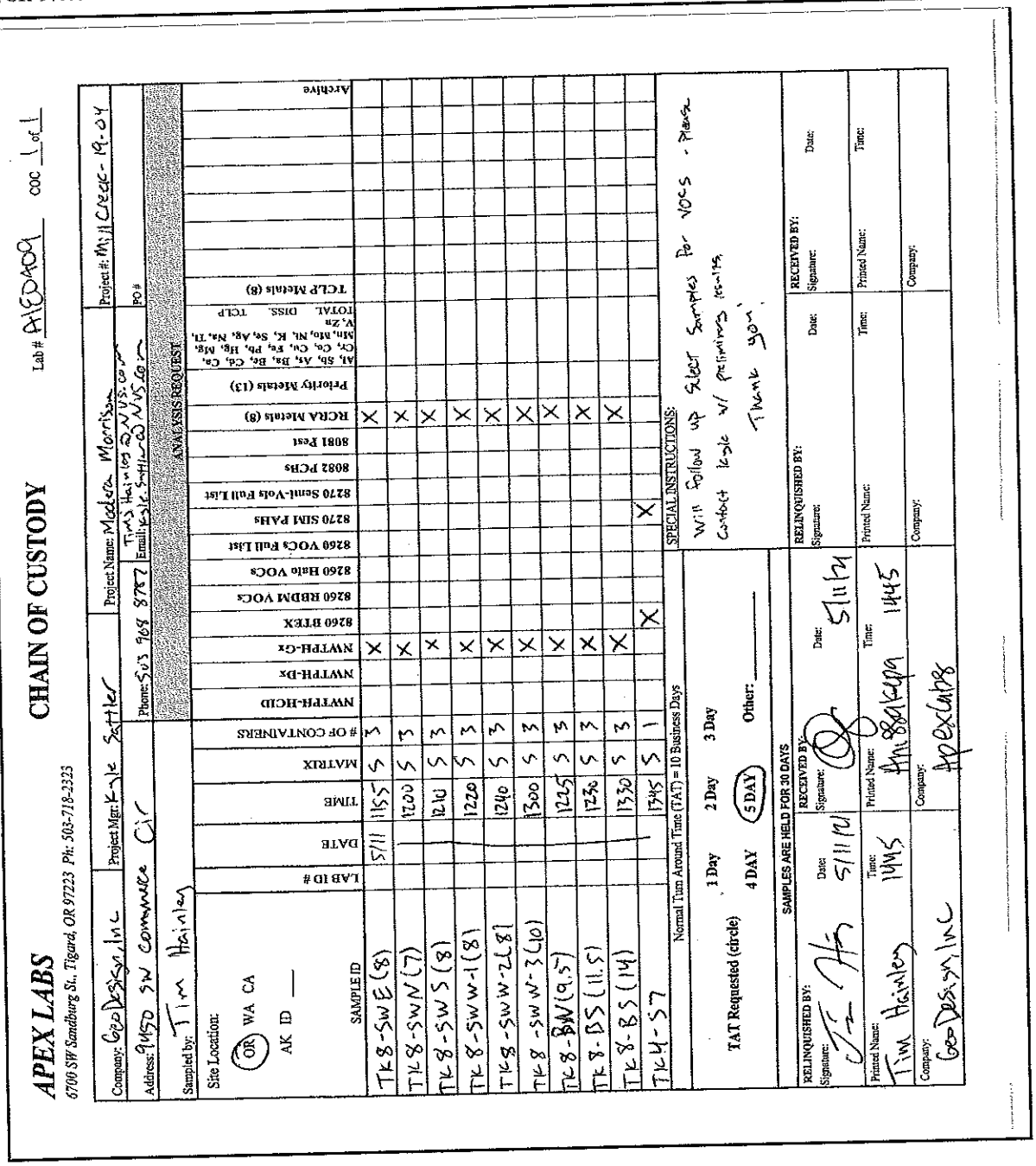
ORELAP ID: OR100062

ANALYTICAL REPORT

GeoDesign, Inc. 9450 SW Commerce Circle Wilsonville, OR 97070	Project: **Modera Morrison** Project Number: **Millcreek-19-04** Project Manager: **Kyle Sattler**	**Report ID:** **A1E0409 - 05 24 21 1153**



APEX LABS — **CHAIN OF CUSTODY** — Lab # APEDA09 — COC 1 of 1

6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323

Company: GeoDesign, Inc | Project Mgr: Kyle Sattler | Project Name: Modera Morrison | Project #: Mill Creek - 19-04

Address: 9450 SW Commerce Cir | Phone: 503 968 8787 | Email: kyle.sattler@GeoDesignNW.com | PO #

Sampled by: Tim Hainley

Site Location: (OR) WA CA — AK ID —

ANALYSIS REQUEST

SAMPLE ID	LAB ID #	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 BTEX	8260 RBDM VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIM PAHs	8270 Semi-Vols Full List	8082 PCBs	8081 Pest	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn TOTAL DISS. TCLP	TCLP Metals (8)	Archive
TK8-SWE(8)		5/11	1155	S	3			X									X			
TK8-SWN(7)			1200	S	3			X									X			
TK8-SWS(8)			1214	S	3			X									X			
TK8-SWW-1(8)			1220	S	3			X									X			
TK8-SWW-2L81			1240	S	3			X									X			
TK8-SWW-3(10)			1300	S	3			X									X			
TK8-BW(9.5)			1225	S	3			X									X			
TK8-BS(11.5)			1236	S	3			X									X			
TK8-BS(14)			1330	S	3			X									X			
TK4-S7			1345	S	1				X					X						

Normal Turn Around Time (TAT) = 10 Business Days

TAT Requested (circle): 1 Day | 2 Day | 3 Day | 4 DAY | (5 DAY) | Other: ____

SPECIAL INSTRUCTIONS:
Will forward up select samples for VOCs - Please
Contact Kyle w/ preliminary results
Thank you.

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature:	Signature:	Signature:	Signature:
Date: 5/11/21	Date: 5/11/21	Date: 5/11/21	Date:
Time: 1445	Time: 1445	Time:	Time:
Printed Name: Tim Hainley	Printed Name: Amber Bakkegard	Printed Name:	Printed Name:
Company: GeoDesign, Inc	Company: Apex Labs	Company:	Company:

DRAFT REPORT

The results provided in this report are PRELIMINARY and are subject to change based on subsequent analysis, QC validation or final data review. Please use these results with the understanding that they may have not been finalized by the laboratory.

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

GeoDesign, Inc.	Project: Modera Morrison	
9450 SW Commerce Circle	Project Number: Millcreek-19-04	Report ID:
Wilsonville, OR 97070	Project Manager: Kyle Sattler	A1E0409 - 05 24 21 1153

APEX LABS COOLER RECEIPT FORM

Client: GeoDesign Element WO#: A1E0409

Project/Project #: Modera Morrison #MillCreek-19-04

Delivery Info:

Date/time received: 5/14/21 @ 1445 By: AKK

Delivered by: Apex ___ Client X ESS ___ FedEx ___ UPS ___ Swift ___ Senvoy ___ SDS ___ Other ___

Cooler Inspection Date/time inspected: 5/14/21 @ 1445 By: AKK

Chain of Custody included? Yes X No ___ Custody seals? Yes ___ No X

Signed/dated by client? Yes X No ___

Signed/dated by Apex? Yes X No ___

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	1.9 X 9pc 5/14/21						
Received on ice? (Y/N)	Y						
Temp. blanks? (Y/N)	Y						
Ice type: (Gel/Real/Other)	Gel						
Condition:	Good						

Cooler out of temp? (Y/N) Possible reason why: ___

Green dots applied to out of temperature samples? Yes/No

Out of temperature samples form initiated? Yes/No

Sample Inspection: Date/time inspected: 5/14/21 @ 15:41 By: TAM

All samples intact? Yes X No ___ Comments: ___

Bottle labels/COCs agree? Yes ___ No X Comments: T on TKB-SWW-3(10) 2/2 VOAs read 15:00

COC/container discrepancies form initiated? Yes ___ No X

Containers/volumes received appropriate for analysis? Yes X No ___ Comments: ___

Do VOA vials have visible headspace? Yes ___ No ___ NA X

Comments ___

Water samples: pH checked: Yes ___ No ___ NA X pH appropriate? Yes ___ No ___ NA X

Comments: ___

Additional information: ___

Labeled by: TAM Witness: AKK Cooler Inspected by: TAM

APPENDIX H

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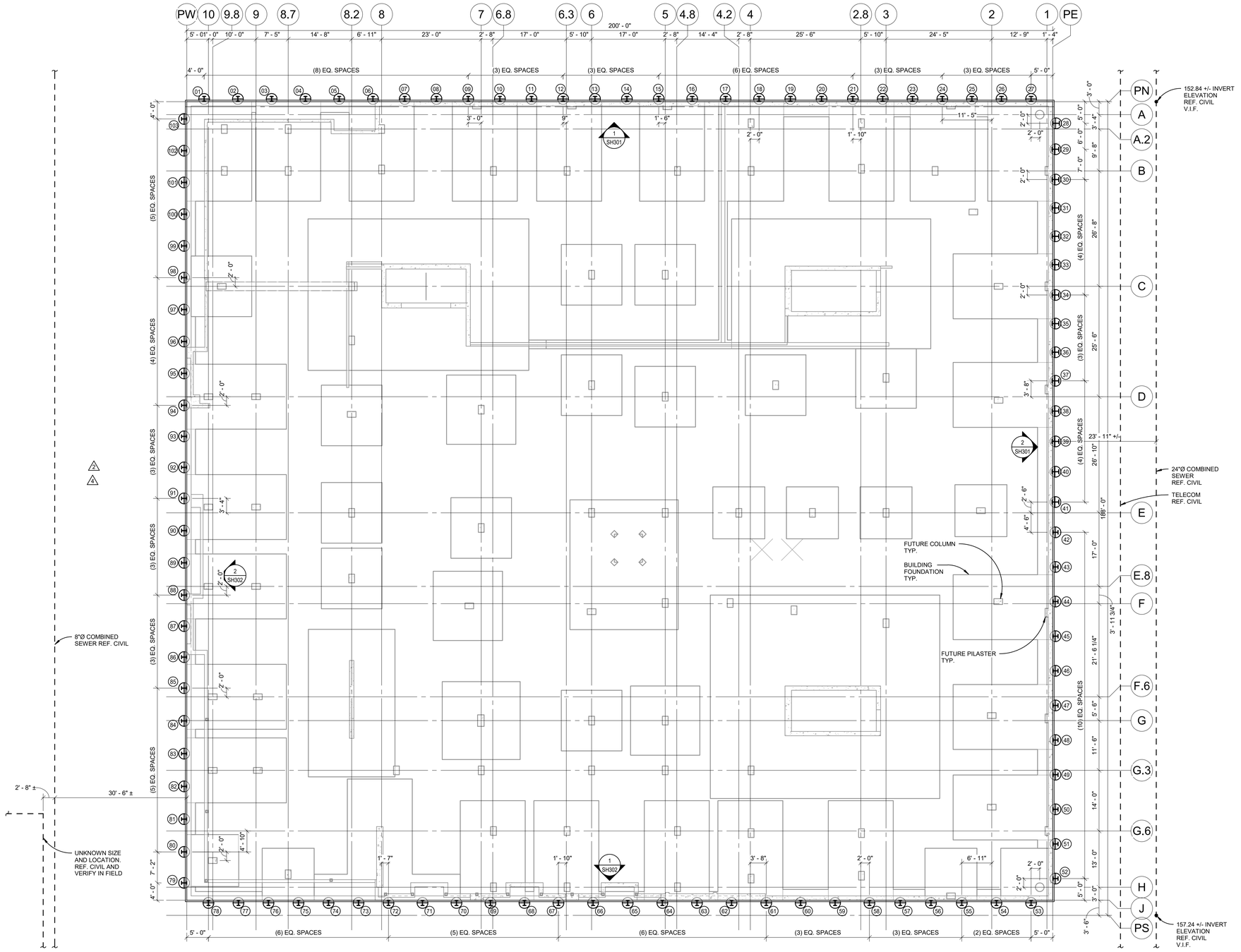

1 SHORING PLAN
1" = 10'-0"

SHORING NOTES:

1. REF. SH002 FOR GENERAL SHORING NOTES AND STRUCTURAL REQUIREMENTS FOR SHORING WALL INSTALLATION, MONITORING, AND TESTING.
2. (X) INDICATES SOLDIER PILE NUMBER.
3. INDICATES WF SOLDIER PILE LOCATION.
4. SOLDIER PILES ARE EQUALLY SPACED U.N.O.
5. INDICATES CONCRETE PERIMETER WALL OF FUTURE STRUCTURE. REF. STRUCTURAL DRAWINGS FOR WALL THICKNESS. REF. ARCH. DRAWINGS FOR WALL LOCATION DIMENSIONS.
6. (A) REF. SH501 FOR TYPICAL DETAILS.
7. IT IS THE CONTRACTORS RESPONSIBILITY TO COORDINATE ALL EXISTING CONDITIONS IN THE ROADWAY AND UNDER EXISTING ADJACENT STRUCTURES AND SURFACES PRIOR TO COMMENCING SHORING OPERATIONS.
8. CONTRACTOR TO VERIFY THE SIZE AND LOCATION OF ALL CIVIL UTILITY VAULTS, DUCT BANKS AND PIPES. INCLUDING STORM, SEWER, GAS, WATER, POWER, TELECOM, ETC. PRIOR TO CONSTRUCTION.
9. (1) REF. CIVIL FOR SEWER LATERALS TO BE CAPPED AND ABANDONED PRIOR TO SHORING INSTALLATION.
10. DISTANCE FROM PROPERTY LINE TO CENTER LINE OF RIGHT OF WAY:
    NORTH: 42' - 0"
    EAST: 30' - 0"
    SOUTH: 33' - 6"
    WEST: 30' - 0"

PILE TIEBACK LOCATION SCHEDULE

WALL	PILE #	TIEBACK	
		W.P. EL.	ANGLE
NORTH	01-06	155.67'	15°
NORTH	07-27	161.50'	15°
EAST	28-41	159.50'	26°
EAST	42-52	159.90'	22°
SOUTH	53-62	159.00'	15°
SOUTH	63-78	155.00'	15°
WEST	79-103	154.50'	24°

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Portland, OR 97204
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F: 503.227.7980
www.kpff.com
1002190101-19

STRUCTURAL REGISTERED PROFESSIONAL ENGINEER 79476PE OREGON JUNE 12, 1981 JOSHUA F. RICHARDS
EXPIRES 12-31-22

MODERA MORRISON SHORING

MCRT
SE 12TH & MORRISON
PORTLAND, OREGON

REVISIONS

A	ADDENDUM 1	02/28/2020
2	PERMIT RESPONSE 2	06/12/2020
4	AB 4	07/20/2020
7	AB 7	03/17/2021

CHECKED BY: Checker
ISSUE DATE: 30 MAR 2020
PROJECT NO: 10021901011-R19

SHORING PLAN
SH100
DESC PERMIT SET

5910
3/17/2021 9:28:29 AM
SERA Design and Architecture, Inc.

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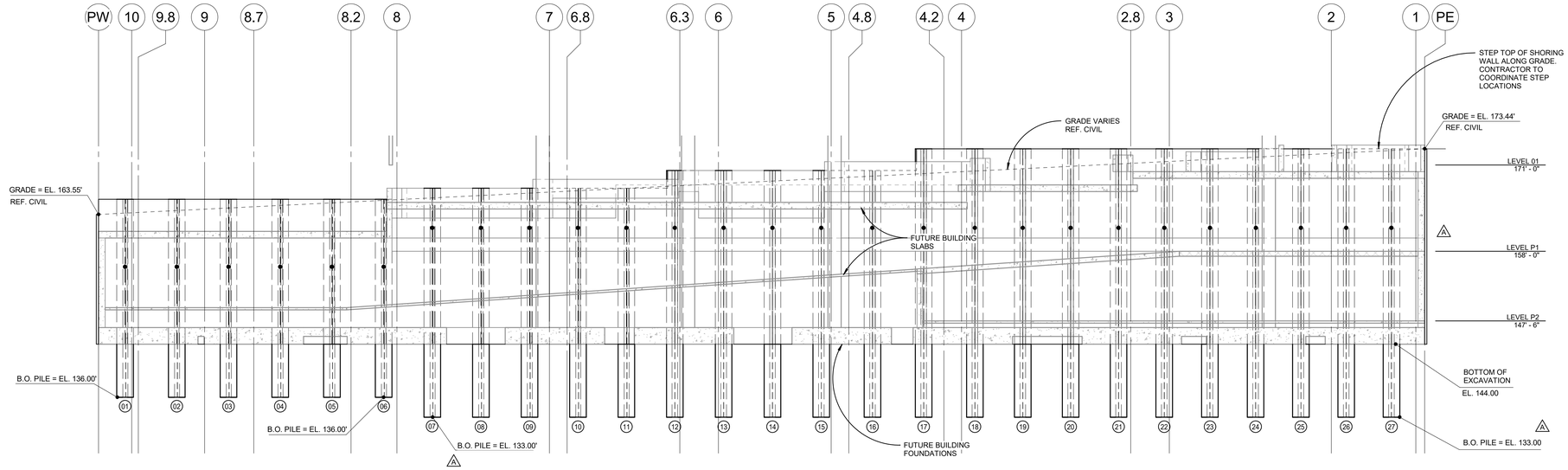
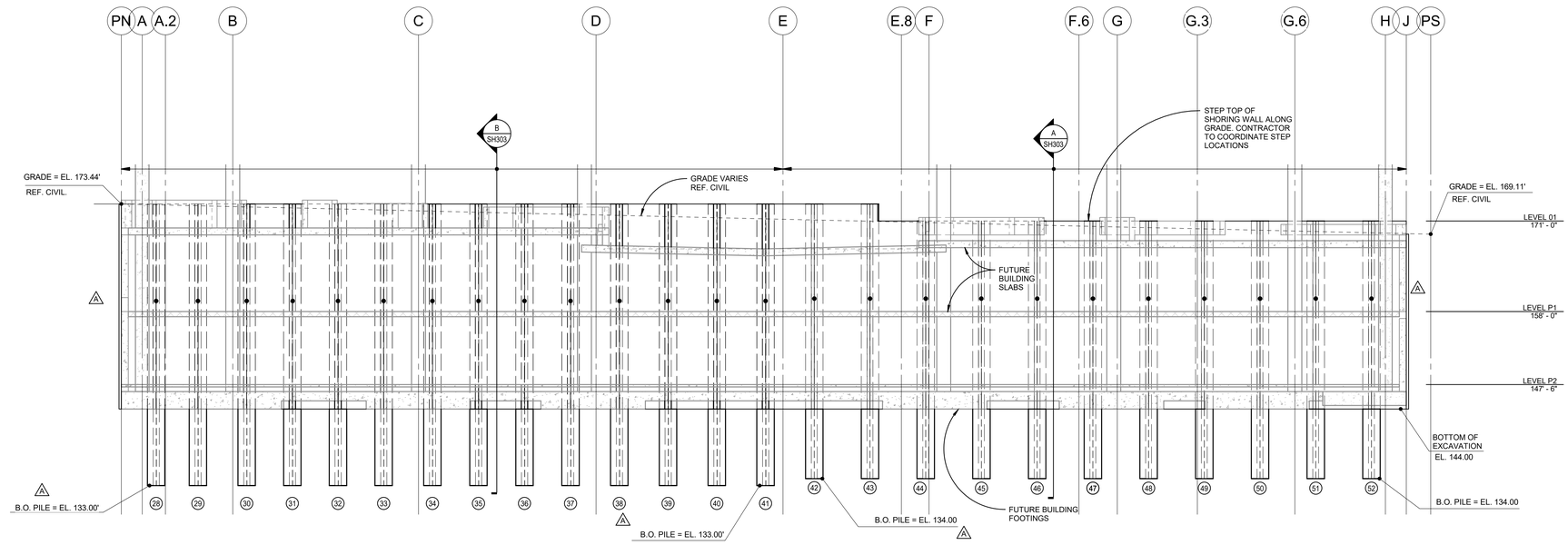


1 NORTH ELEVATION
1/8" = 1'-0"



2 EAST ELEVATION
1/8" = 1'-0"

NOTES:

1. (X) INDICATES SOLDIER PILE NUMBER.
2. • INDICATES TIEBACK. TIEBACK ELEVATION BASED ON WORK POINT (W.P.) REF. DETAIL 1/SH501.
3. REF. SH501 FOR TYPICAL DETAILS.
4. FUTURE CONSTRUCTION. REF. STRU. AND ARCH. DRAWINGS.

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STRUCTURAL REGISTERED PROFESSIONAL ENGINEER 79476PE OREGON JUNE 12, 1981 JOSHUA F. RICHARDS
EXPIRES 12-13-20

NOT FOR CONSTRUCTION

MODERA MORRISON SHORING

MCRT
SE 12TH & MORRISON
PORTLAND, OREGON

REVISIONS

A	ADDENDUM 1	28 FEB 2020

CHECKED BY: Checker
ISSUE DATE: 30 MAR 2020
PROJECT NO: 1002190101-R19

CONSTRUCTION SET

SHORING ELEVATIONS

SH301

5931
3/27/2020 10:13:48 AM SERA Design and Architecture, Inc.

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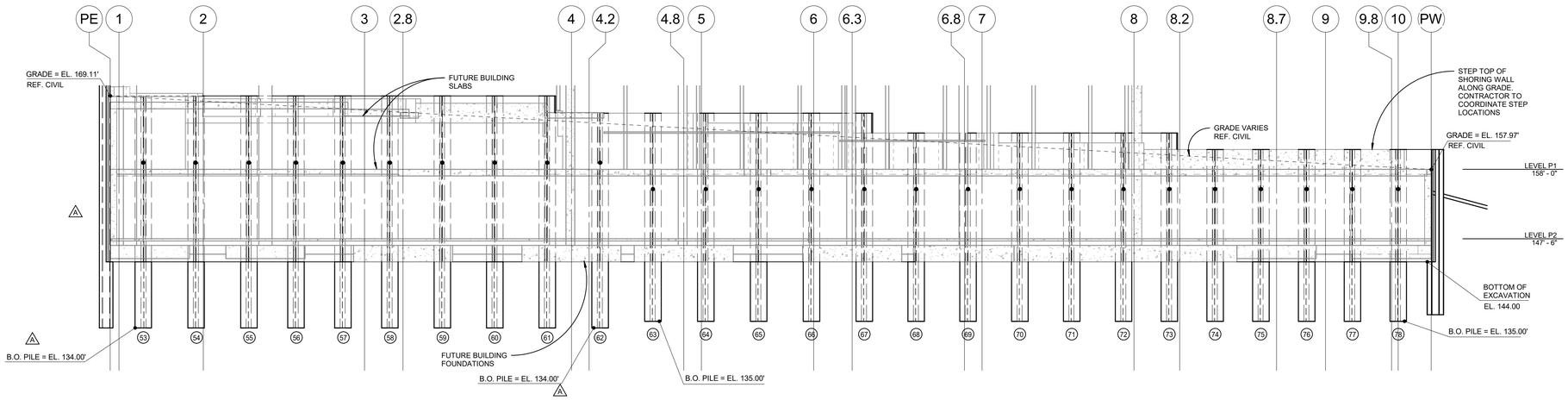
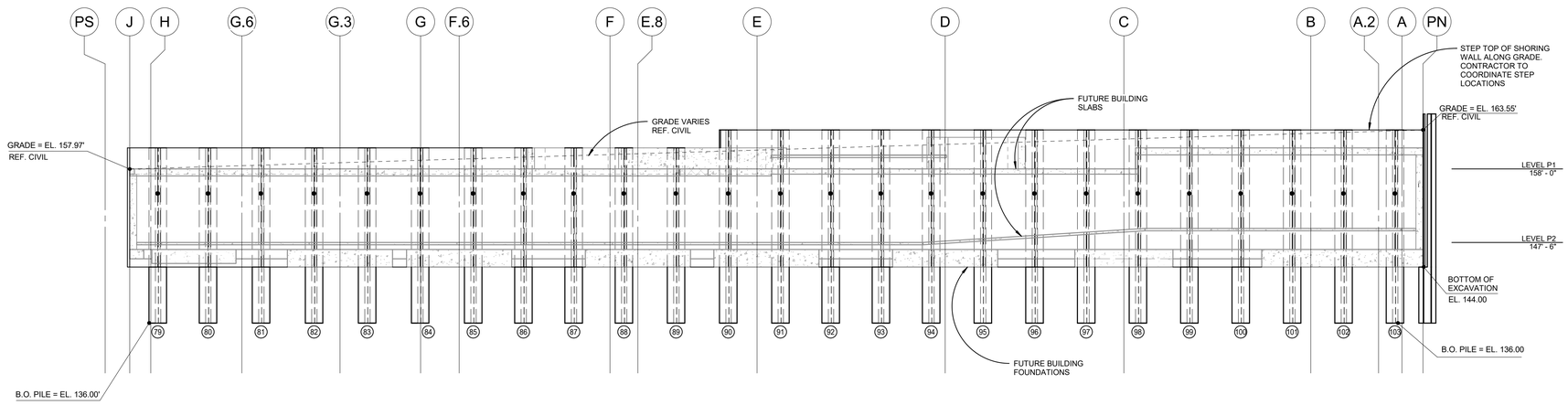


1 SOUTH ELEVATION
1/8" = 1'-0"

NOTES:

1. (X) INDICATES SOLDIER PILE NUMBER.
2. • INDICATES TIEBACK. TIEBACK ELEVATION BASED ON WORK POINT (W.P.) REF. DETAIL 1/SH501.
3. REF. SH501 FOR TYPICAL DETAILS.
4. FUTURE CONSTRUCTION. REF. STRU. AND ARCH. DRAWINGS.



2 WEST ELEVATION
1/8" = 1'-0"

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EXPIRES 12-13-20

MODERA MORRISON SHORING

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PORTLAND, OREGON

REVISIONS
A ADDENDUM 1 28 FEB 2020

CHECKED BY: Checker
ISSUE DATE: 30 MAR 2020
PROJECT NO: 1002190101-R19

CONSTRUCTION SET

SHORING ELEVATIONS
SH302

5932
3/27/2020 10:13:49 AM SERA Design and Architecture, Inc.

APPENDIX I

APPENDIX I

CHEMICAL ANALYTICAL PROGRAM

GENERAL

Chain-of-custody procedures were followed during handling and transport of the soil samples to the analytical laboratory. The laboratory holds the soil samples in cold storage pending extraction and/or analysis. The analytical results, analytical methods reference, and laboratory QC records are included in this appendix. The analytical results are also summarized in the tables of this report.

REVIEW OF ANALYTICAL DATA

The analytical laboratory maintains an internal quality assurance program consisting of a combination of the following:

Blanks: Blanks are laboratory-prepared water samples that are free of contaminants. The blanks are carried through the analysis procedure along with the field samples to document that contaminants were not introduced to the samples during sample handling and analysis.

Surrogate Recoveries: Surrogates are organic compounds that are similar in nature to the analytes of concern but are not normally found in nature. The surrogates are added to QC and field samples prior to analysis. The percent recovery of the surrogate is calculated to demonstrate acceptable method performance.

Duplicates: Duplicates are obtained by splitting a sample into two parts. The two separate parts are carried through the analyses. The analytical results are then compared by calculating the RPD between the samples.

MS/MSD Recoveries: An MS sample is a sample that has been split into a second portion. The MSD is obtained by further splitting the MS sample. A known concentration of the analyte of interest is added to the MS and MSD samples. The analytical results for both samples are then compared for RPD and percent recovery to demonstrate acceptable method performance.

BS/BSD Recoveries: BS and BSD samples are obtained and analyzed in the same procedure as the MS/MSD samples; however, the laboratory blank sample is used to obtain the BS/BSD samples. The percent recovery and RPD of the known concentration of analyte of interest added to the BS/BSD sample is calculated after chemical analyses to demonstrate acceptable method performance.

SUMMARY OF ANALYTICAL DATA REVIEW

NV5 reviewed the attached analytical data reports for data quality exceptions and deviations from acceptable method performance criteria. The reported concentrations of select analytes are estimates between the laboratory's MDLs (the lowest level the instrument can detect) and the MRLs (the lowest concentrations that can be accurately quantified. Based on our review of the analytical reports, it is our opinion that the analytical data are acceptable for their intended use.

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

Tuesday, April 13, 2021

Kyle Sattler
GeoDesign, Inc.
9450 SW Commerce Circle
Wilsonville, OR 97070

RE: A1D0354 - MillCreek-19-04 - MillCreek-19-04

Thank you for using Apex Laboratories. We greatly appreciate your business and strive to provide the highest quality services to the environmental industry.

Enclosed are the results of analyses for work order A1D0354, which was received by the laboratory on 4/9/2021 at 2:40:00PM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: pnerenberg@apex-labs.com, or by phone at 503-718-2323.

Please note: All samples will be disposed of within 30 days of sample receipt, unless prior arrangements have been made.

Cooler Receipt Information

(See Cooler Receipt Form for details)

Cooler #1	2.1 degC	Cooler #2	4.1 degC

This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.
All other deliverables derived from this data, including Electronic Data Deliverables (EDDs), CLP-like forms, client requested summary sheets, and all other products are considered secondary to this report.

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0354 - 04 13 21 1446**

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TP-1(1)	A1D0354-01	Soil	04/09/21 08:23	04/09/21 14:40
TP-2(0.5)	A1D0354-02	Soil	04/09/21 09:30	04/09/21 14:40
TP-3(1)	A1D0354-03	Soil	04/09/21 10:12	04/09/21 14:40
TP-4(1)	A1D0354-04	Soil	04/09/21 10:28	04/09/21 14:40
TP-5(1.5)	A1D0354-05	Soil	04/09/21 10:54	04/09/21 14:40
TP-6(2)	A1D0354-06	Soil	04/09/21 11:18	04/09/21 14:40
TP-7(0.5)	A1D0354-07	Soil	04/09/21 11:44	04/09/21 14:40
TP-8(0.5)	A1D0354-08	Soil	04/09/21 13:05	04/09/21 14:40

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Apex Laboratories, LLC
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503-718-2323
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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0354 - 04 13 21 1446**

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
TP-1(1) (A1D0354-01)				**Matrix: Soil**				
Batch: 1040339								
Lead	**29.7**	---	0.256	mg/kg dry	10	04/09/21 22:44	EPA 6020B	
TP-2(0.5) (A1D0354-02)				**Matrix: Soil**				
Batch: 1040339								
Lead	**10.3**	---	0.270	mg/kg dry	10	04/09/21 22:49	EPA 6020B	
TP-3(1) (A1D0354-03)				**Matrix: Soil**				
Batch: 1040339								
Lead	**12.7**	---	0.256	mg/kg dry	10	04/09/21 22:54	EPA 6020B	
TP-4(1) (A1D0354-04)				**Matrix: Soil**				
Batch: 1040339								
Lead	**9.90**	---	0.272	mg/kg dry	10	04/09/21 23:09	EPA 6020B	
TP-5(1.5) (A1D0354-05)				**Matrix: Soil**				
Batch: 1040339								
Lead	**15.6**	---	0.267	mg/kg dry	10	04/09/21 23:14	EPA 6020B	
TP-6(2) (A1D0354-06)				**Matrix: Soil**				
Batch: 1040339								
Lead	**36.1**	---	0.278	mg/kg dry	10	04/09/21 23:19	EPA 6020B	
TP-7(0.5) (A1D0354-07)				**Matrix: Soil**				
Batch: 1040339								
Lead	**18.0**	---	0.271	mg/kg dry	10	04/09/21 23:24	EPA 6020B	
TP-8(0.5) (A1D0354-08)				**Matrix: Soil**				
Batch: 1040339								
Lead	**22.9**	---	0.273	mg/kg dry	10	04/09/21 23:29	EPA 6020B	

Apex Laboratories

Philip Nerenberg, Lab Director

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0354 - 04 13 21 1446**

ANALYTICAL SAMPLE RESULTS

Percent Dry Weight

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
TP-1(1) (A1D0354-01)				**Matrix: Soil**		**Batch: 1040357**		
% Solids	**80.0**	---	1.00	%	1	04/13/21 10:17	EPA 8000D	
TP-2(0.5) (A1D0354-02)				**Matrix: Soil**		**Batch: 1040357**		
% Solids	**77.2**	---	1.00	%	1	04/13/21 10:17	EPA 8000D	
TP-3(1) (A1D0354-03)				**Matrix: Soil**		**Batch: 1040357**		
% Solids	**81.0**	---	1.00	%	1	04/13/21 10:17	EPA 8000D	
TP-4(1) (A1D0354-04)				**Matrix: Soil**		**Batch: 1040357**		
% Solids	**78.4**	---	1.00	%	1	04/13/21 10:17	EPA 8000D	
TP-5(1.5) (A1D0354-05)				**Matrix: Soil**		**Batch: 1040357**		
% Solids	**76.6**	---	1.00	%	1	04/13/21 10:17	EPA 8000D	
TP-6(2) (A1D0354-06)				**Matrix: Soil**		**Batch: 1040357**		
% Solids	**74.5**	---	1.00	%	1	04/13/21 10:17	EPA 8000D	
TP-7(0.5) (A1D0354-07)				**Matrix: Soil**		**Batch: 1040357**		
% Solids	**77.3**	---	1.00	%	1	04/13/21 10:17	EPA 8000D	
TP-8(0.5) (A1D0354-08)				**Matrix: Soil**		**Batch: 1040357**		
% Solids	**81.1**	---	1.00	%	1	04/13/21 10:17	EPA 8000D	

Apex Laboratories

Philip Nerenberg, Lab Director

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ANALYTICAL REPORT

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9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0354 - 04 13 21 1446**

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040339 - EPA 3051A							**Soil**					
Blank (1040339-BLK1)			Prepared: 04/09/21 14:12 Analyzed: 04/09/21 21:29									
EPA 6020B												
Lead	ND	---	0.200	mg/kg wet	10	---	---	---	---	---	---	
LCS (1040339-BS1)			Prepared: 04/09/21 14:12 Analyzed: 04/09/21 21:34									
EPA 6020B												
Lead	49.0	---	0.200	mg/kg wet	10	50.0	---	98	80-120%	---	---	
Duplicate (1040339-DUP2)			Prepared: 04/09/21 14:12 Analyzed: 04/09/21 23:49									
QC Source Sample: Non-SDG (A1D0334-01RE1)												
Lead	**256**	---	53.1	mg/kg wet	2500	---	428	---	---	**50**	**20%**	Q-04, Q-16
Matrix Spike (1040339-MS2)			Prepared: 04/09/21 14:12 Analyzed: 04/09/21 23:54									
QC Source Sample: Non-SDG (A1D0334-01RE1)												
EPA 6020B												
Lead	514	---	51.5	mg/kg wet	2500	51.5	428	**166**	**75-125%**	---	---	Q-04, Q-16

Apex Laboratories

Philip Nerenberg, Lab Director

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0354 - 04 13 21 1446**

QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040357 - Total Solids (Dry Weight)							**Soil**					
Duplicate (1040357-DUP1)			Prepared: 04/12/21 07:59		Analyzed: 04/13/21 10:17							
QC Source Sample: Non-SDG (A1D0316-01)												
% Solids	**80.4**	---	1.00	%	1	---	78.7	---	---	2	10%	
Duplicate (1040357-DUP2)			Prepared: 04/12/21 07:59		Analyzed: 04/13/21 10:17							
QC Source Sample: Non-SDG (A1D0320-04)												
% Solids	**70.8**	---	1.00	%	1	---	70.6	---	---	0.3	10%	
Duplicate (1040357-DUP3)			Prepared: 04/12/21 07:59		Analyzed: 04/13/21 10:17							
QC Source Sample: Non-SDG (A1D0322-01)												
% Solids	**85.5**	---	1.00	%	1	---	85.5	---	---	0.01	10%	
Duplicate (1040357-DUP4)			Prepared: 04/12/21 07:59		Analyzed: 04/13/21 10:17							
QC Source Sample: Non-SDG (A1D0325-02)												
% Solids	**81.3**	---	1.00	%	1	---	81.7	---	---	0.4	10%	
Duplicate (1040357-DUP5)			Prepared: 04/12/21 07:59		Analyzed: 04/13/21 10:17							
QC Source Sample: Non-SDG (A1D0330-01)												
% Solids	**75.4**	---	1.00	%	1	---	76.0	---	---	0.7	10%	
Duplicate (1040357-DUP6)			Prepared: 04/12/21 07:59		Analyzed: 04/13/21 10:17							
QC Source Sample: TP-2(0.5) (A1D0354-02)												
EPA 8000D												
% Solids	**77.0**	---	1.00	%	1	---	77.2	---	---	0.2	10%	
Duplicate (1040357-DUP7)			Prepared: 04/12/21 07:59		Analyzed: 04/13/21 10:17							
QC Source Sample: Non-SDG (A1D0363-04)												
% Solids	**69.3**	---	1.00	%	1	---	69.6	---	---	0.4	10%	
Duplicate (1040357-DUP8)			Prepared: 04/12/21 07:59		Analyzed: 04/13/21 10:17							
QC Source Sample: Non-SDG (A1D0366-06)												
% Solids	**76.6**	---	1.00	%	1	---	76.5	---	---	0.1	10%	

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Philip Nerenberg, Lab Director

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Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

GeoDesign, Inc.	Project: MillCreek-19-04	
9450 SW Commerce Circle	Project Number: MillCreek-19-04	Report ID:
Wilsonville, OR 97070	Project Manager: Kyle Sattler	A1D0354 - 04 13 21 1446

QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040357 - Total Solids (Dry Weight)							Soil					
Duplicate (1040357-DUP9)			Prepared: 04/12/21 07:59		Analyzed: 04/13/21 10:17							
QC Source Sample: Non-SDG (A1D0369-01)												
% Solids	**67.7**	---	1.00	%	1	---	67.6	---	---	0.1	10%	
Duplicate (1040357-DUPA)			Prepared: 04/12/21 07:59		Analyzed: 04/13/21 10:17							
QC Source Sample: Non-SDG (A1D0370-08)												
% Solids	**65.3**	---	1.00	%	1	---	65.2	---	---	0.2	10%	
Duplicate (1040357-DUPB)			Prepared: 04/12/21 07:59		Analyzed: 04/13/21 10:17							
QC Source Sample: Non-SDG (A1D0376-04)												
% Solids	**76.9**	---	1.00	%	1	---	75.9	---	---	1	10%	
Duplicate (1040357-DUPC)			Prepared: 04/12/21 07:59		Analyzed: 04/13/21 10:17							
QC Source Sample: Non-SDG (A1D0384-02)												
% Solids	**87.5**	---	1.00	%	1	---	86.7	---	---	0.9	10%	
Duplicate (1040357-DUPD)			Prepared: 04/12/21 07:59		Analyzed: 04/13/21 10:17							
QC Source Sample: Non-SDG (A1D0388-03)												
% Solids	**78.8**	---	1.00	%	1	---	78.1	---	---	0.9	10%	
Duplicate (1040357-DUPE)			Prepared: 04/12/21 07:59		Analyzed: 04/13/21 10:17							
QC Source Sample: Non-SDG (A1D0392-04)												
% Solids	**80.4**	---	1.00	%	1	---	79.7	---	---	0.8	10%	
Duplicate (1040357-DUPF)			Prepared: 04/12/21 07:59		Analyzed: 04/13/21 10:17							
QC Source Sample: Non-SDG (A1D0393-06)												
% Solids	**81.9**	---	1.00	%	1	---	81.6	---	---	0.4	10%	
Duplicate (1040357-DUPG)			Prepared: 04/12/21 07:59		Analyzed: 04/13/21 10:17							
QC Source Sample: Non-SDG (A1D0397-02)												
% Solids	**88.7**	---	1.00	%	1	---	87.9	---	---	0.9	10%	

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Philip Nerenberg, Lab Director

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0354 - 04 13 21 1446**

QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040357 - Total Solids (Dry Weight)							**Soil**					
Duplicate (1040357-DUPH)			Prepared: 04/12/21 16:32		Analyzed: 04/13/21 10:17							
QC Source Sample: Non-SDG (A1C1218-12)												
% Solids	**99.1**	---	1.00	%	1	---	99.1	---	---	0.02	10%	
Duplicate (1040357-DUPI)			Prepared: 04/12/21 16:32		Analyzed: 04/13/21 10:17							
QC Source Sample: Non-SDG (A1D0399-05)												
% Solids	**75.2**	---	1.00	%	1	---	75.3	---	---	0.2	10%	
Duplicate (1040357-DUPJ)			Prepared: 04/12/21 16:32		Analyzed: 04/13/21 10:17							
QC Source Sample: Non-SDG (A1D0401-01)												
% Solids	**81.1**	---	1.00	%	1	---	82.9	---	---	2	10%	
Duplicate (1040357-DUPK)			Prepared: 04/12/21 16:32		Analyzed: 04/13/21 10:17							
QC Source Sample: Non-SDG (A1D0403-01)												
% Solids	**71.3**	---	1.00	%	1	---	71.4	---	---	0.04	10%	
Duplicate (1040357-DUPL)			Prepared: 04/12/21 16:32		Analyzed: 04/13/21 10:17							
QC Source Sample: Non-SDG (A1D0404-06)												
% Solids	**80.4**	---	1.00	%	1	---	80.7	---	---	0.3	10%	
Duplicate (1040357-DUPM)			Prepared: 04/12/21 16:32		Analyzed: 04/13/21 10:17							
QC Source Sample: Non-SDG (A1D0406-02)												
% Solids	**72.0**	---	1.00	%	1	---	72.2	---	---	0.3	10%	
Duplicate (1040357-DUPN)			Prepared: 04/12/21 16:32		Analyzed: 04/13/21 10:17							
QC Source Sample: Non-SDG (A1D0413-02)												
% Solids	**77.3**	---	1.00	%	1	---	76.7	---	---	0.8	10%	

No Client related Batch QC samples analyzed for this batch. See notes page for more information.

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0354 - 04 13 21 1446**

SAMPLE PREPARATION INFORMATION

Total Metals by EPA 6020B (ICPMS)

Prep: EPA 3051A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1040339							
A1D0354-01	Soil	EPA 6020B	04/09/21 08:23	04/09/21 16:01	0.489g/50mL	0.5g/50mL	1.02
A1D0354-02	Soil	EPA 6020B	04/09/21 09:30	04/09/21 16:01	0.48g/50mL	0.5g/50mL	1.04
A1D0354-03	Soil	EPA 6020B	04/09/21 10:12	04/09/21 16:01	0.483g/50mL	0.5g/50mL	1.04
A1D0354-04	Soil	EPA 6020B	04/09/21 10:28	04/09/21 16:01	0.469g/50mL	0.5g/50mL	1.07
A1D0354-05	Soil	EPA 6020B	04/09/21 10:54	04/09/21 16:01	0.489g/50mL	0.5g/50mL	1.02
A1D0354-06	Soil	EPA 6020B	04/09/21 11:18	04/09/21 16:01	0.482g/50mL	0.5g/50mL	1.04
A1D0354-07	Soil	EPA 6020B	04/09/21 11:44	04/09/21 16:01	0.477g/50mL	0.5g/50mL	1.05
A1D0354-08	Soil	EPA 6020B	04/09/21 13:05	04/09/21 16:01	0.452g/50mL	0.5g/50mL	1.11

Percent Dry Weight

Prep: Total Solids (Dry Weight)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1040357							
A1D0354-01	Soil	EPA 8000D	04/09/21 08:23	04/12/21 07:59			NA
A1D0354-02	Soil	EPA 8000D	04/09/21 09:30	04/12/21 07:59			NA
A1D0354-03	Soil	EPA 8000D	04/09/21 10:12	04/12/21 07:59			NA
A1D0354-04	Soil	EPA 8000D	04/09/21 10:28	04/12/21 07:59			NA
A1D0354-05	Soil	EPA 8000D	04/09/21 10:54	04/12/21 07:59			NA
A1D0354-06	Soil	EPA 8000D	04/09/21 11:18	04/12/21 07:59			NA
A1D0354-07	Soil	EPA 8000D	04/09/21 11:44	04/12/21 07:59			NA
A1D0354-08	Soil	EPA 8000D	04/09/21 13:05	04/12/21 07:59			NA

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0354 - 04 13 21 1446**

QUALIFIER DEFINITIONS

Client Sample and Quality Control (QC) Sample Qualifier Definitions:

Apex Laboratories

Q-04 Spike recovery and/or RPD is outside control limits due to a non-homogeneous sample matrix.

Q-16 Reanalysis of an original Batch QC sample.

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9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0354 - 04 13 21 1446**

REPORTING NOTES AND CONVENTIONS:

Abbreviations:

DET Analyte DETECTED at or above the detection or reporting limit.

ND Analyte NOT DETECTED at or above the detection or reporting limit.

NR Result Not Reported

RPD Relative Percent Difference. RPDs for Matrix Spikes and Matrix Spike Duplicates are based on concentration, not recovery.

Detection Limits: Limit of Detection (LOD)

Limits of Detection (LODs) are normally set at a level of one half the validated Limit of Quantitation (LOQ).
If no value is listed ('-----'), then the data has not been evaluated below the Reporting Limit.

Reporting Limits: Limit of Quantitation (LOQ)

Validated Limits of Quantitation (LOQs) are reported as the Reporting Limits for all analyses where the LOQ, MRL, PQL or CRL are requested. The LOQ represents a level at or above the low point of the calibration curve, that has been validated according to Apex Laboratories' comprehensive LOQ policies and procedures.

Reporting Conventions:

Basis: Results for soil samples are generally reported on a 100% dry weight basis.
The Result Basis is listed following the units as " dry", " wet", or " " (blank) designation.

" dry" Sample results and Reporting Limits are reported on a dry weight basis. (i.e. "ug/kg dry")
See Percent Solids section for details of dry weight analysis.

" wet" Sample results and Reporting Limits for this analysis are normally dry weight corrected, but have not been modified in this case.

" " Results without 'wet' or 'dry' designation are not normally dry weight corrected. These results are considered 'As Received'.

QC Source:

In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) may be analyzed to demonstrate accuracy and precision of the extraction batch.

Non-Client Batch QC Samples (Duplicates and Matrix Spike/Duplicates) may not be included in this report. Please request a Full QC report if this data is required.

Miscellaneous Notes:

" --- " QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.

" *** " Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

Blanks:

Standard practice is to evaluate the results from Blank QC Samples down to a level equal to ½ the Reporting Limit (RL).
-For Blank hits falling between ½ the RL and the RL (J flagged hits), the associated sample and QC data will receive a 'B-02' qualifier.
-For Blank hits above the RL, the associated sample and QC data will receive a 'B' qualifier, per Apex Laboratories' Blank Policy.
For further details, please request a copy of this document.

Apex Laboratories

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GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0354 - 04 13 21 1446**

REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks (Cont.):

Sample results flagged with a 'B' or 'B-02' qualifier are potentially biased high if the sample results are less than ten times the level found in the blank for inorganic analyses, or less than five times the level found in the blank for organic analyses.

'B' and 'B-02' qualifications are only applied to sample results detected above the Reporting Level.

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

Water samples containing significant amounts of sediment are decanted or separated prior to extraction, and only the water portion analyzed, unless otherwise directed by the client.

Soil and Sediment Samples:

Soil and Sediment samples containing significant amounts of water are decanted prior to extraction, and only the solid portion analyzed, unless otherwise directed by the client.

Sampling and Preservation Notes:

Certain regulatory programs, such as National Pollutant Discharge Elimination System (NPDES), require that activities such as sample filtration (for dissolved metals, orthophosphate, hexavalent chromium, etc.) and testing of short hold analytes (pH, Dissolved Oxygen, etc.) be performed in the field (on-site) within a short time window. In addition, sample matrix spikes are required for some analyses, and sufficient volume must be provided, and billable site specific QC requested, if this is required. All regulatory permits should be reviewed to ensure that these requirements are being met.

Data users should be aware of which regulations pertain to the samples they submit for testing. If related sample collection activities are not approved for a particular regulatory program, results should be considered estimates. Apex Laboratories will qualify these analytes according to the most stringent requirements, however results for samples that are for non-regulatory purposes may be acceptable.

Samples that have been filtered and preserved at Apex Laboratories per client request are listed in the preparation section of the report with the date and time of filtration listed.

Apex Laboratories maintains detailed records on sample receipt, including client label verification, cooler temperature, sample preservation, hold time compliance and field filtration. Data is qualified as necessary, and the lack of qualification indicates compliance with required parameters.

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Philip Nerenberg, Lab Director

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0354 - 04 13 21 1446**

LABORATORY ACCREDITATION INFORMATION

ORELAP Certification ID: OR100062 (Primary Accreditation) - EPA ID: OR01039

All methods and analytes reported from work performed at Apex Laboratories are included on Apex Laboratories' ORELAP Scope of Certification, with the exception of any analyte(s) listed below:

Apex Laboratories

Matrix	Analysis	TNI_ID	Analyte	TNI_ID	Accreditation

All reported analytes are included in Apex Laboratories' current ORELAP scope.

Secondary Accreditations

Apex Laboratories also maintains reciprocal accreditation with non-TNI states (Washington DOE), as well as other state specific accreditations not listed here.

Subcontract Laboratory Accreditations

Subcontracted data falls outside of Apex Laboratories' Scope of Accreditation.
Please see the Subcontract Laboratory report for full details, or contact your Project Manager for more information.

Field Testing Parameters

Results for Field Tested data are provded by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.

Apex Laboratories

Philip Nerenberg, Lab Director

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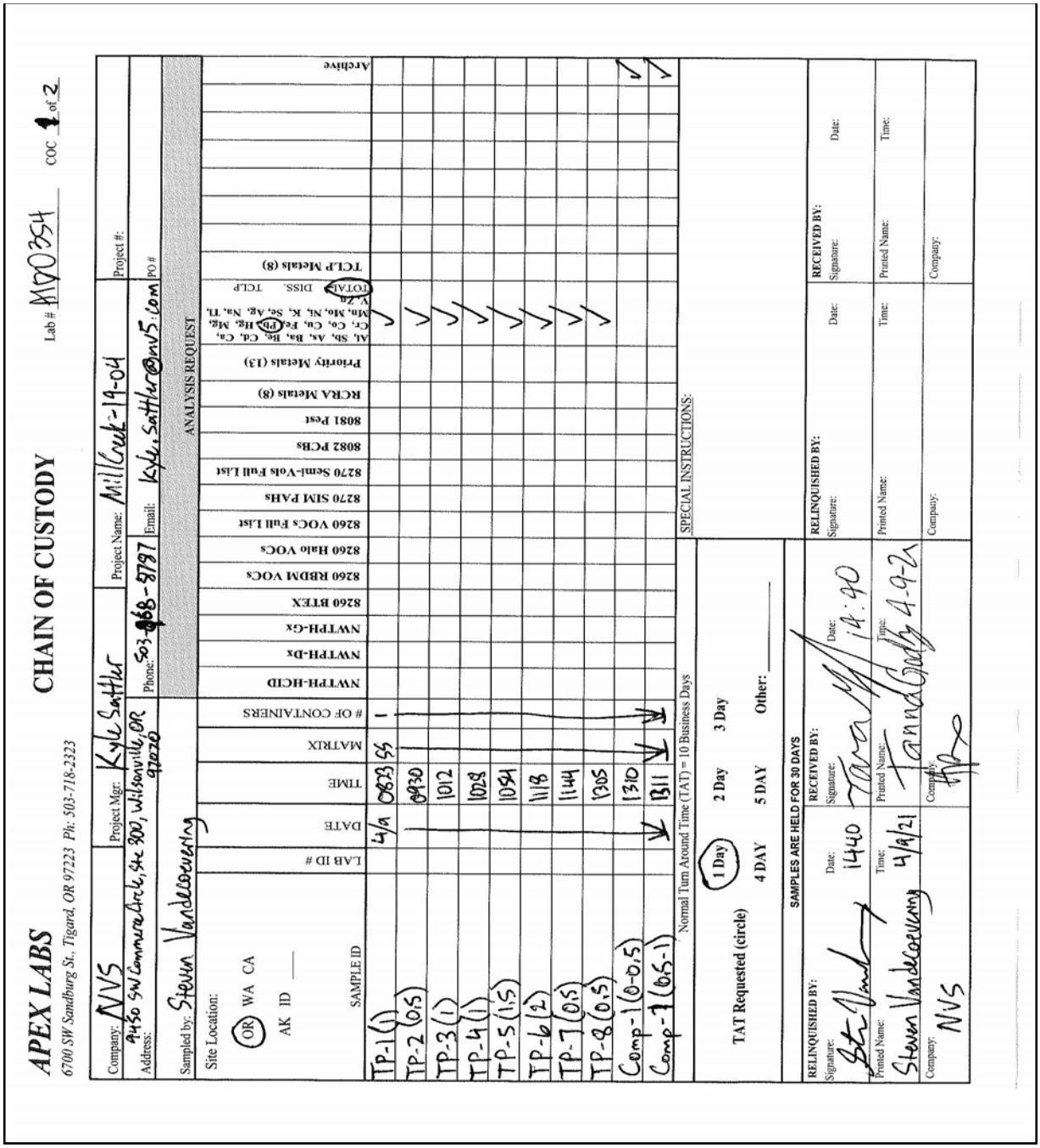
ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0354 - 04 13 21 1446**



APEX LABS
6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323

CHAIN OF CUSTODY

Lab # A1D0354 COC 1 of 2

Company: NVS | Project Mgr: Kyle Sattler | Project Name: MillCreek-19-04 | Project #:
Address: 9450 SW Commerce Circle, Ste 200, Wilsonville, OR 97070 | Phone: 503-968-8787 | Email: Kyle.Sattler@nvs.com | PO #
Sampled by: Steven Vandeberg

Site Location: (OR) WA CA AK ID ____

SAMPLE ID	LAB ID #	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 BTEX	8260 RBDM VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIM PAHs	8270 Semi-Vols Full List	8082 PCBs	8081 Pest	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn	TOTAL DISS. TCLP	TCLP Metals (8)	Archive
TP-1 (1)		4/8	0823	SS	1														✓		
TP-2 (0.5)			0930																✓		
TP-3 (1)			1012																✓		
TP-4 (1)			1028																✓		
TP-5 (1.5)			1041																✓		
TP-6 (2)			1118																✓		
TP-7 (0.5)			1144																✓		
TP-8 (0.5)			1305																✓		
Comp-1 (0-0.5)			1310		✓														✓		✓
Comp-1 (0.5-1)		✓	1311	✓	✓														✓		✓

Normal Turn Around Time (TAT) = 10 Business Days

TAT Requested (circle): (1 Day) 2 Day 3 Day 4 DAY 5 DAY Other: ____

SPECIAL INSTRUCTIONS:

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature:	Signature:	Signature:	Signature:
Date: 4/9/21	Date:	Date:	Date:
Time: 1440	Time: 14:40	Time:	Time:
Printed Name: Steven Vandeberg	Printed Name: Tanner Holliday	Printed Name:	Printed Name:
Company: NVS	Company:	Company:	Company:

Apex Laboratories

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Philip Nerenberg

Philip Nerenberg, Lab Director

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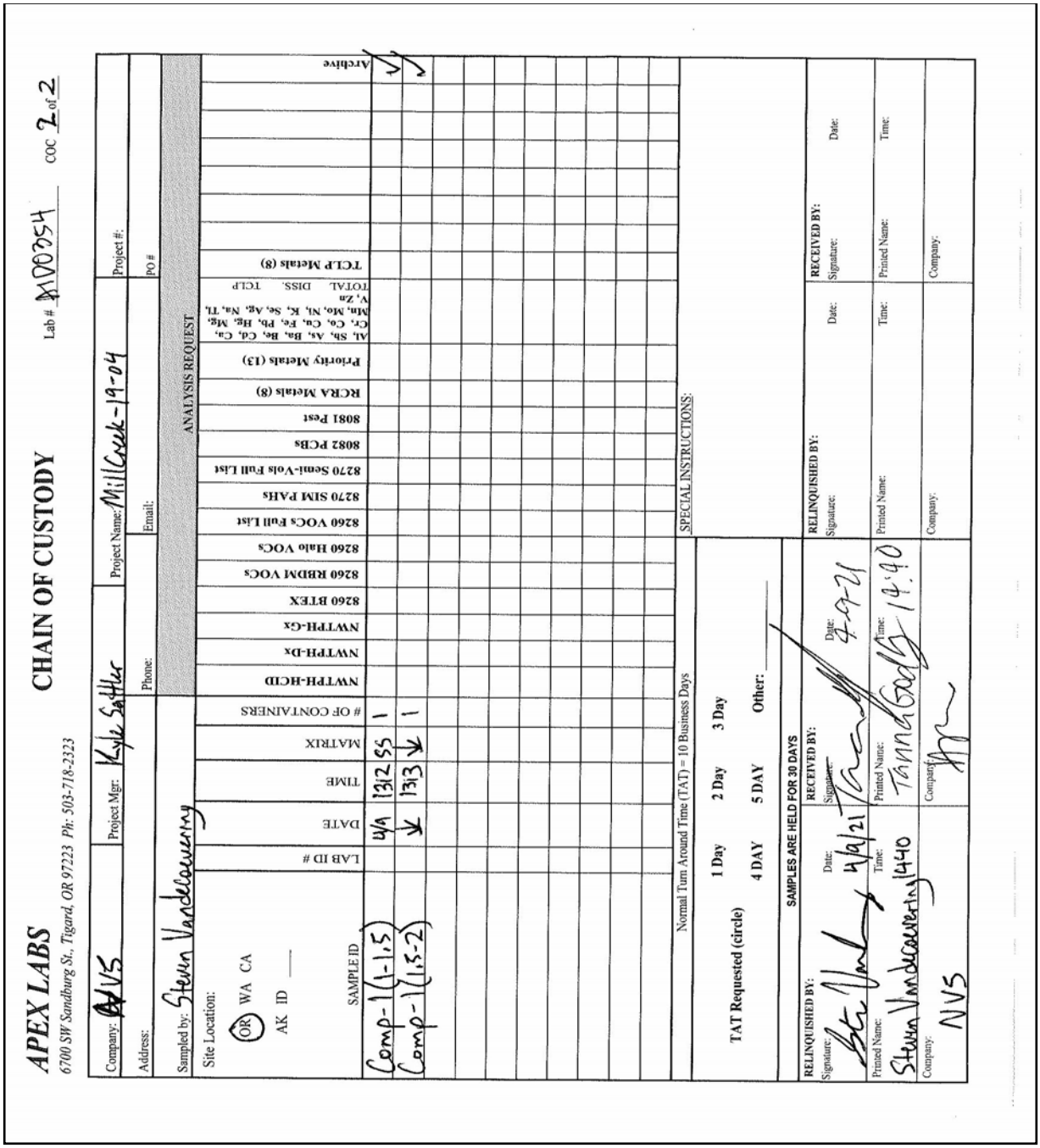
ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0354 - 04 13 21 1446**



APEX LABS
6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323

CHAIN OF CUSTODY

Lab # A1D0354 COC 2 of 2

Company: APEX | Project Mgr: Kyle Sattler | Project Name: MillCreek-19-04 | Project #:
Address: | Phone: | Email: | PO #
Sampled by: Steven Vandeleuerny

Site Location: (OR) WA CA AK ID ____

SAMPLE ID	LAB ID #	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 BTEX	8260 RBDM VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIM PAHs	8270 Semi-Vols Full List	8082 PCBs	8081 Pest	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn	TOTAL DISS. TCLP	TCLP Metals (8)	Archive
Comp-1(1-1.5)		4/8	1312	SS	1																✓
Comp-1(1.5-2)		↓	1313	↓	1																✓

Normal Turn Around Time (TAT) = 10 Business Days

TAT Requested (circle): 1 Day 2 Day 3 Day 4 DAY 5 DAY Other: ____

SPECIAL INSTRUCTIONS:

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY: Signature: | Date: 4/9/21 | Time: | RECEIVED BY: Signature: | Date: 4-9-21 | Time: 14:40
Printed Name: Steven Vandeleuerny | Time: 1440 | Printed Name: Tanner Goff
Company: NVS | Company:

RELINQUISHED BY: Signature: | Date: | Time: | RECEIVED BY: Signature: | Date: | Time:
Printed Name: | Printed Name:
Company: | Company:

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0354 - 04 13 21 1446**

APEX LABS COOLER RECEIPT FORM

Client: NV5 Element WO#: A1 D0354

Project/Project #: MillCreek-19-04

Delivery Info:

Date/time received: 4-9-21 @ 14:40 By: TAM

Delivered by: Apex___ Client X ESS___ FedEx___ UPS___ Swift___ Senvoy___ SDS___ Other___

Cooler Inspection Date/time inspected: 4-9-21 @ 14:40 By: TAM

Chain of Custody included? Yes X No ___ Custody seals? Yes___ No X

Signed/dated by client? Yes X No ___

Signed/dated by Apex? Yes X No ___

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	2.1	4.1					
Received on ice? (Y/N)	Y	Y					
Temp. blanks? (Y/N)	N	N					
Ice type: (Gel/Real/Other)	Real →						
Condition:	Good →						

Cooler out of temp? (Y/(N)) Possible reason why:

Green dots applied to out of temperature samples? Yes/(No)

Out of temperature samples form initiated? Yes/(No)

Sample Inspection: Date/time inspected: 4/9/21 @ 1508 By: AKL

All samples intact? Yes X No ___ Comments:

Bottle labels/COCs agree? Yes X No ___ Comments:

COC/container discrepancies form initiated? Yes ___ No X

Containers/volumes received appropriate for analysis? Yes X No ___ Comments:

Do VOA vials have visible headspace? Yes ___ No ___ NA X

Comments

Water samples: pH checked: Yes___No___NA X pH appropriate? Yes___No___NA X

Comments:

Additional information:

Labeled by: AKL Witness: B Cooler Inspected by: TAM

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503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

Monday, April 12, 2021

Kyle Sattler
GeoDesign, Inc.
9450 SW Commerce Circle
Wilsonville, OR 97070

RE: A1D0355 - MillCreek-19-04 - MillCreek-19-04

Thank you for using Apex Laboratories. We greatly appreciate your business and strive to provide the highest quality services to the environmental industry.

Enclosed are the results of analyses for work order A1D0355, which was received by the laboratory on 4/9/2021 at 2:40:00PM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: pnerenberg@apex-labs.com, or by phone at 503-718-2323.

Please note: All samples will be disposed of within 30 days of sample receipt, unless prior arrangements have been made.

Cooler Receipt Information

(See Cooler Receipt Form for details)

Cooler #1	2.1 degC	Cooler #2	4.1 degC

This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.
All other deliverables derived from this data, including Electronic Data Deliverables (EDDs), CLP-like forms, client requested summary sheets, and all other products are considered secondary to this report.

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0355 - 04 12 21 1553**

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Comp-1-Native	**A1D0355-01**	**Soil**	**04/09/21 13:05**	**04/09/21 14:40**

Apex Laboratories

Philip Nerenberg, Lab Director

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0355 - 04 12 21 1553**

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
Comp-1-Native (A1D0355-01)				**Matrix: Soil**				
Batch: 1040339								
Lead	**13.4**	---	0.275	mg/kg dry	10	04/09/21 21:44	EPA 6020B	

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0355 - 04 12 21 1553**

ANALYTICAL SAMPLE RESULTS

Percent Dry Weight

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
Comp-1-Native (A1D0355-01)				**Matrix: Soil**		**Batch: 1040303**		
% Solids	**78.3**	---	1.00	%	1	04/12/21 07:51	EPA 8000D	

Apex Laboratories

Philip Nerenberg, Lab Director

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0355 - 04 12 21 1553**

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040339 - EPA 3051A							**Soil**					
Blank (1040339-BLK1)			Prepared: 04/09/21 14:12 Analyzed: 04/09/21 21:29									
EPA 6020B												
Lead	ND	---	0.200	mg/kg wet	10	---	---	---	---	---	---	
LCS (1040339-BS1)			Prepared: 04/09/21 14:12 Analyzed: 04/09/21 21:34									
EPA 6020B												
Lead	49.0	---	0.200	mg/kg wet	10	50.0	---	98	80-120%	---	---	
Duplicate (1040339-DUP2)			Prepared: 04/09/21 14:12 Analyzed: 04/09/21 23:49									
QC Source Sample: Non-SDG (A1D0334-01RE1)												
Lead	**256**	---	53.1	mg/kg wet	2500	---	428	---	---	**50**	**20%**	Q-04, Q-16
Matrix Spike (1040339-MS2)			Prepared: 04/09/21 14:12 Analyzed: 04/09/21 23:54									
QC Source Sample: Non-SDG (A1D0334-01RE1)												
EPA 6020B												
Lead	514	---	51.5	mg/kg wet	2500	51.5	428	**166**	**75-125%**	---	---	Q-04, Q-16

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0355 - 04 12 21 1553**

QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040303 - Total Solids (Dry Weight)							**Soil**					
Duplicate (1040303-DUP1)			Prepared: 04/09/21 07:51			Analyzed: 04/12/21 07:51						
QC Source Sample: Non-SDG (A1D0221-01)												
% Solids	**56.3**	---	1.00	%	1	---	57.6	---	---	2	10%	
Duplicate (1040303-DUP2)			Prepared: 04/09/21 07:51			Analyzed: 04/12/21 07:51						
QC Source Sample: Non-SDG (A1D0263-08)												
% Solids	**78.7**	---	1.00	%	1	---	78.7	---	---	0.04	10%	
Duplicate (1040303-DUP3)			Prepared: 04/09/21 07:51			Analyzed: 04/12/21 07:51						
QC Source Sample: Non-SDG (A1D0286-01)												
% Solids	**84.2**	---	1.00	%	1	---	84.5	---	---	0.4	10%	
Duplicate (1040303-DUP4)			Prepared: 04/09/21 20:27			Analyzed: 04/12/21 07:51						
QC Source Sample: Non-SDG (A1D0337-01)												
% Solids	**76.3**	---	1.00	%	1	---	76.0	---	---	0.4	10%	
Duplicate (1040303-DUP5)			Prepared: 04/09/21 20:27			Analyzed: 04/12/21 07:51						
QC Source Sample: Non-SDG (A1D0371-01)												
% Solids	**77.7**	---	1.00	%	1	---	77.9	---	---	0.2	10%	
Duplicate (1040303-DUP6)			Prepared: 04/09/21 20:27			Analyzed: 04/12/21 07:51						
QC Source Sample: Non-SDG (A1D0378-02)												
% Solids	**86.9**	---	1.00	%	1	---	87.3	---	---	0.4	10%	

No Client related Batch QC samples analyzed for this batch. See notes page for more information.

Apex Laboratories

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0355 - 04 12 21 1553**

SAMPLE PREPARATION INFORMATION

Total Metals by EPA 6020B (ICPMS)

Prep: EPA 3051A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1040339							
A1D0355-01	Soil	EPA 6020B	04/09/21 13:05	04/09/21 16:01	0.464g/50mL	0.5g/50mL	1.08

Percent Dry Weight

Prep: Total Solids (Dry Weight)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1040303							
A1D0355-01	Soil	EPA 8000D	04/09/21 13:05	04/09/21 20:27			NA

Apex Laboratories

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0355 - 04 12 21 1553**

QUALIFIER DEFINITIONS

Client Sample and Quality Control (QC) Sample Qualifier Definitions:

Apex Laboratories

Q-04 Spike recovery and/or RPD is outside control limits due to a non-homogeneous sample matrix.

Q-16 Reanalysis of an original Batch QC sample.

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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ANALYTICAL REPORT

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9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0355 - 04 12 21 1553**

REPORTING NOTES AND CONVENTIONS:

Abbreviations:

DET Analyte DETECTED at or above the detection or reporting limit.

ND Analyte NOT DETECTED at or above the detection or reporting limit.

NR Result Not Reported

RPD Relative Percent Difference. RPDs for Matrix Spikes and Matrix Spike Duplicates are based on concentration, not recovery.

Detection Limits: Limit of Detection (LOD)

Limits of Detection (LODs) are normally set at a level of one half the validated Limit of Quantitation (LOQ).
If no value is listed ('-----'), then the data has not been evaluated below the Reporting Limit.

Reporting Limits: Limit of Quantitation (LOQ)

Validated Limits of Quantitation (LOQs) are reported as the Reporting Limits for all analyses where the LOQ, MRL, PQL or CRL are requested. The LOQ represents a level at or above the low point of the calibration curve, that has been validated according to Apex Laboratories' comprehensive LOQ policies and procedures.

Reporting Conventions:

Basis: Results for soil samples are generally reported on a 100% dry weight basis.
The Result Basis is listed following the units as " dry", " wet", or " " (blank) designation.

" dry" Sample results and Reporting Limits are reported on a dry weight basis. (i.e. "ug/kg dry")
See Percent Solids section for details of dry weight analysis.

" wet" Sample results and Reporting Limits for this analysis are normally dry weight corrected, but have not been modified in this case.

" " Results without 'wet' or 'dry' designation are not normally dry weight corrected. These results are considered 'As Received'.

QC Source:

In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) may be analyzed to demonstrate accuracy and precision of the extraction batch.

Non-Client Batch QC Samples (Duplicates and Matrix Spike/Duplicates) may not be included in this report. Please request a Full QC report if this data is required.

Miscellaneous Notes:

" --- " QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.

" *** " Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

Blanks:

Standard practice is to evaluate the results from Blank QC Samples down to a level equal to ½ the Reporting Limit (RL).
-For Blank hits falling between ½ the RL and the RL (J flagged hits), the associated sample and QC data will receive a 'B-02' qualifier.
-For Blank hits above the RL, the associated sample and QC data will receive a 'B' qualifier, per Apex Laboratories' Blank Policy.
For further details, please request a copy of this document.

Apex Laboratories

Philip Nerenberg, Lab Director

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503-718-2323
ORELAP ID: **OR100062**

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0355 - 04 12 21 1553**

REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks (Cont.):

Sample results flagged with a 'B' or 'B-02' qualifier are potentially biased high if the sample results are less than ten times the level found in the blank for inorganic analyses, or less than five times the level found in the blank for organic analyses.

'B' and 'B-02' qualifications are only applied to sample results detected above the Reporting Level.

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

Water samples containing significant amounts of sediment are decanted or separated prior to extraction, and only the water portion analyzed, unless otherwise directed by the client.

Soil and Sediment Samples:

Soil and Sediment samples containing significant amounts of water are decanted prior to extraction, and only the solid portion analyzed, unless otherwise directed by the client.

Sampling and Preservation Notes:

Certain regulatory programs, such as National Pollutant Discharge Elimination System (NPDES), require that activities such as sample filtration (for dissolved metals, orthophosphate, hexavalent chromium, etc.) and testing of short hold analytes (pH, Dissolved Oxygen, etc.) be performed in the field (on-site) within a short time window. In addition, sample matrix spikes are required for some analyses, and sufficient volume must be provided, and billable site specific QC requested, if this is required. All regulatory permits should be reviewed to ensure that these requirements are being met.

Data users should be aware of which regulations pertain to the samples they submit for testing. If related sample collection activities are not approved for a particular regulatory program, results should be considered estimates. Apex Laboratories will qualify these analytes according to the most stringent requirements, however results for samples that are for non-regulatory purposes may be acceptable.

Samples that have been filtered and preserved at Apex Laboratories per client request are listed in the preparation section of the report with the date and time of filtration listed.

Apex Laboratories maintains detailed records on sample receipt, including client label verification, cooler temperature, sample preservation, hold time compliance and field filtration. Data is qualified as necessary, and the lack of qualification indicates compliance with required parameters.

Apex Laboratories

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Philip Nerenberg, Lab Director

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503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0355 - 04 12 21 1553**

LABORATORY ACCREDITATION INFORMATION

ORELAP Certification ID: OR100062 (Primary Accreditation) - EPA ID: OR01039

All methods and analytes reported from work performed at Apex Laboratories are included on Apex Laboratories' ORELAP Scope of Certification, with the exception of any analyte(s) listed below:

Apex Laboratories

Matrix	Analysis	TNI_ID	Analyte	TNI_ID	Accreditation

All reported analytes are included in Apex Laboratories' current ORELAP scope.

Secondary Accreditations

Apex Laboratories also maintains reciprocal accreditation with non-TNI states (Washington DOE), as well as other state specific accreditations not listed here.

Subcontract Laboratory Accreditations

Subcontracted data falls outside of Apex Laboratories' Scope of Accreditation.
Please see the Subcontract Laboratory report for full details, or contact your Project Manager for more information.

Field Testing Parameters

Results for Field Tested data are provded by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.

Apex Laboratories

Philip Nerenberg, Lab Director

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ANALYTICAL REPORT

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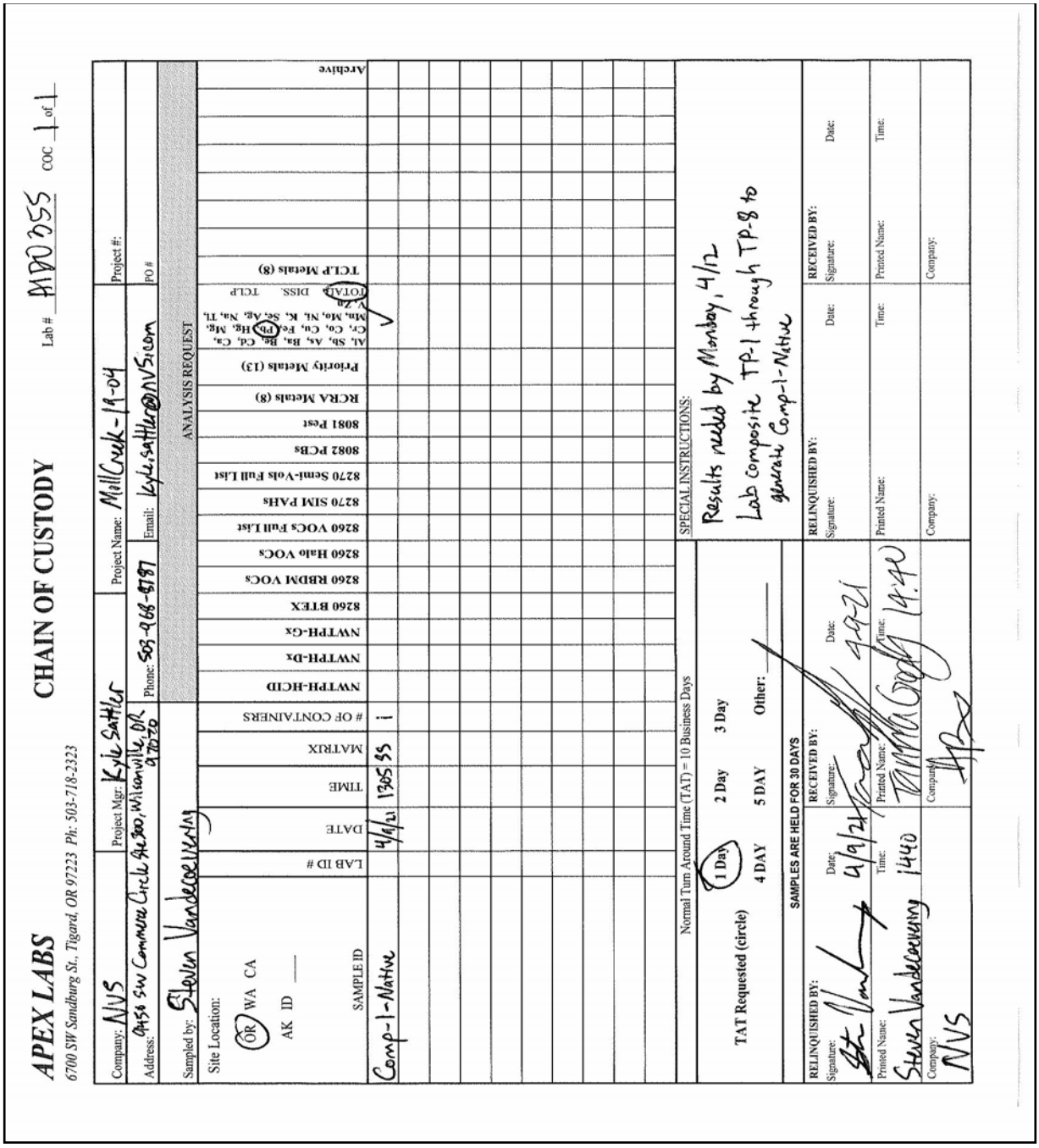
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0355 - 04 12 21 1553**



APEX LABS
6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323

CHAIN OF CUSTODY

Lab # A1D0355 COC 1 of 1

Company: NVS | Project Mgr: Kyle Sattler | Project Name: MillCreek-19-04 | Project #:
Address: 9450 SW Commerce Circle Suite 180, Wilsonville, OR 97070 | Phone: 503-968-6787 | Email: kyle.sattler@NVS.com | PO #
Sampled by: Steven Vandeberg

Site Location: (OR) WA CA AK ID ____

SAMPLE ID	LAB ID #	DATE	TIME	MATRIX	# OF CONTAINERS
Comp-1-Native		4/9/21	1305	SS	1

ANALYSIS REQUEST

NWTPH-HCID
NWTPH-Dx
NWTPH-Gx
8260 BTEX
8260 RBDM VOCs
8260 Halo VOCs
8260 VOCs Full List
8270 SIM PAHs
8270 Semi-Vols Full List
8082 PCBs
8081 Pest
RCRA Metals (8)
Priority Metals (13)
Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, (Pb), Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn
TOTAL DISS. TCLP
TCLP Metals (8)
Archive

Normal Turn Around Time (TAT) = 10 Business Days

TAT Requested (circle): (1 Day) 2 Day 3 Day 4 DAY 5 DAY Other: ____

SPECIAL INSTRUCTIONS:
Results needed by Monday, 4/12
Lab composite TP-1 through TP-8 to generate Comp-1-Native

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY:	Date:	RECEIVED BY:	Date:	RELINQUISHED BY:	Date:	RECEIVED BY:	Date:
Signature:	4/9/21	Signature:	4/9/21	Signature:		Signature:	
Printed Name: Steven Vandeberg	Time: 1440	Printed Name:	Time: 14:40	Printed Name:	Time:	Printed Name:	Time:
Company: NVS		Company:		Company:		Company:	

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0355 - 04 12 21 1553**

APEX LABS COOLER RECEIPT FORM

Client: NV5 Element WO#: A1 D0355

Project/Project #: MillCreek-19-04

Delivery Info:

Date/time received: 4-9-21 @ 14:40 By: TAC

Delivered by: Apex___Client X_ESS___FedEx___UPS___Swift___Senvoy ___SDS___Other_____

Cooler Inspection Date/time inspected: 4-9-21 @ 14:40 By: TAC

Chain of Custody included? Yes X No _____ Custody seals? Yes_____ No X

Signed/dated by client? Yes X No _____

Signed/dated by Apex? Yes X No _____

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	2.1	4.1					
Received on ice? (Y/N)	Y	Y					
Temp. blanks? (Y/N)	N	N					
Ice type: (Gel/Real/Other)	Real →						
Condition:	Good →						

Cooler out of temp? (Y/(N)) Possible reason why: _____

Green dots applied to out of temperature samples? Yes/(No)

Out of temperature samples form initiated? Yes/(No)

Sample Inspection: Date/time inspected: 4/9/21 @ 1508 By: AKK

All samples intact? Yes X No ___ Comments: _____

Bottle labels/COCs agree? Yes X No ___ Comments: Lab created Composite

COC/container discrepancies form initiated? Yes ___ No X

Containers/volumes received appropriate for analysis? Yes X No ___ Comments: _____

Do VOA vials have visible headspace? Yes ___ No ___ NA X

Comments _____

Water samples: pH checked: Yes___No___NA X pH appropriate? Yes___No___NA X

Comments: _____

Additional information: _____

Labeled by: AKK Witness: [signature] Cooler Inspected by: TAC

Apex Laboratories

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Philip Nerenberg

Philip Nerenberg, Lab Director

Apex Laboratories, LLC
6700 S.W. Sandburg Street
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503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

Thursday, April 15, 2021

Kyle Sattler
GeoDesign, Inc.
9450 SW Commerce Circle
Wilsonville, OR 97070

RE: A1D0434 - MillCreek-19-04 - MillCreek-19-04

Thank you for using Apex Laboratories. We greatly appreciate your business and strive to provide the highest quality services to the environmental industry.

Enclosed are the results of analyses for work order A1D0434, which was received by the laboratory on 4/12/2021 at 4:10:00PM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: pnerenberg@apex-labs.com, or by phone at 503-718-2323.

Please note: All samples will be disposed of within 30 days of sample receipt, unless prior arrangements have been made.

Cooler Receipt Information

(See Cooler Receipt Form for details)

Cooler #1	6.1 degC

This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.
All other deliverables derived from this data, including Electronic Data Deliverables (EDDs), CLP-like forms, client requested summary sheets, and all other products are considered secondary to this report.

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Philip Nerenberg

Philip Nerenberg, Lab Director

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0434 - 04 15 21 1458**

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
UST-1	**A1D0434-01**	**Soil**	**04/12/21 13:15**	**04/12/21 16:10**
Lead Comp	**A1D0434-02**	**Soil**	**04/12/21 14:30**	**04/12/21 16:10**

Apex Laboratories

Philip Nerenberg, Lab Director

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: MillCreek-19-04	
9450 SW Commerce Circle	Project Number: MillCreek-19-04	Report ID:
Wilsonville, OR 97070	Project Manager: Kyle Sattler	A1D0434 - 04 15 21 1458

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
UST-1 (A1D0434-01)				**Matrix: Soil**		**Batch: 1040492**		
Acetone	ND	---	1.58	mg/kg dry	50	04/14/21 15:30	5035A/8260D	
Acrylonitrile	ND	---	0.158	mg/kg dry	50	04/14/21 15:30	5035A/8260D	
Benzene	ND	---	0.0158	mg/kg dry	50	04/14/21 15:30	5035A/8260D	
Bromobenzene	ND	---	0.0396	mg/kg dry	50	04/14/21 15:30	5035A/8260D	
Bromochloromethane	ND	---	0.0792	mg/kg dry	50	04/14/21 15:30	5035A/8260D	
Bromodichloromethane	ND	---	0.0792	mg/kg dry	50	04/14/21 15:30	5035A/8260D	
Bromoform	ND	---	0.158	mg/kg dry	50	04/14/21 15:30	5035A/8260D	
Bromomethane	ND	---	0.792	mg/kg dry	50	04/14/21 15:30	5035A/8260D	
2-Butanone (MEK)	ND	---	0.792	mg/kg dry	50	04/14/21 15:30	5035A/8260D	
n-Butylbenzene	**2.56**	---	0.0792	mg/kg dry	50	04/14/21 15:30	5035A/8260D	**M-02**
sec-Butylbenzene	**0.863**	---	0.0792	mg/kg dry	50	04/14/21 15:30	5035A/8260D	
tert-Butylbenzene	ND	---	0.0792	mg/kg dry	50	04/14/21 15:30	5035A/8260D	
Carbon disulfide	ND	---	0.792	mg/kg dry	50	04/14/21 15:30	5035A/8260D	
Carbon tetrachloride	ND	---	0.0792	mg/kg dry	50	04/14/21 15:30	5035A/8260D	
Chlorobenzene	ND	---	0.0594	mg/kg dry	50	04/14/21 15:30	5035A/8260D	R-02
Chloroethane	ND	---	0.792	mg/kg dry	50	04/14/21 15:30	5035A/8260D	
Chloroform	ND	---	0.0792	mg/kg dry	50	04/14/21 15:30	5035A/8260D	
Chloromethane	ND	---	0.396	mg/kg dry	50	04/14/21 15:30	5035A/8260D	
2-Chlorotoluene	ND	---	0.0792	mg/kg dry	50	04/14/21 15:30	5035A/8260D	
4-Chlorotoluene	ND	---	0.0792	mg/kg dry	50	04/14/21 15:30	5035A/8260D	
Dibromochloromethane	ND	---	0.158	mg/kg dry	50	04/14/21 15:30	5035A/8260D	
1,2-Dibromo-3-chloropropane	ND	---	0.396	mg/kg dry	50	04/14/21 15:30	5035A/8260D	
1,2-Dibromoethane (EDB)	ND	---	0.0792	mg/kg dry	50	04/14/21 15:30	5035A/8260D	
Dibromomethane	ND	---	0.0792	mg/kg dry	50	04/14/21 15:30	5035A/8260D	
1,2-Dichlorobenzene	ND	---	0.0396	mg/kg dry	50	04/14/21 15:30	5035A/8260D	
1,3-Dichlorobenzene	ND	---	0.0396	mg/kg dry	50	04/14/21 15:30	5035A/8260D	
1,4-Dichlorobenzene	ND	---	0.0396	mg/kg dry	50	04/14/21 15:30	5035A/8260D	
Dichlorodifluoromethane	ND	---	0.158	mg/kg dry	50	04/14/21 15:30	5035A/8260D	
1,1-Dichloroethane	ND	---	0.0396	mg/kg dry	50	04/14/21 15:30	5035A/8260D	
1,2-Dichloroethane (EDC)	ND	---	0.0396	mg/kg dry	50	04/14/21 15:30	5035A/8260D	
1,1-Dichloroethene	ND	---	0.0396	mg/kg dry	50	04/14/21 15:30	5035A/8260D	
cis-1,2-Dichloroethene	ND	---	0.0396	mg/kg dry	50	04/14/21 15:30	5035A/8260D	
trans-1,2-Dichloroethene	ND	---	0.0396	mg/kg dry	50	04/14/21 15:30	5035A/8260D	

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Philip Nerenberg, Lab Director

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Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

GeoDesign, Inc.	Project: MillCreek-19-04	
9450 SW Commerce Circle	Project Number: MillCreek-19-04	Report ID:
Wilsonville, OR 97070	Project Manager: Kyle Sattler	A1D0434 - 04 15 21 1458

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
UST-1 (A1D0434-01)				**Matrix: Soil**		**Batch: 1040492**		
1,2-Dichloropropane	ND	---	0.0396	mg/kg dry	50	04/14/21 15:30	5035A/8260D	
1,3-Dichloropropane	ND	---	0.0792	mg/kg dry	50	04/14/21 15:30	5035A/8260D	
2,2-Dichloropropane	ND	---	0.0792	mg/kg dry	50	04/14/21 15:30	5035A/8260D	
1,1-Dichloropropene	ND	---	0.0792	mg/kg dry	50	04/14/21 15:30	5035A/8260D	
cis-1,3-Dichloropropene	ND	---	0.0792	mg/kg dry	50	04/14/21 15:30	5035A/8260D	
trans-1,3-Dichloropropene	ND	---	0.0792	mg/kg dry	50	04/14/21 15:30	5035A/8260D	
Ethylbenzene	**0.0971**	---	0.0396	mg/kg dry	50	04/14/21 15:30	5035A/8260D	
Hexachlorobutadiene	ND	---	0.158	mg/kg dry	50	04/14/21 15:30	5035A/8260D	
2-Hexanone	ND	---	1.03	mg/kg dry	50	04/14/21 15:30	5035A/8260D	R-02
Isopropylbenzene	**0.244**	---	0.0792	mg/kg dry	50	04/14/21 15:30	5035A/8260D	
4-Isopropyltoluene	**0.846**	---	0.0792	mg/kg dry	50	04/14/21 15:30	5035A/8260D	**M-02**
Methylene chloride	ND	---	0.792	mg/kg dry	50	04/14/21 15:30	5035A/8260D	
4-Methyl-2-pentanone (MiBK)	ND	---	4.00	mg/kg dry	50	04/14/21 15:30	5035A/8260D	R-02
Methyl tert-butyl ether (MTBE)	ND	---	0.0792	mg/kg dry	50	04/14/21 15:30	5035A/8260D	
Naphthalene	**4.90**	---	0.158	mg/kg dry	50	04/14/21 15:30	5035A/8260D	
n-Propylbenzene	**1.23**	---	0.0396	mg/kg dry	50	04/14/21 15:30	5035A/8260D	
Styrene	ND	---	0.0792	mg/kg dry	50	04/14/21 15:30	5035A/8260D	
1,1,1,2-Tetrachloroethane	ND	---	0.0396	mg/kg dry	50	04/14/21 15:30	5035A/8260D	
1,1,2,2-Tetrachloroethane	ND	---	0.376	mg/kg dry	50	04/14/21 15:30	5035A/8260D	R-02
Tetrachloroethene (PCE)	ND	---	0.0396	mg/kg dry	50	04/14/21 15:30	5035A/8260D	
Toluene	ND	---	0.0792	mg/kg dry	50	04/14/21 15:30	5035A/8260D	
1,2,3-Trichlorobenzene	ND	---	0.396	mg/kg dry	50	04/14/21 15:30	5035A/8260D	
1,2,4-Trichlorobenzene	ND	---	0.396	mg/kg dry	50	04/14/21 15:30	5035A/8260D	
1,1,1-Trichloroethane	ND	---	0.0396	mg/kg dry	50	04/14/21 15:30	5035A/8260D	
1,1,2-Trichloroethane	ND	---	0.0396	mg/kg dry	50	04/14/21 15:30	5035A/8260D	
Trichloroethene (TCE)	ND	---	0.0396	mg/kg dry	50	04/14/21 15:30	5035A/8260D	
Trichlorofluoromethane	ND	---	0.158	mg/kg dry	50	04/14/21 15:30	5035A/8260D	
1,2,3-Trichloropropane	ND	---	0.455	mg/kg dry	50	04/14/21 15:30	5035A/8260D	R-02
1,3,5-Trimethylbenzene	**15.4**	---	0.0792	mg/kg dry	50	04/14/21 15:30	5035A/8260D	
Vinyl chloride	ND	---	0.0396	mg/kg dry	50	04/14/21 15:30	5035A/8260D	
m,p-Xylene	**0.822**	---	0.0792	mg/kg dry	50	04/14/21 15:30	5035A/8260D	
o-Xylene	ND	---	0.0594	mg/kg dry	50	04/14/21 15:30	5035A/8260D	R-02
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery: 102 %*		*Limits: 80-120 %*	*1*	*04/14/21 15:30*	*5035A/8260D*	

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0434 - 04 15 21 1458**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
UST-1 (A1D0434-01)				**Matrix: Soil**		**Batch: 1040492**		
Surrogate: Toluene-d8 (Surr)			*Recovery: 86 %*	*Limits: 80-120 %*	*1*	*04/14/21 15:30*	*5035A/8260D*	
4-Bromofluorobenzene (Surr)			*91 %*	*79-120 %*	*1*	*04/14/21 15:30*	*5035A/8260D*	
UST-1 (A1D0434-01RE1)				**Matrix: Soil**		**Batch: 1040492**		
1,2,4-Trimethylbenzene	**43.9**	---	1.58	mg/kg dry	1000	04/14/21 16:51	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)			*Recovery: 100 %*	*Limits: 80-120 %*	*1*	*04/14/21 16:51*	*5035A/8260D*	
Toluene-d8 (Surr)			*103 %*	*80-120 %*	*1*	*04/14/21 16:51*	*5035A/8260D*	
4-Bromofluorobenzene (Surr)			*100 %*	*79-120 %*	*1*	*04/14/21 16:51*	*5035A/8260D*	

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0434 - 04 15 21 1458**

ANALYTICAL SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
UST-1 (A1D0434-01RE1)				**Matrix: Soil**		**Batch: 1040431**		**C-07**
Aroclor 1016	ND	---	0.0136	mg/kg dry	1	04/14/21 09:07	EPA 8082A	
Aroclor 1221	ND	---	0.0136	mg/kg dry	1	04/14/21 09:07	EPA 8082A	
Aroclor 1232	ND	---	0.0136	mg/kg dry	1	04/14/21 09:07	EPA 8082A	
Aroclor 1242	ND	---	0.0136	mg/kg dry	1	04/14/21 09:07	EPA 8082A	
Aroclor 1248	ND	---	0.0136	mg/kg dry	1	04/14/21 09:07	EPA 8082A	
Aroclor 1254	ND	---	0.0136	mg/kg dry	1	04/14/21 09:07	EPA 8082A	
Aroclor 1260	ND	---	0.0136	mg/kg dry	1	04/14/21 09:07	EPA 8082A	
Surrogate: Decachlorobiphenyl (Surr)		*Recovery: 95 %*		*Limits: 60-125 %*	*1*	*04/14/21 09:07*	*EPA 8082A*	

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0434 - 04 15 21 1458**

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
UST-1 (A1D0434-01)				**Matrix: Soil**				
Batch: 1040409								
Arsenic	**12.3**	---	1.49	mg/kg dry	10	04/13/21 07:01	EPA 6020B	
Barium	**233**	---	1.49	mg/kg dry	10	04/13/21 07:01	EPA 6020B	
Cadmium	ND	---	0.297	mg/kg dry	10	04/13/21 07:01	EPA 6020B	
Chromium	**33.0**	---	1.49	mg/kg dry	10	04/13/21 07:01	EPA 6020B	
Lead	**80.6**	---	0.297	mg/kg dry	10	04/13/21 07:01	EPA 6020B	
Mercury	ND	---	0.119	mg/kg dry	10	04/13/21 07:01	EPA 6020B	
Selenium	ND	---	1.49	mg/kg dry	10	04/13/21 07:01	EPA 6020B	
Silver	ND	---	0.297	mg/kg dry	10	04/13/21 07:01	EPA 6020B	
Lead Comp (A1D0434-02RE1)				**Matrix: Soil**				
Batch: 1040409								
Lead	**643**	---	1.21	mg/kg dry	50	04/13/21 15:41	EPA 6020B	**Q-42**

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0434 - 04 15 21 1458**

ANALYTICAL SAMPLE RESULTS

Percent Dry Weight

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
UST-1 (A1D0434-01)				**Matrix: Soil**		**Batch: 1040424**		
% Solids	**71.6**	---	1.00	%	1	04/14/21 07:37	EPA 8000D	
Lead Comp (A1D0434-02)				**Matrix: Soil**		**Batch: 1040410**		
% Solids	**89.8**	---	1.00	%	1	04/13/21 08:34	EPA 8000D	

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9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0434 - 04 15 21 1458**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040492 - EPA 5035A							**Soil**					
Blank (1040492-BLK1)			Prepared: 04/14/21 09:00 Analyzed: 04/14/21 15:03									
5035A/8260D												
Acetone	ND	---	0.667	mg/kg wet	50	---	---	---	---	---	---	
Acrylonitrile	ND	---	0.0667	mg/kg wet	50	---	---	---	---	---	---	
Benzene	ND	---	0.00667	mg/kg wet	50	---	---	---	---	---	---	
Bromobenzene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Bromochloromethane	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Bromodichloromethane	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Bromoform	ND	---	0.0667	mg/kg wet	50	---	---	---	---	---	---	
Bromomethane	ND	---	0.333	mg/kg wet	50	---	---	---	---	---	---	
2-Butanone (MEK)	ND	---	0.333	mg/kg wet	50	---	---	---	---	---	---	
n-Butylbenzene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
sec-Butylbenzene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
tert-Butylbenzene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Carbon disulfide	ND	---	0.333	mg/kg wet	50	---	---	---	---	---	---	
Carbon tetrachloride	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Chlorobenzene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Chloroethane	ND	---	0.333	mg/kg wet	50	---	---	---	---	---	---	
Chloroform	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Chloromethane	ND	---	0.167	mg/kg wet	50	---	---	---	---	---	---	
2-Chlorotoluene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
4-Chlorotoluene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Dibromochloromethane	ND	---	0.0667	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	---	0.167	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Dibromomethane	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	---	0.0667	mg/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethane	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	

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GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0434 - 04 15 21 1458**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040492 - EPA 5035A							**Soil**					
Blank (1040492-BLK1)			Prepared: 04/14/21 09:00 Analyzed: 04/14/21 15:03									
1,2-Dichloropropane	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,3-Dichloropropane	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
2,2-Dichloropropane	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,1-Dichloropropene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Ethylbenzene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Hexachlorobutadiene	ND	---	0.0667	mg/kg wet	50	---	---	---	---	---	---	
2-Hexanone	ND	---	0.333	mg/kg wet	50	---	---	---	---	---	---	
Isopropylbenzene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
4-Isopropyltoluene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Methylene chloride	ND	---	0.333	mg/kg wet	50	---	---	---	---	---	---	
4-Methyl-2-pentanone (MiBK)	ND	---	0.333	mg/kg wet	50	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Naphthalene	ND	---	0.0667	mg/kg wet	50	---	---	---	---	---	---	
n-Propylbenzene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Styrene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Toluene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,2,3-Trichlorobenzene	ND	---	0.167	mg/kg wet	50	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	---	0.167	mg/kg wet	50	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,1,2-Trichloroethane	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Trichlorofluoromethane	ND	---	0.0667	mg/kg wet	50	---	---	---	---	---	---	
1,2,3-Trichloropropane	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Vinyl chloride	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
m,p-Xylene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
o-Xylene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	

Surr: 1,4-Difluorobenzene (Surr) *Recovery: 100 %* *Limits: 80-120 %* *Dilution: 1x*

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Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0434 - 04 15 21 1458**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040492 - EPA 5035A							**Soil**					
Blank (1040492-BLK1)			Prepared: 04/14/21 09:00 Analyzed: 04/14/21 15:03									
Surr: Toluene-d8 (Surr)			*Recovery: 104 %*	*Limits: 80-120 %*			*Dilution: 1x*					
4-Bromofluorobenzene (Surr)			*99 %*	*79-120 %*			*"*					
LCS (1040492-BS1)			Prepared: 04/14/21 09:00 Analyzed: 04/14/21 14:09									
5035A/8260D												
Acetone	1.89	---	1.00	mg/kg wet	50	2.00	---	95	80-120%	---	---	
Acrylonitrile	1.13	---	0.100	mg/kg wet	50	1.00	---	113	80-120%	---	---	
Benzene	1.04	---	0.0100	mg/kg wet	50	1.00	---	104	80-120%	---	---	
Bromobenzene	0.970	---	0.0250	mg/kg wet	50	1.00	---	97	80-120%	---	---	
Bromochloromethane	1.09	---	0.0500	mg/kg wet	50	1.00	---	109	80-120%	---	---	
Bromodichloromethane	0.955	---	0.0500	mg/kg wet	50	1.00	---	95	80-120%	---	---	
Bromoform	1.03	---	0.100	mg/kg wet	50	1.00	---	103	80-120%	---	---	
Bromomethane	1.10	---	0.500	mg/kg wet	50	1.00	---	110	80-120%	---	---	
2-Butanone (MEK)	2.14	---	0.500	mg/kg wet	50	2.00	---	107	80-120%	---	---	
n-Butylbenzene	1.04	---	0.0500	mg/kg wet	50	1.00	---	104	80-120%	---	---	
sec-Butylbenzene	0.990	---	0.0500	mg/kg wet	50	1.00	---	99	80-120%	---	---	
tert-Butylbenzene	0.952	---	0.0500	mg/kg wet	50	1.00	---	95	80-120%	---	---	
Carbon disulfide	0.882	---	0.500	mg/kg wet	50	1.00	---	88	80-120%	---	---	
Carbon tetrachloride	1.17	---	0.0500	mg/kg wet	50	1.00	---	117	80-120%	---	---	
Chlorobenzene	0.994	---	0.0250	mg/kg wet	50	1.00	---	99	80-120%	---	---	
Chloroethane	0.960	---	0.500	mg/kg wet	50	1.00	---	96	80-120%	---	---	
Chloroform	1.04	---	0.0500	mg/kg wet	50	1.00	---	104	80-120%	---	---	
Chloromethane	0.998	---	0.250	mg/kg wet	50	1.00	---	100	80-120%	---	---	
2-Chlorotoluene	1.04	---	0.0500	mg/kg wet	50	1.00	---	104	80-120%	---	---	
4-Chlorotoluene	1.02	---	0.0500	mg/kg wet	50	1.00	---	102	80-120%	---	---	
Dibromochloromethane	0.964	---	0.100	mg/kg wet	50	1.00	---	96	80-120%	---	---	
1,2-Dibromo-3-chloropropane	0.784	---	0.250	mg/kg wet	50	1.00	---	**78**	**80-120%**	---	---	Q-55
1,2-Dibromoethane (EDB)	1.03	---	0.0500	mg/kg wet	50	1.00	---	103	80-120%	---	---	
Dibromomethane	1.02	---	0.0500	mg/kg wet	50	1.00	---	102	80-120%	---	---	
1,2-Dichlorobenzene	1.01	---	0.0250	mg/kg wet	50	1.00	---	101	80-120%	---	---	
1,3-Dichlorobenzene	1.02	---	0.0250	mg/kg wet	50	1.00	---	102	80-120%	---	---	
1,4-Dichlorobenzene	0.920	---	0.0250	mg/kg wet	50	1.00	---	92	80-120%	---	---	
Dichlorodifluoromethane	0.924	---	0.100	mg/kg wet	50	1.00	---	92	80-120%	---	---	
1,1-Dichloroethane	1.10	---	0.0250	mg/kg wet	50	1.00	---	110	80-120%	---	---	

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Philip Nerenberg, Lab Director

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ORELAP ID: **OR100062**

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0434 - 04 15 21 1458**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040492 - EPA 5035A							**Soil**					
LCS (1040492-BS1)			Prepared: 04/14/21 09:00 Analyzed: 04/14/21 14:09									
1,2-Dichloroethane (EDC)	1.05	---	0.0250	mg/kg wet	50	1.00	---	105	80-120%	---	---	
1,1-Dichloroethene	1.03	---	0.0250	mg/kg wet	50	1.00	---	103	80-120%	---	---	
cis-1,2-Dichloroethene	1.08	---	0.0250	mg/kg wet	50	1.00	---	108	80-120%	---	---	
trans-1,2-Dichloroethene	1.05	---	0.0250	mg/kg wet	50	1.00	---	105	80-120%	---	---	
1,2-Dichloropropane	1.09	---	0.0250	mg/kg wet	50	1.00	---	109	80-120%	---	---	
1,3-Dichloropropane	1.07	---	0.0500	mg/kg wet	50	1.00	---	107	80-120%	---	---	
2,2-Dichloropropane	1.10	---	0.0500	mg/kg wet	50	1.00	---	110	80-120%	---	---	
1,1-Dichloropropene	1.04	---	0.0500	mg/kg wet	50	1.00	---	104	80-120%	---	---	
cis-1,3-Dichloropropene	0.948	---	0.0500	mg/kg wet	50	1.00	---	95	80-120%	---	---	
trans-1,3-Dichloropropene	0.909	---	0.0500	mg/kg wet	50	1.00	---	91	80-120%	---	---	
Ethylbenzene	0.992	---	0.0250	mg/kg wet	50	1.00	---	99	80-120%	---	---	
Hexachlorobutadiene	0.958	---	0.100	mg/kg wet	50	1.00	---	96	80-120%	---	---	
2-Hexanone	2.09	---	0.500	mg/kg wet	50	2.00	---	105	80-120%	---	---	
Isopropylbenzene	0.992	---	0.0500	mg/kg wet	50	1.00	---	99	80-120%	---	---	
4-Isopropyltoluene	1.01	---	0.0500	mg/kg wet	50	1.00	---	101	80-120%	---	---	
Methylene chloride	0.962	---	0.500	mg/kg wet	50	1.00	---	96	80-120%	---	---	
4-Methyl-2-pentanone (MiBK)	2.03	---	0.500	mg/kg wet	50	2.00	---	102	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	1.03	---	0.0500	mg/kg wet	50	1.00	---	103	80-120%	---	---	
Naphthalene	0.974	---	0.100	mg/kg wet	50	1.00	---	97	80-120%	---	---	
n-Propylbenzene	1.02	---	0.0250	mg/kg wet	50	1.00	---	102	80-120%	---	---	
Styrene	1.06	---	0.0500	mg/kg wet	50	1.00	---	106	80-120%	---	---	
1,1,1,2-Tetrachloroethane	1.14	---	0.0250	mg/kg wet	50	1.00	---	114	80-120%	---	---	
1,1,2,2-Tetrachloroethane	1.05	---	0.0500	mg/kg wet	50	1.00	---	105	80-120%	---	---	
Tetrachloroethene (PCE)	0.999	---	0.0250	mg/kg wet	50	1.00	---	100	80-120%	---	---	
Toluene	0.978	---	0.0500	mg/kg wet	50	1.00	---	98	80-120%	---	---	
1,2,3-Trichlorobenzene	1.04	---	0.250	mg/kg wet	50	1.00	---	104	80-120%	---	---	
1,2,4-Trichlorobenzene	0.989	---	0.250	mg/kg wet	50	1.00	---	99	80-120%	---	---	
1,1,1-Trichloroethane	1.02	---	0.0250	mg/kg wet	50	1.00	---	102	80-120%	---	---	
1,1,2-Trichloroethane	1.04	---	0.0250	mg/kg wet	50	1.00	---	104	80-120%	---	---	
Trichloroethene (TCE)	1.03	---	0.0250	mg/kg wet	50	1.00	---	103	80-120%	---	---	
Trichlorofluoromethane	0.947	---	0.100	mg/kg wet	50	1.00	---	95	80-120%	---	---	
1,2,3-Trichloropropane	1.02	---	0.0500	mg/kg wet	50	1.00	---	102	80-120%	---	---	
1,2,4-Trimethylbenzene	1.07	---	0.0500	mg/kg wet	50	1.00	---	107	80-120%	---	---	
1,3,5-Trimethylbenzene	1.04	---	0.0500	mg/kg wet	50	1.00	---	104	80-120%	---	---	

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Philip Nerenberg, Lab Director

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ORELAP ID: **OR100062**

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0434 - 04 15 21 1458**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040492 - EPA 5035A							**Soil**					
LCS (1040492-BS1)			Prepared: 04/14/21 09:00 Analyzed: 04/14/21 14:09									
Vinyl chloride	0.991	---	0.0250	mg/kg wet	50	1.00	---	99	80-120%	---	---	
m,p-Xylene	2.00	---	0.0500	mg/kg wet	50	2.00	---	100	80-120%	---	---	
o-Xylene	1.02	---	0.0250	mg/kg wet	50	1.00	---	102	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*101 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*102 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*96 %*		*79-120 %*			*"*				
Duplicate (1040492-DUP1)			Prepared: 04/13/21 17:33 Analyzed: 04/14/21 21:46									**TEMP**
QC Source Sample: Non-SDG (A1D0544-01)												
Acetone	ND	---	1.30	mg/kg dry	50	---	ND	---	---	---	30%	
Acrylonitrile	ND	---	0.130	mg/kg dry	50	---	ND	---	---	---	30%	
Benzene	**0.0448**	---	0.0130	mg/kg dry	50	---	ND	---	---		**30%**	Q-05
Bromobenzene	ND	---	0.0326	mg/kg dry	50	---	ND	---	---	---	30%	
Bromochloromethane	ND	---	0.0652	mg/kg dry	50	---	ND	---	---	---	30%	
Bromodichloromethane	ND	---	0.0652	mg/kg dry	50	---	ND	---	---	---	30%	
Bromoform	ND	---	0.130	mg/kg dry	50	---	ND	---	---	---	30%	
Bromomethane	ND	---	0.652	mg/kg dry	50	---	ND	---	---	---	30%	
2-Butanone (MEK)	ND	---	0.652	mg/kg dry	50	---	ND	---	---	---	30%	
n-Butylbenzene	**0.623**	---	0.0652	mg/kg dry	50	---	0.139	---	---	**127**	**30%**	Q-04
sec-Butylbenzene	**0.204**	---	0.0652	mg/kg dry	50	---	0.0561	---	---	**114**	**30%**	Q-05
tert-Butylbenzene	ND	---	0.0652	mg/kg dry	50	---	ND	---	---	---	30%	
Carbon disulfide	ND	---	0.652	mg/kg dry	50	---	ND	---	---	---	30%	
Carbon tetrachloride	ND	---	0.0652	mg/kg dry	50	---	ND	---	---	---	30%	
Chlorobenzene	ND	---	0.0326	mg/kg dry	50	---	ND	---	---	**---**	**30%**	Q-05
Chloroethane	ND	---	0.652	mg/kg dry	50	---	ND	---	---	---	30%	
Chloroform	ND	---	0.0652	mg/kg dry	50	---	ND	---	---	---	30%	
Chloromethane	ND	---	0.326	mg/kg dry	50	---	ND	---	---	---	30%	
2-Chlorotoluene	ND	---	0.0652	mg/kg dry	50	---	ND	---	---	---	30%	
4-Chlorotoluene	ND	---	0.0652	mg/kg dry	50	---	ND	---	---	---	30%	
Dibromochloromethane	ND	---	0.130	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dibromo-3-chloropropane	ND	---	0.326	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dibromoethane (EDB)	ND	---	0.0652	mg/kg dry	50	---	ND	---	---	---	30%	
Dibromomethane	ND	---	0.0652	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichlorobenzene	**0.226**	---	0.0326	mg/kg dry	50	---	0.0886	---	---	**87**	**30%**	Q-04

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Philip Nerenberg, Lab Director

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503-718-2323
ORELAP ID: **OR100062**

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0434 - 04 15 21 1458**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040492 - EPA 5035A							**Soil**					
Duplicate (1040492-DUP1)			Prepared: 04/13/21 17:33 Analyzed: 04/14/21 21:46									**TEMP**
QC Source Sample: Non-SDG (A1D0544-01)												
1,3-Dichlorobenzene	ND	---	0.0326	mg/kg dry	50	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	**0.0399**	---	0.0326	mg/kg dry	50	---	0.0167	---	---	**82**	**30%**	Q-05
Dichlorodifluoromethane	ND	---	0.130	mg/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	---	0.0326	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	---	0.0326	mg/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	---	0.0326	mg/kg dry	50	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	---	0.0326	mg/kg dry	50	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	---	0.0326	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	---	0.0326	mg/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	---	0.0652	mg/kg dry	50	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	---	0.0652	mg/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	---	0.0652	mg/kg dry	50	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	---	0.0652	mg/kg dry	50	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	---	0.0652	mg/kg dry	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	---	0.0326	mg/kg dry	50	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	---	0.130	mg/kg dry	50	---	ND	---	---	---	30%	
2-Hexanone	ND	---	0.652	mg/kg dry	50	---	ND	---	---	---	30%	
Isopropylbenzene	**0.0709**	---	0.0652	mg/kg dry	50	---	ND	---	---		**30%**	Q-05
4-Isopropyltoluene	ND	---	0.0652	mg/kg dry	50	---	ND	---	---	---	30%	
Methylene chloride	ND	---	0.652	mg/kg dry	50	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	---	0.652	mg/kg dry	50	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	---	0.0652	mg/kg dry	50	---	ND	---	---	---	30%	
Naphthalene	**0.718**	---	0.130	mg/kg dry	50	---	0.448	---	---	**46**	**30%**	Q-04
n-Propylbenzene	**0.525**	---	0.0326	mg/kg dry	50	---	0.159	---	---	**107**	**30%**	Q-04
Styrene	ND	---	0.0652	mg/kg dry	50	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	---	0.0326	mg/kg dry	50	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	---	0.0652	mg/kg dry	50	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	---	0.0326	mg/kg dry	50	---	ND	---	---	---	30%	
Toluene	ND	---	0.0652	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	---	0.326	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	---	0.326	mg/kg dry	50	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	---	0.0326	mg/kg dry	50	---	ND	---	---	---	30%	
1,1,2-Trichloroethane	ND	---	0.0326	mg/kg dry	50	---	ND	---	---	---	30%	

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ORELAP ID: **OR100062**

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0434 - 04 15 21 1458**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040492 - EPA 5035A							**Soil**					
Duplicate (1040492-DUP1)			Prepared: 04/13/21 17:33 Analyzed: 04/14/21 21:46									**TEMP**
QC Source Sample: Non-SDG (A1D0544-01)												
Trichloroethene (TCE)	ND	---	0.0326	mg/kg dry	50	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	---	0.130	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	---	0.0652	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	**0.121**	---	0.0652	mg/kg dry	50	---	0.122	---	---	0.3	30%	
1,3,5-Trimethylbenzene	ND	---	0.0652	mg/kg dry	50	---	ND	---	---	---	30%	
Vinyl chloride	ND	---	0.0326	mg/kg dry	50	---	ND	---	---	---	30%	
m,p-Xylene	ND	---	0.0652	mg/kg dry	50	---	ND	---	---	---	30%	
o-Xylene	ND	---	0.0326	mg/kg dry	50	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*101 %*	*Limits:*	*80-120 %*		*Dilution: 1x*					
Toluene-d8 (Surr)			*102 %*		*80-120 %*		*"*					
4-Bromofluorobenzene (Surr)			*102 %*		*79-120 %*		*"*					
Duplicate (1040492-DUP2)			Prepared: 04/13/21 16:48 Analyzed: 04/14/21 22:40									**TEMP**
QC Source Sample: Non-SDG (A1D0544-04)												
Acetone	ND	---	1.42	mg/kg dry	50	---	ND	---	---	---	30%	
Acrylonitrile	ND	---	0.142	mg/kg dry	50	---	ND	---	---	---	30%	
Benzene	ND	---	0.0142	mg/kg dry	50	---	ND	---	---	---	30%	
Bromobenzene	ND	---	0.0356	mg/kg dry	50	---	ND	---	---	---	30%	
Bromochloromethane	ND	---	0.0712	mg/kg dry	50	---	ND	---	---	---	30%	
Bromodichloromethane	ND	---	0.0712	mg/kg dry	50	---	ND	---	---	---	30%	
Bromoform	ND	---	0.142	mg/kg dry	50	---	ND	---	---	---	30%	
Bromomethane	ND	---	0.712	mg/kg dry	50	---	ND	---	---	---	30%	
2-Butanone (MEK)	ND	---	0.712	mg/kg dry	50	---	ND	---	---	---	30%	
n-Butylbenzene	ND	---	0.0712	mg/kg dry	50	---	ND	---	---	---	30%	
sec-Butylbenzene	ND	---	0.0712	mg/kg dry	50	---	ND	---	---	---	30%	
tert-Butylbenzene	ND	---	0.0712	mg/kg dry	50	---	ND	---	---	---	30%	
Carbon disulfide	ND	---	0.712	mg/kg dry	50	---	ND	---	---	---	30%	
Carbon tetrachloride	ND	---	0.0712	mg/kg dry	50	---	ND	---	---	---	30%	
Chlorobenzene	ND	---	0.0356	mg/kg dry	50	---	ND	---	---	---	30%	
Chloroethane	ND	---	0.712	mg/kg dry	50	---	ND	---	---	---	30%	
Chloroform	ND	---	0.0712	mg/kg dry	50	---	ND	---	---	---	30%	
Chloromethane	ND	---	0.356	mg/kg dry	50	---	ND	---	---	---	30%	
2-Chlorotoluene	ND	---	0.0712	mg/kg dry	50	---	ND	---	---	---	30%	

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Philip Nerenberg, Lab Director

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ORELAP ID: **OR100062**

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0434 - 04 15 21 1458**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040492 - EPA 5035A							**Soil**					
Duplicate (1040492-DUP2)			Prepared: 04/13/21 16:48 Analyzed: 04/14/21 22:40									**TEMP**
QC Source Sample: Non-SDG (A1D0544-04)												
4-Chlorotoluene	ND	---	0.0712	mg/kg dry	50	---	ND	---	---	---	30%	
Dibromochloromethane	ND	---	0.142	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dibromo-3-chloropropane	ND	---	0.356	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dibromoethane (EDB)	ND	---	0.0712	mg/kg dry	50	---	ND	---	---	---	30%	
Dibromomethane	ND	---	0.0712	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichlorobenzene	ND	---	0.0356	mg/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichlorobenzene	ND	---	0.0356	mg/kg dry	50	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	---	0.0356	mg/kg dry	50	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	---	0.142	mg/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	---	0.0356	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	---	0.0356	mg/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	---	0.0356	mg/kg dry	50	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	---	0.0356	mg/kg dry	50	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	---	0.0356	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	---	0.0356	mg/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	---	0.0712	mg/kg dry	50	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	---	0.0712	mg/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	---	0.0712	mg/kg dry	50	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	---	0.0712	mg/kg dry	50	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	---	0.0712	mg/kg dry	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	---	0.0356	mg/kg dry	50	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	---	0.142	mg/kg dry	50	---	ND	---	---	---	30%	
2-Hexanone	ND	---	0.712	mg/kg dry	50	---	ND	---	---	---	30%	
Isopropylbenzene	ND	---	0.0712	mg/kg dry	50	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	---	0.0712	mg/kg dry	50	---	ND	---	---	---	30%	
Methylene chloride	ND	---	0.712	mg/kg dry	50	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	---	0.712	mg/kg dry	50	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	---	0.0712	mg/kg dry	50	---	ND	---	---	---	30%	
Naphthalene	ND	---	0.142	mg/kg dry	50	---	ND	---	---	---	30%	
n-Propylbenzene	ND	---	0.0356	mg/kg dry	50	---	ND	---	---	---	30%	
Styrene	ND	---	0.0712	mg/kg dry	50	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	---	0.0356	mg/kg dry	50	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	---	0.0712	mg/kg dry	50	---	ND	---	---	---	30%	

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0434 - 04 15 21 1458**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040492 - EPA 5035A							**Soil**					
Duplicate (1040492-DUP2)			Prepared: 04/13/21 16:48 Analyzed: 04/14/21 22:40									**TEMP**
QC Source Sample: Non-SDG (A1D0544-04)												
Tetrachloroethene (PCE)	ND	---	0.0356	mg/kg dry	50	---	ND	---	---	---	30%	
Toluene	ND	---	0.0712	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	---	0.356	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	---	0.356	mg/kg dry	50	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	---	0.0356	mg/kg dry	50	---	ND	---	---	---	30%	
1,1,2-Trichloroethane	ND	---	0.0356	mg/kg dry	50	---	ND	---	---	---	30%	
Trichloroethene (TCE)	ND	---	0.0356	mg/kg dry	50	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	---	0.142	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	---	0.0712	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	---	0.0712	mg/kg dry	50	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	---	0.0712	mg/kg dry	50	---	ND	---	---	---	30%	
Vinyl chloride	ND	---	0.0356	mg/kg dry	50	---	ND	---	---	---	30%	
m,p-Xylene	ND	---	0.0712	mg/kg dry	50	---	ND	---	---	---	30%	
o-Xylene	ND	---	0.0356	mg/kg dry	50	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 99 %*	*Limits: 80-120 %*			*Dilution: 1x*					
Toluene-d8 (Surr)			*100 %*	*80-120 %*			*"*					
4-Bromofluorobenzene (Surr)			*101 %*	*79-120 %*			*"*					
Matrix Spike (1040492-MS1)			Prepared: 04/09/21 11:30 Analyzed: 04/15/21 02:16									**T-02**
QC Source Sample: Non-SDG (A1D0353-01)												
5035A/8260D												
Acetone	2.74	---	1.38	mg/kg dry	50	2.76	ND	99	36-164%	---	---	
Acrylonitrile	1.50	---	0.138	mg/kg dry	50	1.38	ND	109	65-134%	---	---	
Benzene	1.40	---	0.0138	mg/kg dry	50	1.38	ND	101	77-121%	---	---	
Bromobenzene	1.32	---	0.0345	mg/kg dry	50	1.38	ND	95	78-121%	---	---	
Bromochloromethane	1.47	---	0.0691	mg/kg dry	50	1.38	ND	107	78-125%	---	---	
Bromodichloromethane	1.29	---	0.0691	mg/kg dry	50	1.38	ND	93	75-127%	---	---	
Bromoform	1.44	---	0.138	mg/kg dry	50	1.38	ND	104	67-132%	---	---	
Bromomethane	1.41	---	0.691	mg/kg dry	50	1.38	ND	102	53-143%	---	---	
2-Butanone (MEK)	3.03	---	0.691	mg/kg dry	50	2.76	ND	110	51-148%	---	---	
n-Butylbenzene	1.44	---	0.0691	mg/kg dry	50	1.38	ND	104	70-128%	---	---	
sec-Butylbenzene	1.40	---	0.0691	mg/kg dry	50	1.38	ND	101	73-126%	---	---	
tert-Butylbenzene	1.33	---	0.0691	mg/kg dry	50	1.38	ND	96	73-125%	---	---	

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Philip Nerenberg, Lab Director

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ORELAP ID: **OR100062**

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0434 - 04 15 21 1458**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040492 - EPA 5035A							**Soil**					
Matrix Spike (1040492-MS1)			Prepared: 04/09/21 11:30		Analyzed: 04/15/21 02:16							**T-02**
QC Source Sample: Non-SDG (A1D0353-01)												
Carbon disulfide	1.16	---	0.691	mg/kg dry	50	1.38	ND	84	63-132%	---	---	
Carbon tetrachloride	1.60	---	0.0691	mg/kg dry	50	1.38	ND	116	70-135%	---	---	
Chlorobenzene	1.37	---	0.0345	mg/kg dry	50	1.38	ND	99	79-120%	---	---	
Chloroethane	1.29	---	0.691	mg/kg dry	50	1.38	ND	93	59-139%	---	---	
Chloroform	1.37	---	0.0691	mg/kg dry	50	1.38	ND	99	78-123%	---	---	
Chloromethane	1.36	---	0.345	mg/kg dry	50	1.38	ND	98	50-136%	---	---	
2-Chlorotoluene	1.46	---	0.0691	mg/kg dry	50	1.38	ND	105	75-122%	---	---	
4-Chlorotoluene	1.39	---	0.0691	mg/kg dry	50	1.38	ND	100	72-124%	---	---	
Dibromochloromethane	1.36	---	0.138	mg/kg dry	50	1.38	ND	99	74-126%	---	---	
1,2-Dibromo-3-chloropropane	1.16	---	0.345	mg/kg dry	50	1.38	ND	84	61-132%	---	---	Q-54
1,2-Dibromoethane (EDB)	1.46	---	0.0691	mg/kg dry	50	1.38	ND	106	78-122%	---	---	
Dibromomethane	1.39	---	0.0691	mg/kg dry	50	1.38	ND	101	78-125%	---	---	
1,2-Dichlorobenzene	1.39	---	0.0345	mg/kg dry	50	1.38	ND	100	78-121%	---	---	
1,3-Dichlorobenzene	1.41	---	0.0345	mg/kg dry	50	1.38	ND	102	77-121%	---	---	
1,4-Dichlorobenzene	1.31	---	0.0345	mg/kg dry	50	1.38	ND	95	75-120%	---	---	
Dichlorodifluoromethane	1.25	---	0.138	mg/kg dry	50	1.38	ND	91	29-149%	---	---	
1,1-Dichloroethane	1.45	---	0.0345	mg/kg dry	50	1.38	ND	105	76-125%	---	---	
1,2-Dichloroethane (EDC)	1.43	---	0.0345	mg/kg dry	50	1.38	ND	103	73-128%	---	---	
1,1-Dichloroethene	1.37	---	0.0345	mg/kg dry	50	1.38	ND	99	70-131%	---	---	
cis-1,2-Dichloroethene	1.45	---	0.0345	mg/kg dry	50	1.38	ND	105	77-123%	---	---	
trans-1,2-Dichloroethene	1.40	---	0.0345	mg/kg dry	50	1.38	ND	101	74-125%	---	---	
1,2-Dichloropropane	1.46	---	0.0345	mg/kg dry	50	1.38	ND	106	76-123%	---	---	
1,3-Dichloropropane	1.48	---	0.0691	mg/kg dry	50	1.38	ND	107	77-121%	---	---	
2,2-Dichloropropane	1.37	---	0.0691	mg/kg dry	50	1.38	ND	99	67-133%	---	---	
1,1-Dichloropropene	1.41	---	0.0691	mg/kg dry	50	1.38	ND	102	76-125%	---	---	
cis-1,3-Dichloropropene	1.30	---	0.0691	mg/kg dry	50	1.38	ND	94	74-126%	---	---	
trans-1,3-Dichloropropene	1.24	---	0.0691	mg/kg dry	50	1.38	ND	90	71-130%	---	---	
Ethylbenzene	1.39	---	0.0345	mg/kg dry	50	1.38	ND	101	76-122%	---	---	
Hexachlorobutadiene	1.30	---	0.138	mg/kg dry	50	1.38	ND	94	61-135%	---	---	
2-Hexanone	3.00	---	0.691	mg/kg dry	50	2.76	ND	109	53-145%	---	---	
Isopropylbenzene	1.40	---	0.0691	mg/kg dry	50	1.38	ND	101	68-134%	---	---	
4-Isopropyltoluene	1.43	---	0.0691	mg/kg dry	50	1.38	ND	104	73-127%	---	---	
Methylene chloride	1.23	---	0.691	mg/kg dry	50	1.38	ND	89	70-128%	---	---	

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ORELAP ID: OR100062

ANALYTICAL REPORT

GeoDesign, Inc.	Project: MillCreek-19-04	
9450 SW Commerce Circle	Project Number: MillCreek-19-04	Report ID:
Wilsonville, OR 97070	Project Manager: Kyle Sattler	A1D0434 - 04 15 21 1458

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040492 - EPA 5035A							Soil					
Matrix Spike (1040492-MS1)			Prepared: 04/09/21 11:30 Analyzed: 04/15/21 02:16									T-02
QC Source Sample: Non-SDG (A1D0353-01)												
4-Methyl-2-pentanone (MiBK)	2.89	---	0.691	mg/kg dry	50	2.76	ND	105	65-135%	---	---	
Methyl tert-butyl ether (MTBE)	1.41	---	0.0691	mg/kg dry	50	1.38	ND	102	73-125%	---	---	
Naphthalene	1.45	---	0.138	mg/kg dry	50	1.38	ND	105	62-129%	---	---	
n-Propylbenzene	1.43	---	0.0345	mg/kg dry	50	1.38	ND	103	73-125%	---	---	
Styrene	1.46	---	0.0691	mg/kg dry	50	1.38	ND	106	76-124%	---	---	
1,1,1,2-Tetrachloroethane	1.60	---	0.0345	mg/kg dry	50	1.38	ND	115	78-125%	---	---	
1,1,2,2-Tetrachloroethane	1.44	---	0.0691	mg/kg dry	50	1.38	ND	104	70-124%	---	---	
Tetrachloroethene (PCE)	1.40	---	0.0345	mg/kg dry	50	1.38	ND	101	73-128%	---	---	
Toluene	1.35	---	0.0691	mg/kg dry	50	1.38	ND	98	77-121%	---	---	
1,2,3-Trichlorobenzene	1.45	---	0.345	mg/kg dry	50	1.38	ND	105	66-130%	---	---	
1,2,4-Trichlorobenzene	1.38	---	0.345	mg/kg dry	50	1.38	ND	100	67-129%	---	---	
1,1,1-Trichloroethane	1.40	---	0.0345	mg/kg dry	50	1.38	ND	101	73-130%	---	---	
1,1,2-Trichloroethane	1.46	---	0.0345	mg/kg dry	50	1.38	ND	106	78-121%	---	---	
Trichloroethene (TCE)	1.39	---	0.0345	mg/kg dry	50	1.38	ND	100	77-123%	---	---	
Trichlorofluoromethane	1.36	---	0.138	mg/kg dry	50	1.38	ND	98	62-140%	---	---	
1,2,3-Trichloropropane	1.46	---	0.0691	mg/kg dry	50	1.38	ND	105	73-125%	---	---	
1,2,4-Trimethylbenzene	1.49	---	0.0691	mg/kg dry	50	1.38	ND	108	75-123%	---	---	
1,3,5-Trimethylbenzene	1.47	---	0.0691	mg/kg dry	50	1.38	ND	106	73-124%	---	---	
Vinyl chloride	1.32	---	0.0345	mg/kg dry	50	1.38	ND	95	56-135%	---	---	
m,p-Xylene	2.83	---	0.0691	mg/kg dry	50	2.76	ND	102	77-124%	---	---	
o-Xylene	1.42	---	0.0345	mg/kg dry	50	1.38	ND	103	77-123%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*101 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*102 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*99 %*		*79-120 %*			*"*				

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ORELAP ID: OR100062

ANALYTICAL REPORT

GeoDesign, Inc.	Project: MillCreek-19-04	
9450 SW Commerce Circle	Project Number: MillCreek-19-04	Report ID:
Wilsonville, OR 97070	Project Manager: Kyle Sattler	A1D0434 - 04 15 21 1458

QUALITY CONTROL (QC) SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040431 - EPA 3546							**Soil**					
Blank (1040431-BLK1)			Prepared: 04/13/21 09:59		Analyzed: 04/13/21 16:30							C-07
EPA 8082A												
Aroclor 1016	ND	---	0.00364	mg/kg wet	1	---	---	---	---	---	---	
Aroclor 1221	ND	---	0.00364	mg/kg wet	1	---	---	---	---	---	---	
Aroclor 1232	ND	---	0.00364	mg/kg wet	1	---	---	---	---	---	---	
Aroclor 1242	ND	---	0.00364	mg/kg wet	1	---	---	---	---	---	---	
Aroclor 1248	ND	---	0.00364	mg/kg wet	1	---	---	---	---	---	---	
Aroclor 1254	ND	---	0.00364	mg/kg wet	1	---	---	---	---	---	---	
Aroclor 1260	ND	---	0.00364	mg/kg wet	1	---	---	---	---	---	---	
Surr: Decachlorobiphenyl (Surr)			*Recovery: 111 %*		*Limits: 60-125 %*			*Dilution: 1x*				
LCS (1040431-BS1)			Prepared: 04/13/21 09:59		Analyzed: 04/13/21 16:48							C-07
EPA 8082A												
Aroclor 1016	0.201	---	0.00400	mg/kg wet	1	0.250	---	81	47-134%	---	---	
Aroclor 1260	0.206	---	0.00400	mg/kg wet	1	0.250	---	82	53-140%	---	---	
Surr: Decachlorobiphenyl (Surr)			*Recovery: 111 %*		*Limits: 60-125 %*			*Dilution: 1x*				
Duplicate (1040431-DUP1)			Prepared: 04/13/21 09:59		Analyzed: 04/13/21 17:41							C-07
QC Source Sample: Non-SDG (A1D0316-01RE1)												
Aroclor 1016	ND	---	0.00395	mg/kg wet	1	---	ND	---	---	---	30%	
Aroclor 1221	ND	---	0.00395	mg/kg wet	1	---	ND	---	---	---	30%	
Aroclor 1232	ND	---	0.00395	mg/kg wet	1	---	ND	---	---	---	30%	
Aroclor 1242	ND	---	0.00395	mg/kg wet	1	---	ND	---	---	---	30%	
Aroclor 1248	ND	---	0.00395	mg/kg wet	1	---	ND	---	---	---	30%	
Aroclor 1254	ND	---	0.00395	mg/kg wet	1	---	0.00251	---	---	***	**30%**	Q-05
Aroclor 1260	ND	---	0.00395	mg/kg wet	1	---	ND	---	---	---	30%	
Surr: Decachlorobiphenyl (Surr)			*Recovery: 82 %*		*Limits: 60-125 %*			*Dilution: 1x*				
Matrix Spike (1040431-MS1)			Prepared: 04/13/21 09:59		Analyzed: 04/13/21 20:03							C-07
QC Source Sample: UST-1 (A1D0434-01RE1)												
EPA 8082A												
Aroclor 1016	0.273	---	0.0138	mg/kg dry	1	0.344	ND	79	47-134%	---	---	
Aroclor 1260	0.292	---	0.0138	mg/kg dry	1	0.344	ND	85	53-140%	---	---	
Surr: Decachlorobiphenyl (Surr)			*Recovery: 101 %*		*Limits: 60-125 %*			*Dilution: 1x*				

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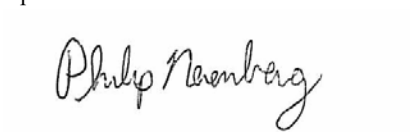

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0434 - 04 15 21 1458**

QUALITY CONTROL (QC) SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040431 - EPA 3546							**Soil**					

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Wilsonville, OR 97070	Project Manager: Kyle Sattler	A1D0434 - 04 15 21 1458

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040409 - EPA 3051A							Soil					
Blank (1040409-BLK1)			Prepared: 04/12/21 20:37 Analyzed: 04/13/21 06:31									
EPA 6020B												
Arsenic	ND	---	0.962	mg/kg wet	10	---	---	---	---	---	---	
Barium	ND	---	0.962	mg/kg wet	10	---	---	---	---	---	---	
Cadmium	ND	---	0.192	mg/kg wet	10	---	---	---	---	---	---	
Chromium	ND	---	0.962	mg/kg wet	10	---	---	---	---	---	---	
Lead	ND	---	0.192	mg/kg wet	10	---	---	---	---	---	---	
Mercury	ND	---	0.0769	mg/kg wet	10	---	---	---	---	---	---	
Selenium	ND	---	0.962	mg/kg wet	10	---	---	---	---	---	---	
Silver	ND	---	0.192	mg/kg wet	10	---	---	---	---	---	---	
LCS (1040409-BS1)			Prepared: 04/12/21 20:37 Analyzed: 04/13/21 06:36									
EPA 6020B												
Arsenic	51.2	---	1.00	mg/kg wet	10	50.0	---	102	80-120%	---	---	
Barium	52.0	---	1.00	mg/kg wet	10	50.0	---	104	80-120%	---	---	
Cadmium	50.9	---	0.200	mg/kg wet	10	50.0	---	102	80-120%	---	---	
Chromium	52.3	---	1.00	mg/kg wet	10	50.0	---	105	80-120%	---	---	
Lead	51.8	---	0.200	mg/kg wet	10	50.0	---	104	80-120%	---	---	
Mercury	1.01	---	0.0800	mg/kg wet	10	1.00	---	101	80-120%	---	---	
Selenium	24.8	---	1.00	mg/kg wet	10	25.0	---	99	80-120%	---	---	
Silver	26.7	---	0.200	mg/kg wet	10	25.0	---	107	80-120%	---	---	
Duplicate (1040409-DUP1)			Prepared: 04/12/21 20:37 Analyzed: 04/13/21 07:11									
QC Source Sample: Lead Comp (A1D0434-02)												
EPA 6020B												
Arsenic	**5.06**	---	1.14	mg/kg dry	10	---	7.60	---	---	**40**	**20%**	Q-04
Barium	**354**	---	1.14	mg/kg dry	10	---	425	---	---	18	20%	
Cadmium	**0.671**	---	0.229	mg/kg dry	10	---	1.15	---	---	**53**	**20%**	Q-04, Q-05
Chromium	**18.9**	---	1.14	mg/kg dry	10	---	24.5	---	---	**26**	**20%**	Q-04
Mercury	ND	---	0.0915	mg/kg dry	10	---	0.0919	---	---	***	20%	
Selenium	ND	---	1.14	mg/kg dry	10	---	ND	---	---	---	20%	
Silver	ND	---	0.229	mg/kg dry	10	---	ND	---	---	---	20%	
Duplicate (1040409-DUP2)			Prepared: 04/12/21 20:37 Analyzed: 04/13/21 15:46									

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0434 - 04 15 21 1458**

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040409 - EPA 3051A							**Soil**					
Duplicate (1040409-DUP2)			Prepared: 04/12/21 20:37		Analyzed: 04/13/21 15:46							
QC Source Sample: Lead Comp (A1D0434-02RE1)												
EPA 6020B												
Lead	**337**	---	1.14	mg/kg dry	50	---	643	---	---	**62**	**20%**	Q-04, Q-16
Matrix Spike (1040409-MS1)			Prepared: 04/12/21 20:37		Analyzed: 04/13/21 07:16							
QC Source Sample: Lead Comp (A1D0434-02)												
EPA 6020B												
Arsenic	65.0	---	1.19	mg/kg dry	10	59.6	7.60	96	75-125%	---	---	
Barium	431	---	1.19	mg/kg dry	10	59.6	425	**11**	**75-125%**	---	---	Q-04
Cadmium	59.4	---	0.239	mg/kg dry	10	59.6	1.15	98	75-125%	---	---	
Chromium	82.4	---	1.19	mg/kg dry	10	59.6	24.5	97	75-125%	---	---	
Mercury	1.27	---	0.0954	mg/kg dry	10	1.19	0.0919	99	75-125%	---	---	
Selenium	29.8	---	1.19	mg/kg dry	10	29.8	ND	100	75-125%	---	---	
Silver	31.2	---	0.239	mg/kg dry	10	29.8	ND	105	75-125%	---	---	
Matrix Spike (1040409-MS2)			Prepared: 04/12/21 20:37		Analyzed: 04/13/21 15:51							
QC Source Sample: Lead Comp (A1D0434-02RE1)												
EPA 6020B												
Lead	355	---	1.19	mg/kg dry	50	59.6	643	**-482**	**75-125%**	---	---	Q-04, Q-16

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9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0434 - 04 15 21 1458**

QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040410 - Total Solids (Dry Weight)							**Soil**					
Duplicate (1040410-DUP1)			Prepared: 04/12/21 21:24			Analyzed: 04/13/21 08:34						
QC Source Sample: Lead Comp (A1D0434-02)												
EPA 8000D												
% Solids	**86.7**	---	1.00	%	1	---	89.8	---	---	3	10%	
Duplicate (1040410-DUP2)			Prepared: 04/12/21 21:24			Analyzed: 04/13/21 08:34						
QC Source Sample: Non-SDG (A1D0443-04)												
% Solids	**81.2**	---	1.00	%	1	---	81.8	---	---	0.8	10%	
Duplicate (1040410-DUP3)			Prepared: 04/12/21 21:24			Analyzed: 04/13/21 08:34						
QC Source Sample: Non-SDG (A1D0446-02)												
% Solids	**84.7**	---	1.00	%	1	---	84.8	---	---	0.1	10%	

No Client related Batch QC samples analyzed for this batch. See notes page for more information.

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ANALYTICAL REPORT

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9450 SW Commerce Circle	Project Number: MillCreek-19-04	Report ID:
Wilsonville, OR 97070	Project Manager: Kyle Sattler	A1D0434 - 04 15 21 1458

QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040424 - Total Solids (Dry Weight)							Soil					
Duplicate (1040424-DUP1)			Prepared: 04/13/21 09:16		Analyzed: 04/14/21 07:37							
QC Source Sample: Non-SDG (A1D0334-01)												
% Solids	**76.4**	---	1.00	%	1	---	74.6	---	---	2	10%	
Duplicate (1040424-DUP2)			Prepared: 04/13/21 09:16		Analyzed: 04/14/21 07:37							
QC Source Sample: Non-SDG (A1D0364-15)												
% Solids	**88.9**	---	1.00	%	1	---	85.7	---	---	4	10%	
Duplicate (1040424-DUP3)			Prepared: 04/13/21 09:16		Analyzed: 04/14/21 07:37							
QC Source Sample: Non-SDG (A1D0451-01)												
% Solids	**77.5**	---	1.00	%	1	---	77.8	---	---	0.4	10%	
Duplicate (1040424-DUP4)			Prepared: 04/13/21 17:58		Analyzed: 04/14/21 07:37							
QC Source Sample: Non-SDG (A1D0244-01)												
% Solids	**85.6**	---	1.00	%	1	---	88.2	---	---	3	10%	
Duplicate (1040424-DUP5)			Prepared: 04/13/21 17:58		Analyzed: 04/14/21 07:37							
QC Source Sample: Non-SDG (A1D0453-10)												
% Solids	**90.6**	---	1.00	%	1	---	90.6	---	---	0.02	10%	
Duplicate (1040424-DUP6)			Prepared: 04/13/21 17:58		Analyzed: 04/14/21 07:37							
QC Source Sample: Non-SDG (A1D0479-02)												
% Solids	**92.4**	---	1.00	%	1	---	92.5	---	---	0.1	10%	
Duplicate (1040424-DUP7)			Prepared: 04/13/21 20:37		Analyzed: 04/14/21 07:37							
QC Source Sample: Non-SDG (A1D0492-01)												
% Solids	**89.8**	---	1.00	%	1	---	89.8	---	---	0.02	10%	
Duplicate (1040424-DUP8)			Prepared: 04/13/21 20:37		Analyzed: 04/14/21 07:37							
QC Source Sample: Non-SDG (A1D0499-01)												
% Solids	**88.2**	---	1.00	%	1	---	89.1	---	---	1	10%	

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0434 - 04 15 21 1458**

QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040424 - Total Solids (Dry Weight)							**Soil**					
Duplicate (1040424-DUP9)			Prepared: 04/13/21 20:37		Analyzed: 04/14/21 07:37							
QC Source Sample: Non-SDG (A1D0502-04)												
% Solids	**80.7**	---	1.00	%	1	---	78.5	---	---	3	10%	

No Client related Batch QC samples analyzed for this batch. See notes page for more information.

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SAMPLE PREPARATION INFORMATION

Volatile Organic Compounds by EPA 8260D

Prep: EPA 5035A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1040492							
A1D0434-01	Soil	5035A/8260D	04/12/21 13:15	04/12/21 13:15	5.88g/5mL	5g/5mL	0.85
A1D0434-01RE1	Soil	5035A/8260D	04/12/21 13:15	04/12/21 13:15	5.88g/5mL	5g/5mL	0.85

Polychlorinated Biphenyls by EPA 8082A

Prep: EPA 3546

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1040431							
A1D0434-01RE1	Soil	EPA 8082A	04/12/21 13:15	04/13/21 09:59	10.25g/5mL	10g/5mL	0.98

Total Metals by EPA 6020B (ICPMS)

Prep: EPA 3051A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1040409							
A1D0434-01	Soil	EPA 6020B	04/12/21 13:15	04/12/21 20:37	0.47g/50mL	0.5g/50mL	1.06
A1D0434-02RE1	Soil	EPA 6020B	04/12/21 14:30	04/12/21 20:37	0.461g/50mL	0.5g/50mL	1.08

Percent Dry Weight

Prep: Total Solids (Dry Weight)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1040410							
A1D0434-02	Soil	EPA 8000D	04/12/21 14:30	04/12/21 21:24			NA
Batch: 1040424							
A1D0434-01	Soil	EPA 8000D	04/12/21 13:15	04/13/21 09:16			NA

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QUALIFIER DEFINITIONS

Client Sample and Quality Control (QC) Sample Qualifier Definitions:

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C-07	Extract has undergone Sulfuric Acid Cleanup by EPA 3665A, Sulfur Cleanup by EPA 3660B, and Florisil Cleanup by EPA 3620B in order to minimize matrix interference.
M-02	Due to matrix interference, this analyte cannot be accurately quantified. The reported result is estimated.
Q-04	Spike recovery and/or RPD is outside control limits due to a non-homogeneous sample matrix.
Q-05	Analyses are not controlled on RPD values from sample and duplicate concentrations that are below 5 times the reporting level.
Q-16	Reanalysis of an original Batch QC sample.
Q-42	Matrix Spike and/or Duplicate analysis was performed on this sample. % Recovery or RPD for this analyte is outside laboratory control limits. (Refer to the QC Section of Analytical Report.)
Q-54	Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -2%. The results are reported as Estimated Values.
Q-55	Daily CCV/LCS recovery for this analyte was below the +/-20% criteria listed in EPA 8260, however there is adequate sensitivity to ensure detection at the reporting level.
R-02	The Reporting Limit for this analyte has been raised to account for interference from coeluting organic compounds present in the sample.
T-02	This Batch QC sample was analyzed outside of the method specified 12 hour analysis window. Results are estimated.
TEMP	Sample(s) received outside of recommended temperature. See Case Narrative.

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REPORTING NOTES AND CONVENTIONS:

Abbreviations:

DET Analyte DETECTED at or above the detection or reporting limit.

ND Analyte NOT DETECTED at or above the detection or reporting limit.

NR Result Not Reported

RPD Relative Percent Difference. RPDs for Matrix Spikes and Matrix Spike Duplicates are based on concentration, not recovery.

Detection Limits: Limit of Detection (LOD)

Limits of Detection (LODs) are normally set at a level of one half the validated Limit of Quantitation (LOQ).
If no value is listed ('-----'), then the data has not been evaluated below the Reporting Limit.

Reporting Limits: Limit of Quantitation (LOQ)

Validated Limits of Quantitation (LOQs) are reported as the Reporting Limits for all analyses where the LOQ, MRL, PQL or CRL are requested. The LOQ represents a level at or above the low point of the calibration curve, that has been validated according to Apex Laboratories' comprehensive LOQ policies and procedures.

Reporting Conventions:

Basis: Results for soil samples are generally reported on a 100% dry weight basis.
The Result Basis is listed following the units as " dry", " wet", or " " (blank) designation.

" dry" Sample results and Reporting Limits are reported on a dry weight basis. (i.e. "ug/kg dry")
See Percent Solids section for details of dry weight analysis.

" wet" Sample results and Reporting Limits for this analysis are normally dry weight corrected, but have not been modified in this case.

" " Results without 'wet' or 'dry' designation are not normally dry weight corrected. These results are considered 'As Received'.

QC Source:

In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) may be analyzed to demonstrate accuracy and precision of the extraction batch.

Non-Client Batch QC Samples (Duplicates and Matrix Spike/Duplicates) may not be included in this report. Please request a Full QC report if this data is required.

Miscellaneous Notes:

" --- " QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.

" *** " Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

Blanks:

Standard practice is to evaluate the results from Blank QC Samples down to a level equal to ½ the Reporting Limit (RL).
-For Blank hits falling between ½ the RL and the RL (J flagged hits), the associated sample and QC data will receive a 'B-02' qualifier.
-For Blank hits above the RL, the associated sample and QC data will receive a 'B' qualifier, per Apex Laboratories' Blank Policy.
For further details, please request a copy of this document.

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REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks (Cont.):

Sample results flagged with a 'B' or 'B-02' qualifier are potentially biased high if the sample results are less than ten times the level found in the blank for inorganic analyses, or less than five times the level found in the blank for organic analyses.

'B' and 'B-02' qualifications are only applied to sample results detected above the Reporting Level.

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

Water samples containing significant amounts of sediment are decanted or separated prior to extraction, and only the water portion analyzed, unless otherwise directed by the client.

Soil and Sediment Samples:

Soil and Sediment samples containing significant amounts of water are decanted prior to extraction, and only the solid portion analyzed, unless otherwise directed by the client.

Sampling and Preservation Notes:

Certain regulatory programs, such as National Pollutant Discharge Elimination System (NPDES), require that activities such as sample filtration (for dissolved metals, orthophosphate, hexavalent chromium, etc.) and testing of short hold analytes (pH, Dissolved Oxygen, etc.) be performed in the field (on-site) within a short time window. In addition, sample matrix spikes are required for some analyses, and sufficient volume must be provided, and billable site specific QC requested, if this is required. All regulatory permits should be reviewed to ensure that these requirements are being met.

Data users should be aware of which regulations pertain to the samples they submit for testing. If related sample collection activities are not approved for a particular regulatory program, results should be considered estimates. Apex Laboratories will qualify these analytes according to the most stringent requirements, however results for samples that are for non-regulatory purposes may be acceptable.

Samples that have been filtered and preserved at Apex Laboratories per client request are listed in the preparation section of the report with the date and time of filtration listed.

Apex Laboratories maintains detailed records on sample receipt, including client label verification, cooler temperature, sample preservation, hold time compliance and field filtration. Data is qualified as necessary, and the lack of qualification indicates compliance with required parameters.

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ANALYTICAL REPORT

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9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0434 - 04 15 21 1458**

LABORATORY ACCREDITATION INFORMATION

ORELAP Certification ID: OR100062 (Primary Accreditation) - EPA ID: OR01039

All methods and analytes reported from work performed at Apex Laboratories are included on Apex Laboratories' ORELAP Scope of Certification, with the exception of any analyte(s) listed below:

Apex Laboratories

Matrix	Analysis	TNI_ID	Analyte	TNI_ID	Accreditation

All reported analytes are included in Apex Laboratories' current ORELAP scope.

Secondary Accreditations

Apex Laboratories also maintains reciprocal accreditation with non-TNI states (Washington DOE), as well as other state specific accreditations not listed here.

Subcontract Laboratory Accreditations

Subcontracted data falls outside of Apex Laboratories' Scope of Accreditation.
Please see the Subcontract Laboratory report for full details, or contact your Project Manager for more information.

Field Testing Parameters

Results for Field Tested data are provded by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.

Apex Laboratories

Philip Nerenberg, Lab Director

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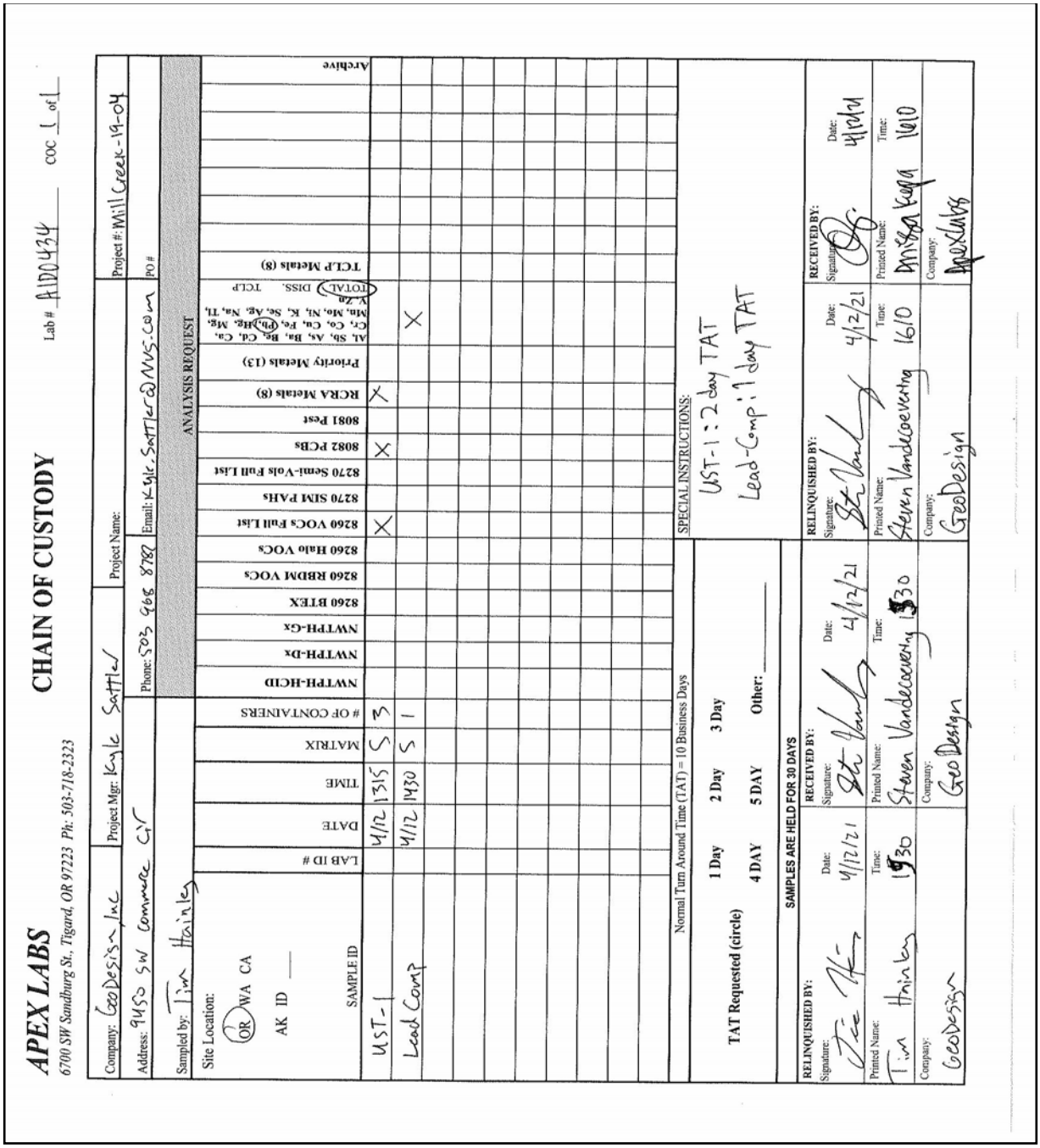
Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0434 - 04 15 21 1458**



APEX LABS — 6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323

CHAIN OF CUSTODY — Lab # A1D0434 — COC 1 of 1

Company: GeoDesign Inc — Project Mgr: Kyle Sattler — Project Name: — Project #: MillCreek-19-04

Address: 9450 SW Commerce Cir — Phone: 503 968 8787 — Email: Kyle.Sattler@NVS.com — PO #

Sampled by: Tim Hainley

Site Location: (OR) WA CA — AK ID ___

ANALYSIS REQUEST

SAMPLE ID	LAB ID #	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 BTEX	8260 RBDM VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIM PAHs	8270 Semi-Vols Full List	8082 PCBs	8081 Pest	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn — TOTAL / DISS. — TCLP	TCLP Metals (8)	Archive
UST-1		4/12	1315	S	3							X			X		X				
Lead Comp		4/12	1430	S	1														X		

Normal Turn Around Time (TAT) = 10 Business Days

TAT Requested (circle): 1 Day 2 Day 3 Day 4 DAY 5 DAY Other: ___

SPECIAL INSTRUCTIONS: UST-1: 2 day TAT; Lead-Comp: 1 day TAT

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY:	Date:	RECEIVED BY:	Date:	RELINQUISHED BY:	Date:	RECEIVED BY:	Date:
Signature:	4/12/21	Signature:	4/12/21	Signature:	4/12/21	Signature:	4/14/21
Printed Name: Tim Hainley	Time: 1930	Printed Name: Steven Vandecoevering	Time: 1930	Printed Name: Steven Vandecoevering	Time: 1610	Printed Name: Mistina Kemp	Time: 1010
Company: GeoDesign		Company: GeoDesign		Company: GeoDesign		Company: Apex	

Apex Laboratories

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Philip Nerenberg

Philip Nerenberg, Lab Director

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0434 - 04 15 21 1458**

APEX LABS COOLER RECEIPT FORM

Client: GeoDesign Element WO#: A1D0434

Project/Project #: #Millcreek-19-04

Delivery Info:

Date/time received: 4/12/21 @ 1610 By: AKC

Delivered by: Apex ___ Client X ESS ___ FedEx ___ UPS ___ Swift ___ Senvoy ___ SDS ___ Other ___

Cooler Inspection Date/time inspected: 4/12/21 @ 1610 By: AKK

Chain of Custody included? Yes X No ___ Custody seals? Yes ___ No X

Signed/dated by client? Yes X No ___

Signed/dated by Apex? Yes X No ___

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	6.1						
Received on ice? (Y/N)	Y						
Temp. blanks? (Y/N)	N						
Ice type: (Gel/Real/Other)	Gel						
Condition:	Good						

Cooler out of temp? (Y/N) Possible reason why: Recently sampled

Green dots applied to out of temperature samples? Yes (No)

Out of temperature samples form initiated? Yes (No)

Sample Inspection: Date/time inspected: 4/12/21 @ 1612 By: AKK

All samples intact? Yes X No ___ Comments: ___

Bottle labels/COCs agree? Yes ___ No X Comments: UST-1 Ton jar reads 1215

COC/container discrepancies form initiated? Yes ___ No X

Containers/volumes received appropriate for analysis? Yes X No ___ Comments: ___

Do VOA vials have visible headspace? Yes ___ No ___ NA X

Comments ___

Water samples: pH checked: Yes ___ No ___ NA X pH appropriate? Yes ___ No ___ NA X

Comments: ___

Additional information: ___

Labeled by: Witness: Cooler Inspected by:

AKC AKK

Apex Laboratories

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Philip Nerenberg, Lab Director

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

Thursday, April 15, 2021

Kyle Sattler
GeoDesign, Inc.
9450 SW Commerce Circle
Wilsonville, OR 97070

RE: A1D0476 - MillCreek-19-04 - MillCreek-19-04

Thank you for using Apex Laboratories. We greatly appreciate your business and strive to provide the highest quality services to the environmental industry.

Enclosed are the results of analyses for work order A1D0476, which was received by the laboratory on 4/13/2021 at 3:07:00PM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: pnerenberg@apex-labs.com, or by phone at 503-718-2323.

Please note: All samples will be disposed of within 30 days of sample receipt, unless prior arrangements have been made.

Cooler Receipt Information

(See Cooler Receipt Form for details)

Cooler #1	1.9 degC	Cooler #2	3.0 degC

DRAFT REPORT

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: MillCreek-19-04	
9450 SW Commerce Circle	Project Number: MillCreek-19-04	Report ID:
Wilsonville, OR 97070	Project Manager: Kyle Sattler	A1D0476 - 04 15 21 1453

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TP-9(1)	A1D0476-01	Soil	04/12/21 08:29	04/13/21 15:07
TP-9(2)	A1D0476-02	Soil	04/12/21 09:48	04/13/21 15:07
TP-9(3)	A1D0476-03	Soil	04/12/21 09:50	04/13/21 15:07
TP-10(1)	A1D0476-04	Soil	04/12/21 10:55	04/13/21 15:07
TP-10(2)	A1D0476-05	Soil	04/12/21 10:57	04/13/21 15:07
TP-10(3)	A1D0476-06	Soil	04/12/21 10:59	04/13/21 15:07
TP-11(1)	A1D0476-07	Soil	04/12/21 11:12	04/13/21 15:07
TP-11(2)	A1D0476-08	Soil	04/12/21 11:13	04/13/21 15:07
TP-11(3)	A1D0476-09	Soil	04/12/21 11:14	04/13/21 15:07
TP-12(1.5)	A1D0476-10	Soil	04/12/21 11:49	04/13/21 15:07
TP-12(2)	A1D0476-11	Soil	04/12/21 11:48	04/13/21 15:07
TP-12(3)	A1D0476-12	Soil	04/12/21 11:47	04/13/21 15:07
TP-13(1.5)	A1D0476-13	Soil	04/12/21 12:00	04/13/21 15:07
TP-13(2)	A1D0476-14	Soil	04/12/21 11:58	04/13/21 15:07
TP-13(3)	A1D0476-15	Soil	04/12/21 11:57	04/13/21 15:07
TP-14(1.7)	A1D0476-16	Soil	04/13/21 08:49	04/13/21 15:07
TP-14(2.5)	A1D0476-17	Soil	04/13/21 08:47	04/13/21 15:07
TP-14(3.5)	A1D0476-18	Soil	04/13/21 08:45	04/13/21 15:07
TP-15(4)	A1D0476-19	Soil	04/12/21 12:48	04/13/21 15:07
TP-15(5)	A1D0476-20	Soil	04/12/21 12:47	04/13/21 15:07
TP-16(3)	A1D0476-21	Soil	04/12/21 12:38	04/13/21 15:07
TP-16(4)	A1D0476-22	Soil	04/12/21 12:41	04/13/21 15:07
TP-17(1)	A1D0476-23	Soil	04/12/21 12:18	04/13/21 15:07
TP-17(2)	A1D0476-24	Soil	04/12/21 12:17	04/13/21 15:07
TP-17(3)	A1D0476-25	Soil	04/12/21 12:16	04/13/21 15:07
TP-18(1.5)	A1D0476-26	Soil	04/12/21 13:12	04/13/21 15:07
TP-18(2.5)	A1D0476-27	Soil	04/12/21 13:11	04/13/21 15:07
TP-18(4)	A1D0476-28	Soil	04/12/21 13:09	04/13/21 15:07
TP-19(2)	A1D0476-29	Soil	04/12/21 13:23	04/13/21 15:07
TP-19(3)	A1D0476-30	Soil	04/12/21 13:21	04/13/21 15:07
TP-20(2)	A1D0476-31	Soil	04/12/21 13:33	04/13/21 15:07
TP-20(3)	A1D0476-32	Soil	04/12/21 13:31	04/13/21 15:07
TP-21(1)	A1D0476-33	Soil	04/12/21 14:13	04/13/21 15:07

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ORELAP ID: OR100062

ANALYTICAL REPORT

GeoDesign, Inc.	Project: MillCreek-19-04	
9450 SW Commerce Circle	Project Number: MillCreek-19-04	Report ID:
Wilsonville, OR 97070	Project Manager: Kyle Sattler	A1D0476 - 04 15 21 1453

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TP-21(2)	A1D0476-34	Soil	04/12/21 14:12	04/13/21 15:07
TP-21(3)	A1D0476-35	Soil	04/12/21 14:07	04/13/21 15:07
TP-22(1.5)	A1D0476-36	Soil	04/12/21 14:51	04/13/21 15:07
TP-22(2.5)	A1D0476-37	Soil	04/12/21 14:50	04/13/21 15:07
TP-22(3.5)	A1D0476-38	Soil	04/12/21 14:49	04/13/21 15:07
TP-23(1)	A1D0476-39	Soil	04/13/21 09:08	04/13/21 15:07
TP-23(2)	A1D0476-40	Soil	04/13/21 09:06	04/13/21 15:07
TP-23(3)	A1D0476-41	Soil	04/13/21 09:04	04/13/21 15:07
TP-24(1)	A1D0476-42	Soil	04/13/21 09:37	04/13/21 15:07
TP-24(2)	A1D0476-43	Soil	04/13/21 09:35	04/13/21 15:07
TP-24(3)	A1D0476-44	Soil	04/13/21 09:33	04/13/21 15:07
TP-25(1.5)	A1D0476-45	Soil	04/12/21 14:00	04/13/21 15:07
TP-25(2.5)	A1D0476-46	Soil	04/12/21 13:59	04/13/21 15:07
TP-25(3.5)	A1D0476-47	Soil	04/12/21 13:50	04/13/21 15:07
TP-26(1.5)	A1D0476-48	Soil	04/12/21 14:25	04/13/21 15:07
TP-26(2.5)	A1D0476-49	Soil	04/12/21 14:23	04/13/21 15:07
TP-26(3.5)	A1D0476-50	Soil	04/12/21 14:21	04/13/21 15:07
TP-27(1)	A1D0476-51	Soil	04/12/21 14:41	04/13/21 15:07
TP-27(2)	A1D0476-52	Soil	04/12/21 14:39	04/13/21 15:07
TP-27(3)	A1D0476-53	Soil	04/12/21 14:38	04/13/21 15:07
TP-28(1)	A1D0476-54	Soil	04/13/21 10:20	04/13/21 15:07
TP-28(2)	A1D0476-55	Soil	04/13/21 10:18	04/13/21 15:07
TP-28(3)	A1D0476-56	Soil	04/13/21 10:16	04/13/21 15:07
TP-29(1.2)	A1D0476-57	Soil	04/13/21 10:35	04/13/21 15:07
TP-29(2)	A1D0476-58	Soil	04/13/21 10:33	04/13/21 15:07
TP-29(3)	A1D0476-59	Soil	04/13/21 10:31	04/13/21 15:07
TP-30(1.5)	A1D0476-60	Soil	04/13/21 10:56	04/13/21 15:07
TP-30(2.5)	A1D0476-61	Soil	04/13/21 10:54	04/13/21 15:07
TP-30(3.5)	A1D0476-62	Soil	04/13/21 10:52	04/13/21 15:07
TP-31(1.5)	A1D0476-63	Soil	04/13/21 11:52	04/13/21 15:07
TP-31(2.5)	A1D0476-64	Soil	04/13/21 11:50	04/13/21 15:07
TP-31(3.5)	A1D0476-65	Soil	04/13/21 11:48	04/13/21 15:07
TP-32(1.5)	A1D0476-66	Soil	04/13/21 12:30	04/13/21 15:07

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0476 - 04 15 21 1453**

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TP-32(2.5)	A1D0476-67	Soil	04/13/21 12:28	04/13/21 15:07
TP-32(3.5)	A1D0476-68	Soil	04/13/21 12:26	04/13/21 15:07
COMP-2-Native	A1D0476-69	Soil	04/13/21 12:32	04/13/21 15:07
COMP-3-Native	A1D0476-70	Soil	04/13/21 09:42	04/13/21 15:07
COMP-4-Native	A1D0476-71	Soil	04/13/21 08:55	04/13/21 15:07
Trip Blank	A1D0476-72	Water	04/12/21 00:00	04/13/21 15:07

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ANALYTICAL REPORT

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9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0476 - 04 15 21 1453**

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
COMP-2-Native (A1D0476-69)				**Matrix: Soil**				
Batch: 1040497								
Lead	**13.8**	---	0.248	mg/kg dry	10	04/15/21 00:32	EPA 6020B	
COMP-3-Native (A1D0476-70)				**Matrix: Soil**				
Batch: 1040497								
Lead	**36.5**	---	0.259	mg/kg dry	10	04/15/21 00:37	EPA 6020B	
COMP-4-Native (A1D0476-71)				**Matrix: Soil**				
Batch: 1040497								
Lead	**17.8**	---	0.264	mg/kg dry	10	04/15/21 00:42	EPA 6020B	

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ANALYTICAL REPORT

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9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0476 - 04 15 21 1453**

ANALYTICAL SAMPLE RESULTS

Percent Dry Weight

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
COMP-2-Native (A1D0476-69)				**Matrix: Soil**		**Batch: 1040468**		
% Solids	**79.0**	---	1.00	%	1	04/15/21 07:37	EPA 8000D	
COMP-3-Native (A1D0476-70)				**Matrix: Soil**		**Batch: 1040468**		
% Solids	**78.0**	---	1.00	%	1	04/15/21 07:37	EPA 8000D	
COMP-4-Native (A1D0476-71)				**Matrix: Soil**		**Batch: 1040468**		
% Solids	**80.0**	---	1.00	%	1	04/15/21 07:37	EPA 8000D	

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GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0476 - 04 15 21 1453**

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040497 - EPA 3051A							**Soil**					
Blank (1040497-BLK1)			Prepared: 04/14/21 13:30 Analyzed: 04/14/21 23:26									
EPA 6020B												
Lead	ND	---	0.192	mg/kg wet	10	---	---	---	---	---	---	
LCS (1040497-BS1)			Prepared: 04/14/21 13:30 Analyzed: 04/14/21 23:36									
EPA 6020B												
Lead	52.2	---	0.200	mg/kg wet	10	50.0	---	104	80-120%	---	---	
Duplicate (1040497-DUP1)			Prepared: 04/14/21 13:30 Analyzed: 04/14/21 23:57									
QC Source Sample: Non-SDG (A1D0057-06)												
Lead	**182**	---	0.214	mg/kg dry	10	---	189	---	---	4	20%	
Duplicate (1040497-DUP2)			Prepared: 04/14/21 13:30 Analyzed: 04/15/21 00:02									
QC Source Sample: Non-SDG (A1D0057-06)												
Lead	**186**	---	0.214	mg/kg dry	10	---	189	---	---	1	20%	
Matrix Spike (1040497-MS1)			Prepared: 04/14/21 13:30 Analyzed: 04/15/21 00:17									
QC Source Sample: Non-SDG (A1D0057-06)												
EPA 6020B												
Lead	246	---	0.220	mg/kg dry	10	54.9	189	105	75-125%	---	---	

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QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040468 - Total Solids (Dry Weight)							**Soil**					
Duplicate (1040468-DUP1)			Prepared: 04/14/21 07:53		Analyzed: 04/15/21 07:37							
QC Source Sample: Non-SDG (A1D0379-01)												
% Solids	**95.4**	---	1.00	%	1	---	94.8	---	---	0.6	10%	
Duplicate (1040468-DUP2)			Prepared: 04/14/21 07:53		Analyzed: 04/15/21 07:37							
QC Source Sample: COMP-3-Native (A1D0476-70)												
EPA 8000D												
% Solids	**78.3**	---	1.00	%	1	---	78.0	---	---	0.4	10%	
Duplicate (1040468-DUP3)			Prepared: 04/14/21 07:53		Analyzed: 04/15/21 07:37							
QC Source Sample: Non-SDG (A1D0484-03)												
% Solids	**72.4**	---	1.00	%	1	---	71.9	---	---	0.6	10%	
Duplicate (1040468-DUP4)			Prepared: 04/14/21 07:53		Analyzed: 04/15/21 07:37							
QC Source Sample: Non-SDG (A1D0488-05)												
% Solids	**68.8**	---	1.00	%	1	---	68.2	---	---	0.8	10%	
Duplicate (1040468-DUP5)			Prepared: 04/14/21 19:25		Analyzed: 04/15/21 07:37							
QC Source Sample: Non-SDG (A1D0538-01)												
% Solids	**77.6**	---	1.00	%	1	---	77.5	---	---	0.2	10%	
Duplicate (1040468-DUP6)			Prepared: 04/14/21 19:25		Analyzed: 04/15/21 07:37							
QC Source Sample: Non-SDG (A1D0544-03)												
% Solids	**74.6**	---	1.00	%	1	---	78.7	---	---	5	10%	
Duplicate (1040468-DUP7)			Prepared: 04/14/21 19:25		Analyzed: 04/15/21 07:37							
QC Source Sample: Non-SDG (A1D0558-01)												
% Solids	**76.1**	---	1.00	%	1	---	75.9	---	---	0.3	10%	
Duplicate (1040468-DUP8)			Prepared: 04/14/21 19:25		Analyzed: 04/15/21 07:37							
QC Source Sample: Non-SDG (A1D0561-02)												
% Solids	**76.5**	---	1.00	%	1	---	76.6	---	---	0.2	10%	

DRAFT REPORT

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Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0476 - 04 15 21 1453**

QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040468 - Total Solids (Dry Weight)							**Soil**					

No Client related Batch QC samples analyzed for this batch. See notes page for more information.

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0476 - 04 15 21 1453**

SAMPLE PREPARATION INFORMATION

Total Metals by EPA 6020B (ICPMS)

Prep: EPA 3051A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1040497							
A1D0476-69	Soil	EPA 6020B	04/13/21 12:32	04/14/21 13:30	0.51g/50mL	0.5g/50mL	0.98
A1D0476-70	Soil	EPA 6020B	04/13/21 09:42	04/14/21 13:30	0.496g/50mL	0.5g/50mL	1.01
A1D0476-71	Soil	EPA 6020B	04/13/21 08:55	04/14/21 13:30	0.474g/50mL	0.5g/50mL	1.05

Percent Dry Weight

Prep: Total Solids (Dry Weight)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1040468							
A1D0476-69	Soil	EPA 8000D	04/13/21 12:32	04/14/21 07:53			NA
A1D0476-70	Soil	EPA 8000D	04/13/21 09:42	04/14/21 07:53			NA
A1D0476-71	Soil	EPA 8000D	04/13/21 08:55	04/14/21 07:53			NA

DRAFT REPORT

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GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0476 - 04 15 21 1453**

QUALIFIER DEFINITIONS

Client Sample and Quality Control (QC) Sample Qualifier Definitions:

There are No Qualifiers on Sample or QC Data for this report

Apex Laboratories, LLC
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ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0476 - 04 15 21 1453**

REPORTING NOTES AND CONVENTIONS:

Abbreviations:

DET Analyte DETECTED at or above the detection or reporting limit.

ND Analyte NOT DETECTED at or above the detection or reporting limit.

NR Result Not Reported

RPD Relative Percent Difference. RPDs for Matrix Spikes and Matrix Spike Duplicates are based on concentration, not recovery.

Detection Limits: Limit of Detection (LOD)

Limits of Detection (LODs) are normally set at a level of one half the validated Limit of Quantitation (LOQ).
If no value is listed ('-----'), then the data has not been evaluated below the Reporting Limit.

Reporting Limits: Limit of Quantitation (LOQ)

Validated Limits of Quantitation (LOQs) are reported as the Reporting Limits for all analyses where the LOQ, MRL, PQL or CRL are requested. The LOQ represents a level at or above the low point of the calibration curve, that has been validated according to Apex Laboratories' comprehensive LOQ policies and procedures.

Reporting Conventions:

Basis: Results for soil samples are generally reported on a 100% dry weight basis.
The Result Basis is listed following the units as " dry", " wet", or " " (blank) designation.

" dry" Sample results and Reporting Limits are reported on a dry weight basis. (i.e. "ug/kg dry")
See Percent Solids section for details of dry weight analysis.

" wet" Sample results and Reporting Limits for this analysis are normally dry weight corrected, but have not been modified in this case.

" " Results without 'wet' or 'dry' designation are not normally dry weight corrected. These results are considered 'As Received'.

QC Source:

In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) may be analyzed to demonstrate accuracy and precision of the extraction batch.

Non-Client Batch QC Samples (Duplicates and Matrix Spike/Duplicates) may not be included in this report. Please request a Full QC report if this data is required.

Miscellaneous Notes:

" --- " QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.

" *** " Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

Blanks:

Standard practice is to evaluate the results from Blank QC Samples down to a level equal to ½ the Reporting Limit (RL).
-For Blank hits falling between ½ the RL and the RL (J flagged hits), the associated sample and QC data will receive a 'B-02' qualifier.
-For Blank hits above the RL, the associated sample and QC data will receive a 'B' qualifier, per Apex Laboratories' Blank Policy.
For further details, please request a copy of this document.

DRAFT REPORT

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Apex Laboratories, LLC
6700 S.W. Sandburg Street
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503-718-2323
ORELAP ID: **OR100062**

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0476 - 04 15 21 1453**

REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks (Cont.):

Sample results flagged with a 'B' or 'B-02' qualifier are potentially biased high if the sample results are less than ten times the level found in the blank for inorganic analyses, or less than five times the level found in the blank for organic analyses.

'B' and 'B-02' qualifications are only applied to sample results detected above the Reporting Level.

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

Water samples containing significant amounts of sediment are decanted or separated prior to extraction, and only the water portion analyzed, unless otherwise directed by the client.

Soil and Sediment Samples:

Soil and Sediment samples containing significant amounts of water are decanted prior to extraction, and only the solid portion analyzed, unless otherwise directed by the client.

Sampling and Preservation Notes:

Certain regulatory programs, such as National Pollutant Discharge Elimination System (NPDES), require that activities such as sample filtration (for dissolved metals, orthophosphate, hexavalent chromium, etc.) and testing of short hold analytes (pH, Dissolved Oxygen, etc.) be performed in the field (on-site) within a short time window. In addition, sample matrix spikes are required for some analyses, and sufficient volume must be provided, and billable site specific QC requested, if this is required. All regulatory permits should be reviewed to ensure that these requirements are being met.

Data users should be aware of which regulations pertain to the samples they submit for testing. If related sample collection activities are not approved for a particular regulatory program, results should be considered estimates. Apex Laboratories will qualify these analytes according to the most stringent requirements, however results for samples that are for non-regulatory purposes may be acceptable.

Samples that have been filtered and preserved at Apex Laboratories per client request are listed in the preparation section of the report with the date and time of filtration listed.

Apex Laboratories maintains detailed records on sample receipt, including client label verification, cooler temperature, sample preservation, hold time compliance and field filtration. Data is qualified as necessary, and the lack of qualification indicates compliance with required parameters.

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GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0476 - 04 15 21 1453**

LABORATORY ACCREDITATION INFORMATION

ORELAP Certification ID: OR100062 (Primary Accreditation) -
EPA ID: OR01039

All methods and analytes reported from work performed at Apex Laboratories are included on Apex Laboratories' ORELAP Scope of Certification, with the exception of any analyte(s) listed below:

Apex Laboratories

Matrix	Analysis	TNI_ID	Analyte	TNI_ID	Accreditation

All reported analytes are included in Apex Laboratories' current ORELAP scope.

Secondary Accreditations

Apex Laboratories also maintains reciprocal accreditation with non-TNI states (Washington DOE), as well as other state specific accreditations not listed here.

Subcontract Laboratory Accreditations

Subcontracted data falls outside of Apex Laboratories' Scope of Accreditation.
Please see the Subcontract Laboratory report for full details, or contact your Project Manager for more information.

Field Testing Parameters

Results for Field Tested data are provded by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.

Apex Laboratories, LLC
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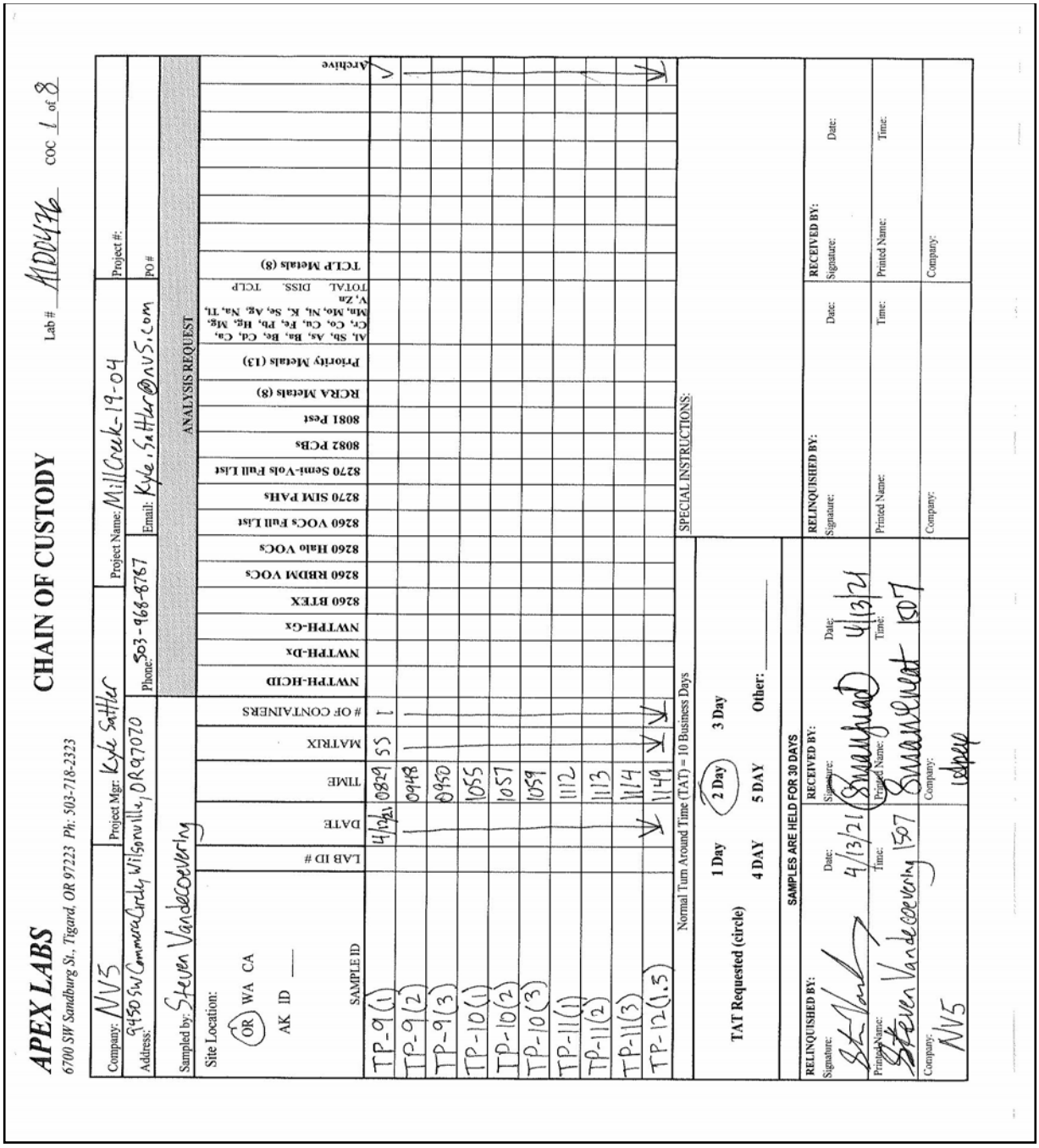
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0476 - 04 15 21 1453**



APEX LABS — CHAIN OF CUSTODY — Lab # A1D0476 — COC 1 of 8

6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323

Company: NV5 | Project Mgr: Kyle Sattler | Project Name: MillCreek-19-04 | Project #:

Address: 9450 SW Commerce Circle, Wilsonville, OR 97070 | Phone: 503-968-8787 | Email: Kyle.Sattler@NV5.com | PO #

Sampled by: Steven Vandecoevering

Site Location: (OR) WA CA AK ID ___

SAMPLE ID	LAB ID #	DATE	TIME	MATRIX	# OF CONTAINERS
TP-9(1)		4/12/21	0829	SS	1
TP-9(2)			0948		
TP-9(3)			0950		
TP-10(1)			1055		
TP-10(2)			1057		
TP-10(3)			1059		
TP-11(1)			1112		
TP-11(2)			1113		
TP-11(3)			1114		
TP-12(1.5)			1149		

ANALYSIS REQUEST

NWTPH-HCID; NWTPH-Dx; NWTPH-Gx; 8260 BTEX; 8260 RBDM VOCs; 8260 Halo VOCs; 8260 VOCs Full List; 8270 SIM PAHs; 8270 Semi-Vols Full List; 8082 PCBs; 8081 Pest; RCRA Metals (8); Priority Metals (13); Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn — TOTAL DISS. TCLP; TCLP Metals (8); Archive

SPECIAL INSTRUCTIONS:

Normal Turn Around Time (TAT) = 10 Business Days

TAT Requested (circle): 1 Day | 2 Day | 3 Day | 4 DAY | 5 DAY | Other: ___

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY: Signature: Date: 4/13/21 Time: 1507 Printed Name: Steven Vandecoevering Company: NV5

RECEIVED BY: Signature: Date: 4/13/21 Time: 1507 Printed Name: Company: Idaho

RELINQUISHED BY: Signature: Date: Time: Printed Name: Company:

RECEIVED BY: Signature: Date: Time: Printed Name: Company:

DRAFT REPORT

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Apex Laboratories, LLC
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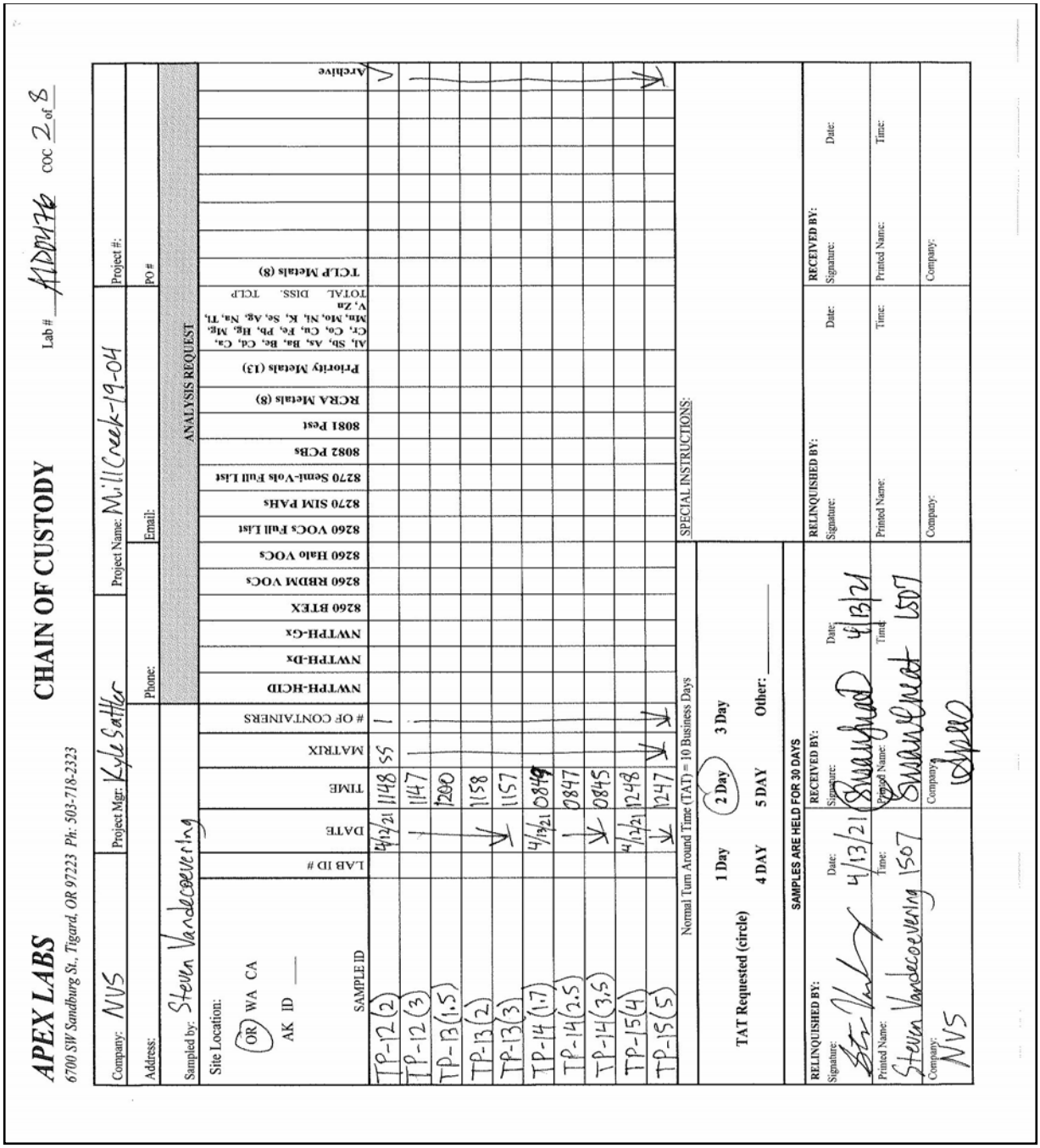
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0476 - 04 15 21 1453**



APEX LABS — CHAIN OF CUSTODY — Lab # A1D0476 — COC 2 of 8

6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323

Company: NVS | Project Mgr: Kyle Sattler | Project Name: MillCreek-19-04 | Project #:

Address: | Phone: | Email: | PO #

Sampled by: Steven Vandeberg

Site Location: (OR) WA CA AK ID ____

ANALYSIS REQUEST

SAMPLE ID	LAB ID #	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 BTEX	8260 RBDM VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIM PAHs	8270 Semi-Vols Full List	8082 PCBs	8081 Pest	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn TOTAL DISS. TCLP	TCLP Metals (8)	Archive
TP-12(2)		4/12/21	1148	SS	1															V
TP-12(3)			1147		1															
TP-13(1.5)			1200																	
TP-13(2)			1158																	
TP-13(3)			1157																	
TP-14(1.7)		4/13/21	0849																	
TP-14(2.5)			0847																	
TP-14(3.5)			0845																	
TP-15(4)		4/12/21	1248																	
TP-15(5)			1247																	V

Normal Turn Around Time (TAT) = 10 Business Days

TAT Requested (circle): 1 Day | 2 Day | 3 Day | 4 DAY | 5 DAY | Other: ____

SPECIAL INSTRUCTIONS:

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY: Signature: Date: 4/13/21 Time: Printed Name: Steven Vandeberg Company: NVS

RECEIVED BY: Signature: Date: 4/13/21 Time: 1507 Printed Name: Susanne Neat Company: LSDT

RELINQUISHED BY: Signature: Date: Time: Printed Name: Company:

RECEIVED BY: Signature: Date: Time: Printed Name: Company:

DRAFT REPORT

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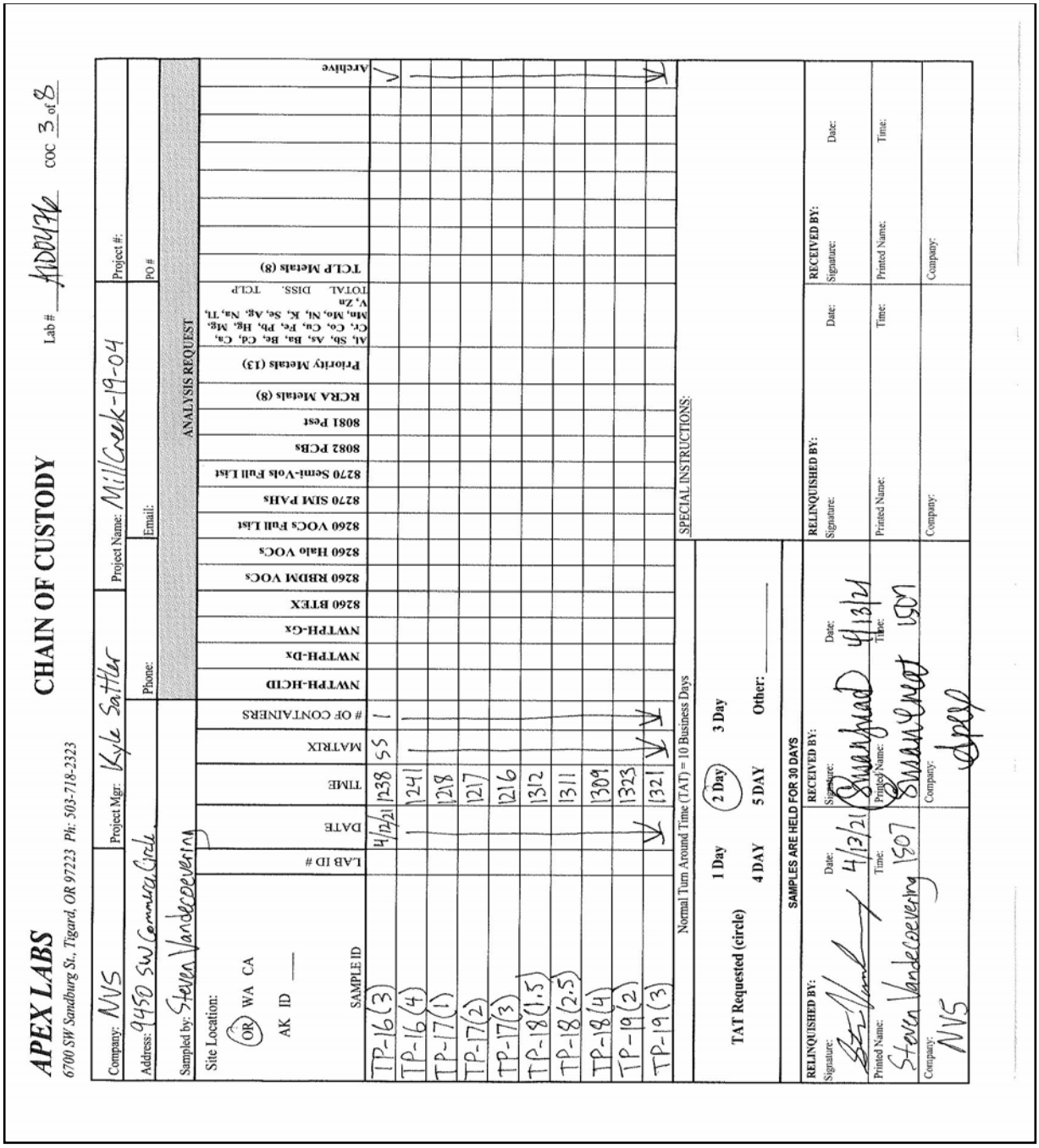
Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0476 - 04 15 21 1453**



APEX LABS
6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323

CHAIN OF CUSTODY

Lab # ADD0476 COC 3 of 8

Company: NVS | Project Mgr: Kyle Sattler | Project Name: MillCreek-19-04 | Project #:
Address: 9450 SW Commerce Circle | Phone: | Email: | PO #
Sampled by: Steven Vandeberg

Site Location: (OR) WA CA AK ID ___

ANALYSIS REQUEST

SAMPLE ID	LAB ID #	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 BTEX	8260 RBDM VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIM PAHs	8270 Semi-Vols Full List	8082 PCBs	8081 Pest	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn TOTAL DISS. TCLP	TCLP Metals (8)	Archive
TP-16(3)		4/12/21	1238	SS	1															✓
TP-16(4)			1241		1															
TP-17(1)			1218		1															
TP-17(2)			1217																	
TP-17(3)			1216																	
TP-18(1.5)			1312																	
TP-18(2.5)			1311																	
TP-18(4)			1309																	
TP-19(2)			1323																	
TP-19(3)		✓	1321	✓	✓															✓

SPECIAL INSTRUCTIONS:

Normal Turn Around Time (TAT) = 10 Business Days

TAT Requested (circle): 1 Day | 2 Day | 3 Day | 4 DAY | 5 DAY | Other: ___

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY: Signature: | Date: | Time: | Printed Name: | Company:

RECEIVED BY: Signature: | Date: | Time: | Printed Name: | Company:

RELINQUISHED BY: Signature: | Date: | Time: | Printed Name: | Company:

RECEIVED BY: Signature: | Date: | Time: | Printed Name: | Company:

RELINQUISHED BY: Signature: | Date: 4/13/21 | Time: 1507 | Printed Name: Steven Vandeberg | Company: NVS

RECEIVED BY: Signature: | Date: 4/13/21 | Time: 1507 | Printed Name: | Company:

DRAFT REPORT

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Apex Laboratories, LLC
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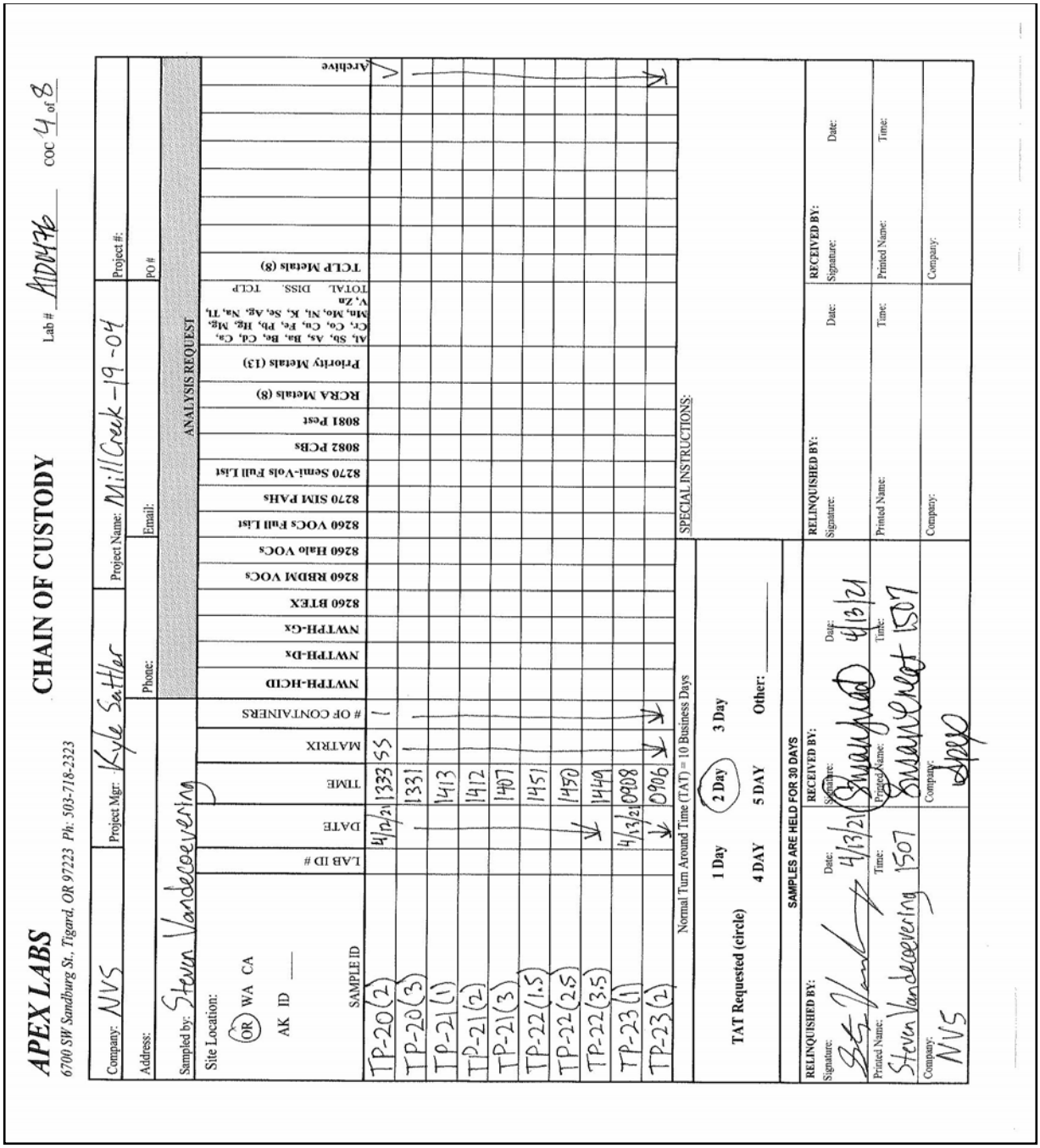
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0476 - 04 15 21 1453**



APEX LABS — CHAIN OF CUSTODY
6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323
Lab # A1D0476 COC 4 of 8

Company: NVS | Project Mgr: Kyle Sattler | Project Name: MillCreek-19-04 | Project #:
Address: | Phone: | Email: | PO #
Sampled by: Steven Vandeloeversing
Site Location: (OR) WA CA AK ID ___

SAMPLE ID	LAB ID #	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 BTEX	8260 RBDM VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIM PAHs	8270 Semi-Vols Full List	8082 PCBs	8081 Pest	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn TOTAL DISS. TCLP	TCLP Metals (8)	Archive
TP-20(2)		4/12/21	1333	SS	1																✓
TP-20(3)			1331		1																
TP-21(1)			1413																		
TP-21(2)			1412																		
TP-21(3)			1407																		
TP-22(1.5)			1451																		
TP-22(2.5)			1450																		
TP-22(3.5)		↓	1449	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
TP-23(1)		4/13/21	0808	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
TP-23(2)		↓	0906	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓

SPECIAL INSTRUCTIONS:

Normal Turn Around Time (TAT) = 10 Business Days
TAT Requested (circle): 1 Day | 2 Day | 3 Day | 4 DAY | 5 DAY | Other: ___

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY: Signature: Steven Vandeloeversing Date: 4/13/21 Printed Name: Steven Vandeloeversing Time: 1507 Company: NVS
RECEIVED BY: Signature: Date: Printed Name: Time: Company:
RELINQUISHED BY: Signature: Date: Printed Name: Time: Company:
RECEIVED BY: Signature: Date: Printed Name: Time: Company:

DRAFT REPORT

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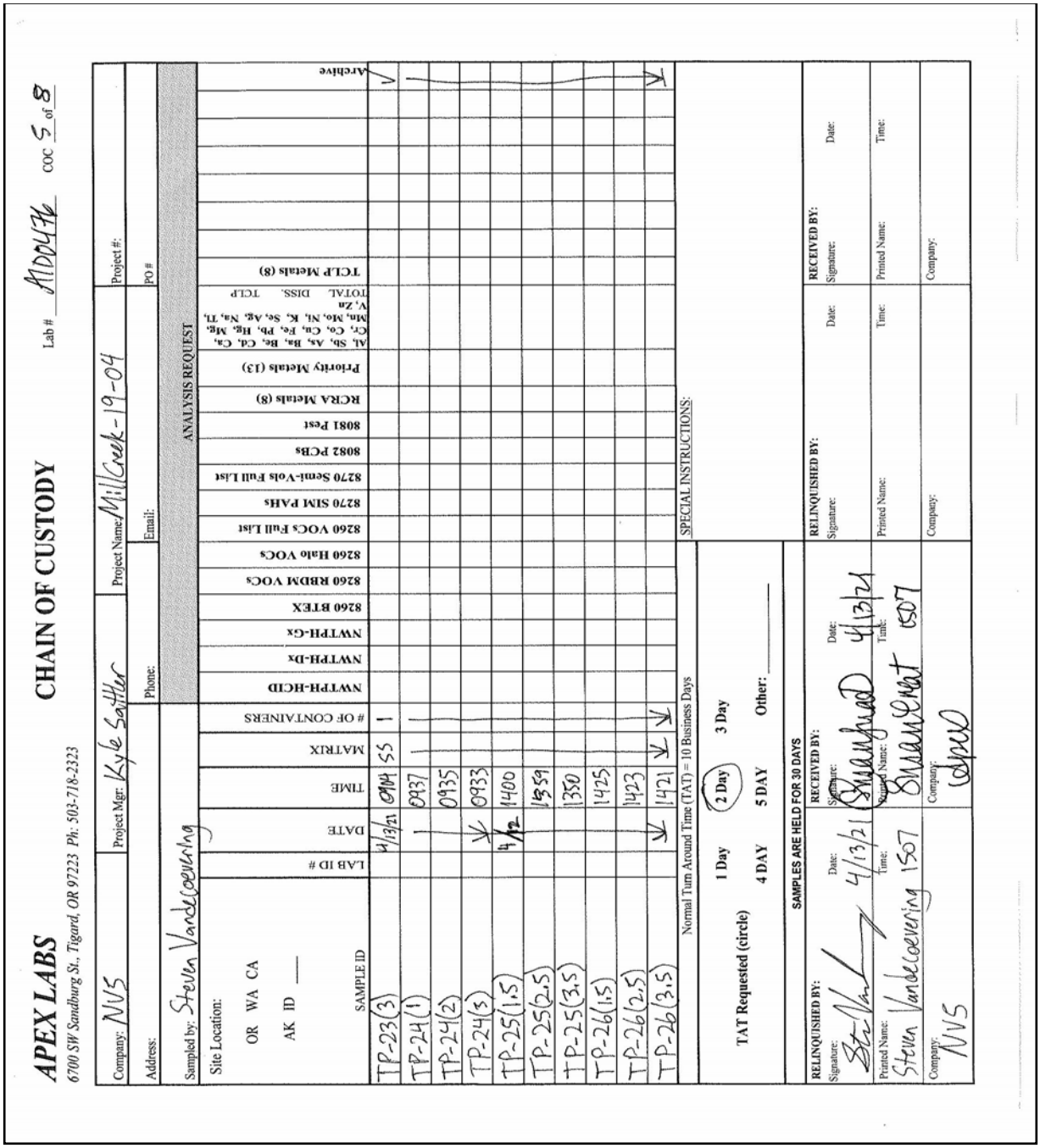
Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0476 - 04 15 21 1453**



APEX LABS — CHAIN OF CUSTODY — Lab # MIDAUG — COC 5 of 8

6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323

Company: NV5 | Project Mgr: Kyle Sattler | Project Name: MillCreek-19-04 | Project #:

Address: | Phone: | Email: | PO #

Sampled by: Steven Vandeloevering

Site Location: OR WA CA AK ID ___

ANALYSIS REQUEST

SAMPLE ID	LAB ID #	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 BTEX	8260 RBDM VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIM PAHs	8270 Semi-Vols Full List	8082 PCBs	8081 Pest	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn TOTAL DISS. TCLP	TCLP Metals (8)	Archive
TP-23(3)		4/13/21	0914	SS	1															✓
TP-24(1)			0937		1															
TP-24(2)			0935																	
TP-24(3)		✓	0933																	
TP-25(1.5)		4/12	1400																	
TP-25(2.5)			1359																	
TP-25(3.5)			1350																	
TP-26(1.5)			1425																	
TP-26(2.5)			1423																	
TP-26(3.5)		✓	1421	✓	✓															✓

SPECIAL INSTRUCTIONS:

Normal Turn Around Time (TAT) = 10 Business Days

TAT Requested (circle): 1 Day | (2 Day) | 3 Day | 4 DAY | 5 DAY | Other: ___

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY: Signature: | Date: 4/13/21 | Time: | Printed Name: Steven Vandeloevering | Company: NV5

RECEIVED BY: Signature: | Date: 4/13/21 | Time: 1507 | Printed Name: | Company:

RELINQUISHED BY: Signature: | Date: 4/13/21 | Time: 1507 | Printed Name: | Company:

RECEIVED BY: Signature: | Date: | Time: | Printed Name: | Company:

RELINQUISHED BY: Signature: | Date: | Time: | Printed Name: | Company:

RECEIVED BY: Signature: | Date: | Time: | Printed Name: | Company:

DRAFT REPORT

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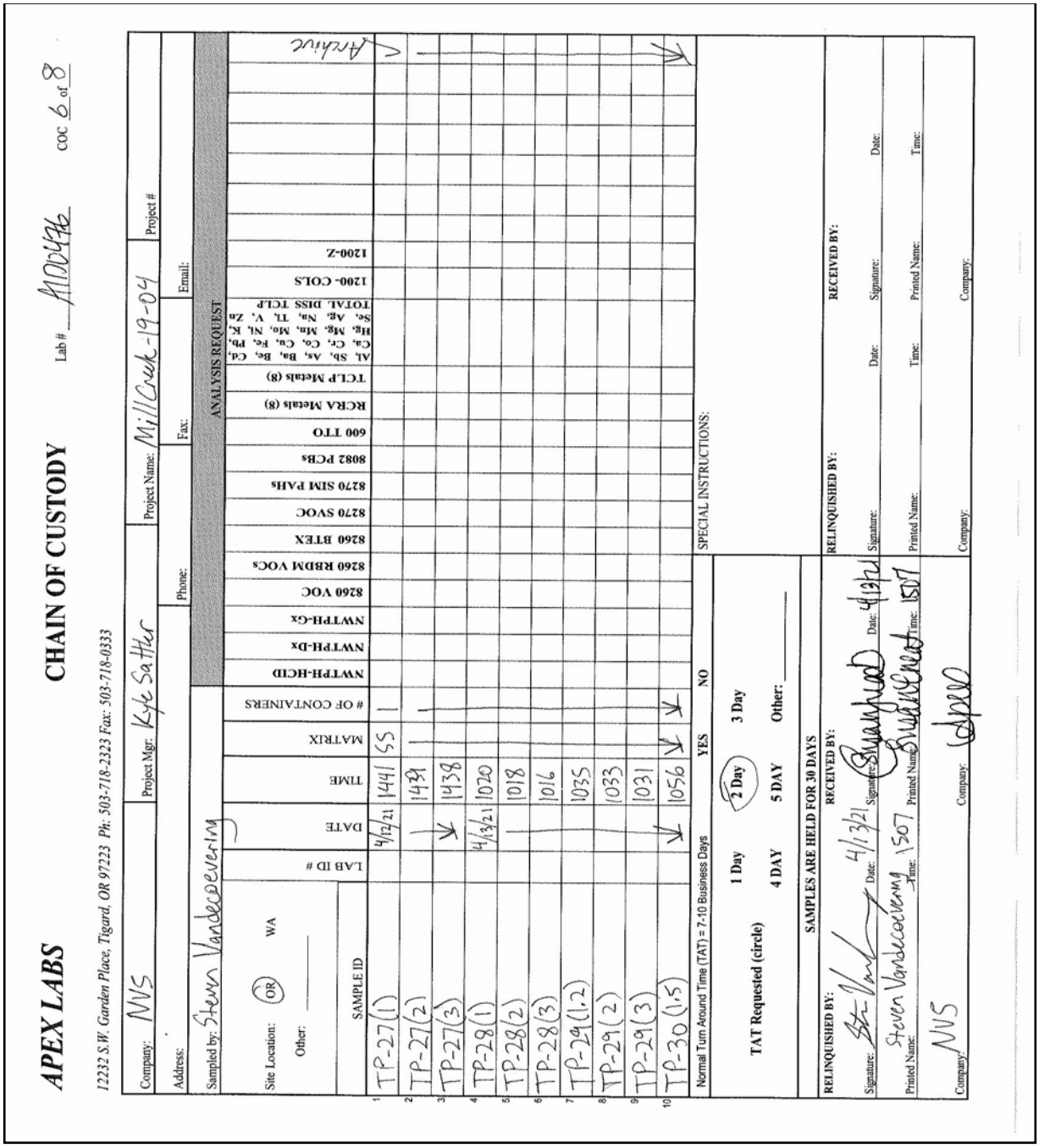
Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0476 - 04 15 21 1453**



APEX LABS — **CHAIN OF CUSTODY** — Lab # A1D0476 — COC 6 of 8

12232 S.W. Garden Place, Tigard, OR 97223 Ph: 503-718-2323 Fax: 503-718-0333

Company: NVS | Project Mgr: Kyle Sattler | Project Name: MillCreek-19-04 | Project #

Address: | Phone: | Fax: | Email:

Sampled by: Steven Vandeberg

Site Location: (OR) WA — Other: ____

#	SAMPLE ID	LAB ID #	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 VOC	8260 RBDM VOCs	8260 BTEX	8270 SVOC	8270 SIM PAHs	8082 PCBs	600 TTO	RCRA Metals (8)	TCLP Metals (8)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn TOTAL DISS TCLP	1200- COLS	1200-Z	ANALYSIS REQUEST
1	TP-27(1)		4/12/21	1441	LS	1															Archive
2	TP-27(2)			1439		1															
3	TP-27(3)			1438																	
4	TP-28(1)		4/13/21	1020																	
5	TP-28(2)			1018																	
6	TP-28(3)			1016																	
7	TP-29(1.2)			1035																	
8	TP-29(2)			1033																	
9	TP-29(3)			1031																	
10	TP-30(1.5)			1056																	

Normal Turn Around Time (TAT) = 7-10 Business Days — YES — NO

SPECIAL INSTRUCTIONS:

TAT Requested (circle): 1 Day — 2 Day — 3 Day — 4 DAY — 5 DAY — Other: ____

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY: Signature: — Date: 4/13/21 — Time: 1507 — Printed Name: Steven Vandeberg — Company: NVS

RECEIVED BY: Signature: — Date: 4/13/21 — Time: 1507 — Printed Name: Susanne Hall — Company: APEX

RELINQUISHED BY: Signature: — Date: — Time: — Printed Name: — Company:

RECEIVED BY: Signature: — Date: — Time: — Printed Name: — Company:

DRAFT REPORT

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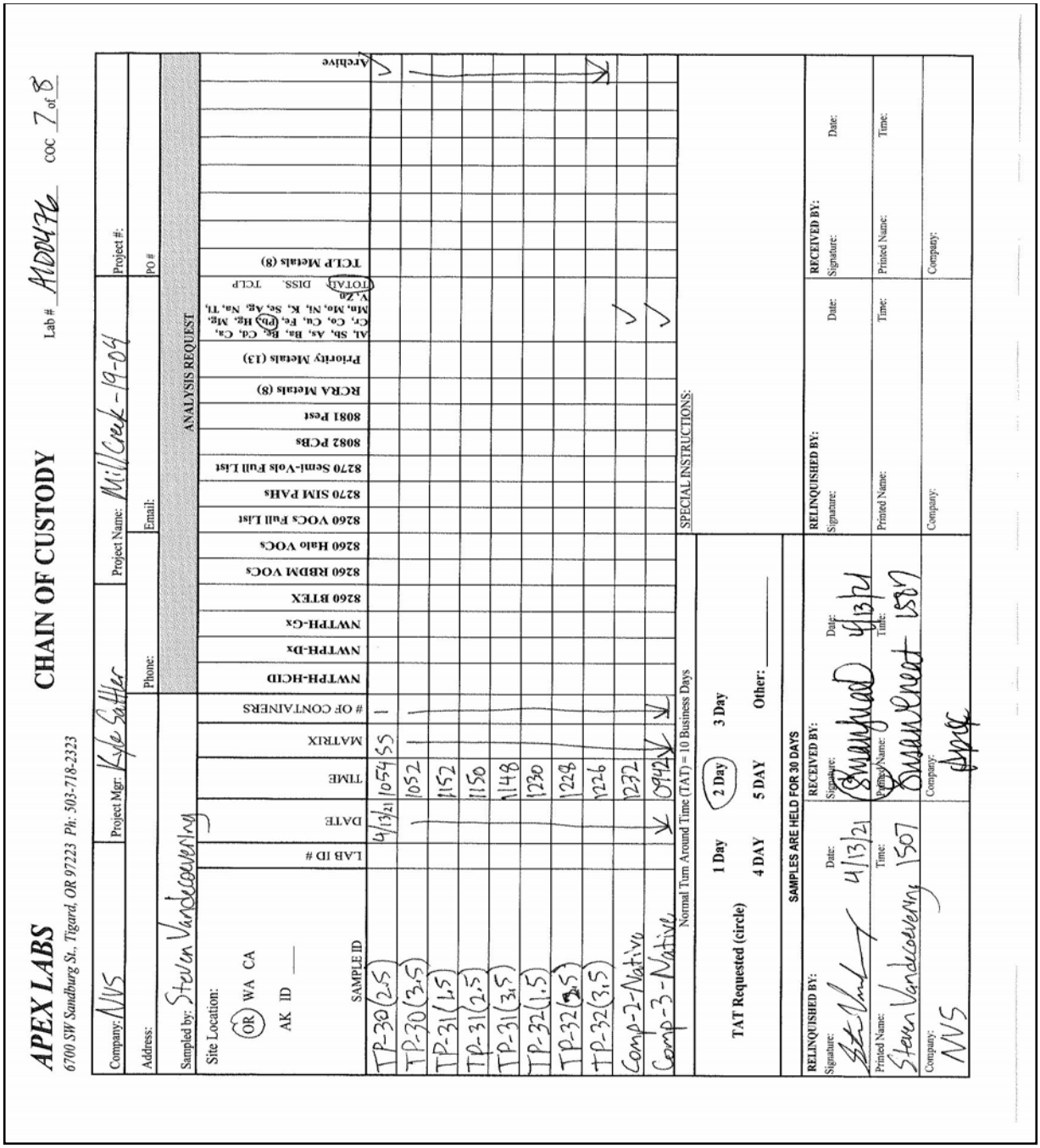
Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0476 - 04 15 21 1453**



APEX LABS — **CHAIN OF CUSTODY** — Lab # A1D0476 — COC 7 of 8

6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323

Company: NVS | Project Mgr: Kyle Sattler | Project Name: MillCreek-19-04 | Project #:

Address: | Phone: | Email: | PO #

Sampled by: Steven Vandeveenng

Site Location: (OR) WA CA AK ID ___

SAMPLE ID	LAB ID #	DATE	TIME	MATRIX	# OF CONTAINERS
TP-30(2.5)		4/13/21	1054	SS	1
TP-30(3.5)			1052		1
TP-31(1.5)			1152		
TP-31(2.5)			1150		
TP-31(3.5)			1148		
TP-32(1.5)			1230		
TP-32(2.5)			1228		
TP-32(3.5)			1226		
Comp-2-Native			1232		
Comp-3-Native		✓	0942	✓	✓

ANALYSIS REQUEST: NWTPH-HCID; NWTPH-Dx; NWTPH-Gx; 8260 BTEX; 8260 RBDM VOCs; 8260 Halo VOCs; 8260 VOCs Full List; 8270 SIM PAHs; 8270 Semi-Vols Full List; 8082 PCBs; 8081 Pest; RCRA Metals (8); Priority Metals (13); Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, (Pb), Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn (TOTAL / DISS. / TCLP); TCLP Metals (8); Archive

SPECIAL INSTRUCTIONS:

Normal Turn Around Time (TAT) = 10 Business Days

TAT Requested (circle): 1 Day | (2 Day) | 3 Day | 4 DAY | 5 DAY | Other: ___

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY: Signature: Steven Vandeveenng Date: 4/13/21 Time: 1507 Printed Name: Steven Vandeveenng Company: NVS

RECEIVED BY: Signature: Date: Time: Printed Name: Company:

RELINQUISHED BY: Signature: Date: Time: Printed Name: Company:

RECEIVED BY: Signature: Date: Time: Printed Name: Company:

DRAFT REPORT

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Apex Laboratories, LLC
6700 S.W. Sandburg Street
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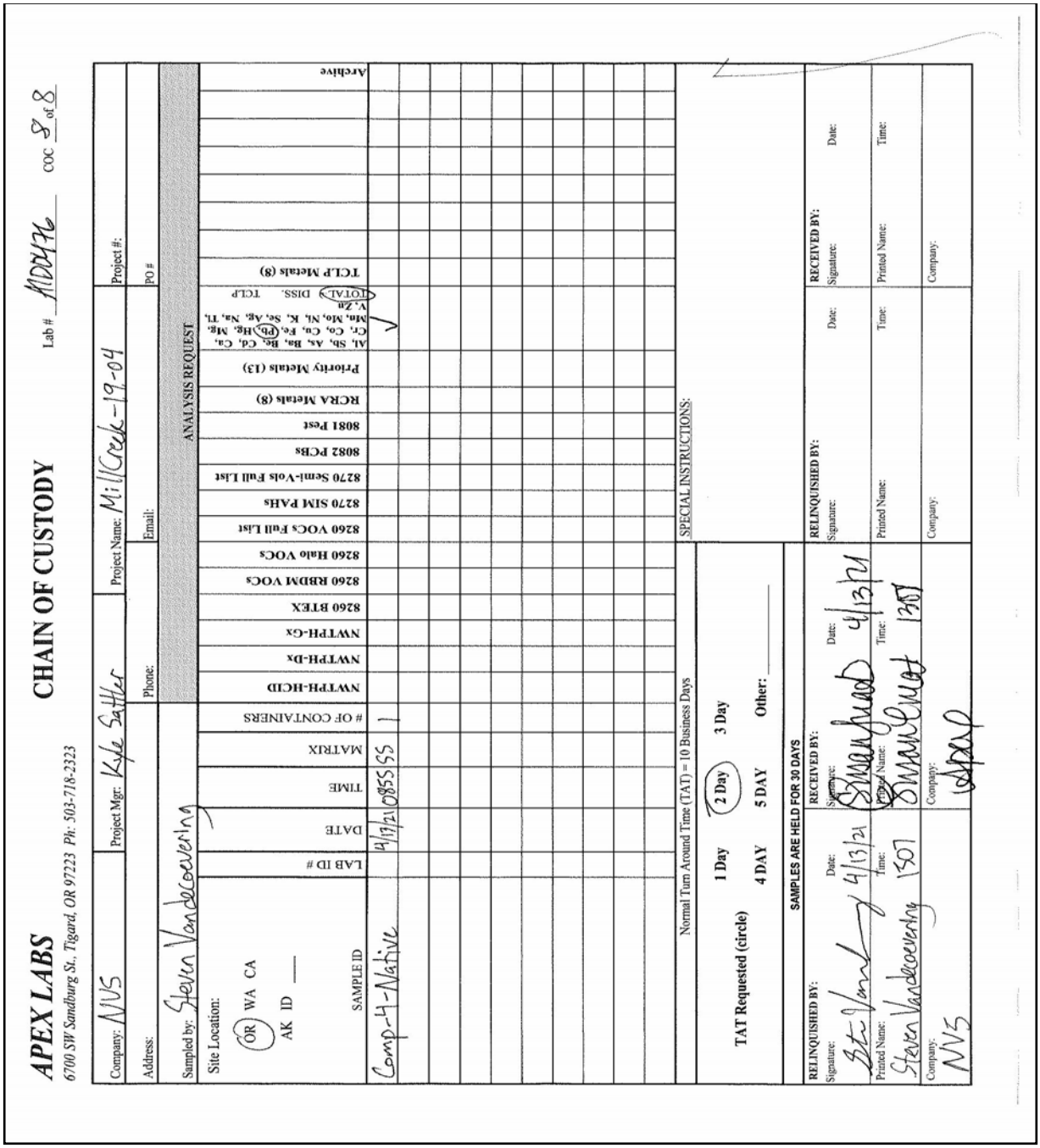
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0476 - 04 15 21 1453**



APEX LABS — CHAIN OF CUSTODY — Lab # A1D0476 — COC 8 of 8

6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323

Company: NVS | Project Mgr: Kyle Sattler | Project Name: MillCreek-19-04 | Project #:

Address: | Phone: | Email: | PO #

Sampled by: Steven Vandeberg

Site Location: (OR) WA CA AK ID ___

ANALYSIS REQUEST

SAMPLE ID	LAB ID #	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 BTEX	8260 RBDM VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIM PAHs	8270 Semi-Vols Full List	8082 PCBs	8081 Pest	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, (Pb), Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn	TOTAL / DISS. TCLP	TCLP Metals (8)	Archive
Comp-4-Native		4/13/21	0855	SS	1														✓		

SPECIAL INSTRUCTIONS:

Normal Turn Around Time (TAT) = 10 Business Days

TAT Requested (circle): 1 Day | (2 Day) | 3 Day | 4 DAY | 5 DAY | Other: ___

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature:	Signature:	Signature:	Signature:
Date: 4/13/21	Date: 4/13/21	Date:	Date:
Time: 1507	Time: 1507	Time:	Time:
Printed Name: Steven Vandeberg	Printed Name: Steven Vandeberg	Printed Name:	Printed Name:
Company: NVS	Company: NVS	Company:	Company:

DRAFT REPORT

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Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0476 - 04 15 21 1453**

APEX LABS COOLER RECEIPT FORM

Client: NV5 Element WO#: A1 D0476

Project/Project #: Mill Creek-19-04

Delivery Info:

Date/time received: 4/13/21 @ 1507 By: (SC)

Delivered by: Apex____Client X ESS____FedEx____UPS____Swift___Senvoy ___SDS___Other_____

Cooler Inspection Date/time inspected: 4/13/21 @ 1515 By: (SC)

Chain of Custody included? Yes X No _____ Custody seals? Yes_____ No X

Signed/dated by client? Yes X No _____

Signed/dated by Apex? Yes X No _____

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	1.9	3.0					
Received on ice? (Y/N)	Y	Y					
Temp. blanks? (Y/N)	N	N					
Ice type: (Gel/Real/Other)	real/gel	real/gel					
Condition:	good	good					

Cooler out of temp? (Y)(N) Possible reason why: _____

Green dots applied to out of temperature samples? Yes/(No)

Out of temperature samples form initiated? Yes/(No)

Sample Inspection: Date/time inspected: 4/13/21 @ 16:59 By: KS

All samples intact? Yes X No ___ Comments: _____

Bottle labels/COCs agree? Yes ___ No X Comments: T on cont reads 13:56, COC reads 13:50 on TP25(3.5). Received trip blank,

COC/container discrepancies form initiated? Yes ___ No X

Containers/volumes received appropriate for analysis? Yes X No ___ Comments: _____

Do VOA vials have visible headspace? Yes ___ No ___ NA X

Comments _____

Water samples: pH checked: Yes___No___NA X pH appropriate? Yes___No___NA X

Comments: _____

Additional information: not listed on COC. Non-lab created Trip blank.

Labeled by: KS Witness: SC Cooler Inspected by: KS

DRAFT REPORT

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6700 S.W. Sandburg Street
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ORELAP ID: **OR100062**

ANALYTICAL REPORT

Monday, May 31, 2021

Kyle Sattler
GeoDesign, Inc.
9450 SW Commerce Circle
Wilsonville, OR 97070

RE: A1D0476 - MillCreek-19-04 - MillCreek-19-04

Thank you for using Apex Laboratories. We greatly appreciate your business and strive to provide the highest quality services to the environmental industry.

Enclosed are the results of analyses for work order A1D0476, which was received by the laboratory on 4/13/2021 at 3:07:00PM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: pnerenberg@apex-labs.com, or by phone at 503-718-2323.

Please note: All samples will be disposed of within 30 days of sample receipt, unless prior arrangements have been made.

Cooler Receipt Information

(See Cooler Receipt Form for details)

Cooler #1	1.9 degC	Cooler #2	3.0 degC

This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.
All other deliverables derived from this data, including Electronic Data Deliverables (EDDs), CLP-like forms, client requested summary sheets, and all other products are considered secondary to this report.

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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Apex Laboratories, LLC
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503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0476 - 05 24 21 1752**

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TP-17(2)	A1D0476-24	Soil	04/12/21 12:17	04/13/21 15:07
TP-17(3)	A1D0476-25	Soil	04/12/21 12:16	04/13/21 15:07
TP-18(2.5)	A1D0476-27	Soil	04/12/21 13:11	04/13/21 15:07
TP-18(4)	A1D0476-28	Soil	04/12/21 13:09	04/13/21 15:07
TP-19(3)	A1D0476-30	Soil	04/12/21 13:21	04/13/21 15:07
TP-20(3)	A1D0476-32	Soil	04/12/21 13:31	04/13/21 15:07
TP-21(2)	A1D0476-34	Soil	04/12/21 14:12	04/13/21 15:07
TP-21(3)	A1D0476-35	Soil	04/12/21 14:07	04/13/21 15:07
TP-22(2.5)	A1D0476-37	Soil	04/12/21 14:50	04/13/21 15:07
TP-22(3.5)	A1D0476-38	Soil	04/12/21 14:49	04/13/21 15:07
TP-23(2)	A1D0476-40	Soil	04/13/21 09:06	04/13/21 15:07
TP-23(3)	A1D0476-41	Soil	04/13/21 09:04	04/13/21 15:07
TP-24(2)	A1D0476-43	Soil	04/13/21 09:35	04/13/21 15:07
TP-24(3)	A1D0476-44	Soil	04/13/21 09:33	04/13/21 15:07
COMP-2-Native	A1D0476-69	Soil	04/13/21 12:32	04/13/21 15:07
COMP-3-Native	A1D0476-70	Soil	04/13/21 09:42	04/13/21 15:07
COMP-4-Native	A1D0476-71	Soil	04/13/21 08:55	04/13/21 15:07
COMP-3-Native2	A1D0476-73	Soil	04/12/21 12:17	04/13/21 15:07
COMP-3-Native3	A1D0476-74	Soil	04/12/21 12:16	04/13/21 15:07

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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Apex Laboratories, LLC
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503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0476 - 05 24 21 1752**

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
COMP-2-Native (A1D0476-69)				**Matrix: Soil**				
Batch: 1040497								
Lead	**13.8**	---	0.248	mg/kg dry	10	04/15/21 00:32	EPA 6020B	
COMP-3-Native (A1D0476-70)				**Matrix: Soil**				
Batch: 1040497								
Lead	**36.5**	---	0.259	mg/kg dry	10	04/15/21 00:37	EPA 6020B	
COMP-4-Native (A1D0476-71)				**Matrix: Soil**				
Batch: 1040497								
Lead	**17.8**	---	0.264	mg/kg dry	10	04/15/21 00:42	EPA 6020B	
COMP-3-Native2 (A1D0476-73)				**Matrix: Soil**				
Batch: 1040633								
Lead	**33.0**	---	0.280	mg/kg dry	10	04/19/21 14:20	EPA 6020B	
COMP-3-Native3 (A1D0476-74)				**Matrix: Soil**				
Batch: 1040633								
Lead	**15.5**	---	0.260	mg/kg dry	10	04/19/21 14:25	EPA 6020B	

Apex Laboratories

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Philip Nerenberg, Lab Director

Apex Laboratories, LLC
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Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0476 - 05 24 21 1752**

ANALYTICAL SAMPLE RESULTS

Percent Dry Weight

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
COMP-2-Native (A1D0476-69)				**Matrix: Soil**		**Batch: 1040468**		
% Solids	**79.0**	---	1.00	%	1	04/15/21 07:37	EPA 8000D	
COMP-3-Native (A1D0476-70)				**Matrix: Soil**		**Batch: 1040468**		
% Solids	**78.0**	---	1.00	%	1	04/15/21 07:37	EPA 8000D	
COMP-4-Native (A1D0476-71)				**Matrix: Soil**		**Batch: 1040468**		
% Solids	**80.0**	---	1.00	%	1	04/15/21 07:37	EPA 8000D	
COMP-3-Native2 (A1D0476-73)				**Matrix: Soil**		**Batch: 1040580**		
% Solids	**77.3**	---	1.00	%	1	04/17/21 08:20	EPA 8000D	
COMP-3-Native3 (A1D0476-74)				**Matrix: Soil**		**Batch: 1040580**		
% Solids	**76.1**	---	1.00	%	1	04/17/21 08:20	EPA 8000D	

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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ORELAP ID: OR100062

ANALYTICAL REPORT

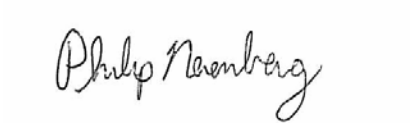
GeoDesign, Inc.	Project: MillCreek-19-04	
9450 SW Commerce Circle	Project Number: MillCreek-19-04	Report ID:
Wilsonville, OR 97070	Project Manager: Kyle Sattler	A1D0476 - 05 24 21 1752

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040497 - EPA 3051A							Soil					
Blank (1040497-BLK1)			Prepared: 04/14/21 13:30 Analyzed: 04/14/21 23:26									
EPA 6020B												
Lead	ND	---	0.192	mg/kg wet	10	---	---	---	---	---	---	
LCS (1040497-BS1)			Prepared: 04/14/21 13:30 Analyzed: 04/14/21 23:36									
EPA 6020B												
Lead	52.2	---	0.200	mg/kg wet	10	50.0	---	104	80-120%	---	---	
Duplicate (1040497-DUP1)			Prepared: 04/14/21 13:30 Analyzed: 04/14/21 23:57									
QC Source Sample: Non-SDG (A1D0057-06)												
Lead	**182**	---	0.214	mg/kg dry	10	---	189	---	---	4	20%	
Duplicate (1040497-DUP2)			Prepared: 04/14/21 13:30 Analyzed: 04/15/21 00:02									
QC Source Sample: Non-SDG (A1D0057-06)												
Lead	**186**	---	0.214	mg/kg dry	10	---	189	---	---	1	20%	
Matrix Spike (1040497-MS1)			Prepared: 04/14/21 13:30 Analyzed: 04/15/21 00:17									
QC Source Sample: Non-SDG (A1D0057-06)												
EPA 6020B												
Lead	246	---	0.220	mg/kg dry	10	54.9	189	105	75-125%	---	---	
Batch 1040633 - EPA 3051A							Soil					
Blank (1040633-BLK1)			Prepared: 04/19/21 09:26 Analyzed: 04/19/21 13:57									
EPA 6020B												
Lead	ND	---	0.192	mg/kg wet	10	---	---	---	---	---	---	
LCS (1040633-BS1)			Prepared: 04/19/21 09:26 Analyzed: 04/19/21 14:02									
EPA 6020B												
Lead	51.0	---	0.200	mg/kg wet	10	50.0	---	102	80-120%	---	---	
Duplicate (1040633-DUP1)			Prepared: 04/19/21 09:26 Analyzed: 04/19/21 14:11									
QC Source Sample: Non-SDG (A1C1127-38)												

Apex Laboratories



Philip Nerenberg, Lab Director

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Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0476 - 05 24 21 1752**

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040633 - EPA 3051A							**Soil**					
Duplicate (1040633-DUP1)			Prepared: 04/19/21 09:26		Analyzed: 04/19/21 14:11							
QC Source Sample: Non-SDG (A1C1127-38)												
Lead	**16.5**	---	0.320	mg/kg dry	10	---	18.4	---	---	10	20%	
Matrix Spike (1040633-MS1)			Prepared: 04/19/21 09:26		Analyzed: 04/19/21 14:16							
QC Source Sample: Non-SDG (A1C1127-38)												
EPA 6020B												
Lead	104	---	0.300	mg/kg dry	10	75.1	18.4	114	75-125%	---	---	

Apex Laboratories

Philip Nerenberg, Lab Director

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Apex Laboratories, LLC
6700 S.W. Sandburg Street
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503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

GeoDesign, Inc.	Project: MillCreek-19-04	
9450 SW Commerce Circle	Project Number: MillCreek-19-04	Report ID:
Wilsonville, OR 97070	Project Manager: Kyle Sattler	A1D0476 - 05 24 21 1752

QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040468 - Total Solids (Dry Weight)							Soil					
Duplicate (1040468-DUP1)			Prepared: 04/14/21 07:53		Analyzed: 04/15/21 07:37							
QC Source Sample: Non-SDG (A1D0379-01)												
% Solids	**95.4**	---	1.00	%	1	---	94.8	---	---	0.6	10%	
Duplicate (1040468-DUP2)			Prepared: 04/14/21 07:53		Analyzed: 04/15/21 07:37							
QC Source Sample: COMP-3-Native (A1D0476-70)												
EPA 8000D												
% Solids	**78.3**	---	1.00	%	1	---	78.0	---	---	0.4	10%	
Duplicate (1040468-DUP3)			Prepared: 04/14/21 07:53		Analyzed: 04/15/21 07:37							
QC Source Sample: Non-SDG (A1D0484-03)												
% Solids	**72.4**	---	1.00	%	1	---	71.9	---	---	0.6	10%	
Duplicate (1040468-DUP4)			Prepared: 04/14/21 07:53		Analyzed: 04/15/21 07:37							
QC Source Sample: Non-SDG (A1D0488-05)												
% Solids	**68.8**	---	1.00	%	1	---	68.2	---	---	0.8	10%	
Duplicate (1040468-DUP5)			Prepared: 04/14/21 19:25		Analyzed: 04/15/21 07:37							
QC Source Sample: Non-SDG (A1D0538-01)												
% Solids	**77.6**	---	1.00	%	1	---	77.5	---	---	0.2	10%	
Duplicate (1040468-DUP6)			Prepared: 04/14/21 19:25		Analyzed: 04/15/21 07:37							
QC Source Sample: Non-SDG (A1D0544-03)												
% Solids	**74.6**	---	1.00	%	1	---	78.7	---	---	5	10%	
Duplicate (1040468-DUP7)			Prepared: 04/14/21 19:25		Analyzed: 04/15/21 07:37							
QC Source Sample: Non-SDG (A1D0558-01)												
% Solids	**76.1**	---	1.00	%	1	---	75.9	---	---	0.3	10%	
Duplicate (1040468-DUP8)			Prepared: 04/14/21 19:25		Analyzed: 04/15/21 07:37							
QC Source Sample: Non-SDG (A1D0561-02)												
% Solids	**76.5**	---	1.00	%	1	---	76.6	---	---	0.2	10%	

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Philip Nerenberg, Lab Director

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Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0476 - 05 24 21 1752**

QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040468 - Total Solids (Dry Weight)							**Soil**					

No Client related Batch QC samples analyzed for this batch. See notes page for more information.

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0476 - 05 24 21 1752**

QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040580 - Total Solids (Dry Weight)							**Soil**					
Duplicate (1040580-DUP1)			Prepared: 04/16/21 10:00		Analyzed: 04/17/21 08:20							
QC Source Sample: Non-SDG (A1D0481-01)												
% Solids	**91.0**	---	1.00	%	1	---	91.0	---	---	0.1	10%	
Duplicate (1040580-DUP2)			Prepared: 04/16/21 10:00		Analyzed: 04/17/21 08:20							
QC Source Sample: Non-SDG (A1D0540-01)												
% Solids	**94.1**	---	1.00	%	1	---	94.2	---	---	0.09	10%	
Duplicate (1040580-DUP3)			Prepared: 04/16/21 10:00		Analyzed: 04/17/21 08:20							
QC Source Sample: Non-SDG (A1D0567-04)												
% Solids	**78.4**	---	1.00	%	1	---	76.4	---	---	3	10%	
Duplicate (1040580-DUP4)			Prepared: 04/16/21 10:00		Analyzed: 04/17/21 08:20							
QC Source Sample: Non-SDG (A1D0571-01)												
% Solids	**71.2**	---	1.00	%	1	---	70.7	---	---	0.8	10%	
Duplicate (1040580-DUP5)			Prepared: 04/16/21 10:00		Analyzed: 04/17/21 08:20							
QC Source Sample: Non-SDG (A1D0573-02)												
% Solids	**73.9**	---	1.00	%	1	---	73.6	---	---	0.4	10%	
Duplicate (1040580-DUP6)			Prepared: 04/16/21 10:00		Analyzed: 04/17/21 08:20							
QC Source Sample: Non-SDG (A1D0575-02)												
% Solids	**77.9**	---	1.00	%	1	---	77.5	---	---	0.6	10%	
Duplicate (1040580-DUP7)			Prepared: 04/16/21 10:00		Analyzed: 04/17/21 08:20							
QC Source Sample: Non-SDG (A1D0580-01)												
% Solids	**89.7**	---	1.00	%	1	---	90.3	---	---	0.6	10%	
Duplicate (1040580-DUP8)			Prepared: 04/16/21 10:00		Analyzed: 04/17/21 08:20							
QC Source Sample: Non-SDG (A1D0631-03)												
% Solids	**79.7**	---	1.00	%	1	---	79.2	---	---	0.6	10%	

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: MillCreek-19-04	
9450 SW Commerce Circle	Project Number: MillCreek-19-04	Report ID:
Wilsonville, OR 97070	Project Manager: Kyle Sattler	A1D0476 - 05 24 21 1752

QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040580 - Total Solids (Dry Weight)							Soil					
Duplicate (1040580-DUP9)			Prepared: 04/16/21 10:00		Analyzed: 04/17/21 08:20							
QC Source Sample: Non-SDG (A1D0636-01)												
% Solids	**65.2**	---	1.00	%	1	---	64.4	---	---	1	10%	
Duplicate (1040580-DUPA)			Prepared: 04/16/21 10:00		Analyzed: 04/17/21 08:20							
QC Source Sample: Non-SDG (A1D0638-06)												
% Solids	**77.3**	---	1.00	%	1	---	77.3	---	---	0.04	10%	
Duplicate (1040580-DUPB)			Prepared: 04/16/21 17:38		Analyzed: 04/17/21 08:20							
QC Source Sample: Non-SDG (A1D0055-26)												
% Solids	**98.1**	---	1.00	%	1	---	98.0	---	---	0.003	10%	
Duplicate (1040580-DUPC)			Prepared: 04/16/21 17:38		Analyzed: 04/17/21 08:20							
QC Source Sample: COMP-3-Native3 (A1D0476-74)												
EPA 8000D												
% Solids	**76.1**	---	1.00	%	1	---	76.1	---	---	0.07	10%	
Duplicate (1040580-DUPD)			Prepared: 04/16/21 17:39		Analyzed: 04/17/21 08:20							
QC Source Sample: Non-SDG (A1D0639-07)												
% Solids	**79.2**	---	1.00	%	1	---	79.1	---	---	0.07	10%	
Duplicate (1040580-DUPE)			Prepared: 04/16/21 20:02		Analyzed: 04/17/21 08:20							
QC Source Sample: Non-SDG (A1D0670-04)												
% Solids	**85.4**	---	1.00	%	1	---	85.9	---	---	0.6	10%	
Duplicate (1040580-DUPF)			Prepared: 04/16/21 20:02		Analyzed: 04/17/21 08:20							
QC Source Sample: Non-SDG (A1D0675-01)												
% Solids	**78.5**	---	1.00	%	1	---	79.2	---	---	0.9	10%	
Duplicate (1040580-DUPG)			Prepared: 04/16/21 20:02		Analyzed: 04/17/21 08:20							
QC Source Sample: Non-SDG (A1D0676-09)												
% Solids	**72.5**	---	1.00	%	1	---	71.7	---	---	1	10%	

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0476 - 05 24 21 1752**

QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040580 - Total Solids (Dry Weight)							Soil					
Duplicate (1040580-DUPH)			Prepared: 04/16/21 20:02		Analyzed: 04/17/21 08:20							
QC Source Sample: Non-SDG (A1D0676-19)												
% Solids	**90.9**	---	1.00	%	1	---	89.2	---	---	2	10%	
Duplicate (1040580-DUPI)			Prepared: 04/16/21 20:02		Analyzed: 04/17/21 08:20							
QC Source Sample: Non-SDG (A1D0677-06)												
% Solids	**73.1**	---	1.00	%	1	---	73.6	---	---	0.7	10%	
Duplicate (1040580-DUPJ)			Prepared: 04/16/21 20:02		Analyzed: 04/17/21 08:20							
QC Source Sample: Non-SDG (A1D0679-03)												
% Solids	**88.0**	---	1.00	%	1	---	88.2	---	---	0.2	10%	

No Client related Batch QC samples analyzed for this batch. See notes page for more information.

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Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0476 - 05 24 21 1752**

SAMPLE PREPARATION INFORMATION

Total Metals by EPA 6020B (ICPMS)

Prep: EPA 3051A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1040497							
A1D0476-69	Soil	EPA 6020B	04/13/21 12:32	04/14/21 13:30	0.51g/50mL	0.5g/50mL	0.98
A1D0476-70	Soil	EPA 6020B	04/13/21 09:42	04/14/21 13:30	0.496g/50mL	0.5g/50mL	1.01
A1D0476-71	Soil	EPA 6020B	04/13/21 08:55	04/14/21 13:30	0.474g/50mL	0.5g/50mL	1.05
Batch: 1040633							
A1D0476-73	Soil	EPA 6020B	04/12/21 12:17	04/19/21 09:26	0.462g/50mL	0.5g/50mL	1.08
A1D0476-74	Soil	EPA 6020B	04/12/21 12:16	04/19/21 09:26	0.506g/50mL	0.5g/50mL	0.99

Percent Dry Weight

Prep: Total Solids (Dry Weight)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1040468							
A1D0476-69	Soil	EPA 8000D	04/13/21 12:32	04/14/21 07:53			NA
A1D0476-70	Soil	EPA 8000D	04/13/21 09:42	04/14/21 07:53			NA
A1D0476-71	Soil	EPA 8000D	04/13/21 08:55	04/14/21 07:53			NA
Batch: 1040580							
A1D0476-73	Soil	EPA 8000D	04/12/21 12:17	04/16/21 17:38			NA
A1D0476-74	Soil	EPA 8000D	04/12/21 12:16	04/16/21 17:38			NA

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: MillCreek-19-04	
9450 SW Commerce Circle	Project Number: MillCreek-19-04	Report ID:
Wilsonville, OR 97070	Project Manager: Kyle Sattler	A1D0476 - 05 24 21 1752

QUALIFIER DEFINITIONS

Client Sample and Quality Control (QC) Sample Qualifier Definitions:

There are No Qualifiers on Sample or QC Data for this report

Apex Laboratories

Philip Nerenberg, Lab Director

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0476 - 05 24 21 1752**

REPORTING NOTES AND CONVENTIONS:

Abbreviations:

DET Analyte DETECTED at or above the detection or reporting limit.

ND Analyte NOT DETECTED at or above the detection or reporting limit.

NR Result Not Reported

RPD Relative Percent Difference. RPDs for Matrix Spikes and Matrix Spike Duplicates are based on concentration, not recovery.

Detection Limits: Limit of Detection (LOD)

Limits of Detection (LODs) are normally set at a level of one half the validated Limit of Quantitation (LOQ).
If no value is listed ('-----'), then the data has not been evaluated below the Reporting Limit.

Reporting Limits: Limit of Quantitation (LOQ)

Validated Limits of Quantitation (LOQs) are reported as the Reporting Limits for all analyses where the LOQ, MRL, PQL or CRL are requested. The LOQ represents a level at or above the low point of the calibration curve, that has been validated according to Apex Laboratories' comprehensive LOQ policies and procedures.

Reporting Conventions:

Basis: Results for soil samples are generally reported on a 100% dry weight basis.
The Result Basis is listed following the units as " dry", " wet", or " " (blank) designation.

" dry" Sample results and Reporting Limits are reported on a dry weight basis. (i.e. "ug/kg dry")
See Percent Solids section for details of dry weight analysis.

" wet" Sample results and Reporting Limits for this analysis are normally dry weight corrected, but have not been modified in this case.

" " Results without 'wet' or 'dry' designation are not normally dry weight corrected. These results are considered 'As Received'.

QC Source:

In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) may be analyzed to demonstrate accuracy and precision of the extraction batch.

Non-Client Batch QC Samples (Duplicates and Matrix Spike/Duplicates) may not be included in this report. Please request a Full QC report if this data is required.

Miscellaneous Notes:

" --- " QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.

" *** " Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

Blanks:

Standard practice is to evaluate the results from Blank QC Samples down to a level equal to ½ the Reporting Limit (RL).
-For Blank hits falling between ½ the RL and the RL (J flagged hits), the associated sample and QC data will receive a 'B-02' qualifier.
-For Blank hits above the RL, the associated sample and QC data will receive a 'B' qualifier, per Apex Laboratories' Blank Policy.
For further details, please request a copy of this document.

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GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0476 - 05 24 21 1752**

REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks (Cont.):

Sample results flagged with a 'B' or 'B-02' qualifier are potentially biased high if the sample results are less than ten times the level found in the blank for inorganic analyses, or less than five times the level found in the blank for organic analyses.

'B' and 'B-02' qualifications are only applied to sample results detected above the Reporting Level.

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

Water samples containing significant amounts of sediment are decanted or separated prior to extraction, and only the water portion analyzed, unless otherwise directed by the client.

Soil and Sediment Samples:

Soil and Sediment samples containing significant amounts of water are decanted prior to extraction, and only the solid portion analyzed, unless otherwise directed by the client.

Sampling and Preservation Notes:

Certain regulatory programs, such as National Pollutant Discharge Elimination System (NPDES), require that activities such as sample filtration (for dissolved metals, orthophosphate, hexavalent chromium, etc.) and testing of short hold analytes (pH, Dissolved Oxygen, etc.) be performed in the field (on-site) within a short time window. In addition, sample matrix spikes are required for some analyses, and sufficient volume must be provided, and billable site specific QC requested, if this is required. All regulatory permits should be reviewed to ensure that these requirements are being met.

Data users should be aware of which regulations pertain to the samples they submit for testing. If related sample collection activities are not approved for a particular regulatory program, results should be considered estimates. Apex Laboratories will qualify these analytes according to the most stringent requirements, however results for samples that are for non-regulatory purposes may be acceptable.

Samples that have been filtered and preserved at Apex Laboratories per client request are listed in the preparation section of the report with the date and time of filtration listed.

Apex Laboratories maintains detailed records on sample receipt, including client label verification, cooler temperature, sample preservation, hold time compliance and field filtration. Data is qualified as necessary, and the lack of qualification indicates compliance with required parameters.

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0476 - 05 24 21 1752**

LABORATORY ACCREDITATION INFORMATION

ORELAP Certification ID: OR100062 (Primary Accreditation) - EPA ID: OR01039

All methods and analytes reported from work performed at Apex Laboratories are included on Apex Laboratories' ORELAP Scope of Certification, with the exception of any analyte(s) listed below:

Apex Laboratories

Matrix	Analysis	TNI_ID	Analyte	TNI_ID	Accreditation

All reported analytes are included in Apex Laboratories' current ORELAP scope.

Secondary Accreditations

Apex Laboratories also maintains reciprocal accreditation with non-TNI states (Washington DOE), as well as other state specific accreditations not listed here.

Subcontract Laboratory Accreditations

Subcontracted data falls outside of Apex Laboratories' Scope of Accreditation.
Please see the Subcontract Laboratory report for full details, or contact your Project Manager for more information.

Field Testing Parameters

Results for Field Tested data are provded by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.

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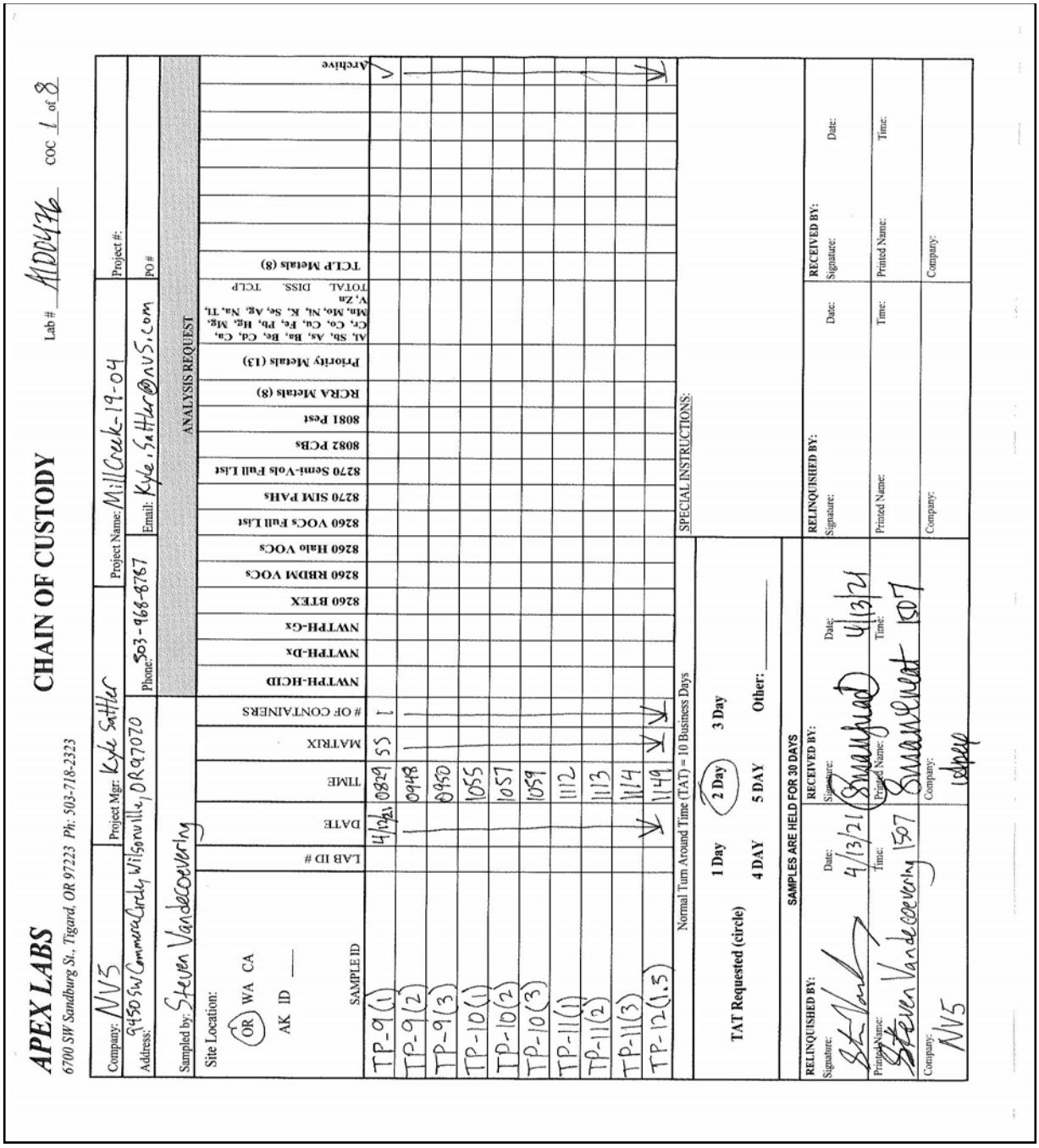

APEX LABS
6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323

CHAIN OF CUSTODY

Lab # A1D0476 COC 1 of 1

Company: NV5 | Project Mgr: Kyle Sattler | Project Name: MillCreek-19-04 | Project #:
Address: 9450 SW Commerce Circle, Wilsonville, OR 97070 | Phone: 503-968-6787 | Email: Kyle.Sattler@NV5.com | PO #
Sampled by: Steven Vandecoevering

Site Location: (OR) WA CA AK ID ___

ANALYSIS REQUEST

SAMPLE ID	LAB ID #	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 BTEX	8260 RBDM VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIM PAHs	8270 Semi-Vols Full List	8082 PCBs	8081 Pest	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn TOTAL DISS. TCLP	TCLP Metals (8)	Archive
TP-9(1)		4/12/21	0829	SS	1																✓
TP-9(2)			0948		1																
TP-9(3)			0950																		
TP-10(1)			1055																		
TP-10(2)			1057																		
TP-10(3)			1059																		
TP-11(1)			1112																		
TP-11(2)			1113																		
TP-11(3)			1114																		
TP-12(1.5)		↓	1149	↓	↓																↓

SPECIAL INSTRUCTIONS:

Normal Turn Around Time (TAT) = 10 Business Days

TAT Requested (circle): 1 Day | 2 Day | 3 Day | 4 DAY | 5 DAY | Other: ___

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature:	Signature:	Signature:	Signature:
Date: 4/13/21	Date: 4/13/21	Date:	Date:
Time: 1507	Time:	Time:	Time:
Printed Name: Steven Vandecoevering	Printed Name:	Printed Name:	Printed Name:
Company: NV5	Company: Apex	Company:	Company:

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Philip Nerenberg

Philip Nerenberg, Lab Director

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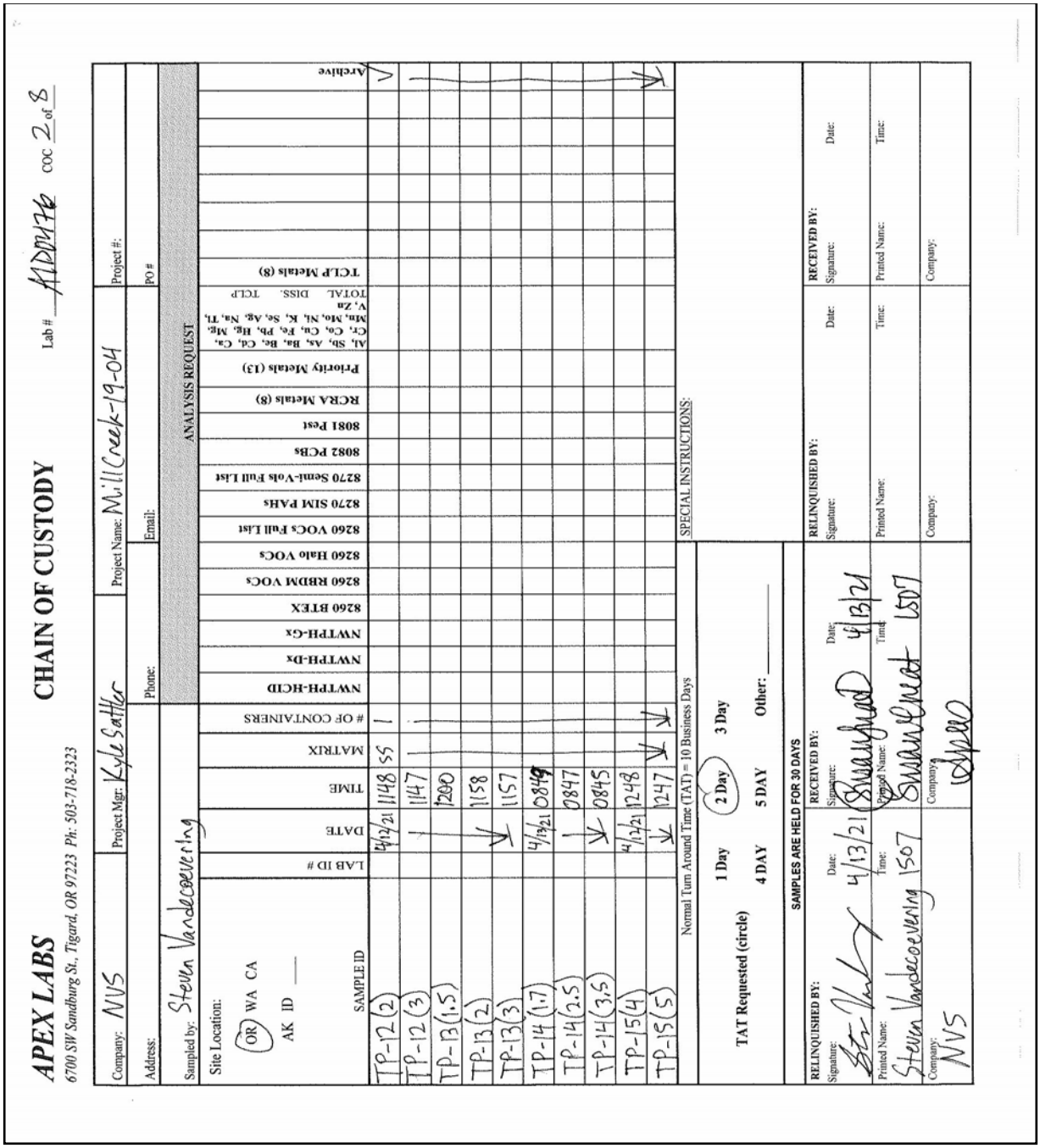
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0476 - 05 24 21 1752**



APEX LABS — **CHAIN OF CUSTODY** — Lab # A1D0476 — COC 2 of 8

6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323

Company: NVS | Project Mgr: Kyle Sattler | Project Name: MillCreek-19-04 | Project #:

Address: | Phone: | Email: | PO #

Sampled by: Steven Vandeberg

Site Location: (OR) WA CA AK ID ____

ANALYSIS REQUEST

SAMPLE ID	LAB ID #	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 BTEX	8260 RBDM VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIM PAHs	8270 Semi-Vols Full List	8082 PCBs	8081 Pest	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn TOTAL DISS. TCLP	TCLP Metals (8)	Archive
TP-12(2)		4/12/21	1148	SS	1															V
TP-12(3)			1147		1															
TP-13(1.5)			1200																	
TP-13(2)			1158																	
TP-13(3)			1157																	
TP-14(1.7)		4/13/21	0849																	
TP-14(2.5)			0847																	
TP-14(3.5)			0845																	
TP-15(4)		4/12/21	1248																	
TP-15(5)			1247																	V

SPECIAL INSTRUCTIONS:

Normal Turn Around Time (TAT) = 10 Business Days

TAT Requested (circle): 1 Day | 2 Day | 3 Day | 4 DAY | 5 DAY | Other: ____

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY: Signature: | Date: | Time: | Printed Name: | Company:

RECEIVED BY: Signature: | Date: | Time: | Printed Name: | Company:

RELINQUISHED BY: Signature: | Date: | Time: | Printed Name: | Company:

RECEIVED BY: Signature: | Date: | Time: | Printed Name: | Company:

RELINQUISHED BY: Signature: | Date: 4/13/21 | Time: 1507 | Printed Name: Steven Vandeberg | Company: NVS

RECEIVED BY: Signature: | Date: 4/13/21 | Time: 1507 | Printed Name: | Company:

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

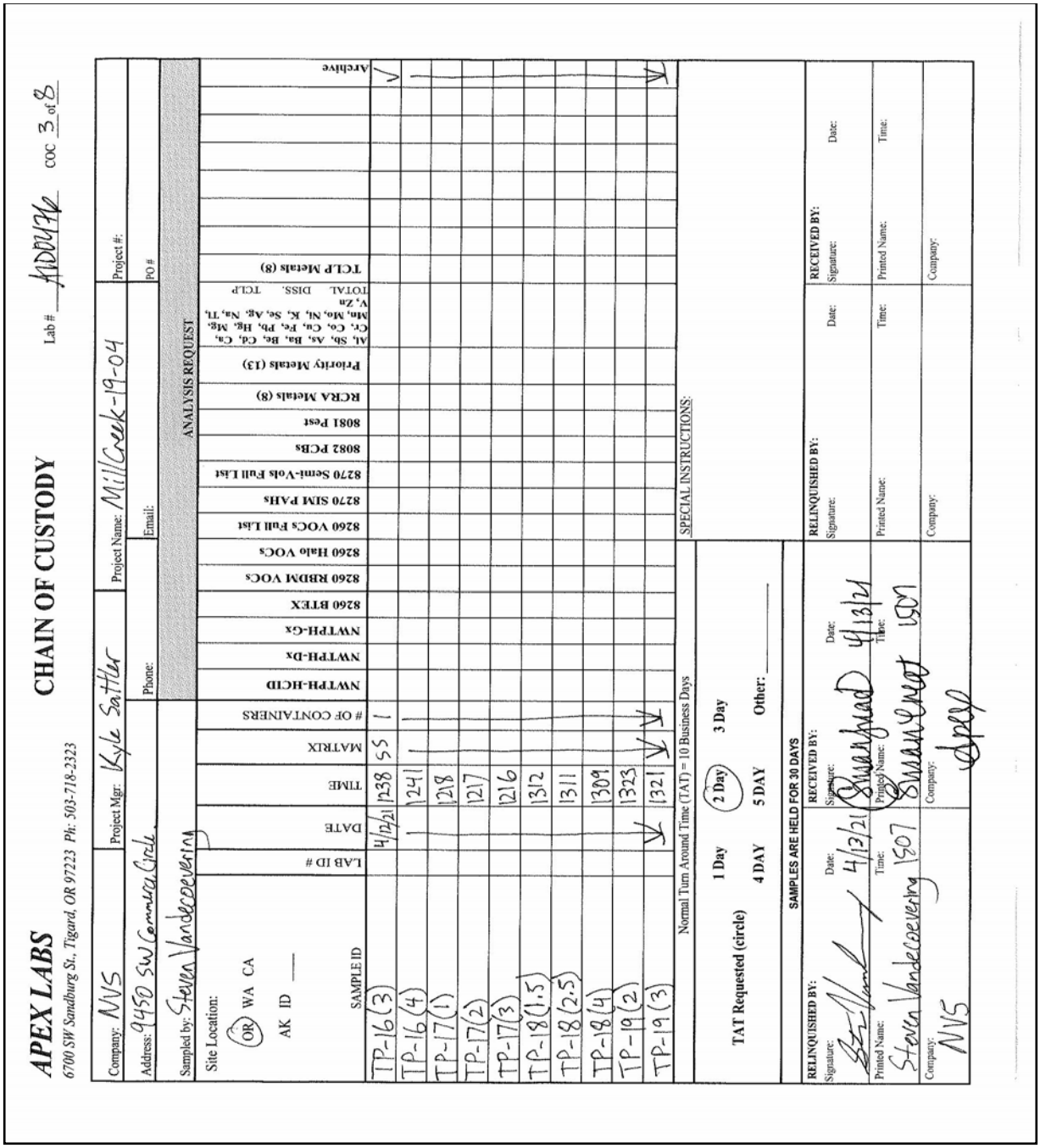
Philip Nerenberg

Philip Nerenberg, Lab Director

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0476 - 05 24 21 1752**



APEX LABS — 6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323

CHAIN OF CUSTODY — Lab # 1D0476 — COC 3 of 8

Company: NVS | Project Mgr: Kyle Sattler | Project Name: MillCreek-19-04 | Project #:
Address: 9450 SW Commerce Circle | Phone: | Email: | PO #
Sampled by: Steven Vandeberg

Site Location: (OR) WA CA AK ID ___

ANALYSIS REQUEST

SAMPLE ID	LAB ID #	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 BTEX	8260 RBDM VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIM PAHs	8270 Semi-Vols Full List	8082 PCBs	8081 Pest	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn TOTAL DISS. TCLP	TCLP Metals (8)	Archive
TP-16(3)		4/12/21	1238	SS	1															✓
TP-16(4)			1241		1															
TP-17(1)			1218		1															
TP-17(2)			1217		1															
TP-17(3)			1216		1															
TP-18(1.5)			1312		1															
TP-18(2.5)			1311		1															
TP-18(4)			1309		1															
TP-19(2)			1323		1															
TP-19(3)		✓	1321	✓	1															✓

SPECIAL INSTRUCTIONS:

Normal Turn Around Time (TAT) = 10 Business Days

TAT Requested (circle): 1 Day (2 Day) 3 Day 4 DAY 5 DAY Other: ___

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY: Signature: Date: 4/13/21 Printed Name: Steven Vandeberg Time: 1507 Company: NVS

RECEIVED BY: Signature: Date: 4/13/21 Printed Name: Time: 1507 Company: dpsp

RELINQUISHED BY: Signature: Date: Printed Name: Time: Company:

RECEIVED BY: Signature: Date: Printed Name: Time: Company:

Apex Laboratories

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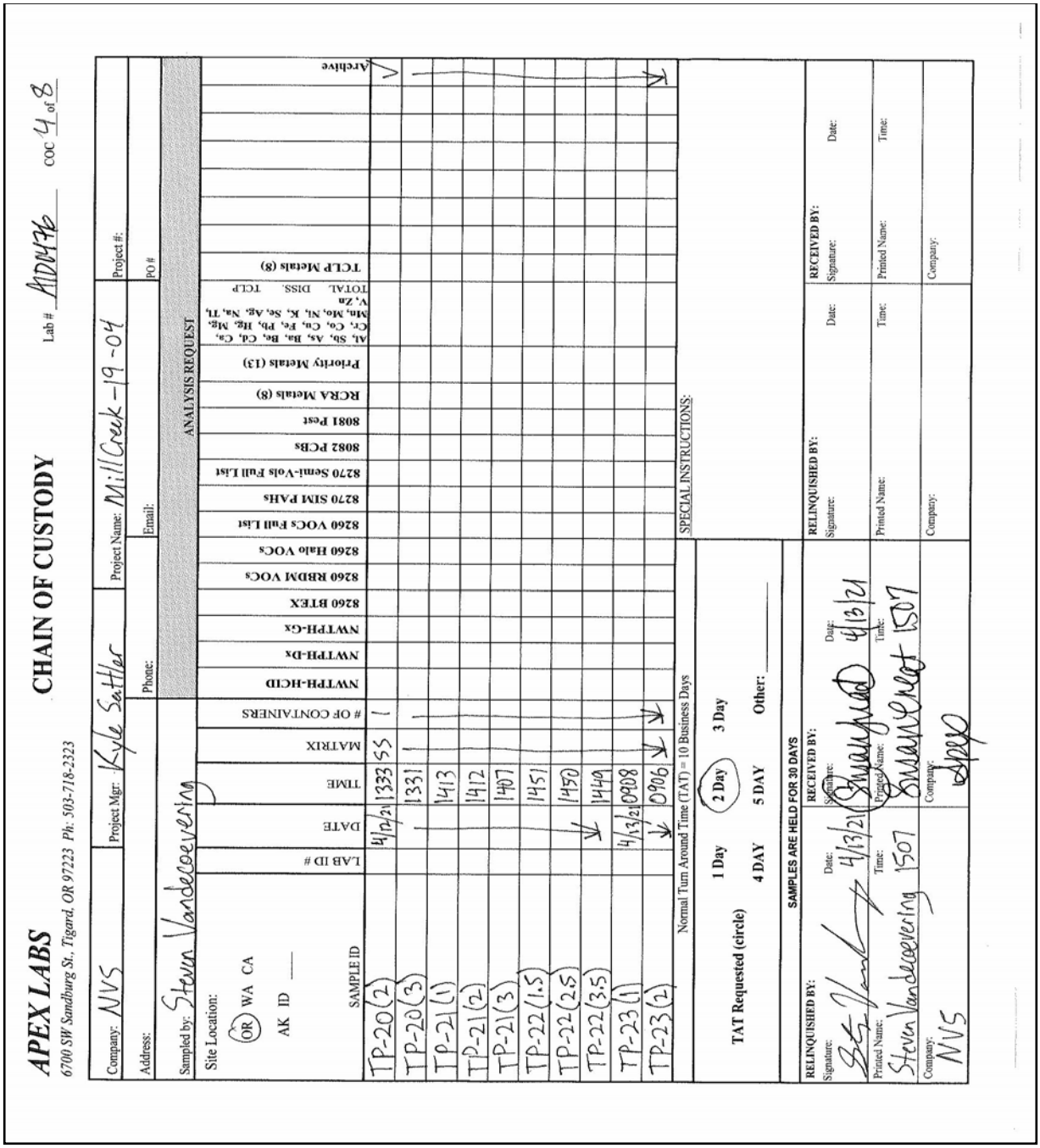
Philip Nerenberg

Philip Nerenberg, Lab Director

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0476 - 05 24 21 1752**



APEX LABS — **CHAIN OF CUSTODY** — Lab # A1D0476 — COC 4 of 8

6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323

Company: NVS — Project Mgr: Kyle Sattler — Project Name: MillCreek-19-04 — Project #:

Address: — Phone: — Email: — PO #

Sampled by: Steven Vandeloeversing

Site Location: (OR) WA CA — AK ID ___

ANALYSIS REQUEST

SAMPLE ID	LAB ID #	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 BTEX	8260 RBDM VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIM PAHs	8270 Semi-Vols Full List	8082 PCBs	8081 Pest	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn TOTAL DISS. TCLP	TCLP Metals (8)	PO #	Archive
TP-20(2)		4/12/21	1333	SS	1																✓
TP-20(3)			1331		1																
TP-21(1)			1413																		
TP-21(2)			1412																		
TP-21(3)			1407																		
TP-22(1.5)			1451																		
TP-22(2.5)			1450																		
TP-22(3.5)		↓	1449	↓	↓																
TP-23(1)		4/13/21	0808																		
TP-23(2)		↓	0906	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓

Normal Turn Around Time (TAT) = 10 Business Days

SPECIAL INSTRUCTIONS:

TAT Requested (circle): 1 Day — (2 Day) — 3 Day — 4 DAY — 5 DAY — Other: ___

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature:	Signature:	Signature:	Signature:
Date: 4/13/21	Date: 4/13/21	Date:	Date:
Time: 1507	Time: 1507	Time:	Time:
Printed Name: Steven Vandeloeversing	Printed Name: Steven Vandeloeversing	Printed Name:	Printed Name:
Company: NVS	Company: APEX	Company:	Company:

Apex Laboratories

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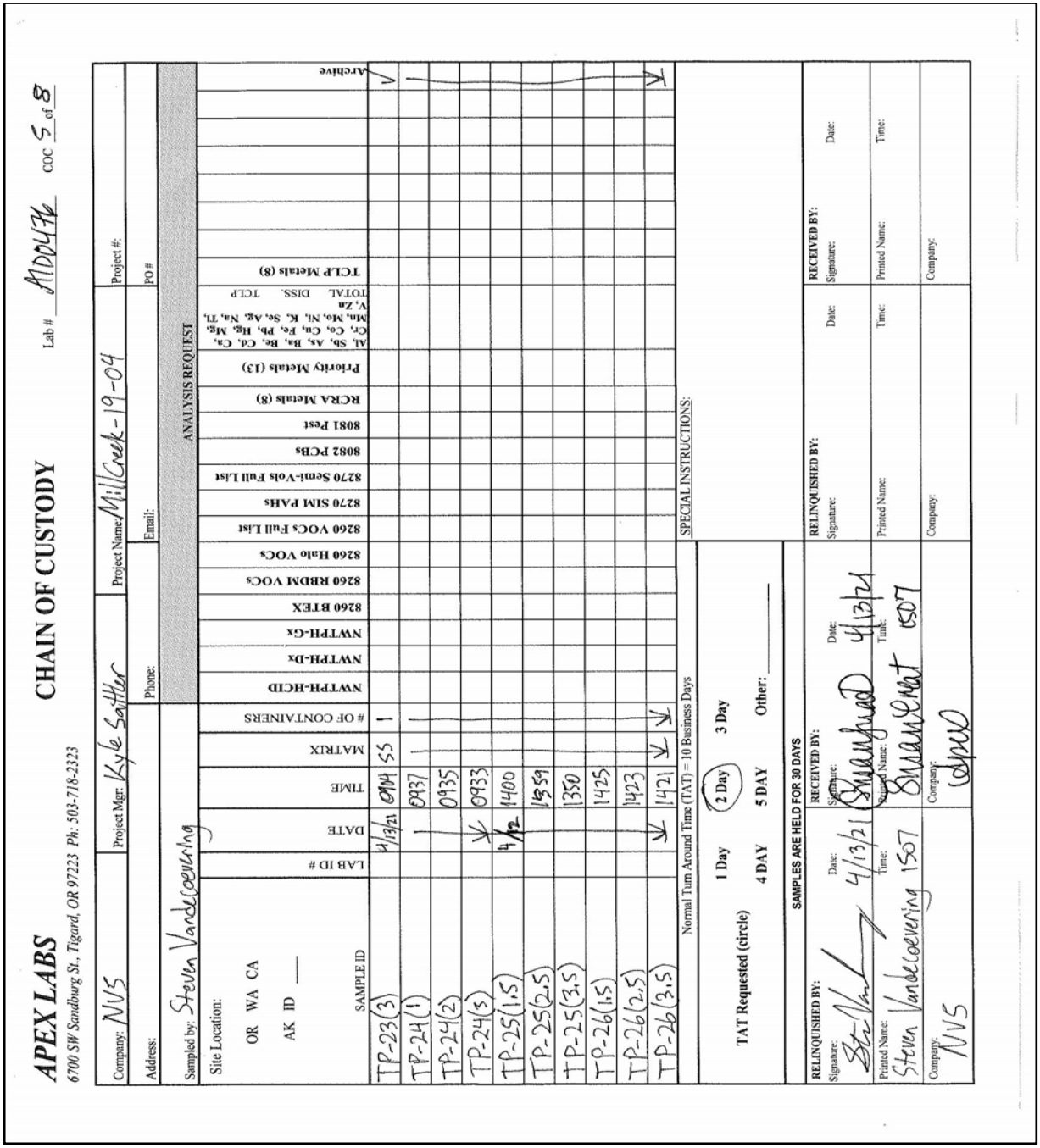
Philip Nerenberg

Philip Nerenberg, Lab Director

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0476 - 05 24 21 1752**



APEX LABS — **CHAIN OF CUSTODY** — Lab # MIDALTR — COC 5 of 8

6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323

Company: NV5 | Project Mgr: Kyle Sattler | Project Name: MillCreek-19-04 | Project #:

Address: | Phone: | Email: | PO #

Sampled by: Steven Vandeloevering

Site Location: OR WA CA AK ID ___

SAMPLE ID	LAB ID #	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 BTEX	8260 RBDM VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIM PAHs	8270 Semi-Vols Full List	8082 PCBs	8081 Pest	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn TOTAL DISS. TCLP	TCLP Metals (8)	Archive
TP-23(3)		4/13/21	0914	SS	1																✓
TP-24(1)			0937		1																
TP-24(2)			0935																		
TP-24(3)		✓	0933																		
TP-25(1.5)		4/12	1400																		
TP-25(2.5)			1359																		
TP-25(3.5)			1350																		
TP-26(1.5)			1425																		
TP-26(2.5)			1423																		
TP-26(3.5)		✓	1421	✓	✓																✓

Normal Turn Around Time (TAT) = 10 Business Days

SPECIAL INSTRUCTIONS:

TAT Requested (circle): 1 Day | (2 Day) | 3 Day | 4 DAY | 5 DAY | Other: ___

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature:	Signature:	Signature:	Signature:
Date: 4/13/21	Date: 4/13/21	Date:	Date:
Time: 1507	Time: 1507	Time:	Time:
Printed Name: Steven Vandeloevering	Printed Name: Shawn Hurd	Printed Name:	Printed Name:
Company: NV5	Company: APEX	Company:	Company:

Apex Laboratories

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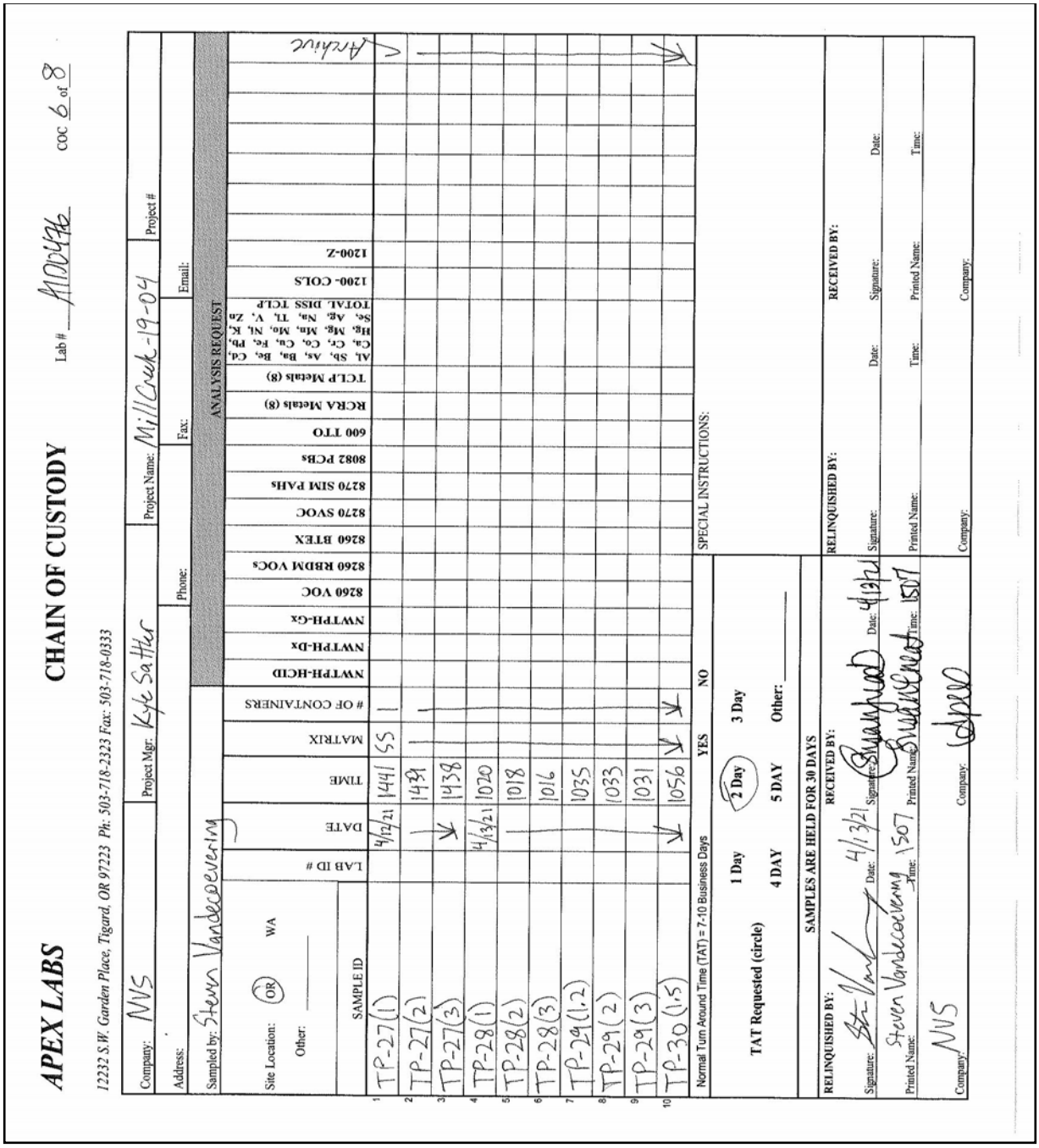
Philip Nerenberg

Philip Nerenberg, Lab Director

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0476 - 05 24 21 1752**



APEX LABS — **CHAIN OF CUSTODY** — Lab # A1D0476 — COC 6 of 8

12232 S.W. Garden Place, Tigard, OR 97223 Ph: 503-718-2323 Fax: 503-718-0333

Company: NVS | Project Mgr: Kyle Sattler | Project Name: MillCreek-19-04 | Project #
Address: | Phone: | Fax: | Email:
Sampled by: Steven Vandeberg

Site Location: (OR) WA
Other: ____

#	SAMPLE ID	LAB ID #	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 VOC	8260 RBDM VOCs	8260 BTEX	8270 SVOC	8270 SIM PAHs	8082 PCBs	600 TTO	RCRA Metals (8)	TCLP Metals (8)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn TOTAL DISS TCLP	1200- COLS	1200-Z	Archive
1	TP-27(1)		4/12/21	1441	LS	1															
2	TP-27(2)			1439																	
3	TP-27(3)			1438																	
4	TP-28(1)		4/13/21	1020																	
5	TP-28(2)			1018																	
6	TP-28(3)			1016																	
7	TP-29(1.2)			1035																	
8	TP-29(2)			1033																	
9	TP-29(3)			1031																	
10	TP-30(1.5)			1056		1															

Normal Turn Around Time (TAT) = 7-10 Business Days — YES — NO

SPECIAL INSTRUCTIONS:

TAT Requested (circle): 1 Day | 2 Day | 3 Day | 4 DAY | 5 DAY | Other: ____

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY: Signature: | Date: 4/13/21 | Time: 1507 | Printed Name: Steven Vandeberg | Company: NVS

RECEIVED BY: Signature: | Date: 4/13/21 | Time: 1507 | Printed Name: Susan Ward | Company: APEX

RELINQUISHED BY: Signature: | Date: | Time: | Printed Name: | Company:

RECEIVED BY: Signature: | Date: | Time: | Printed Name: | Company:

Apex Laboratories

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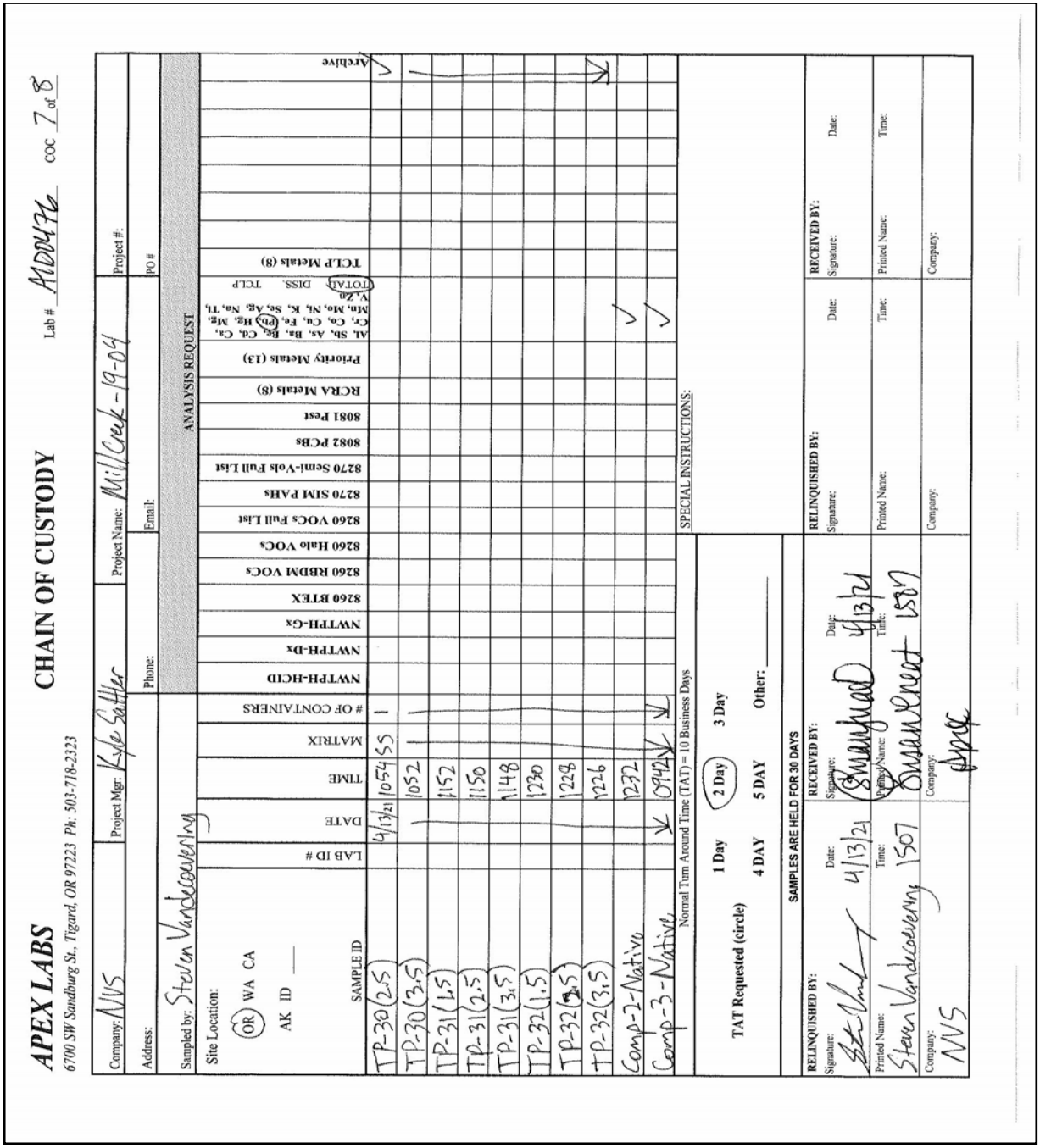
Philip Nerenberg

Philip Nerenberg, Lab Director

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0476 - 05 24 21 1752**



APEX LABS — **CHAIN OF CUSTODY** — Lab # A1D0476 — COC 7 of 8

6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323

Company: NVS | Project Mgr: Kyle Sattler | Project Name: MillCreek-19-04 | Project #:

Address: | Phone: | Email: | PO #

Sampled by: Steven Vandeveenng

Site Location: (OR) WA CA AK ID ___

SAMPLE ID	LAB ID #	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 BTEX	8260 RBDM VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIM PAHs	8270 Semi-Vols Full List	8082 PCBs	8081 Pest	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, (Pb), Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn	TCLP (TOTAL / DISS.)	TCLP Metals (8)	Archive
TP-30(2.5)		4/13/21	1054	SS	1																✓
TP-30(3.5)			1052		1																
TP-31(1.5)			1152																		
TP-31(2.5)			1150																		
TP-31(3.5)			1148																		
TP-32(1.5)			1230																		
TP-32(2.5)			1228																		
TP-32(3.5)			1226																✓		✓
Comp-2-Native			1222																		
Comp-3-Native		✓	0942	✓	✓									✓					✓		

Normal Turn Around Time (TAT) = 10 Business Days

TAT Requested (circle): 1 Day | (2 Day) | 3 Day | 4 DAY | 5 DAY | Other: ___

SPECIAL INSTRUCTIONS:

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature:	Signature:	Signature:	Signature:
Date: 4/13/21	Date: 4/13/21	Date:	Date:
Time: 1507	Time: 1507	Time:	Time:
Printed Name: Steven Vandeveenng	Printed Name: Susan Kneet	Printed Name:	Printed Name:
Company: NVS	Company: APEX	Company:	Company:

Apex Laboratories

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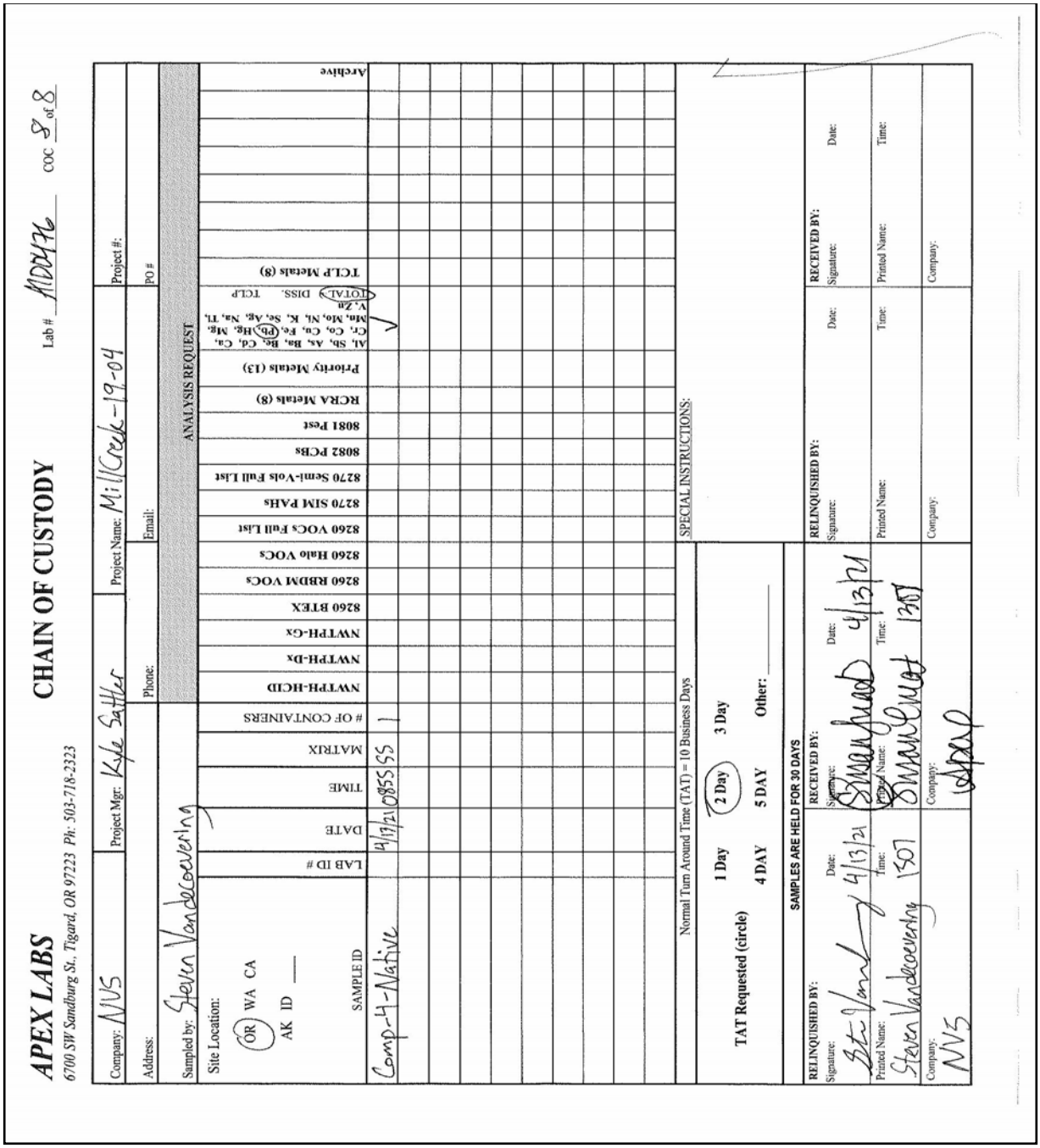
Philip Nerenberg

Philip Nerenberg, Lab Director

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0476 - 05 24 21 1752**



APEX LABS — CHAIN OF CUSTODY — Lab # A1D0476 — COC 8 of 8
6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323

Company: NVS | Project Mgr: Kyle Sattler | Project Name: MillCreek-19-04 | Project #:
Address: | Phone: | Email: | PO #
Sampled by: Steven Vandeberg

Site Location: (OR) WA CA AK ID —

SAMPLE ID	LAB ID #	DATE	TIME	MATRIX	# OF CONTAINERS
Comp-4-Native		4/13/21	0855	SS	1

ANALYSIS REQUEST: NWTPH-HCID; NWTPH-Dx; NWTPH-Gx; 8260 BTEX; 8260 RBDM VOCs; 8260 Halo VOCs; 8260 VOCs Full List; 8270 SIM PAHs; 8270 Semi-Vols Full List; 8082 PCBs; 8081 Pest; RCRA Metals (8); Priority Metals (13); Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, (Pb), Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn; (TOTAL) DISS. TCLP; TCLP Metals (8); Archive

SPECIAL INSTRUCTIONS:

Normal Turn Around Time (TAT) = 10 Business Days

TAT Requested (circle): 1 Day | (2 Day) | 3 Day | 4 DAY | 5 DAY | Other: _____

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY:	Date:	RECEIVED BY:	Date:	RELINQUISHED BY:	Date:	RECEIVED BY:	Date:
Signature:		Signature:		Signature:		Signature:	
Printed Name:	Time:	Printed Name:	Time:	Printed Name:	Time:	Printed Name:	Time:
Company: NVS		Company:		Company:		Company:	

Apex Laboratories

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Philip Nerenberg

Philip Nerenberg, Lab Director

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0476 - 05 24 21 1752**

APEX LABS COOLER RECEIPT FORM

Client: NV5 Element WO#: A1 D0476

Project/Project #: Mill Creek-19-04

Delivery Info:

Date/time received: 4/13/21 @ 1507 By: (SC)

Delivered by: Apex___Client X ESS___FedEx___UPS___Swift___Senvoy___SDS___Other___

Cooler Inspection Date/time inspected: 4/13/21 @ 1515 By: (SC)

Chain of Custody included? Yes X No ___ Custody seals? Yes___ No X

Signed/dated by client? Yes X No ___

Signed/dated by Apex? Yes X No ___

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	1.9	3.0					
Received on ice? (Y/N)	Y	Y					
Temp. blanks? (Y/N)	N	N					
Ice type: (Gel/Real/Other)	real/gel	real/gel					
Condition:	good	good					

Cooler out of temp? (Y)(N) Possible reason why: ___

Green dots applied to out of temperature samples? Yes/(No)

Out of temperature samples form initiated? Yes/(No)

Sample Inspection: Date/time inspected: 4/13/21 @ 16:59 By: MS

All samples intact? Yes X No ___ Comments: ___

Bottle labels/COCs agree? Yes ___ No X Comments: T on cont reads 13:56, CoC reads 13:50 on TP25(3.5). Received trip blank,

COC/container discrepancies form initiated? Yes ___ No X

Containers/volumes received appropriate for analysis? Yes X No ___ Comments: ___

Do VOA vials have visible headspace? Yes ___ No ___ NA X

Comments ___

Water samples: pH checked: Yes___No___NA X pH appropriate? Yes___No___NA X

Comments: ___

Additional information: not listed on CoC. Non-lab treated Trip blank.

Labeled by: MS Witness: SC Cooler Inspected by: MS

Apex Laboratories

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Philip Nerenberg

Philip Nerenberg, Lab Director

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

Friday, April 23, 2021

Kyle Sattler
GeoDesign, Inc.
9450 SW Commerce Circle
Wilsonville, OR 97070

RE: A1D0741 - MillCreek-19-04 - MillCreek-19-04

Thank you for using Apex Laboratories. We greatly appreciate your business and strive to provide the highest quality services to the environmental industry.

Enclosed are the results of analyses for work order A1D0741, which was received by the laboratory on 4/20/2021 at 3:10:00PM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: pnerenberg@apex-labs.com, or by phone at 503-718-2323.

Please note: All samples will be disposed of within 30 days of sample receipt, unless prior arrangements have been made.

Cooler Receipt Information

(See Cooler Receipt Form for details)

Cooler #1	1.9 degC

This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.
All other deliverables derived from this data, including Electronic Data Deliverables (EDDs), CLP-like forms, client requested summary sheets, and all other products are considered secondary to this report.

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0741 - 04 23 21 1129**

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
UST-CDF	**A1D0741-01**	**Soil**	**04/20/21 14:00**	**04/20/21 15:10**

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

GeoDesign, Inc.	Project: MillCreek-19-04	
9450 SW Commerce Circle	Project Number: MillCreek-19-04	Report ID:
Wilsonville, OR 97070	Project Manager: Kyle Sattler	A1D0741 - 04 23 21 1129

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
UST-CDF (A1D0741-01)				**Matrix: Soil**		**Batch: 1040727**		
Acetone	ND	---	1.37	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
Acrylonitrile	ND	---	0.137	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
Benzene	ND	---	0.0137	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
Bromobenzene	ND	---	0.0342	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
Bromochloromethane	ND	---	0.0684	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
Bromodichloromethane	ND	---	0.0684	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
Bromoform	ND	---	0.137	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
Bromomethane	ND	---	0.684	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
2-Butanone (MEK)	ND	---	0.684	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
n-Butylbenzene	ND	---	0.0684	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
sec-Butylbenzene	ND	---	0.0684	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
tert-Butylbenzene	ND	---	0.0684	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
Carbon disulfide	ND	---	0.684	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
Carbon tetrachloride	ND	---	0.0684	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
Chlorobenzene	ND	---	0.0342	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
Chloroethane	ND	---	0.684	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
Chloroform	ND	---	0.0684	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
Chloromethane	ND	---	0.342	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
2-Chlorotoluene	ND	---	0.0684	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
4-Chlorotoluene	ND	---	0.0684	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
Dibromochloromethane	ND	---	0.137	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
1,2-Dibromo-3-chloropropane	ND	---	0.342	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
1,2-Dibromoethane (EDB)	ND	---	0.0684	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
Dibromomethane	ND	---	0.0684	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
1,2-Dichlorobenzene	ND	---	0.0342	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
1,3-Dichlorobenzene	ND	---	0.0342	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
1,4-Dichlorobenzene	ND	---	0.0342	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
Dichlorodifluoromethane	ND	---	0.137	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
1,1-Dichloroethane	ND	---	0.0342	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
1,2-Dichloroethane (EDC)	ND	---	0.0342	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
1,1-Dichloroethene	ND	---	0.0342	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
cis-1,2-Dichloroethene	ND	---	0.0342	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
trans-1,2-Dichloroethene	ND	---	0.0342	mg/kg dry	50	04/21/21 19:27	5035A/8260D	

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Philip Nerenberg, Lab Director

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503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0741 - 04 23 21 1129**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
UST-CDF (A1D0741-01)				**Matrix: Soil**		**Batch: 1040727**		
1,2-Dichloropropane	ND	---	0.0342	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
1,3-Dichloropropane	ND	---	0.0684	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
2,2-Dichloropropane	ND	---	0.0684	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
1,1-Dichloropropene	ND	---	0.0684	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
cis-1,3-Dichloropropene	ND	---	0.0684	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
trans-1,3-Dichloropropene	ND	---	0.0684	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
Ethylbenzene	ND	---	0.0342	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
Hexachlorobutadiene	ND	---	0.137	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
2-Hexanone	ND	---	0.684	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
Isopropylbenzene	ND	---	0.0684	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
4-Isopropyltoluene	ND	---	0.0684	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
Methylene chloride	ND	---	0.684	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
4-Methyl-2-pentanone (MiBK)	ND	---	0.684	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	0.0684	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
Naphthalene	ND	---	0.137	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
n-Propylbenzene	ND	---	0.0342	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
Styrene	ND	---	0.0684	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
1,1,1,2-Tetrachloroethane	ND	---	0.0342	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
1,1,2,2-Tetrachloroethane	ND	---	0.0684	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
Tetrachloroethene (PCE)	ND	---	0.0342	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
Toluene	ND	---	0.0684	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
1,2,3-Trichlorobenzene	ND	---	0.342	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
1,2,4-Trichlorobenzene	ND	---	0.342	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
1,1,1-Trichloroethane	ND	---	0.0342	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
1,1,2-Trichloroethane	ND	---	0.0342	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
Trichloroethene (TCE)	ND	---	0.0342	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
Trichlorofluoromethane	ND	---	0.137	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
1,2,3-Trichloropropane	ND	---	0.0684	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
1,2,4-Trimethylbenzene	**0.121**	---	0.0684	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
1,3,5-Trimethylbenzene	ND	---	0.0684	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
Vinyl chloride	ND	---	0.0342	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
m,p-Xylene	ND	---	0.0684	mg/kg dry	50	04/21/21 19:27	5035A/8260D	
o-Xylene	ND	---	0.0342	mg/kg dry	50	04/21/21 19:27	5035A/8260D	

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0741 - 04 23 21 1129**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
UST-CDF (A1D0741-01)				**Matrix: Soil**		**Batch: 1040727**		
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*101 %*	*Limits: 80-120 %*	*1*	*04/21/21 19:27*	*5035A/8260D*	
Toluene-d8 (Surr)			*99 %*	*80-120 %*	*1*	*04/21/21 19:27*	*5035A/8260D*	
4-Bromofluorobenzene (Surr)			*104 %*	*79-120 %*	*1*	*04/21/21 19:27*	*5035A/8260D*	

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0741 - 04 23 21 1129**

ANALYTICAL SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
UST-CDF (A1D0741-01)				**Matrix: Soil**		**Batch: 1040723**		**C-07**
Aroclor 1016	ND	---	0.0121	mg/kg dry	1	04/21/21 23:27	EPA 8082A	
Aroclor 1221	ND	---	0.0121	mg/kg dry	1	04/21/21 23:27	EPA 8082A	
Aroclor 1232	ND	---	0.0121	mg/kg dry	1	04/21/21 23:27	EPA 8082A	
Aroclor 1242	ND	---	0.0121	mg/kg dry	1	04/21/21 23:27	EPA 8082A	
Aroclor 1248	ND	---	0.0121	mg/kg dry	1	04/21/21 23:27	EPA 8082A	
Aroclor 1254	ND	---	0.0121	mg/kg dry	1	04/21/21 23:27	EPA 8082A	
Aroclor 1260	ND	---	0.0121	mg/kg dry	1	04/21/21 23:27	EPA 8082A	
Surrogate: Decachlorobiphenyl (Surr)		*Recovery: 86 %*		*Limits: 60-125 %*	*1*	*04/21/21 23:27*	*EPA 8082A*	

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0741 - 04 23 21 1129**

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
UST-CDF (A1D0741-01)				**Matrix: Soil**				
Batch: 1040709								
Arsenic	**1.79**	---	1.28	mg/kg dry	10	04/20/21 23:45	EPA 6020B	
Barium	**92.1**	---	1.28	mg/kg dry	10	04/20/21 23:45	EPA 6020B	
Cadmium	ND	---	0.257	mg/kg dry	10	04/20/21 23:45	EPA 6020B	
Chromium	**8.01**	---	1.28	mg/kg dry	10	04/20/21 23:45	EPA 6020B	
Lead	**2.62**	---	0.257	mg/kg dry	10	04/20/21 23:45	EPA 6020B	
Mercury	ND	---	0.103	mg/kg dry	10	04/20/21 23:45	EPA 6020B	
Selenium	ND	---	1.28	mg/kg dry	10	04/20/21 23:45	EPA 6020B	
Silver	ND	---	0.257	mg/kg dry	10	04/20/21 23:45	EPA 6020B	

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0741 - 04 23 21 1129**

ANALYTICAL SAMPLE RESULTS

Percent Dry Weight

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
UST-CDF (A1D0741-01)				**Matrix: Soil**		**Batch: 1040725**		
% Solids	**80.6**	---	1.00	%	1	04/22/21 08:24	EPA 8000D	

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0741 - 04 23 21 1129**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040727 - EPA 5035A							**Soil**					
Blank (1040727-BLK1)			Prepared: 04/21/21 09:00 Analyzed: 04/21/21 10:56									
5035A/8260D												
Acetone	ND	---	0.667	mg/kg wet	50	---	---	---	---	---	---	
Acrylonitrile	ND	---	0.0667	mg/kg wet	50	---	---	---	---	---	---	
Benzene	ND	---	0.00667	mg/kg wet	50	---	---	---	---	---	---	
Bromobenzene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Bromochloromethane	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Bromodichloromethane	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Bromoform	ND	---	0.0667	mg/kg wet	50	---	---	---	---	---	---	
Bromomethane	ND	---	0.333	mg/kg wet	50	---	---	---	---	---	---	
2-Butanone (MEK)	ND	---	0.333	mg/kg wet	50	---	---	---	---	---	---	
n-Butylbenzene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
sec-Butylbenzene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
tert-Butylbenzene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Carbon disulfide	ND	---	0.333	mg/kg wet	50	---	---	---	---	---	---	
Carbon tetrachloride	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Chlorobenzene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Chloroethane	ND	---	0.333	mg/kg wet	50	---	---	---	---	---	---	
Chloroform	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Chloromethane	ND	---	0.167	mg/kg wet	50	---	---	---	---	---	---	
2-Chlorotoluene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
4-Chlorotoluene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Dibromochloromethane	ND	---	0.0667	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	---	0.167	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Dibromomethane	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	---	0.0667	mg/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethane	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0741 - 04 23 21 1129**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040727 - EPA 5035A							**Soil**					
Blank (1040727-BLK1)			Prepared: 04/21/21 09:00 Analyzed: 04/21/21 10:56									
1,2-Dichloropropane	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,3-Dichloropropane	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
2,2-Dichloropropane	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,1-Dichloropropene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Ethylbenzene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Hexachlorobutadiene	ND	---	0.0667	mg/kg wet	50	---	---	---	---	---	---	
2-Hexanone	ND	---	0.333	mg/kg wet	50	---	---	---	---	---	---	
Isopropylbenzene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
4-Isopropyltoluene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Methylene chloride	ND	---	0.333	mg/kg wet	50	---	---	---	---	---	---	
4-Methyl-2-pentanone (MiBK)	ND	---	0.333	mg/kg wet	50	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Naphthalene	ND	---	0.0667	mg/kg wet	50	---	---	---	---	---	---	
n-Propylbenzene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Styrene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Toluene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,2,3-Trichlorobenzene	ND	---	0.167	mg/kg wet	50	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	---	0.167	mg/kg wet	50	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,1,2-Trichloroethane	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Trichlorofluoromethane	ND	---	0.0667	mg/kg wet	50	---	---	---	---	---	---	
1,2,3-Trichloropropane	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Vinyl chloride	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
m,p-Xylene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
o-Xylene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	

Surr: 1,4-Difluorobenzene (Surr) *Recovery: 103 %* *Limits: 80-120 %* *Dilution: 1x*

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Philip Nerenberg, Lab Director

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0741 - 04 23 21 1129**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040727 - EPA 5035A							**Soil**					
Blank (1040727-BLK1)				Prepared: 04/21/21 09:00 Analyzed: 04/21/21 10:56								
Surr: Toluene-d8 (Surr)			*Recovery: 99 %*	*Limits: 80-120 %*				*Dilution: 1x*				
4-Bromofluorobenzene (Surr)			*102 %*	*79-120 %*				*"*				
LCS (1040727-BS1)				Prepared: 04/21/21 09:00 Analyzed: 04/21/21 10:02								
5035A/8260D												
Acetone	1.70	---	1.00	mg/kg wet	50	2.00	---	85	80-120%	---	---	
Acrylonitrile	1.02	---	0.100	mg/kg wet	50	1.00	---	102	80-120%	---	---	
Benzene	0.994	---	0.0100	mg/kg wet	50	1.00	---	99	80-120%	---	---	
Bromobenzene	0.978	---	0.0250	mg/kg wet	50	1.00	---	98	80-120%	---	---	
Bromochloromethane	1.00	---	0.0500	mg/kg wet	50	1.00	---	100	80-120%	---	---	
Bromodichloromethane	0.921	---	0.0500	mg/kg wet	50	1.00	---	92	80-120%	---	---	
Bromoform	1.10	---	0.100	mg/kg wet	50	1.00	---	110	80-120%	---	---	
Bromomethane	0.923	---	0.500	mg/kg wet	50	1.00	---	92	80-120%	---	---	
2-Butanone (MEK)	1.94	---	0.500	mg/kg wet	50	2.00	---	97	80-120%	---	---	
n-Butylbenzene	1.00	---	0.0500	mg/kg wet	50	1.00	---	100	80-120%	---	---	
sec-Butylbenzene	1.00	---	0.0500	mg/kg wet	50	1.00	---	100	80-120%	---	---	
tert-Butylbenzene	0.925	---	0.0500	mg/kg wet	50	1.00	---	93	80-120%	---	---	
Carbon disulfide	0.766	---	0.500	mg/kg wet	50	1.00	---	**77**	**80-120%**	---	---	Q-55
Carbon tetrachloride	1.25	---	0.0500	mg/kg wet	50	1.00	---	**125**	**80-120%**	---	---	Q-56
Chlorobenzene	0.982	---	0.0250	mg/kg wet	50	1.00	---	98	80-120%	---	---	
Chloroethane	0.729	---	0.500	mg/kg wet	50	1.00	---	**73**	**80-120%**	---	---	Q-55
Chloroform	0.965	---	0.0500	mg/kg wet	50	1.00	---	96	80-120%	---	---	
Chloromethane	0.994	---	0.250	mg/kg wet	50	1.00	---	99	80-120%	---	---	
2-Chlorotoluene	1.05	---	0.0500	mg/kg wet	50	1.00	---	105	80-120%	---	---	
4-Chlorotoluene	0.995	---	0.0500	mg/kg wet	50	1.00	---	100	80-120%	---	---	
Dibromochloromethane	1.00	---	0.100	mg/kg wet	50	1.00	---	100	80-120%	---	---	
1,2-Dibromo-3-chloropropane	0.797	---	0.250	mg/kg wet	50	1.00	---	80	80-120%	---	---	
1,2-Dibromoethane (EDB)	0.977	---	0.0500	mg/kg wet	50	1.00	---	98	80-120%	---	---	
Dibromomethane	0.952	---	0.0500	mg/kg wet	50	1.00	---	95	80-120%	---	---	
1,2-Dichlorobenzene	1.01	---	0.0250	mg/kg wet	50	1.00	---	101	80-120%	---	---	
1,3-Dichlorobenzene	1.03	---	0.0250	mg/kg wet	50	1.00	---	103	80-120%	---	---	
1,4-Dichlorobenzene	0.947	---	0.0250	mg/kg wet	50	1.00	---	95	80-120%	---	---	
Dichlorodifluoromethane	0.993	---	0.100	mg/kg wet	50	1.00	---	99	80-120%	---	---	
1,1-Dichloroethane	1.02	---	0.0250	mg/kg wet	50	1.00	---	102	80-120%	---	---	

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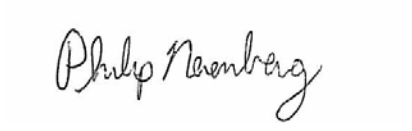

Philip Nerenberg, Lab Director

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ORELAP ID: OR100062

ANALYTICAL REPORT

GeoDesign, Inc.	Project: MillCreek-19-04	
9450 SW Commerce Circle	Project Number: MillCreek-19-04	Report ID:
Wilsonville, OR 97070	Project Manager: Kyle Sattler	A1D0741 - 04 23 21 1129

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040727 - EPA 5035A							**Soil**					
LCS (1040727-BS1)			Prepared: 04/21/21 09:00 Analyzed: 04/21/21 10:02									
1,2-Dichloroethane (EDC)	0.990	---	0.0250	mg/kg wet	50	1.00	---	99	80-120%	---	---	
1,1-Dichloroethene	0.945	---	0.0250	mg/kg wet	50	1.00	---	94	80-120%	---	---	
cis-1,2-Dichloroethene	1.02	---	0.0250	mg/kg wet	50	1.00	---	102	80-120%	---	---	
trans-1,2-Dichloroethene	0.979	---	0.0250	mg/kg wet	50	1.00	---	98	80-120%	---	---	
1,2-Dichloropropane	1.04	---	0.0250	mg/kg wet	50	1.00	---	104	80-120%	---	---	
1,3-Dichloropropane	1.03	---	0.0500	mg/kg wet	50	1.00	---	103	80-120%	---	---	
2,2-Dichloropropane	1.13	---	0.0500	mg/kg wet	50	1.00	---	113	80-120%	---	---	
1,1-Dichloropropene	0.994	---	0.0500	mg/kg wet	50	1.00	---	99	80-120%	---	---	
cis-1,3-Dichloropropene	0.933	---	0.0500	mg/kg wet	50	1.00	---	93	80-120%	---	---	
trans-1,3-Dichloropropene	0.896	---	0.0500	mg/kg wet	50	1.00	---	90	80-120%	---	---	
Ethylbenzene	0.958	---	0.0250	mg/kg wet	50	1.00	---	96	80-120%	---	---	
Hexachlorobutadiene	0.964	---	0.100	mg/kg wet	50	1.00	---	96	80-120%	---	---	
2-Hexanone	1.88	---	0.500	mg/kg wet	50	2.00	---	94	80-120%	---	---	
Isopropylbenzene	0.968	---	0.0500	mg/kg wet	50	1.00	---	97	80-120%	---	---	
4-Isopropyltoluene	0.993	---	0.0500	mg/kg wet	50	1.00	---	99	80-120%	---	---	
Methylene chloride	0.958	---	0.500	mg/kg wet	50	1.00	---	96	80-120%	---	---	
4-Methyl-2-pentanone (MiBK)	1.87	---	0.500	mg/kg wet	50	2.00	---	94	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	1.01	---	0.0500	mg/kg wet	50	1.00	---	101	80-120%	---	---	
Naphthalene	0.914	---	0.100	mg/kg wet	50	1.00	---	91	80-120%	---	---	
n-Propylbenzene	0.997	---	0.0250	mg/kg wet	50	1.00	---	100	80-120%	---	---	
Styrene	0.981	---	0.0500	mg/kg wet	50	1.00	---	98	80-120%	---	---	
1,1,1,2-Tetrachloroethane	1.19	---	0.0250	mg/kg wet	50	1.00	---	119	80-120%	---	---	
1,1,2,2-Tetrachloroethane	0.983	---	0.0500	mg/kg wet	50	1.00	---	98	80-120%	---	---	
Tetrachloroethene (PCE)	1.02	---	0.0250	mg/kg wet	50	1.00	---	102	80-120%	---	---	
Toluene	0.955	---	0.0500	mg/kg wet	50	1.00	---	96	80-120%	---	---	
1,2,3-Trichlorobenzene	1.00	---	0.250	mg/kg wet	50	1.00	---	100	80-120%	---	---	
1,2,4-Trichlorobenzene	0.973	---	0.250	mg/kg wet	50	1.00	---	97	80-120%	---	---	
1,1,1-Trichloroethane	1.03	---	0.0250	mg/kg wet	50	1.00	---	103	80-120%	---	---	
1,1,2-Trichloroethane	1.01	---	0.0250	mg/kg wet	50	1.00	---	101	80-120%	---	---	
Trichloroethene (TCE)	1.02	---	0.0250	mg/kg wet	50	1.00	---	102	80-120%	---	---	
Trichlorofluoromethane	0.769	---	0.100	mg/kg wet	50	1.00	---	**77**	**80-120%**	---	---	Q-55
1,2,3-Trichloropropane	1.00	---	0.0500	mg/kg wet	50	1.00	---	100	80-120%	---	---	
1,2,4-Trimethylbenzene	1.04	---	0.0500	mg/kg wet	50	1.00	---	104	80-120%	---	---	
1,3,5-Trimethylbenzene	1.02	---	0.0500	mg/kg wet	50	1.00	---	102	80-120%	---	---	

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Philip Nerenberg, Lab Director

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0741 - 04 23 21 1129**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040727 - EPA 5035A							**Soil**					
LCS (1040727-BS1)			Prepared: 04/21/21 09:00 Analyzed: 04/21/21 10:02									
Vinyl chloride	0.933	---	0.0250	mg/kg wet	50	1.00	---	93	80-120%	---	---	
m,p-Xylene	1.96	---	0.0500	mg/kg wet	50	2.00	---	98	80-120%	---	---	
o-Xylene	0.985	---	0.0250	mg/kg wet	50	1.00	---	98	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*102 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*102 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*101 %*		*79-120 %*			*"*				
Duplicate (1040727-DUP1)			Prepared: 04/19/21 12:45 Analyzed: 04/21/21 20:21									
QC Source Sample: Non-SDG (A1D0713-01)												
Acetone	ND	---	15.8	mg/kg dry	500	---	ND	---	---	---	30%	
Acrylonitrile	ND	---	1.58	mg/kg dry	500	---	ND	---	---	---	30%	
Benzene	**0.406**	---	0.158	mg/kg dry	500	---	0.394	---	---	3	30%	
Bromobenzene	ND	---	0.396	mg/kg dry	500	---	ND	---	---	---	30%	
Bromochloromethane	ND	---	0.792	mg/kg dry	500	---	ND	---	---	---	30%	
Bromodichloromethane	ND	---	0.792	mg/kg dry	500	---	ND	---	---	---	30%	
Bromoform	ND	---	1.58	mg/kg dry	500	---	ND	---	---	---	30%	
Bromomethane	ND	---	7.92	mg/kg dry	500	---	ND	---	---	---	30%	
2-Butanone (MEK)	ND	---	7.92	mg/kg dry	500	---	ND	---	---	---	30%	
n-Butylbenzene	**8.11**	---	0.792	mg/kg dry	500	---	7.38	---	---	9	30%	
sec-Butylbenzene	**9.83**	---	0.792	mg/kg dry	500	---	8.75	---	---	12	30%	
tert-Butylbenzene	ND	---	0.792	mg/kg dry	500	---	ND	---	---	---	30%	
Carbon disulfide	ND	---	7.92	mg/kg dry	500	---	ND	---	---	---	30%	
Carbon tetrachloride	ND	---	0.792	mg/kg dry	500	---	ND	---	---	---	30%	
Chlorobenzene	ND	---	0.396	mg/kg dry	500	---	ND	---	---	---	30%	
Chloroethane	ND	---	7.92	mg/kg dry	500	---	ND	---	---	---	30%	
Chloroform	ND	---	0.792	mg/kg dry	500	---	ND	---	---	---	30%	
Chloromethane	ND	---	3.96	mg/kg dry	500	---	ND	---	---	---	30%	
2-Chlorotoluene	ND	---	0.792	mg/kg dry	500	---	ND	---	---	---	30%	
4-Chlorotoluene	ND	---	0.792	mg/kg dry	500	---	ND	---	---	---	30%	
Dibromochloromethane	ND	---	1.58	mg/kg dry	500	---	ND	---	---	---	30%	
1,2-Dibromo-3-chloropropane	ND	---	3.96	mg/kg dry	500	---	ND	---	---	---	30%	
1,2-Dibromoethane (EDB)	ND	---	0.792	mg/kg dry	500	---	ND	---	---	---	30%	
Dibromomethane	ND	---	0.792	mg/kg dry	500	---	ND	---	---	---	30%	
1,2-Dichlorobenzene	ND	---	0.396	mg/kg dry	500	---	ND	---	---	---	30%	

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Philip Nerenberg, Lab Director

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ORELAP ID: **OR100062**

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0741 - 04 23 21 1129**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040727 - EPA 5035A							**Soil**					
Duplicate (1040727-DUP1)			Prepared: 04/19/21 12:45 Analyzed: 04/21/21 20:21									
QC Source Sample: Non-SDG (A1D0713-01)												
1,3-Dichlorobenzene	ND	---	0.396	mg/kg dry	500	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	---	0.396	mg/kg dry	500	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	---	1.58	mg/kg dry	500	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	---	0.396	mg/kg dry	500	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	---	0.396	mg/kg dry	500	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	---	0.396	mg/kg dry	500	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	---	0.396	mg/kg dry	500	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	---	0.396	mg/kg dry	500	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	---	0.396	mg/kg dry	500	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	---	0.792	mg/kg dry	500	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	---	0.792	mg/kg dry	500	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	---	0.792	mg/kg dry	500	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	---	0.792	mg/kg dry	500	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	---	0.792	mg/kg dry	500	---	ND	---	---	---	30%	
Ethylbenzene	**4.64**	---	0.396	mg/kg dry	500	---	4.87	---	---	5	30%	
Hexachlorobutadiene	ND	---	1.58	mg/kg dry	500	---	ND	---	---	---	30%	
2-Hexanone	ND	---	7.92	mg/kg dry	500	---	ND	---	---	---	30%	
Isopropylbenzene	**5.06**	---	0.792	mg/kg dry	500	---	4.92	---	---	3	30%	
4-Isopropyltoluene	**9.88**	---	0.792	mg/kg dry	500	---	8.54	---	---	15	30%	M-02
Methylene chloride	ND	---	7.92	mg/kg dry	500	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	---	7.92	mg/kg dry	500	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	---	0.792	mg/kg dry	500	---	ND	---	---	---	30%	
Naphthalene	**46.5**	---	1.58	mg/kg dry	500	---	42.4	---	---	9	30%	
n-Propylbenzene	**7.25**	---	0.396	mg/kg dry	500	---	6.86	---	---	6	30%	
Styrene	ND	---	0.792	mg/kg dry	500	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	---	0.396	mg/kg dry	500	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	---	4.16	mg/kg dry	500	---	ND	---	---	---	30%	R-02
Tetrachloroethene (PCE)	ND	---	0.396	mg/kg dry	500	---	ND	---	---	---	30%	
Toluene	**4.88**	---	0.792	mg/kg dry	500	---	4.83	---	---	1	30%	
1,2,3-Trichlorobenzene	ND	---	3.96	mg/kg dry	500	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	---	3.96	mg/kg dry	500	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	---	0.396	mg/kg dry	500	---	ND	---	---	---	30%	
1,1,2-Trichloroethane	ND	---	0.396	mg/kg dry	500	---	ND	---	---	---	30%	

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Philip Nerenberg, Lab Director

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ORELAP ID: **OR100062**

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0741 - 04 23 21 1129**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040727 - EPA 5035A							**Soil**					
Duplicate (1040727-DUP1)			Prepared: 04/19/21 12:45 Analyzed: 04/21/21 20:21									
QC Source Sample: Non-SDG (A1D0713-01)												
Trichloroethene (TCE)	ND	---	0.396	mg/kg dry	500	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	---	1.58	mg/kg dry	500	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	---	2.38	mg/kg dry	500	---	ND	---	---	---	30%	R-02
1,2,4-Trimethylbenzene	**54.9**	---	0.792	mg/kg dry	500	---	52.3	---	---	5	30%	
1,3,5-Trimethylbenzene	**15.3**	---	0.792	mg/kg dry	500	---	14.2	---	---	8	30%	
Vinyl chloride	ND	---	0.396	mg/kg dry	500	---	ND	---	---	---	30%	
m,p-Xylene	**24.8**	---	0.792	mg/kg dry	500	---	24.5	---	---	1	30%	
o-Xylene	**15.8**	---	0.396	mg/kg dry	500	---	15.5	---	---	2	30%	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*101 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*99 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*97 %*		*79-120 %*			*"*				
Matrix Spike (1040727-MS1)			Prepared: 04/16/21 15:00 Analyzed: 04/21/21 21:42									
QC Source Sample: Non-SDG (A1D0674-02)												
5035A/8260D												
Acetone	11.6	---	6.34	mg/kg dry	200	12.7	ND	91	36-164%	---	---	
Acrylonitrile	6.62	---	0.634	mg/kg dry	200	6.34	ND	104	65-134%	---	---	
Benzene	6.22	---	0.0634	mg/kg dry	200	6.34	ND	98	77-121%	---	---	
Bromobenzene	5.90	---	0.158	mg/kg dry	200	6.34	ND	93	78-121%	---	---	
Bromochloromethane	6.22	---	0.317	mg/kg dry	200	6.34	ND	98	78-125%	---	---	
Bromodichloromethane	5.89	---	0.317	mg/kg dry	200	6.34	ND	93	75-127%	---	---	
Bromoform	7.25	---	0.634	mg/kg dry	200	6.34	ND	114	67-132%	---	---	
Bromomethane	5.08	---	3.17	mg/kg dry	200	6.34	ND	80	53-143%	---	---	
2-Butanone (MEK)	12.8	---	3.17	mg/kg dry	200	12.7	ND	101	51-148%	---	---	
n-Butylbenzene	6.80	---	0.317	mg/kg dry	200	6.34	0.268	103	70-128%	---	---	
sec-Butylbenzene	6.32	---	0.317	mg/kg dry	200	6.34	0.250	96	73-126%	---	---	
tert-Butylbenzene	5.80	---	0.317	mg/kg dry	200	6.34	ND	88	73-125%	---	---	
Carbon disulfide	4.96	---	3.17	mg/kg dry	200	6.34	ND	78	63-132%	---	---	Q-54a
Carbon tetrachloride	8.23	---	0.317	mg/kg dry	200	6.34	ND	130	70-135%	---	---	Q-54
Chlorobenzene	6.22	---	0.158	mg/kg dry	200	6.34	ND	98	79-120%	---	---	
Chloroethane	4.10	---	3.17	mg/kg dry	200	6.34	ND	65	59-139%	---	---	Q-54b
Chloroform	6.10	---	0.317	mg/kg dry	200	6.34	ND	96	78-123%	---	---	
Chloromethane	6.48	---	1.58	mg/kg dry	200	6.34	ND	102	50-136%	---	---	

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503-718-2323
ORELAP ID: **OR100062**

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0741 - 04 23 21 1129**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040727 - EPA 5035A							**Soil**					
Matrix Spike (1040727-MS1)			Prepared: 04/16/21 15:00 Analyzed: 04/21/21 21:42									
QC Source Sample: Non-SDG (A1D0674-02)												
2-Chlorotoluene	6.37	---	0.317	mg/kg dry	200	6.34	ND	100	75-122%	---	---	
4-Chlorotoluene	5.91	---	0.317	mg/kg dry	200	6.34	ND	93	72-124%	---	---	
Dibromochloromethane	6.54	---	0.634	mg/kg dry	200	6.34	ND	103	74-126%	---	---	
1,2-Dibromo-3-chloropropane	6.16	---	1.58	mg/kg dry	200	6.34	ND	97	61-132%	---	---	
1,2-Dibromoethane (EDB)	6.50	---	0.317	mg/kg dry	200	6.34	ND	102	78-122%	---	---	
Dibromomethane	6.06	---	0.317	mg/kg dry	200	6.34	ND	96	78-125%	---	---	
1,2-Dichlorobenzene	6.23	---	0.158	mg/kg dry	200	6.34	ND	98	78-121%	---	---	
1,3-Dichlorobenzene	6.16	---	0.158	mg/kg dry	200	6.34	ND	97	77-121%	---	---	
1,4-Dichlorobenzene	5.73	---	0.158	mg/kg dry	200	6.34	ND	90	75-120%	---	---	
Dichlorodifluoromethane	6.61	---	0.634	mg/kg dry	200	6.34	ND	104	29-149%	---	---	
1,1-Dichloroethane	6.34	---	0.158	mg/kg dry	200	6.34	ND	100	76-125%	---	---	
1,2-Dichloroethane (EDC)	6.15	---	0.158	mg/kg dry	200	6.34	ND	97	73-128%	---	---	
1,1-Dichloroethene	5.97	---	0.158	mg/kg dry	200	6.34	ND	94	70-131%	---	---	
cis-1,2-Dichloroethene	6.30	---	0.158	mg/kg dry	200	6.34	ND	99	77-123%	---	---	
trans-1,2-Dichloroethene	6.14	---	0.158	mg/kg dry	200	6.34	ND	97	74-125%	---	---	
1,2-Dichloropropane	6.48	---	0.158	mg/kg dry	200	6.34	ND	102	76-123%	---	---	
1,3-Dichloropropane	6.51	---	0.317	mg/kg dry	200	6.34	ND	103	77-121%	---	---	
2,2-Dichloropropane	7.08	---	0.317	mg/kg dry	200	6.34	ND	112	67-133%	---	---	
1,1-Dichloropropene	6.29	---	0.317	mg/kg dry	200	6.34	ND	99	76-125%	---	---	
cis-1,3-Dichloropropene	6.00	---	0.317	mg/kg dry	200	6.34	ND	95	74-126%	---	---	
trans-1,3-Dichloropropene	5.73	---	0.317	mg/kg dry	200	6.34	ND	90	71-130%	---	---	
Ethylbenzene	6.07	---	0.158	mg/kg dry	200	6.34	ND	96	76-122%	---	---	
Hexachlorobutadiene	9.18	---	0.634	mg/kg dry	200	6.34	ND	**145**	**61-135%**	---	---	Q-01
2-Hexanone	12.9	---	3.17	mg/kg dry	200	12.7	ND	101	53-145%	---	---	
Isopropylbenzene	6.17	---	0.317	mg/kg dry	200	6.34	ND	97	68-134%	---	---	
4-Isopropyltoluene	6.71	---	0.317	mg/kg dry	200	6.34	0.168	103	73-127%	---	---	
Methylene chloride	6.56	---	3.17	mg/kg dry	200	6.34	ND	103	70-128%	---	---	
4-Methyl-2-pentanone (MiBK)	12.5	---	3.17	mg/kg dry	200	12.7	ND	99	65-135%	---	---	
Methyl tert-butyl ether (MTBE)	6.60	---	0.317	mg/kg dry	200	6.34	ND	104	73-125%	---	---	
Naphthalene	7.31	---	0.634	mg/kg dry	200	6.34	ND	115	62-129%	---	---	
n-Propylbenzene	6.16	---	0.158	mg/kg dry	200	6.34	0.130	95	73-125%	---	---	
Styrene	6.48	---	0.317	mg/kg dry	200	6.34	ND	102	76-124%	---	---	
1,1,1,2-Tetrachloroethane	7.77	---	0.158	mg/kg dry	200	6.34	ND	123	78-125%	---	---	

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503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

GeoDesign, Inc.	Project: MillCreek-19-04	
9450 SW Commerce Circle	Project Number: MillCreek-19-04	Report ID:
Wilsonville, OR 97070	Project Manager: Kyle Sattler	A1D0741 - 04 23 21 1129

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040727 - EPA 5035A							Soil					
Matrix Spike (1040727-MS1)			Prepared: 04/16/21 15:00 Analyzed: 04/21/21 21:42									
QC Source Sample: Non-SDG (A1D0674-02)												
1,1,2,2-Tetrachloroethane	7.03	---	0.317	mg/kg dry	200	6.34	ND	105	70-124%	---	---	
Tetrachloroethene (PCE)	6.41	---	0.158	mg/kg dry	200	6.34	ND	101	73-128%	---	---	
Toluene	5.96	---	0.317	mg/kg dry	200	6.34	ND	94	77-121%	---	---	
1,2,3-Trichlorobenzene	7.20	---	1.58	mg/kg dry	200	6.34	ND	113	66-130%	---	---	
1,2,4-Trichlorobenzene	6.66	---	1.58	mg/kg dry	200	6.34	ND	105	67-129%	---	---	
1,1,1-Trichloroethane	6.53	---	0.158	mg/kg dry	200	6.34	ND	103	73-130%	---	---	
1,1,2-Trichloroethane	6.47	---	0.158	mg/kg dry	200	6.34	ND	102	78-121%	---	---	
Trichloroethene (TCE)	6.40	---	0.158	mg/kg dry	200	6.34	ND	101	77-123%	---	---	
Trichlorofluoromethane	4.84	---	0.634	mg/kg dry	200	6.34	ND	76	62-140%	---	---	Q-54a
1,2,3-Trichloropropane	6.60	---	0.317	mg/kg dry	200	6.34	ND	104	73-125%	---	---	
1,2,4-Trimethylbenzene	6.63	---	0.317	mg/kg dry	200	6.34	0.674	94	75-123%	---	---	
1,3,5-Trimethylbenzene	6.46	---	0.317	mg/kg dry	200	6.34	0.355	96	73-124%	---	---	
Vinyl chloride	5.64	---	0.158	mg/kg dry	200	6.34	ND	89	56-135%	---	---	
m,p-Xylene	12.2	---	0.317	mg/kg dry	200	12.7	ND	96	77-124%	---	---	
o-Xylene	6.38	---	0.158	mg/kg dry	200	6.34	0.0818	99	77-123%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*101 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*100 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*97 %*		*79-120 %*			*"*				

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ORELAP ID: OR100062

ANALYTICAL REPORT

GeoDesign, Inc.	Project: MillCreek-19-04	
9450 SW Commerce Circle	Project Number: MillCreek-19-04	Report ID:
Wilsonville, OR 97070	Project Manager: Kyle Sattler	A1D0741 - 04 23 21 1129

QUALITY CONTROL (QC) SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040723 - EPA 3546							**Soil**					
Blank (1040723-BLK1)			Prepared: 04/21/21 07:45		Analyzed: 04/21/21 19:54							**C-07**
EPA 8082A												
Aroclor 1016	ND	---	0.00364	mg/kg wet	1	---	---	---	---	---	---	
Aroclor 1221	ND	---	0.00364	mg/kg wet	1	---	---	---	---	---	---	
Aroclor 1232	ND	---	0.00364	mg/kg wet	1	---	---	---	---	---	---	
Aroclor 1242	ND	---	0.00364	mg/kg wet	1	---	---	---	---	---	---	
Aroclor 1248	ND	---	0.00364	mg/kg wet	1	---	---	---	---	---	---	
Aroclor 1254	ND	---	0.00364	mg/kg wet	1	---	---	---	---	---	---	
Aroclor 1260	ND	---	0.00364	mg/kg wet	1	---	---	---	---	---	---	
Surr: Decachlorobiphenyl (Surr)			*Recovery: 97 %*		*Limits: 60-125 %*			*Dilution: 1x*				
LCS (1040723-BS1)			Prepared: 04/21/21 07:45		Analyzed: 04/21/21 20:11							**C-07**
EPA 8082A												
Aroclor 1016	0.186	---	0.00400	mg/kg wet	1	0.250	---	74	47-134%	---	---	
Aroclor 1260	0.202	---	0.00400	mg/kg wet	1	0.250	---	81	53-140%	---	---	
Surr: Decachlorobiphenyl (Surr)			*Recovery: 102 %*		*Limits: 60-125 %*			*Dilution: 1x*				
Duplicate (1040723-DUP1)			Prepared: 04/21/21 07:45		Analyzed: 04/21/21 21:05							**C-07**
QC Source Sample: Non-SDG (A1D0055-41)												
Aroclor 1016	ND	---	0.00395	mg/kg dry	1	---	ND	---	---	---	30%	
Aroclor 1221	ND	---	0.00395	mg/kg dry	1	---	ND	---	---	---	30%	
Aroclor 1232	ND	---	0.00395	mg/kg dry	1	---	ND	---	---	---	30%	
Aroclor 1242	ND	---	0.00395	mg/kg dry	1	---	0.00321	---	---	***	30%	
Aroclor 1248	ND	---	0.00395	mg/kg dry	1	---	ND	---	---	---	30%	
Aroclor 1254	ND	---	0.00395	mg/kg dry	1	---	0.00344	---	---	***	30%	
Aroclor 1260	ND	---	0.00395	mg/kg dry	1	---	ND	---	---	---	30%	
Surr: Decachlorobiphenyl (Surr)			*Recovery: 93 %*		*Limits: 60-125 %*			*Dilution: 1x*				
Matrix Spike (1040723-MS2)			Prepared: 04/21/21 07:45		Analyzed: 04/22/21 11:14							**C-07, Q-43**
QC Source Sample: Non-SDG (A1D0055-42RE1)												
EPA 8082A												
Aroclor 1016	4.22	---	0.200	mg/kg dry	50	0.250	ND	**1690**	**47-134%**	---	---	
Aroclor 1260	4.90	---	0.200	mg/kg dry	50	0.250	2.73	**867**	**53-140%**	---	---	
Surr: Decachlorobiphenyl (Surr)			*Recovery: 108 %*		*Limits: 60-125 %*			*Dilution: 50x*				

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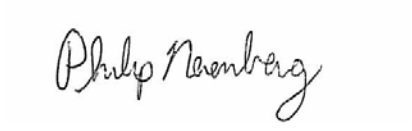

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0741 - 04 23 21 1129**

QUALITY CONTROL (QC) SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040723 - EPA 3546							**Soil**					

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: MillCreek-19-04	
9450 SW Commerce Circle	Project Number: MillCreek-19-04	Report ID:
Wilsonville, OR 97070	Project Manager: Kyle Sattler	A1D0741 - 04 23 21 1129

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040709 - EPA 3051A							Soil					
Blank (1040709-BLK1)			Prepared: 04/20/21 14:46 Analyzed: 04/20/21 22:06									
EPA 6020B												
Arsenic	ND	---	0.962	mg/kg wet	10	---	---	---	---	---	---	
Barium	ND	---	0.962	mg/kg wet	10	---	---	---	---	---	---	
Cadmium	ND	---	0.192	mg/kg wet	10	---	---	---	---	---	---	
Chromium	ND	---	0.962	mg/kg wet	10	---	---	---	---	---	---	
Lead	ND	---	0.192	mg/kg wet	10	---	---	---	---	---	---	
Mercury	ND	---	0.0769	mg/kg wet	10	---	---	---	---	---	---	
Selenium	ND	---	0.962	mg/kg wet	10	---	---	---	---	---	---	
Silver	ND	---	0.192	mg/kg wet	10	---	---	---	---	---	---	
LCS (1040709-BS1)			Prepared: 04/20/21 14:46 Analyzed: 04/20/21 22:30									
EPA 6020B												
Arsenic	49.4	---	1.00	mg/kg wet	10	50.0	---	99	80-120%	---	---	
Barium	47.7	---	1.00	mg/kg wet	10	50.0	---	95	80-120%	---	---	
Cadmium	50.8	---	0.200	mg/kg wet	10	50.0	---	102	80-120%	---	---	
Chromium	48.2	---	1.00	mg/kg wet	10	50.0	---	96	80-120%	---	---	
Lead	53.3	---	0.200	mg/kg wet	10	50.0	---	107	80-120%	---	---	
Mercury	1.05	---	0.0800	mg/kg wet	10	1.00	---	105	80-120%	---	---	
Selenium	24.0	---	1.00	mg/kg wet	10	25.0	---	96	80-120%	---	---	
Silver	25.5	---	0.200	mg/kg wet	10	25.0	---	102	80-120%	---	---	
Duplicate (1040709-DUP1)			Prepared: 04/20/21 14:46 Analyzed: 04/20/21 22:44									
QC Source Sample: Non-SDG (A1D0055-28)												
Arsenic	**4.14**	---	1.01	mg/kg dry	10	---	3.84	---	---	7	20%	
Barium	**134**	---	1.01	mg/kg dry	10	---	125	---	---	7	20%	
Cadmium	**0.783**	---	0.201	mg/kg dry	10	---	0.828	---	---	5	20%	
Chromium	**62.1**	---	1.01	mg/kg dry	10	---	53.4	---	---	15	20%	
Lead	**64.3**	---	0.201	mg/kg dry	10	---	62.2	---	---	3	20%	
Mercury	**0.112**	---	0.0805	mg/kg dry	10	---	0.143	---	---	**25**	**20%**	Q-05
Selenium	ND	---	1.01	mg/kg dry	10	---	ND	---	---	---	20%	
Silver	**0.272**	---	0.201	mg/kg dry	10	---	0.275	---	---	1	20%	
Matrix Spike (1040709-MS1)			Prepared: 04/20/21 14:46 Analyzed: 04/20/21 22:49									

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0741 - 04 23 21 1129**

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040709 - EPA 3051A							**Soil**					
Matrix Spike (1040709-MS1)			Prepared: 04/20/21 14:46 Analyzed: 04/20/21 22:49									
QC Source Sample: Non-SDG (A1D0055-28)												
EPA 6020B												
Arsenic	53.5	---	1.02	mg/kg dry	10	51.2	3.84	97	75-125%	---	---	
Barium	177	---	1.02	mg/kg dry	10	51.2	125	101	75-125%	---	---	
Cadmium	51.5	---	0.205	mg/kg dry	10	51.2	0.828	99	75-125%	---	---	
Chromium	104	---	1.02	mg/kg dry	10	51.2	53.4	99	75-125%	---	---	
Lead	114	---	0.205	mg/kg dry	10	51.2	62.2	102	75-125%	---	---	
Mercury	1.09	---	0.0819	mg/kg dry	10	1.02	0.143	93	75-125%	---	---	
Selenium	23.5	---	1.02	mg/kg dry	10	25.6	ND	92	75-125%	---	---	
Silver	25.8	---	0.205	mg/kg dry	10	25.6	0.275	100	75-125%	---	---	

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GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0741 - 04 23 21 1129**

QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040725 - Total Solids (Dry Weight)							**Soil**					
Duplicate (1040725-DUP1)			Prepared: 04/21/21 07:49			Analyzed: 04/22/21 08:24						
QC Source Sample: Non-SDG (A1D0699-01)												
% Solids	**90.1**	---	1.00	%	1	---	90.1	---	---	0.05	10%	
Duplicate (1040725-DUP2)			Prepared: 04/21/21 07:49			Analyzed: 04/22/21 08:24						
QC Source Sample: Non-SDG (A1D0699-21)												
% Solids	**69.7**	---	1.00	%	1	---	70.6	---	---	1	10%	
Duplicate (1040725-DUP3)			Prepared: 04/21/21 07:49			Analyzed: 04/22/21 08:24						
QC Source Sample: Non-SDG (A1D0704-04)												
% Solids	**90.3**	---	1.00	%	1	---	90.3	---	---	0.02	10%	
Duplicate (1040725-DUP4)			Prepared: 04/21/21 07:49			Analyzed: 04/22/21 08:24						
QC Source Sample: Non-SDG (A1D0706-01)												
% Solids	**92.7**	---	1.00	%	1	---	93.5	---	---	0.9	10%	
Duplicate (1040725-DUP5)			Prepared: 04/21/21 07:49			Analyzed: 04/22/21 08:24						
QC Source Sample: Non-SDG (A1D0753-05)												
% Solids	**76.6**	---	1.00	%	1	---	77.2	---	---	0.8	10%	
Duplicate (1040725-DUP6)			Prepared: 04/21/21 07:49			Analyzed: 04/22/21 08:24						
QC Source Sample: Non-SDG (A1D0755-05)												
% Solids	**76.8**	---	1.00	%	1	---	76.8	---	---	0.0004	10%	
Duplicate (1040725-DUP7)			Prepared: 04/21/21 07:49			Analyzed: 04/22/21 08:24						
QC Source Sample: Non-SDG (A1D0758-01)												
% Solids	**75.8**	---	1.00	%	1	---	76.9	---	---	1	10%	
Duplicate (1040725-DUP8)			Prepared: 04/21/21 07:49			Analyzed: 04/22/21 08:24						
QC Source Sample: Non-SDG (A1D0761-01)												
% Solids	**86.2**	---	1.00	%	1	---	86.4	---	---	0.2	10%	

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Philip Nerenberg, Lab Director

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Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0741 - 04 23 21 1129**

QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040725 - Total Solids (Dry Weight)							Soil					
Duplicate (1040725-DUP9)			Prepared: 04/21/21 07:49		Analyzed: 04/22/21 08:24							
QC Source Sample: Non-SDG (A1D0763-03)												
% Solids	**92.2**	---	1.00	%	1	---	91.4	---	---	0.8	10%	
Duplicate (1040725-DUPA)			Prepared: 04/21/21 12:22		Analyzed: 04/22/21 08:24							
QC Source Sample: Non-SDG (A1D0783-05)												
% Solids	**73.1**	---	1.00	%	1	---	72.8	---	---	0.4	10%	
Duplicate (1040725-DUPB)			Prepared: 04/21/21 12:22		Analyzed: 04/22/21 08:24							
QC Source Sample: Non-SDG (A1D0787-02)												
% Solids	**71.7**	---	1.00	%	1	---	71.8	---	---	0.1	10%	
Duplicate (1040725-DUPC)			Prepared: 04/21/21 19:30		Analyzed: 04/22/21 08:24							
QC Source Sample: Non-SDG (A1D0809-01)												
% Solids	**91.2**	---	1.00	%	1	---	90.9	---	---	0.3	10%	
Duplicate (1040725-DUPD)			Prepared: 04/21/21 19:30		Analyzed: 04/22/21 08:24							
QC Source Sample: Non-SDG (A1D0821-07)												
% Solids	**72.4**	---	1.00	%	1	---	72.5	---	---	0.1	10%	
Duplicate (1040725-DUPE)			Prepared: 04/21/21 19:30		Analyzed: 04/22/21 08:24							
QC Source Sample: Non-SDG (A1D0824-01)												
% Solids	**73.6**	---	1.00	%	1	---	75.0	---	---	2	10%	
Duplicate (1040725-DUPF)			Prepared: 04/21/21 19:30		Analyzed: 04/22/21 08:24							
QC Source Sample: Non-SDG (A1D0830-02)												
% Solids	**74.9**	---	1.00	%	1	---	74.7	---	---	0.4	10%	
Duplicate (1040725-DUPG)			Prepared: 04/21/21 19:30		Analyzed: 04/22/21 08:24							
QC Source Sample: Non-SDG (A1D0835-01)												
% Solids	**88.1**	---	1.00	%	1	---	86.0	---	---	2	10%	

Apex Laboratories

Philip Nerenberg, Lab Director

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503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0741 - 04 23 21 1129**

QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040725 - Total Solids (Dry Weight)							**Soil**					
Duplicate (1040725-DUPH)			Prepared: 04/21/21 19:30		Analyzed: 04/22/21 08:24							
QC Source Sample: Non-SDG (A1D0835-11)												
% Solids	**94.8**	---	1.00	%	1	---	94.9	---	---	0.06	10%	
Duplicate (1040725-DUPI)			Prepared: 04/21/21 19:30		Analyzed: 04/22/21 08:24							
QC Source Sample: Non-SDG (A1D0835-15)												
% Solids	**94.9**	---	1.00	%	1	---	95.7	---	---	0.8	10%	
Duplicate (1040725-DUPJ)			Prepared: 04/21/21 19:30		Analyzed: 04/22/21 08:24							
QC Source Sample: Non-SDG (A1D0840-02)												
% Solids	**79.3**	---	1.00	%	1	---	79.5	---	---	0.3	10%	
Duplicate (1040725-DUPK)			Prepared: 04/21/21 19:31		Analyzed: 04/22/21 08:24							
QC Source Sample: Non-SDG (A1D0842-04)												
% Solids	**78.8**	---	1.00	%	1	---	80.7	---	---	2	10%	

No Client related Batch QC samples analyzed for this batch. See notes page for more information.

Apex Laboratories

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0741 - 04 23 21 1129**

SAMPLE PREPARATION INFORMATION

Volatile Organic Compounds by EPA 8260D

Prep: EPA 5035A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1040727							
A1D0741-01	Soil	5035A/8260D	04/20/21 14:00	04/20/21 14:00	5.5g/5mL	5g/5mL	0.91

Polychlorinated Biphenyls by EPA 8082A

Prep: EPA 3546

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1040723							
A1D0741-01	Soil	EPA 8082A	04/20/21 14:00	04/21/21 07:45	10.25g/5mL	10g/5mL	0.98

Total Metals by EPA 6020B (ICPMS)

Prep: EPA 3051A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1040709							
A1D0741-01	Soil	EPA 6020B	04/20/21 14:00	04/20/21 15:38	0.483g/50mL	0.5g/50mL	1.04

Percent Dry Weight

Prep: Total Solids (Dry Weight)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1040725							
A1D0741-01	Soil	EPA 8000D	04/20/21 14:00	04/21/21 07:49			NA

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GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0741 - 04 23 21 1129**

QUALIFIER DEFINITIONS

Client Sample and Quality Control (QC) Sample Qualifier Definitions:

Apex Laboratories

C-07	Extract has undergone Sulfuric Acid Cleanup by EPA 3665A, Sulfur Cleanup by EPA 3660B, and Florisil Cleanup by EPA 3620B in order to minimize matrix interference.
M-02	Due to matrix interference, this analyte cannot be accurately quantified. The reported result is estimated.
Q-01	Spike recovery and/or RPD is outside acceptance limits.
Q-05	Analyses are not controlled on RPD values from sample and duplicate concentrations that are below 5 times the reporting level.
Q-43	Matrix Spike recovery is not applicable due to interfering Aroclor(s) in source sample.
Q-54	Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +5%. The results are reported as Estimated Values.
Q-54a	Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -3%. The results are reported as Estimated Values.
Q-54b	Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -7%. The results are reported as Estimated Values.
Q-55	Daily CCV/LCS recovery for this analyte was below the +/-20% criteria listed in EPA 8260, however there is adequate sensitivity to ensure detection at the reporting level.
Q-56	Daily CCV/LCS recovery for this analyte was above the +/-20% criteria listed in EPA 8260
R-02	The Reporting Limit for this analyte has been raised to account for interference from coeluting organic compounds present in the sample.

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Philip Nerenberg, Lab Director

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0741 - 04 23 21 1129**

REPORTING NOTES AND CONVENTIONS:

Abbreviations:

DET Analyte DETECTED at or above the detection or reporting limit.

ND Analyte NOT DETECTED at or above the detection or reporting limit.

NR Result Not Reported

RPD Relative Percent Difference. RPDs for Matrix Spikes and Matrix Spike Duplicates are based on concentration, not recovery.

Detection Limits: Limit of Detection (LOD)

Limits of Detection (LODs) are normally set at a level of one half the validated Limit of Quantitation (LOQ).
If no value is listed ('-----'), then the data has not been evaluated below the Reporting Limit.

Reporting Limits: Limit of Quantitation (LOQ)

Validated Limits of Quantitation (LOQs) are reported as the Reporting Limits for all analyses where the LOQ, MRL, PQL or CRL are requested. The LOQ represents a level at or above the low point of the calibration curve, that has been validated according to Apex Laboratories' comprehensive LOQ policies and procedures.

Reporting Conventions:

Basis: Results for soil samples are generally reported on a 100% dry weight basis.
The Result Basis is listed following the units as " dry", " wet", or " " (blank) designation.

" dry" Sample results and Reporting Limits are reported on a dry weight basis. (i.e. "ug/kg dry")
See Percent Solids section for details of dry weight analysis.

" wet" Sample results and Reporting Limits for this analysis are normally dry weight corrected, but have not been modified in this case.

" " Results without 'wet' or 'dry' designation are not normally dry weight corrected. These results are considered 'As Received'.

QC Source:

In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) may be analyzed to demonstrate accuracy and precision of the extraction batch.

Non-Client Batch QC Samples (Duplicates and Matrix Spike/Duplicates) may not be included in this report. Please request a Full QC report if this data is required.

Miscellaneous Notes:

" --- " QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.

" *** " Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

Blanks:

Standard practice is to evaluate the results from Blank QC Samples down to a level equal to ½ the Reporting Limit (RL).
-For Blank hits falling between ½ the RL and the RL (J flagged hits), the associated sample and QC data will receive a 'B-02' qualifier.
-For Blank hits above the RL, the associated sample and QC data will receive a 'B' qualifier, per Apex Laboratories' Blank Policy.
For further details, please request a copy of this document.

Apex Laboratories

Philip Nerenberg, Lab Director

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GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0741 - 04 23 21 1129**

REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks (Cont.):

Sample results flagged with a 'B' or 'B-02' qualifier are potentially biased high if the sample results are less than ten times the level found in the blank for inorganic analyses, or less than five times the level found in the blank for organic analyses.

'B' and 'B-02' qualifications are only applied to sample results detected above the Reporting Level.

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

Water samples containing significant amounts of sediment are decanted or separated prior to extraction, and only the water portion analyzed, unless otherwise directed by the client.

Soil and Sediment Samples:

Soil and Sediment samples containing significant amounts of water are decanted prior to extraction, and only the solid portion analyzed, unless otherwise directed by the client.

Sampling and Preservation Notes:

Certain regulatory programs, such as National Pollutant Discharge Elimination System (NPDES), require that activities such as sample filtration (for dissolved metals, orthophosphate, hexavalent chromium, etc.) and testing of short hold analytes (pH, Dissolved Oxygen, etc.) be performed in the field (on-site) within a short time window. In addition, sample matrix spikes are required for some analyses, and sufficient volume must be provided, and billable site specific QC requested, if this is required. All regulatory permits should be reviewed to ensure that these requirements are being met.

Data users should be aware of which regulations pertain to the samples they submit for testing. If related sample collection activities are not approved for a particular regulatory program, results should be considered estimates. Apex Laboratories will qualify these analytes according to the most stringent requirements, however results for samples that are for non-regulatory purposes may be acceptable.

Samples that have been filtered and preserved at Apex Laboratories per client request are listed in the preparation section of the report with the date and time of filtration listed.

Apex Laboratories maintains detailed records on sample receipt, including client label verification, cooler temperature, sample preservation, hold time compliance and field filtration. Data is qualified as necessary, and the lack of qualification indicates compliance with required parameters.

Apex Laboratories

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Philip Nerenberg, Lab Director

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0741 - 04 23 21 1129**

LABORATORY ACCREDITATION INFORMATION

ORELAP Certification ID: OR100062 (Primary Accreditation) -
EPA ID: OR01039

All methods and analytes reported from work performed at Apex Laboratories are included on Apex Laboratories' ORELAP Scope of Certification, with the exception of any analyte(s) listed below:

Apex Laboratories

Matrix	Analysis	TNI_ID	Analyte	TNI_ID	Accreditation

All reported analytes are included in Apex Laboratories' current ORELAP scope.

Secondary Accreditations

Apex Laboratories also maintains reciprocal accreditation with non-TNI states (Washington DOE), as well as other state specific accreditations not listed here.

Subcontract Laboratory Accreditations

Subcontracted data falls outside of Apex Laboratories' Scope of Accreditation.
Please see the Subcontract Laboratory report for full details, or contact your Project Manager for more information.

Field Testing Parameters

Results for Field Tested data are provded by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.

Apex Laboratories

Philip Nerenberg, Lab Director

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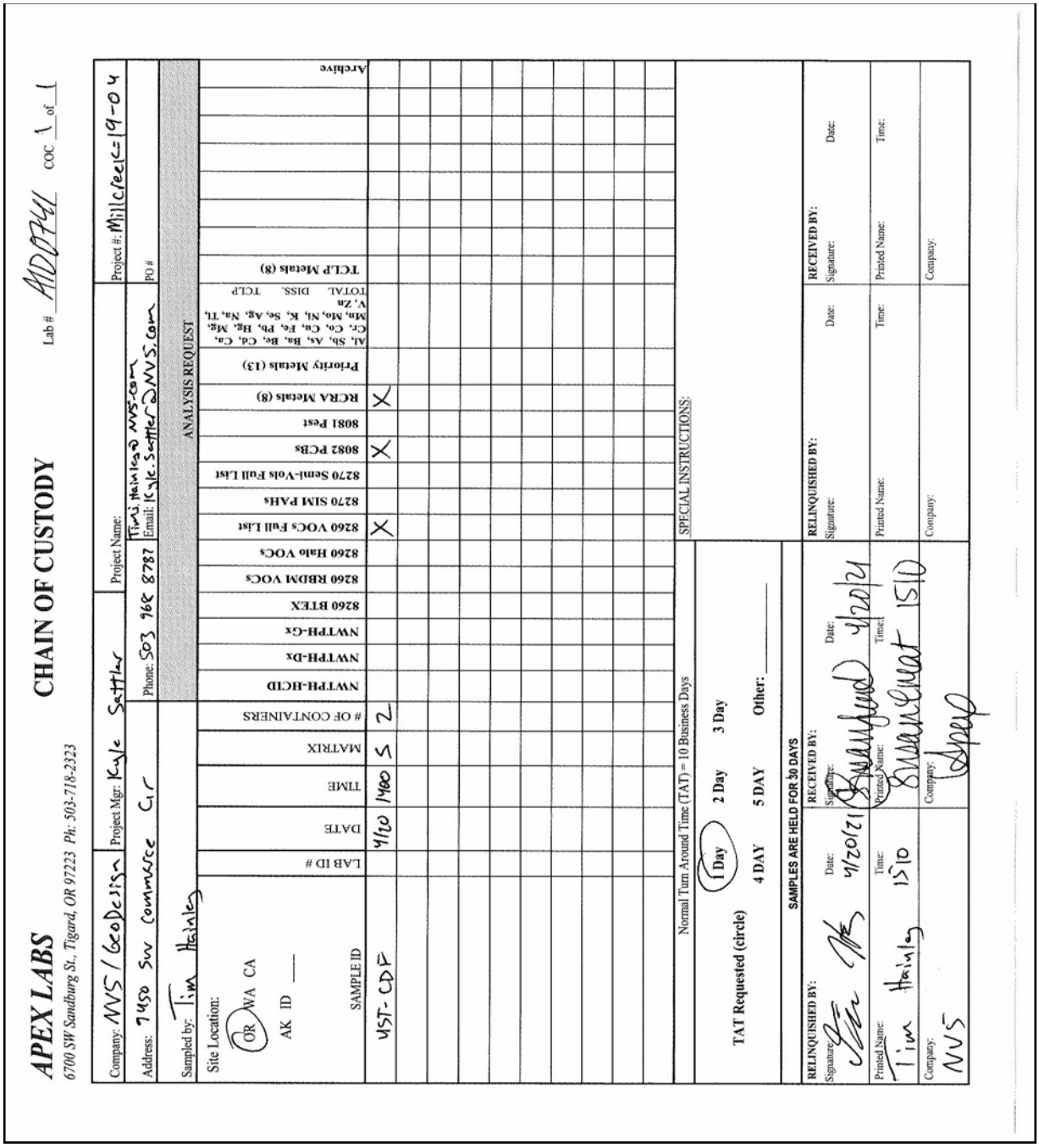
ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0741 - 04 23 21 1129**



APEX LABS — CHAIN OF CUSTODY — Lab # A1D0741 — COC 1 of 1

6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323

Company: NVS / GeoDesign | Project Mgr: Kyle Sattler | Project Name: | Project #: MillCreek-19-04

Address: 9450 SW Commerce Cir | Phone: 503 968 8787 | Email: Tim.Heinlen@NVS.com, Kyle.Sattler@NVS.com | PO #

Sampled by: Tim Heinlen

Site Location: (OR) WA CA AK ID ___

SAMPLE ID	LAB ID #	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 BTEX	8260 RBDM VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIM PAHs	8270 Semi-Vols Full List	8082 PCBs	8081 Pest	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn TOTAL DISS. TCLP	TCLP Metals (8)	Archive
UST-CDF		4/20	1400	S	2							X			X		X			

SPECIAL INSTRUCTIONS:

Normal Turn Around Time (TAT) = 10 Business Days

TAT Requested (circle): (1 Day) 2 Day 3 Day 4 DAY 5 DAY Other: ___

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature:	Signature:	Signature:	Signature:
Date: 4/20/21	Date: 4/20/21	Date:	Date:
Printed Name: Tim Heinlen	Printed Name: Susan Chat	Printed Name:	Printed Name:
Time: 1510	Time: 1510	Time:	Time:
Company: NVS	Company: Apex	Company:	Company:

Apex Laboratories

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Philip Nerenberg, Lab Director

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0741 - 04 23 21 1129**

APEX LABS COOLER RECEIPT FORM

Client: NV5/GeoDesign Element WO#: A1 D0741

Project/Project #: Millcreek-19-04

Delivery Info:

Date/time received: 4/20/21 @ 1510 By: SI

Delivered by: Apex___ Client X ESS___ FedEx___ UPS___ Swift___ Senvoy___ SDS___ Other_____

Cooler Inspection Date/time inspected: 4/20/21 @ 1510 By: SI

Chain of Custody included? Yes X No _____ Custody seals? Yes_____ No X

Signed/dated by client? Yes X No _____

Signed/dated by Apex? Yes X No _____

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	1.9						
Received on ice? (Y/N)	Y						
Temp. blanks? (Y/N)	N						
Ice type: (Gel/Real/Other)	real						
Condition:	good						

Cooler out of temp? (Y/N) Possible reason why:

Green dots applied to out of temperature samples? Yes (No)

Out of temperature samples form initiated? Yes (No)

12 SI 1st 4/20/21

Sample Inspection: Date/time inspected: 4/20/21 @ 1510 By: SI

All samples intact? Yes X No ___ Comments:

Bottle labels/COCs agree? Yes X No ___ Comments:

COC/container discrepancies form initiated? Yes ___ No X

Containers/volumes received appropriate for analysis? Yes X No ___ Comments:

Do VOA vials have visible headspace? Yes ___ No ___ NA X

Comments

Water samples: pH checked: Yes___ No___ NA X pH appropriate? Yes___ No___ NA X

Comments:

Additional information:

Labeled by: LS Witness: SI Cooler Inspected by: SI

Apex Laboratories

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Philip Nerenberg

Philip Nerenberg, Lab Director

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

Tuesday, April 27, 2021

Kyle Sattler
GeoDesign, Inc.
9450 SW Commerce Circle
Wilsonville, OR 97070

RE: A1D0803 - MillCreek-19-04 - MillCreek-19-04

Thank you for using Apex Laboratories. We greatly appreciate your business and strive to provide the highest quality services to the environmental industry.

Enclosed are the results of analyses for work order A1D0803, which was received by the laboratory on 4/21/2021 at 1:00:00PM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: pnerenberg@apex-labs.com, or by phone at 503-718-2323.

Please note: All samples will be disposed of within 30 days of sample receipt, unless prior arrangements have been made.

Cooler Receipt Information

(See Cooler Receipt Form for details)

Cooler #1	5.9 degC

This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.
All other deliverables derived from this data, including Electronic Data Deliverables (EDDs), CLP-like forms, client requested summary sheets, and all other products are considered secondary to this report.

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0803 - 04 27 21 1528**

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
HOT-SP(042121)	**A1D0803-01**	**Soil**	**04/21/21 10:45**	**04/21/21 13:00**
UST-Gas	**A1D0803-02**	**Soil**	**04/21/21 12:00**	**04/21/21 13:00**

Apex Laboratories

Philip Nerenberg, Lab Director

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: MillCreek-19-04	
9450 SW Commerce Circle	Project Number: MillCreek-19-04	Report ID:
Wilsonville, OR 97070	Project Manager: Kyle Sattler	A1D0803 - 04 27 21 1528

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
HOT-SP(042121) (A1D0803-01)				**Matrix: Soil**		**Batch: 1040939**		
Acetone	ND	---	1.57	mg/kg dry	50	04/26/21 20:50	5035A/8260D	
Acrylonitrile	ND	---	0.157	mg/kg dry	50	04/26/21 20:50	5035A/8260D	
Benzene	ND	---	0.0157	mg/kg dry	50	04/26/21 20:50	5035A/8260D	
Bromobenzene	ND	---	0.0393	mg/kg dry	50	04/26/21 20:50	5035A/8260D	
Bromochloromethane	ND	---	0.0786	mg/kg dry	50	04/26/21 20:50	5035A/8260D	
Bromodichloromethane	ND	---	0.0786	mg/kg dry	50	04/26/21 20:50	5035A/8260D	
Bromoform	ND	---	0.157	mg/kg dry	50	04/26/21 20:50	5035A/8260D	
Bromomethane	ND	---	0.786	mg/kg dry	50	04/26/21 20:50	5035A/8260D	
2-Butanone (MEK)	ND	---	0.786	mg/kg dry	50	04/26/21 20:50	5035A/8260D	
n-Butylbenzene	ND	---	0.0786	mg/kg dry	50	04/26/21 20:50	5035A/8260D	
sec-Butylbenzene	ND	---	0.0786	mg/kg dry	50	04/26/21 20:50	5035A/8260D	
tert-Butylbenzene	ND	---	0.0786	mg/kg dry	50	04/26/21 20:50	5035A/8260D	
Carbon disulfide	ND	---	0.786	mg/kg dry	50	04/26/21 20:50	5035A/8260D	
Carbon tetrachloride	ND	---	0.0786	mg/kg dry	50	04/26/21 20:50	5035A/8260D	
Chlorobenzene	ND	---	0.0393	mg/kg dry	50	04/26/21 20:50	5035A/8260D	
Chloroethane	ND	---	0.786	mg/kg dry	50	04/26/21 20:50	5035A/8260D	Q-30
Chloroform	ND	---	0.0786	mg/kg dry	50	04/26/21 20:50	5035A/8260D	
Chloromethane	ND	---	0.393	mg/kg dry	50	04/26/21 20:50	5035A/8260D	
2-Chlorotoluene	ND	---	0.0786	mg/kg dry	50	04/26/21 20:50	5035A/8260D	
4-Chlorotoluene	ND	---	0.0786	mg/kg dry	50	04/26/21 20:50	5035A/8260D	
Dibromochloromethane	ND	---	0.157	mg/kg dry	50	04/26/21 20:50	5035A/8260D	
1,2-Dibromo-3-chloropropane	ND	---	0.393	mg/kg dry	50	04/26/21 20:50	5035A/8260D	
1,2-Dibromoethane (EDB)	ND	---	0.0786	mg/kg dry	50	04/26/21 20:50	5035A/8260D	
Dibromomethane	ND	---	0.0786	mg/kg dry	50	04/26/21 20:50	5035A/8260D	
1,2-Dichlorobenzene	ND	---	0.0393	mg/kg dry	50	04/26/21 20:50	5035A/8260D	
1,3-Dichlorobenzene	ND	---	0.0393	mg/kg dry	50	04/26/21 20:50	5035A/8260D	
1,4-Dichlorobenzene	ND	---	0.0393	mg/kg dry	50	04/26/21 20:50	5035A/8260D	
Dichlorodifluoromethane	ND	---	0.157	mg/kg dry	50	04/26/21 20:50	5035A/8260D	
1,1-Dichloroethane	ND	---	0.0393	mg/kg dry	50	04/26/21 20:50	5035A/8260D	
1,2-Dichloroethane (EDC)	ND	---	0.0393	mg/kg dry	50	04/26/21 20:50	5035A/8260D	
1,1-Dichloroethene	ND	---	0.0393	mg/kg dry	50	04/26/21 20:50	5035A/8260D	
cis-1,2-Dichloroethene	ND	---	0.0393	mg/kg dry	50	04/26/21 20:50	5035A/8260D	
trans-1,2-Dichloroethene	ND	---	0.0393	mg/kg dry	50	04/26/21 20:50	5035A/8260D	

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Philip Nerenberg, Lab Director

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

GeoDesign, Inc.	Project: MillCreek-19-04	
9450 SW Commerce Circle	Project Number: MillCreek-19-04	Report ID:
Wilsonville, OR 97070	Project Manager: Kyle Sattler	A1D0803 - 04 27 21 1528

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
HOT-SP(042121) (A1D0803-01)				**Matrix: Soil**		**Batch: 1040939**		
1,2-Dichloropropane	ND	---	0.0393	mg/kg dry	50	04/26/21 20:50	5035A/8260D	
1,3-Dichloropropane	ND	---	0.0786	mg/kg dry	50	04/26/21 20:50	5035A/8260D	
2,2-Dichloropropane	ND	---	0.0786	mg/kg dry	50	04/26/21 20:50	5035A/8260D	
1,1-Dichloropropene	ND	---	0.0786	mg/kg dry	50	04/26/21 20:50	5035A/8260D	
cis-1,3-Dichloropropene	ND	---	0.0786	mg/kg dry	50	04/26/21 20:50	5035A/8260D	
trans-1,3-Dichloropropene	ND	---	0.0786	mg/kg dry	50	04/26/21 20:50	5035A/8260D	
Ethylbenzene	ND	---	0.0393	mg/kg dry	50	04/26/21 20:50	5035A/8260D	
Hexachlorobutadiene	ND	---	0.157	mg/kg dry	50	04/26/21 20:50	5035A/8260D	
2-Hexanone	ND	---	0.786	mg/kg dry	50	04/26/21 20:50	5035A/8260D	
Isopropylbenzene	ND	---	0.0983	mg/kg dry	50	04/26/21 20:50	5035A/8260D	
4-Isopropyltoluene	**0.0884**	---	0.0786	mg/kg dry	50	04/26/21 20:50	5035A/8260D	**M-02**
Methylene chloride	ND	---	0.786	mg/kg dry	50	04/26/21 20:50	5035A/8260D	
4-Methyl-2-pentanone (MiBK)	ND	---	0.786	mg/kg dry	50	04/26/21 20:50	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	0.0786	mg/kg dry	50	04/26/21 20:50	5035A/8260D	
Naphthalene	**0.247**	---	0.157	mg/kg dry	50	04/26/21 20:50	5035A/8260D	**M-04**
n-Propylbenzene	ND	---	0.0393	mg/kg dry	50	04/26/21 20:50	5035A/8260D	
Styrene	ND	---	0.0786	mg/kg dry	50	04/26/21 20:50	5035A/8260D	
1,1,1,2-Tetrachloroethane	ND	---	0.0393	mg/kg dry	50	04/26/21 20:50	5035A/8260D	
1,1,2,2-Tetrachloroethane	ND	---	0.138	mg/kg dry	50	04/26/21 20:50	5035A/8260D	R-02
Tetrachloroethene (PCE)	ND	---	0.0393	mg/kg dry	50	04/26/21 20:50	5035A/8260D	
Toluene	ND	---	0.0786	mg/kg dry	50	04/26/21 20:50	5035A/8260D	
1,2,3-Trichlorobenzene	ND	---	0.393	mg/kg dry	50	04/26/21 20:50	5035A/8260D	
1,2,4-Trichlorobenzene	ND	---	0.393	mg/kg dry	50	04/26/21 20:50	5035A/8260D	
1,1,1-Trichloroethane	ND	---	0.0393	mg/kg dry	50	04/26/21 20:50	5035A/8260D	
1,1,2-Trichloroethane	ND	---	0.0393	mg/kg dry	50	04/26/21 20:50	5035A/8260D	
Trichloroethene (TCE)	ND	---	0.0393	mg/kg dry	50	04/26/21 20:50	5035A/8260D	
Trichlorofluoromethane	ND	---	0.157	mg/kg dry	50	04/26/21 20:50	5035A/8260D	
1,2,3-Trichloropropane	ND	---	0.0786	mg/kg dry	50	04/26/21 20:50	5035A/8260D	
1,2,4-Trimethylbenzene	**0.321**	---	0.0786	mg/kg dry	50	04/26/21 20:50	5035A/8260D	
1,3,5-Trimethylbenzene	**0.115**	---	0.0786	mg/kg dry	50	04/26/21 20:50	5035A/8260D	
Vinyl chloride	ND	---	0.0393	mg/kg dry	50	04/26/21 20:50	5035A/8260D	
m,p-Xylene	ND	---	0.0786	mg/kg dry	50	04/26/21 20:50	5035A/8260D	
o-Xylene	ND	---	0.0393	mg/kg dry	50	04/26/21 20:50	5035A/8260D	

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Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

GeoDesign, Inc.	Project: MillCreek-19-04	
9450 SW Commerce Circle	Project Number: MillCreek-19-04	Report ID:
Wilsonville, OR 97070	Project Manager: Kyle Sattler	A1D0803 - 04 27 21 1528

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
HOT-SP(042121) (A1D0803-01)				**Matrix: Soil**		**Batch: 1040939**		
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*104 %*	*Limits: 80-120 %*	*1*	*04/26/21 20:50*	*5035A/8260D*	
Toluene-d8 (Surr)			*97 %*	*80-120 %*	*1*	*04/26/21 20:50*	*5035A/8260D*	
4-Bromofluorobenzene (Surr)			*101 %*	*79-120 %*	*1*	*04/26/21 20:50*	*5035A/8260D*	
UST-Gas (A1D0803-02)				**Matrix: Soil**		**Batch: 1040939**		
Acetone	ND	---	1.57	mg/kg dry	50	04/26/21 21:16	5035A/8260D	
Acrylonitrile	ND	---	0.157	mg/kg dry	50	04/26/21 21:16	5035A/8260D	
Benzene	**0.362**	---	0.0157	mg/kg dry	50	04/26/21 21:16	5035A/8260D	
Bromobenzene	ND	---	0.0393	mg/kg dry	50	04/26/21 21:16	5035A/8260D	
Bromochloromethane	ND	---	0.0786	mg/kg dry	50	04/26/21 21:16	5035A/8260D	
Bromodichloromethane	ND	---	0.0786	mg/kg dry	50	04/26/21 21:16	5035A/8260D	
Bromoform	ND	---	0.157	mg/kg dry	50	04/26/21 21:16	5035A/8260D	
Bromomethane	ND	---	0.786	mg/kg dry	50	04/26/21 21:16	5035A/8260D	
2-Butanone (MEK)	ND	---	0.786	mg/kg dry	50	04/26/21 21:16	5035A/8260D	
n-Butylbenzene	**0.0916**	---	0.0786	mg/kg dry	50	04/26/21 21:16	5035A/8260D	**M-02**
sec-Butylbenzene	ND	---	0.0786	mg/kg dry	50	04/26/21 21:16	5035A/8260D	
tert-Butylbenzene	ND	---	0.0786	mg/kg dry	50	04/26/21 21:16	5035A/8260D	
Carbon disulfide	ND	---	0.786	mg/kg dry	50	04/26/21 21:16	5035A/8260D	
Carbon tetrachloride	ND	---	0.0786	mg/kg dry	50	04/26/21 21:16	5035A/8260D	
Chlorobenzene	ND	---	0.0393	mg/kg dry	50	04/26/21 21:16	5035A/8260D	
Chloroethane	ND	---	0.786	mg/kg dry	50	04/26/21 21:16	5035A/8260D	Q-30
Chloroform	ND	---	0.0786	mg/kg dry	50	04/26/21 21:16	5035A/8260D	
Chloromethane	ND	---	0.393	mg/kg dry	50	04/26/21 21:16	5035A/8260D	
2-Chlorotoluene	ND	---	0.0786	mg/kg dry	50	04/26/21 21:16	5035A/8260D	
4-Chlorotoluene	ND	---	0.0786	mg/kg dry	50	04/26/21 21:16	5035A/8260D	
Dibromochloromethane	ND	---	0.157	mg/kg dry	50	04/26/21 21:16	5035A/8260D	
1,2-Dibromo-3-chloropropane	ND	---	0.393	mg/kg dry	50	04/26/21 21:16	5035A/8260D	
1,2-Dibromoethane (EDB)	ND	---	0.0786	mg/kg dry	50	04/26/21 21:16	5035A/8260D	
Dibromomethane	ND	---	0.0786	mg/kg dry	50	04/26/21 21:16	5035A/8260D	
1,2-Dichlorobenzene	ND	---	0.0393	mg/kg dry	50	04/26/21 21:16	5035A/8260D	
1,3-Dichlorobenzene	ND	---	0.0393	mg/kg dry	50	04/26/21 21:16	5035A/8260D	
1,4-Dichlorobenzene	ND	---	0.0393	mg/kg dry	50	04/26/21 21:16	5035A/8260D	
Dichlorodifluoromethane	ND	---	0.157	mg/kg dry	50	04/26/21 21:16	5035A/8260D	
1,1-Dichloroethane	ND	---	0.0393	mg/kg dry	50	04/26/21 21:16	5035A/8260D	

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Philip Nerenberg, Lab Director

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503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0803 - 04 27 21 1528**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
UST-Gas (A1D0803-02)				**Matrix: Soil**		**Batch: 1040939**		
1,2-Dichloroethane (EDC)	ND	---	0.0393	mg/kg dry	50	04/26/21 21:16	5035A/8260D	
1,1-Dichloroethene	ND	---	0.0393	mg/kg dry	50	04/26/21 21:16	5035A/8260D	
cis-1,2-Dichloroethene	ND	---	0.0393	mg/kg dry	50	04/26/21 21:16	5035A/8260D	
trans-1,2-Dichloroethene	ND	---	0.0393	mg/kg dry	50	04/26/21 21:16	5035A/8260D	
1,2-Dichloropropane	ND	---	0.0393	mg/kg dry	50	04/26/21 21:16	5035A/8260D	
1,3-Dichloropropane	ND	---	0.0786	mg/kg dry	50	04/26/21 21:16	5035A/8260D	
2,2-Dichloropropane	ND	---	0.0786	mg/kg dry	50	04/26/21 21:16	5035A/8260D	
1,1-Dichloropropene	ND	---	0.0786	mg/kg dry	50	04/26/21 21:16	5035A/8260D	
cis-1,3-Dichloropropene	ND	---	0.0786	mg/kg dry	50	04/26/21 21:16	5035A/8260D	
trans-1,3-Dichloropropene	ND	---	0.0786	mg/kg dry	50	04/26/21 21:16	5035A/8260D	
Ethylbenzene	**0.206**	---	0.0393	mg/kg dry	50	04/26/21 21:16	5035A/8260D	
Hexachlorobutadiene	ND	---	0.157	mg/kg dry	50	04/26/21 21:16	5035A/8260D	
2-Hexanone	ND	---	0.786	mg/kg dry	50	04/26/21 21:16	5035A/8260D	
Isopropylbenzene	ND	---	0.0786	mg/kg dry	50	04/26/21 21:16	5035A/8260D	
4-Isopropyltoluene	**0.104**	---	0.0786	mg/kg dry	50	04/26/21 21:16	5035A/8260D	**M-02**
Methylene chloride	ND	---	0.786	mg/kg dry	50	04/26/21 21:16	5035A/8260D	
4-Methyl-2-pentanone (MiBK)	ND	---	0.786	mg/kg dry	50	04/26/21 21:16	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	0.0786	mg/kg dry	50	04/26/21 21:16	5035A/8260D	
Naphthalene	**0.206**	---	0.157	mg/kg dry	50	04/26/21 21:16	5035A/8260D	
n-Propylbenzene	**0.144**	---	0.0393	mg/kg dry	50	04/26/21 21:16	5035A/8260D	
Styrene	ND	---	0.0786	mg/kg dry	50	04/26/21 21:16	5035A/8260D	
1,1,1,2-Tetrachloroethane	ND	---	0.0393	mg/kg dry	50	04/26/21 21:16	5035A/8260D	
1,1,2,2-Tetrachloroethane	ND	---	0.0982	mg/kg dry	50	04/26/21 21:16	5035A/8260D	R-02
Tetrachloroethene (PCE)	ND	---	0.0393	mg/kg dry	50	04/26/21 21:16	5035A/8260D	
Toluene	**0.717**	---	0.0786	mg/kg dry	50	04/26/21 21:16	5035A/8260D	
1,2,3-Trichlorobenzene	ND	---	0.393	mg/kg dry	50	04/26/21 21:16	5035A/8260D	
1,2,4-Trichlorobenzene	ND	---	0.393	mg/kg dry	50	04/26/21 21:16	5035A/8260D	
1,1,1-Trichloroethane	ND	---	0.0393	mg/kg dry	50	04/26/21 21:16	5035A/8260D	
1,1,2-Trichloroethane	ND	---	0.0393	mg/kg dry	50	04/26/21 21:16	5035A/8260D	
Trichloroethene (TCE)	ND	---	0.0393	mg/kg dry	50	04/26/21 21:16	5035A/8260D	
Trichlorofluoromethane	ND	---	0.157	mg/kg dry	50	04/26/21 21:16	5035A/8260D	
1,2,3-Trichloropropane	ND	---	0.0786	mg/kg dry	50	04/26/21 21:16	5035A/8260D	
1,2,4-Trimethylbenzene	**1.09**	---	0.0786	mg/kg dry	50	04/26/21 21:16	5035A/8260D	

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Philip Nerenberg, Lab Director

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0803 - 04 27 21 1528**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
UST-Gas (A1D0803-02)				**Matrix: Soil**		**Batch: 1040939**		
1,3,5-Trimethylbenzene	**0.324**	---	0.0786	mg/kg dry	50	04/26/21 21:16	5035A/8260D	
Vinyl chloride	ND	---	0.0393	mg/kg dry	50	04/26/21 21:16	5035A/8260D	
m,p-Xylene	**0.901**	---	0.0786	mg/kg dry	50	04/26/21 21:16	5035A/8260D	
o-Xylene	**0.452**	---	0.0393	mg/kg dry	50	04/26/21 21:16	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*102 %*	*Limits:* *80-120 %*	*1*	*04/26/21 21:16*	*5035A/8260D*	
Toluene-d8 (Surr)			*97 %*	*80-120 %*	*1*	*04/26/21 21:16*	*5035A/8260D*	
4-Bromofluorobenzene (Surr)			*102 %*	*79-120 %*	*1*	*04/26/21 21:16*	*5035A/8260D*	

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0803 - 04 27 21 1528**

ANALYTICAL SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
HOT-SP(042121) (A1D0803-01)				**Matrix: Soil**		**Batch: 1040830**		**C-07**
Aroclor 1016	ND	---	0.0126	mg/kg dry	1	04/23/21 18:27	EPA 8082A	
Aroclor 1221	ND	---	0.0126	mg/kg dry	1	04/23/21 18:27	EPA 8082A	
Aroclor 1232	ND	---	0.0126	mg/kg dry	1	04/23/21 18:27	EPA 8082A	
Aroclor 1242	ND	---	0.0126	mg/kg dry	1	04/23/21 18:27	EPA 8082A	
Aroclor 1248	ND	---	0.0126	mg/kg dry	1	04/23/21 18:27	EPA 8082A	
Aroclor 1254	ND	---	0.0126	mg/kg dry	1	04/23/21 18:27	EPA 8082A	
Aroclor 1260	ND	---	0.0126	mg/kg dry	1	04/23/21 18:27	EPA 8082A	
Surrogate: Decachlorobiphenyl (Surr)		*Recovery: 91 %*		*Limits: 60-125 %*	*1*	*04/23/21 18:27*	*EPA 8082A*	
UST-Gas (A1D0803-02)				**Matrix: Soil**		**Batch: 1040830**		**C-07**
Aroclor 1016	ND	---	0.0125	mg/kg dry	1	04/23/21 19:38	EPA 8082A	
Aroclor 1221	ND	---	0.0125	mg/kg dry	1	04/23/21 19:38	EPA 8082A	
Aroclor 1232	ND	---	0.0125	mg/kg dry	1	04/23/21 19:38	EPA 8082A	
Aroclor 1242	ND	---	0.0125	mg/kg dry	1	04/23/21 19:38	EPA 8082A	
Aroclor 1248	ND	---	0.0125	mg/kg dry	1	04/23/21 19:38	EPA 8082A	
Aroclor 1254	ND	---	0.0125	mg/kg dry	1	04/23/21 19:38	EPA 8082A	
Aroclor 1260	ND	---	0.0125	mg/kg dry	1	04/23/21 19:38	EPA 8082A	
Surrogate: Decachlorobiphenyl (Surr)		*Recovery: 87 %*		*Limits: 60-125 %*	*1*	*04/23/21 19:38*	*EPA 8082A*	

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Philip Nerenberg, Lab Director

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503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0803 - 04 27 21 1528**

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
HOT-SP(042121) (A1D0803-01)				**Matrix: Soil**				
Batch: 1040814								
Arsenic	**8.46**	---	1.35	mg/kg dry	10	04/22/21 21:59	EPA 6020B	
Barium	**188**	---	1.35	mg/kg dry	10	04/22/21 21:59	EPA 6020B	
Cadmium	ND	---	0.269	mg/kg dry	10	04/22/21 21:59	EPA 6020B	
Chromium	**21.2**	---	1.35	mg/kg dry	10	04/22/21 21:59	EPA 6020B	
Lead	**13.3**	---	0.269	mg/kg dry	10	04/22/21 21:59	EPA 6020B	
Mercury	ND	---	0.108	mg/kg dry	10	04/22/21 21:59	EPA 6020B	
Selenium	ND	---	1.35	mg/kg dry	10	04/22/21 21:59	EPA 6020B	
Silver	ND	---	0.269	mg/kg dry	10	04/22/21 21:59	EPA 6020B	
UST-Gas (A1D0803-02)				**Matrix: Soil**				
Batch: 1040814								
Arsenic	**6.13**	---	1.43	mg/kg dry	10	04/22/21 22:04	EPA 6020B	
Barium	**184**	---	1.43	mg/kg dry	10	04/22/21 22:04	EPA 6020B	
Cadmium	**0.814**	---	0.287	mg/kg dry	10	04/22/21 22:04	EPA 6020B	
Chromium	**22.1**	---	1.43	mg/kg dry	10	04/22/21 22:04	EPA 6020B	
Lead	**29.7**	---	0.287	mg/kg dry	10	04/22/21 22:04	EPA 6020B	
Mercury	ND	---	0.115	mg/kg dry	10	04/22/21 22:04	EPA 6020B	
Selenium	ND	---	1.43	mg/kg dry	10	04/22/21 22:04	EPA 6020B	
Silver	ND	---	0.287	mg/kg dry	10	04/22/21 22:04	EPA 6020B	

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0803 - 04 27 21 1528**

ANALYTICAL SAMPLE RESULTS

Percent Dry Weight

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
HOT-SP(042121) (A1D0803-01)				**Matrix: Soil**		**Batch: 1040836**		
% Solids	**77.4**	---	1.00	%	1	04/26/21 07:52	EPA 8000D	
UST-Gas (A1D0803-02)				**Matrix: Soil**		**Batch: 1040836**		
% Solids	**75.9**	---	1.00	%	1	04/26/21 07:52	EPA 8000D	

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: MillCreek-19-04	
9450 SW Commerce Circle	Project Number: MillCreek-19-04	Report ID:
Wilsonville, OR 97070	Project Manager: Kyle Sattler	A1D0803 - 04 27 21 1528

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040939 - EPA 5035A							Soil					
Blank (1040939-BLK1)			Prepared: 04/26/21 09:00 Analyzed: 04/26/21 15:27									
5035A/8260D												
Acetone	ND	---	0.667	mg/kg wet	50	---	---	---	---	---	---	
Acrylonitrile	ND	---	0.0667	mg/kg wet	50	---	---	---	---	---	---	
Benzene	ND	---	0.00667	mg/kg wet	50	---	---	---	---	---	---	
Bromobenzene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Bromochloromethane	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Bromodichloromethane	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Bromoform	ND	---	0.0667	mg/kg wet	50	---	---	---	---	---	---	
Bromomethane	ND	---	0.333	mg/kg wet	50	---	---	---	---	---	---	
2-Butanone (MEK)	ND	---	0.333	mg/kg wet	50	---	---	---	---	---	---	
n-Butylbenzene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
sec-Butylbenzene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
tert-Butylbenzene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Carbon disulfide	ND	---	0.333	mg/kg wet	50	---	---	---	---	---	---	
Carbon tetrachloride	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Chlorobenzene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Chloroethane	ND	---	0.333	mg/kg wet	50	---	---	---	---	---	---	Q-30
Chloroform	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Chloromethane	ND	---	0.167	mg/kg wet	50	---	---	---	---	---	---	
2-Chlorotoluene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
4-Chlorotoluene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Dibromochloromethane	ND	---	0.0667	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	---	0.167	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Dibromomethane	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	---	0.0667	mg/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethane	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0803 - 04 27 21 1528**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040939 - EPA 5035A							**Soil**					
Blank (1040939-BLK1)			Prepared: 04/26/21 09:00 Analyzed: 04/26/21 15:27									
1,2-Dichloropropane	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,3-Dichloropropane	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
2,2-Dichloropropane	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,1-Dichloropropene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Ethylbenzene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Hexachlorobutadiene	ND	---	0.0667	mg/kg wet	50	---	---	---	---	---	---	
2-Hexanone	ND	---	0.333	mg/kg wet	50	---	---	---	---	---	---	
Isopropylbenzene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
4-Isopropyltoluene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Methylene chloride	ND	---	0.333	mg/kg wet	50	---	---	---	---	---	---	
4-Methyl-2-pentanone (MiBK)	ND	---	0.333	mg/kg wet	50	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Naphthalene	ND	---	0.0667	mg/kg wet	50	---	---	---	---	---	---	
n-Propylbenzene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Styrene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Toluene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,2,3-Trichlorobenzene	ND	---	0.167	mg/kg wet	50	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	---	0.167	mg/kg wet	50	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,1,2-Trichloroethane	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Trichlorofluoromethane	ND	---	0.0667	mg/kg wet	50	---	---	---	---	---	---	
1,2,3-Trichloropropane	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Vinyl chloride	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
m,p-Xylene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
o-Xylene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	

Surr: 1,4-Difluorobenzene (Surr) *Recovery: 102 %* *Limits: 80-120 %* *Dilution: 1x*

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0803 - 04 27 21 1528**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040939 - EPA 5035A							**Soil**					
Blank (1040939-BLK1)			Prepared: 04/26/21 09:00 Analyzed: 04/26/21 15:27									
Surr: Toluene-d8 (Surr)			*Recovery: 99 %*	*Limits: 80-120 %*				*Dilution: 1x*				
4-Bromofluorobenzene (Surr)			*104 %*	*79-120 %*				*"*				
LCS (1040939-BS1)			Prepared: 04/26/21 09:00 Analyzed: 04/26/21 14:33									**Q-50**
5035A/8260D												
Acetone	1.76	---	1.00	mg/kg wet	50	2.00	---	88	80-120%	---	---	
Acrylonitrile	1.06	---	0.100	mg/kg wet	50	1.00	---	106	80-120%	---	---	
Benzene	0.993	---	0.0100	mg/kg wet	50	1.00	---	99	80-120%	---	---	
Bromobenzene	0.975	---	0.0250	mg/kg wet	50	1.00	---	98	80-120%	---	---	
Bromochloromethane	0.986	---	0.0500	mg/kg wet	50	1.00	---	99	80-120%	---	---	
Bromodichloromethane	0.972	---	0.0500	mg/kg wet	50	1.00	---	97	80-120%	---	---	
Bromoform	1.25	---	0.100	mg/kg wet	50	1.00	---	**125**	**80-120%**	---	---	Q-56
Bromomethane	0.849	---	0.500	mg/kg wet	50	1.00	---	85	80-120%	---	---	
2-Butanone (MEK)	1.99	---	0.500	mg/kg wet	50	2.00	---	99	80-120%	---	---	
n-Butylbenzene	0.944	---	0.0500	mg/kg wet	50	1.00	---	94	80-120%	---	---	
sec-Butylbenzene	0.954	---	0.0500	mg/kg wet	50	1.00	---	95	80-120%	---	---	
tert-Butylbenzene	0.912	---	0.0500	mg/kg wet	50	1.00	---	91	80-120%	---	---	
Carbon disulfide	0.769	---	0.500	mg/kg wet	50	1.00	---	**77**	**80-120%**	---	---	Q-55
Carbon tetrachloride	1.32	---	0.0500	mg/kg wet	50	1.00	---	**132**	**80-120%**	---	---	Q-56
Chlorobenzene	0.992	---	0.0250	mg/kg wet	50	1.00	---	99	80-120%	---	---	
Chloroethane	0.691	---	0.500	mg/kg wet	50	1.00	---	**69**	**80-120%**	---	---	Q-30
Chloroform	0.983	---	0.0500	mg/kg wet	50	1.00	---	98	80-120%	---	---	
Chloromethane	1.01	---	0.250	mg/kg wet	50	1.00	---	101	80-120%	---	---	
2-Chlorotoluene	1.05	---	0.0500	mg/kg wet	50	1.00	---	105	80-120%	---	---	
4-Chlorotoluene	0.984	---	0.0500	mg/kg wet	50	1.00	---	98	80-120%	---	---	
Dibromochloromethane	1.09	---	0.100	mg/kg wet	50	1.00	---	109	80-120%	---	---	
1,2-Dibromo-3-chloropropane	0.925	---	0.250	mg/kg wet	50	1.00	---	92	80-120%	---	---	
1,2-Dibromoethane (EDB)	1.02	---	0.0500	mg/kg wet	50	1.00	---	102	80-120%	---	---	
Dibromomethane	0.990	---	0.0500	mg/kg wet	50	1.00	---	99	80-120%	---	---	
1,2-Dichlorobenzene	0.986	---	0.0250	mg/kg wet	50	1.00	---	99	80-120%	---	---	
1,3-Dichlorobenzene	1.01	---	0.0250	mg/kg wet	50	1.00	---	101	80-120%	---	---	
1,4-Dichlorobenzene	0.934	---	0.0250	mg/kg wet	50	1.00	---	93	80-120%	---	---	
Dichlorodifluoromethane	0.988	---	0.100	mg/kg wet	50	1.00	---	99	80-120%	---	---	
1,1-Dichloroethane	1.02	---	0.0250	mg/kg wet	50	1.00	---	102	80-120%	---	---	

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GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0803 - 04 27 21 1528**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040939 - EPA 5035A							**Soil**					
LCS (1040939-BS1)			Prepared: 04/26/21 09:00 Analyzed: 04/26/21 14:33									**Q-50**
1,2-Dichloroethane (EDC)	0.968	---	0.0250	mg/kg wet	50	1.00	---	97	80-120%	---	---	
1,1-Dichloroethene	0.932	---	0.0250	mg/kg wet	50	1.00	---	93	80-120%	---	---	
cis-1,2-Dichloroethene	1.00	---	0.0250	mg/kg wet	50	1.00	---	100	80-120%	---	---	
trans-1,2-Dichloroethene	0.979	---	0.0250	mg/kg wet	50	1.00	---	98	80-120%	---	---	
1,2-Dichloropropane	1.04	---	0.0250	mg/kg wet	50	1.00	---	104	80-120%	---	---	
1,3-Dichloropropane	1.02	---	0.0500	mg/kg wet	50	1.00	---	102	80-120%	---	---	
2,2-Dichloropropane	1.20	---	0.0500	mg/kg wet	50	1.00	---	120	80-120%	---	---	
1,1-Dichloropropene	1.00	---	0.0500	mg/kg wet	50	1.00	---	100	80-120%	---	---	
cis-1,3-Dichloropropene	0.968	---	0.0500	mg/kg wet	50	1.00	---	97	80-120%	---	---	
trans-1,3-Dichloropropene	0.952	---	0.0500	mg/kg wet	50	1.00	---	95	80-120%	---	---	
Ethylbenzene	0.966	---	0.0250	mg/kg wet	50	1.00	---	97	80-120%	---	---	
Hexachlorobutadiene	0.923	---	0.100	mg/kg wet	50	1.00	---	92	80-120%	---	---	
2-Hexanone	1.93	---	0.500	mg/kg wet	50	2.00	---	97	80-120%	---	---	
Isopropylbenzene	0.958	---	0.0500	mg/kg wet	50	1.00	---	96	80-120%	---	---	
4-Isopropyltoluene	0.978	---	0.0500	mg/kg wet	50	1.00	---	98	80-120%	---	---	
Methylene chloride	0.993	---	0.500	mg/kg wet	50	1.00	---	99	80-120%	---	---	
4-Methyl-2-pentanone (MiBK)	1.92	---	0.500	mg/kg wet	50	2.00	---	96	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	1.05	---	0.0500	mg/kg wet	50	1.00	---	105	80-120%	---	---	
Naphthalene	0.976	---	0.100	mg/kg wet	50	1.00	---	98	80-120%	---	---	
n-Propylbenzene	0.985	---	0.0250	mg/kg wet	50	1.00	---	98	80-120%	---	---	
Styrene	0.982	---	0.0500	mg/kg wet	50	1.00	---	98	80-120%	---	---	
1,1,1,2-Tetrachloroethane	1.29	---	0.0250	mg/kg wet	50	1.00	---	**129**	**80-120%**	---	---	Q-56
1,1,2,2-Tetrachloroethane	0.996	---	0.0500	mg/kg wet	50	1.00	---	100	80-120%	---	---	
Tetrachloroethene (PCE)	1.01	---	0.0250	mg/kg wet	50	1.00	---	101	80-120%	---	---	
Toluene	0.949	---	0.0500	mg/kg wet	50	1.00	---	95	80-120%	---	---	
1,2,3-Trichlorobenzene	1.04	---	0.250	mg/kg wet	50	1.00	---	104	80-120%	---	---	
1,2,4-Trichlorobenzene	1.02	---	0.250	mg/kg wet	50	1.00	---	102	80-120%	---	---	
1,1,1-Trichloroethane	1.05	---	0.0250	mg/kg wet	50	1.00	---	105	80-120%	---	---	
1,1,2-Trichloroethane	1.03	---	0.0250	mg/kg wet	50	1.00	---	103	80-120%	---	---	
Trichloroethene (TCE)	1.03	---	0.0250	mg/kg wet	50	1.00	---	103	80-120%	---	---	
Trichlorofluoromethane	0.735	---	0.100	mg/kg wet	50	1.00	---	**74**	**80-120%**	---	---	Q-55
1,2,3-Trichloropropane	1.01	---	0.0500	mg/kg wet	50	1.00	---	101	80-120%	---	---	
1,2,4-Trimethylbenzene	1.01	---	0.0500	mg/kg wet	50	1.00	---	101	80-120%	---	---	
1,3,5-Trimethylbenzene	1.01	---	0.0500	mg/kg wet	50	1.00	---	101	80-120%	---	---	

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Philip Nerenberg, Lab Director

Apex Laboratories, LLC
6700 S.W. Sandburg Street
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503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

GeoDesign, Inc.	Project: MillCreek-19-04	
9450 SW Commerce Circle	Project Number: MillCreek-19-04	Report ID:
Wilsonville, OR 97070	Project Manager: Kyle Sattler	A1D0803 - 04 27 21 1528

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040939 - EPA 5035A							Soil					
LCS (1040939-BS1)			Prepared: 04/26/21 09:00 Analyzed: 04/26/21 14:33									Q-50
Vinyl chloride	0.904	---	0.0250	mg/kg wet	50	1.00	---	90	80-120%	---	---	
m,p-Xylene	1.92	---	0.0500	mg/kg wet	50	2.00	---	96	80-120%	---	---	
o-Xylene	0.981	---	0.0250	mg/kg wet	50	1.00	---	98	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*102 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*100 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*101 %*		*79-120 %*			*"*				
Duplicate (1040939-DUP1)			Prepared: 04/22/21 09:50 Analyzed: 04/26/21 20:23									
QC Source Sample: Non-SDG (A1D0874-04)												
Acetone	ND	---	1.68	mg/kg dry	50	---	ND	---	---	---	30%	
Acrylonitrile	ND	---	0.168	mg/kg dry	50	---	ND	---	---	---	30%	
Benzene	ND	---	0.0168	mg/kg dry	50	---	ND	---	---	---	30%	
Bromobenzene	ND	---	0.0420	mg/kg dry	50	---	ND	---	---	---	30%	
Bromochloromethane	ND	---	0.0841	mg/kg dry	50	---	ND	---	---	---	30%	
Bromodichloromethane	ND	---	0.0841	mg/kg dry	50	---	ND	---	---	---	30%	
Bromoform	ND	---	0.168	mg/kg dry	50	---	ND	---	---	---	30%	
Bromomethane	ND	---	0.841	mg/kg dry	50	---	ND	---	---	---	30%	
2-Butanone (MEK)	ND	---	0.841	mg/kg dry	50	---	ND	---	---	---	30%	
n-Butylbenzene	ND	---	0.0841	mg/kg dry	50	---	ND	---	---	---	30%	
sec-Butylbenzene	ND	---	0.0841	mg/kg dry	50	---	ND	---	---	---	30%	
tert-Butylbenzene	ND	---	0.0841	mg/kg dry	50	---	ND	---	---	---	30%	
Carbon disulfide	ND	---	0.841	mg/kg dry	50	---	ND	---	---	---	30%	
Carbon tetrachloride	ND	---	0.0841	mg/kg dry	50	---	ND	---	---	---	30%	
Chlorobenzene	ND	---	0.0420	mg/kg dry	50	---	ND	---	---	---	30%	
Chloroethane	ND	---	0.841	mg/kg dry	50	---	ND	---	---	---	30%	Q-30
Chloroform	ND	---	0.0841	mg/kg dry	50	---	ND	---	---	---	30%	
Chloromethane	ND	---	0.420	mg/kg dry	50	---	ND	---	---	---	30%	
2-Chlorotoluene	ND	---	0.0841	mg/kg dry	50	---	ND	---	---	---	30%	
4-Chlorotoluene	ND	---	0.0841	mg/kg dry	50	---	ND	---	---	---	30%	
Dibromochloromethane	ND	---	0.168	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dibromo-3-chloropropane	ND	---	0.420	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dibromoethane (EDB)	ND	---	0.0841	mg/kg dry	50	---	ND	---	---	---	30%	
Dibromomethane	ND	---	0.0841	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichlorobenzene	ND	---	0.0420	mg/kg dry	50	---	ND	---	---	---	30%	

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Philip Nerenberg, Lab Director

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ORELAP ID: **OR100062**

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0803 - 04 27 21 1528**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040939 - EPA 5035A							**Soil**					
Duplicate (1040939-DUP1)			Prepared: 04/22/21 09:50 Analyzed: 04/26/21 20:23									
QC Source Sample: Non-SDG (A1D0874-04)												
1,3-Dichlorobenzene	ND	---	0.0420	mg/kg dry	50	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	---	0.0420	mg/kg dry	50	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	---	0.168	mg/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	---	0.0420	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	---	0.0420	mg/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	---	0.0420	mg/kg dry	50	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	---	0.0420	mg/kg dry	50	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	---	0.0420	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	---	0.0420	mg/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	---	0.0841	mg/kg dry	50	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	---	0.0841	mg/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	---	0.0841	mg/kg dry	50	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	---	0.0841	mg/kg dry	50	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	---	0.0841	mg/kg dry	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	---	0.0420	mg/kg dry	50	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	---	0.168	mg/kg dry	50	---	ND	---	---	---	30%	
2-Hexanone	ND	---	0.841	mg/kg dry	50	---	ND	---	---	---	30%	
Isopropylbenzene	ND	---	0.0841	mg/kg dry	50	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	---	0.0841	mg/kg dry	50	---	ND	---	---	---	30%	
Methylene chloride	ND	---	0.841	mg/kg dry	50	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	---	0.841	mg/kg dry	50	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	---	0.0841	mg/kg dry	50	---	ND	---	---	---	30%	
Naphthalene	ND	---	0.168	mg/kg dry	50	---	ND	---	---	---	30%	
n-Propylbenzene	ND	---	0.0420	mg/kg dry	50	---	ND	---	---	---	30%	
Styrene	ND	---	0.0841	mg/kg dry	50	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	---	0.0420	mg/kg dry	50	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	---	0.0841	mg/kg dry	50	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	---	0.0420	mg/kg dry	50	---	ND	---	---	---	30%	
Toluene	ND	---	0.0841	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	---	0.420	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	---	0.420	mg/kg dry	50	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	---	0.0420	mg/kg dry	50	---	ND	---	---	---	30%	
1,1,2-Trichloroethane	ND	---	0.0420	mg/kg dry	50	---	ND	---	---	---	30%	

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Philip Nerenberg, Lab Director

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0803 - 04 27 21 1528**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040939 - EPA 5035A							**Soil**					
Duplicate (1040939-DUP1)			Prepared: 04/22/21 09:50 Analyzed: 04/26/21 20:23									
QC Source Sample: Non-SDG (A1D0874-04)												
Trichloroethene (TCE)	ND	---	0.0420	mg/kg dry	50	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	---	0.168	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	---	0.0841	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	---	0.0841	mg/kg dry	50	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	---	0.0841	mg/kg dry	50	---	ND	---	---	---	30%	
Vinyl chloride	ND	---	0.0420	mg/kg dry	50	---	ND	---	---	---	30%	
m,p-Xylene	ND	---	0.0841	mg/kg dry	50	---	ND	---	---	---	30%	
o-Xylene	ND	---	0.0420	mg/kg dry	50	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*102 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*99 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*103 %*		*79-120 %*			*"*				

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: MillCreek-19-04	
9450 SW Commerce Circle	Project Number: MillCreek-19-04	Report ID:
Wilsonville, OR 97070	Project Manager: Kyle Sattler	A1D0803 - 04 27 21 1528

QUALITY CONTROL (QC) SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040830 - EPA 3546							Soil					
Blank (1040830-BLK1)			Prepared: 04/23/21 07:12		Analyzed: 04/23/21 17:52							C-07
EPA 8082A												
Aroclor 1016	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Aroclor 1221	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Aroclor 1232	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Aroclor 1242	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Aroclor 1248	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Aroclor 1254	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Aroclor 1260	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Surr: Decachlorobiphenyl (Surr)			*Recovery: 90 %*		*Limits: 60-125 %*			*Dilution: 1x*				
LCS (1040830-BS1)			Prepared: 04/23/21 07:12		Analyzed: 04/23/21 18:10							C-07
EPA 8082A												
Aroclor 1016	0.163	---	0.0100	mg/kg wet	1	0.250	---	65	47-134%	---	---	
Aroclor 1260	0.192	---	0.0100	mg/kg wet	1	0.250	---	77	53-140%	---	---	
Surr: Decachlorobiphenyl (Surr)			*Recovery: 93 %*		*Limits: 60-125 %*			*Dilution: 1x*				
Duplicate (1040830-DUP1)			Prepared: 04/23/21 07:12		Analyzed: 04/23/21 19:03							C-07
QC Source Sample: HOT-SP(042121) (A1D0803-01)												
EPA 8082A												
Aroclor 1016	ND	---	0.0126	mg/kg dry	1	---	ND	---	---	---	30%	
Aroclor 1221	ND	---	0.0126	mg/kg dry	1	---	ND	---	---	---	30%	
Aroclor 1232	ND	---	0.0126	mg/kg dry	1	---	ND	---	---	---	30%	
Aroclor 1242	ND	---	0.0126	mg/kg dry	1	---	0.0100	---	---	***	**30%**	Q-05
Aroclor 1248	ND	---	0.0126	mg/kg dry	1	---	ND	---	---	---	30%	
Aroclor 1254	ND	---	0.0126	mg/kg dry	1	---	ND	---	---	---	30%	
Aroclor 1260	ND	---	0.0126	mg/kg dry	1	---	ND	---	---	---	30%	
Surr: Decachlorobiphenyl (Surr)			*Recovery: 81 %*		*Limits: 60-125 %*			*Dilution: 1x*				
Matrix Spike (1040830-MS1)			Prepared: 04/23/21 07:12		Analyzed: 04/23/21 20:14							C-07
QC Source Sample: UST-Gas (A1D0803-02)												
EPA 8082A												
Aroclor 1016	0.209	---	0.0125	mg/kg dry	1	0.312	ND	67	47-134%	---	---	
Aroclor 1260	0.231	---	0.0125	mg/kg dry	1	0.312	ND	74	53-140%	---	---	

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Philip Nerenberg, Lab Director

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GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0803 - 04 27 21 1528**

QUALITY CONTROL (QC) SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040830 - EPA 3546							**Soil**					
Matrix Spike (1040830-MS1)			Prepared: 04/23/21 07:12		Analyzed: 04/23/21 20:14							**C-07**
QC Source Sample: UST-Gas (A1D0803-02)												
Surr: Decachlorobiphenyl (Surr)			*Recovery: 86 %*		*Limits: 60-125 %*							*Dilution: 1x*

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GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0803 - 04 27 21 1528**

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040814 - EPA 3051A							**Soil**					
Blank (1040814-BLK1)			Prepared: 04/22/21 13:57 Analyzed: 04/22/21 17:57									
EPA 6020B												
Arsenic	ND	---	0.962	mg/kg wet	10	---	---	---	---	---	---	
Barium	ND	---	0.962	mg/kg wet	10	---	---	---	---	---	---	
Cadmium	ND	---	0.192	mg/kg wet	10	---	---	---	---	---	---	
Chromium	ND	---	0.962	mg/kg wet	10	---	---	---	---	---	---	
Lead	ND	---	0.192	mg/kg wet	10	---	---	---	---	---	---	
Mercury	ND	---	0.0769	mg/kg wet	10	---	---	---	---	---	---	
Selenium	ND	---	0.962	mg/kg wet	10	---	---	---	---	---	---	
Silver	ND	---	0.192	mg/kg wet	10	---	---	---	---	---	---	
LCS (1040814-BS1)			Prepared: 04/22/21 13:57 Analyzed: 04/22/21 18:02									
EPA 6020B												
Arsenic	49.2	---	1.00	mg/kg wet	10	50.0	---	98	80-120%	---	---	
Barium	51.2	---	1.00	mg/kg wet	10	50.0	---	102	80-120%	---	---	
Cadmium	49.4	---	0.200	mg/kg wet	10	50.0	---	99	80-120%	---	---	
Chromium	49.7	---	1.00	mg/kg wet	10	50.0	---	99	80-120%	---	---	
Lead	50.2	---	0.200	mg/kg wet	10	50.0	---	100	80-120%	---	---	
Mercury	1.04	---	0.0800	mg/kg wet	10	1.00	---	104	80-120%	---	---	
Selenium	24.7	---	1.00	mg/kg wet	10	25.0	---	99	80-120%	---	---	
Silver	26.8	---	0.200	mg/kg wet	10	25.0	---	107	80-120%	---	---	
Duplicate (1040814-DUP1)			Prepared: 04/22/21 13:57 Analyzed: 04/22/21 18:13									
QC Source Sample: Non-SDG (A1D0821-17)												
Arsenic	**3.52**	---	1.16	mg/kg dry	10	---	3.48	---	---	1	20%	
Barium	**45.1**	---	1.16	mg/kg dry	10	---	44.9	---	---	0.3	20%	
Cadmium	ND	---	0.231	mg/kg dry	10	---	0.236	---	---	***	20%	
Chromium	**17.5**	---	1.16	mg/kg dry	10	---	16.8	---	---	4	20%	
Lead	**5.96**	---	0.231	mg/kg dry	10	---	7.01	---	---	16	20%	
Mercury	ND	---	0.0925	mg/kg dry	10	---	0.314	---	---	***	**20%**	Q-05
Selenium	ND	---	1.16	mg/kg dry	10	---	ND	---	---	---	20%	
Silver	ND	---	0.231	mg/kg dry	10	---	ND	---	---	---	20%	
Matrix Spike (1040814-MS1)			Prepared: 04/22/21 13:57 Analyzed: 04/22/21 18:18									

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: MillCreek-19-04	
9450 SW Commerce Circle	Project Number: MillCreek-19-04	Report ID:
Wilsonville, OR 97070	Project Manager: Kyle Sattler	A1D0803 - 04 27 21 1528

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040814 - EPA 3051A							Soil					
Matrix Spike (1040814-MS1)			Prepared: 04/22/21 13:57 Analyzed: 04/22/21 18:18									
QC Source Sample: Non-SDG (A1D0821-17)												
EPA 6020B												
Arsenic	63.6	---	1.21	mg/kg dry	10	60.5	3.48	99	75-125%	---	---	
Barium	111	---	1.21	mg/kg dry	10	60.5	44.9	109	75-125%	---	---	
Cadmium	60.5	---	0.242	mg/kg dry	10	60.5	0.236	100	75-125%	---	---	
Chromium	77.6	---	1.21	mg/kg dry	10	60.5	16.8	100	75-125%	---	---	
Lead	67.1	---	0.242	mg/kg dry	10	60.5	7.01	99	75-125%	---	---	
Mercury	1.22	---	0.0967	mg/kg dry	10	1.21	0.314	75	75-125%	---	---	
Selenium	31.9	---	1.21	mg/kg dry	10	30.2	ND	106	75-125%	---	---	
Silver	31.7	---	0.242	mg/kg dry	10	30.2	ND	105	75-125%	---	---	
Matrix Spike Dup (1040814-MSD1)			Prepared: 04/22/21 13:57 Analyzed: 04/22/21 18:33									
QC Source Sample: Non-SDG (A1D0821-17)												
Arsenic	67.3	---	6.05	mg/kg dry	50	60.5	3.48	106	75-125%	6	20%	
Barium	120	---	6.05	mg/kg dry	50	60.5	44.9	125	75-125%	8	20%	
Cadmium	64.5	---	1.21	mg/kg dry	50	60.5	ND	107	75-125%	6	20%	
Chromium	81.7	---	6.05	mg/kg dry	50	60.5	16.8	107	75-125%	5	20%	
Lead	68.7	---	1.21	mg/kg dry	50	60.5	7.01	102	75-125%	2	20%	
Mercury	1.25	---	0.484	mg/kg dry	50	1.21	0.314	78	75-125%	3	20%	
Selenium	31.3	---	6.05	mg/kg dry	50	30.2	ND	104	75-125%	2	20%	
Silver	32.1	---	1.21	mg/kg dry	50	30.2	ND	106	75-125%	1	20%	

Apex Laboratories

Philip Nerenberg, Lab Director

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Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0803 - 04 27 21 1528**

QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1040836 - Total Solids (Dry Weight)							**Soil**					
Duplicate (1040836-DUP1)			Prepared: 04/23/21 08:06		Analyzed: 04/26/21 07:52							
QC Source Sample: Non-SDG (A1C0878-CC)												
% Solids	**71.1**	---	1.00	%	1	---	70.9	---	---	0.3	10%	
Duplicate (1040836-DUP2)			Prepared: 04/23/21 08:06		Analyzed: 04/26/21 07:52							
QC Source Sample: Non-SDG (A1C0878-CM)												
% Solids	**72.9**	---	1.00	%	1	---	71.3	---	---	2	10%	
Duplicate (1040836-DUP3)			Prepared: 04/23/21 08:06		Analyzed: 04/26/21 07:52							
QC Source Sample: Non-SDG (A1D0870-02)												
% Solids	**80.6**	---	1.00	%	1	---	79.4	---	---	2	10%	
Duplicate (1040836-DUP4)			Prepared: 04/23/21 08:06		Analyzed: 04/26/21 07:52							
QC Source Sample: Non-SDG (A1D0874-04)												
% Solids	**77.6**	---	1.00	%	1	---	77.4	---	---	0.3	10%	
Duplicate (1040836-DUP5)			Prepared: 04/23/21 19:38		Analyzed: 04/26/21 07:52							
QC Source Sample: Non-SDG (A1D0921-04)												
% Solids	**92.3**	---	1.00	%	1	---	92.9	---	---	0.7	10%	
Duplicate (1040836-DUP6)			Prepared: 04/23/21 19:38		Analyzed: 04/26/21 07:52							
QC Source Sample: Non-SDG (A1D0939-01)												
% Solids	**79.0**	---	1.00	%	1	---	78.4	---	---	0.8	10%	
Duplicate (1040836-DUP7)			Prepared: 04/23/21 19:38		Analyzed: 04/26/21 07:52							
QC Source Sample: Non-SDG (A1D0940-07)												
% Solids	**71.8**	---	1.00	%	1	---	71.6	---	---	0.3	10%	

No Client related Batch QC samples analyzed for this batch. See notes page for more information.

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0803 - 04 27 21 1528**

SAMPLE PREPARATION INFORMATION

Volatile Organic Compounds by EPA 8260D

Prep: EPA 5035A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1040939							
A1D0803-01	Soil	5035A/8260D	04/21/21 10:45	04/21/21 10:45	5.04g/5mL	5g/5mL	0.99
A1D0803-02	Soil	5035A/8260D	04/21/21 12:00	04/21/21 12:00	5.26g/5mL	5g/5mL	0.95

Polychlorinated Biphenyls by EPA 8082A

Prep: EPA 3546

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1040830							
A1D0803-01	Soil	EPA 8082A	04/21/21 10:45	04/23/21 07:12	10.22g/5mL	10g/5mL	0.98
A1D0803-02	Soil	EPA 8082A	04/21/21 12:00	04/23/21 07:12	10.57g/5mL	10g/5mL	0.95

Total Metals by EPA 6020B (ICPMS)

Prep: EPA 3051A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1040814							
A1D0803-01	Soil	EPA 6020B	04/21/21 10:45	04/22/21 13:57	0.48g/50mL	0.5g/50mL	1.04
A1D0803-02	Soil	EPA 6020B	04/21/21 12:00	04/22/21 13:57	0.46g/50mL	0.5g/50mL	1.09

Percent Dry Weight

Prep: Total Solids (Dry Weight)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1040836							
A1D0803-01	Soil	EPA 8000D	04/21/21 10:45	04/23/21 08:06			NA
A1D0803-02	Soil	EPA 8000D	04/21/21 12:00	04/23/21 08:06			NA

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GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0803 - 04 27 21 1528**

QUALIFIER DEFINITIONS

Client Sample and Quality Control (QC) Sample Qualifier Definitions:

Apex Laboratories

C-07	Extract has undergone Sulfuric Acid Cleanup by EPA 3665A, Sulfur Cleanup by EPA 3660B, and Florisil Cleanup by EPA 3620B in order to minimize matrix interference.
M-02	Due to matrix interference, this analyte cannot be accurately quantified. The reported result is estimated.
M-04	Due to matrix interference, this analyte cannot be accurately quantified. The reported result may contain a high bias.
Q-05	Analyses are not controlled on RPD values from sample and duplicate concentrations that are below 5 times the reporting level.
Q-30	Recovery for Lab Control Spike (LCS) is below the lower control limit. Data may be biased low.
Q-50	Due to instrument malfunction, not all Batch QC samples were analyzed. The batch is accepted based on the recoveries of the Blank Spike (BS).
Q-55	Daily CCV/LCS recovery for this analyte was below the +/-20% criteria listed in EPA 8260, however there is adequate sensitivity to ensure detection at the reporting level.
Q-56	Daily CCV/LCS recovery for this analyte was above the +/-20% criteria listed in EPA 8260
R-02	The Reporting Limit for this analyte has been raised to account for interference from coeluting organic compounds present in the sample.

Apex Laboratories

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0803 - 04 27 21 1528**

REPORTING NOTES AND CONVENTIONS:

Abbreviations:

DET Analyte DETECTED at or above the detection or reporting limit.

ND Analyte NOT DETECTED at or above the detection or reporting limit.

NR Result Not Reported

RPD Relative Percent Difference. RPDs for Matrix Spikes and Matrix Spike Duplicates are based on concentration, not recovery.

Detection Limits: Limit of Detection (LOD)

Limits of Detection (LODs) are normally set at a level of one half the validated Limit of Quantitation (LOQ).
If no value is listed ('-----'), then the data has not been evaluated below the Reporting Limit.

Reporting Limits: Limit of Quantitation (LOQ)

Validated Limits of Quantitation (LOQs) are reported as the Reporting Limits for all analyses where the LOQ, MRL, PQL or CRL are requested. The LOQ represents a level at or above the low point of the calibration curve, that has been validated according to Apex Laboratories' comprehensive LOQ policies and procedures.

Reporting Conventions:

Basis: Results for soil samples are generally reported on a 100% dry weight basis.
The Result Basis is listed following the units as " dry", " wet", or " " (blank) designation.

" dry" Sample results and Reporting Limits are reported on a dry weight basis. (i.e. "ug/kg dry")
See Percent Solids section for details of dry weight analysis.

" wet" Sample results and Reporting Limits for this analysis are normally dry weight corrected, but have not been modified in this case.

" " Results without 'wet' or 'dry' designation are not normally dry weight corrected. These results are considered 'As Received'.

QC Source:

In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) may be analyzed to demonstrate accuracy and precision of the extraction batch.

Non-Client Batch QC Samples (Duplicates and Matrix Spike/Duplicates) may not be included in this report. Please request a Full QC report if this data is required.

Miscellaneous Notes:

" --- " QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.

" *** " Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

Blanks:

Standard practice is to evaluate the results from Blank QC Samples down to a level equal to ½ the Reporting Limit (RL).
-For Blank hits falling between ½ the RL and the RL (J flagged hits), the associated sample and QC data will receive a 'B-02' qualifier.
-For Blank hits above the RL, the associated sample and QC data will receive a 'B' qualifier, per Apex Laboratories' Blank Policy.
For further details, please request a copy of this document.

Apex Laboratories

Philip Nerenberg, Lab Director

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GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0803 - 04 27 21 1528**

REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks (Cont.):

Sample results flagged with a 'B' or 'B-02' qualifier are potentially biased high if the sample results are less than ten times the level found in the blank for inorganic analyses, or less than five times the level found in the blank for organic analyses.

'B' and 'B-02' qualifications are only applied to sample results detected above the Reporting Level.

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

Water samples containing significant amounts of sediment are decanted or separated prior to extraction, and only the water portion analyzed, unless otherwise directed by the client.

Soil and Sediment Samples:

Soil and Sediment samples containing significant amounts of water are decanted prior to extraction, and only the solid portion analyzed, unless otherwise directed by the client.

Sampling and Preservation Notes:

Certain regulatory programs, such as National Pollutant Discharge Elimination System (NPDES), require that activities such as sample filtration (for dissolved metals, orthophosphate, hexavalent chromium, etc.) and testing of short hold analytes (pH, Dissolved Oxygen, etc.) be performed in the field (on-site) within a short time window. In addition, sample matrix spikes are required for some analyses, and sufficient volume must be provided, and billable site specific QC requested, if this is required. All regulatory permits should be reviewed to ensure that these requirements are being met.

Data users should be aware of which regulations pertain to the samples they submit for testing. If related sample collection activities are not approved for a particular regulatory program, results should be considered estimates. Apex Laboratories will qualify these analytes according to the most stringent requirements, however results for samples that are for non-regulatory purposes may be acceptable.

Samples that have been filtered and preserved at Apex Laboratories per client request are listed in the preparation section of the report with the date and time of filtration listed.

Apex Laboratories maintains detailed records on sample receipt, including client label verification, cooler temperature, sample preservation, hold time compliance and field filtration. Data is qualified as necessary, and the lack of qualification indicates compliance with required parameters.

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0803 - 04 27 21 1528**

LABORATORY ACCREDITATION INFORMATION

ORELAP Certification ID: OR100062 (Primary Accreditation) -
EPA ID: OR01039

All methods and analytes reported from work performed at Apex Laboratories are included on Apex Laboratories' ORELAP Scope of Certification, with the exception of any analyte(s) listed below:

Apex Laboratories

Matrix	Analysis	TNI_ID	Analyte	TNI_ID	Accreditation

All reported analytes are included in Apex Laboratories' current ORELAP scope.

Secondary Accreditations

Apex Laboratories also maintains reciprocal accreditation with non-TNI states (Washington DOE), as well as other state specific accreditations not listed here.

Subcontract Laboratory Accreditations

Subcontracted data falls outside of Apex Laboratories' Scope of Accreditation.
Please see the Subcontract Laboratory report for full details, or contact your Project Manager for more information.

Field Testing Parameters

Results for Field Tested data are provded by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.

Apex Laboratories

Philip Nerenberg, Lab Director

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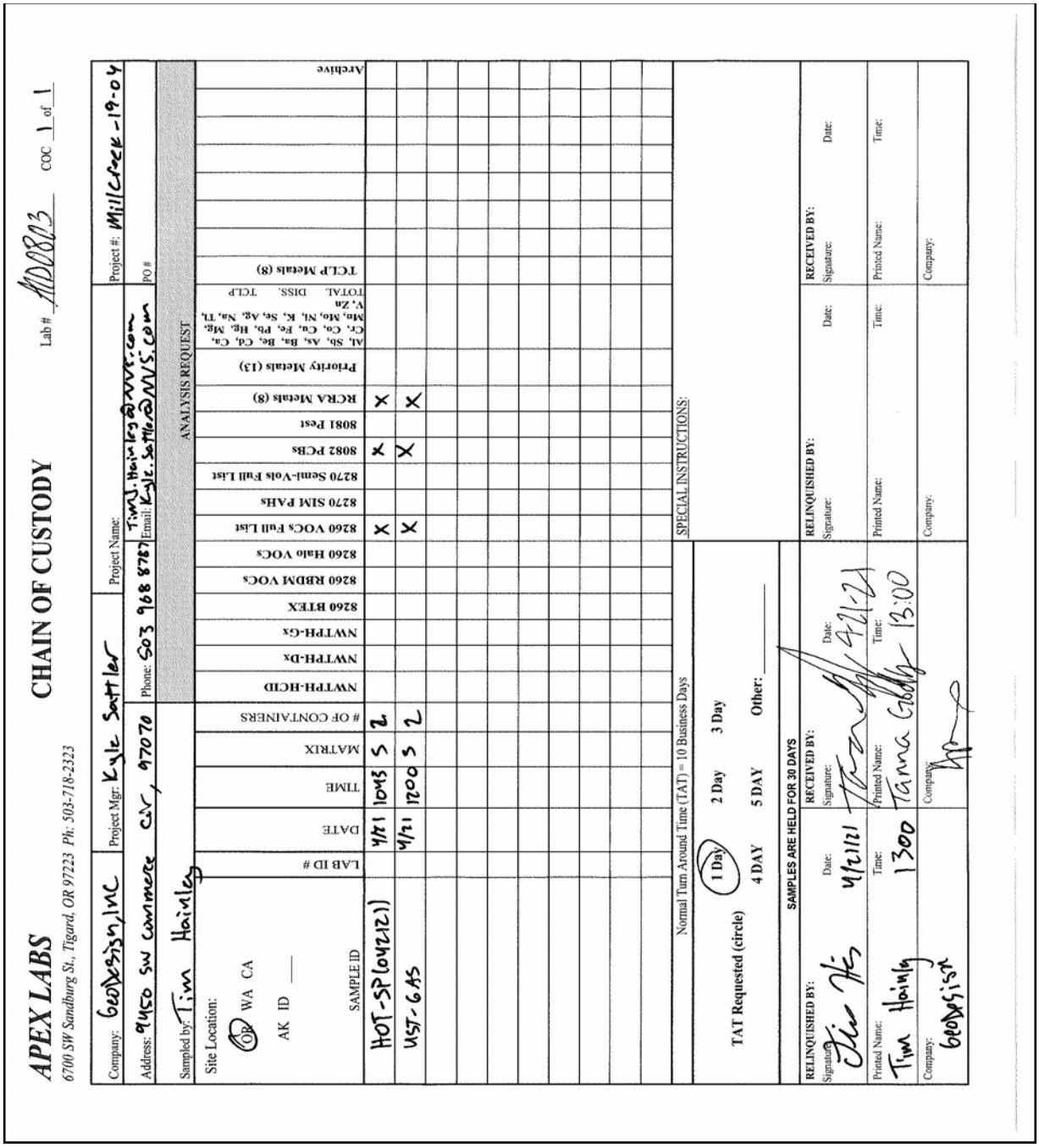
ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0803 - 04 27 21 1528**



APEX LABS — CHAIN OF CUSTODY — Lab # A1D0803 — COC 1 of 1

6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323

Company: GeoDesign, Inc | Project Mgr: Kyle Sattler | Project Name: | Project #: MillCreek-19-04

Address: 9450 SW Commerce Cir, 97070 | Phone: 503 968 8787 | Email: Tim.Hainley@gdinc.com; Kyle.Sattler@gdinc.com | PO #

Sampled by: Tim Hainley

Site Location: (OR) WA CA AK ID ____

SAMPLE ID	LAB ID #	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 BTEX	8260 RBDM VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIM PAHs	8270 Semi-Vols Full List	8082 PCBs	8081 Pest	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn TOTAL DISS. TCLP	TCLP Metals (8)	Archive
HOT-SP(04212021)		4/21	1045	S	2							X			X		X			
UST-GAS		4/21	1200	S	2							X			X		X			

SPECIAL INSTRUCTIONS:

Normal Turn Around Time (TAT) = 10 Business Days

TAT Requested (circle): (1 Day) 2 Day 3 Day 4 DAY 5 DAY Other: ____

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature:	Signature:	Signature:	Signature:
Date: 4/21/21	Date: 4/21/21	Date:	Date:
Time: 1300	Time: 13:00	Time:	Time:
Printed Name: Tim Hainley	Printed Name: Tanna Cobb	Printed Name:	Printed Name:
Company: GeoDesign	Company:	Company:	Company:

Apex Laboratories

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Philip Nerenberg

Philip Nerenberg, Lab Director

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **MillCreek-19-04**	
9450 SW Commerce Circle	Project Number: **MillCreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1D0803 - 04 27 21 1528**

APEX LABS COOLER RECEIPT FORM

Client: Geodesign, Inc Element WO#: A1 D0803

Project/Project #: Mill Creek-19-04

Delivery Info:

Date/time received: 4-21-21 @ 13:00 By: TAC

Delivered by: Apex ___ Client X ESS ___ FedEx ___ UPS ___ Swift ___ Senvoy ___ SDS ___ Other ___

Cooler Inspection Date/time inspected: 4-21-21 @ 13:00 By: TAC

Chain of Custody included? Yes X No ___ Custody seals? Yes ___ No X

Signed/dated by client? Yes X No ___

Signed/dated by Apex? Yes X No ___

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	5.9						
Received on ice? (Y/N)	Y						
Temp. blanks? (Y/N)	Y						
Ice type: (Gel/Real/Other)	Real						
Condition:	good						

Cooler out of temp? (Y/N) Possible reason why: ___

Green dots applied to out of temperature samples? Yes/No

Out of temperature samples form initiated? Yes/No

Sample Inspection: Date/time inspected: 4/21/21 @ 14:45 By: LS

All samples intact? Yes X No ___ Comments: ___

Bottle labels/COCs agree? Yes X No ___ Comments: ___

COC/container discrepancies form initiated? Yes ___ No X

Containers/volumes received appropriate for analysis? Yes X No ___ Comments: ___

Do VOA vials have visible headspace? Yes ___ No ___ NA X

Comments ___

Water samples: pH checked: Yes ___ No ___ NA X pH appropriate? Yes ___ No ___ NA X

Comments: ___

Additional information: ___

Labeled by: LS Witness: KN Cooler Inspected by: LS

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Philip Nerenberg

Philip Nerenberg, Lab Director

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

Monday, May 24, 2021

Kyle Sattler
GeoDesign, Inc.
9450 SW Commerce Circle
Wilsonville, OR 97070

RE: A1E0234 - Modera Morrison - Millcreek-19-04

Thank you for using Apex Laboratories. We greatly appreciate your business and strive to provide the highest quality services to the environmental industry.

Enclosed are the results of analyses for work order A1E0234, which was received by the laboratory on 5/6/2021 at 3:00:00PM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: pnerenberg@apex-labs.com, or by phone at 503-718-2323.

Please note: All samples will be disposed of within 30 days of sample receipt, unless prior arrangements have been made.

Cooler Receipt Information

(See Cooler Receipt Form for details)

Cooler #1	5.6 degC

This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.
All other deliverables derived from this data, including Electronic Data Deliverables (EDDs), CLP-like forms, client requested summary sheets, and all other products are considered secondary to this report.

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0234 - 05 24 21 1749**

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
UST-9_BaseN(8)	A1E0234-01	Soil	05/06/21 11:05	05/06/21 15:00
UST-9_BaseS(8)	A1E0234-02	Soil	05/06/21 11:00	05/06/21 15:00

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0234 - 05 24 21 1749**

ANALYTICAL SAMPLE RESULTS

Hydrocarbon Identification Screen by NWTPH-HCID

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
UST-9_BaseN(8) (A1E0234-01)				**Matrix: Soil**		**Batch: 1050207**		
Gasoline Range Organics	DET	---	26.4	mg/kg dry	1	05/07/21 04:52	NWTPH-HCID	
Diesel Range Organics	DET	---	65.9	mg/kg dry	1	05/07/21 04:52	NWTPH-HCID	
Oil Range Organics	ND	---	132	mg/kg dry	1	05/07/21 04:52	NWTPH-HCID	
Surrogate: o-Terphenyl (Surr)		*Recovery:*	*81 %*	*Limits: 50-150 %*	*1*	*05/07/21 04:52*	*NWTPH-HCID*	
4-Bromofluorobenzene (Surr)			*85 %*	*50-150 %*	*1*	*05/07/21 04:52*	*NWTPH-HCID*	
UST-9_BaseS(8) (A1E0234-02)				**Matrix: Soil**		**Batch: 1050207**		
Gasoline Range Organics	DET	---	26.6	mg/kg dry	1	05/07/21 05:37	NWTPH-HCID	
Diesel Range Organics	DET	---	66.5	mg/kg dry	1	05/07/21 05:37	NWTPH-HCID	
Oil Range Organics	ND	---	133	mg/kg dry	1	05/07/21 05:37	NWTPH-HCID	
Surrogate: o-Terphenyl (Surr)		*Recovery:*	*90 %*	*Limits: 50-150 %*	*1*	*05/07/21 05:37*	*NWTPH-HCID*	
4-Bromofluorobenzene (Surr)			*49 %*	*50-150 %*	*1*	*05/07/21 05:37*	*NWTPH-HCID*	*S-05*

Apex Laboratories

Philip Nerenberg, Lab Director

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ANALYTICAL REPORT

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9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0234 - 05 24 21 1749**

ANALYTICAL SAMPLE RESULTS

Percent Dry Weight

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
UST-9_BaseN(8) (A1E0234-01)				**Matrix: Soil**		**Batch: 1050161**		
% Solids	**71.9**	---	1.00	%	1	05/07/21 08:00	EPA 8000D	
UST-9_BaseS(8) (A1E0234-02)				**Matrix: Soil**		**Batch: 1050161**		
% Solids	**71.6**	---	1.00	%	1	05/07/21 08:00	EPA 8000D	

Apex Laboratories

Philip Nerenberg, Lab Director

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0234 - 05 24 21 1749**

QUALITY CONTROL (QC) SAMPLE RESULTS

Hydrocarbon Identification Screen by NWTPH-HCID

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050207 - NWTPH-HCID (Soil)							Soil					
Blank (1050207-BLK1)			Prepared: 05/06/21 17:09 Analyzed: 05/07/21 04:29									
NWTPH-HCID												
Gasoline Range Organics	ND	---	18.2	mg/kg wet	1	---	---	---	---	---	---	
Diesel Range Organics	ND	---	45.5	mg/kg wet	1	---	---	---	---	---	---	
Oil Range Organics	ND	---	90.9	mg/kg wet	1	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)			*Recovery: 96 %*	*Limits: 50-150 %*			*Dilution: 1x*					
4-Bromofluorobenzene (Surr)			*96 %*	*50-150 %*			*"*					
Duplicate (1050207-DUP1)			Prepared: 05/06/21 17:09 Analyzed: 05/07/21 05:14									
QC Source Sample: UST-9_BaseN(8) (A1E0234-01)												
NWTPH-HCID												
Gasoline Range Organics	**DET**	---	26.1	mg/kg dry	1	---	ND	---	---		**30%**	
Diesel Range Organics	**DET**	---	65.2	mg/kg dry	1	---	ND	---	---		**30%**	
Oil Range Organics	ND	---	130	mg/kg dry	1	---	ND	---	---	---	30%	
Surr: o-Terphenyl (Surr)			*Recovery: 94 %*	*Limits: 50-150 %*			*Dilution: 1x*					
4-Bromofluorobenzene (Surr)			*61 %*	*50-150 %*			*"*					

Apex Laboratories

Philip Nerenberg, Lab Director

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Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

GeoDesign, Inc.	Project: Modera Morrison	
9450 SW Commerce Circle	Project Number: Millcreek-19-04	Report ID:
Wilsonville, OR 97070	Project Manager: Kyle Sattler	A1E0234 - 05 24 21 1749

QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050161 - Total Solids (Dry Weight)							Soil					
Duplicate (1050161-DUP1)			Prepared: 05/06/21 09:04			Analyzed: 05/07/21 08:00						
QC Source Sample: Non-SDG (A1D1116-19)												
% Solids	**82.7**	---	1.00	%	1	---	82.7	---	---	0.07	10%	
Duplicate (1050161-DUP2)			Prepared: 05/06/21 09:04			Analyzed: 05/07/21 08:00						
QC Source Sample: Non-SDG (A1E0214-07)												
% Solids	**79.6**	---	1.00	%	1	---	79.6	---	---	0.02	10%	
Duplicate (1050161-DUP3)			Prepared: 05/06/21 19:09			Analyzed: 05/07/21 08:00						
QC Source Sample: Non-SDG (A1E0235-05)												
% Solids	**84.2**	---	1.00	%	1	---	84.3	---	---	0.2	10%	
Duplicate (1050161-DUP4)			Prepared: 05/06/21 19:09			Analyzed: 05/07/21 08:00						
QC Source Sample: Non-SDG (A1E0246-03)												
% Solids	**78.8**	---	1.00	%	1	---	78.8	---	---	0.02	10%	
Duplicate (1050161-DUP5)			Prepared: 05/06/21 19:09			Analyzed: 05/07/21 08:00						
QC Source Sample: Non-SDG (A1E0252-03)												
% Solids	**76.3**	---	1.00	%	1	---	76.6	---	---	0.4	10%	

No Client related Batch QC samples analyzed for this batch. See notes page for more information.

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0234 - 05 24 21 1749**

SAMPLE PREPARATION INFORMATION

Hydrocarbon Identification Screen by NWTPH-HCID

Prep: NWTPH-HCID (Soil)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1050207							
A1E0234-01	Soil	NWTPH-HCID	05/06/21 11:05	05/06/21 17:09	10.55g/10mL	10g/10mL	0.95
A1E0234-02	Soil	NWTPH-HCID	05/06/21 11:00	05/06/21 17:09	10.5g/10mL	10g/10mL	0.95

Percent Dry Weight

Prep: Total Solids (Dry Weight)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1050161							
A1E0234-01	Soil	EPA 8000D	05/06/21 11:05	05/06/21 19:09			NA
A1E0234-02	Soil	EPA 8000D	05/06/21 11:00	05/06/21 19:09			NA

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0234 - 05 24 21 1749**

QUALIFIER DEFINITIONS

Client Sample and Quality Control (QC) Sample Qualifier Definitions:

Apex Laboratories

S-05 Surrogate recovery is estimated due to sample dilution required for high analyte concentration and/or matrix interference.

Apex Laboratories

Philip Nerenberg, Lab Director

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0234 - 05 24 21 1749**

REPORTING NOTES AND CONVENTIONS:

Abbreviations:

DET Analyte DETECTED at or above the detection or reporting limit.

ND Analyte NOT DETECTED at or above the detection or reporting limit.

NR Result Not Reported

RPD Relative Percent Difference. RPDs for Matrix Spikes and Matrix Spike Duplicates are based on concentration, not recovery.

Detection Limits: Limit of Detection (LOD)

Limits of Detection (LODs) are normally set at a level of one half the validated Limit of Quantitation (LOQ).
If no value is listed ('-----'), then the data has not been evaluated below the Reporting Limit.

Reporting Limits: Limit of Quantitation (LOQ)

Validated Limits of Quantitation (LOQs) are reported as the Reporting Limits for all analyses where the LOQ, MRL, PQL or CRL are requested. The LOQ represents a level at or above the low point of the calibration curve, that has been validated according to Apex Laboratories' comprehensive LOQ policies and procedures.

Reporting Conventions:

Basis: Results for soil samples are generally reported on a 100% dry weight basis.
The Result Basis is listed following the units as " dry", " wet", or " " (blank) designation.

" dry" Sample results and Reporting Limits are reported on a dry weight basis. (i.e. "ug/kg dry")
See Percent Solids section for details of dry weight analysis.

" wet" Sample results and Reporting Limits for this analysis are normally dry weight corrected, but have not been modified in this case.

" " Results without 'wet' or 'dry' designation are not normally dry weight corrected. These results are considered 'As Received'.

QC Source:

In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) may be analyzed to demonstrate accuracy and precision of the extraction batch.

Non-Client Batch QC Samples (Duplicates and Matrix Spike/Duplicates) may not be included in this report. Please request a Full QC report if this data is required.

Miscellaneous Notes:

" --- " QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.

" *** " Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

Blanks:

Standard practice is to evaluate the results from Blank QC Samples down to a level equal to ½ the Reporting Limit (RL).
-For Blank hits falling between ½ the RL and the RL (J flagged hits), the associated sample and QC data will receive a 'B-02' qualifier.
-For Blank hits above the RL, the associated sample and QC data will receive a 'B' qualifier, per Apex Laboratories' Blank Policy.
For further details, please request a copy of this document.

Apex Laboratories

Philip Nerenberg, Lab Director

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GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0234 - 05 24 21 1749**

REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks (Cont.):

Sample results flagged with a 'B' or 'B-02' qualifier are potentially biased high if the sample results are less than ten times the level found in the blank for inorganic analyses, or less than five times the level found in the blank for organic analyses.

'B' and 'B-02' qualifications are only applied to sample results detected above the Reporting Level.

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

Water samples containing significant amounts of sediment are decanted or separated prior to extraction, and only the water portion analyzed, unless otherwise directed by the client.

Soil and Sediment Samples:

Soil and Sediment samples containing significant amounts of water are decanted prior to extraction, and only the solid portion analyzed, unless otherwise directed by the client.

Sampling and Preservation Notes:

Certain regulatory programs, such as National Pollutant Discharge Elimination System (NPDES), require that activities such as sample filtration (for dissolved metals, orthophosphate, hexavalent chromium, etc.) and testing of short hold analytes (pH, Dissolved Oxygen, etc.) be performed in the field (on-site) within a short time window. In addition, sample matrix spikes are required for some analyses, and sufficient volume must be provided, and billable site specific QC requested, if this is required. All regulatory permits should be reviewed to ensure that these requirements are being met.

Data users should be aware of which regulations pertain to the samples they submit for testing. If related sample collection activities are not approved for a particular regulatory program, results should be considered estimates. Apex Laboratories will qualify these analytes according to the most stringent requirements, however results for samples that are for non-regulatory purposes may be acceptable.

Samples that have been filtered and preserved at Apex Laboratories per client request are listed in the preparation section of the report with the date and time of filtration listed.

Apex Laboratories maintains detailed records on sample receipt, including client label verification, cooler temperature, sample preservation, hold time compliance and field filtration. Data is qualified as necessary, and the lack of qualification indicates compliance with required parameters.

Apex Laboratories

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Philip Nerenberg, Lab Director

Apex Laboratories, LLC
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Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0234 - 05 24 21 1749**

LABORATORY ACCREDITATION INFORMATION

ORELAP Certification ID: OR100062 (Primary Accreditation) - EPA ID: OR01039

All methods and analytes reported from work performed at Apex Laboratories are included on Apex Laboratories' ORELAP Scope of Certification, with the exception of any analyte(s) listed below:

Apex Laboratories

Matrix	Analysis	TNI_ID	Analyte	TNI_ID	Accreditation

All reported analytes are included in Apex Laboratories' current ORELAP scope.

Secondary Accreditations

Apex Laboratories also maintains reciprocal accreditation with non-TNI states (Washington DOE), as well as other state specific accreditations not listed here.

Subcontract Laboratory Accreditations

Subcontracted data falls outside of Apex Laboratories' Scope of Accreditation.
Please see the Subcontract Laboratory report for full details, or contact your Project Manager for more information.

Field Testing Parameters

Results for Field Tested data are provded by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.

Apex Laboratories

Philip Nerenberg, Lab Director

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **Modera Morrison**	
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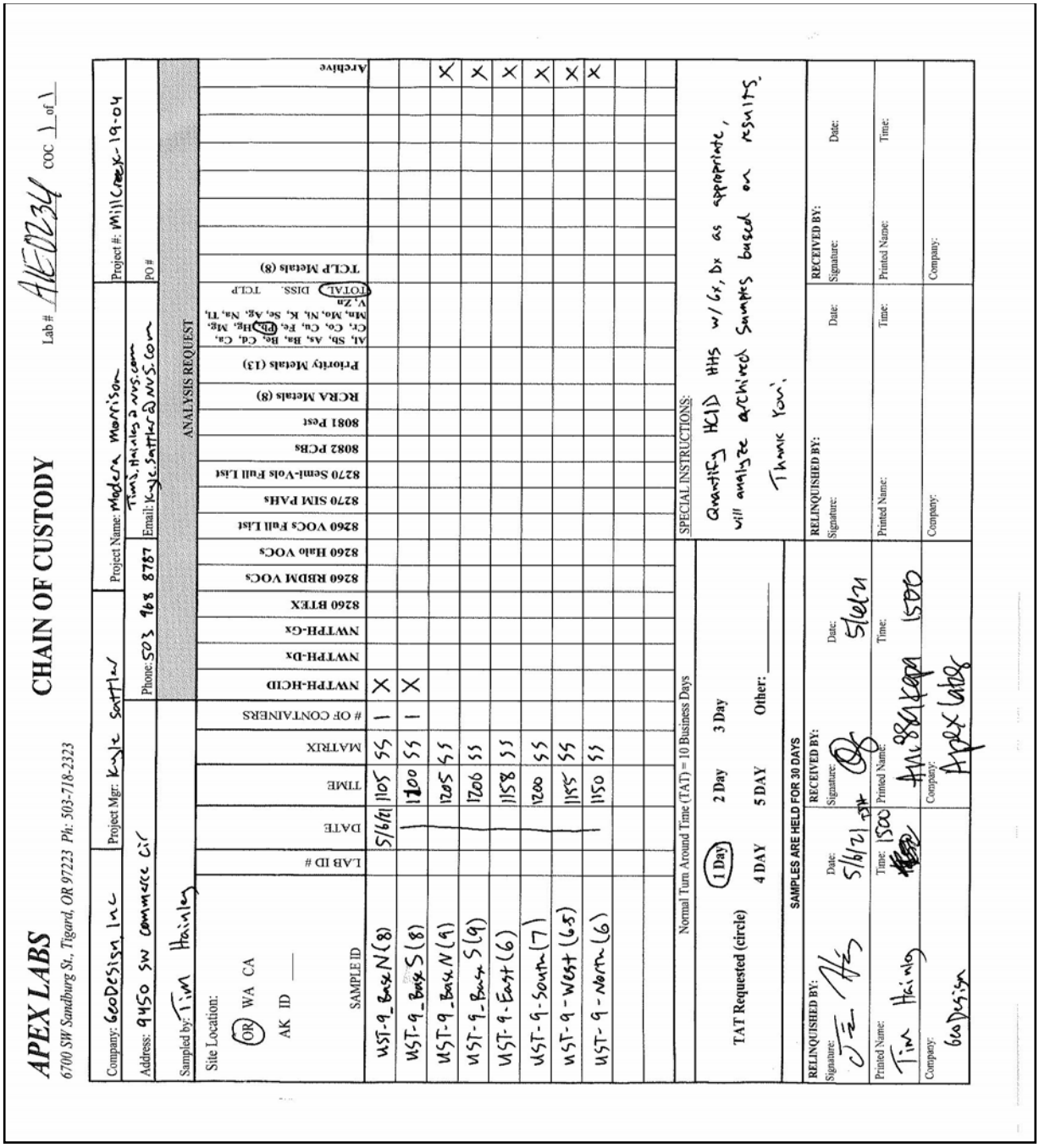
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0234 - 05 24 21 1749**



APEX LABS — CHAIN OF CUSTODY — Lab # A1E0234 COC 1 of 1
6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323

Company: GeoDesign, Inc | Project Mgr: Kyle Sattler | Project Name: Modera Morrison | Project #: Millcreek-19-04
Address: 9450 SW Commerce Cir | Phone: 503 968 8787 | Email: Kyle.Sattler@nvs.com, Tim.Hainley@nvs.com | PO #
Sampled by: Tim Hainley

Site Location: (OR) WA CA AK ID ____

ANALYSIS REQUEST

SAMPLE ID	LAB ID #	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 BTEX	8260 RBDM VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIM PAHs	8270 Semi-Vols Full List	8082 PCBs	8081 Pest	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, (Pb) Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn TOTAL DISS. TCLP	TCLP Metals (8)	Archive
UST-9_BaseN(8)		5/6/21	1105	SS	1	X														
UST-9_BaseS(8)			1200	SS	1	X														
UST-9_BaseN(9)			1205	SS															X	
UST-9_BaseS(9)			1206	SS															X	
UST-9-East(6)			1158	SS															X	
UST-9-South(7)			1200	SS															X	
UST-9-West(6S)			1155	SS															X	
UST-9-North(6)			1150	SS															X	

SPECIAL INSTRUCTIONS:
Quantify HCID HHS w/ 6x, Dx as appropriate, will analyze archived samples based on results.
Thank You!

Normal Turn Around Time (TAT) = 10 Business Days
TAT Requested (circle): (1 Day) 2 Day 3 Day 4 DAY 5 DAY Other: ____
SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature:	Signature:	Signature:	Signature:
Date: 5/6/21	Date: 5/6/21	Date:	Date:
Time: 1500	Time: 1500	Time:	Time:
Printed Name: Tim Hainley	Printed Name: [illegible]	Printed Name:	Printed Name:
Company: GeoDesign	Company: Apex Labs	Company:	Company:

Apex Laboratories

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Philip Nerenberg

Philip Nerenberg, Lab Director

Apex Laboratories, LLC
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Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0234 - 05 24 21 1749**

APEX LABS COOLER RECEIPT FORM

Client: GeoDesign Element WO#: A1 E0234

Project/Project #: Modera Morrison #Millcreek-19-04

Delivery Info:

Date/time received: 5/24/21 @ 1500 By: AKK

Delivered by: Apex___ Client X ESS___ FedEx___ UPS___ Swift___ Senvoy___ SDS___ Other___

Cooler Inspection Date/time inspected: 5/24/21 @ 1500 By: AKK

Chain of Custody included? Yes X No ___ Custody seals? Yes___ No X

Signed/dated by client? Yes X No ___

Signed/dated by Apex? Yes X No ___

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	5.6						
Received on ice? (Y/N)	Y						
Temp. blanks? (Y/N)	Y						
Ice type: (Gel/Real/Other)	Real						
Condition:	Good						

Cooler out of temp? (Y/N) Possible reason why:

Green dots applied to out of temperature samples? Yes/No

Out of temperature samples form initiated? Yes/No

Sample Inspection: Date/time inspected: 5/24/21 @ 1605 By: MS

All samples intact? Yes X No ___ Comments:

Bottle labels/COCs agree? ~~Yes~~ X No X Comments: 5/5/6 NO D on UST-9-Base S(9) cont. NO T on UST-9-west (6.5) 8oz jar.

COC/container discrepancies form initiated? Yes ___ No X

Containers/volumes received appropriate for analysis? Yes X No ___ Comments:

Do VOA vials have visible headspace? Yes ___ No ___ NA X

Comments

Water samples: pH checked: Yes___No___NA X pH appropriate? Yes___No___NA X

Comments:

Additional information: MeOH voa reads UST-9-Base(9) for UST-9_BaseN(9).

Labeled by: MS Witness: KS Cooler Inspected by: MS

Apex Laboratories, LLC
6700 S.W. Sandburg Street
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503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

Tuesday, May 11, 2021

Kyle Sattler
GeoDesign, Inc.
9450 SW Commerce Circle
Wilsonville, OR 97070

RE: A1E0281 - Modera Morrison - Millcreek-19-04

Thank you for using Apex Laboratories. We greatly appreciate your business and strive to provide the highest quality services to the environmental industry.

Enclosed are the results of analyses for work order A1E0281, which was received by the laboratory on 5/7/2021 at 3:25:00PM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: pnerenberg@apex-labs.com, or by phone at 503-718-2323.

Please note: All samples will be disposed of within 30 days of sample receipt, unless prior arrangements have been made.

Cooler Receipt Information

(See Cooler Receipt Form for details)

Cooler#1	0.8 degC

This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.
All other deliverables derived from this data, including Electronic Data Deliverables (EDDs), CLP-like forms, client requested summary sheets, and all other products are considered secondary to this report.

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0281 - 05 11 21 1651**

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
NW-PIT-North(8)	A1E0281-01	Soil	05/07/21 13:20	05/07/21 15:25
NW-PIT-East(8)	A1E0281-02	Soil	05/07/21 13:30	05/07/21 15:25
NW-PIT-South(8)	A1E0281-03	Soil	05/07/21 13:40	05/07/21 15:25
NW-PIT-West(8)	A1E0281-04	Soil	05/07/21 13:45	05/07/21 15:25
NW-PIT-Base(13)	A1E0281-05	Soil	05/07/21 13:55	05/07/21 15:25

Apex Laboratories

Philip Nerenberg

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0281 - 05 11 21 1651**

ANALYTICAL SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
NW-PIT-North(8) (A1E0281-01)				**Matrix: Soil**		**Batch: 1050280**		**V-15**
Gasoline Range Organics	ND	---	6.46	mg/kg dry	50	05/10/21 11:05	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 99 %*		*Limits: 50-150 %*	*1*	*05/10/21 11:05*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*97 %*	*50-150 %*	*1*	*05/10/21 11:05*	*NWTPH-Gx (MS)*	
NW-PIT-East(8) (A1E0281-02)				**Matrix: Soil**		**Batch: 1050280**		**V-15**
Gasoline Range Organics	ND	---	7.07	mg/kg dry	50	05/10/21 11:33	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 104 %*		*Limits: 50-150 %*	*1*	*05/10/21 11:33*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*98 %*	*50-150 %*	*1*	*05/10/21 11:33*	*NWTPH-Gx (MS)*	
NW-PIT-South(8) (A1E0281-03)				**Matrix: Soil**		**Batch: 1050280**		**V-15**
Gasoline Range Organics	ND	---	6.72	mg/kg dry	50	05/10/21 11:59	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 102 %*		*Limits: 50-150 %*	*1*	*05/10/21 11:59*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*98 %*	*50-150 %*	*1*	*05/10/21 11:59*	*NWTPH-Gx (MS)*	
NW-PIT-West(8) (A1E0281-04)				**Matrix: Soil**		**Batch: 1050280**		**V-15**
Gasoline Range Organics	ND	---	6.86	mg/kg dry	50	05/10/21 12:26	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 101 %*		*Limits: 50-150 %*	*1*	*05/10/21 12:26*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*98 %*	*50-150 %*	*1*	*05/10/21 12:26*	*NWTPH-Gx (MS)*	
NW-PIT-Base(13) (A1E0281-05)				**Matrix: Soil**		**Batch: 1050280**		**V-15**
Gasoline Range Organics	ND	---	6.15	mg/kg dry	50	05/10/21 12:54	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 100 %*		*Limits: 50-150 %*	*1*	*05/10/21 12:54*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*99 %*	*50-150 %*	*1*	*05/10/21 12:54*	*NWTPH-Gx (MS)*	

Apex Laboratories

Philip Nerenberg, Lab Director

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0281 - 05 11 21 1651**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
NW-PIT-North(8) (A1E0281-01)				**Matrix: Soil**		**Batch: 1050280**		**V-15**
Acetone	ND	---	1.29	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
Acrylonitrile	ND	---	0.129	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
Benzene	ND	---	0.0129	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
Bromobenzene	ND	---	0.0323	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
Bromochloromethane	ND	---	0.0646	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
Bromodichloromethane	ND	---	0.0646	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
Bromoform	ND	---	0.129	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
Bromomethane	ND	---	0.646	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
2-Butanone (MEK)	ND	---	0.646	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
n-Butylbenzene	ND	---	0.0646	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
sec-Butylbenzene	ND	---	0.0646	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
tert-Butylbenzene	ND	---	0.0646	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
Carbon disulfide	ND	---	0.646	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
Carbon tetrachloride	ND	---	0.0646	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
Chlorobenzene	ND	---	0.0323	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
Chloroethane	ND	---	0.646	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
Chloroform	ND	---	0.0646	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
Chloromethane	ND	---	0.323	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
2-Chlorotoluene	ND	---	0.0646	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
4-Chlorotoluene	ND	---	0.0646	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
Dibromochloromethane	ND	---	0.129	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
1,2-Dibromo-3-chloropropane	ND	---	0.323	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
1,2-Dibromoethane (EDB)	ND	---	0.0646	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
Dibromomethane	ND	---	0.0646	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
1,2-Dichlorobenzene	ND	---	0.0323	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
1,3-Dichlorobenzene	ND	---	0.0323	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
1,4-Dichlorobenzene	ND	---	0.0323	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
Dichlorodifluoromethane	ND	---	0.129	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
1,1-Dichloroethane	ND	---	0.0323	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
1,2-Dichloroethane (EDC)	ND	---	0.0323	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
1,1-Dichloroethene	ND	---	0.0323	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
cis-1,2-Dichloroethene	ND	---	0.0323	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
trans-1,2-Dichloroethene	ND	---	0.0323	mg/kg dry	50	05/10/21 11:05	5035A/8260D	

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Philip Nerenberg, Lab Director

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0281 - 05 11 21 1651**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
NW-PIT-North(8) (A1E0281-01)				**Matrix: Soil**		**Batch: 1050280**		**V-15**
1,2-Dichloropropane	ND	---	0.0323	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
1,3-Dichloropropane	ND	---	0.0646	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
2,2-Dichloropropane	ND	---	0.0646	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
1,1-Dichloropropene	ND	---	0.0646	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
cis-1,3-Dichloropropene	ND	---	0.0646	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
trans-1,3-Dichloropropene	ND	---	0.0646	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
Ethylbenzene	ND	---	0.0323	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
Hexachlorobutadiene	ND	---	0.129	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
2-Hexanone	ND	---	0.646	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
Isopropylbenzene	ND	---	0.0646	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
4-Isopropyltoluene	ND	---	0.0646	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
Methylene chloride	ND	---	0.646	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
4-Methyl-2-pentanone (MiBK)	ND	---	0.646	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	0.0646	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
Naphthalene	ND	---	0.129	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
n-Propylbenzene	ND	---	0.0323	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
Styrene	ND	---	0.0646	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
1,1,1,2-Tetrachloroethane	ND	---	0.0323	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
1,1,2,2-Tetrachloroethane	ND	---	0.0646	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
Tetrachloroethene (PCE)	ND	---	0.0323	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
Toluene	ND	---	0.0646	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
1,2,3-Trichlorobenzene	ND	---	0.323	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
1,2,4-Trichlorobenzene	ND	---	0.323	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
1,1,1-Trichloroethane	ND	---	0.0323	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
1,1,2-Trichloroethane	ND	---	0.0323	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
Trichloroethene (TCE)	ND	---	0.0323	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
Trichlorofluoromethane	ND	---	0.129	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
1,2,3-Trichloropropane	ND	---	0.0646	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
1,2,4-Trimethylbenzene	ND	---	0.0646	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
1,3,5-Trimethylbenzene	ND	---	0.0646	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
Vinyl chloride	ND	---	0.0323	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
m,p-Xylene	ND	---	0.0646	mg/kg dry	50	05/10/21 11:05	5035A/8260D	
o-Xylene	ND	---	0.0323	mg/kg dry	50	05/10/21 11:05	5035A/8260D	

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Philip Nerenberg, Lab Director

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ORELAP ID: **OR100062**

GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0281 - 05 11 21 1651**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
NW-PIT-North(8) (A1E0281-01)				**Matrix: Soil**		**Batch: 1050280**		**V-15**
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*106 %*	*Limits: 80-120 %*	*1*	*05/10/21 11:05*	*5035A/8260D*	
Toluene-d8 (Surr)			*99 %*	*80-120 %*	*1*	*05/10/21 11:05*	*5035A/8260D*	
4-Bromofluorobenzene (Surr)			*101 %*	*79-120 %*	*1*	*05/10/21 11:05*	*5035A/8260D*	
NW-PIT-East(8) (A1E0281-02)				**Matrix: Soil**		**Batch: 1050280**		**V-15**
Acetone	ND	---	1.41	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
Acrylonitrile	ND	---	0.141	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
Benzene	ND	---	0.0141	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
Bromobenzene	ND	---	0.0353	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
Bromochloromethane	ND	---	0.0707	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
Bromodichloromethane	ND	---	0.0707	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
Bromoform	ND	---	0.141	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
Bromomethane	ND	---	0.707	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
2-Butanone (MEK)	ND	---	0.707	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
n-Butylbenzene	ND	---	0.0707	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
sec-Butylbenzene	ND	---	0.0707	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
tert-Butylbenzene	ND	---	0.0707	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
Carbon disulfide	ND	---	0.707	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
Carbon tetrachloride	ND	---	0.0707	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
Chlorobenzene	ND	---	0.0353	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
Chloroethane	ND	---	0.707	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
Chloroform	ND	---	0.0707	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
Chloromethane	ND	---	0.353	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
2-Chlorotoluene	ND	---	0.0707	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
4-Chlorotoluene	ND	---	0.0707	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
Dibromochloromethane	ND	---	0.141	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
1,2-Dibromo-3-chloropropane	ND	---	0.353	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
1,2-Dibromoethane (EDB)	ND	---	0.0707	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
Dibromomethane	ND	---	0.0707	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
1,2-Dichlorobenzene	ND	---	0.0353	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
1,3-Dichlorobenzene	ND	---	0.0353	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
1,4-Dichlorobenzene	ND	---	0.0353	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
Dichlorodifluoromethane	ND	---	0.141	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
1,1-Dichloroethane	ND	---	0.0353	mg/kg dry	50	05/10/21 11:33	5035A/8260D	

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ORELAP ID: OR100062

ANALYTICAL REPORT

GeoDesign, Inc.	Project: Modera Morrison	
9450 SW Commerce Circle	Project Number: Millcreek-19-04	Report ID:
Wilsonville, OR 97070	Project Manager: Kyle Sattler	A1E0281 - 05 11 21 1651

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
NW-PIT-East(8) (A1E0281-02)				**Matrix: Soil**		**Batch: 1050280**		**V-15**
1,2-Dichloroethane (EDC)	ND	---	0.0353	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
1,1-Dichloroethene	ND	---	0.0353	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
cis-1,2-Dichloroethene	ND	---	0.0353	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
trans-1,2-Dichloroethene	ND	---	0.0353	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
1,2-Dichloropropane	ND	---	0.0353	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
1,3-Dichloropropane	ND	---	0.0707	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
2,2-Dichloropropane	ND	---	0.0707	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
1,1-Dichloropropene	ND	---	0.0707	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
cis-1,3-Dichloropropene	ND	---	0.0707	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
trans-1,3-Dichloropropene	ND	---	0.0707	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
Ethylbenzene	ND	---	0.0353	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
Hexachlorobutadiene	ND	---	0.141	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
2-Hexanone	ND	---	0.707	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
Isopropylbenzene	ND	---	0.0707	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
4-Isopropyltoluene	ND	---	0.0707	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
Methylene chloride	ND	---	0.707	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
4-Methyl-2-pentanone (MiBK)	ND	---	0.707	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	0.0707	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
Naphthalene	ND	---	0.141	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
n-Propylbenzene	ND	---	0.0353	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
Styrene	ND	---	0.0707	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
1,1,1,2-Tetrachloroethane	ND	---	0.0353	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
1,1,2,2-Tetrachloroethane	ND	---	0.0707	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
Tetrachloroethene (PCE)	ND	---	0.0353	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
Toluene	ND	---	0.0707	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
1,2,3-Trichlorobenzene	ND	---	0.353	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
1,2,4-Trichlorobenzene	ND	---	0.353	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
1,1,1-Trichloroethane	ND	---	0.0353	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
1,1,2-Trichloroethane	ND	---	0.0353	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
Trichloroethene (TCE)	ND	---	0.0353	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
Trichlorofluoromethane	ND	---	0.141	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
1,2,3-Trichloropropane	ND	---	0.0707	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
1,2,4-Trimethylbenzene	ND	---	0.0707	mg/kg dry	50	05/10/21 11:33	5035A/8260D	

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Philip Nerenberg, Lab Director

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0281 - 05 11 21 1651**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
NW-PIT-East(8) (A1E0281-02)				**Matrix: Soil**		**Batch: 1050280**		**V-15**
1,3,5-Trimethylbenzene	ND	---	0.0707	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
Vinyl chloride	ND	---	0.0353	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
m,p-Xylene	ND	---	0.0707	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
o-Xylene	ND	---	0.0353	mg/kg dry	50	05/10/21 11:33	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*109 %*	*Limits: 80-120 %*	*1*	*05/10/21 11:33*	*5035A/8260D*	
Toluene-d8 (Surr)			*97 %*	*80-120 %*	*1*	*05/10/21 11:33*	*5035A/8260D*	
4-Bromofluorobenzene (Surr)			*101 %*	*79-120 %*	*1*	*05/10/21 11:33*	*5035A/8260D*	
NW-PIT-South(8) (A1E0281-03)				**Matrix: Soil**		**Batch: 1050280**		**V-15**
Acetone	ND	---	1.34	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
Acrylonitrile	ND	---	0.134	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
Benzene	ND	---	0.0134	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
Bromobenzene	ND	---	0.0336	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
Bromochloromethane	ND	---	0.0672	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
Bromodichloromethane	ND	---	0.0672	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
Bromoform	ND	---	0.134	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
Bromomethane	ND	---	0.672	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
2-Butanone (MEK)	ND	---	0.672	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
n-Butylbenzene	ND	---	0.0672	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
sec-Butylbenzene	ND	---	0.0672	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
tert-Butylbenzene	ND	---	0.0672	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
Carbon disulfide	ND	---	0.672	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
Carbon tetrachloride	ND	---	0.0672	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
Chlorobenzene	ND	---	0.0336	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
Chloroethane	ND	---	0.672	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
Chloroform	ND	---	0.0672	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
Chloromethane	ND	---	0.336	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
2-Chlorotoluene	ND	---	0.0672	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
4-Chlorotoluene	ND	---	0.0672	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
Dibromochloromethane	ND	---	0.134	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
1,2-Dibromo-3-chloropropane	ND	---	0.336	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
1,2-Dibromoethane (EDB)	ND	---	0.0672	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
Dibromomethane	ND	---	0.0672	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
1,2-Dichlorobenzene	ND	---	0.0336	mg/kg dry	50	05/10/21 11:59	5035A/8260D	

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Philip Nerenberg, Lab Director

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

GeoDesign, Inc.	Project: Modera Morrison	
9450 SW Commerce Circle	Project Number: Millcreek-19-04	Report ID:
Wilsonville, OR 97070	Project Manager: Kyle Sattler	A1E0281 - 05 11 21 1651

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
NW-PIT-South(8) (A1E0281-03)				**Matrix: Soil**		**Batch: 1050280**		**V-15**
1,3-Dichlorobenzene	ND	---	0.0336	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
1,4-Dichlorobenzene	ND	---	0.0336	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
Dichlorodifluoromethane	ND	---	0.134	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
1,1-Dichloroethane	ND	---	0.0336	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
1,2-Dichloroethane (EDC)	ND	---	0.0336	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
1,1-Dichloroethene	ND	---	0.0336	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
cis-1,2-Dichloroethene	ND	---	0.0336	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
trans-1,2-Dichloroethene	ND	---	0.0336	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
1,2-Dichloropropane	ND	---	0.0336	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
1,3-Dichloropropane	ND	---	0.0672	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
2,2-Dichloropropane	ND	---	0.0672	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
1,1-Dichloropropene	ND	---	0.0672	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
cis-1,3-Dichloropropene	ND	---	0.0672	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
trans-1,3-Dichloropropene	ND	---	0.0672	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
Ethylbenzene	ND	---	0.0336	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
Hexachlorobutadiene	ND	---	0.134	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
2-Hexanone	ND	---	0.672	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
Isopropylbenzene	ND	---	0.0672	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
4-Isopropyltoluene	ND	---	0.0672	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
Methylene chloride	ND	---	0.672	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
4-Methyl-2-pentanone (MiBK)	ND	---	0.672	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	0.0672	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
Naphthalene	ND	---	0.134	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
n-Propylbenzene	ND	---	0.0336	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
Styrene	ND	---	0.0672	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
1,1,1,2-Tetrachloroethane	ND	---	0.0336	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
1,1,2,2-Tetrachloroethane	ND	---	0.0672	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
Tetrachloroethene (PCE)	ND	---	0.0336	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
Toluene	ND	---	0.0672	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
1,2,3-Trichlorobenzene	ND	---	0.336	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
1,2,4-Trichlorobenzene	ND	---	0.336	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
1,1,1-Trichloroethane	ND	---	0.0336	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
1,1,2-Trichloroethane	ND	---	0.0336	mg/kg dry	50	05/10/21 11:59	5035A/8260D	

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: Modera Morrison	
9450 SW Commerce Circle	Project Number: Millcreek-19-04	Report ID:
Wilsonville, OR 97070	Project Manager: Kyle Sattler	A1E0281 - 05 11 21 1651

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
NW-PIT-South(8) (A1E0281-03)				**Matrix: Soil**		**Batch: 1050280**		**V-15**
Trichloroethene (TCE)	ND	---	0.0336	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
Trichlorofluoromethane	ND	---	0.134	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
1,2,3-Trichloropropane	ND	---	0.0672	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
1,2,4-Trimethylbenzene	ND	---	0.0672	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
1,3,5-Trimethylbenzene	ND	---	0.0672	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
Vinyl chloride	ND	---	0.0336	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
m,p-Xylene	ND	---	0.0672	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
o-Xylene	ND	---	0.0336	mg/kg dry	50	05/10/21 11:59	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*107 %*	*Limits: 80-120 %*	*1*	*05/10/21 11:59*	*5035A/8260D*	
Toluene-d8 (Surr)			*98 %*	*80-120 %*	*1*	*05/10/21 11:59*	*5035A/8260D*	
4-Bromofluorobenzene (Surr)			*103 %*	*79-120 %*	*1*	*05/10/21 11:59*	*5035A/8260D*	
NW-PIT-West(8) (A1E0281-04)				**Matrix: Soil**		**Batch: 1050280**		**V-15**
Acetone	ND	---	1.37	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
Acrylonitrile	ND	---	0.137	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
Benzene	ND	---	0.0137	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
Bromobenzene	ND	---	0.0343	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
Bromochloromethane	ND	---	0.0686	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
Bromodichloromethane	ND	---	0.0686	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
Bromoform	ND	---	0.137	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
Bromomethane	ND	---	0.686	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
2-Butanone (MEK)	ND	---	0.686	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
n-Butylbenzene	ND	---	0.0686	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
sec-Butylbenzene	ND	---	0.0686	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
tert-Butylbenzene	ND	---	0.0686	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
Carbon disulfide	ND	---	0.686	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
Carbon tetrachloride	ND	---	0.0686	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
Chlorobenzene	ND	---	0.0343	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
Chloroethane	ND	---	0.686	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
Chloroform	ND	---	0.0686	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
Chloromethane	ND	---	0.343	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
2-Chlorotoluene	ND	---	0.0686	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
4-Chlorotoluene	ND	---	0.0686	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
Dibromochloromethane	ND	---	0.137	mg/kg dry	50	05/10/21 12:26	5035A/8260D	

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: Modera Morrison	
9450 SW Commerce Circle	Project Number: Millcreek-19-04	Report ID:
Wilsonville, OR 97070	Project Manager: Kyle Sattler	A1E0281 - 05 11 21 1651

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
NW-PIT-West(8) (A1E0281-04)				**Matrix: Soil**		**Batch: 1050280**		**V-15**
1,2-Dibromo-3-chloropropane	ND	---	0.343	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
1,2-Dibromoethane (EDB)	ND	---	0.0686	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
Dibromomethane	ND	---	0.0686	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
1,2-Dichlorobenzene	ND	---	0.0343	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
1,3-Dichlorobenzene	ND	---	0.0343	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
1,4-Dichlorobenzene	ND	---	0.0343	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
Dichlorodifluoromethane	ND	---	0.137	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
1,1-Dichloroethane	ND	---	0.0343	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
1,2-Dichloroethane (EDC)	ND	---	0.0343	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
1,1-Dichloroethene	ND	---	0.0343	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
cis-1,2-Dichloroethene	ND	---	0.0343	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
trans-1,2-Dichloroethene	ND	---	0.0343	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
1,2-Dichloropropane	ND	---	0.0343	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
1,3-Dichloropropane	ND	---	0.0686	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
2,2-Dichloropropane	ND	---	0.0686	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
1,1-Dichloropropene	ND	---	0.0686	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
cis-1,3-Dichloropropene	ND	---	0.0686	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
trans-1,3-Dichloropropene	ND	---	0.0686	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
Ethylbenzene	ND	---	0.0343	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
Hexachlorobutadiene	ND	---	0.137	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
2-Hexanone	ND	---	0.686	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
Isopropylbenzene	ND	---	0.0686	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
4-Isopropyltoluene	ND	---	0.0686	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
Methylene chloride	ND	---	0.686	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
4-Methyl-2-pentanone (MiBK)	ND	---	0.686	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	0.0686	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
Naphthalene	ND	---	0.137	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
n-Propylbenzene	ND	---	0.0343	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
Styrene	ND	---	0.0686	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
1,1,1,2-Tetrachloroethane	ND	---	0.0343	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
1,1,2,2-Tetrachloroethane	ND	---	0.0686	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
Tetrachloroethene (PCE)	ND	---	0.0343	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
Toluene	ND	---	0.0686	mg/kg dry	50	05/10/21 12:26	5035A/8260D	

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9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0281 - 05 11 21 1651**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
NW-PIT-West(8) (A1E0281-04)				**Matrix: Soil**		**Batch: 1050280**		**V-15**
1,2,3-Trichlorobenzene	ND	---	0.343	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
1,2,4-Trichlorobenzene	ND	---	0.343	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
1,1,1-Trichloroethane	ND	---	0.0343	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
1,1,2-Trichloroethane	ND	---	0.0343	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
Trichloroethene (TCE)	ND	---	0.0343	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
Trichlorofluoromethane	ND	---	0.137	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
1,2,3-Trichloropropane	ND	---	0.0686	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
1,2,4-Trimethylbenzene	ND	---	0.0686	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
1,3,5-Trimethylbenzene	ND	---	0.0686	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
Vinyl chloride	ND	---	0.0343	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
m,p-Xylene	ND	---	0.0686	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
o-Xylene	ND	---	0.0343	mg/kg dry	50	05/10/21 12:26	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*107 %*	*Limits: 80-120 %*	*1*	*05/10/21 12:26*	*5035A/8260D*	
Toluene-d8 (Surr)			*98 %*	*80-120 %*	*1*	*05/10/21 12:26*	*5035A/8260D*	
4-Bromofluorobenzene (Surr)			*102 %*	*79-120 %*	*1*	*05/10/21 12:26*	*5035A/8260D*	
NW-PIT-Base(13) (A1E0281-05)				**Matrix: Soil**		**Batch: 1050280**		**V-15**
Acetone	ND	---	1.23	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
Acrylonitrile	ND	---	0.123	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
Benzene	ND	---	0.0123	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
Bromobenzene	ND	---	0.0308	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
Bromochloromethane	ND	---	0.0615	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
Bromodichloromethane	ND	---	0.0615	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
Bromoform	ND	---	0.123	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
Bromomethane	ND	---	0.615	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
2-Butanone (MEK)	ND	---	0.615	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
n-Butylbenzene	ND	---	0.0615	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
sec-Butylbenzene	ND	---	0.0615	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
tert-Butylbenzene	ND	---	0.0615	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
Carbon disulfide	ND	---	0.615	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
Carbon tetrachloride	ND	---	0.0615	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
Chlorobenzene	ND	---	0.0308	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
Chloroethane	ND	---	0.615	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
Chloroform	ND	---	0.0615	mg/kg dry	50	05/10/21 12:54	5035A/8260D	

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9450 SW Commerce Circle	Project Number: Millcreek-19-04	Report ID:
Wilsonville, OR 97070	Project Manager: Kyle Sattler	A1E0281 - 05 11 21 1651

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
NW-PIT-Base(13) (A1E0281-05)				**Matrix: Soil**		**Batch: 1050280**		**V-15**
Chloromethane	ND	---	0.308	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
2-Chlorotoluene	ND	---	0.0615	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
4-Chlorotoluene	ND	---	0.0615	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
Dibromochloromethane	ND	---	0.123	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
1,2-Dibromo-3-chloropropane	ND	---	0.308	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
1,2-Dibromoethane (EDB)	ND	---	0.0615	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
Dibromomethane	ND	---	0.0615	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
1,2-Dichlorobenzene	ND	---	0.0308	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
1,3-Dichlorobenzene	ND	---	0.0308	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
1,4-Dichlorobenzene	ND	---	0.0308	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
Dichlorodifluoromethane	ND	---	0.123	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
1,1-Dichloroethane	ND	---	0.0308	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
1,2-Dichloroethane (EDC)	ND	---	0.0308	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
1,1-Dichloroethene	ND	---	0.0308	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
cis-1,2-Dichloroethene	ND	---	0.0308	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
trans-1,2-Dichloroethene	ND	---	0.0308	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
1,2-Dichloropropane	ND	---	0.0308	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
1,3-Dichloropropane	ND	---	0.0615	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
2,2-Dichloropropane	ND	---	0.0615	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
1,1-Dichloropropene	ND	---	0.0615	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
cis-1,3-Dichloropropene	ND	---	0.0615	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
trans-1,3-Dichloropropene	ND	---	0.0615	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
Ethylbenzene	ND	---	0.0308	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
Hexachlorobutadiene	ND	---	0.123	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
2-Hexanone	ND	---	0.615	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
Isopropylbenzene	ND	---	0.0615	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
4-Isopropyltoluene	ND	---	0.0615	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
Methylene chloride	ND	---	0.615	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
4-Methyl-2-pentanone (MiBK)	ND	---	0.615	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	0.0615	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
Naphthalene	ND	---	0.123	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
n-Propylbenzene	ND	---	0.0308	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
Styrene	ND	---	0.0615	mg/kg dry	50	05/10/21 12:54	5035A/8260D	

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0281 - 05 11 21 1651**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
NW-PIT-Base(13) (A1E0281-05)				**Matrix: Soil**		**Batch: 1050280**		**V-15**
1,1,1,2-Tetrachloroethane	ND	---	0.0308	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
1,1,2,2-Tetrachloroethane	ND	---	0.0615	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
Tetrachloroethene (PCE)	ND	---	0.0308	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
Toluene	ND	---	0.0615	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
1,2,3-Trichlorobenzene	ND	---	0.308	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
1,2,4-Trichlorobenzene	ND	---	0.308	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
1,1,1-Trichloroethane	ND	---	0.0308	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
1,1,2-Trichloroethane	ND	---	0.0308	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
Trichloroethene (TCE)	ND	---	0.0308	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
Trichlorofluoromethane	ND	---	0.123	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
1,2,3-Trichloropropane	ND	---	0.0615	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
1,2,4-Trimethylbenzene	ND	---	0.0615	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
1,3,5-Trimethylbenzene	ND	---	0.0615	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
Vinyl chloride	ND	---	0.0308	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
m,p-Xylene	ND	---	0.0615	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
o-Xylene	ND	---	0.0308	mg/kg dry	50	05/10/21 12:54	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*109 %*	*Limits: 80-120 %*	*1*	*05/10/21 12:54*	*5035A/8260D*	
Toluene-d8 (Surr)			*100 %*	*80-120 %*	*1*	*05/10/21 12:54*	*5035A/8260D*	
4-Bromofluorobenzene (Surr)			*100 %*	*79-120 %*	*1*	*05/10/21 12:54*	*5035A/8260D*	

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: Modera Morrison	
9450 SW Commerce Circle	Project Number: Millcreek-19-04	Report ID:
Wilsonville, OR 97070	Project Manager: Kyle Sattler	A1E0281 - 05 11 21 1651

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
NW-PIT-North(8) (A1E0281-01)				**Matrix: Soil**				
Batch: 1050277								
Arsenic	**6.14**	---	1.21	mg/kg dry	10	05/10/21 22:52	EPA 6020B	
Barium	**159**	---	1.21	mg/kg dry	10	05/10/21 22:52	EPA 6020B	
Cadmium	ND	---	0.242	mg/kg dry	10	05/10/21 22:52	EPA 6020B	
Chromium	**23.7**	---	1.21	mg/kg dry	10	05/10/21 22:52	EPA 6020B	
Lead	**10.9**	---	0.242	mg/kg dry	10	05/10/21 22:52	EPA 6020B	
Mercury	ND	---	0.0967	mg/kg dry	10	05/10/21 22:52	EPA 6020B	
Selenium	ND	---	1.21	mg/kg dry	10	05/10/21 22:52	EPA 6020B	
Silver	ND	---	0.242	mg/kg dry	10	05/10/21 22:52	EPA 6020B	
NW-PIT-East(8) (A1E0281-02)				**Matrix: Soil**				
Batch: 1050277								
Arsenic	**5.53**	---	1.39	mg/kg dry	10	05/10/21 22:57	EPA 6020B	
Barium	**150**	---	1.39	mg/kg dry	10	05/10/21 22:57	EPA 6020B	
Cadmium	ND	---	0.277	mg/kg dry	10	05/10/21 22:57	EPA 6020B	
Chromium	**14.6**	---	1.39	mg/kg dry	10	05/10/21 22:57	EPA 6020B	
Lead	**8.27**	---	0.277	mg/kg dry	10	05/10/21 22:57	EPA 6020B	
Mercury	ND	---	0.111	mg/kg dry	10	05/10/21 22:57	EPA 6020B	
Selenium	ND	---	1.39	mg/kg dry	10	05/10/21 22:57	EPA 6020B	
Silver	ND	---	0.277	mg/kg dry	10	05/10/21 22:57	EPA 6020B	
NW-PIT-South(8) (A1E0281-03)				**Matrix: Soil**				
Batch: 1050277								
Arsenic	**4.75**	---	1.35	mg/kg dry	10	05/10/21 23:02	EPA 6020B	
Barium	**143**	---	1.35	mg/kg dry	10	05/10/21 23:02	EPA 6020B	
Cadmium	ND	---	0.270	mg/kg dry	10	05/10/21 23:02	EPA 6020B	
Chromium	**14.3**	---	1.35	mg/kg dry	10	05/10/21 23:02	EPA 6020B	
Lead	**8.35**	---	0.270	mg/kg dry	10	05/10/21 23:02	EPA 6020B	
Mercury	ND	---	0.108	mg/kg dry	10	05/10/21 23:02	EPA 6020B	
Selenium	ND	---	1.35	mg/kg dry	10	05/10/21 23:02	EPA 6020B	
Silver	ND	---	0.270	mg/kg dry	10	05/10/21 23:02	EPA 6020B	
NW-PIT-West(8) (A1E0281-04)				**Matrix: Soil**				
Batch: 1050277								

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0281 - 05 11 21 1651**

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
NW-PIT-West(8) (A1E0281-04)				**Matrix: Soil**				
Arsenic	**3.95**	---	1.26	mg/kg dry	10	05/10/21 23:07	EPA 6020B	
Barium	**119**	---	1.26	mg/kg dry	10	05/10/21 23:07	EPA 6020B	
Cadmium	ND	---	0.253	mg/kg dry	10	05/10/21 23:07	EPA 6020B	
Chromium	**15.9**	---	1.26	mg/kg dry	10	05/10/21 23:07	EPA 6020B	
Lead	**7.11**	---	0.253	mg/kg dry	10	05/10/21 23:07	EPA 6020B	
Mercury	ND	---	0.101	mg/kg dry	10	05/10/21 23:07	EPA 6020B	
Selenium	ND	---	1.26	mg/kg dry	10	05/10/21 23:07	EPA 6020B	
Silver	ND	---	0.253	mg/kg dry	10	05/10/21 23:07	EPA 6020B	
NW-PIT-Base(13) (A1E0281-05)				**Matrix: Soil**				
Batch: 1050277								
Arsenic	**4.00**	---	1.16	mg/kg dry	10	05/10/21 23:12	EPA 6020B	
Barium	**118**	---	1.16	mg/kg dry	10	05/10/21 23:12	EPA 6020B	
Cadmium	ND	---	0.233	mg/kg dry	10	05/10/21 23:12	EPA 6020B	
Chromium	**11.9**	---	1.16	mg/kg dry	10	05/10/21 23:12	EPA 6020B	
Lead	**7.85**	---	0.233	mg/kg dry	10	05/10/21 23:12	EPA 6020B	
Mercury	ND	---	0.0930	mg/kg dry	10	05/10/21 23:12	EPA 6020B	
Selenium	ND	---	1.16	mg/kg dry	10	05/10/21 23:12	EPA 6020B	
Silver	ND	---	0.233	mg/kg dry	10	05/10/21 23:12	EPA 6020B	

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0281 - 05 11 21 1651**

ANALYTICAL SAMPLE RESULTS

Percent Dry Weight

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
NW-PIT-North(8) (A1E0281-01)				**Matrix: Soil**		**Batch: 1050213**		
% Solids	**81.4**	---	1.00	%	1	05/10/21 10:03	EPA 8000D	
NW-PIT-East(8) (A1E0281-02)				**Matrix: Soil**		**Batch: 1050213**		
% Solids	**76.1**	---	1.00	%	1	05/10/21 10:03	EPA 8000D	
NW-PIT-South(8) (A1E0281-03)				**Matrix: Soil**		**Batch: 1050213**		
% Solids	**81.3**	---	1.00	%	1	05/10/21 10:03	EPA 8000D	
NW-PIT-West(8) (A1E0281-04)				**Matrix: Soil**		**Batch: 1050213**		
% Solids	**83.1**	---	1.00	%	1	05/10/21 10:03	EPA 8000D	
NW-PIT-Base(13) (A1E0281-05)				**Matrix: Soil**		**Batch: 1050213**		
% Solids	**85.0**	---	1.00	%	1	05/10/21 10:03	EPA 8000D	

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0281 - 05 11 21 1651**

QUALITY CONTROL (QC) SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050280 - EPA 5035A							**Soil**					
Blank (1050280-BLK1)			Prepared: 05/10/21 08:30 Analyzed: 05/10/21 10:36									
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	3.33	mg/kg wet	50	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery: 98 %*	*Limits: 50-150 %*		*Dilution: 1x*							
1,4-Difluorobenzene (Sur)		*95 %*	*50-150 %*		*"*							
LCS (1050280-BS2)			Prepared: 05/10/21 08:30 Analyzed: 05/10/21 10:09									
NWTPH-Gx (MS)												
Gasoline Range Organics	25.0	---	5.00	mg/kg wet	50	25.0	---	100	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery: 97 %*	*Limits: 50-150 %*		*Dilution: 1x*							
1,4-Difluorobenzene (Sur)		*96 %*	*50-150 %*		*"*							
Duplicate (1050280-DUP1)			Prepared: 05/05/21 15:50 Analyzed: 05/10/21 17:50									
QC Source Sample: Non-SDG (A1E0214-05)												
Gasoline Range Organics	ND	---	5.81	mg/kg dry	50	---	ND	---	---	---	30%	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery: 102 %*	*Limits: 50-150 %*		*Dilution: 1x*							
1,4-Difluorobenzene (Sur)		*98 %*	*50-150 %*		*"*							

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0281 - 05 11 21 1651**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050280 - EPA 5035A							**Soil**					
Blank (1050280-BLK1)			Prepared: 05/10/21 08:30 Analyzed: 05/10/21 10:36									
5035A/8260D												
Acetone	ND	---	0.667	mg/kg wet	50	---	---	---	---	---	---	
Acrylonitrile	ND	---	0.0667	mg/kg wet	50	---	---	---	---	---	---	
Benzene	ND	---	0.00667	mg/kg wet	50	---	---	---	---	---	---	
Bromobenzene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Bromochloromethane	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Bromodichloromethane	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Bromoform	ND	---	0.0667	mg/kg wet	50	---	---	---	---	---	---	
Bromomethane	ND	---	0.333	mg/kg wet	50	---	---	---	---	---	---	
2-Butanone (MEK)	ND	---	0.333	mg/kg wet	50	---	---	---	---	---	---	
n-Butylbenzene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
sec-Butylbenzene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
tert-Butylbenzene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Carbon disulfide	ND	---	0.333	mg/kg wet	50	---	---	---	---	---	---	
Carbon tetrachloride	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Chlorobenzene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Chloroethane	ND	---	0.333	mg/kg wet	50	---	---	---	---	---	---	
Chloroform	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Chloromethane	ND	---	0.167	mg/kg wet	50	---	---	---	---	---	---	
2-Chlorotoluene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
4-Chlorotoluene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Dibromochloromethane	ND	---	0.0667	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	---	0.167	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Dibromomethane	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	---	0.0667	mg/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethane	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0281 - 05 11 21 1651**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050280 - EPA 5035A							**Soil**					
Blank (1050280-BLK1)			Prepared: 05/10/21 08:30 Analyzed: 05/10/21 10:36									
1,2-Dichloropropane	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,3-Dichloropropane	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
2,2-Dichloropropane	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,1-Dichloropropene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Ethylbenzene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Hexachlorobutadiene	ND	---	0.0667	mg/kg wet	50	---	---	---	---	---	---	
2-Hexanone	ND	---	0.333	mg/kg wet	50	---	---	---	---	---	---	
Isopropylbenzene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
4-Isopropyltoluene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Methylene chloride	ND	---	0.333	mg/kg wet	50	---	---	---	---	---	---	
4-Methyl-2-pentanone (MiBK)	ND	---	0.333	mg/kg wet	50	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Naphthalene	ND	---	0.0667	mg/kg wet	50	---	---	---	---	---	---	
n-Propylbenzene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Styrene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Toluene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,2,3-Trichlorobenzene	ND	---	0.167	mg/kg wet	50	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	---	0.167	mg/kg wet	50	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
1,1,2-Trichloroethane	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Trichlorofluoromethane	ND	---	0.0667	mg/kg wet	50	---	---	---	---	---	---	
1,2,3-Trichloropropane	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Vinyl chloride	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
m,p-Xylene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
o-Xylene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	

Surr: 1,4-Difluorobenzene (Surr) *Recovery: 106 %* *Limits: 80-120 %* *Dilution: 1x*

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Philip Nerenberg, Lab Director

Apex Laboratories, LLC
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Tigard, OR 97223
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ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0281 - 05 11 21 1651**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050280 - EPA 5035A							**Soil**					
Blank (1050280-BLK1)			Prepared: 05/10/21 08:30 Analyzed: 05/10/21 10:36									
Surr: Toluene-d8 (Surr)			*Recovery: 100 %*	*Limits: 80-120 %*			*Dilution: 1x*					
4-Bromofluorobenzene (Surr)			*100 %*	*79-120 %*			*"*					
LCS (1050280-BS1)			Prepared: 05/10/21 08:30 Analyzed: 05/10/21 09:43									
5035A/8260D												
Acetone	1.98	---	1.00	mg/kg wet	50	2.00	---	99	80-120%	---	---	
Acrylonitrile	1.10	---	0.100	mg/kg wet	50	1.00	---	110	80-120%	---	---	
Benzene	1.08	---	0.0100	mg/kg wet	50	1.00	---	108	80-120%	---	---	
Bromobenzene	1.02	---	0.0250	mg/kg wet	50	1.00	---	102	80-120%	---	---	
Bromochloromethane	1.16	---	0.0500	mg/kg wet	50	1.00	---	116	80-120%	---	---	
Bromodichloromethane	1.06	---	0.0500	mg/kg wet	50	1.00	---	106	80-120%	---	---	
Bromoform	1.28	---	0.100	mg/kg wet	50	1.00	---	**128**	**80-120%**	---	---	Q-56
Bromomethane	1.06	---	0.500	mg/kg wet	50	1.00	---	106	80-120%	---	---	
2-Butanone (MEK)	2.18	---	0.500	mg/kg wet	50	2.00	---	109	80-120%	---	---	
n-Butylbenzene	0.948	---	0.0500	mg/kg wet	50	1.00	---	95	80-120%	---	---	
sec-Butylbenzene	1.00	---	0.0500	mg/kg wet	50	1.00	---	100	80-120%	---	---	
tert-Butylbenzene	0.890	---	0.0500	mg/kg wet	50	1.00	---	89	80-120%	---	---	
Carbon disulfide	0.817	---	0.500	mg/kg wet	50	1.00	---	82	80-120%	---	---	
Carbon tetrachloride	1.45	---	0.0500	mg/kg wet	50	1.00	---	**145**	**80-120%**	---	---	Q-56
Chlorobenzene	1.01	---	0.0250	mg/kg wet	50	1.00	---	101	80-120%	---	---	
Chloroethane	0.936	---	0.500	mg/kg wet	50	1.00	---	94	80-120%	---	---	
Chloroform	1.05	---	0.0500	mg/kg wet	50	1.00	---	105	80-120%	---	---	
Chloromethane	1.02	---	0.250	mg/kg wet	50	1.00	---	102	80-120%	---	---	
2-Chlorotoluene	1.06	---	0.0500	mg/kg wet	50	1.00	---	106	80-120%	---	---	
4-Chlorotoluene	0.996	---	0.0500	mg/kg wet	50	1.00	---	100	80-120%	---	---	
Dibromochloromethane	1.13	---	0.100	mg/kg wet	50	1.00	---	113	80-120%	---	---	
1,2-Dibromo-3-chloropropane	0.896	---	0.250	mg/kg wet	50	1.00	---	90	80-120%	---	---	
1,2-Dibromoethane (EDB)	1.02	---	0.0500	mg/kg wet	50	1.00	---	102	80-120%	---	---	
Dibromomethane	1.07	---	0.0500	mg/kg wet	50	1.00	---	107	80-120%	---	---	
1,2-Dichlorobenzene	1.02	---	0.0250	mg/kg wet	50	1.00	---	102	80-120%	---	---	
1,3-Dichlorobenzene	1.06	---	0.0250	mg/kg wet	50	1.00	---	106	80-120%	---	---	
1,4-Dichlorobenzene	0.964	---	0.0250	mg/kg wet	50	1.00	---	96	80-120%	---	---	
Dichlorodifluoromethane	0.841	---	0.100	mg/kg wet	50	1.00	---	84	80-120%	---	---	
1,1-Dichloroethane	1.10	---	0.0250	mg/kg wet	50	1.00	---	110	80-120%	---	---	

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Philip Nerenberg, Lab Director

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ORELAP ID: **OR100062**

GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0281 - 05 11 21 1651**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050280 - EPA 5035A							**Soil**					
LCS (1050280-BS1)			Prepared: 05/10/21 08:30 Analyzed: 05/10/21 09:43									
1,2-Dichloroethane (EDC)	1.06	---	0.0250	mg/kg wet	50	1.00	---	106	80-120%	---	---	
1,1-Dichloroethene	1.01	---	0.0250	mg/kg wet	50	1.00	---	101	80-120%	---	---	
cis-1,2-Dichloroethene	1.06	---	0.0250	mg/kg wet	50	1.00	---	106	80-120%	---	---	
trans-1,2-Dichloroethene	1.05	---	0.0250	mg/kg wet	50	1.00	---	105	80-120%	---	---	
1,2-Dichloropropane	1.13	---	0.0250	mg/kg wet	50	1.00	---	113	80-120%	---	---	
1,3-Dichloropropane	1.05	---	0.0500	mg/kg wet	50	1.00	---	105	80-120%	---	---	
2,2-Dichloropropane	1.21	---	0.0500	mg/kg wet	50	1.00	---	**121**	**80-120%**	---	---	Q-56
1,1-Dichloropropene	1.04	---	0.0500	mg/kg wet	50	1.00	---	104	80-120%	---	---	
cis-1,3-Dichloropropene	0.956	---	0.0500	mg/kg wet	50	1.00	---	96	80-120%	---	---	
trans-1,3-Dichloropropene	0.962	---	0.0500	mg/kg wet	50	1.00	---	96	80-120%	---	---	
Ethylbenzene	0.966	---	0.0250	mg/kg wet	50	1.00	---	97	80-120%	---	---	
Hexachlorobutadiene	0.958	---	0.100	mg/kg wet	50	1.00	---	96	80-120%	---	---	
2-Hexanone	1.74	---	0.500	mg/kg wet	50	2.00	---	87	80-120%	---	---	
Isopropylbenzene	0.936	---	0.0500	mg/kg wet	50	1.00	---	94	80-120%	---	---	
4-Isopropyltoluene	0.971	---	0.0500	mg/kg wet	50	1.00	---	97	80-120%	---	---	
Methylene chloride	1.04	---	0.500	mg/kg wet	50	1.00	---	104	80-120%	---	---	
4-Methyl-2-pentanone (MiBK)	1.81	---	0.500	mg/kg wet	50	2.00	---	91	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	1.07	---	0.0500	mg/kg wet	50	1.00	---	107	80-120%	---	---	
Naphthalene	0.811	---	0.100	mg/kg wet	50	1.00	---	81	80-120%	---	---	
n-Propylbenzene	1.04	---	0.0250	mg/kg wet	50	1.00	---	104	80-120%	---	---	
Styrene	0.947	---	0.0500	mg/kg wet	50	1.00	---	95	80-120%	---	---	
1,1,1,2-Tetrachloroethane	1.33	---	0.0250	mg/kg wet	50	1.00	---	**133**	**80-120%**	---	---	Q-56
1,1,2,2-Tetrachloroethane	1.08	---	0.0500	mg/kg wet	50	1.00	---	108	80-120%	---	---	
Tetrachloroethene (PCE)	1.00	---	0.0250	mg/kg wet	50	1.00	---	100	80-120%	---	---	
Toluene	0.972	---	0.0500	mg/kg wet	50	1.00	---	97	80-120%	---	---	
1,2,3-Trichlorobenzene	0.971	---	0.250	mg/kg wet	50	1.00	---	97	80-120%	---	---	
1,2,4-Trichlorobenzene	0.906	---	0.250	mg/kg wet	50	1.00	---	91	80-120%	---	---	
1,1,1-Trichloroethane	1.11	---	0.0250	mg/kg wet	50	1.00	---	111	80-120%	---	---	
1,1,2-Trichloroethane	1.06	---	0.0250	mg/kg wet	50	1.00	---	106	80-120%	---	---	
Trichloroethene (TCE)	1.08	---	0.0250	mg/kg wet	50	1.00	---	108	80-120%	---	---	
Trichlorofluoromethane	0.976	---	0.100	mg/kg wet	50	1.00	---	98	80-120%	---	---	
1,2,3-Trichloropropane	1.10	---	0.0500	mg/kg wet	50	1.00	---	110	80-120%	---	---	
1,2,4-Trimethylbenzene	1.01	---	0.0500	mg/kg wet	50	1.00	---	101	80-120%	---	---	
1,3,5-Trimethylbenzene	1.02	---	0.0500	mg/kg wet	50	1.00	---	102	80-120%	---	---	

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Philip Nerenberg, Lab Director

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0281 - 05 11 21 1651**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050280 - EPA 5035A							**Soil**					
LCS (1050280-BS1)			Prepared: 05/10/21 08:30 Analyzed: 05/10/21 09:43									
Vinyl chloride	0.987	---	0.0250	mg/kg wet	50	1.00	---	99	80-120%	---	---	
m,p-Xylene	1.94	---	0.0500	mg/kg wet	50	2.00	---	97	80-120%	---	---	
o-Xylene	0.926	---	0.0250	mg/kg wet	50	1.00	---	93	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*106 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*100 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*98 %*		*79-120 %*			*"*				
Duplicate (1050280-DUP1)			Prepared: 05/05/21 15:50 Analyzed: 05/10/21 17:50									
QC Source Sample: Non-SDG (A1E0214-05)												
Acetone	ND	---	1.16	mg/kg dry	50	---	ND	---	---	---	30%	
Acrylonitrile	ND	---	0.116	mg/kg dry	50	---	ND	---	---	---	30%	
Benzene	ND	---	0.0116	mg/kg dry	50	---	ND	---	---	---	30%	
Bromobenzene	ND	---	0.0290	mg/kg dry	50	---	ND	---	---	---	30%	
Bromochloromethane	ND	---	0.0581	mg/kg dry	50	---	ND	---	---	---	30%	
Bromodichloromethane	ND	---	0.0581	mg/kg dry	50	---	ND	---	---	---	30%	
Bromoform	ND	---	0.116	mg/kg dry	50	---	ND	---	---	---	30%	
Bromomethane	ND	---	0.581	mg/kg dry	50	---	ND	---	---	---	30%	
2-Butanone (MEK)	ND	---	0.581	mg/kg dry	50	---	ND	---	---	---	30%	
n-Butylbenzene	ND	---	0.0581	mg/kg dry	50	---	ND	---	---	---	30%	
sec-Butylbenzene	ND	---	0.0581	mg/kg dry	50	---	ND	---	---	---	30%	
tert-Butylbenzene	ND	---	0.0581	mg/kg dry	50	---	ND	---	---	---	30%	
Carbon disulfide	ND	---	0.581	mg/kg dry	50	---	ND	---	---	---	30%	
Carbon tetrachloride	ND	---	0.0581	mg/kg dry	50	---	ND	---	---	---	30%	
Chlorobenzene	ND	---	0.0290	mg/kg dry	50	---	ND	---	---	---	30%	
Chloroethane	ND	---	0.581	mg/kg dry	50	---	ND	---	---	---	30%	
Chloroform	ND	---	0.0581	mg/kg dry	50	---	ND	---	---	---	30%	
Chloromethane	ND	---	0.290	mg/kg dry	50	---	ND	---	---	---	30%	
2-Chlorotoluene	ND	---	0.0581	mg/kg dry	50	---	ND	---	---	---	30%	
4-Chlorotoluene	ND	---	0.0581	mg/kg dry	50	---	ND	---	---	---	30%	
Dibromochloromethane	ND	---	0.116	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dibromo-3-chloropropane	ND	---	0.290	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dibromoethane (EDB)	ND	---	0.0581	mg/kg dry	50	---	ND	---	---	---	30%	
Dibromomethane	ND	---	0.0581	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichlorobenzene	ND	---	0.0290	mg/kg dry	50	---	ND	---	---	---	30%	

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GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0281 - 05 11 21 1651**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050280 - EPA 5035A							**Soil**					
Duplicate (1050280-DUP1)			Prepared: 05/05/21 15:50 Analyzed: 05/10/21 17:50									
QC Source Sample: Non-SDG (A1E0214-05)												
1,3-Dichlorobenzene	ND	---	0.0290	mg/kg dry	50	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	---	0.0290	mg/kg dry	50	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	---	0.116	mg/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	---	0.0290	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	---	0.0290	mg/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	---	0.0290	mg/kg dry	50	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	---	0.0290	mg/kg dry	50	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	---	0.0290	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	---	0.0290	mg/kg dry	50	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	---	0.0581	mg/kg dry	50	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	---	0.0581	mg/kg dry	50	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	---	0.0581	mg/kg dry	50	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	---	0.0581	mg/kg dry	50	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	---	0.0581	mg/kg dry	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	---	0.0290	mg/kg dry	50	---	ND	---	---	---	30%	
Hexachlorobutadiene	ND	---	0.116	mg/kg dry	50	---	ND	---	---	---	30%	
2-Hexanone	ND	---	0.581	mg/kg dry	50	---	ND	---	---	---	30%	
Isopropylbenzene	ND	---	0.0581	mg/kg dry	50	---	ND	---	---	---	30%	
4-Isopropyltoluene	ND	---	0.0581	mg/kg dry	50	---	ND	---	---	---	30%	
Methylene chloride	ND	---	0.581	mg/kg dry	50	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	---	0.581	mg/kg dry	50	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	---	0.0581	mg/kg dry	50	---	ND	---	---	---	30%	
Naphthalene	ND	---	0.116	mg/kg dry	50	---	ND	---	---	---	30%	
n-Propylbenzene	ND	---	0.0290	mg/kg dry	50	---	ND	---	---	---	30%	
Styrene	ND	---	0.0581	mg/kg dry	50	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	---	0.0290	mg/kg dry	50	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	---	0.0581	mg/kg dry	50	---	ND	---	---	---	30%	
Tetrachloroethene (PCE)	ND	---	0.0290	mg/kg dry	50	---	ND	---	---	---	30%	
Toluene	ND	---	0.0581	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichlorobenzene	ND	---	0.290	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	---	0.290	mg/kg dry	50	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	---	0.0290	mg/kg dry	50	---	ND	---	---	---	30%	
1,1,2-Trichloroethane	ND	---	0.0290	mg/kg dry	50	---	ND	---	---	---	30%	

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GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0281 - 05 11 21 1651**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050280 - EPA 5035A							**Soil**					
Duplicate (1050280-DUP1)			Prepared: 05/05/21 15:50 Analyzed: 05/10/21 17:50									
QC Source Sample: Non-SDG (A1E0214-05)												
Trichloroethene (TCE)	ND	---	0.0290	mg/kg dry	50	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	---	0.116	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	---	0.0581	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	---	0.0581	mg/kg dry	50	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	---	0.0581	mg/kg dry	50	---	ND	---	---	---	30%	
Vinyl chloride	ND	---	0.0290	mg/kg dry	50	---	ND	---	---	---	30%	
m,p-Xylene	ND	---	0.0581	mg/kg dry	50	---	ND	---	---	---	30%	
o-Xylene	ND	---	0.0290	mg/kg dry	50	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*107 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*98 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*100 %*		*79-120 %*			*"*				
Matrix Spike (1050280-MS1)			Prepared: 04/28/21 13:45 Analyzed: 05/10/21 15:08									
QC Source Sample: Non-SDG (A1D1246-08RE1)												
5035A/8260D												
Acetone	1.81	---	0.926	mg/kg wet	50	1.99	ND	91	36-164%	---	---	
Acrylonitrile	0.998	---	0.0926	mg/kg wet	50	0.993	ND	101	65-134%	---	---	
Benzene	0.937	---	0.00926	mg/kg wet	50	0.993	ND	94	77-121%	---	---	
Bromobenzene	0.886	---	0.0231	mg/kg wet	50	0.993	ND	89	78-121%	---	---	
Bromochloromethane	1.01	---	0.0463	mg/kg wet	50	0.993	ND	101	78-125%	---	---	
Bromodichloromethane	0.905	---	0.0463	mg/kg wet	50	0.993	ND	91	75-127%	---	---	
Bromoform	1.13	---	0.0926	mg/kg wet	50	0.993	ND	113	67-132%	---	---	Q-54c
Bromomethane	0.942	---	0.463	mg/kg wet	50	0.993	ND	95	53-143%	---	---	
2-Butanone (MEK)	1.94	---	0.463	mg/kg wet	50	1.99	ND	98	51-148%	---	---	
n-Butylbenzene	0.807	---	0.0463	mg/kg wet	50	0.993	ND	81	70-128%	---	---	
sec-Butylbenzene	0.846	---	0.0463	mg/kg wet	50	0.993	ND	85	73-126%	---	---	
tert-Butylbenzene	0.769	---	0.0463	mg/kg wet	50	0.993	ND	77	73-125%	---	---	
Carbon disulfide	0.630	---	0.463	mg/kg wet	50	0.993	ND	63	63-132%	---	---	
Carbon tetrachloride	1.17	---	0.0463	mg/kg wet	50	0.993	ND	117	70-135%	---	---	Q-54b
Chlorobenzene	0.897	---	0.0231	mg/kg wet	50	0.993	ND	90	79-120%	---	---	
Chloroethane	0.780	---	0.463	mg/kg wet	50	0.993	ND	79	59-139%	---	---	
Chloroform	0.916	---	0.0463	mg/kg wet	50	0.993	ND	92	78-123%	---	---	
Chloromethane	0.814	---	0.231	mg/kg wet	50	0.993	ND	82	50-136%	---	---	

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Philip Nerenberg, Lab Director

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503-718-2323
ORELAP ID: **OR100062**

GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0281 - 05 11 21 1651**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050280 - EPA 5035A							**Soil**					
Matrix Spike (1050280-MS1)			Prepared: 04/28/21 13:45		Analyzed: 05/10/21 15:08							
QC Source Sample: Non-SDG (A1D1246-08RE1)												
2-Chlorotoluene	0.935	---	0.0463	mg/kg wet	50	0.993	ND	94	75-122%	---	---	
4-Chlorotoluene	0.874	---	0.0463	mg/kg wet	50	0.993	ND	88	72-124%	---	---	
Dibromochloromethane	0.960	---	0.0926	mg/kg wet	50	0.993	ND	97	74-126%	---	---	
1,2-Dibromo-3-chloropropane	0.798	---	0.231	mg/kg wet	50	0.993	ND	80	61-132%	---	---	
1,2-Dibromoethane (EDB)	0.884	---	0.0463	mg/kg wet	50	0.993	ND	89	78-122%	---	---	
Dibromomethane	0.931	---	0.0463	mg/kg wet	50	0.993	ND	94	78-125%	---	---	
1,2-Dichlorobenzene	0.886	---	0.0231	mg/kg wet	50	0.993	ND	89	78-121%	---	---	
1,3-Dichlorobenzene	0.914	---	0.0231	mg/kg wet	50	0.993	ND	92	77-121%	---	---	
1,4-Dichlorobenzene	0.858	---	0.0231	mg/kg wet	50	0.993	ND	86	75-120%	---	---	
Dichlorodifluoromethane	0.574	---	0.0926	mg/kg wet	50	0.993	ND	58	29-149%	---	---	
1,1-Dichloroethane	0.958	---	0.0231	mg/kg wet	50	0.993	ND	97	76-125%	---	---	
1,2-Dichloroethane (EDC)	0.921	---	0.0231	mg/kg wet	50	0.993	ND	93	73-128%	---	---	
1,1-Dichloroethene	0.823	---	0.0231	mg/kg wet	50	0.993	ND	83	70-131%	---	---	
cis-1,2-Dichloroethene	0.900	---	0.0231	mg/kg wet	50	0.993	ND	91	77-123%	---	---	
trans-1,2-Dichloroethene	0.875	---	0.0231	mg/kg wet	50	0.993	ND	88	74-125%	---	---	
1,2-Dichloropropane	0.983	---	0.0231	mg/kg wet	50	0.993	ND	99	76-123%	---	---	
1,3-Dichloropropane	0.910	---	0.0463	mg/kg wet	50	0.993	ND	92	77-121%	---	---	
2,2-Dichloropropane	0.961	---	0.0463	mg/kg wet	50	0.993	ND	97	67-133%	---	---	Q-54
1,1-Dichloropropene	0.870	---	0.0463	mg/kg wet	50	0.993	ND	88	76-125%	---	---	
cis-1,3-Dichloropropene	0.733	---	0.0463	mg/kg wet	50	0.993	ND	74	74-126%	---	---	
trans-1,3-Dichloropropene	0.798	---	0.0463	mg/kg wet	50	0.993	ND	80	71-130%	---	---	
Ethylbenzene	0.825	---	0.0231	mg/kg wet	50	0.993	ND	83	76-122%	---	---	
Hexachlorobutadiene	0.769	---	0.0926	mg/kg wet	50	0.993	ND	77	61-135%	---	---	
2-Hexanone	1.57	---	0.463	mg/kg wet	50	1.99	ND	79	53-145%	---	---	
Isopropylbenzene	0.792	---	0.0463	mg/kg wet	50	0.993	ND	80	68-134%	---	---	
4-Isopropyltoluene	0.825	---	0.0463	mg/kg wet	50	0.993	ND	83	73-127%	---	---	
Methylene chloride	0.890	---	0.463	mg/kg wet	50	0.993	ND	90	70-128%	---	---	
4-Methyl-2-pentanone (MiBK)	1.60	---	0.463	mg/kg wet	50	1.99	ND	80	65-135%	---	---	
Methyl tert-butyl ether (MTBE)	0.915	---	0.0463	mg/kg wet	50	0.993	ND	92	73-125%	---	---	
Naphthalene	0.717	---	0.0926	mg/kg wet	50	0.993	ND	72	62-129%	---	---	
n-Propylbenzene	0.890	---	0.0231	mg/kg wet	50	0.993	ND	90	73-125%	---	---	
Styrene	0.822	---	0.0463	mg/kg wet	50	0.993	ND	83	76-124%	---	---	
1,1,1,2-Tetrachloroethane	1.16	---	0.0231	mg/kg wet	50	0.993	ND	117	78-125%	---	---	Q-54a

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ORELAP ID: OR100062

ANALYTICAL REPORT

GeoDesign, Inc.	Project: Modera Morrison	
9450 SW Commerce Circle	Project Number: Millcreek-19-04	Report ID:
Wilsonville, OR 97070	Project Manager: Kyle Sattler	A1E0281 - 05 11 21 1651

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050280 - EPA 5035A							**Soil**					
Matrix Spike (1050280-MS1)			Prepared: 04/28/21 13:45 Analyzed: 05/10/21 15:08									
QC Source Sample: Non-SDG (A1D1246-08RE1)												
1,1,2,2-Tetrachloroethane	0.983	---	0.0463	mg/kg wet	50	0.993	ND	99	70-124%	---	---	
Tetrachloroethene (PCE)	0.838	---	0.0231	mg/kg wet	50	0.993	ND	84	73-128%	---	---	
Toluene	0.827	---	0.0463	mg/kg wet	50	0.993	ND	83	77-121%	---	---	
1,2,3-Trichlorobenzene	0.838	---	0.231	mg/kg wet	50	0.993	ND	84	66-130%	---	---	
1,2,4-Trichlorobenzene	0.752	---	0.231	mg/kg wet	50	0.993	ND	76	67-129%	---	---	
1,1,1-Trichloroethane	0.939	---	0.0231	mg/kg wet	50	0.993	ND	95	73-130%	---	---	
1,1,2-Trichloroethane	0.921	---	0.0231	mg/kg wet	50	0.993	ND	93	78-121%	---	---	
Trichloroethene (TCE)	0.925	---	0.0231	mg/kg wet	50	0.993	ND	93	77-123%	---	---	
Trichlorofluoromethane	0.856	---	0.0926	mg/kg wet	50	0.993	ND	86	62-140%	---	---	
1,2,3-Trichloropropane	0.947	---	0.0463	mg/kg wet	50	0.993	ND	95	73-125%	---	---	
1,2,4-Trimethylbenzene	0.879	---	0.0463	mg/kg wet	50	0.993	ND	89	75-123%	---	---	
1,3,5-Trimethylbenzene	0.901	---	0.0463	mg/kg wet	50	0.993	ND	91	73-124%	---	---	
Vinyl chloride	0.813	---	0.0231	mg/kg wet	50	0.993	ND	82	56-135%	---	---	
m,p-Xylene	1.67	---	0.0463	mg/kg wet	50	1.99	ND	84	77-124%	---	---	
o-Xylene	0.801	---	0.0231	mg/kg wet	50	0.993	ND	81	77-123%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*105 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*97 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*98 %*		*79-120 %*			*"*				
Matrix Spike Dup (1050280-MSD1)			Prepared: 04/28/21 13:45 Analyzed: 05/10/21 15:36									
QC Source Sample: Non-SDG (A1D1246-08RE1)												
Acetone	1.85	---	0.926	mg/kg wet	50	1.99	ND	93	36-164%	2	30%	
Acrylonitrile	1.03	---	0.0926	mg/kg wet	50	0.993	ND	104	65-134%	4	30%	
Benzene	0.976	---	0.00926	mg/kg wet	50	0.993	ND	98	77-121%	4	30%	
Bromobenzene	0.913	---	0.0231	mg/kg wet	50	0.993	ND	92	78-121%	3	30%	
Bromochloromethane	1.02	---	0.0463	mg/kg wet	50	0.993	ND	103	78-125%	2	30%	
Bromodichloromethane	1.01	---	0.0463	mg/kg wet	50	0.993	ND	101	75-127%	11	30%	
Bromoform	1.23	---	0.0926	mg/kg wet	50	0.993	ND	124	67-132%	9	30%	Q-54c
Bromomethane	0.926	---	0.463	mg/kg wet	50	0.993	ND	93	53-143%	2	30%	
2-Butanone (MEK)	1.94	---	0.463	mg/kg wet	50	1.99	ND	98	51-148%	0.2	30%	
n-Butylbenzene	0.871	---	0.0463	mg/kg wet	50	0.993	ND	88	70-128%	8	30%	
sec-Butylbenzene	0.906	---	0.0463	mg/kg wet	50	0.993	ND	91	73-126%	7	30%	
tert-Butylbenzene	0.820	---	0.0463	mg/kg wet	50	0.993	ND	83	73-125%	6	30%	

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Philip Nerenberg, Lab Director

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ORELAP ID: **OR100062**

GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0281 - 05 11 21 1651**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050280 - EPA 5035A							**Soil**					
Matrix Spike Dup (1050280-MSD1)			Prepared: 04/28/21 13:45 Analyzed: 05/10/21 15:36									
QC Source Sample: Non-SDG (A1D1246-08RE1)												
Carbon disulfide	0.730	---	0.463	mg/kg wet	50	0.993	ND	74	63-132%	15	30%	
Carbon tetrachloride	1.38	---	0.0463	mg/kg wet	50	0.993	ND	**139**	**70-135%**	17	30%	Q-54b
Chlorobenzene	0.920	---	0.0231	mg/kg wet	50	0.993	ND	93	79-120%	2	30%	
Chloroethane	0.890	---	0.463	mg/kg wet	50	0.993	ND	90	59-139%	13	30%	
Chloroform	0.979	---	0.0463	mg/kg wet	50	0.993	ND	99	78-123%	7	30%	
Chloromethane	0.902	---	0.231	mg/kg wet	50	0.993	ND	91	50-136%	10	30%	
2-Chlorotoluene	0.971	---	0.0463	mg/kg wet	50	0.993	ND	98	75-122%	4	30%	
4-Chlorotoluene	0.891	---	0.0463	mg/kg wet	50	0.993	ND	90	72-124%	2	30%	
Dibromochloromethane	1.09	---	0.0926	mg/kg wet	50	0.993	ND	109	74-126%	12	30%	
1,2-Dibromo-3-chloropropane	0.850	---	0.231	mg/kg wet	50	0.993	ND	86	61-132%	6	30%	
1,2-Dibromoethane (EDB)	0.933	---	0.0463	mg/kg wet	50	0.993	ND	94	78-122%	5	30%	
Dibromomethane	0.963	---	0.0463	mg/kg wet	50	0.993	ND	97	78-125%	3	30%	
1,2-Dichlorobenzene	0.941	---	0.0231	mg/kg wet	50	0.993	ND	95	78-121%	6	30%	
1,3-Dichlorobenzene	0.953	---	0.0231	mg/kg wet	50	0.993	ND	96	77-121%	4	30%	
1,4-Dichlorobenzene	0.873	---	0.0231	mg/kg wet	50	0.993	ND	88	75-120%	2	30%	
Dichlorodifluoromethane	0.650	---	0.0926	mg/kg wet	50	0.993	ND	65	29-149%	12	30%	
1,1-Dichloroethane	1.01	---	0.0231	mg/kg wet	50	0.993	ND	102	76-125%	5	30%	
1,2-Dichloroethane (EDC)	0.947	---	0.0231	mg/kg wet	50	0.993	ND	95	73-128%	3	30%	
1,1-Dichloroethene	0.895	---	0.0231	mg/kg wet	50	0.993	ND	90	70-131%	8	30%	
cis-1,2-Dichloroethene	0.941	---	0.0231	mg/kg wet	50	0.993	ND	95	77-123%	4	30%	
trans-1,2-Dichloroethene	0.942	---	0.0231	mg/kg wet	50	0.993	ND	95	74-125%	7	30%	
1,2-Dichloropropane	1.01	---	0.0231	mg/kg wet	50	0.993	ND	101	76-123%	2	30%	
1,3-Dichloropropane	0.937	---	0.0463	mg/kg wet	50	0.993	ND	94	77-121%	3	30%	
2,2-Dichloropropane	1.07	---	0.0463	mg/kg wet	50	0.993	ND	108	67-133%	11	30%	Q-54
1,1-Dichloropropene	0.941	---	0.0463	mg/kg wet	50	0.993	ND	95	76-125%	8	30%	
cis-1,3-Dichloropropene	0.817	---	0.0463	mg/kg wet	50	0.993	ND	82	74-126%	11	30%	
trans-1,3-Dichloropropene	0.867	---	0.0463	mg/kg wet	50	0.993	ND	87	71-130%	8	30%	
Ethylbenzene	0.870	---	0.0231	mg/kg wet	50	0.993	ND	88	76-122%	5	30%	
Hexachlorobutadiene	0.860	---	0.0926	mg/kg wet	50	0.993	ND	87	61-135%	11	30%	
2-Hexanone	1.62	---	0.463	mg/kg wet	50	1.99	ND	82	53-145%	3	30%	
Isopropylbenzene	0.834	---	0.0463	mg/kg wet	50	0.993	ND	84	68-134%	5	30%	
4-Isopropyltoluene	0.877	---	0.0463	mg/kg wet	50	0.993	ND	88	73-127%	6	30%	
Methylene chloride	0.940	---	0.463	mg/kg wet	50	0.993	ND	95	70-128%	5	30%	

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: Modera Morrison	
9450 SW Commerce Circle	Project Number: Millcreek-19-04	Report ID:
Wilsonville, OR 97070	Project Manager: Kyle Sattler	A1E0281 - 05 11 21 1651

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050280 - EPA 5035A							**Soil**					
Matrix Spike Dup (1050280-MSD1)			Prepared: 04/28/21 13:45 Analyzed: 05/10/21 15:36									
QC Source Sample: Non-SDG (A1D1246-08RE1)												
4-Methyl-2-pentanone (MiBK)	1.68	---	0.463	mg/kg wet	50	1.99	ND	85	65-135%	5	30%	
Methyl tert-butyl ether (MTBE)	0.960	---	0.0463	mg/kg wet	50	0.993	ND	97	73-125%	5	30%	
Naphthalene	0.736	---	0.0926	mg/kg wet	50	0.993	ND	74	62-129%	3	30%	
n-Propylbenzene	0.933	---	0.0231	mg/kg wet	50	0.993	ND	94	73-125%	5	30%	
Styrene	0.891	---	0.0463	mg/kg wet	50	0.993	ND	90	76-124%	8	30%	
1,1,1,2-Tetrachloroethane	1.26	---	0.0231	mg/kg wet	50	0.993	ND	**127**	**78-125%**	8	30%	Q-54a
1,1,2,2-Tetrachloroethane	0.988	---	0.0463	mg/kg wet	50	0.993	ND	100	70-124%	0.5	30%	
Tetrachloroethene (PCE)	0.893	---	0.0231	mg/kg wet	50	0.993	ND	90	73-128%	6	30%	
Toluene	0.866	---	0.0463	mg/kg wet	50	0.993	ND	87	77-121%	5	30%	
1,2,3-Trichlorobenzene	0.902	---	0.231	mg/kg wet	50	0.993	ND	91	66-130%	7	30%	
1,2,4-Trichlorobenzene	0.813	---	0.231	mg/kg wet	50	0.993	ND	82	67-129%	8	30%	
1,1,1-Trichloroethane	1.02	---	0.0231	mg/kg wet	50	0.993	ND	102	73-130%	8	30%	
1,1,2-Trichloroethane	0.954	---	0.0231	mg/kg wet	50	0.993	ND	96	78-121%	4	30%	
Trichloroethene (TCE)	0.977	---	0.0231	mg/kg wet	50	0.993	ND	98	77-123%	6	30%	
Trichlorofluoromethane	0.890	---	0.0926	mg/kg wet	50	0.993	ND	90	62-140%	4	30%	
1,2,3-Trichloropropane	0.955	---	0.0463	mg/kg wet	50	0.993	ND	96	73-125%	0.8	30%	
1,2,4-Trimethylbenzene	0.920	---	0.0463	mg/kg wet	50	0.993	ND	93	75-123%	5	30%	
1,3,5-Trimethylbenzene	0.929	---	0.0463	mg/kg wet	50	0.993	ND	94	73-124%	3	30%	
Vinyl chloride	0.878	---	0.0231	mg/kg wet	50	0.993	ND	88	56-135%	8	30%	
m,p-Xylene	1.73	---	0.0463	mg/kg wet	50	1.99	ND	87	77-124%	4	30%	
o-Xylene	0.840	---	0.0231	mg/kg wet	50	0.993	ND	85	77-123%	5	30%	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*106 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*99 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*98 %*		*79-120 %*			*"*				

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: Modera Morrison	
9450 SW Commerce Circle	Project Number: Millcreek-19-04	Report ID:
Wilsonville, OR 97070	Project Manager: Kyle Sattler	A1E0281 - 05 11 21 1651

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050277 - EPA 3051A							Soil					
Blank (1050277-BLK1)			Prepared: 05/10/21 07:50 Analyzed: 05/10/21 21:44									
EPA 6020B												
Arsenic	ND	---	0.962	mg/kg wet	10	---	---	---	---	---	---	
Barium	ND	---	0.962	mg/kg wet	10	---	---	---	---	---	---	
Cadmium	ND	---	0.192	mg/kg wet	10	---	---	---	---	---	---	
Chromium	ND	---	0.962	mg/kg wet	10	---	---	---	---	---	---	
Lead	ND	---	0.192	mg/kg wet	10	---	---	---	---	---	---	
Mercury	ND	---	0.0769	mg/kg wet	10	---	---	---	---	---	---	
Selenium	ND	---	0.962	mg/kg wet	10	---	---	---	---	---	---	
Silver	ND	---	0.192	mg/kg wet	10	---	---	---	---	---	---	
LCS (1050277-BS1)			Prepared: 05/10/21 07:50 Analyzed: 05/10/21 21:49									
EPA 6020B												
Arsenic	51.6	---	1.00	mg/kg wet	10	50.0	---	103	80-120%	---	---	
Barium	49.8	---	1.00	mg/kg wet	10	50.0	---	100	80-120%	---	---	
Cadmium	50.5	---	0.200	mg/kg wet	10	50.0	---	101	80-120%	---	---	
Chromium	51.6	---	1.00	mg/kg wet	10	50.0	---	103	80-120%	---	---	
Lead	50.9	---	0.200	mg/kg wet	10	50.0	---	102	80-120%	---	---	
Mercury	1.01	---	0.0800	mg/kg wet	10	1.00	---	101	80-120%	---	---	
Selenium	23.7	---	1.00	mg/kg wet	10	25.0	---	95	80-120%	---	---	
Silver	25.0	---	0.200	mg/kg wet	10	25.0	---	100	80-120%	---	---	
Duplicate (1050277-DUP1)			Prepared: 05/10/21 07:50 Analyzed: 05/10/21 23:16									
QC Source Sample: NW-PIT-Base(13) (A1E0281-05)												
EPA 6020B												
Arsenic	**4.20**	---	1.23	mg/kg dry	10	---	4.00	---	---	5	20%	
Barium	**122**	---	1.23	mg/kg dry	10	---	118	---	---	3	20%	
Cadmium	ND	---	0.246	mg/kg dry	10	---	0.150	---	---	***	20%	
Chromium	**12.5**	---	1.23	mg/kg dry	10	---	11.9	---	---	5	20%	
Lead	**8.10**	---	0.246	mg/kg dry	10	---	7.85	---	---	3	20%	
Mercury	ND	---	0.0984	mg/kg dry	10	---	ND	---	---	---	20%	
Selenium	ND	---	1.23	mg/kg dry	10	---	ND	---	---	---	20%	
Silver	ND	---	0.246	mg/kg dry	10	---	ND	---	---	---	20%	
Matrix Spike (1050277-MS1)			Prepared: 05/10/21 07:50 Analyzed: 05/10/21 23:21									

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Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0281 - 05 11 21 1651**

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050277 - EPA 3051A							**Soil**					
Matrix Spike (1050277-MS1)			Prepared: 05/10/21 07:50 Analyzed: 05/10/21 23:21									
QC Source Sample: NW-PIT-Base(13) (A1E0281-05)												
EPA 6020B												
Arsenic	68.6	---	1.27	mg/kg dry	10	63.4	4.00	102	75-125%	---	---	
Barium	187	---	1.27	mg/kg dry	10	63.4	118	109	75-125%	---	---	
Cadmium	63.0	---	0.254	mg/kg dry	10	63.4	0.150	99	75-125%	---	---	
Chromium	76.6	---	1.27	mg/kg dry	10	63.4	11.9	102	75-125%	---	---	
Lead	68.9	---	0.254	mg/kg dry	10	63.4	7.85	96	75-125%	---	---	
Mercury	1.21	---	0.101	mg/kg dry	10	1.27	ND	96	75-125%	---	---	
Selenium	30.3	---	1.27	mg/kg dry	10	31.7	ND	96	75-125%	---	---	
Silver	30.7	---	0.254	mg/kg dry	10	31.7	ND	97	75-125%	---	---	

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: Modera Morrison	
9450 SW Commerce Circle	Project Number: Millcreek-19-04	Report ID:
Wilsonville, OR 97070	Project Manager: Kyle Sattler	A1E0281 - 05 11 21 1651

QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050213 - Total Solids (Dry Weight)							Soil					
Duplicate (1050213-DUP1)			Prepared: 05/07/21 08:09		Analyzed: 05/10/21 10:03							
QC Source Sample: Non-SDG (A1E0059-02)												
% Solids	**97.0**	---	1.00	%	1	---	97.0	---	---	0.02	10%	
Duplicate (1050213-DUP2)			Prepared: 05/07/21 08:09		Analyzed: 05/10/21 10:03							
QC Source Sample: Non-SDG (A1E0247-03)												
% Solids	**77.0**	---	1.00	%	1	---	75.8	---	---	2	10%	
Duplicate (1050213-DUP3)			Prepared: 05/07/21 08:09		Analyzed: 05/10/21 10:03							
QC Source Sample: Non-SDG (A1E0250-04)												
% Solids	**86.5**	---	1.00	%	1	---	86.9	---	---	0.5	10%	
Duplicate (1050213-DUP4)			Prepared: 05/07/21 08:09		Analyzed: 05/10/21 10:03							
QC Source Sample: Non-SDG (A1E0251-03)												
% Solids	**78.3**	---	1.00	%	1	---	78.3	---	---	0.03	10%	
Duplicate (1050213-DUP5)			Prepared: 05/07/21 08:09		Analyzed: 05/10/21 10:03							
QC Source Sample: Non-SDG (A1E0256-03)												
% Solids	**82.2**	---	1.00	%	1	---	82.2	---	---	0.03	10%	
Duplicate (1050213-DUP6)			Prepared: 05/07/21 19:43		Analyzed: 05/10/21 10:03							
QC Source Sample: Non-SDG (A1E0290-02)												
% Solids	**90.1**	---	1.00	%	1	---	90.0	---	---	0.09	10%	
Duplicate (1050213-DUP7)			Prepared: 05/07/21 19:43		Analyzed: 05/10/21 10:03							
QC Source Sample: Non-SDG (A1E0302-01)												
% Solids	**74.4**	---	1.00	%	1	---	74.2	---	---	0.2	10%	

No Client related Batch QC samples analyzed for this batch. See notes page for more information.

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Philip Nerenberg, Lab Director

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0281 - 05 11 21 1651**

SAMPLE PREPARATION INFORMATION

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Prep: EPA 5035A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1050280							
A1E0281-01	Soil	NWTPH-Gx (MS)	05/07/21 13:20	05/07/21 16:43	5.77g/5mL	5g/5mL	0.87
A1E0281-02	Soil	NWTPH-Gx (MS)	05/07/21 13:30	05/07/21 16:43	5.98g/5mL	5g/5mL	0.84
A1E0281-03	Soil	NWTPH-Gx (MS)	05/07/21 13:40	05/07/21 16:43	5.52g/5mL	5g/5mL	0.91
A1E0281-04	Soil	NWTPH-Gx (MS)	05/07/21 13:45	05/07/21 16:43	5.15g/5mL	5g/5mL	0.97
A1E0281-05	Soil	NWTPH-Gx (MS)	05/07/21 13:55	05/07/21 16:43	5.58g/5mL	5g/5mL	0.90

Volatile Organic Compounds by EPA 8260D

Prep: EPA 5035A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1050280							
A1E0281-01	Soil	5035A/8260D	05/07/21 13:20	05/07/21 16:43	5.77g/5mL	5g/5mL	0.87
A1E0281-02	Soil	5035A/8260D	05/07/21 13:30	05/07/21 16:43	5.98g/5mL	5g/5mL	0.84
A1E0281-03	Soil	5035A/8260D	05/07/21 13:40	05/07/21 16:43	5.52g/5mL	5g/5mL	0.91
A1E0281-04	Soil	5035A/8260D	05/07/21 13:45	05/07/21 16:43	5.15g/5mL	5g/5mL	0.97
A1E0281-05	Soil	5035A/8260D	05/07/21 13:55	05/07/21 16:43	5.58g/5mL	5g/5mL	0.90

Total Metals by EPA 6020B (ICPMS)

Prep: EPA 3051A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1050277							
A1E0281-01	Soil	EPA 6020B	05/07/21 13:20	05/10/21 07:50	0.508g/50mL	0.5g/50mL	0.98
A1E0281-02	Soil	EPA 6020B	05/07/21 13:30	05/10/21 07:50	0.474g/50mL	0.5g/50mL	1.05
A1E0281-03	Soil	EPA 6020B	05/07/21 13:40	05/10/21 07:50	0.456g/50mL	0.5g/50mL	1.10
A1E0281-04	Soil	EPA 6020B	05/07/21 13:45	05/10/21 07:50	0.476g/50mL	0.5g/50mL	1.05
A1E0281-05	Soil	EPA 6020B	05/07/21 13:55	05/10/21 07:50	0.506g/50mL	0.5g/50mL	0.99

Percent Dry Weight

Prep: Total Solids (Dry Weight)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1050213							
A1E0281-01	Soil	EPA 8000D	05/07/21 13:20	05/07/21 19:43			NA
A1E0281-02	Soil	EPA 8000D	05/07/21 13:30	05/07/21 19:43			NA
A1E0281-03	Soil	EPA 8000D	05/07/21 13:40	05/07/21 19:43			NA

Apex Laboratories

Philip Nerenberg, Lab Director

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0281 - 05 11 21 1651**

SAMPLE PREPARATION INFORMATION

Percent Dry Weight

Prep: Total Solids (Dry Weight)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
A1E0281-04	Soil	EPA 8000D	05/07/21 13:45	05/07/21 19:43			NA
A1E0281-05	Soil	EPA 8000D	05/07/21 13:55	05/07/21 19:43			NA

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QUALIFIER DEFINITIONS

Client Sample and Quality Control (QC) Sample Qualifier Definitions:

Apex Laboratories

Q-54	Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +1%. The results are reported as Estimated Values.
Q-54a	Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +13%. The results are reported as Estimated Values.
Q-54b	Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +25%. The results are reported as Estimated Values.
Q-54c	Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +8%. The results are reported as Estimated Values.
Q-56	Daily CCV/LCS recovery for this analyte was above the +/-20% criteria listed in EPA 8260
V-15	Sample aliquot was subsampled from the sample container. The subsampled aliquot was preserved in the laboratory within 48 hours of sampling.

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REPORTING NOTES AND CONVENTIONS:

Abbreviations:

DET Analyte DETECTED at or above the detection or reporting limit.

ND Analyte NOT DETECTED at or above the detection or reporting limit.

NR Result Not Reported

RPD Relative Percent Difference. RPDs for Matrix Spikes and Matrix Spike Duplicates are based on concentration, not recovery.

Detection Limits: Limit of Detection (LOD)

Limits of Detection (LODs) are normally set at a level of one half the validated Limit of Quantitation (LOQ).
If no value is listed ('-----'), then the data has not been evaluated below the Reporting Limit.

Reporting Limits: Limit of Quantitation (LOQ)

Validated Limits of Quantitation (LOQs) are reported as the Reporting Limits for all analyses where the LOQ, MRL, PQL or CRL are requested. The LOQ represents a level at or above the low point of the calibration curve, that has been validated according to Apex Laboratories' comprehensive LOQ policies and procedures.

Reporting Conventions:

Basis: Results for soil samples are generally reported on a 100% dry weight basis.
The Result Basis is listed following the units as " dry", " wet", or " " (blank) designation.

" dry" Sample results and Reporting Limits are reported on a dry weight basis. (i.e. "ug/kg dry")
See Percent Solids section for details of dry weight analysis.

" wet" Sample results and Reporting Limits for this analysis are normally dry weight corrected, but have not been modified in this case.

" " Results without 'wet' or 'dry' designation are not normally dry weight corrected. These results are considered 'As Received'.

QC Source:

In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) may be analyzed to demonstrate accuracy and precision of the extraction batch.

Non-Client Batch QC Samples (Duplicates and Matrix Spike/Duplicates) may not be included in this report. Please request a Full QC report if this data is required.

Miscellaneous Notes:

" --- " QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.

" *** " Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

Blanks:

Standard practice is to evaluate the results from Blank QC Samples down to a level equal to ½ the Reporting Limit (RL).
-For Blank hits falling between ½ the RL and the RL (J flagged hits), the associated sample and QC data will receive a 'B-02' qualifier.
-For Blank hits above the RL, the associated sample and QC data will receive a 'B' qualifier, per Apex Laboratories' Blank Policy.
For further details, please request a copy of this document.

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REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks (Cont.):

Sample results flagged with a 'B' or 'B-02' qualifier are potentially biased high if the sample results are less than ten times the level found in the blank for inorganic analyses, or less than five times the level found in the blank for organic analyses.

'B' and 'B-02' qualifications are only applied to sample results detected above the Reporting Level.

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

Water samples containing significant amounts of sediment are decanted or separated prior to extraction, and only the water portion analyzed, unless otherwise directed by the client.

Soil and Sediment Samples:

Soil and Sediment samples containing significant amounts of water are decanted prior to extraction, and only the solid portion analyzed, unless otherwise directed by the client.

Sampling and Preservation Notes:

Certain regulatory programs, such as National Pollutant Discharge Elimination System (NPDES), require that activities such as sample filtration (for dissolved metals, orthophosphate, hexavalent chromium, etc.) and testing of short hold analytes (pH, Dissolved Oxygen, etc.) be performed in the field (on-site) within a short time window. In addition, sample matrix spikes are required for some analyses, and sufficient volume must be provided, and billable site specific QC requested, if this is required. All regulatory permits should be reviewed to ensure that these requirements are being met.

Data users should be aware of which regulations pertain to the samples they submit for testing. If related sample collection activities are not approved for a particular regulatory program, results should be considered estimates. Apex Laboratories will qualify these analytes according to the most stringent requirements, however results for samples that are for non-regulatory purposes may be acceptable.

Samples that have been filtered and preserved at Apex Laboratories per client request are listed in the preparation section of the report with the date and time of filtration listed.

Apex Laboratories maintains detailed records on sample receipt, including client label verification, cooler temperature, sample preservation, hold time compliance and field filtration. Data is qualified as necessary, and the lack of qualification indicates compliance with required parameters.

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ANALYTICAL REPORT

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LABORATORY ACCREDITATION INFORMATION

ORELAP Certification ID: OR100062 (Primary Accreditation) - EPA ID: OR01039

All methods and analytes reported from work performed at Apex Laboratories are included on Apex Laboratories' ORELAP Scope of Certification, with the exception of any analyte(s) listed below:

Apex Laboratories

Matrix	Analysis	TNI_ID	Analyte	TNI_ID	Accreditation

All reported analytes are included in Apex Laboratories' current ORELAP scope.

Secondary Accreditations

Apex Laboratories also maintains reciprocal accreditation with non-TNI states (Washington DOE), as well as other state specific accreditations not listed here.

Subcontract Laboratory Accreditations

Subcontracted data falls outside of Apex Laboratories' Scope of Accreditation.
Please see the Subcontract Laboratory report for full details, or contact your Project Manager for more information.

Field Testing Parameters

Results for Field Tested data are provded by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.

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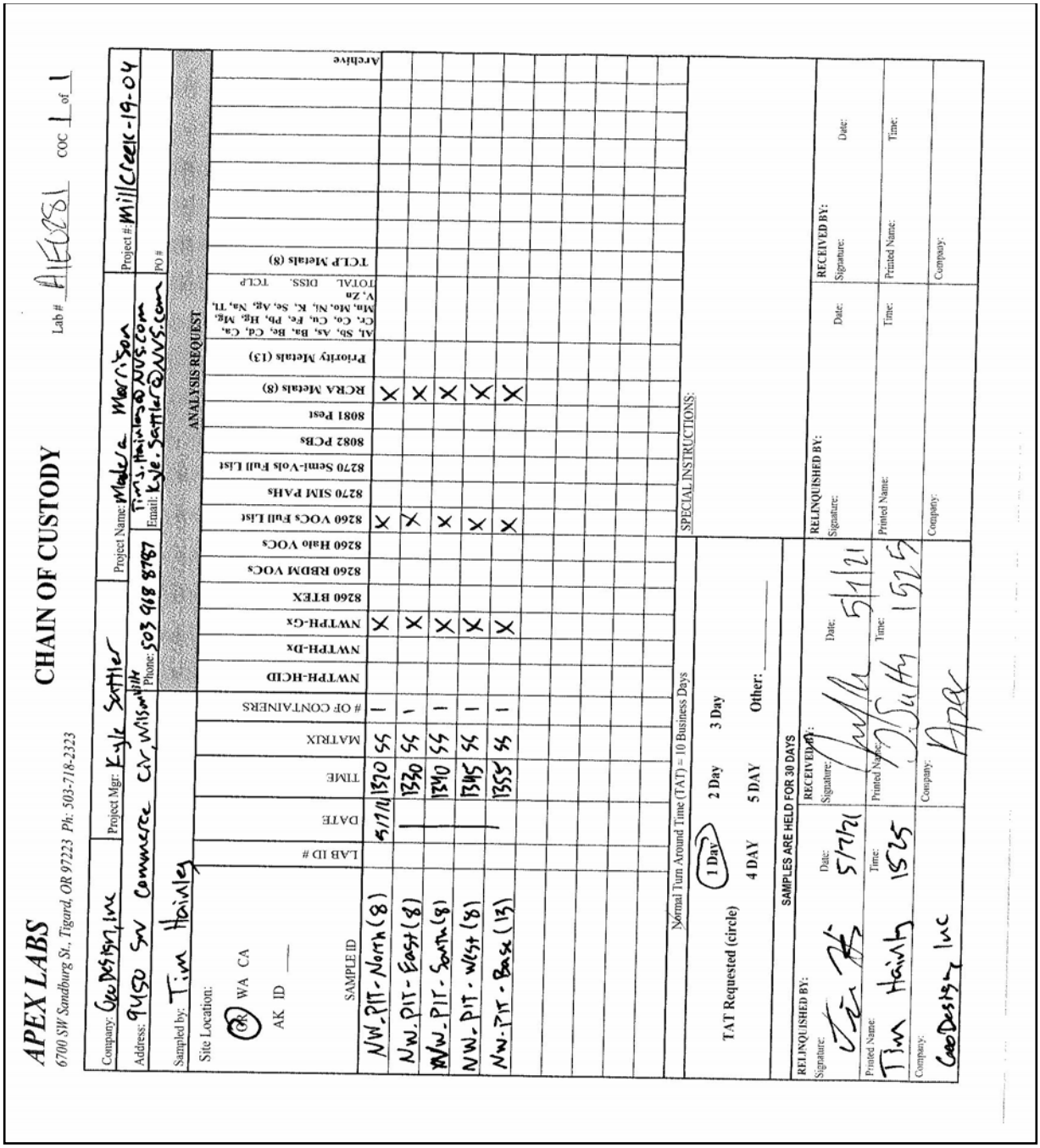

APEX LABS
6700 SW Sandburg St. Tigard, OR 97223 Ph. 503-718-2323

CHAIN OF CUSTODY

Lab # A1E0281 COC 1 of 1

Company: GeoDesign, Inc | Project Mgr: Kyle Sattler | Project Name: Modera Morrison | Project #: Millcreek-19-04
Address: 9450 SW Commerce Cir, Wilsonville OR | Phone: 503 968 8787 | Email: Kyle.Sattler@NVS.com | PO #
Sampled by: Tim Hainley

Site Location: (X) WA CA AK ID ___

ANALYSIS REQUEST

SAMPLE ID	LAB ID #	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 BTEX	8260 RBDM VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIM PAHs	8270 Semi-Vols Full List	8082 PCBs	8081 Pest	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn TOTAL DISS. TCLP	TCLP Metals (8)	Archive
NW-PIT-North (8)		5/11/21	1320	SS	1			X				X					X			
NW-PIT-East (8)			1330	SS	1			X				X					X			
NW-PIT-South (8)			1340	SS	1			X				X					X			
NW-PIT-West (8)			1345	SS	1			X				X					X			
NW-PIT-Base (13)			1355	SS	1			X				X					X			

Normal Turn Around Time (TAT) = 10 Business Days

TAT Requested (circle): (1 Day) 2 Day 3 Day 4 DAY 5 DAY Other: ___

SPECIAL INSTRUCTIONS:

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature:	Signature:	Signature:	Signature:
Date: 5/7/21	Date: 5/11/21	Date:	Date:
Time: 1525	Time: 1525	Time:	Time:
Printed Name: Tim Hainley	Printed Name:	Printed Name:	Printed Name:
Company: GeoDesign Inc	Company: Apex	Company:	Company:

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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ANALYTICAL REPORT

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9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0281 - 05 11 21 1651**

APEX LABS COOLER RECEIPT FORM

Client: GeoDesign, Inc. Element WO#: A1 E0281

Project/Project #: Modera Morrison Millcreek-19-04

Delivery Info:

Date/time received: 5/7/21 @ 1525 By: JS

Delivered by: Apex ___ Client X ESS ___ FedEx ___ UPS ___ Swift ___ Senvoy ___ SDS ___ Other ___

Cooler Inspection Date/time inspected: 5/7/21 @ 1540 By: JS

Chain of Custody included? Yes X No ___ Custody seals? Yes ___ No X

Signed/dated by client? Yes X No ___

Signed/dated by Apex? Yes X No ___

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	0.8						
Received on ice? (Y/N)	Y						
Temp. blanks? (Y/N)	N						
Ice type: (Gel/Real/Other)	Real						
Condition:	good						

Cooler out of temp? (Y(N) Possible reason why: ___

Green dots applied to out of temperature samples? Yes (No)

Out of temperature samples form initiated? Yes (No)

Sample Inspection: Date/time inspected: 5/7/21 @ 1600 By: JS

All samples intact? Yes X No ___ Comments: ___

Bottle labels/COCs agree? Yes ___ No X Comments: Missing Prefix NW on all Sample Containers.

COC/container discrepancies form initiated? Yes ___ No X

Containers/volumes received appropriate for analysis? Yes ✓ No ___ Comments: ___

Do VOA vials have visible headspace? Yes ___ No ___ NA X

Comments ___

Water samples: pH checked: Yes ___ No ___ NA ✓ pH appropriate? Yes ___ No ___ NA ✓

Comments: ___

Additional information: ___

Labeled by: JS Witness: [illegible] Cooler Inspected by: JS

Apex Laboratories, LLC
6700 S.W. Sandburg Street
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ANALYTICAL REPORT

Wednesday, June 2, 2021

Kyle Sattler
GeoDesign, Inc.
9450 SW Commerce Circle
Wilsonville, OR 97070

RE: A1E0409 - Modera Morrison - Millcreek-19-04

Thank you for using Apex Laboratories. We greatly appreciate your business and strive to provide the highest quality services to the environmental industry.

Enclosed are the results of analyses for work order A1E0409, which was received by the laboratory on 5/11/2021 at 2:45:00PM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: pnerenberg@apex-labs.com, or by phone at 503-718-2323.

Please note: All samples will be disposed of within 30 days of sample receipt, unless prior arrangements have been made.

Cooler Receipt Information

(See Cooler Receipt Form for details)

Cooler#1	1.9 degC

This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.
All other deliverables derived from this data, including Electronic Data Deliverables (EDDs), CLP-like forms, client requested summary sheets, and all other products are considered secondary to this report.

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0409 - 06 02 21 1816**

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TK8-SWE(8)	A1E0409-01	Soil	05/11/21 11:55	05/11/21 14:45
TK8-SWN(7)	A1E0409-02	Soil	05/11/21 12:00	05/11/21 14:45
TK8-SWS(8)	A1E0409-03	Soil	05/11/21 12:10	05/11/21 14:45
TK8-SWW-1(8)	A1E0409-04	Soil	05/11/21 12:20	05/11/21 14:45
TK8-SWW-2(8)	A1E0409-05	Soil	05/11/21 12:40	05/11/21 14:45
TK8-SWW-3(10)	A1E0409-06	Soil	05/11/21 13:00	05/11/21 14:45
TK8-BN(9.5)	A1E0409-07	Soil	05/11/21 12:25	05/11/21 14:45
TK8-BS(11.5)	A1E0409-08	Soil	05/11/21 12:30	05/11/21 14:45
TK8-BS(14)	A1E0409-09	Soil	05/11/21 13:30	05/11/21 14:45
TK4-S7	A1E0409-10	Soil	05/11/21 13:45	05/11/21 14:45

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9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0409 - 06 02 21 1816**

ANALYTICAL SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
TK8-SWE(8) (A1E0409-01)				**Matrix: Soil**		**Batch: 1050555**		
Gasoline Range Organics	ND	---	6.69	mg/kg dry	50	05/17/21 12:58	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 96 %*	*Limits: 50-150 %*		*1*	*05/17/21 12:58*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)		*123 %*	*50-150 %*		*1*	*05/17/21 12:58*	*NWTPH-Gx (MS)*	
TK8-SWN(7) (A1E0409-02)				**Matrix: Soil**		**Batch: 1050555**		
Gasoline Range Organics	**28.8**	---	8.73	mg/kg dry	50	05/17/21 13:52	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 110 %*	*Limits: 50-150 %*		*1*	*05/17/21 13:52*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)		*123 %*	*50-150 %*		*1*	*05/17/21 13:52*	*NWTPH-Gx (MS)*	
TK8-SWS(8) (A1E0409-03RE1)				**Matrix: Soil**		**Batch: 1050611**		
Gasoline Range Organics	**25100**	---	1590	mg/kg dry	10000	05/18/21 18:40	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 114 %*	*Limits: 50-150 %*		*1*	*05/18/21 18:40*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)		*98 %*	*50-150 %*		*1*	*05/18/21 18:40*	*NWTPH-Gx (MS)*	
TK8-SWW-1(8) (A1E0409-04RE1)				**Matrix: Soil**		**Batch: 1050611**		
Gasoline Range Organics	**7500**	---	147	mg/kg dry	1000	05/18/21 19:34	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 155 %*	*Limits: 50-150 %*		*1*	*05/18/21 19:34*	*NWTPH-Gx (MS)*	*S-02*
1,4-Difluorobenzene (Sur)		*101 %*	*50-150 %*		*1*	*05/18/21 19:34*	*NWTPH-Gx (MS)*	
TK8-SWW-2(8) (A1E0409-05RE1)				**Matrix: Soil**		**Batch: 1050611**		
Gasoline Range Organics	**39500**	---	1540	mg/kg dry	10000	05/18/21 19:07	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 114 %*	*Limits: 50-150 %*		*1*	*05/18/21 19:07*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)		*93 %*	*50-150 %*		*1*	*05/18/21 19:07*	*NWTPH-Gx (MS)*	
TK8-SWW-3(10) (A1E0409-06)				**Matrix: Soil**		**Batch: 1050555**		
Gasoline Range Organics	ND	---	7.19	mg/kg dry	50	05/17/21 14:19	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 97 %*	*Limits: 50-150 %*		*1*	*05/17/21 14:19*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)		*119 %*	*50-150 %*		*1*	*05/17/21 14:19*	*NWTPH-Gx (MS)*	
TK8-BN(9.5) (A1E0409-07)				**Matrix: Soil**		**Batch: 1050555**		
Gasoline Range Organics	ND	---	7.01	mg/kg dry	50	05/17/21 14:46	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 101 %*	*Limits: 50-150 %*		*1*	*05/17/21 14:46*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)		*121 %*	*50-150 %*		*1*	*05/17/21 14:46*	*NWTPH-Gx (MS)*	
TK8-BS(11.5) (A1E0409-08)				**Matrix: Soil**		**Batch: 1050555**		

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Philip Nerenberg, Lab Director

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0409 - 06 02 21 1816**

ANALYTICAL SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
TK8-BS(11.5) (A1E0409-08)				**Matrix: Soil**		**Batch: 1050555**		
Gasoline Range Organics	**231**	---	6.48	mg/kg dry	50	05/17/21 15:13	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 108 %*	*Limits: 50-150 %*		*1*	*05/17/21 15:13*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*119 %*	*50-150 %*	*1*	*05/17/21 15:13*	*NWTPH-Gx (MS)*	
TK8-BS(14) (A1E0409-09)				**Matrix: Soil**		**Batch: 1050555**		
Gasoline Range Organics	ND	---	6.53	mg/kg dry	50	05/17/21 15:40	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 95 %*	*Limits: 50-150 %*		*1*	*05/17/21 15:40*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*120 %*	*50-150 %*	*1*	*05/17/21 15:40*	*NWTPH-Gx (MS)*	

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9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0409 - 06 02 21 1816**

ANALYTICAL SAMPLE RESULTS

BTEX Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
TK4-S7 (A1E0409-10)				**Matrix: Soil**		**Batch: 1050555**		**V-15**
Benzene	**0.0127**	---	0.00980	mg/kg dry	50	05/17/21 18:53	5035A/8260D	
Toluene	ND	---	0.0490	mg/kg dry	50	05/17/21 18:53	5035A/8260D	
Ethylbenzene	ND	---	0.0245	mg/kg dry	50	05/17/21 18:53	5035A/8260D	
Xylenes, total	ND	---	0.0735	mg/kg dry	50	05/17/21 18:53	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*110 %*	*Limits: 80-120 %*	*1*	*05/17/21 18:53*	*5035A/8260D*	
Toluene-d8 (Surr)			*106 %*	*80-120 %*	*1*	*05/17/21 18:53*	*5035A/8260D*	
4-Bromofluorobenzene (Surr)			*95 %*	*79-120 %*	*1*	*05/17/21 18:53*	*5035A/8260D*	

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ANALYTICAL REPORT

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9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0409 - 06 02 21 1816**

ANALYTICAL SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 5035A/8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
TK8-SWN(7) (A1E0409-02)				**Matrix: Soil**		**Batch: 1050555**		
Benzene	ND	---	0.0175	mg/kg dry	50	05/17/21 13:52	5035A/8260D	
Toluene	ND	---	0.0873	mg/kg dry	50	05/17/21 13:52	5035A/8260D	
Ethylbenzene	ND	---	0.0437	mg/kg dry	50	05/17/21 13:52	5035A/8260D	
Xylenes, total	ND	---	0.131	mg/kg dry	50	05/17/21 13:52	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	0.0873	mg/kg dry	50	05/17/21 13:52	5035A/8260D	
Naphthalene	ND	---	0.175	mg/kg dry	50	05/17/21 13:52	5035A/8260D	
1,2-Dibromoethane (EDB)	ND	---	0.0873	mg/kg dry	50	05/17/21 13:52	5035A/8260D	
1,2-Dichloroethane (EDC)	ND	---	0.0437	mg/kg dry	50	05/17/21 13:52	5035A/8260D	
Isopropylbenzene	ND	---	0.0873	mg/kg dry	50	05/17/21 13:52	5035A/8260D	
1,2,4-Trimethylbenzene	ND	---	0.0873	mg/kg dry	50	05/17/21 13:52	5035A/8260D	
1,3,5-Trimethylbenzene	ND	---	0.0873	mg/kg dry	50	05/17/21 13:52	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*111 %*	*Limits: 80-120 %*	*1*	*05/17/21 13:52*	*5035A/8260D*	
Toluene-d8 (Surr)			*106 %*	*80-120 %*	*1*	*05/17/21 13:52*	*5035A/8260D*	
4-Bromofluorobenzene (Surr)			*90 %*	*79-120 %*	*1*	*05/17/21 13:52*	*5035A/8260D*	
TK8-SWS(8) (A1E0409-03)				**Matrix: Soil**		**Batch: 1050555**		
Benzene	**58.0**	---	0.159	mg/kg dry	500	05/17/21 20:14	5035A/8260D	
Ethylbenzene	**144**	---	0.396	mg/kg dry	500	05/17/21 20:14	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	0.793	mg/kg dry	500	05/17/21 20:14	5035A/8260D	
Naphthalene	**47.9**	---	1.59	mg/kg dry	500	05/17/21 20:14	5035A/8260D	
1,2-Dibromoethane (EDB)	ND	---	0.793	mg/kg dry	500	05/17/21 20:14	5035A/8260D	
1,2-Dichloroethane (EDC)	ND	---	1.43	mg/kg dry	500	05/17/21 20:14	5035A/8260D	R-02
Isopropylbenzene	**36.9**	---	0.793	mg/kg dry	500	05/17/21 20:14	5035A/8260D	
1,3,5-Trimethylbenzene	**119**	---	0.793	mg/kg dry	500	05/17/21 20:14	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*120 %*	*Limits: 80-120 %*	*1*	*05/17/21 20:14*	*5035A/8260D*	
Toluene-d8 (Surr)			*107 %*	*80-120 %*	*1*	*05/17/21 20:14*	*5035A/8260D*	
4-Bromofluorobenzene (Surr)			*89 %*	*79-120 %*	*1*	*05/17/21 20:14*	*5035A/8260D*	
TK8-SWS(8) (A1E0409-03RE1)				**Matrix: Soil**		**Batch: 1050611**		
Toluene	**332**	---	15.9	mg/kg dry	10000	05/18/21 18:40	5035A/8260D	
Xylenes, total	**800**	---	23.8	mg/kg dry	10000	05/18/21 18:40	5035A/8260D	
1,2,4-Trimethylbenzene	**364**	---	15.9	mg/kg dry	10000	05/18/21 18:40	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*107 %*	*Limits: 80-120 %*	*1*	*05/18/21 18:40*	*5035A/8260D*	
Toluene-d8 (Surr)			*98 %*	*80-120 %*	*1*	*05/18/21 18:40*	*5035A/8260D*	

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: Modera Morrison	
9450 SW Commerce Circle	Project Number: Millcreek-19-04	Report ID:
Wilsonville, OR 97070	Project Manager: Kyle Sattler	A1E0409 - 06 02 21 1816

ANALYTICAL SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 5035A/8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
TK8-SWS(8) (A1E0409-03RE1)				**Matrix: Soil**		**Batch: 1050611**		
Surrogate: 4-Bromofluorobenzene (Surr)		*Recovery: 98 %*		*Limits: 79-120 %*	*1*	*05/18/21 18:40*	*5035A/8260D*	
TK8-SWW-1(8) (A1E0409-04RE1)				**Matrix: Soil**		**Batch: 1050611**		
Benzene	**7.51**	---	0.295	mg/kg dry	1000	05/18/21 19:34	5035A/8260D	
Toluene	**7.84**	---	1.47	mg/kg dry	1000	05/18/21 19:34	5035A/8260D	
Ethylbenzene	**27.6**	---	0.737	mg/kg dry	1000	05/18/21 19:34	5035A/8260D	
Xylenes, total	**95.5**	---	2.21	mg/kg dry	1000	05/18/21 19:34	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	1.47	mg/kg dry	1000	05/18/21 19:34	5035A/8260D	
Naphthalene	**7.37**	---	2.95	mg/kg dry	1000	05/18/21 19:34	5035A/8260D	**Q-54**
1,2-Dibromoethane (EDB)	ND	---	1.47	mg/kg dry	1000	05/18/21 19:34	5035A/8260D	
1,2-Dichloroethane (EDC)	ND	---	0.737	mg/kg dry	1000	05/18/21 19:34	5035A/8260D	
Isopropylbenzene	**8.61**	---	1.47	mg/kg dry	1000	05/18/21 19:34	5035A/8260D	
1,2,4-Trimethylbenzene	**108**	---	1.47	mg/kg dry	1000	05/18/21 19:34	5035A/8260D	
1,3,5-Trimethylbenzene	**4.98**	---	1.47	mg/kg dry	1000	05/18/21 19:34	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery: 105 %*		*Limits: 80-120 %*	*1*	*05/18/21 19:34*	*5035A/8260D*	
Toluene-d8 (Surr)			*102 %*	*80-120 %*	*1*	*05/18/21 19:34*	*5035A/8260D*	
4-Bromofluorobenzene (Surr)			*96 %*	*79-120 %*	*1*	*05/18/21 19:34*	*5035A/8260D*	
TK8-SWW-2(8) (A1E0409-05RE1)				**Matrix: Soil**		**Batch: 1050611**		
Benzene	**276**	---	3.09	mg/kg dry	10000	05/18/21 19:07	5035A/8260D	
Toluene	**1090**	---	15.4	mg/kg dry	10000	05/18/21 19:07	5035A/8260D	
Ethylbenzene	**282**	---	7.72	mg/kg dry	10000	05/18/21 19:07	5035A/8260D	
Xylenes, total	**1720**	---	23.2	mg/kg dry	10000	05/18/21 19:07	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	15.4	mg/kg dry	10000	05/18/21 19:07	5035A/8260D	
Naphthalene	**57.2**	---	30.9	mg/kg dry	10000	05/18/21 19:07	5035A/8260D	**Q-54**
1,2-Dibromoethane (EDB)	ND	---	15.4	mg/kg dry	10000	05/18/21 19:07	5035A/8260D	
1,2-Dichloroethane (EDC)	**11.8**	---	7.72	mg/kg dry	10000	05/18/21 19:07	5035A/8260D	
Isopropylbenzene	**61.6**	---	15.4	mg/kg dry	10000	05/18/21 19:07	5035A/8260D	
1,2,4-Trimethylbenzene	**676**	---	15.4	mg/kg dry	10000	05/18/21 19:07	5035A/8260D	
1,3,5-Trimethylbenzene	**199**	---	15.4	mg/kg dry	10000	05/18/21 19:07	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery: 106 %*		*Limits: 80-120 %*	*1*	*05/18/21 19:07*	*5035A/8260D*	
Toluene-d8 (Surr)			*101 %*	*80-120 %*	*1*	*05/18/21 19:07*	*5035A/8260D*	
4-Bromofluorobenzene (Surr)			*100 %*	*79-120 %*	*1*	*05/18/21 19:07*	*5035A/8260D*	

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0409 - 06 02 21 1816**

ANALYTICAL SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 5035A/8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
TK8-BS(11.5) (A1E0409-08)				**Matrix: Soil**		**Batch: 1050555**		
Benzene	**0.624**	---	0.0130	mg/kg dry	50	05/17/21 15:13	5035A/8260D	
Toluene	**0.519**	---	0.0648	mg/kg dry	50	05/17/21 15:13	5035A/8260D	
Ethylbenzene	**0.268**	---	0.0324	mg/kg dry	50	05/17/21 15:13	5035A/8260D	
Xylenes, total	**1.92**	---	0.0972	mg/kg dry	50	05/17/21 15:13	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	0.0648	mg/kg dry	50	05/17/21 15:13	5035A/8260D	
Naphthalene	**0.338**	---	0.130	mg/kg dry	50	05/17/21 15:13	5035A/8260D	
1,2-Dibromoethane (EDB)	ND	---	0.0648	mg/kg dry	50	05/17/21 15:13	5035A/8260D	
1,2-Dichloroethane (EDC)	ND	---	0.0324	mg/kg dry	50	05/17/21 15:13	5035A/8260D	
Isopropylbenzene	**0.0719**	---	0.0648	mg/kg dry	50	05/17/21 15:13	5035A/8260D	
1,2,4-Trimethylbenzene	**1.41**	---	0.0648	mg/kg dry	50	05/17/21 15:13	5035A/8260D	
1,3,5-Trimethylbenzene	**0.488**	---	0.0648	mg/kg dry	50	05/17/21 15:13	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*106 %*	*Limits: 80-120 %*	*1*	*05/17/21 15:13*	*5035A/8260D*	
Toluene-d8 (Surr)			*102 %*	*80-120 %*	*1*	*05/17/21 15:13*	*5035A/8260D*	
4-Bromofluorobenzene (Surr)			*89 %*	*79-120 %*	*1*	*05/17/21 15:13*	*5035A/8260D*	

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Philip Nerenberg, Lab Director

Apex Laboratories, LLC
6700 S.W. Sandburg Street
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503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

GeoDesign, Inc.	Project: Modera Morrison	
9450 SW Commerce Circle	Project Number: Millcreek-19-04	Report ID:
Wilsonville, OR 97070	Project Manager: Kyle Sattler	A1E0409 - 06 02 21 1816

ANALYTICAL SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E SIM

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
TK4-S7 (A1E0409-10)				**Matrix: Soil**		**Batch: 1050489**		
Acenaphthene	ND	---	0.0104	mg/kg dry	1	05/14/21 12:25	EPA 8270E SIM	
Acenaphthylene	ND	---	0.0104	mg/kg dry	1	05/14/21 12:25	EPA 8270E SIM	
Anthracene	ND	---	0.0104	mg/kg dry	1	05/14/21 12:25	EPA 8270E SIM	
Benz(a)anthracene	ND	---	0.0104	mg/kg dry	1	05/14/21 12:25	EPA 8270E SIM	
Benzo(a)pyrene	ND	---	0.0104	mg/kg dry	1	05/14/21 12:25	EPA 8270E SIM	
Benzo(b)fluoranthene	ND	---	0.0104	mg/kg dry	1	05/14/21 12:25	EPA 8270E SIM	
Benzo(k)fluoranthene	ND	---	0.0104	mg/kg dry	1	05/14/21 12:25	EPA 8270E SIM	
Benzo(g,h,i)perylene	ND	---	0.0104	mg/kg dry	1	05/14/21 12:25	EPA 8270E SIM	
Chrysene	ND	---	0.0104	mg/kg dry	1	05/14/21 12:25	EPA 8270E SIM	
Dibenz(a,h)anthracene	ND	---	0.0104	mg/kg dry	1	05/14/21 12:25	EPA 8270E SIM	
Fluoranthene	ND	---	0.0104	mg/kg dry	1	05/14/21 12:25	EPA 8270E SIM	
Fluorene	ND	---	0.0104	mg/kg dry	1	05/14/21 12:25	EPA 8270E SIM	
Indeno(1,2,3-cd)pyrene	ND	---	0.0104	mg/kg dry	1	05/14/21 12:25	EPA 8270E SIM	
1-Methylnaphthalene	ND	---	0.0104	mg/kg dry	1	05/14/21 12:25	EPA 8270E SIM	
2-Methylnaphthalene	ND	---	0.0104	mg/kg dry	1	05/14/21 12:25	EPA 8270E SIM	
Naphthalene	ND	---	0.0104	mg/kg dry	1	05/14/21 12:25	EPA 8270E SIM	
Phenanthrene	ND	---	0.0104	mg/kg dry	1	05/14/21 12:25	EPA 8270E SIM	
Pyrene	ND	---	0.0104	mg/kg dry	1	05/14/21 12:25	EPA 8270E SIM	
Dibenzofuran	ND	---	0.0104	mg/kg dry	1	05/14/21 12:25	EPA 8270E SIM	
Surrogate: 2-Fluorobiphenyl (Surr)		*Recovery:*	*75 %*	*Limits: 44-120 %*	*1*	*05/14/21 12:25*	*EPA 8270E SIM*	
p-Terphenyl-d14 (Surr)			*77 %*	*54-127 %*	*1*	*05/14/21 12:25*	*EPA 8270E SIM*	

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0409 - 06 02 21 1816**

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
TK8-SWE(8) (A1E0409-01)				**Matrix: Soil**				
Batch: 1050458								
Arsenic	**8.94**	---	1.26	mg/kg dry	10	05/13/21 16:08	EPA 6020B	
Barium	**180**	---	1.26	mg/kg dry	10	05/13/21 16:08	EPA 6020B	
Cadmium	ND	---	0.252	mg/kg dry	10	05/13/21 16:08	EPA 6020B	
Chromium	**19.2**	---	1.26	mg/kg dry	10	05/13/21 16:08	EPA 6020B	
Lead	**11.9**	---	0.252	mg/kg dry	10	05/13/21 16:08	EPA 6020B	
Mercury	ND	---	0.101	mg/kg dry	10	05/13/21 16:08	EPA 6020B	
Selenium	ND	---	1.26	mg/kg dry	10	05/13/21 16:08	EPA 6020B	
Silver	ND	---	0.252	mg/kg dry	10	05/13/21 16:08	EPA 6020B	
TK8-SWN(7) (A1E0409-02)				**Matrix: Soil**				
Batch: 1050458								
Arsenic	**4.82**	---	1.37	mg/kg dry	10	05/13/21 16:32	EPA 6020B	
Barium	**133**	---	1.37	mg/kg dry	10	05/13/21 16:32	EPA 6020B	
Cadmium	ND	---	0.274	mg/kg dry	10	05/13/21 16:32	EPA 6020B	
Chromium	**15.4**	---	1.37	mg/kg dry	10	05/13/21 16:32	EPA 6020B	
Lead	**8.29**	---	0.274	mg/kg dry	10	05/13/21 16:32	EPA 6020B	
Mercury	ND	---	0.110	mg/kg dry	10	05/13/21 16:32	EPA 6020B	
Selenium	ND	---	1.37	mg/kg dry	10	05/13/21 16:32	EPA 6020B	
Silver	ND	---	0.274	mg/kg dry	10	05/13/21 16:32	EPA 6020B	
TK8-SWS(8) (A1E0409-03)				**Matrix: Soil**				
Batch: 1050458								
Arsenic	**8.33**	---	1.31	mg/kg dry	10	05/13/21 16:36	EPA 6020B	
Barium	**169**	---	1.31	mg/kg dry	10	05/13/21 16:36	EPA 6020B	
Cadmium	ND	---	0.261	mg/kg dry	10	05/13/21 16:36	EPA 6020B	
Chromium	**19.2**	---	1.31	mg/kg dry	10	05/13/21 16:36	EPA 6020B	
Lead	**18.4**	---	0.261	mg/kg dry	10	05/13/21 16:36	EPA 6020B	
Mercury	ND	---	0.105	mg/kg dry	10	05/13/21 16:36	EPA 6020B	
Selenium	ND	---	1.31	mg/kg dry	10	05/13/21 16:36	EPA 6020B	
Silver	ND	---	0.261	mg/kg dry	10	05/13/21 16:36	EPA 6020B	
TK8-SWW-1(8) (A1E0409-04)				**Matrix: Soil**				
Batch: 1050458								

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0409 - 06 02 21 1816**

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
TK8-SWW-1(8) (A1E0409-04)				**Matrix: Soil**				
Arsenic	**5.61**	---	1.34	mg/kg dry	10	05/13/21 16:41	EPA 6020B	
Barium	**186**	---	1.34	mg/kg dry	10	05/13/21 16:41	EPA 6020B	
Cadmium	ND	---	0.268	mg/kg dry	10	05/13/21 16:41	EPA 6020B	
Chromium	**22.7**	---	1.34	mg/kg dry	10	05/13/21 16:41	EPA 6020B	
Lead	**21.7**	---	0.268	mg/kg dry	10	05/13/21 16:41	EPA 6020B	
Mercury	ND	---	0.107	mg/kg dry	10	05/13/21 16:41	EPA 6020B	
Selenium	ND	---	1.34	mg/kg dry	10	05/13/21 16:41	EPA 6020B	
Silver	ND	---	0.268	mg/kg dry	10	05/13/21 16:41	EPA 6020B	
TK8-SWW-2(8) (A1E0409-05)				**Matrix: Soil**				
Batch: 1050458								
Arsenic	**4.66**	---	1.25	mg/kg dry	10	05/13/21 16:46	EPA 6020B	
Barium	**133**	---	1.25	mg/kg dry	10	05/13/21 16:46	EPA 6020B	
Cadmium	**1.75**	---	0.249	mg/kg dry	10	05/13/21 16:46	EPA 6020B	
Chromium	**15.6**	---	1.25	mg/kg dry	10	05/13/21 16:46	EPA 6020B	
Lead	**62.5**	---	0.249	mg/kg dry	10	05/13/21 16:46	EPA 6020B	
Mercury	ND	---	0.0998	mg/kg dry	10	05/13/21 16:46	EPA 6020B	
Selenium	ND	---	1.25	mg/kg dry	10	05/13/21 16:46	EPA 6020B	
Silver	ND	---	0.249	mg/kg dry	10	05/13/21 16:46	EPA 6020B	
TK8-SWW-3(10) (A1E0409-06)				**Matrix: Soil**				
Batch: 1050458								
Arsenic	**5.78**	---	1.23	mg/kg dry	10	05/13/21 16:51	EPA 6020B	
Barium	**124**	---	1.23	mg/kg dry	10	05/13/21 16:51	EPA 6020B	
Cadmium	ND	---	0.246	mg/kg dry	10	05/13/21 16:51	EPA 6020B	
Chromium	**15.7**	---	1.23	mg/kg dry	10	05/13/21 16:51	EPA 6020B	
Lead	**8.94**	---	0.246	mg/kg dry	10	05/13/21 16:51	EPA 6020B	
Mercury	ND	---	0.0986	mg/kg dry	10	05/13/21 16:51	EPA 6020B	
Selenium	ND	---	1.23	mg/kg dry	10	05/13/21 16:51	EPA 6020B	
Silver	ND	---	0.246	mg/kg dry	10	05/13/21 16:51	EPA 6020B	
TK8-BN(9.5) (A1E0409-07)				**Matrix: Soil**				
Batch: 1050458								
Arsenic	**4.66**	---	1.19	mg/kg dry	10	05/13/21 16:55	EPA 6020B	

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0409 - 06 02 21 1816**

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
TK8-BN(9.5) (A1E0409-07)				**Matrix: Soil**				
Barium	**140**	---	1.19	mg/kg dry	10	05/13/21 16:55	EPA 6020B	
Cadmium	ND	---	0.238	mg/kg dry	10	05/13/21 16:55	EPA 6020B	
Chromium	**11.7**	---	1.19	mg/kg dry	10	05/13/21 16:55	EPA 6020B	
Lead	**6.30**	---	0.238	mg/kg dry	10	05/13/21 16:55	EPA 6020B	
Mercury	ND	---	0.0952	mg/kg dry	10	05/13/21 16:55	EPA 6020B	
Selenium	ND	---	1.19	mg/kg dry	10	05/13/21 16:55	EPA 6020B	
Silver	ND	---	0.238	mg/kg dry	10	05/13/21 16:55	EPA 6020B	
TK8-BS(11.5) (A1E0409-08)				**Matrix: Soil**				
Batch: 1050458								
Arsenic	**6.04**	---	1.35	mg/kg dry	10	05/13/21 17:00	EPA 6020B	
Barium	**128**	---	1.35	mg/kg dry	10	05/13/21 17:00	EPA 6020B	
Cadmium	ND	---	0.271	mg/kg dry	10	05/13/21 17:00	EPA 6020B	
Chromium	**19.4**	---	1.35	mg/kg dry	10	05/13/21 17:00	EPA 6020B	
Lead	**13.9**	---	0.271	mg/kg dry	10	05/13/21 17:00	EPA 6020B	
Mercury	ND	---	0.108	mg/kg dry	10	05/13/21 17:00	EPA 6020B	
Selenium	ND	---	1.35	mg/kg dry	10	05/13/21 17:00	EPA 6020B	
Silver	ND	---	0.271	mg/kg dry	10	05/13/21 17:00	EPA 6020B	
TK8-BS(14) (A1E0409-09)				**Matrix: Soil**				
Batch: 1050458								
Arsenic	**2.58**	---	1.19	mg/kg dry	10	05/13/21 17:05	EPA 6020B	
Barium	**118**	---	1.19	mg/kg dry	10	05/13/21 17:05	EPA 6020B	
Cadmium	ND	---	0.238	mg/kg dry	10	05/13/21 17:05	EPA 6020B	
Chromium	**8.75**	---	1.19	mg/kg dry	10	05/13/21 17:05	EPA 6020B	
Lead	**5.11**	---	0.238	mg/kg dry	10	05/13/21 17:05	EPA 6020B	
Mercury	ND	---	0.0951	mg/kg dry	10	05/13/21 17:05	EPA 6020B	
Selenium	ND	---	1.19	mg/kg dry	10	05/13/21 17:05	EPA 6020B	
Silver	ND	---	0.238	mg/kg dry	10	05/13/21 17:05	EPA 6020B	

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ANALYTICAL REPORT

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9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0409 - 06 02 21 1816**

ANALYTICAL SAMPLE RESULTS

Percent Dry Weight

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
TK8-SWE(8) (A1E0409-01)				**Matrix: Soil**		**Batch: 1050441**		
% Solids	**82.6**	---	1.00	%	1	05/14/21 08:18	EPA 8000D	
TK8-SWN(7) (A1E0409-02)				**Matrix: Soil**		**Batch: 1050441**		
% Solids	**78.3**	---	1.00	%	1	05/14/21 08:18	EPA 8000D	
TK8-SWS(8) (A1E0409-03)				**Matrix: Soil**		**Batch: 1050441**		
% Solids	**78.2**	---	1.00	%	1	05/14/21 08:18	EPA 8000D	
TK8-SWW-1(8) (A1E0409-04)				**Matrix: Soil**		**Batch: 1050441**		
% Solids	**74.1**	---	1.00	%	1	05/14/21 08:18	EPA 8000D	
TK8-SWW-2(8) (A1E0409-05)				**Matrix: Soil**		**Batch: 1050441**		
% Solids	**78.0**	---	1.00	%	1	05/14/21 08:18	EPA 8000D	
TK8-SWW-3(10) (A1E0409-06)				**Matrix: Soil**		**Batch: 1050441**		
% Solids	**85.8**	---	1.00	%	1	05/14/21 08:18	EPA 8000D	
TK8-BN(9.5) (A1E0409-07)				**Matrix: Soil**		**Batch: 1050441**		
% Solids	**90.1**	---	1.00	%	1	05/14/21 08:18	EPA 8000D	
TK8-BS(11.5) (A1E0409-08)				**Matrix: Soil**		**Batch: 1050441**		
% Solids	**77.2**	---	1.00	%	1	05/14/21 08:18	EPA 8000D	
TK8-BS(14) (A1E0409-09)				**Matrix: Soil**		**Batch: 1050441**		
% Solids	**91.6**	---	1.00	%	1	05/14/21 08:18	EPA 8000D	
TK4-S7 (A1E0409-10)				**Matrix: Soil**		**Batch: 1050441**		
% Solids	**95.9**	---	1.00	%	1	05/14/21 08:18	EPA 8000D	

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0409 - 06 02 21 1816**

QUALITY CONTROL (QC) SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050555 - EPA 5035A							**Soil**					
Blank (1050555-BLK1)			Prepared: 05/17/21 09:00 Analyzed: 05/17/21 12:31									
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	0.0667	mg/kg wet	1	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 96 %*	*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*120 %*	*50-150 %*			*"*					
LCS (1050555-BS2)			Prepared: 05/17/21 09:00 Analyzed: 05/17/21 12:04									
NWTPH-Gx (MS)												
Gasoline Range Organics	28.9	---	5.00	mg/kg wet	50	25.0	---	116	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 91 %*	*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*113 %*	*50-150 %*			*"*					
Duplicate (1050555-DUP1)			Prepared: 05/11/21 11:55 Analyzed: 05/17/21 13:25									
QC Source Sample: TK8-SWE(8) (A1E0409-01)												
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	14.3	mg/kg dry	50	---	ND	---	---	---	30%	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 97 %*	*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*123 %*	*50-150 %*			*"*					
Batch 1050611 - EPA 5035A							**Soil**					
Blank (1050611-BLK1)			Prepared: 05/18/21 09:00 Analyzed: 05/18/21 11:35									
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	3.33	mg/kg wet	50	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 95 %*	*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*96 %*	*50-150 %*			*"*					
LCS (1050611-BS2)			Prepared: 05/18/21 09:00 Analyzed: 05/18/21 11:08									
NWTPH-Gx (MS)												
Gasoline Range Organics	22.9	---	5.00	mg/kg wet	50	25.0	---	91	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 97 %*	*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*98 %*	*50-150 %*			*"*					
Duplicate (1050611-DUP1)			Prepared: 05/10/21 11:30 Analyzed: 05/18/21 21:22									

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0409 - 06 02 21 1816**

QUALITY CONTROL (QC) SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050611 - EPA 5035A							**Soil**					
Duplicate (1050611-DUP1)			Prepared: 05/10/21 11:30		Analyzed: 05/18/21 21:22							
QC Source Sample: Non-SDG (A1E0576-11)												
Gasoline Range Organics	ND	---	31.8	mg/kg dry	50	---	ND	---	---	---	30%	R-06
Surr: 4-Bromofluorobenzene (Sur)		*Recovery: 107 %*		*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)		*96 %*		*50-150 %*			*"*					
Duplicate (1050611-DUP2)			Prepared: 05/04/21 10:00		Analyzed: 05/18/21 22:15							**TEMP**
QC Source Sample: Non-SDG (A1E0225-20)												
Gasoline Range Organics	ND	---	15.0	mg/kg dry	50	---	ND	---	---	---	30%	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery: 108 %*		*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)		*95 %*		*50-150 %*			*"*					

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0409 - 06 02 21 1816**

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050555 - EPA 5035A							**Soil**					
Blank (1050555-BLK1)			Prepared: 05/17/21 09:00 Analyzed: 05/17/21 12:31									
5035A/8260D												
Benzene	ND	---	0.000133	mg/kg wet	1	---	---	---	---	---	---	
Toluene	ND	---	0.000667	mg/kg wet	1	---	---	---	---	---	---	
Ethylbenzene	ND	---	0.000333	mg/kg wet	1	---	---	---	---	---	---	
Xylenes, total	ND	---	0.00100	mg/kg wet	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*107 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*108 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*92 %*		*79-120 %*			*"*				
LCS (1050555-BS1)			Prepared: 05/17/21 09:00 Analyzed: 05/17/21 11:37									
5035A/8260D												
Benzene	1.18	---	0.0100	mg/kg wet	50	1.00	---	118	80-120%	---	---	
Toluene	1.12	---	0.0500	mg/kg wet	50	1.00	---	112	80-120%	---	---	
Ethylbenzene	1.09	---	0.0250	mg/kg wet	50	1.00	---	109	80-120%	---	---	
Xylenes, total	3.24	---	0.0750	mg/kg wet	50	3.00	---	108	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*102 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*106 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*87 %*		*79-120 %*			*"*				
Duplicate (1050555-DUP1)			Prepared: 05/11/21 11:55 Analyzed: 05/17/21 13:25									
QC Source Sample: TK8-SWE(8) (A1E0409-01)												
5035A/8260D												
Benzene	ND	---	0.0287	mg/kg dry	50	---	ND	---	---	---	30%	
Toluene	ND	---	0.143	mg/kg dry	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	---	0.0717	mg/kg dry	50	---	ND	---	---	---	30%	
Xylenes, total	ND	---	0.215	mg/kg dry	50	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*111 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*108 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*93 %*		*79-120 %*			*"*				
Matrix Spike (1050555-MS1)			Prepared: 05/11/21 16:25 Analyzed: 05/17/21 19:20									**V-15**
QC Source Sample: TK4-S7 (A1E0409-10)												
5035A/8260D												

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Philip Nerenberg, Lab Director

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0409 - 06 02 21 1816**

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050555 - EPA 5035A							**Soil**					
Matrix Spike (1050555-MS1)			Prepared: 05/11/21 16:25		Analyzed: 05/17/21 19:20							**V-15**
QC Source Sample: TK4-S7 (A1E0409-10)												
Benzene	1.11	---	0.00980	mg/kg dry	50	1.15	0.0127	96	77-121%	---	---	
Toluene	0.981	---	0.0490	mg/kg dry	50	1.15	0.0456	82	77-121%	---	---	
Ethylbenzene	0.905	---	0.0245	mg/kg dry	50	1.15	0.0162	78	76-122%	---	---	
Xylenes, total	2.75	---	0.0735	mg/kg dry	50	3.44	0.0700	78	78-124%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*107 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*104 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*90 %*		*79-120 %*			*"*				

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0409 - 06 02 21 1816**

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 5035A/8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050555 - EPA 5035A							**Soil**					
Blank (1050555-BLK1)			Prepared: 05/17/21 09:00 Analyzed: 05/17/21 12:31									
5035A/8260D												
Benzene	ND	---	0.000133	mg/kg wet	1	---	---	---	---	---	---	
Toluene	ND	---	0.000667	mg/kg wet	1	---	---	---	---	---	---	
Ethylbenzene	ND	---	0.000333	mg/kg wet	1	---	---	---	---	---	---	
Xylenes, total	ND	---	0.00100	mg/kg wet	1	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	---	0.000667	mg/kg wet	1	---	---	---	---	---	---	
Naphthalene	ND	---	0.00133	mg/kg wet	1	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	---	0.000667	mg/kg wet	1	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	---	0.000333	mg/kg wet	1	---	---	---	---	---	---	
Isopropylbenzene	ND	---	0.000667	mg/kg wet	1	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	---	0.000667	mg/kg wet	1	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	---	0.000667	mg/kg wet	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 107 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*108 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*92 %*		*79-120 %*			*"*				
LCS (1050555-BS1)			Prepared: 05/17/21 09:00 Analyzed: 05/17/21 11:37									
5035A/8260D												
Benzene	1.18	---	0.0100	mg/kg wet	50	1.00	---	118	80-120%	---	---	
Toluene	1.12	---	0.0500	mg/kg wet	50	1.00	---	112	80-120%	---	---	
Ethylbenzene	1.09	---	0.0250	mg/kg wet	50	1.00	---	109	80-120%	---	---	
Xylenes, total	3.24	---	0.0750	mg/kg wet	50	3.00	---	108	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	1.06	---	0.0500	mg/kg wet	50	1.00	---	106	80-120%	---	---	
Naphthalene	0.829	---	0.100	mg/kg wet	50	1.00	---	83	80-120%	---	---	
1,2-Dibromoethane (EDB)	1.08	---	0.0500	mg/kg wet	50	1.00	---	108	80-120%	---	---	
1,2-Dichloroethane (EDC)	1.18	---	0.0250	mg/kg wet	50	1.00	---	118	80-120%	---	---	
Isopropylbenzene	1.02	---	0.0500	mg/kg wet	50	1.00	---	102	80-120%	---	---	
1,2,4-Trimethylbenzene	1.19	---	0.0500	mg/kg wet	50	1.00	---	119	80-120%	---	---	
1,3,5-Trimethylbenzene	1.18	---	0.0500	mg/kg wet	50	1.00	---	118	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 102 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*106 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*87 %*		*79-120 %*			*"*				
Duplicate (1050555-DUP1)			Prepared: 05/11/21 11:55 Analyzed: 05/17/21 13:25									

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Philip Nerenberg, Lab Director

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ORELAP ID: **OR100062**

GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0409 - 06 02 21 1816**

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 5035A/8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050555 - EPA 5035A							**Soil**					
Duplicate (1050555-DUP1)			Prepared: 05/11/21 11:55 Analyzed: 05/17/21 13:25									
QC Source Sample: TK8-SWE(8) (A1E0409-01)												
5035A/8260D												
Benzene	ND	---	0.0287	mg/kg dry	50	---	ND	---	---	---	30%	
Toluene	ND	---	0.143	mg/kg dry	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	---	0.0717	mg/kg dry	50	---	ND	---	---	---	30%	
Xylenes, total	ND	---	0.215	mg/kg dry	50	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	---	0.143	mg/kg dry	50	---	ND	---	---	---	30%	
Naphthalene	ND	---	0.287	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dibromoethane (EDB)	ND	---	0.143	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	---	0.0717	mg/kg dry	50	---	ND	---	---	---	30%	
Isopropylbenzene	ND	---	0.143	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	---	0.143	mg/kg dry	50	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	---	0.143	mg/kg dry	50	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*111 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*108 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*93 %*		*79-120 %*			*"*				
Matrix Spike (1050555-MS1)			Prepared: 05/11/21 16:25 Analyzed: 05/17/21 19:20									**V-15**
QC Source Sample: TK4-S7 (A1E0409-10)												
5035A/8260D												
Benzene	1.11	---	0.00980	mg/kg dry	50	1.15	0.0127	96	77-121%	---	---	
Toluene	0.981	---	0.0490	mg/kg dry	50	1.15	0.0456	82	77-121%	---	---	
Ethylbenzene	0.905	---	0.0245	mg/kg dry	50	1.15	0.0162	78	76-122%	---	---	
Xylenes, total	2.75	---	0.0735	mg/kg dry	50	3.44	0.0700	78	78-124%	---	---	
Methyl tert-butyl ether (MTBE)	1.08	---	0.0490	mg/kg dry	50	1.15	ND	94	73-125%	---	---	
Naphthalene	0.745	---	0.0980	mg/kg dry	50	1.15	ND	65	62-129%	---	---	
1,2-Dibromoethane (EDB)	1.02	---	0.0490	mg/kg dry	50	1.15	ND	89	78-122%	---	---	
1,2-Dichloroethane (EDC)	1.10	---	0.0245	mg/kg dry	50	1.15	ND	96	73-128%	---	---	
Isopropylbenzene	0.832	---	0.0490	mg/kg dry	50	1.15	ND	73	68-134%	---	---	
1,2,4-Trimethylbenzene	1.06	---	0.0490	mg/kg dry	50	1.15	0.0416	88	75-123%	---	---	
1,3,5-Trimethylbenzene	0.986	---	0.0490	mg/kg dry	50	1.15	ND	86	73-124%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*107 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*104 %*		*80-120 %*			*"*				

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Philip Nerenberg, Lab Director

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0409 - 06 02 21 1816**

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 5035A/8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050555 - EPA 5035A							**Soil**					
Matrix Spike (1050555-MS1)			Prepared: 05/11/21 16:25		Analyzed: 05/17/21 19:20							**V-15**
QC Source Sample: TK4-S7 (A1E0409-10)												
Surr: 4-Bromofluorobenzene (Surr)			*Recovery: 90 %*		*Limits: 79-120 %*		*Dilution: 1x*					

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0409 - 06 02 21 1816**

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 5035A/8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050611 - EPA 5035A							**Soil**					
Blank (1050611-BLK1)			Prepared: 05/18/21 09:00 Analyzed: 05/18/21 11:35									
5035A/8260D												
Benzene	ND	---	0.00667	mg/kg wet	50	---	---	---	---	---	---	
Toluene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Ethylbenzene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Xylenes, total	ND	---	0.0500	mg/kg wet	50	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Naphthalene	ND	---	0.0667	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Isopropylbenzene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*107 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*101 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*102 %*		*79-120 %*			*"*				
LCS (1050611-BS1)			Prepared: 05/18/21 09:00 Analyzed: 05/18/21 10:41									
5035A/8260D												
Benzene	1.03	---	0.0100	mg/kg wet	50	1.00	---	103	80-120%	---	---	
Toluene	0.908	---	0.0500	mg/kg wet	50	1.00	---	91	80-120%	---	---	
Ethylbenzene	0.918	---	0.0250	mg/kg wet	50	1.00	---	92	80-120%	---	---	
Xylenes, total	2.68	---	0.0750	mg/kg wet	50	3.00	---	89	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	1.03	---	0.0500	mg/kg wet	50	1.00	---	103	80-120%	---	---	
Naphthalene	0.746	---	0.100	mg/kg wet	50	1.00	---	**75**	**80-120%**	---	---	Q-55
1,2-Dibromoethane (EDB)	0.958	---	0.0500	mg/kg wet	50	1.00	---	96	80-120%	---	---	
1,2-Dichloroethane (EDC)	1.01	---	0.0250	mg/kg wet	50	1.00	---	101	80-120%	---	---	
Isopropylbenzene	0.864	---	0.0500	mg/kg wet	50	1.00	---	86	80-120%	---	---	
1,2,4-Trimethylbenzene	0.949	---	0.0500	mg/kg wet	50	1.00	---	95	80-120%	---	---	
1,3,5-Trimethylbenzene	0.948	---	0.0500	mg/kg wet	50	1.00	---	95	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*106 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*100 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*99 %*		*79-120 %*			*"*				
Duplicate (1050611-DUP1)			Prepared: 05/10/21 11:30 Analyzed: 05/18/21 21:22									

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Philip Nerenberg, Lab Director

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ORELAP ID: **OR100062**

GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0409 - 06 02 21 1816**

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 5035A/8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050611 - EPA 5035A							**Soil**					
Duplicate (1050611-DUP1)			Prepared: 05/10/21 11:30 Analyzed: 05/18/21 21:22									
QC Source Sample: Non-SDG (A1E0576-11)												
Benzene	ND	---	0.0159	mg/kg dry	50	---	ND	---	---	---	30%	
Toluene	ND	---	0.0794	mg/kg dry	50	---	ND	---	---	---	30%	
Ethylbenzene	**0.0499**	---	0.0397	mg/kg dry	50	---	0.0606	---	---	19	30%	
Xylenes, total	ND	---	0.119	mg/kg dry	50	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	---	0.0794	mg/kg dry	50	---	ND	---	---	---	30%	
Naphthalene	**0.175**	---	0.159	mg/kg dry	50	---	0.212	---	---	19	30%	Q-54
1,2-Dibromoethane (EDB)	ND	---	0.0794	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	---	0.0397	mg/kg dry	50	---	ND	---	---	---	30%	
Isopropylbenzene	**0.253**	---	0.0794	mg/kg dry	50	---	0.257	---	---	2	30%	
1,2,4-Trimethylbenzene	ND	---	0.0794	mg/kg dry	50	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	---	0.0794	mg/kg dry	50	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*106 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*97 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*105 %*		*79-120 %*			*"*				
Duplicate (1050611-DUP2)			Prepared: 05/04/21 10:00 Analyzed: 05/18/21 22:15									**TEMP**
QC Source Sample: Non-SDG (A1E0225-20)												
Benzene	ND	---	0.0301	mg/kg dry	50	---	ND	---	---	---	30%	
Toluene	ND	---	0.150	mg/kg dry	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	---	0.0751	mg/kg dry	50	---	ND	---	---	---	30%	
Xylenes, total	ND	---	0.225	mg/kg dry	50	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	---	0.150	mg/kg dry	50	---	ND	---	---	---	30%	
Naphthalene	ND	---	0.301	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dibromoethane (EDB)	ND	---	0.150	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	---	0.0751	mg/kg dry	50	---	ND	---	---	---	30%	
Isopropylbenzene	ND	---	0.150	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	---	0.150	mg/kg dry	50	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	---	0.150	mg/kg dry	50	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*107 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*95 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*106 %*		*79-120 %*			*"*				

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Philip Nerenberg, Lab Director

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ORELAP ID: **OR100062**

GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0409 - 06 02 21 1816**

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 5035A/8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050611 - EPA 5035A							**Soil**					
Matrix Spike (1050611-MS1)			Prepared: 05/04/21 10:00		Analyzed: 05/18/21 23:09							**T-02, TEMP**
QC Source Sample: Non-SDG (A1E0225-21)												
5035A/8260D												
Benzene	2.73	---	0.0262	mg/kg dry	50	2.62	ND	104	77-121%	---	---	
Toluene	2.35	---	0.131	mg/kg dry	50	2.62	ND	90	77-121%	---	---	
Ethylbenzene	2.41	---	0.0656	mg/kg dry	50	2.62	ND	92	76-122%	---	---	
Xylenes, total	7.20	---	0.197	mg/kg dry	50	7.87	ND	92	78-124%	---	---	
Methyl tert-butyl ether (MTBE)	2.76	---	0.131	mg/kg dry	50	2.62	ND	105	73-125%	---	---	
Naphthalene	1.93	---	0.262	mg/kg dry	50	2.62	ND	74	62-129%	---	---	Q-54
1,2-Dibromoethane (EDB)	2.54	---	0.131	mg/kg dry	50	2.62	ND	97	78-122%	---	---	
1,2-Dichloroethane (EDC)	2.67	---	0.0656	mg/kg dry	50	2.62	ND	102	73-128%	---	---	
Isopropylbenzene	2.35	---	0.131	mg/kg dry	50	2.62	ND	90	68-134%	---	---	
1,2,4-Trimethylbenzene	2.54	---	0.131	mg/kg dry	50	2.62	ND	97	75-123%	---	---	
1,3,5-Trimethylbenzene	2.54	---	0.131	mg/kg dry	50	2.62	ND	97	73-124%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*106 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*95 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*101 %*		*79-120 %*			*"*				

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0409 - 06 02 21 1816**

QUALITY CONTROL (QC) SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E SIM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050489 - EPA 3546							**Soil**					
Blank (1050489-BLK1)			Prepared: 05/14/21 08:28		Analyzed: 05/14/21 11:33							
EPA 8270E SIM												
Acenaphthene	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Acenaphthylene	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Anthracene	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Benz(a)anthracene	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Benzo(a)pyrene	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Benzo(b)fluoranthene	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Benzo(k)fluoranthene	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Benzo(g,h,i)perylene	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Chrysene	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Dibenz(a,h)anthracene	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Fluoranthene	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Fluorene	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Indeno(1,2,3-cd)pyrene	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
1-Methylnaphthalene	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
2-Methylnaphthalene	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Naphthalene	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Phenanthrene	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Pyrene	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Dibenzofuran	ND	---	0.00909	mg/kg wet	1	---	---	---	---	---	---	
Surr: 2-Fluorobiphenyl (Surr)			*Recovery: 92 %*		*Limits: 44-120 %*			*Dilution: 1x*				
p-Terphenyl-d14 (Surr)			*84 %*		*54-127 %*			*"*				
LCS (1050489-BS1)			Prepared: 05/14/21 08:28		Analyzed: 05/14/21 11:59							
EPA 8270E SIM												
Acenaphthene	0.737	---	0.0100	mg/kg wet	1	0.800	---	92	40-123%	---	---	
Acenaphthylene	0.780	---	0.0100	mg/kg wet	1	0.800	---	98	32-132%	---	---	
Anthracene	0.710	---	0.0100	mg/kg wet	1	0.800	---	89	47-123%	---	---	
Benz(a)anthracene	0.719	---	0.0100	mg/kg wet	1	0.800	---	90	49-126%	---	---	
Benzo(a)pyrene	0.710	---	0.0100	mg/kg wet	1	0.800	---	89	45-129%	---	---	
Benzo(b)fluoranthene	0.658	---	0.0100	mg/kg wet	1	0.800	---	82	45-132%	---	---	
Benzo(k)fluoranthene	0.626	---	0.0100	mg/kg wet	1	0.800	---	78	47-132%	---	---	
Benzo(g,h,i)perylene	0.618	---	0.0100	mg/kg wet	1	0.800	---	77	43-134%	---	---	
Chrysene	0.712	---	0.0100	mg/kg wet	1	0.800	---	89	50-124%	---	---	

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ORELAP ID: **OR100062**

GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0409 - 06 02 21 1816**

QUALITY CONTROL (QC) SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E SIM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050489 - EPA 3546							**Soil**					
LCS (1050489-BS1)			Prepared: 05/14/21 08:28		Analyzed: 05/14/21 11:59							
Dibenz(a,h)anthracene	0.724	---	0.0100	mg/kg wet	1	0.800	---	91	45-134%	---	---	
Fluoranthene	0.698	---	0.0100	mg/kg wet	1	0.800	---	87	50-127%	---	---	
Fluorene	0.701	---	0.0100	mg/kg wet	1	0.800	---	88	43-125%	---	---	
Indeno(1,2,3-cd)pyrene	0.678	---	0.0100	mg/kg wet	1	0.800	---	85	45-133%	---	---	
1-Methylnaphthalene	0.697	---	0.0100	mg/kg wet	1	0.800	---	87	40-120%	---	---	
2-Methylnaphthalene	0.701	---	0.0100	mg/kg wet	1	0.800	---	88	38-122%	---	---	
Naphthalene	0.656	---	0.0100	mg/kg wet	1	0.800	---	82	35-123%	---	---	
Phenanthrene	0.684	---	0.0100	mg/kg wet	1	0.800	---	85	50-121%	---	---	
Pyrene	0.697	---	0.0100	mg/kg wet	1	0.800	---	87	47-127%	---	---	
Dibenzofuran	0.705	---	0.0100	mg/kg wet	1	0.800	---	88	44-120%	---	---	
Surr: 2-Fluorobiphenyl (Surr)			*Recovery: 96 %*		*Limits: 44-120 %*							
p-Terphenyl-d14 (Surr)			*85 %*		*54-127 %*							
Duplicate (1050489-DUP1)			Prepared: 05/14/21 08:28		Analyzed: 05/14/21 12:50							
QC Source Sample: TK4-S7 (A1E0409-10)												
EPA 8270E SIM												
Acenaphthene	ND	---	0.0102	mg/kg dry	1	---	ND	---	---	---	30%	
Acenaphthylene	ND	---	0.0102	mg/kg dry	1	---	ND	---	---	---	30%	
Anthracene	ND	---	0.0102	mg/kg dry	1	---	ND	---	---	---	30%	
Benz(a)anthracene	ND	---	0.0102	mg/kg dry	1	---	ND	---	---	---	30%	
Benzo(a)pyrene	ND	---	0.0102	mg/kg dry	1	---	ND	---	---	---	30%	
Benzo(b)fluoranthene	ND	---	0.0102	mg/kg dry	1	---	ND	---	---	---	30%	
Benzo(k)fluoranthene	ND	---	0.0102	mg/kg dry	1	---	ND	---	---	---	30%	
Benzo(g,h,i)perylene	ND	---	0.0102	mg/kg dry	1	---	ND	---	---	---	30%	
Chrysene	ND	---	0.0102	mg/kg dry	1	---	ND	---	---	---	30%	
Dibenz(a,h)anthracene	ND	---	0.0102	mg/kg dry	1	---	ND	---	---	---	30%	
Fluoranthene	ND	---	0.0102	mg/kg dry	1	---	ND	---	---	---	30%	
Fluorene	ND	---	0.0102	mg/kg dry	1	---	ND	---	---	---	30%	
Indeno(1,2,3-cd)pyrene	ND	---	0.0102	mg/kg dry	1	---	ND	---	---	---	30%	
1-Methylnaphthalene	ND	---	0.0102	mg/kg dry	1	---	ND	---	---	---	30%	
2-Methylnaphthalene	ND	---	0.0102	mg/kg dry	1	---	ND	---	---	---	30%	
Naphthalene	ND	---	0.0102	mg/kg dry	1	---	ND	---	---	---	30%	
Phenanthrene	ND	---	0.0102	mg/kg dry	1	---	ND	---	---	---	30%	
Pyrene	ND	---	0.0102	mg/kg dry	1	---	ND	---	---	---	30%	

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Philip Nerenberg, Lab Director

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0409 - 06 02 21 1816**

QUALITY CONTROL (QC) SAMPLE RESULTS

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E SIM

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050489 - EPA 3546							**Soil**					
Duplicate (1050489-DUP1)			Prepared: 05/14/21 08:28		Analyzed: 05/14/21 12:50							
QC Source Sample: TK4-S7 (A1E0409-10)												
Dibenzofuran	ND	---	0.0102	mg/kg dry	1	---	ND	---	---	---	30%	
Surr: 2-Fluorobiphenyl (Surr)			*Recovery: 79 %*		*Limits: 44-120 %*			*Dilution: 1x*				
p-Terphenyl-d14 (Surr)			*73 %*		*54-127 %*			*"*				
Matrix Spike (1050489-MS1)			Prepared: 05/14/21 08:28		Analyzed: 05/14/21 13:16							
QC Source Sample: TK4-S7 (A1E0409-10)												
EPA 8270E SIM												
Acenaphthene	0.678	---	0.0103	mg/kg dry	1	0.827	ND	82	40-123%	---	---	
Acenaphthylene	0.722	---	0.0103	mg/kg dry	1	0.827	ND	87	32-132%	---	---	
Anthracene	0.646	---	0.0103	mg/kg dry	1	0.827	ND	78	47-123%	---	---	
Benz(a)anthracene	0.648	---	0.0103	mg/kg dry	1	0.827	ND	78	49-126%	---	---	
Benzo(a)pyrene	0.601	---	0.0103	mg/kg dry	1	0.827	ND	73	45-129%	---	---	
Benzo(b)fluoranthene	0.585	---	0.0103	mg/kg dry	1	0.827	ND	71	45-132%	---	---	
Benzo(k)fluoranthene	0.580	---	0.0103	mg/kg dry	1	0.827	ND	70	47-132%	---	---	
Benzo(g,h,i)perylene	0.546	---	0.0103	mg/kg dry	1	0.827	ND	66	43-134%	---	---	
Chrysene	0.664	---	0.0103	mg/kg dry	1	0.827	ND	80	50-124%	---	---	
Dibenz(a,h)anthracene	0.655	---	0.0103	mg/kg dry	1	0.827	ND	79	45-134%	---	---	
Fluoranthene	0.625	---	0.0103	mg/kg dry	1	0.827	ND	76	50-127%	---	---	
Fluorene	0.644	---	0.0103	mg/kg dry	1	0.827	ND	78	43-125%	---	---	
Indeno(1,2,3-cd)pyrene	0.606	---	0.0103	mg/kg dry	1	0.827	ND	73	45-133%	---	---	
1-Methylnaphthalene	0.641	---	0.0103	mg/kg dry	1	0.827	ND	77	40-120%	---	---	
2-Methylnaphthalene	0.647	---	0.0103	mg/kg dry	1	0.827	ND	78	38-122%	---	---	
Naphthalene	0.616	---	0.0103	mg/kg dry	1	0.827	ND	74	35-123%	---	---	
Phenanthrene	0.623	---	0.0103	mg/kg dry	1	0.827	ND	75	50-121%	---	---	
Pyrene	0.617	---	0.0103	mg/kg dry	1	0.827	ND	75	47-127%	---	---	
Dibenzofuran	0.648	---	0.0103	mg/kg dry	1	0.827	ND	78	44-120%	---	---	
Surr: 2-Fluorobiphenyl (Surr)			*Recovery: 86 %*		*Limits: 44-120 %*			*Dilution: 1x*				
p-Terphenyl-d14 (Surr)			*74 %*		*54-127 %*			*"*				

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ORELAP ID: OR100062

ANALYTICAL REPORT

GeoDesign, Inc.	Project: Modera Morrison	
9450 SW Commerce Circle	Project Number: Millcreek-19-04	Report ID:
Wilsonville, OR 97070	Project Manager: Kyle Sattler	A1E0409 - 06 02 21 1816

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050458 - EPA 3051A							Soil					
Blank (1050458-BLK1)			Prepared: 05/13/21 10:53 Analyzed: 05/13/21 15:44									
EPA 6020B												
Arsenic	ND	---	0.962	mg/kg wet	10	---	---	---	---	---	---	
Barium	ND	---	0.962	mg/kg wet	10	---	---	---	---	---	---	
Cadmium	ND	---	0.192	mg/kg wet	10	---	---	---	---	---	---	
Chromium	ND	---	0.962	mg/kg wet	10	---	---	---	---	---	---	
Lead	ND	---	0.192	mg/kg wet	10	---	---	---	---	---	---	
Mercury	ND	---	0.0769	mg/kg wet	10	---	---	---	---	---	---	
Selenium	ND	---	0.962	mg/kg wet	10	---	---	---	---	---	---	
Silver	ND	---	0.192	mg/kg wet	10	---	---	---	---	---	---	
LCS (1050458-BS1)			Prepared: 05/13/21 10:53 Analyzed: 05/13/21 15:49									
EPA 6020B												
Arsenic	47.4	---	1.00	mg/kg wet	10	50.0	---	95	80-120%	---	---	
Barium	48.8	---	1.00	mg/kg wet	10	50.0	---	98	80-120%	---	---	
Cadmium	48.2	---	0.200	mg/kg wet	10	50.0	---	96	80-120%	---	---	
Chromium	46.7	---	1.00	mg/kg wet	10	50.0	---	93	80-120%	---	---	
Lead	46.5	---	0.200	mg/kg wet	10	50.0	---	93	80-120%	---	---	
Mercury	0.884	---	0.0800	mg/kg wet	10	1.00	---	88	80-120%	---	---	
Selenium	21.4	---	1.00	mg/kg wet	10	25.0	---	86	80-120%	---	---	
Silver	24.5	---	0.200	mg/kg wet	10	25.0	---	98	80-120%	---	---	
Duplicate (1050458-DUP1)			Prepared: 05/13/21 10:53 Analyzed: 05/13/21 16:22									
QC Source Sample: TK8-SWE(8) (A1E0409-01)												
EPA 6020B												
Arsenic	**8.94**	---	1.28	mg/kg dry	10	---	8.94	---	---	0.07	20%	
Barium	**176**	---	1.28	mg/kg dry	10	---	180	---	---	2	20%	
Cadmium	ND	---	0.257	mg/kg dry	10	---	ND	---	---	---	20%	
Chromium	**20.3**	---	1.28	mg/kg dry	10	---	19.2	---	---	5	20%	
Lead	**11.2**	---	0.257	mg/kg dry	10	---	11.9	---	---	6	20%	
Mercury	ND	---	0.103	mg/kg dry	10	---	ND	---	---	---	20%	
Selenium	ND	---	1.28	mg/kg dry	10	---	ND	---	---	---	20%	
Silver	ND	---	0.257	mg/kg dry	10	---	ND	---	---	---	20%	
Matrix Spike (1050458-MS1)			Prepared: 05/13/21 10:53 Analyzed: 05/13/21 16:27									

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9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0409 - 06 02 21 1816**

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050458 - EPA 3051A							**Soil**					
Matrix Spike (1050458-MS1)			Prepared: 05/13/21 10:53		Analyzed: 05/13/21 16:27							
QC Source Sample: TK8-SWE(8) (A1E0409-01)												
EPA 6020B												
Arsenic	68.8	---	1.27	mg/kg dry	10	63.3	8.94	95	75-125%	---	---	
Barium	241	---	1.27	mg/kg dry	10	63.3	180	96	75-125%	---	---	
Cadmium	60.0	---	0.253	mg/kg dry	10	63.3	ND	95	75-125%	---	---	
Chromium	81.6	---	1.27	mg/kg dry	10	63.3	19.2	98	75-125%	---	---	
Lead	68.6	---	0.253	mg/kg dry	10	63.3	11.9	90	75-125%	---	---	
Mercury	1.15	---	0.101	mg/kg dry	10	1.27	ND	91	75-125%	---	---	
Selenium	26.9	---	1.27	mg/kg dry	10	31.7	ND	85	75-125%	---	---	
Silver	30.0	---	0.253	mg/kg dry	10	31.7	ND	95	75-125%	---	---	

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: Modera Morrison	
9450 SW Commerce Circle	Project Number: Millcreek-19-04	Report ID:
Wilsonville, OR 97070	Project Manager: Kyle Sattler	A1E0409 - 06 02 21 1816

QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 1050441 - Total Solids (Dry Weight)							Soil					
Duplicate (1050441-DUP1)			Prepared: 05/13/21 09:03		Analyzed: 05/14/21 08:18							
QC Source Sample: Non-SDG (A1D0451-04)												
% Solids	**78.7**	---	1.00	%	1	---	78.4	---	---	0.4	10%	
Duplicate (1050441-DUP2)			Prepared: 05/13/21 09:03		Analyzed: 05/14/21 08:18							
QC Source Sample: Non-SDG (A1E0285-02)												
% Solids	**97.1**	---	1.00	%	1	---	97.1	---	---	0.004	10%	
Duplicate (1050441-DUP3)			Prepared: 05/13/21 09:03		Analyzed: 05/14/21 08:18							
QC Source Sample: TK8-SWE(8) (A1E0409-01)												
EPA 8000D												
% Solids	**83.0**	---	1.00	%	1	---	82.6	---	---	0.6	10%	
Duplicate (1050441-DUP4)			Prepared: 05/13/21 09:03		Analyzed: 05/14/21 08:18							
QC Source Sample: Non-SDG (A1E0466-01)												
% Solids	**88.5**	---	1.00	%	1	---	87.8	---	---	0.7	10%	
Duplicate (1050441-DUP5)			Prepared: 05/13/21 09:03		Analyzed: 05/14/21 08:18							
QC Source Sample: Non-SDG (A1E0469-08)												
% Solids	**81.5**	---	1.00	%	1	---	82.3	---	---	1	10%	
Duplicate (1050441-DUP6)			Prepared: 05/13/21 09:03		Analyzed: 05/14/21 08:18							
QC Source Sample: Non-SDG (A1E0487-01)												
% Solids	**72.2**	---	1.00	%	1	---	71.9	---	---	0.4	10%	
Duplicate (1050441-DUP7)			Prepared: 05/13/21 09:03		Analyzed: 05/14/21 08:18							
QC Source Sample: Non-SDG (A1E0492-02)												
% Solids	**81.2**	---	1.00	%	1	---	82.7	---	---	2	10%	

No Client related Batch QC samples analyzed for this batch. See notes page for more information.

Apex Laboratories

Philip Nerenberg, Lab Director

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Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0409 - 06 02 21 1816**

SAMPLE PREPARATION INFORMATION

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Prep: EPA 5035A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1050555							
A1E0409-01	Soil	NWTPH-Gx (MS)	05/11/21 11:55	05/11/21 11:55	5.37g/5mL	5g/5mL	0.93
A1E0409-02	Soil	NWTPH-Gx (MS)	05/11/21 12:00	05/11/21 12:00	4.34g/5mL	5g/5mL	1.15
A1E0409-06	Soil	NWTPH-Gx (MS)	05/11/21 13:00	05/11/21 13:00	4.58g/5mL	5g/5mL	1.09
A1E0409-07	Soil	NWTPH-Gx (MS)	05/11/21 12:25	05/11/21 12:25	4.29g/5mL	5g/5mL	1.17
A1E0409-08	Soil	NWTPH-Gx (MS)	05/11/21 12:30	05/11/21 12:30	6.47g/5mL	5g/5mL	0.77
A1E0409-09	Soil	NWTPH-Gx (MS)	05/11/21 13:30	05/11/21 13:30	4.49g/5mL	5g/5mL	1.11
Batch: 1050611							
A1E0409-03RE1	Soil	NWTPH-Gx (MS)	05/11/21 12:10	05/11/21 12:10	4.89g/5mL	5g/5mL	1.02
A1E0409-04RE1	Soil	NWTPH-Gx (MS)	05/11/21 12:20	05/11/21 12:20	6g/5mL	5g/5mL	0.83
A1E0409-05RE1	Soil	NWTPH-Gx (MS)	05/11/21 12:40	05/11/21 12:40	5.08g/5mL	5g/5mL	0.98

BTEX Compounds by EPA 8260D

Prep: EPA 5035A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1050555							
A1E0409-10	Soil	5035A/8260D	05/11/21 13:45	05/11/21 16:25	5.57g/5mL	5g/5mL	0.90

Selected Volatile Organic Compounds by EPA 5035A/8260D

Prep: EPA 5035A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1050555							
A1E0409-02	Soil	5035A/8260D	05/11/21 12:00	05/11/21 12:00	4.34g/5mL	5g/5mL	1.15
A1E0409-03	Soil	5035A/8260D	05/11/21 12:10	05/11/21 12:10	4.89g/5mL	5g/5mL	1.02
A1E0409-08	Soil	5035A/8260D	05/11/21 12:30	05/11/21 12:30	6.47g/5mL	5g/5mL	0.77
Batch: 1050611							
A1E0409-03RE1	Soil	5035A/8260D	05/11/21 12:10	05/11/21 12:10	4.89g/5mL	5g/5mL	1.02
A1E0409-04RE1	Soil	5035A/8260D	05/11/21 12:20	05/11/21 12:20	6g/5mL	5g/5mL	0.83
A1E0409-05RE1	Soil	5035A/8260D	05/11/21 12:40	05/11/21 12:40	5.08g/5mL	5g/5mL	0.98

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E SIM

Prep: EPA 3546

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor

Apex Laboratories

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Philip Nerenberg, Lab Director

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0409 - 06 02 21 1816**

SAMPLE PREPARATION INFORMATION

Polyaromatic Hydrocarbons (PAHs) by EPA 8270E SIM

Prep: EPA 3546

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1050489							
A1E0409-10	Soil	EPA 8270E SIM	05/11/21 13:45	05/14/21 08:28	10.01g/5mL	10g/5mL	1.00

Total Metals by EPA 6020B (ICPMS)

Prep: EPA 3051A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1050458							
A1E0409-01	Soil	EPA 6020B	05/11/21 11:55	05/13/21 10:53	0.481g/50mL	0.5g/50mL	1.04
A1E0409-02	Soil	EPA 6020B	05/11/21 12:00	05/13/21 10:53	0.465g/50mL	0.5g/50mL	1.08
A1E0409-03	Soil	EPA 6020B	05/11/21 12:10	05/13/21 10:53	0.489g/50mL	0.5g/50mL	1.02
A1E0409-04	Soil	EPA 6020B	05/11/21 12:20	05/13/21 10:53	0.503g/50mL	0.5g/50mL	0.99
A1E0409-05	Soil	EPA 6020B	05/11/21 12:40	05/13/21 10:53	0.514g/50mL	0.5g/50mL	0.97
A1E0409-06	Soil	EPA 6020B	05/11/21 13:00	05/13/21 10:53	0.473g/50mL	0.5g/50mL	1.06
A1E0409-07	Soil	EPA 6020B	05/11/21 12:25	05/13/21 10:53	0.466g/50mL	0.5g/50mL	1.07
A1E0409-08	Soil	EPA 6020B	05/11/21 12:30	05/13/21 10:53	0.478g/50mL	0.5g/50mL	1.05
A1E0409-09	Soil	EPA 6020B	05/11/21 13:30	05/13/21 10:53	0.459g/50mL	0.5g/50mL	1.09

Percent Dry Weight

Prep: Total Solids (Dry Weight)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1050441							
A1E0409-01	Soil	EPA 8000D	05/11/21 11:55	05/13/21 09:03			NA
A1E0409-02	Soil	EPA 8000D	05/11/21 12:00	05/13/21 09:03			NA
A1E0409-03	Soil	EPA 8000D	05/11/21 12:10	05/13/21 09:03			NA
A1E0409-04	Soil	EPA 8000D	05/11/21 12:20	05/13/21 09:03			NA
A1E0409-05	Soil	EPA 8000D	05/11/21 12:40	05/13/21 09:03			NA
A1E0409-06	Soil	EPA 8000D	05/11/21 13:00	05/13/21 09:03			NA
A1E0409-07	Soil	EPA 8000D	05/11/21 12:25	05/13/21 09:03			NA
A1E0409-08	Soil	EPA 8000D	05/11/21 12:30	05/13/21 09:03			NA
A1E0409-09	Soil	EPA 8000D	05/11/21 13:30	05/13/21 09:03			NA
A1E0409-10	Soil	EPA 8000D	05/11/21 13:45	05/13/21 09:03			NA

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0409 - 06 02 21 1816**

QUALIFIER DEFINITIONS

Client Sample and Quality Control (QC) Sample Qualifier Definitions:

Apex Laboratories

Q-54	Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by -5%. The results are reported as Estimated Values.
Q-55	Daily CCV/LCS recovery for this analyte was below the +/-20% criteria listed in EPA 8260, however there is adequate sensitivity to ensure detection at the reporting level.
R-02	The Reporting Limit for this analyte has been raised to account for interference from coeluting organic compounds present in the sample.
R-06	Reporting level raised due to possible carryover from a previous sample.
S-02	Surrogate recovery cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.
T-02	This Batch QC sample was analyzed outside of the method specified 12 hour analysis window. Results are estimated.
TEMP	Sample(s) received outside of recommended temperature. See Case Narrative.
V-15	Sample aliquot was subsampled from the sample container. The subsampled aliquot was preserved in the laboratory within 48 hours of sampling.

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0409 - 06 02 21 1816**

REPORTING NOTES AND CONVENTIONS:

Abbreviations:

DET Analyte DETECTED at or above the detection or reporting limit.

ND Analyte NOT DETECTED at or above the detection or reporting limit.

NR Result Not Reported

RPD Relative Percent Difference. RPDs for Matrix Spikes and Matrix Spike Duplicates are based on concentration, not recovery.

Detection Limits: Limit of Detection (LOD)

Limits of Detection (LODs) are normally set at a level of one half the validated Limit of Quantitation (LOQ).
If no value is listed ('-----'), then the data has not been evaluated below the Reporting Limit.

Reporting Limits: Limit of Quantitation (LOQ)

Validated Limits of Quantitation (LOQs) are reported as the Reporting Limits for all analyses where the LOQ, MRL, PQL or CRL are requested. The LOQ represents a level at or above the low point of the calibration curve, that has been validated according to Apex Laboratories' comprehensive LOQ policies and procedures.

Reporting Conventions:

Basis: Results for soil samples are generally reported on a 100% dry weight basis.
The Result Basis is listed following the units as " dry", " wet", or " " (blank) designation.

" dry" Sample results and Reporting Limits are reported on a dry weight basis. (i.e. "ug/kg dry")
See Percent Solids section for details of dry weight analysis.

" wet" Sample results and Reporting Limits for this analysis are normally dry weight corrected, but have not been modified in this case.

" " Results without 'wet' or 'dry' designation are not normally dry weight corrected. These results are considered 'As Received'.

QC Source:

In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) may be analyzed to demonstrate accuracy and precision of the extraction batch.

Non-Client Batch QC Samples (Duplicates and Matrix Spike/Duplicates) may not be included in this report. Please request a Full QC report if this data is required.

Miscellaneous Notes:

" --- " QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.

" *** " Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

Blanks:

Standard practice is to evaluate the results from Blank QC Samples down to a level equal to ½ the Reporting Limit (RL).
-For Blank hits falling between ½ the RL and the RL (J flagged hits), the associated sample and QC data will receive a 'B-02' qualifier.
-For Blank hits above the RL, the associated sample and QC data will receive a 'B' qualifier, per Apex Laboratories' Blank Policy.
For further details, please request a copy of this document.

Apex Laboratories

Philip Nerenberg, Lab Director

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GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0409 - 06 02 21 1816**

REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks (Cont.):

Sample results flagged with a 'B' or 'B-02' qualifier are potentially biased high if the sample results are less than ten times the level found in the blank for inorganic analyses, or less than five times the level found in the blank for organic analyses.

'B' and 'B-02' qualifications are only applied to sample results detected above the Reporting Level.

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

Water samples containing significant amounts of sediment are decanted or separated prior to extraction, and only the water portion analyzed, unless otherwise directed by the client.

Soil and Sediment Samples:

Soil and Sediment samples containing significant amounts of water are decanted prior to extraction, and only the solid portion analyzed, unless otherwise directed by the client.

Sampling and Preservation Notes:

Certain regulatory programs, such as National Pollutant Discharge Elimination System (NPDES), require that activities such as sample filtration (for dissolved metals, orthophosphate, hexavalent chromium, etc.) and testing of short hold analytes (pH, Dissolved Oxygen, etc.) be performed in the field (on-site) within a short time window. In addition, sample matrix spikes are required for some analyses, and sufficient volume must be provided, and billable site specific QC requested, if this is required. All regulatory permits should be reviewed to ensure that these requirements are being met.

Data users should be aware of which regulations pertain to the samples they submit for testing. If related sample collection activities are not approved for a particular regulatory program, results should be considered estimates. Apex Laboratories will qualify these analytes according to the most stringent requirements, however results for samples that are for non-regulatory purposes may be acceptable.

Samples that have been filtered and preserved at Apex Laboratories per client request are listed in the preparation section of the report with the date and time of filtration listed.

Apex Laboratories maintains detailed records on sample receipt, including client label verification, cooler temperature, sample preservation, hold time compliance and field filtration. Data is qualified as necessary, and the lack of qualification indicates compliance with required parameters.

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0409 - 06 02 21 1816**

LABORATORY ACCREDITATION INFORMATION

ORELAP Certification ID: OR100062 (Primary Accreditation) - EPA ID: OR01039

All methods and analytes reported from work performed at Apex Laboratories are included on Apex Laboratories' ORELAP Scope of Certification, with the exception of any analyte(s) listed below:

Apex Laboratories

Matrix	Analysis	TNI_ID	Analyte	TNI_ID	Accreditation

All reported analytes are included in Apex Laboratories' current ORELAP scope.

Secondary Accreditations

Apex Laboratories also maintains reciprocal accreditation with non-TNI states (Washington DOE), as well as other state specific accreditations not listed here.

Subcontract Laboratory Accreditations

Subcontracted data falls outside of Apex Laboratories' Scope of Accreditation.
Please see the Subcontract Laboratory report for full details, or contact your Project Manager for more information.

Field Testing Parameters

Results for Field Tested data are provded by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.

Apex Laboratories

Philip Nerenberg, Lab Director

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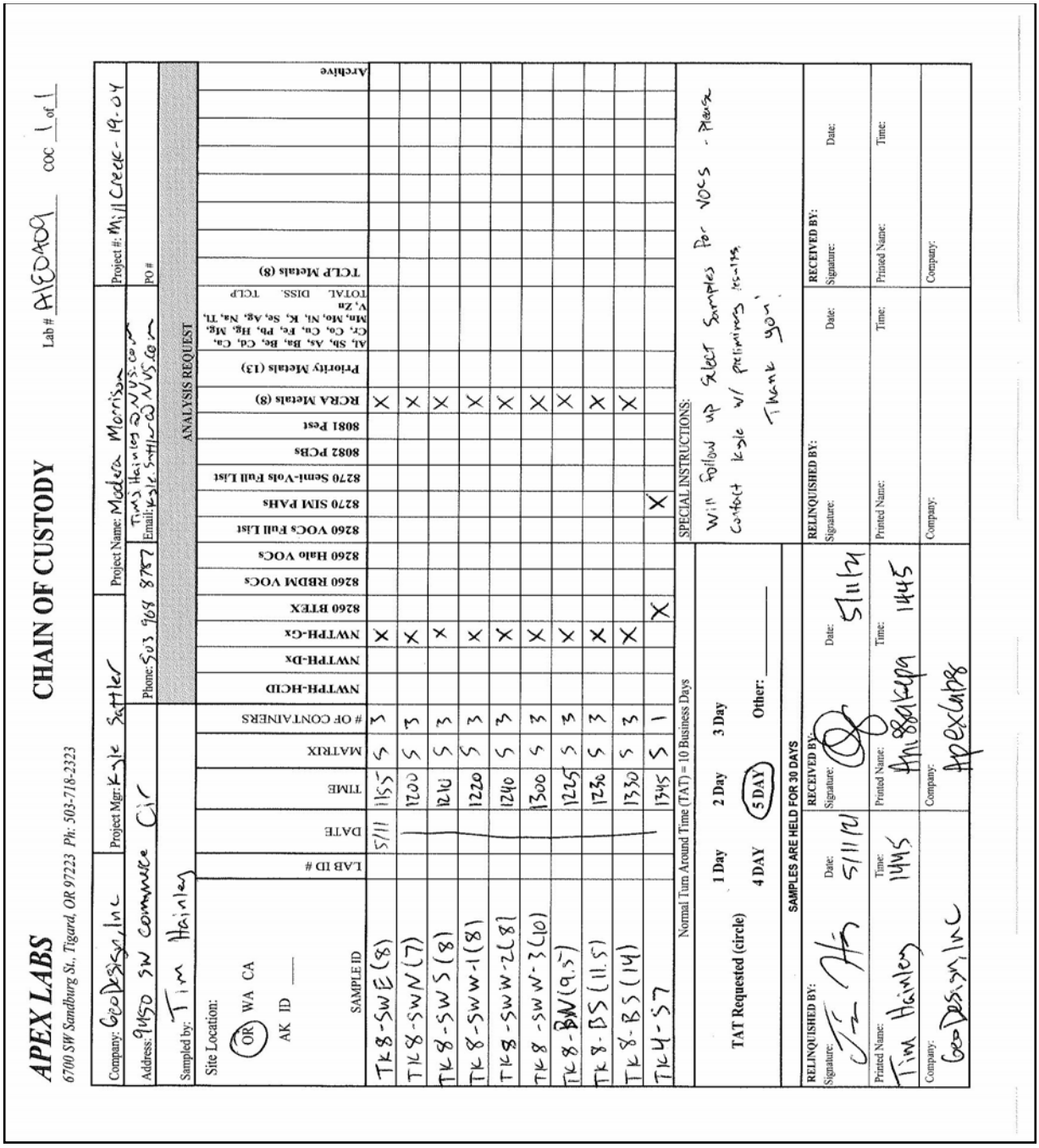
ANALYTICAL REPORT

GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0409 - 06 02 21 1816**



APEX LABS — CHAIN OF CUSTODY — Lab # A1E0409 — COC 1 of 1

6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323

Company: GeoDesign, Inc | Project Mgr: Kyle Sattler | Project Name: Modera Morrison | Project #: Mill Creek - 19-04

Address: 9450 SW Commerce Cir | Phone: 503 968 8787 | Email: Tim, Heinley@NVS.com, Kyle.Sattler@NVS.com | PO #

Sampled by: Tim Heinley

Site Location: (OR) WA CA AK ID ____

ANALYSIS REQUEST

SAMPLE ID	LAB ID #	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 BTEX	8260 RBDM VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIM PAHs	8270 Semi-Vols Full List	8082 PCBs	8081 Pest	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn TOTAL DISS. TCLP	TCLP Metals (8)	Archive
TK8-SWE(8)		5/11	1155	S	3			X									X			
TK8-SWN(7)			1200	S	3			X									X			
TK8-SWS(8)			1210	S	3			X									X			
TK8-SWW-1(8)			1220	S	3			X									X			
TK8-SWW-2(8)			1240	S	3			X									X			
TK8-SWW-3(10)			1300	S	3			X									X			
TK8-BW(9.5)			1225	S	3			X									X			
TK8-BS(11.5)			1230	S	3			X									X			
TK8-BS(14)			1330	S	3			X									X			
TK4-S7			1345	S	1				X				X							

Normal Turn Around Time (TAT) = 10 Business Days

TAT Requested (circle): 1 Day | 2 Day | 3 Day | 4 DAY | (5 DAY) | Other: ____

SPECIAL INSTRUCTIONS:
Will Rollout VP Sales Samples Per VOCs - Please Contact Kyle w/ preliminary results. Thank you!

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature:	Signature:	Signature:	Signature:
Date: 5/11/21	Date: 5/11/21	Date:	Date:
Time: 1445	Time: 1445	Time:	Time:
Printed Name: Tim Heinley	Printed Name: Emily Applegate	Printed Name:	Printed Name:
Company: GeoDesign, Inc	Company: Apex Labs	Company:	Company:

Apex Laboratories

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Philip Nerenberg

Philip Nerenberg, Lab Director

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ANALYTICAL REPORT

GeoDesign, Inc.	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-04**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A1E0409 - 06 02 21 1816**

APEX LABS COOLER RECEIPT FORM

Client: GeoDesign Element WO#: A1E0409

Project/Project #: Modera Morrison #MillCreek-19-04

Delivery Info:

Date/time received: 5/11/21 @ 1445 By: AKK

Delivered by: Apex ___ Client X ESS ___ FedEx ___ UPS ___ Swift ___ Senvoy ___ SDS ___ Other ___

Cooler Inspection Date/time inspected: 5/11/21 @ 1445 By: AKK

Chain of Custody included? Yes X No ___ Custody seals? Yes ___ No X

Signed/dated by client? Yes X No ___

Signed/dated by Apex? Yes X No ___

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	1.9 / AKK 5/11/21						
Received on ice? (Y/N)	Y						
Temp. blanks? (Y/N)	Y						
Ice type: (Gel/Real/Other)	Gel						
Condition:	Good						

Cooler out of temp? (Y/N) Possible reason why: ___

Green dots applied to out of temperature samples? Yes/No

Out of temperature samples form initiated? Yes/No

Sample Inspection: Date/time inspected: 5/11/21 @ 15:41 By: TKM

All samples intact? Yes X No ___ Comments: ___

Bottle labels/COCs agree? Yes ___ No X Comments: T on TKB-GWW-3(10) 2/2 VOAs read 15:00

COC/container discrepancies form initiated? Yes ___ No X

Containers/volumes received appropriate for analysis? Yes X No ___ Comments: ___

Do VOA vials have visible headspace? Yes ___ No ___ NA X

Comments ___

Water samples: pH checked: Yes ___ No ___ NA X pH appropriate? Yes ___ No ___ NA X

Comments: ___

Additional information: ___

Labeled by: TKM Witness: AKK Cooler Inspected by: TKM

Apex Laboratories, LLC
6700 S.W. Sandburg Street
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503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

Wednesday, March 16, 2022

Kyle Sattler
NV5
9450 SW Commerce Circle
Wilsonville, OR 97070

RE: A2C0278 - Modera Morrison - Millcreek-19-01-05

Thank you for using Apex Laboratories. We greatly appreciate your business and strive to provide the highest quality services to the environmental industry.

Enclosed are the results of analyses for work order A2C0278, which was received by the laboratory on 3/2/2022 at 2:11:00PM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: pnerenberg@apex-labs.com, or by phone at 503-718-2323.

Please note: All samples will be disposed of within 30 days of sample receipt, unless prior arrangements have been made.

Cooler Receipt Information

(See Cooler Receipt Form for details)

Cooler #1 2.8 degC

This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.
All other deliverables derived from this data, including Electronic Data Deliverables (EDDs), CLP-like forms, client requested summary sheets, and all other products are considered secondary to this report.

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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ANALYTICAL REPORT

NV5	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-01-05**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A2C0278 - 03 16 22 1759**

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TK8-SWW-S(8)	A2C0278-01	Soil	03/02/22 12:30	03/02/22 14:11
TK8-SWW-4(8)	A2C0278-02	Soil	03/02/22 13:25	03/02/22 14:11

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

NV5	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-01-05**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A2C0278 - 03 16 22 1759**

ANALYTICAL SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
TK8-SWW-S(8) (A2C0278-01RE2)				**Matrix: Soil**		**Batch: 22C0469**		
Gasoline Range Organics	**12300**	---	1450	mg/kg dry	10000	03/11/22 12:13	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 106 %*	*Limits: 50-150 %*		*1*	*03/11/22 12:13*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*91 %*	*50-150 %*	*1*	*03/11/22 12:13*	*NWTPH-Gx (MS)*	
TK8-SWW-4(8) (A2C0278-02)				**Matrix: Soil**		**Batch: 22C0325**		
Gasoline Range Organics	ND	---	7.15	mg/kg dry	50	03/09/22 08:02	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 101 %*	*Limits: 50-150 %*		*1*	*03/09/22 08:02*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*98 %*	*50-150 %*	*1*	*03/09/22 08:02*	*NWTPH-Gx (MS)*	

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

NV5	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-01-05**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A2C0278 - 03 16 22 1759**

ANALYTICAL SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 5035A/8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
TK8-SWW-S(8) (A2C0278-01)				**Matrix: Soil**		**Batch: 22C0325**		
Benzene	ND	---	0.145	mg/kg dry	500	03/09/22 08:56	5035A/8260D	
Toluene	ND	---	0.725	mg/kg dry	500	03/09/22 08:56	5035A/8260D	
Ethylbenzene	ND	---	0.362	mg/kg dry	500	03/09/22 08:56	5035A/8260D	
Xylenes, total	**3.83**	---	1.09	mg/kg dry	500	03/09/22 08:56	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	0.725	mg/kg dry	500	03/09/22 08:56	5035A/8260D	
Naphthalene	ND	---	1.45	mg/kg dry	500	03/09/22 08:56	5035A/8260D	
1,2-Dibromoethane (EDB)	ND	---	0.725	mg/kg dry	500	03/09/22 08:56	5035A/8260D	
1,2-Dichloroethane (EDC)	ND	---	0.362	mg/kg dry	500	03/09/22 08:56	5035A/8260D	
Isopropylbenzene	ND	---	0.725	mg/kg dry	500	03/09/22 08:56	5035A/8260D	
1,2,4-Trimethylbenzene	**4.85**	---	0.725	mg/kg dry	500	03/09/22 08:56	5035A/8260D	
1,3,5-Trimethylbenzene	**12.9**	---	0.725	mg/kg dry	500	03/09/22 08:56	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*105 %*	*Limits: 80-120 %*	*1*	*03/09/22 08:56*	*5035A/8260D*	
Toluene-d8 (Surr)			*95 %*	*80-120 %*	*1*	*03/09/22 08:56*	*5035A/8260D*	
4-Bromofluorobenzene (Surr)			*97 %*	*79-120 %*	*1*	*03/09/22 08:56*	*5035A/8260D*	
TK8-SWW-4(8) (A2C0278-02)				**Matrix: Soil**		**Batch: 22C0325**		
Benzene	ND	---	0.0143	mg/kg dry	50	03/09/22 08:02	5035A/8260D	
Toluene	ND	---	0.0715	mg/kg dry	50	03/09/22 08:02	5035A/8260D	
Ethylbenzene	ND	---	0.0358	mg/kg dry	50	03/09/22 08:02	5035A/8260D	
Xylenes, total	ND	---	0.107	mg/kg dry	50	03/09/22 08:02	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	0.0715	mg/kg dry	50	03/09/22 08:02	5035A/8260D	
Naphthalene	ND	---	0.143	mg/kg dry	50	03/09/22 08:02	5035A/8260D	
1,2-Dibromoethane (EDB)	ND	---	0.0715	mg/kg dry	50	03/09/22 08:02	5035A/8260D	
1,2-Dichloroethane (EDC)	ND	---	0.0358	mg/kg dry	50	03/09/22 08:02	5035A/8260D	
Isopropylbenzene	ND	---	0.0715	mg/kg dry	50	03/09/22 08:02	5035A/8260D	
1,2,4-Trimethylbenzene	ND	---	0.0715	mg/kg dry	50	03/09/22 08:02	5035A/8260D	
1,3,5-Trimethylbenzene	ND	---	0.0715	mg/kg dry	50	03/09/22 08:02	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*105 %*	*Limits: 80-120 %*	*1*	*03/09/22 08:02*	*5035A/8260D*	
Toluene-d8 (Surr)			*102 %*	*80-120 %*	*1*	*03/09/22 08:02*	*5035A/8260D*	
4-Bromofluorobenzene (Surr)			*97 %*	*79-120 %*	*1*	*03/09/22 08:02*	*5035A/8260D*	

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503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

NV5	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-01-05**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A2C0278 - 03 16 22 1759**

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
TK8-SWW-S(8) (A2C0278-01)				**Matrix: Soil**				
Batch: 22C0545								
Arsenic	**4.66**	---	1.39	mg/kg dry	10	03/14/22 16:48	EPA 6020B	
Barium	**127**	---	1.39	mg/kg dry	10	03/14/22 16:48	EPA 6020B	
Cadmium	ND	---	0.277	mg/kg dry	10	03/14/22 16:48	EPA 6020B	
Chromium	**15.9**	---	1.39	mg/kg dry	10	03/14/22 16:48	EPA 6020B	
Lead	**11.7**	---	0.277	mg/kg dry	10	03/14/22 16:48	EPA 6020B	
Mercury	ND	---	0.111	mg/kg dry	10	03/14/22 16:48	EPA 6020B	
Selenium	ND	---	1.39	mg/kg dry	10	03/14/22 16:48	EPA 6020B	
Silver	ND	---	0.277	mg/kg dry	10	03/14/22 16:48	EPA 6020B	
TK8-SWW-4(8) (A2C0278-02)				**Matrix: Soil**				
Batch: 22C0545								
Arsenic	**4.97**	---	1.38	mg/kg dry	10	03/14/22 16:53	EPA 6020B	
Barium	**117**	---	1.38	mg/kg dry	10	03/14/22 16:53	EPA 6020B	
Cadmium	ND	---	0.276	mg/kg dry	10	03/14/22 16:53	EPA 6020B	
Chromium	**13.9**	---	1.38	mg/kg dry	10	03/14/22 16:53	EPA 6020B	
Lead	**7.85**	---	0.276	mg/kg dry	10	03/14/22 16:53	EPA 6020B	
Mercury	ND	---	0.110	mg/kg dry	10	03/14/22 16:53	EPA 6020B	
Selenium	ND	---	1.38	mg/kg dry	10	03/14/22 16:53	EPA 6020B	
Silver	ND	---	0.276	mg/kg dry	10	03/14/22 16:53	EPA 6020B	

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ANALYTICAL REPORT

NV5	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-01-05**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A2C0278 - 03 16 22 1759**

ANALYTICAL SAMPLE RESULTS

Percent Dry Weight

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
TK8-SWW-S(8) (A2C0278-01)				**Matrix: Soil**		**Batch: 22C0215**		
% Solids	**76.7**	---	1.00	%	1	03/07/22 09:27	EPA 8000D	
TK8-SWW-4(8) (A2C0278-02)				**Matrix: Soil**		**Batch: 22C0215**		
% Solids	**78.3**	---	1.00	%	1	03/07/22 09:27	EPA 8000D	

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ANALYTICAL REPORT

NV5	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-01-05**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A2C0278 - 03 16 22 1759**

QUALITY CONTROL (QC) SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22C0325 - EPA 5035A								Soil				
Blank (22C0325-BLK1)			Prepared: 03/08/22 08:00 Analyzed: 03/08/22 23:59									
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	3.33	mg/kg wet	50	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery: 96 %*	*Limits: 50-150 %*		*Dilution: 1x*							
1,4-Difluorobenzene (Sur)		*93 %*	*50-150 %*		*"*							
LCS (22C0325-BS2)			Prepared: 03/08/22 08:00 Analyzed: 03/08/22 23:32									
NWTPH-Gx (MS)												
Gasoline Range Organics	24.2	---	5.00	mg/kg wet	50	25.0	---	97	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery: 96 %*	*Limits: 50-150 %*		*Dilution: 1x*							
1,4-Difluorobenzene (Sur)		*95 %*	*50-150 %*		*"*							
Duplicate (22C0325-DUP1)			Prepared: 03/02/22 11:40 Analyzed: 03/09/22 05:48									
QC Source Sample: Non-SDG (A2C0196-08)												
Gasoline Range Organics	ND	---	6.04	mg/kg dry	50	---	ND	---	---	---	30%	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery: 101 %*	*Limits: 50-150 %*		*Dilution: 1x*							
1,4-Difluorobenzene (Sur)		*96 %*	*50-150 %*		*"*							
Batch 22C0361 - EPA 5035A								Soil				
Blank (22C0361-BLK1)			Prepared: 03/09/22 10:55 Analyzed: 03/09/22 13:16									
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	3.33	mg/kg wet	50	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery: 95 %*	*Limits: 50-150 %*		*Dilution: 1x*							
1,4-Difluorobenzene (Sur)		*95 %*	*50-150 %*		*"*							
LCS (22C0361-BS2)			Prepared: 03/09/22 10:55 Analyzed: 03/09/22 12:49									
NWTPH-Gx (MS)												
Gasoline Range Organics	26.4	---	5.00	mg/kg wet	50	25.0	---	105	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery: 98 %*	*Limits: 50-150 %*		*Dilution: 1x*							
1,4-Difluorobenzene (Sur)		*99 %*	*50-150 %*		*"*							
Duplicate (22C0361-DUP1)			Prepared: 03/08/22 18:58 Analyzed: 03/09/22 22:15									**TEMP, V-15**
QC Source Sample: Non-SDG (A2C0436-17)												

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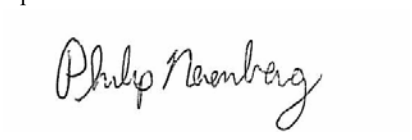

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ANALYTICAL REPORT

NV5	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-01-05**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A2C0278 - 03 16 22 1759**

QUALITY CONTROL (QC) SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22C0361 - EPA 5035A							**Soil**					
Duplicate (22C0361-DUP1)			Prepared: 03/08/22 18:58		Analyzed: 03/09/22 22:15							**TEMP, V-15**
QC Source Sample: Non-SDG (A2C0436-17)												
Gasoline Range Organics	ND	---	6.79	mg/kg dry	50	---	ND	---	---	---	30%	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 99 %*		*Limits: 50-150 %*		*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*94 %*		*50-150 %*		*"*					

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ANALYTICAL REPORT

NV5	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-01-05**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A2C0278 - 03 16 22 1759**

QUALITY CONTROL (QC) SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22C0469 - EPA 5035A							**Soil**					
Blank (22C0469-BLK1)			Prepared: 03/11/22 08:00 Analyzed: 03/11/22 10:52									
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	3.33	mg/kg wet	50	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 95 %*	*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*92 %*	*50-150 %*			*"*					
LCS (22C0469-BS2)			Prepared: 03/11/22 08:00 Analyzed: 03/11/22 10:26									
NWTPH-Gx (MS)												
Gasoline Range Organics	24.8	---	5.00	mg/kg wet	50	25.0	---	99	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 98 %*	*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*97 %*	*50-150 %*			*"*					
Duplicate (22C0469-DUP1)			Prepared: 03/09/22 13:49 Analyzed: 03/11/22 15:48									
QC Source Sample: Non-SDG (A2C0474-03)												
Gasoline Range Organics	ND	---	7.06	mg/kg dry	50	---	ND	---	---	---	30%	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 100 %*	*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)			*93 %*	*50-150 %*			*"*					

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ANALYTICAL REPORT

NV5	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-01-05**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A2C0278 - 03 16 22 1759**

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 5035A/8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22C0325 - EPA 5035A							**Soil**					
Blank (22C0325-BLK1)			Prepared: 03/08/22 08:00 Analyzed: 03/08/22 23:59									
5035A/8260D												
Benzene	ND	---	0.00667	mg/kg wet	50	---	---	---	---	---	---	
Toluene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Ethylbenzene	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Xylenes, total	ND	---	0.0500	mg/kg wet	50	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Naphthalene	ND	---	0.0667	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	---	0.0167	mg/kg wet	50	---	---	---	---	---	---	
Isopropylbenzene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	---	0.0333	mg/kg wet	50	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*101 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*103 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*100 %*		*79-120 %*			*"*				
LCS (22C0325-BS1)			Prepared: 03/08/22 08:00 Analyzed: 03/08/22 23:05									
5035A/8260D												
Benzene	1.08	---	0.0100	mg/kg wet	50	1.00	---	108	80-120%	---	---	
Toluene	1.02	---	0.0500	mg/kg wet	50	1.00	---	102	80-120%	---	---	
Ethylbenzene	0.978	---	0.0250	mg/kg wet	50	1.00	---	98	80-120%	---	---	
Xylenes, total	2.90	---	0.0750	mg/kg wet	50	3.00	---	97	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	0.988	---	0.0500	mg/kg wet	50	1.00	---	99	80-120%	---	---	
Naphthalene	0.974	---	0.100	mg/kg wet	50	1.00	---	97	80-120%	---	---	
1,2-Dibromoethane (EDB)	1.07	---	0.0500	mg/kg wet	50	1.00	---	107	80-120%	---	---	
1,2-Dichloroethane (EDC)	1.03	---	0.0250	mg/kg wet	50	1.00	---	103	80-120%	---	---	
Isopropylbenzene	1.07	---	0.0500	mg/kg wet	50	1.00	---	107	80-120%	---	---	
1,2,4-Trimethylbenzene	1.02	---	0.0500	mg/kg wet	50	1.00	---	102	80-120%	---	---	
1,3,5-Trimethylbenzene	1.04	---	0.0500	mg/kg wet	50	1.00	---	104	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*103 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*101 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*98 %*		*79-120 %*			*"*				
Duplicate (22C0325-DUP1)			Prepared: 03/02/22 11:40 Analyzed: 03/09/22 05:48									

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ORELAP ID: OR100062

ANALYTICAL REPORT

NV5	Project: Modera Morrison	
9450 SW Commerce Circle	Project Number: Millcreek-19-01-05	Report ID:
Wilsonville, OR 97070	Project Manager: Kyle Sattler	A2C0278 - 03 16 22 1759

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 5035A/8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22C0325 - EPA 5035A							Soil					
Duplicate (22C0325-DUP1)			Prepared: 03/02/22 11:40 Analyzed: 03/09/22 05:48									
QC Source Sample: Non-SDG (A2C0196-08)												
Benzene	ND	---	0.0121	mg/kg dry	50	---	ND	---	---	---	30%	
Toluene	ND	---	0.0604	mg/kg dry	50	---	ND	---	---	---	30%	
Ethylbenzene	ND	---	0.0302	mg/kg dry	50	---	ND	---	---	---	30%	
Xylenes, total	ND	---	0.0906	mg/kg dry	50	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	---	0.0604	mg/kg dry	50	---	ND	---	---	---	30%	
Naphthalene	ND	---	0.121	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dibromoethane (EDB)	ND	---	0.0604	mg/kg dry	50	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	---	0.0302	mg/kg dry	50	---	ND	---	---	---	30%	
Isopropylbenzene	ND	---	0.0604	mg/kg dry	50	---	ND	---	---	---	30%	
1,2,4-Trimethylbenzene	ND	---	0.0604	mg/kg dry	50	---	ND	---	---	---	30%	
1,3,5-Trimethylbenzene	ND	---	0.0604	mg/kg dry	50	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*102 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*102 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*98 %*		*79-120 %*			*"*				
Matrix Spike (22C0325-MS1)			Prepared: 03/02/22 11:40 Analyzed: 03/09/22 06:42									
QC Source Sample: Non-SDG (A2C0297-01)												
5035A/8260D												
Benzene	1.64	---	0.0147	mg/kg dry	50	1.47	ND	111	77-121%	---	---	
Toluene	1.48	---	0.0736	mg/kg dry	50	1.47	ND	101	77-121%	---	---	
Ethylbenzene	1.45	---	0.0368	mg/kg dry	50	1.47	ND	98	76-122%	---	---	
Xylenes, total	4.40	---	0.110	mg/kg dry	50	4.42	ND	99	78-124%	---	---	
Methyl tert-butyl ether (MTBE)	1.45	---	0.0736	mg/kg dry	50	1.47	ND	99	73-125%	---	---	
Naphthalene	1.44	---	0.147	mg/kg dry	50	1.47	ND	97	62-129%	---	---	
1,2-Dibromoethane (EDB)	1.51	---	0.0736	mg/kg dry	50	1.47	ND	102	78-122%	---	---	
1,2-Dichloroethane (EDC)	1.53	---	0.0368	mg/kg dry	50	1.47	ND	103	73-128%	---	---	
Isopropylbenzene	1.58	---	0.0736	mg/kg dry	50	1.47	ND	107	68-134%	---	---	
1,2,4-Trimethylbenzene	1.52	---	0.0736	mg/kg dry	50	1.47	ND	103	75-123%	---	---	
1,3,5-Trimethylbenzene	1.56	---	0.0736	mg/kg dry	50	1.47	ND	106	73-124%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		*Recovery:*	*105 %*	*Limits:*	*80-120 %*		*Dilution:*	*1x*				
Toluene-d8 (Surr)			*99 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*95 %*		*79-120 %*			*"*				

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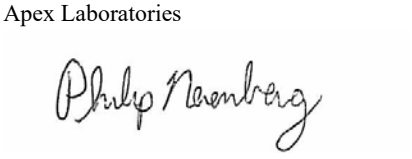

Philip Nerenberg, Lab Director

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Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

NV5	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-01-05**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A2C0278 - 03 16 22 1759**

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22C0545 - EPA 3051A							**Soil**					
Blank (22C0545-BLK1)			Prepared: 03/14/22 11:29 Analyzed: 03/14/22 15:40									
EPA 6020B												
Arsenic	ND	---	0.965	mg/kg wet	10	---	---	---	---	---	---	
Barium	ND	---	0.965	mg/kg wet	10	---	---	---	---	---	---	
Cadmium	ND	---	0.193	mg/kg wet	10	---	---	---	---	---	---	
Chromium	ND	---	0.965	mg/kg wet	10	---	---	---	---	---	---	
Lead	ND	---	0.193	mg/kg wet	10	---	---	---	---	---	---	
Mercury	ND	---	0.0772	mg/kg wet	10	---	---	---	---	---	---	
Selenium	ND	---	0.965	mg/kg wet	10	---	---	---	---	---	---	
Silver	ND	---	0.193	mg/kg wet	10	---	---	---	---	---	---	
LCS (22C0545-BS1)			Prepared: 03/14/22 11:29 Analyzed: 03/14/22 16:00									
EPA 6020B												
Arsenic	45.9	---	1.00	mg/kg wet	10	50.0	---	92	80-120%	---	---	
Barium	46.1	---	1.00	mg/kg wet	10	50.0	---	92	80-120%	---	---	
Cadmium	45.3	---	0.200	mg/kg wet	10	50.0	---	91	80-120%	---	---	
Chromium	44.4	---	1.00	mg/kg wet	10	50.0	---	89	80-120%	---	---	
Lead	47.0	---	0.200	mg/kg wet	10	50.0	---	94	80-120%	---	---	
Mercury	0.898	---	0.0800	mg/kg wet	10	1.00	---	90	80-120%	---	---	
Selenium	22.7	---	1.00	mg/kg wet	10	25.0	---	91	80-120%	---	---	
Silver	23.6	---	0.200	mg/kg wet	10	25.0	---	94	80-120%	---	---	
Duplicate (22C0545-DUP1)			Prepared: 03/14/22 11:29 Analyzed: 03/14/22 16:09									
QC Source Sample: Non-SDG (A2C0154-02)												
Arsenic	**4.12**	---	1.11	mg/kg dry	10	---	3.91	---	---	5	20%	PRO
Barium	**114**	---	1.11	mg/kg dry	10	---	110	---	---	4	20%	PRO
Cadmium	ND	---	0.222	mg/kg dry	10	---	0.162	---	---	***	20%	PRO
Chromium	**28.6**	---	1.11	mg/kg dry	10	---	27.1	---	---	5	20%	PRO
Lead	**28.0**	---	0.222	mg/kg dry	10	---	118	---	---	**123**	**20%**	PRO,Q-17
Mercury	ND	---	0.0888	mg/kg dry	10	---	ND	---	---	---	20%	PRO
Selenium	ND	---	1.11	mg/kg dry	10	---	ND	---	---	---	20%	PRO
Silver	ND	---	0.222	mg/kg dry	10	---	ND	---	---	---	20%	PRO
Matrix Spike (22C0545-MS1)			Prepared: 03/14/22 11:29 Analyzed: 03/14/22 16:24									

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Philip Nerenberg, Lab Director

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503-718-2323
ORELAP ID: **OR100062**

NV5	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-01-05**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A2C0278 - 03 16 22 1759**

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22C0545 - EPA 3051A							**Soil**					
Matrix Spike (22C0545-MS1)			Prepared: 03/14/22 11:29 Analyzed: 03/14/22 16:24									
QC Source Sample: Non-SDG (A2C0154-02)												
EPA 6020B												
Arsenic	51.6	---	1.07	mg/kg dry	10	53.7	3.91	89	75-125%	---	---	PRO
Barium	162	---	1.07	mg/kg dry	10	53.7	110	97	75-125%	---	---	PRO
Cadmium	48.1	---	0.215	mg/kg dry	10	53.7	0.162	89	75-125%	---	---	PRO
Chromium	74.9	---	1.07	mg/kg dry	10	53.7	27.1	89	75-125%	---	---	PRO
Lead	78.8	---	0.215	mg/kg dry	10	53.7	118	**-73**	**75-125%**	---	---	PRO,Q-01
Mercury	0.979	---	0.0859	mg/kg dry	10	1.07	ND	91	75-125%	---	---	PRO
Selenium	24.3	---	1.07	mg/kg dry	10	26.8	ND	90	75-125%	---	---	PRO
Silver	25.2	---	0.215	mg/kg dry	10	26.8	ND	94	75-125%	---	---	PRO

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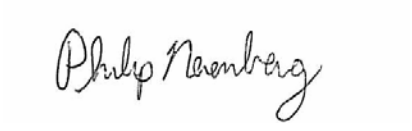

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ANALYTICAL REPORT

NV5	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-01-05**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A2C0278 - 03 16 22 1759**

QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 22C0215 - Total Solids (Dry Weight)							**Soil**					
Duplicate (22C0215-DUP1)			Prepared: 03/04/22 11:49		Analyzed: 03/07/22 09:27							**H-01**
QC Source Sample: Non-SDG (A1I0153-05)												
% Solids	**91.0**	---	1.00	%	1	---	91.1	---	---	0.1	10%	
Duplicate (22C0215-DUP2)			Prepared: 03/04/22 19:20		Analyzed: 03/07/22 09:27							
QC Source Sample: Non-SDG (A2C0311-01)												
% Solids	**77.0**	---	1.00	%	1	---	76.7	---	---	0.4	10%	
Duplicate (22C0215-DUP3)			Prepared: 03/04/22 19:20		Analyzed: 03/07/22 09:27							
QC Source Sample: Non-SDG (A2C0330-01)												
% Solids	**72.6**	---	1.00	%	1	---	72.6	---	---	0.008	10%	

No Client related Batch QC samples analyzed for this batch. See notes page for more information.

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ANALYTICAL REPORT

NV5	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-01-05**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A2C0278 - 03 16 22 1759**

SAMPLE PREPARATION INFORMATION

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Prep: EPA 5035A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 22C0325							
A2C0278-02	Soil	NWTPH-Gx (MS)	03/02/22 13:25	03/02/22 13:25	5.54g/5mL	5g/5mL	0.90
Batch: 22C0469							
A2C0278-01RE2	Soil	NWTPH-Gx (MS)	03/02/22 12:30	03/02/22 12:30	5.69g/5mL	5g/5mL	0.88

Selected Volatile Organic Compounds by EPA 5035A/8260D

Prep: EPA 5035A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 22C0325							
A2C0278-01	Soil	5035A/8260D	03/02/22 12:30	03/02/22 12:30	5.69g/5mL	5g/5mL	0.88
A2C0278-02	Soil	5035A/8260D	03/02/22 13:25	03/02/22 13:25	5.54g/5mL	5g/5mL	0.90

Total Metals by EPA 6020B (ICPMS)

Prep: EPA 3051A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 22C0545							
A2C0278-01	Soil	EPA 6020B	03/02/22 12:30	03/14/22 11:29	0.47g/50mL	0.5g/50mL	1.06
A2C0278-02	Soil	EPA 6020B	03/02/22 13:25	03/14/22 11:29	0.463g/50mL	0.5g/50mL	1.08

Percent Dry Weight

Prep: Total Solids (Dry Weight)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 22C0215							
A2C0278-01	Soil	EPA 8000D	03/02/22 12:30	03/04/22 19:21			NA
A2C0278-02	Soil	EPA 8000D	03/02/22 13:25	03/04/22 19:21			NA

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ANALYTICAL REPORT

NV5	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-01-05**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A2C0278 - 03 16 22 1759**

QUALIFIER DEFINITIONS

Client Sample and Quality Control (QC) Sample Qualifier Definitions:

Apex Laboratories

H-01	This sample was analyzed outside the recommended holding time.
PRO	Sample has undergone sample processing prior to extraction and analysis.
Q-01	Spike recovery and/or RPD is outside acceptance limits.
Q-17	RPD between original and duplicate sample is outside of established control limits.
TEMP	Sample was received outside of recommended temperature. See Case Narrative.
V-15	Sample aliquot was subsampled from the sample container. The subsampled aliquot was preserved in the laboratory within 48 hours of sampling.

Apex Laboratories

Philip Nerenberg

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ANALYTICAL REPORT

NV5	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-01-05**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A2C0278 - 03 16 22 1759**

REPORTING NOTES AND CONVENTIONS:

Abbreviations:

DET Analyte DETECTED at or above the detection or reporting limit.

ND Analyte NOT DETECTED at or above the detection or reporting limit.

NR Result Not Reported

RPD Relative Percent Difference. RPDs for Matrix Spikes and Matrix Spike Duplicates are based on concentration, not recovery.

Detection Limits: Limit of Detection (LOD)

Limits of Detection (LODs) are normally set at a level of one half the validated Limit of Quantitation (LOQ).
If no value is listed ('-----'), then the data has not been evaluated below the Reporting Limit.

Reporting Limits: Limit of Quantitation (LOQ)

Validated Limits of Quantitation (LOQs) are reported as the Reporting Limits for all analyses where the LOQ, MRL, PQL or CRL are requested. The LOQ represents a level at or above the low point of the calibration curve, that has been validated according to Apex Laboratories' comprehensive LOQ policies and procedures.

Reporting Conventions:

Basis: Results for soil samples are generally reported on a 100% dry weight basis.
The Result Basis is listed following the units as " dry", " wet", or " " (blank) designation.

" dry" Sample results and Reporting Limits are reported on a dry weight basis. (i.e. "ug/kg dry")
See Percent Solids section for details of dry weight analysis.

" wet" Sample results and Reporting Limits for this analysis are normally dry weight corrected, but have not been modified in this case.

" " Results without 'wet' or 'dry' designation are not normally dry weight corrected. These results are considered 'As Received'.

QC Source:

In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) may be analyzed to demonstrate accuracy and precision of the extraction batch.

Non-Client Batch QC Samples (Duplicates and Matrix Spike/Duplicates) may not be included in this report. Please request a Full QC report if this data is required.

Miscellaneous Notes:

" --- " QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.

" *** " Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

Blanks:

Standard practice is to evaluate the results from Blank QC Samples down to a level equal to ½ the Reporting Limit (RL).
-For Blank hits falling between ½ the RL and the RL (J flagged hits), the associated sample and QC data will receive a 'B-02' qualifier.
-For Blank hits above the RL, the associated sample and QC data will receive a 'B' qualifier, per Apex Laboratories' Blank Policy.
For further details, please request a copy of this document.

Apex Laboratories

Philip Nerenberg, Lab Director

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NV5	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-01-05**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A2C0278 - 03 16 22 1759**

REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks (Cont.):

Sample results flagged with a 'B' or 'B-02' qualifier are potentially biased high if the sample results are less than ten times the level found in the blank for inorganic analyses, or less than five times the level found in the blank for organic analyses.

'B' and 'B-02' qualifications are only applied to sample results detected above the Reporting Level.

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

Water samples containing significant amounts of sediment are decanted or separated prior to extraction, and only the water portion analyzed, unless otherwise directed by the client.

Soil and Sediment Samples:

Soil and Sediment samples containing significant amounts of water are decanted prior to extraction, and only the solid portion analyzed, unless otherwise directed by the client.

Sampling and Preservation Notes:

Certain regulatory programs, such as National Pollutant Discharge Elimination System (NPDES), require that activities such as sample filtration (for dissolved metals, orthophosphate, hexavalent chromium, etc.) and testing of short hold analytes (pH, Dissolved Oxygen, etc.) be performed in the field (on-site) within a short time window. In addition, sample matrix spikes are required for some analyses, and sufficient volume must be provided, and billable site specific QC requested, if this is required. All regulatory permits should be reviewed to ensure that these requirements are being met.

Data users should be aware of which regulations pertain to the samples they submit for testing. If related sample collection activities are not approved for a particular regulatory program, results should be considered estimates. Apex Laboratories will qualify these analytes according to the most stringent requirements, however results for samples that are for non-regulatory purposes may be acceptable.

Samples that have been filtered and preserved at Apex Laboratories per client request are listed in the preparation section of the report with the date and time of filtration listed.

Apex Laboratories maintains detailed records on sample receipt, including client label verification, cooler temperature, sample preservation, hold time compliance and field filtration. Data is qualified as necessary, and the lack of qualification indicates compliance with required parameters.

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Philip Nerenberg, Lab Director

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

NV5	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-01-05**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A2C0278 - 03 16 22 1759**

LABORATORY ACCREDITATION INFORMATION

ORELAP Certification ID: OR100062 (Primary Accreditation) - EPA ID: OR01039

All methods and analytes reported from work performed at Apex Laboratories are included on Apex Laboratories' ORELAP Scope of Certification, with the exception of any analyte(s) listed below:

Apex Laboratories

Matrix	Analysis	TNI_ID	Analyte	TNI_ID	Accreditation

All reported analytes are included in Apex Laboratories' current ORELAP scope.

Secondary Accreditations

Apex Laboratories also maintains reciprocal accreditation with non-TNI states (Washington DOE), as well as other state specific accreditations not listed here.

Subcontract Laboratory Accreditations

Subcontracted data falls outside of Apex Laboratories' Scope of Accreditation.
Please see the Subcontract Laboratory report for full details, or contact your Project Manager for more information.

Field Testing Parameters

Results for Field Tested data are provded by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.

Apex Laboratories

Philip Nerenberg

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ANALYTICAL REPORT

NV5	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-01-05**	**Report ID:**
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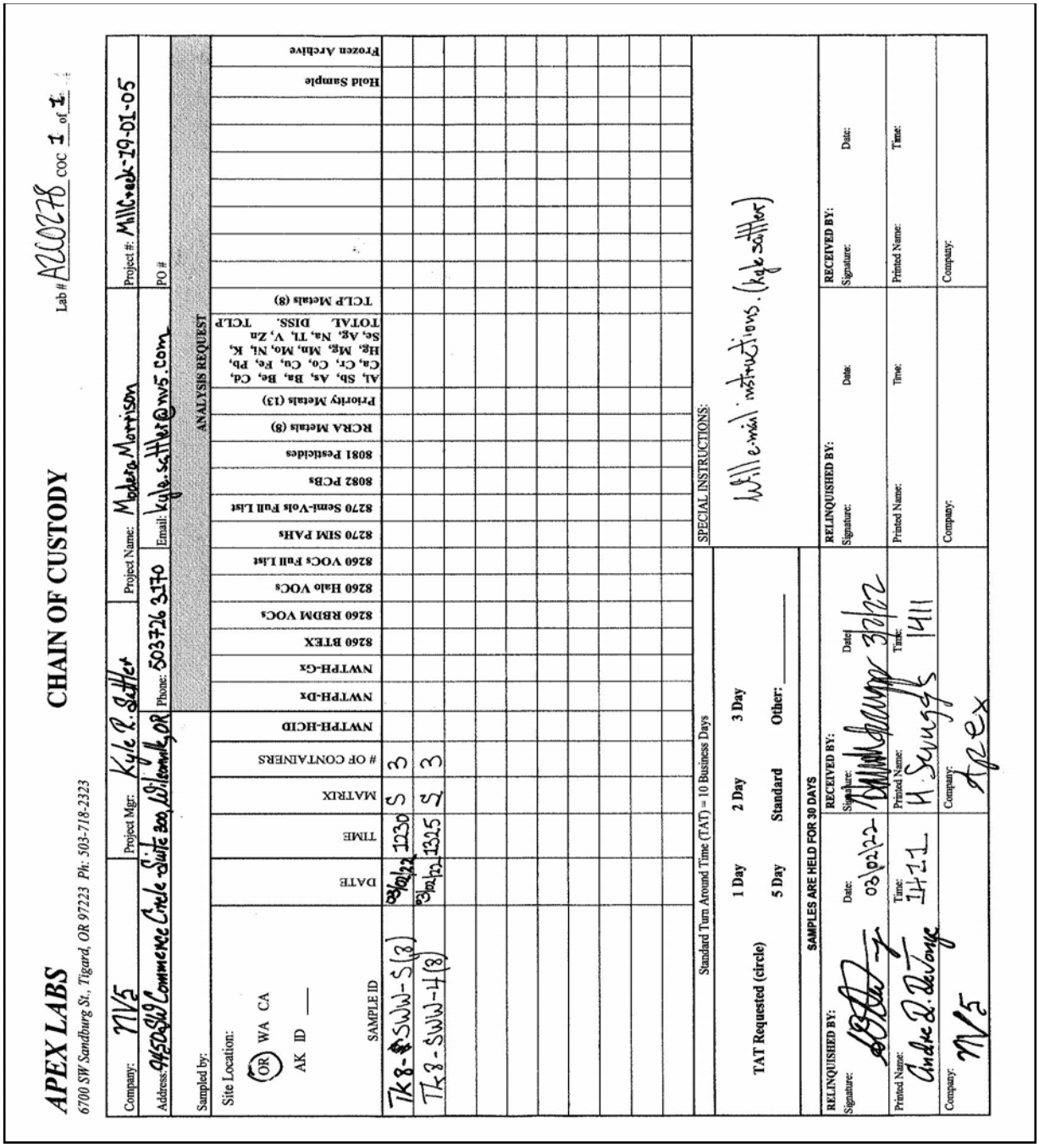

APEX LABS
6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323

CHAIN OF CUSTODY

Lab # A2C0278 COC 1 of 1

Company: NV5 | Project Mgr: Kyle P. Sattler | Project Name: Modera Morrison | Project #: Millcreek-19-01-05
Address: 9450 SW Commerce Circle Suite 300, Wilsonville, OR | Phone: 503-726-2370 | Email: kyle.sattler@nv5.com | PO #
Sampled by:
Site Location: (OR) WA CA AK ID ___

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 BTEX	8260 RBDM VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIM PAHs	8270 Semi-Vols Full List	8082 PCBs	8081 Pesticides	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn TOTAL DISS. TCLP	TCLP Metals (8)	Hold Sample	Frozen Archive
TK 8 - SWJ-S (3)	3/16/22	1230	S	3																	
TK 8 - SWJ-4 (8)	3/16/22	1325	S	3																	

Standard Turn Around Time (TAT) = 10 Business Days
TAT Requested (circle): 1 Day 2 Day 3 Day 5 Day Standard Other: ___

SPECIAL INSTRUCTIONS:
Will e-mail instructions. (kyle sattler)

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature:	Signature:	Signature:	Signature:
Date: 03/02/22	Date: 3/2/22	Date:	Date:
Time: 1421	Time: 1411	Time:	Time:
Printed Name: Andre D. DeJonge	Printed Name: H. Scruggs	Printed Name:	Printed Name:
Company: NV5	Company: Apex	Company:	Company:

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Philip Nerenberg, Lab Director

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

NV5	Project: **Modera Morrison**	
9450 SW Commerce Circle	Project Number: **Millcreek-19-01-05**	**Report ID:**
Wilsonville, OR 97070	Project Manager: **Kyle Sattler**	**A2C0278 - 03 16 22 1759**

APEX LABS COOLER RECEIPT FORM

Client: NV5 Element WO#: A2 C0278

Project/Project #: Modera Morrison | Millcreek-19-01-05

Delivery Info:
Date/time received: 3/2/22 @ 1411 By: HAS
Delivered by: Apex___Client X ESS___FedEx___UPS___Swift___Senvoy ___SDS___Other_____
Cooler Inspection Date/time inspected: 3/2/22 @ 1412 By: ST
Chain of Custody included? Yes X No _____ Custody seals? Yes_____ No X
Signed/dated by client? Yes X No _____
Signed/dated by Apex? Yes X No _____

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	2.8						
Received on ice? (Y/N)	Y						
Temp. blanks? (Y/N)	Y						
Ice type: (Gel/Real/Other)	Real						
Condition:	good						

Cooler out of temp? (Y/N) Possible reason why:_____
Green dots applied to out of temperature samples? Yes No
Out of temperature samples form initiated? Yes No
Sample Inspection: Date/time inspected: 3/4/22 @ 1321 By: HAS
All samples intact? Yes X No ___ Comments:_____
Bottle labels/COCs agree? Yes X No ___ Comments: _____
COC/container discrepancies form initiated? Yes ___ No X
Containers/volumes received appropriate for analysis? Yes X No ___ Comments: _____
Do VOA vials have visible headspace? Yes ___ No ___ NA X
Comments_____
Water samples: pH checked: Yes___No___NA X pH appropriate? Yes___No___NA X
Comments: _____
Additional information:_____

Labeled by: HAS Witness: by Cooler Inspected by: HAS

Apex Laboratories

Philip Nerenberg

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The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

APPENDIX J

Jones Stohosky Environmental Laboratory, Inc.
15695 SW 74th Ave, Suite 350, Tigard, OR 97224
Phone: (971) 266-7545
www.jselabs.com

Asbestos Analysis of Bulk Materials by Polarized Light Microscopy

Client:	GeoDesign, Inc.	**Client #:**	T21001	**Report Date:**	4/29/2021
Project #:	MillCreek-19-04	**Invoice PO:**		**T Batch #:**	990
Project Name:	Modera Morrison, SE 12th and SE Morrison, Portland, OR				

Sample	Layer	Description	Binder/Matrix	Non-Asbestos Components		Asbestos Type %	
AS-1 Texture, Plaster Lab ID #: TAB-2101899							
	1	Cream paint w/ texture	Paint Acid soluble			None Detected	
	2	Gray plaster	Cementitious Rock particles	Cellulose	2%	None Detected	
Paint not separable from texture and included in analysis results. Subsamples ashed for quality assurance.							
AS-2 Red Layer, Black Layer Sample Lab ID #: TAB-2101900							
	1	Pink powder compound	Opaque Acid soluble			None Detected	
	2	Black asphaltic felt w/ red/white mastic compound	Asphaltic Mastic/glue	Fibrous Glass Cellulose	1% 60%	**Chrysotile**	**<1%**
Subsamples ashed for quality assurance. Mastic not separable.							

Analyst Name: Lily Godon **Date: 4/29/2021**

Approved Signatory: Lily Godon

JSE analyzes for bulk asbestos using the EPA-600/M4-82-020 and EPA/600/R-93/116 methods for polarized light microscopy (PLM). These results apply to the sample(s) as received. Asbestos content for an inhomogeneous sample is reported by layer when it is possible to subsample the discrete strata for individual analysis. Small diameter fibers may not be detected by this method. Information supplied by the customer does not affect the validity of PLM results obtained by the EPA 600/R-93/116 method. Customers will be informed (in comments section) if specific environmental or test conditions affect the interpretation of test results. All analysis results conform to the EPA 600/R-93/116, Method for the Determination of Asbestos in Bulk Building Materials. Quantification is performed using visual area estimation unless otherwise stated in the report. Qualitative and quantitative transmission electron microscopy (TEM) analysis may be recommended for difficult samples. Quantitative analysis by PLM point count or TEM is recommended for sample(s) testing at < or = to 10% asbestos. Uncertainty values are as follows: Trace–<5.0%: ±250%; 5.0–39 <10%: ±150%; 10–<30%: ±100%; 30–<60%: ±50%; 60–100%: ±25%. Asbestos includes the following minerals: chrysotile, amosite, crocidolite, tremolite, actinolite, anthophyllite. "Matrix" is defined as non-asbestos, non-binder fibrous and non-fibrous components. "Binder" is defined as a component added for cohesiveness. Non-asbestos sample constituents may not be definite. Amended reports supersede all previous reports. JSE's Tigard lab is a non-NVLAP lab that is successfully proficient in blind national testing and strictly follows the quality assurance activities of our nationally accredited NVLAP testing lab (200872-0) in Milwaukie, Oregon. JSE's Tigard lab satisfies the Oregon rule for bulk asbestos analysis (OAR 340-248-0270). Contact JSE if you need an analysis by our fully accredited Milwaukie lab and a report that bears the NVLAP logo.

Jones Stohosky Environmental Laboratory, Inc.
CHAIN OF CUSTODY

Step 1: Select a location to submit samples. Use Milwaukie address if mailing samples.

East Side - Milwaukie Lab & Office
3315 SE Harrison St.
Milwaukie, OR 97222
Phone: (503) 659-8338

West Side - Tigard Lab & Office
15695 SW 74th Ave, Suite 305
Tigard, OR 97223
Phone: (971) 266-7545

Website: www.jselabs.com

Step 2: Complete the contact information. This will ensure you receive your results ASAP.

Company/Client Name: GeoDesign, Inc | Contact Name: Kyle Sattler
Reporting Email: kyle.sattler@nvs.com | Phone: 503-968-8787
Accounting Email: | Mailing Address:

Step 3: Complete the project information how you would like it to appear on your report.

Project Name: Modera Morrison | Project #: Mill Creek-19-04
Location/Address: SE 12th and SE Morrison, Portland, OR | Invoice PO #:

Step 4: Select a turnaround time (TAT).

Express Rush (EX)	Rush (R)	1 Day	2 Day	3 Day
< 2 Hours PLM < 3 Hours Pb	Same Day	Next Business Day	2 Business Days	3 Business Days

Step 5: Select an analysis type. Contact JSE Labs for other testing services offered.

Asbestos Bulk (PLM)	Asbestos Air (PCM)	Lead (Pb)

Step 6: List and describe samples. List analysis type and turnaround time (TAT).

#	Sample Description	Analysis Type	TAT	A/R	Batch #: 990 / JSE Lab ID
01	AS-1 Texture, Plaster	PLM	R	A	TAB-201899
02	AS-2 Red layer, Black layer Sample	PLM	R	A	TAB-210900
03					
04					
05					
06					
07					
08					
09					
10					

Special/Other Instructions:

Step 7: By signing below you are agreeing to JSE Lab's Terms and Conditions (see reverse side).

Signature: [signature] | Date/Time: 4/29/21, 13:20

Lab Use Only:

$ $ $

Received by: [signature] Date/Time: 04/29/21 1:30 PM Class: Mil / Tig
AH Drop / Walk In / Courier / USPS / FedEx / UPS Confirm Email: Account Check:
R/I #:
Results: Email / Call / Mail Initials: Date:
Lock: LG 04/29/21 Snap: LG 04/29/21
Client #: T-2100-S
Due: 04/29/21 THR

Page _____ of _____

NV5

Delivering Solutions
Improving Lives