
Appendix G-3

Phase II Environmental Site Assessment

Phase II Environmental Site Assessment

Southeast Corner of Portola Parkway and Jeffrey Road
Irvine, California 92602



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Phase II Environmental Site Assessment

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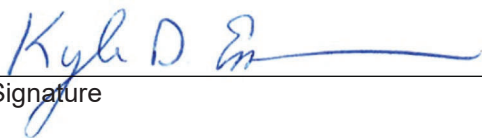


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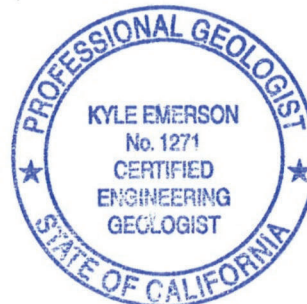


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1 Introduction

Stantec Consulting Services, Inc. (Stantec) has prepared this Phase II Environmental Site Assessment (ESA) report on behalf of Brookfield Properties c/o Brookfield SoCal Land Constructors, LLC (the “client”) for the properties located at the southeast corner of Portola Parkway and Jeffrey Road, within the City of Irvine, County of Orange, California (the “Property” or “Site”, **Figure 1** and **Figure 2**). Site assessment activities presented in this report were completed in accordance with Stantec’s *Proposal for Supplemental Phase II Environmental Site Assessment*, dated July 31, 2024, and the *General Agreement For Consulting Services* between the Client and Stantec, dated September 27, 2024. It is our understanding that the Site is contemplated for redevelopment as a residential community, identified as Gateway. The proposed Gateway development plan is presented on **Figure 2A**.

This investigation has confirmed that chemicals associated with historical agricultural use are present in Site soils, including lead, arsenic, 4,4-DDE, 4-4-DDT, and endrin, but at concentrations below residential screening levels and naturally occurring background concentrations (e.g., arsenic), and therefore do not require remedial action or cleanup. However, cumulative DDT isomer concentrations were detected during this assessment at concentrations exceeding the California hazardous waste threshold of 1.0 mg/kg. These concentrations are similar to concentrations reported by AEI in 2023. Therefore, potential exists of that soils exported from the Site may be classified as California hazardous waste due to cumulative DDT isomer concentrations. If export of soil is planned in connection with the contemplated Site development, that soil should be sampled to confirm concentrations of DDT isomers for disposal prior to removal from the Property for proper disposal classification.

No environmental impacts were identified in the stockpile soils located in the eastern portion of the Site. Further, institutional knowledge regarding the source of the large stockpile located in the northeastern portion of the Site, reported to have been generated from the Orchard Hills development project located north of the Site beyond Jeffrey Road, have shown shallow soils from that project do not contain OCPs, arsenic, or lead at concentrations exceeding residential screening levels. This institutional knowledge of these soil characteristics were confirmed during this investigation, and further confirmed no total petroleum hydrocarbons (TPH) or volatile organic compounds (VOCs) were presented within these stockpiled soils, or within the smaller stockpiles located within sampling grid 16. Therefore, the stockpiles located in the eastern portion of the Site are not considered a REC.

The results of the soil vapor investigation performed proximate to the former UST locations did not indicate a release from the USTs. A single petroleum-related VOC, naphthalene, was detected at concentrations very slightly exceeding the 0.03 AF residential screening level of 2.77 µg/m³. The very slight exceedance of naphthalene in this single soil vapor sample is not considered an indication that the USTs have leaked. The minor detection of naphthalene is not considered representative of soil vapor conditions at the Site, and therefore, is not considered a REC to the Site.

Stantec recommends preparation and implementation of a Soil Management Plan (SMP) to address the potential to encounter any subsurface features during construction.



1.1 Property Description and Operations

The Subject Property consists of approximately 80 acres and is developed with agricultural fields, portable and permanent buildings, storage sheds, storage yards, and unpaved roadways. According to historical Site documents, the property has been occupied by various landscape and agricultural operations since approximately 1938. Former Site tenants are sourced from historical Site documents, as discussed in **Section 1.3**. Surrounding properties include residential to the north, west, and southwest, vacant land to the southeast, and various commercial uses to the northeast. A Property location map is illustrated on **Figure 1**. A Property map with the current configuration is provided as **Figure 2**.

1.2 Property Geology and Hydrogeology

The Subject Property lies within the eastern margin of the Los Angeles Basin, a large structural depression within the Peninsular Range geomorphic province. At the easternmost portion of the Los Angeles Basin is the Tustin Plain, located south and adjacent to the Downey Plain, which is the largest area of recent alluvial sedimentation. The Tustin Plain is composed of alluvial fans with elevations from 150 to 500 feet above mean sea level that formed along the southwest flank of the Santa Ana Mountains with a region slope to the west. The alluvial deposits of Holocene-Quaternary age that comprise the Tustin Plain consist mainly of sands, gravels, silts and clays. Generally, the coarse grained sediments are deposited near the inland hills as alluvial fans, whereas deposition of progressively finer grained sediments occurs towards the river flood-plains. The upper fan areas are interpreted as intake areas where recharge of the groundwater takes place. Hydraulic continuity may exist between alluvial sediments of the fan areas and certain water-bearing sediments of the central lowlands. Replenishment of groundwater occurs in the intake area by infiltration from major streams within their permeable channels and from irrigation water and rain.

The Newport-Inglewood Fault is a major northwest-southeast trending strike-slip fault that terminates near Costa Mesa. This fault does not appear to extend beneath the subject property. Several minor faults including the Peralta Hills Fault and El Modeno fault are located northwest and north of the property and are not considered to be seismically active or potentially active.

The Subject Property is located within the Coastal Plain of Orange County, a groundwater basin which underlies a coastal alluvial plain in northwestern Orange County. The basin is bound on the northwest and the north by the Los Angeles-Orange County boundary. The Whittier fault zone and consolidated rocks of the Puente Hills and Chino Hills bound the northeast extent of the basin. The basin is bound on the east by consolidated rocks of the Santa Ana Mountains, in the area of the Subject Property, and on the south by consolidated rocks of the Laguna Hills and San Joaquin Hills. The Pacific Ocean is the southwest extent of the basin (Department of Water Resources [DWR], 2020).

Groundwater is found in area irrigation wells at depths greater than 100-feet below ground surface (bgs); however, first unconfined groundwater has been identified between approximately 100 to 125 feet bgs. The regional stratigraphy is comprised of interbedded silt, clay and sand that are typical of sediments deposited on alluvial fans during flood stages.



1.3 Background

Stantec was provided the report titled *Phase I Environmental Site Assessment* prepared by AEI Consultants (AEI) dated May 4, 2023, for the Property and surrounding properties addressed as 10851, 10405, 11153, 11159, 11405, 11491, 11501 11502, 11911 Jeffrey Road, Irvine, Orange County, California 92602. AEI identified that the Property has historically been used for agricultural activities, and performed a shallow soil assessment across the Property, as discussed in the AEI report entitled *Limited Subsurface Investigation Report*, dated May 17, 2023.

Based on a review of the AEI reports, Stantec identified the following recognized environmental concerns (RECs) for the Gateway project that require further assessment:

- **Historical Agriculture Use.** Stantec's review of the abovementioned reports identified that the Property has been used for agricultural activities since at least 1938. Assessments completed by AEI identified organochlorine pesticide (OCPs) impacted soils on the Property. An environmental remediation was completed to remove the pesticide impacted soils under the oversight of the Orange County Health Care Agency (OCHCA). Based on the results of the removal process the Site received closure in September of 2010 from the OCHCA. Based on the history of agricultural use, AEI Consultants (AEI) performed additional sampling in 2023 which including composite sampling on a grid to confirm that no pesticides or arsenic impacted soils were present above residential cleanup levels. The results from AEI's investigation found no pesticides or arsenic above levels requiring remedial action; however, Stantec noted that there are gaps on the Property where no data was collected, notably in the northeast portions. Stantec also noted that no lead sampling has been performed on the Property and lead-arsenate based herbicides may have been used and accumulated in shallow soils at concentrations above residential screening levels. Stantec recommends performing additional composite sampling of shallow soil for organochlorine pesticides (OCPs) and discrete sampling of arsenic to appropriately characterize the Property in areas that were not previously sampled by AEI or were not a part of the Property when AEI performed their investigation. Discrete soil sampling should also be performed across the Property previously assessment by AEI for lead analysis.
- **Undocumented Soil Stockpiles.** Recent aerial photographs reveal multiple soil stockpiles in the northeast portion of the Property. Since the source of these stockpiles is not known, Stantec recommends that samples be collected from the stockpiles and analyzed for total petroleum hydrocarbons (TPH), volatile organic compounds (VOCs), California Code of Regulations (CCR) title 22 metals, and OCPs. In the event that these stockpiles are not present during the proposed sampling event, surface soils in the stockpiles area will be collected for the analysis proposed above.
- **Former Fuel USTs.** A former 1,000-gallon gasoline underground storage tank (UST) and 6,000-gallon diesel UST were removed from the Property in September of 1998. Sampling performed at the time of removal as well as sampling performed during a reassessment of the area under OCHCA oversight reported no gasoline range petroleum hydrocarbons, diesel range petroleum hydrocarbons, benzene, ethylbenzene, toluene, or xylenes (BTEX) above laboratory reporting in the collected soil samples. However, former environmental reports available through Geotracker do not indicate that soil vapor sampling was performed at the Property. Although no contaminants were detected in soil, small pockets of residual petroleum hydrocarbons can remain in place in the subsurface that were not detected during past soil sampling that can contribute to elevated VOC concentrations in soil vapor, which have the ability to create a potential vapor intrusion risk to future site occupants. Therefore,



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Introduction

Stantec recommends that soil vapor in the area of the former USTs be screened in the location of the former USTs indicated on maps contained in AEI's Phase I ESA.

The following sections of this report discuss the results of the recommended assessments stated above.



2 Field Investigation

Prior to the commencement of fieldwork activities, Stantec made the following preparations:

2.1 Pre-Field Activities

In accordance with federal Occupational Safety and Health Administration (OSHA) regulations (29 CFR, Section 1910.120), Stantec developed a site-specific Health and Safety Plan (HASP) for the Property. All Stantec personnel and subcontractors associated with the project were required to be familiar with and comply with all provisions of the HASP.

Stantec visited the Property to mark the proposed boring locations. Subsequent to the marking, underground Service Alert (USA) was notified at least 72-hours prior to the commencement of drilling activities.

A geophysical/utility locating company (GPRS) was engaged to scan for any evidence of the former USTs, and clear the proposed soil vapor borings proximate to these former USTs.

2.2 Investigation

Stantec provided the services of a field geologist to supervise and direct all on-site activities. All work was conducted under the direct supervision of a State of California professional geologist, and included the following:

- Former USTs:
 - » (2) soil vapor borings were advancement in the approximate area of the former USTs reportedly removed from the Site in 1998.
- Former and current agricultural operations:
 - » (12) discrete soil sampling locations advanced within previous areas assessed by AEI (areas 1 through 9, 12, 13, and 16), with shallow soil samples analyzed for lead.
 - » (16) soil borings advanced within four areas (areas 11, 19, 20, and 21) with composite soil samples analyzed for OCPs, and discrete soil samples analyzed by arsenic and lead.
- On-site stockpiles:
 - » Composite soil samples collected from the stockpiles located in sampling grid 17.
 - » (2) soil borings advanced within the large stockpile observed along Jeffrey Road to approximately 20 feet, with soil samples collected at 10- and 20-feet below ground surface.

These soil sampling efforts were performed to supplement the AEI soil sampling performed in 2023, and to assess the stockpiles currently located on the Property located along Jeffrey Road. All AEI and Stantec boring locations are depicted on **Figure 3**.



2.2.1 Geophysical Survey - Utility Locating and UST Excavation Evaluation

Stantec subcontracted the services of Ground Penetrating Radar Systems, Inc (GPRS), a geophysical surveyor, to perform a non-intrusive subsurface survey to identify any indications of existing USTs or evidence of backfilled UST excavations (*i.e.*, UST cavities), or potential product piping. The survey was performed using ground penetrating radar (GPR) antennae to scan the surface of the ground, and electromagnetic equipment. Additionally, the area was also cleared for subsurface utilities which may be in conflict with proposed boring locations.

2.2.2 Soil Boring and Sampling Procedures

Prior to boring advancement, borings SV-1 and SV-2, located in the approximate location of the reportedly removed USTs, were cleared of belowground utilities using ground penetrating radar (GPR) and by clearing the top five feet of soil using a hand auger. Once confirmed clear, the borings were advanced using a Geoprobe direct push rig to the targeted depth based on the issue being assessed. During advancement, collection of subsurface soils was performed in five-foot intervals starting at the surface. All of the direct push borings were advanced and sampled using a Geoprobe 6610DT rig equipped with 5-foot-long by 1.25-inch inner diameter sampler with acetate sample liners.

Soil borings SP1 and SP2 were advanced within the large stockpile located in the northeastern portion of the Site, located along Jeffrey Road. Given the height of this stockpile was measured at approximately 20 to 25 feet, these soil borings were advanced to a depth of 20 feet, as to remain entirely within the stockpiled soil.

At each five-foot sampling interval, the sampler was driven into undisturbed soil using a hydraulic ram on the Geoprobe rig. Upon advancement of the sampler through the desired sampling depth interval, the sample liner was retrieved from the boring. The drilling and sampling sequence was then repeated for the entire depth of the boring.

The soils from each of the direct push borings were visually examined by Stantec field personnel who classified the soils in accordance with the unified soil classification system (USCS). A photoionization detector (PID) was used to monitor/field screen the soils collected. Field screening for VOCs was achieved by removing the soil from the uppermost sample sleeve and placing it in a zip-lock type baggie. A PID probe was inserted into the baggie to monitor the headspace for VOC vapors which was used to aid in deciding which samples would be analyzed.

The remainder of the soil brings advanced during this investigation were advanced using a hand auger. Soil sampling from these locations was achieved by discharging soils from the predetermined soil sampling interval directly into laboratory-provided pre-cleaned glass bottleware, and sealed with a Teflon-lined lid.



2.2.3 Soil Vapor Probe Installation

At the completion of drilling to target depth, boreholes SV-1 and SV-2 were completed with soil vapor monitoring probes set at 5 and 15 feet bgs. Soil vapor samples were collected in accordance with the methods and procedures outlined by the DTSC and CRWQCB Advisory – Active Soil Gas Investigations, dated July 2015. A minimum 48-hour equilibrium period was allowed to elapse between the time of installation and the time soil vapor samples were collected.

Each sample probe was constructed with a permeable PennPlex vapor tip connected to ¼-inch outer diameter Nylaflow tubing that was lowered to the bottom of the borehole and backfilled with filter sand, until approximately 6-inches of filter pack was placed. A transition seal consisting of approximately 6-inches of dry bentonite was then placed above the filter pack, followed by an annular seal consisting of hydrated bentonite until the next sampling interval was reached. The sequence was then repeated to install the second monitoring point followed by hydrated bentonite up to the surface. At the surface, the exposed nylon tubing was capped with tight fitting plastic endcaps and labeled to indicate sampling depth.

2.2.4 Soil Vapor Sampling

Soil vapor samples were collected in general accordance with the methods and procedures outlined by the DTSC and CRWQCB Advisory – Active Soil Gas Investigations, dated July 2015 (Advisory), including a 48-hour equilibrium period between the time of installation and the time soil vapor samples were collected. Prior to sampling, a shut-in test was conducted on the sample train to ensure all connections and fittings are airtight. The shut-in test was performed on the sampling train by applying a vacuum of 100 inches of water column (WC) to the sampling train and monitoring magnehelic gauges for a pressure drop for one minute. If loss of vacuum was observed, fittings were adjusted as needed until no vacuum loss was observed during subsequent shut-in tests.

After the sampling equipment passed the shut-in test, the probe was purged to remove internal air from the sample train (calculated from the internal volume of the tubing and probe tip; the void space of the sand pack around the probe tip; and the void space of the dry bentonite in the annular space). Three internal volumes were purged from each sampling location. Immediately following purging the internal volumes, the soil vapor was collected into a passivated 1-liter Summa Canister sampling container connected to the sampling port with Teflon® or Nylaflow® tubing. A three-compound tracer gas consisting of n-pentane, n-heptane, and n-hexane was placed above the surface seal and along the sampling train to evaluate the integrity of the seal. The samples were collected by a soil vapor sampling technician for analysis for VOCs following USEPA method 8260B at an off-Site stationary laboratory.

The tracer compound mixture of n-pentane, n-hexane, and n-heptane was used by the laboratory technician during sample collection. The tracer compound was not detected above reporting limits in any of the samples.



2.2.5 Field Equipment Cleaning Procedures

To maintain quality control during drilling operations, all drill rods and reusable soil sampling equipment was decontaminated using a triple bucket rinse. Prior to drilling at a given location or sampling interval, all equipment coming in direct contact with soil samples was scrubbed with an Alconox scrub solution followed by a clean tap water rinse and then a final distilled water rinse. The disposable acetate soil sample liners were used for one sampling interval and then discarded. Soil vapor sampling materials were not re-used and remain dedicated to the borehole and sample interval in which they were installed.

2.2.6 Investigation Deviations

Stantec made the following observations during this assessment, which altered the scope of work originally proposed:

- On-site stockpiles:
 - » Sampling grid 17, previously assessed by AEI, contained several small soil stockpiles. Therefore, four (4) grab soil samples were collected from these piles and composited into a single soil sample (Composite-1) to characterize potential impacts from these soil stockpiles. Consequently, no discrete soil sample was collected from natural surficial soils within this area for lead analysis.
 - » Stantec observed that no soil sampling had been performed in the area located north of sampling grids 16 and 17. Therefore, Stantec proposed to sample shallow soils in this area to assess the potential presence of OCPs, arsenic and lead from historical on-site agricultural operations. However, upon arrival to the Site, Stantec observed that an approximate 200' x 700' x 20' tall (or approximately 103,000 cubic yard) stockpile was observed in this area. It is reported that this material is sourced from the nearby Orchard Hills residential development, located north of the Site beyond Jeffrey Road. Therefore, Stantec advanced two (2) soil borings advanced within this large stockpile to 20 feet below ground surface, with soil samples collected at 10- and 20-foot depths within each boring.



3 Laboratory Testing Program

All soil samples collected during this investigation were delivered under chain of custody to Jones Environmental Laboratories, Inc. (JEL), based out of Santa Fe Springs, California. Collected soil samples were submitted for potential analysis of the following by the appropriate United States Environmental Protection Agency (USEPA) test methods:

- Total Petroleum Hydrocarbons (TPH) by USEPA 8015;
- Volatile Organic Compounds (VOCs) by USEPA 8260B;
- Arsenic and lead by USEPA 6010B;
- California Code of Regulations (CCR) Title 22 metals by USEPA 6010B and 7471A; and,
- OCPs by USEPA 8081A.

Soil vapor samples collected during this investigation were delivered under chain of custody to an off-Site stationary laboratory operated by JEL. Soil vapor samples were submitted for analyses of GRO and VOCs by USEPA method 8260B.

JEL is certified to perform hazardous waste testing by the California State Water Resources Control Board, Environmental Laboratory Accreditation Program (ELAP).



4 Investigation Results

A summary of the field investigations performed during this assessment by Stantec, and previous assessments performed by AEI, related to the former agricultural activities, former USTs, and observed soil stockpiles is provided in the following table.

Feature Assessed		Boring Identification	Analysis Performed
Former and Current Agricultural Operations	AEI:	1-1 through 13-4, and 16-1 through 17-2 (47 borings total, 14 discrete soil samples and 17 composite soil samples)	Discrete samples: arsenic Composite samples: OCPs
	Stantec:	1 through 9, 12, 13, and 16 (discrete soil samples), and 11-1 through 11-4, 19-1 through 21-4 (4 composite soil samples)	Discrete samples: arsenic and lead Composite samples: OCPs
Former USTs	AEI:	None	--
	Stantec:	SV-1 and SV-2	Analysis: VOCs (soil vapor)
Observed Soil Stockpiles	AEI:	None	--
	Stantec:	SP1 and SP2 (northern soil stockpile) and Composite-1 through Composite-4 (southern small stockpiles)	Analysis: TPH, VOCs, Metals, OCPs

The boring locations are depicted on **Figure 3**.

4.1 Field Observations

Upon arrival to the Site, Stantec observed that an approximate 200' x 700' x 20' tall (or approximately 103,000 cubic yard) stockpile was observed in the northeastern portion of the Site, located along Jeffrey Road. It is reported that this material is sourced from the nearby Orchard Hills residential development, located north of the Site beyond Jeffrey Road. Additionally, several small stockpiles were observed in sampling grid 17 along the southern Property boundary.

Shallow soils encountered across the Property during these assessment activities consisted of silty sand and sandy silt to the maximum explored depth of 15 feet below ground surface (bgs) at soil borings SV-1 and SV-2. Groundwater was not encountered during this investigation. Soils within the stockpiles assessed during this assessment were observed to consist of silty sand with variable amounts of gravel and clay.

4.2 Subsurface Geophysical Survey Results

The geophysical survey performed within the open area at the reported location of the former USTs resulted in no indications of the former USTs, or related UST infrastructure (*i.e.*, product lines, electrical



lines for pumps, etc.). Additionally, no other subsurface utilities, such as electrical, natural gas, sanity sewer, and municipal water supply, were identified in the proximity of the UST areas.

4.3 Analytical Results

Select soil samples collected during this assessment were analyzed for the presence of TPH, VOCs, OCPs, lead, arsenic, and full CCR title 22 metals. Soil vapor samples collected during this assessment were analyzed for VOCs and gasoline range organics (GRO). Laboratory analytical test results from this assessment are presented on the laboratory data sheets attached as **Appendix A**. Soil results are discussed in units of milligram per kilogram (mg/kg) and summarized on **Tables 1 through 3**. Soil vapor results are discussed in unit of micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) and summarized on **Table 4**.

The laboratory test results from the investigation are discussed below and were compared to the more conservative value between the DTSC Human and Ecological Risk Office (HERO) Note 3 screening level for residential sites (DTSC, 2022), and the United States Environmental Protection Agency (USEPA) Regional Screening Levels (RSLs) for residential sites (USEPA, 2024). San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) Environmental Screening Levels (ESLs) were used for TPH evaluation. An attenuation factor (AF) of 0.03 were used to evaluate soil vapor concentrations.

4.3.1 Historical Agricultural Activities

Select OCPs were detected above laboratory reporting limits in composite soil samples 11, 19, and 20, including 4,4-DDE, 4,4-DDT, and endrin, however at concentrations below residential screening level. These OCP results are consistent with the OCP results reported by the AEI sampling across the Site, and no other OCPs were detected above laboratory reporting limits in any of the soil samples analyzed during this assessment. However, cumulative DDT isomers within composite soil sample 11 are reported at 1.316 mg/kg, exceeding the California hazardous waste threshold of 1.0 mg/kg.

Sixteen (16) discrete soil samples were collected across the Site to supplement the AEI dataset. Lead was detected in these discrete soil samples at concentrations ranging from 3.1 to 18.9 mg/kg. The detected concentrations of lead are below the residential use screening level of 80 mg/kg (DTSC, 2022). Arsenic was detected above the laboratory reporting limit of 5.0 mg/kg in a single soil sample at a concentration of 5.7 mg/kg, which is below 12 mg/kg, which is the upper end of the range considered to be naturally occurring in California used as a cleanup levels for arsenic.

4.3.2 Undocumented Stockpiles

A total of four (4) discrete soil samples were collected from the northern stockpile area, and a single (1) multi-point composite soil sample was collected from the southern stockpile area. No VOCs, TPH as gasoline range organics (GRO) or oil range organics (ORO), or OCPs were detected above the laboratory reporting limits in any of these samples. TPH as diesel range organics (DRO) was detected at a concentration of 27.6 mg/kg in a single sample from the large stockpile area, well below the residential screening level of 260 mg/kg. Various metals were detected in all of these samples, but at concentrations below residential screening levels. With regard to arsenic, a single detected was reported above the



laboratory reporting limit at 6.8 mg/kg, which is well below the upper-bound regional background concentration of 11.0 mg/kg, used by regulatory agencies as a cleanup goal. Therefore, no evidence of environmental impacts have been identified in these stockpiled soils.

4.3.3 UST Soil Vapor Results

A total of four (4) soil vapor samples were collected in the approximate location of the removed USTs in the central portion of the Site. Soil vapor sampling results indicated several VOCs are present in soil vapor including in this area at concentrations below residential screening levels using an attenuation factor (AF) of 0.03, with the exception of naphthalene. Naphthalene, a petroleum-based VOC, was detected up to 3 $\mu\text{g}/\text{m}^3$ in sample SV-1-15, exceeding the 0.03 AF residential screening level of 2.77 $\mu\text{g}/\text{m}^3$. The very slight exceedance of naphthalene in this single soil vapor sample is not considered an indication that the USTs have leaked, given the following considerations:

- The reported concentration is within $\pm 30\%$ of the residential screening level, which is the quality assurance / quality control range of the analytical laboratory.
- There is an absence of other petroleum-based VOCs, namely benzene, toluene, ethylbenzene, and xylenes (BTEX) compounds, which if found to be present are indicative of a release. These compounds are not present, and therefore are supporting evidence that a release has not occurred from these historical USTs.

The minor detection of naphthalene is not considered representative of soil vapor conditions at the Site, and therefore, is not considered a REC to the Site.



5 Conclusions and Recommendations

Chemicals associated with historical agricultural use are present in Site soils, including lead, arsenic, 4,4-DDE, 4-4-DDT, and endrin, but at concentrations below residential screening levels and naturally occurring background concentrations (e.g., arsenic). However, cumulative DDT isomer concentrations were detected during this assessment at concentrations exceeding the California hazardous waste threshold of 1.0 mg/kg in sampling grid 11. These concentrations are similar to concentrations reported by AEI in 2023 within sampling grid 11 (0.978 mg/kg), and nearby sampling grids. Therefore, there is potential that soils exported from Site may be classified as California hazardous waste due to cumulative DDT isomer concentrations. If export of soil is planned in connection with the contemplated Site development, that soil should be sampled to confirm concentrations of DDT isomers for disposal prior to removal from the Property for proper disposal classification.

No environmental impacts were identified in the stockpile soils located in the eastern portion of the Site. Further, institutional knowledge regarding the source of the large stockpile located in the northeastern portion of the Site, reported to have been generated from the Orchard Hills development project located north of the Site beyond Jeffrey Road, have shown shallow soils from that project do not contain OCPs, arsenic, or lead at concentrations exceeding residential screening levels. This institutional knowledge of these soil characteristics were confirmed during this investigation, and further confirmed no TPH or VOCs were presented within these stockpiled soils, or within the smaller stockpiles located within sampling grid 16. Therefore, the stockpiles located in the eastern portion of the Site are not considered a REC.

The results of the soil vapor investigation performed proximate to the former UST locations did not indicate a release from the USTs. A single petroleum-related VOC, naphthalene, was detected at concentrations very slightly exceeding the 0.03 AF residential screening level of 2.77 µg/m³. The very slight exceedance of naphthalene in this single soil vapor sample is not considered an indication that the USTs have leaked. The minor detection of naphthalene is not considered representative of soil vapor conditions at the Site, and therefore, is not considered a REC to the Site.

Given the long history of the Site for commercial and agricultural uses, there is potential that previously undocumented and/or unknown structures may be identified during redevelopment of the Site. Therefore, Stantec recommends preparation and implementation of a Soil Management Plan (SMP) to address the potential to encounter any subsurface features during construction. The SMP would include protocols to properly identify and manage subsurface features, potential impacts, and proper notification requirements.



Tables



Table 1
Summary of Soil Sample Analytical Results - Arsenic, Lead, and OCPs
Southeast Corner of Jeffrey Road and Portola Parkway, Irvine, California

Stantec Project Number: 185806650

Sample Area	Sample ID	Sample Type	Sample Depth (feet)	Sample Date	Arsenic and Lead by 6010B		OCPs by 8081A				
					Arsenic	Lead	4,4'-DDE	4,4'-DDT	Cumulative DDD	Endrin	Other
Residential Screening Level					0.68	80	2.0	1.9	--	19	varies
Naturally Occurring California Background Levels					0.6 - 11.0	12.4 - 97.1	--	--	--	--	varies
Hazardous Waste Levels					500	1000	--	--	1.00	--	varies
1	S-1*	Composite	0.5	4/20/2023	--	--	0.216	0.0454	0.2614	0.018	<varies
	S-1-3*	Discrete			2.4	--	--	--	--	--	
	1	Discrete		8/16/2024	--	6.7	--	--	--	--	
2	S-2*	Composite	0.5	4/20/2023	--	--	0.234	0.156	0.39	0.0185	<0.010
	S-2-1*	Discrete			2.8	--	--	--	--	--	
	2	Discrete		8/16/2024	--	7.3	--	--	--	--	
3	S-3*	Composite	0.5	4/20/2023	--	--	0.54	0.324	0.864	0.0235	<0.010
	S-3-2*	Discrete			3.9	--	--	--	--	--	
	3	Discrete		8/16/2024	--	4.6	--	--	--	--	
4	S-4*	Composite	0.5	4/20/2023	--	--	0.67	0.237	0.907	0.0286	<0.010
	S-4-2*	Discrete			3.8	--	--	--	--	--	
	4	Discrete		8/16/2024	--	3.1	--	--	--	--	
5	S-5*	Composite	0.5	4/20/2023	--	--	0.545	0.287	0.832	0.0243	<0.010
	S-5-1*	Discrete			3.7	--	--	--	--	--	
	5	Discrete		8/16/2024	--	4.5	--	--	--	--	
6	S-6*	Composite	0.5	4/20/2023	--	--	0.565	0.411	0.976	0.0327	<0.010
	S-6-1*	Discrete			3.9	--	--	--	--	--	
	6	Discrete		8/16/2024	--	4.3	--	--	--	--	
7	S-7*	Composite	0.5	4/20/2023	--		0.28	0.18	0.460	0.0289	<0.010
	S-7-4*	Discrete			3.4		--	--	--	--	
	7	Discrete		8/16/2024		5.9	--	--	--	--	
8	S-8*	Composite	0.5	4/20/2023	--	--	0.505	0.411	0.916	0.0254	<0.010
	DUP-4*	Composite			--	--	0.457	0.345	0.802	0.0252	<0.010
	S-8-1*	Discrete			5.2	--	--	--	--	--	
	DUP-3*	Discrete		8/16/2024	5.8	--	--	--	--	--	
	8	Discrete			--	5.3	--	--	--	--	
9	S-9*	Composite	0.5	4/20/2023	--	--	0.49	0.391	0.881	0.024	<0.010
	S-9-1*	Discrete			5.8	--	--	--	--	--	
	9	Discrete		8/16/2024	--	4.7	--	--	--	--	
11	S-11*	Composite	0.5	4/20/2023	--	--	0.525	0.453	0.978	0.0299	<0.010
	S-11-2*	Discrete			4.4	--	--	--	--	--	
	11	Composite		8/16/2024	--	--	0.737	0.579	1.316	0.158	<0.010
	11-1	Discrete		8/16/2024	--	18.9	--	--	--	--	
12	S-12*	Composite	0.5	4/20/2023	--	--	0.53	0.246	0.776	0.0222	<0.010
	S-12-2*	Discrete			3.6	--	--	--	--	--	
	12	Discrete		8/16/2024	--	5.8	--	--	--	--	
13	S-13*	Composite	0.5	4/20/2023	--	--	0.0404	0.0117	0.0521	0.0058	<0.010
	S-13-4*	Discrete			4.2	--	--	--	--	--	
	13	Discrete		8/16/2024	--	6	--	--	--	--	
16	S-16*	Composite	0.5	4/20/2023	--	--	0.0329	0.0085	0.0414	0.0037	<0.010
	DUP-2*	Composite			--	--	0.0307	0.0098	0.0405	0.0037	<0.010
	S-16-1*	Discrete			4.5	--	--	--	--	--	
	DUP-1*	Discrete		8/16/2024	4.1	--	--	--	--	--	
	16	Discrete			--	3.3	--	--	--	--	
17	S-17*	Composite	0.5	4/20/2023	--	--	0.0616	0.0251	0.0867	0.0067	<0.010
	S-17-2*	Discrete			4.4	--	--	--	--	--	
19	19	Composite	0.5	8/16/2024	--	--	0.0225	<0.010	0.0225	<0.010	<0.010
	19-1	Discrete			<5.0	6.3	--	--	--	--	
20	20	Composite	0.5	8/16/2024	--	--	0.105	0.0599	0.1649	0.011	<0.010
	20-1	Discrete			<5.0	4.8	--	--	--	--	
21	21	Composite	0.5	8/16/2024	--	--	<0.010	<0.010	<0.010	<0.010	<0.010
	21-1	Discrete			5.7	3.7	--	--	--	--	
Stockpile Area	Composite 1	Composite	--	8/16/2024	<5.0	3.4	<0.010	<0.010	<0.010	<0.010	<0.010
	SP1-10	Discrete	10	8/16/2024	<5.0	3.7	<0.010	<0.010	<0.010	<0.010	<0.010
	SP1-20	Discrete	20	8/16/2024	<5.0	3.1	<0.010	<0.010	<0.010	<0.010	<0.010
	SP2-10	Discrete	10	8/16/2024	<5.0	2.6	<0.010	<0.010	<0.010	<0.010	<0.010
	SP2-20	Discrete	20	8/16/2024	6.8	3.6	<0.010	<0.010	<0.010	<0.010	<0.010

Notes:

All concentrations reported in milligrams per kilogram (mg/kg).

RSL - United States Environmental Protection Agency Regional Screening Level

DTSC - Department of Toxic Substance Control

HERO HHRA - Human and Ecological Risk Office Human Health Risk Assessment

NA - Not Analyzed

NE - Not Established

OCPs - Organochlorine Pesticides

BOLD Denotes analyte was detected above the laboratory reporting limit

< - Denotes analyte was not detected above the laboratory reporting limit

* - Denotes sample collected by AEI Consultants



Analyte exceeds California hazardous waste level.

Table 2
Summary of Soil Sample Analytical Results - TPH and VOCs
Southeast Corner of Jeffrey Road and Portola Parkway, Irvine, California

Stantec Project Number: 185806650

Sample Area	Sample ID	Sample Depth (feet)	Sample Date	TPH by 8015B		VOCs by 8260B					
				DRO	ORO	GRO	Benzene	Ethylbenzene	Toluene	Xylenes	Other
Residential Screening Level				260	1200	430	0.33	5.9	1,100	580	varies
Stockpile Area	Composite 1	--	8/16/2024	<10.0	<10.0	<0.20	<0.001	<0.001	<0.001	<0.001	<varies
	SP1-10	10	8/16/2024	27.6	<10.0	<0.20	<0.001	<0.001	<0.001	<0.001	<varies
	SP1-20	20	8/16/2024	<10.0	<10.0	<0.20	<0.001	<0.001	<0.001	<0.001	<varies
	SP2-10	10	8/16/2024	<10.0	<10.0	<0.20	<0.001	<0.001	<0.001	<0.001	<varies
	SP2-20	20	8/16/2024	<10.0	<10.0	<0.20	<0.001	<0.001	<0.001	<0.001	<varies

Notes:

All concentrations reported in milligrams per kilogram (mg/kg).

RSL - United States Environmental Protection Agency Regional Screening Level

DTSC - Department of Toxic Substance Control

HERO HHRA - Human and Ecological Risk Office Human Health Risk Assessment

NA - Not Analyzed

NE - Not Established

OCPs - Organochlorine Pesticides

BOLD Denotes analyte was detected above the laboratory reporting limit

< - Denotes analyte was not detected above the laboratory reporting limit

Table 3
Summary of Soil Sample Analytical Results - Title 22 Metals
Southeast Corner of Jeffrey Road and Portola Parkway, Irvine, California
Stantec Project Number: 185806650

Sample Area	Sample ID	Sample Depth ⁽¹⁾	Sample Date	Title 22 Metals ⁽²⁾														
				Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Molybdenum	Nickel	Selenium	Vanadium	Zinc	Mercury
Residential Land Use Screening Levels ⁽³⁾				31	0.11	15000	15	5.2	36000	23	3100	80	390	490	390	390	23000	1.0
California Background Levels Range ⁽⁴⁾				0.15-1.95	0.6-12.0 ⁽⁵⁾	133-1400	0.25-2.7	0.05-1.70	23-1,579	2.7-46.9	9.1-96.4	12.4-97.1	5,580-73,400	9-509	0.015-0.430	75-288	133-236	0.1-0.9
1	S-1-3*	0.5	4/20/2023	--	2.4	--	--	--	--	--	--	--	--	--	--	--	--	--
	1	0.5	8/16/2024	--	--	--	--	--	--	--	--	6.7	--	--	--	--	--	--
2	S-2-1*	0.5	4/20/2023	--	2.8	--	--	--	--	--	--	--	--	--	--	--	--	--
	2	0.5	8/16/2024	--	--	--	--	--	--	--	--	7.3	--	--	--	--	--	--
3	S-3-2*	0.5	4/20/2023	--	3.9	--	--	--	--	--	--	--	--	--	--	--	--	--
	3	0.5	8/16/2024	--	--	--	--	--	--	--	--	4.6	--	--	--	--	--	--
4	S-4-2*	0.5	4/20/2023	--	3.8	--	--	--	--	--	--	--	--	--	--	--	--	--
	4	0.5	8/16/2024	--	--	--	--	--	--	--	--	3.1	--	--	--	--	--	--
5	S-5-1*	0.5	4/20/2023	--	3.7	--	--	--	--	--	--	--	--	--	--	--	--	--
	5	0.5	8/16/2024	--	--	--	--	--	--	--	--	4.5	--	--	--	--	--	--
6	S-6-1*	0.5	4/20/2023	--	3.9	--	--	--	--	--	--	--	--	--	--	--	--	--
	6	0.5	8/16/2024	--	--	--	--	--	--	--	--	4.3	--	--	--	--	--	--
7	S-7-4*	0.5	4/20/2023	--	3.4	--	--	--	--	--	--	--	--	--	--	--	--	--
	7	0.5	8/16/2024	--	--	--	--	--	--	--	--	5.9	--	--	--	--	--	--
8	S-8-1*	0.5	4/20/2023	--	5.2	--	--	--	--	--	--	--	--	--	--	--	--	--
	DUP-3*	0.5	4/20/2023	--	5.8	--	--	--	--	--	--	--	--	--	--	--	--	--
	8	0.5	8/16/2024	--	--	--	--	--	--	--	--	5.3	--	--	--	--	--	--
9	S-9-1*	0.5	4/20/2023	--	5.8	--	--	--	--	--	--	--	--	--	--	--	--	--
	9	0.5	8/16/2024	--	--	--	--	--	--	--	--	4.7	--	--	--	--	--	--
11	S-11-2*	0.5	4/20/2023	--	4.4	--	--	--	--	--	--	--	--	--	--	--	--	--
	1-Nov	0.5	8/16/2024	--	--	--	--	--	--	--	--	18.9	--	--	--	--	--	--
12	S-12-2*	0.5	4/20/2023	--	3.6	--	--	--	--	--	--	--	--	--	--	--	--	--
	1-Dec	0.5	8/16/2024	--	--	--	--	--	--	--	--	5.8	--	--	--	--	--	--
13	S-13-4*	0.5	4/20/2023	--	4.2	--	--	--	--	--	--	--	--	--	--	--	--	--
	13-1	0.5	8/16/2024	--	--	--	--	--	--	--	--	6.0	--	--	--	--	--	--
16	S-16-1*	0.5	4/20/2023	--	4.5	--	--	--	--	--	--	--	--	--	--	--	--	--
	DUP-1*	0.5	4/20/2023	--	4.1	--	--	--	--	--	--	--	--	--	--	--	--	--
	16-1	0.5	8/16/2024	--	--	--	--	--	--	--	--	3.3	--	--	--	--	--	--
17	S-17-2*	0.5	4/20/2023	--	4.4	--	--	--	--	--	--	--	--	--	--	--	--	--
19	19-1	0.5	8/16/2024	--	<5.0	--	--	--	--	--	--	6.3	--	--	--	--	--	--
20	20-1	0.5	8/16/2024	--	<5.0	--	--	--	--	--	--	4.8	--	--	--	--	--	--
21	21-1	0.5	8/16/2024	--	5.7	--	--	--	--	--	--	3.7	--	--	--	--	--	--
Stockpile Area	Composite 1	0.5	8/16/2024	<5.0	<5.0	85.3	<0.5	2.2	11	4.9	6.4	3.4	1.1	4.9	<5.0	33.4	40.2	<0.020
	SP1-10	10	8/16/2024	<5.0	<5.0	61.1	<0.5	2.2	11.1	3.8	7.3	3.7	1.7	7.1	<5.0	28.3	31.4	0.028
	SP1-20	20	8/16/2024	<5.0	<5.0	95.2	<0.5	2.1	10.7	5.4	6.3	3.1	<0.5	5.8	<5.0	32	41.3	<0.020
	SP2-10	10	8/16/2024	<5.0	<5.0	57.4	<0.5	1.4	7.5	2.9	5.8	2.6	1.2	4.7	<5.0	19.6	27.7	<0.020
	SP2-20	20	8/16/2024	<5.0	6.8	52.2	<0.5	1.2	8.1	3.9	7.3	3.6	0.5	3.8	<5.0	24.1	30.2	<0.020

Notes:

- All concentrations reported in milligram per kilogram (mg/kg)
- * - Denotes sample collected by AEI Consultants
- (1) - Depth reported in feet below ground surface
- (2) - Analyses performed by USEPA test methods 6010B and 7471A
- (3) - More conservative screening level between USEPA Region 9 RSL (May 2024) and DTSC HERO Note 3 (May 2022).
- (4) - Bradford et al., UCR and DTSC, Background Concentrations of Trace and Major Elements in California Soils, March 1996.
- (5) - Chernoff et al., DTSC, Determination of a Southern California Regional Background Arsenic Concentration in Soil, 2012
- <- Denotes the analyte was not detected above the laboratory PQL
- BOLD** - Denotes the analyte was detected above the laboratory reporting limit.

Abbreviations:

- DTSC - Department of Toxic Substances Control
- HERO - Human and Ecologic Risk Office
- RSL - Regional Screening Level
- UCR - University California, Riverside
- USEPA - United States Environmental Protection Agency

Table 4
Summary of Soil Vapor Sample Analytical Results
Southeast Corner of Jeffrey Road and Portola Parkway, Irvine, California
Stantec Project Number: 185806650

Sample ID	Sample Depth ⁽¹⁾	Sample Date	GRO	Chloroform	1,1-DCE	Dichlorofluoro methane (Freon 12)	Naphthalene	PCE	TBA	TCE	1,2,4-TMB	1,3,5-TMB	m.p-Xylene	o-Xylene	Other VOCs
Residential Screening Level (0.03 AF) ⁽²⁾			20,000 ⁽³⁾	4.0	60	NE	2.77	15.3	173,333	16.0	2,100	2,100	3,333	3,333	Varies
SV-1-5	5	8/21/2024	<1000	<2	4	6	2	6	79	2	<2	<2	<5	<2	<varies
SV-1-15	15	8/21/2024	<1000	3	3	<5	3	11	57	<2	3	<2	<5	<2	<varies
SV-2-5	5	8/21/2024	<1000	<2	3	6	2	5	70	<2	<2	<2	<5	<2	<varies
SV-2-15	15	8/21/2024	<1000	3	2	<5	2	11	92	<2	12	5	5	2	<varies

Notes:

All concentrations reptred in microgramper cubic meter (µg/m³)

J-flag concentrations are smmarized only for compounds where the MDL exceeds residential screening level. For full list of J-flag results, refer to laboratory analytical report.

(1) - Reported as feet below original grade.

(2) - More conservative screening level between USEPA Region 9 RSL (May 2024) and DTSC HERO Note 3 (May 2022).

(3) - SFBRWQCB ESL used for TPH screening levels (2019, Rev. 2)

"<" - Results reported below Laboratory Reporting Limit.

BOLD - Analyte detected above laboratory reportlining limit

Indicates value above the residential screening level (0.03 AF)

AF - Attenuation Factor

CA EPA - California Environmental Protection Agency

DTSC - Department of Toxic Substance Control

EPA - United States Environmental Protection Agency

HERO - Human and Ecological Risk Office

NA - Not Analyzed

NE - Not Established

PCE - Tetrachloroethene

TBA - tert Butylalcohol

TCE - Trichloroethylene

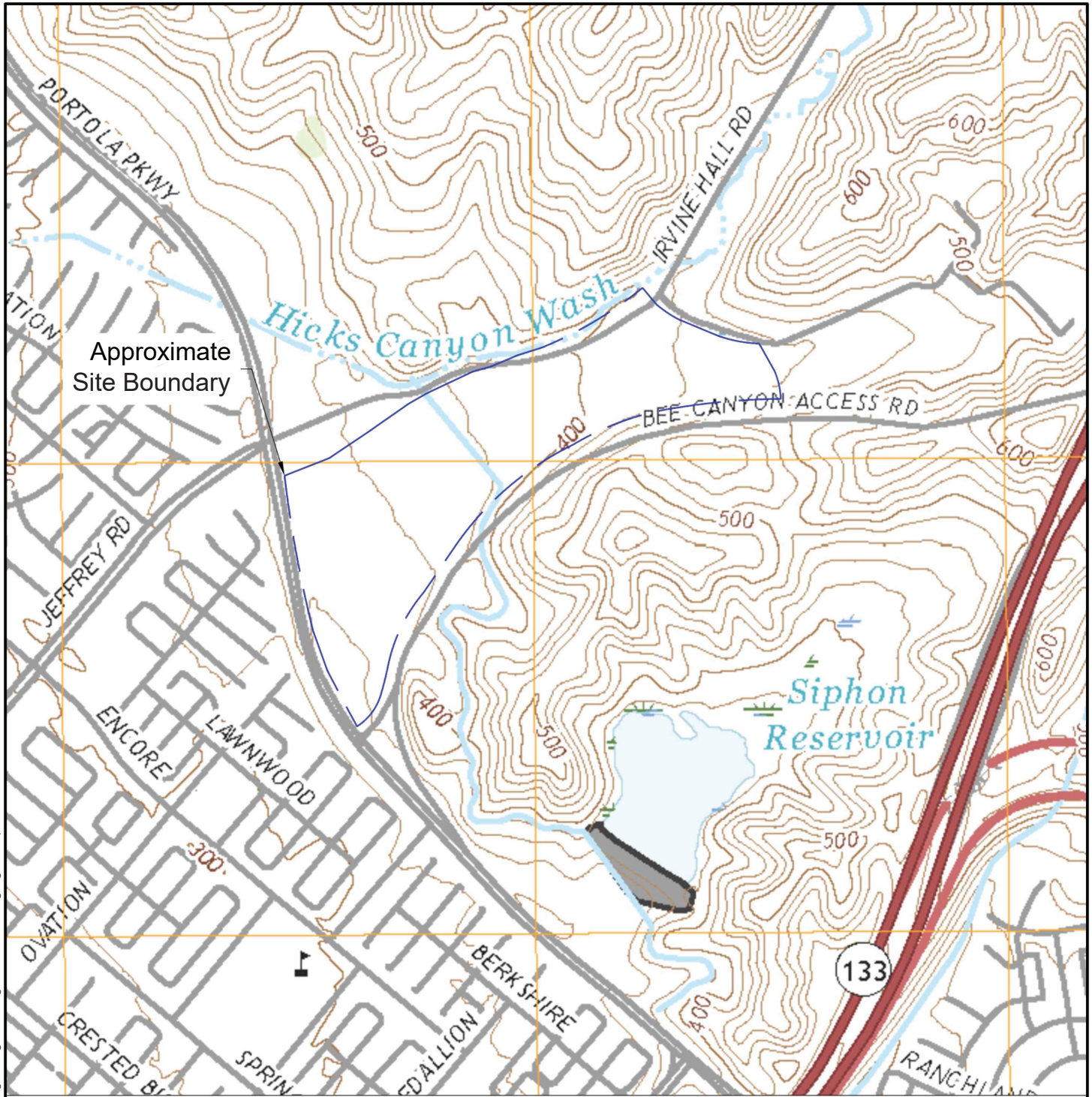
1,2,4-TMB - 1,2,4-Trimethylbenzene

1,3,5-TMB - 1,3,5-Trimethylbenzene

VOCs - Volatile Organic Compounds

Figures





Notes

- Approximate Property Boundary



Stantec

Stantec Consulting Services, Inc.
735 East Carnegie Drive, Suite 280
San Bernardino, California 92408
Tel: (909) 335-6116
www.stantec.com

Client/Project

Brookfield Residential

Gateway
11501 Jeffrey Road
Irvine, CA

Project No.

185806650

Title

Site Location Map

Drawn By

JS

Approved By

KE

Date

2024.08.12

Figure No.

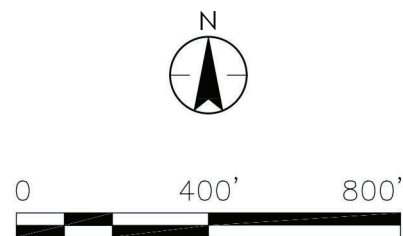
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Stantec Consulting Services, Inc.
735 East Carnegie Drive, Suite 280
San Bernardino, California 92408
Tel: (909) 335-6116
www.stantec.com

- Notes
- Approximate Property Boundary
 - Sampling Grid Line
 - Approximate Location of Former Diesel UST
 - Approximate Location of Former Gasoline UST
 - Stockpile Area



Client/Project
Brookfield Residential

Gateway
11501 Jeffrey Road
Irvine, CA

Project No.
185806650

Title
Site Map

Drawn By JS	Date 2024.08.12
Approved By KE	Figure No. 2

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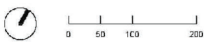


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Brookfield Homes

GATEWAY VILLAGE
IRVINE, CA # 2023-886

CONCEPTUAL DESIGN
DECEMBER 13, 2023



SITE AREA
A1.0



Stantec Consulting Services, Inc.
735 East Carnegie Drive, Suite 280
San Bernardino, California 92408
Tel: (909) 335-6116
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- Notes
- Approximate Property Boundary
 - Sampling Grid Line
 - Approximate Location of Former Diesel UST
 - Approximate Location of Former Gasoline UST
 - Stockpile Area

Development Plan produced by KTG Architecture (2023)



Client/Project
Brookfield Residential
Gateway
11501 Jeffrey Road
Irvine, CA
Project No.
185806650

Title
Proposed Gateway
Development Plan
Drawn By
JS
Approved By
KE
Date
2024.08.12
Figure No.
2A

Appendices



Appendix A Laboratory Data Sheets



Logo



714-449-9937
562-646-1611

11007 FOREST PLACE
SANTA FE SPRINGS, CA 90670
WWW.JONESENV.COM

12 September 2024

Josh Sargent
Stantec Consulting
735 EastCarnegie Drive, Suite 280
San Bernardino, CA 92408

Re: Brookfield - Irvine

Enclosed are the results of analyses for samples received by the laboratory on 08/16/24. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Colby Wakeman".

Colby Wakeman
Lab Director

Stantec Consulting
735 EastCarnegie Drive, Suite 280
San Bernardino, CA 92408Project: Brookfield - Irvine
Project Number: 185806655
Project Manager: Josh SargentReported
09/12/24 15:11

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
19-1	J242427-014	Soil	08/16/2024 09:50	08/16/2024 17:00
20-1	J242427-015	Soil	08/16/2024 10:15	08/16/2024 17:00
21-1	J242427-016	Soil	08/16/2024 13:27	08/16/2024 17:00

DETECTIONS SUMMARY

Sample ID: 19-1 Laboratory ID: J242427-014

No Results Detected

Sample ID: 20-1 Laboratory ID: J242427-015

No Results Detected

Sample ID: 21-1 Laboratory ID: J242427-016

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic, As	5.7	5.0	mg/kg	EPA 6010	

Jones Environmental, Inc.

Colby Wakeman
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.*

Stantec Consulting
735 EastCarnegie Drive, Suite 280
San Bernardino, CA 92408

Project: Brookfield - Irvine
Project Number: 185806655
Project Manager: Josh Sargent

Reported
09/12/24 15:11

19-1
J242427-014(Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyzed	Method	Notes
Arsenic by EPA 6010								
Arsenic, As	ND	5.0	mg/kg	1	QC2409130	08/20/24	EPA 6010	

Jones Environmental, Inc.



Colby Wakeman
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.

Stantec Consulting
735 EastCarnegie Drive, Suite 280
San Bernardino, CA 92408

Project: Brookfield - Irvine
Project Number: 185806655
Project Manager: Josh Sargent

Reported
09/12/24 15:11

20-1
J242427-015(Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyzed	Method	Notes
Arsenic by EPA 6010								
Arsenic, As	ND	5.0	mg/kg	1	QC2409130	08/20/24	EPA 6010	

Jones Environmental, Inc.



Colby Wakeman
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.

Stantec Consulting
735 EastCarnegie Drive, Suite 280
San Bernardino, CA 92408

Project: Brookfield - Irvine
Project Number: 185806655
Project Manager: Josh Sargent

Reported
09/12/24 15:11

21-1
J242427-016(Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyzed	Method	Notes
Arsenic by EPA 6010								
Arsenic, As	5.7	5.0	mg/kg	1	QC2409130	08/20/24	EPA 6010	

Jones Environmental, Inc.



Colby Wakeman
Lab Director

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Stantec Consulting
735 East Carnegie Drive, Suite 280
San Bernardino, CA 92408

Project: Brookfield - Irvine
Project Number: 185806655
Project Manager: Josh Sargent

Reported
09/12/24 15:11

Arsenic by EPA 6010 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	%REC Limits	Notes
Batch QC2409130 - EPA 6010										
CCV 1										
Arsenic, As	0.9	5.0	%	1		93	90 - 110		110	
LCS 1										
Arsenic, As	207	5.0	%	200		103	80 - 120			
LCSD 1										
Arsenic, As	200	5.0	%	200		100	80 - 120	3.39	120	
Method Blank 1										
Arsenic, As	ND	5.0	mg/kg							

Jones Environmental, Inc.



Colby Wakeman
Lab Director

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Project Number: 185806655
Project Manager: Josh Sargent

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Notes and Definitions

- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- E Estimated Concentration; concentration exceeds calibration range.
- LCC Leak Check Compound
- MDL Compound Reported to Method Detection Limit
- 1 Recovery outside of acceptable limits. LCS/LCSD recoveries and %RSD were within QC limits, therefore data was accepted.
- SMSR Sample matrix prevented adequate surrogate recovery.
- J Value less than PQL but greater than MDL.
- HHSR High hydrocarbon concentration in this sample prevented adequate surrogate recovery.
- SMTAR Sample matrix prevented adequate recovery of target analytes.
- OV Sample was filtered in the lab before extraction.
- HHTAR High hydrocarbon concentration prevented in-range recovery of target analytes.
- IHRPD Target analyte recoveries were outside of range but accepted due to passing RPDs
- AROL Target analyte recovery exceeded recovery range but was accepted due to ND of that analyte in MB and sample(s).
- ISO-H Isomers could not be sufficiently chromatographically resolved according to method requirements due to hydrocarbon interference or other matrix effects. The isomers' reported individual concentrations were each calculated as the average of each of the individual isomers' concentrations.
- 2 Recovery outside of acceptable limits for either LCS or LCSD. CCV and LCS or LCSD recoveries were within limits; therefore data was accepted.
- 3 RPD outside of acceptable limits. Target analyte recoveries were within QC limits; therefore, data was accepted.
- 4 LCS and/or LCSD recoveries exceeded acceptability ranges. Target analyte recoveries were accepted due to passing CCV, in-range LCS/LCSD RPDs, and a clean MB in which all target analytes were < RL.
- SMTAR Sample matrix prevented adequate recovery of target analytes.
- RV Surrogate recovery outside of control limits due to required dilution.





11007 Forest Pl.
Santa Fe Springs, CA 90670
(714) 449-9937
reports@jonesenv.com
www.jonesenv.com

Chain-of-Custody Record

Turnaround Time Requested:

- ☐ Immediate Attention - 200% (Advanced notice only)
- ☐ One Day TAT - 100% (Cut off time 11AM)
- ☐ Two Day TAT - 50% (Cut off time 12AM)
- ☐ Three Day TAT - 25% (Cut off time 1PM)
- ☐ Four Day TAT - 10% (Cut off time 2PM)
- ☒ Normal - No Surcharge

LAB USE ONLY

Jones Project #

J242427

Page

of

Date needed by:

Analysis Requested

☐ EDF* - 10% Surcharge

*Global ID:

Temperature:

Cooler 1: 21.5 °C

Cooler 2: °C

Cooler 3: °C

Notes & Special Instructions

Arsenic added on a 48
HRS TAT-JC 091024

Total Number of Containers

Client signature on this Chain of Custody form constitutes acknowledgement that the above analyses have been requested, and the information provided herein is correct and accurate.

Client	Stantec	Date	8-16-24
Project Name	Brookfield Irvine	Client Project #	18580665
Project Address		Sample Container / Preservative Abbreviations	
Email	Joshua.sargent@stantec.com	AS - Acetate Sleeve	
Phone		SS - Stainless Steel Sleeve	
Report To	Josh Sargent	BS - Brass Sleeve	
Sampler	Alex Solobin	G - Glass	
		AB - Amber Bottle	
		P - Plastic	
		SOBI - Sodium Bisulfate	
		MeOH - Methanol	
		HCl - Hydrochloric Acid	
		HNO3 - Nitric Acid	
		O - Other (See Notes)	

Sample ID	Sample Collection Date	Sample Collection Time	Laboratory Sample ID	Preservative	Sample Container	Sample Matrix:	Soil (S), Sludge (SL), Aqueous (A), Free Product (FP)	Number of Containers	Notes & Special Instructions
13	8-16-24	1435	-011	Free	G	S	X	1	
16		1040	-012				X		
18-11-1	09/10 JC	930	-013				X		
19-19-1	09/10 JC	450	-014				X		
20-20-1	09/10 JC	1015	-015				X		
21-21-1	09/10 JC	1327	-016				X		
19-19	09/10 JC	1010	-017				X		
20-20	09/10 JC	1030	-018				X		
18-11	09/10 JC	935	-019				X		
21-21	09/10 JC	1307	-020				X		
Relinquished By (Signature)						Printed Name		10	Total Number of Containers
Company						Date			
Relinquished By (Signature)						Printed Name			
Company						Date		Client signature on this Chain of Custody form constitutes acknowledgement that the above analyses have been requested, and the information provided herein is correct and accurate.	

Logo



714-449-9937
562-646-1611

11007 FOREST PLACE
SANTA FE SPRINGS, CA 90670
WWW.JONESENV.COM

10 September 2024

Josh Sargent
Stantec Consulting
735 EastCarnegie Drive, Suite 280
San Bernardino, CA 92408

Re: Brookfield - Irvine

Enclosed are the results of analyses for samples received by the laboratory on 08/16/24. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Colby Wakeman".

Colby Wakeman
Lab Director

Stantec Consulting
735 EastCarnegie Drive, Suite 280
San Bernardino, CA 92408

Project: Brookfield - Irvine
Project Number: 185806655
Project Manager: Josh Sargent

Reported
09/10/24 14:54

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
1	J242427-001	Soil	08/16/2024 15:12	08/16/2024 17:00
2	J242427-002	Soil	08/16/2024 15:06	08/16/2024 17:00
3	J242427-003	Soil	08/16/2024 15:10	08/16/2024 17:00
4	J242427-004	Soil	08/16/2024 15:20	08/16/2024 17:00
5	J242427-005	Soil	08/16/2024 15:35	08/16/2024 17:00
6	J242427-006	Soil	08/16/2024 15:11	08/16/2024 17:00
7	J242427-007	Soil	08/16/2024 15:04	08/16/2024 17:00
8	J242427-008	Soil	08/16/2024 15:02	08/16/2024 17:00
9	J242427-009	Soil	08/16/2024 15:07	08/16/2024 17:00
12	J242427-010	Soil	08/16/2024 15:00	08/16/2024 17:00
13	J242427-011	Soil	08/16/2024 14:55	08/16/2024 17:00
16	J242427-012	Soil	08/16/2024 10:40	08/16/2024 17:00
11-1	J242427-013	Soil	08/16/2024 09:30	08/16/2024 17:00
19-1	J242427-014	Soil	08/16/2024 09:50	08/16/2024 17:00
20-1	J242427-015	Soil	08/16/2024 10:15	08/16/2024 17:00
21-1	J242427-016	Soil	08/16/2024 13:27	08/16/2024 17:00
19	J242427-017	Soil	08/16/2024 10:10	08/16/2024 17:00
20	J242427-018	Soil	08/16/2024 10:30	08/16/2024 17:00
11	J242427-019	Soil	08/16/2024 09:35	08/16/2024 17:00
21	J242427-020	Soil	08/16/2024 13:07	08/16/2024 17:00
Composite 1	J242427-021	Soil	08/16/2024 10:50	08/16/2024 17:00
SP1-10	J242427-028	Soil	08/16/2024 12:38	08/16/2024 17:00
SP1-20	J242427-029	Soil	08/16/2024 12:42	08/16/2024 17:00
SP2-10	J242427-030	Soil	08/16/2024 14:06	08/16/2024 17:00
SP2-20	J242427-031	Soil	08/16/2024 14:09	08/16/2024 17:00

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Colby Wakeman
Lab Director

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Stantec Consulting
735 East Carnegie Drive, Suite 280
San Bernardino, CA 92408

Project: Brookfield - Irvine
Project Number: 185806655
Project Manager: Josh Sargent

Reported
09/10/24 14:54

DETECTIONS SUMMARY

Sample ID: 1 Laboratory ID: J242427-001

Analyte	Result	Reporting Limit	Units	Method	Notes
Lead, Pb	6.7	0.5	mg/kg	EPA 6010	

Sample ID: 2 Laboratory ID: J242427-002

Analyte	Result	Reporting Limit	Units	Method	Notes
Lead, Pb	7.3	0.5	mg/kg	EPA 6010	

Sample ID: 3 Laboratory ID: J242427-003

Analyte	Result	Reporting Limit	Units	Method	Notes
Lead, Pb	4.6	0.5	mg/kg	EPA 6010	

Sample ID: 4 Laboratory ID: J242427-004

Analyte	Result	Reporting Limit	Units	Method	Notes
Lead, Pb	3.1	0.5	mg/kg	EPA 6010	

Sample ID: 5 Laboratory ID: J242427-005

Analyte	Result	Reporting Limit	Units	Method	Notes
Lead, Pb	4.5	0.5	mg/kg	EPA 6010	

Sample ID: 6 Laboratory ID: J242427-006

Analyte	Result	Reporting Limit	Units	Method	Notes
Lead, Pb	4.3	0.5	mg/kg	EPA 6010	

Sample ID: 7 Laboratory ID: J242427-007

Analyte	Result	Reporting Limit	Units	Method	Notes
Lead, Pb	5.9	0.5	mg/kg	EPA 6010	

Jones Environmental, Inc.



Colby Wakeman
Lab Director

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Project: Brookfield - Irvine
Project Number: 185806655
Project Manager: Josh Sargent

Reported
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DETECTIONS SUMMARY

Sample ID: 8

Laboratory ID: J242427-008

Analyte	Result	Reporting Limit	Units	Method	Notes
Lead, Pb	5.3	0.5	mg/kg	EPA 6010	

Sample ID: 9

Laboratory ID: J242427-009

Analyte	Result	Reporting Limit	Units	Method	Notes
Lead, Pb	4.7	0.5	mg/kg	EPA 6010	

Sample ID: 12

Laboratory ID: J242427-010

Analyte	Result	Reporting Limit	Units	Method	Notes
Lead, Pb	5.8	0.5	mg/kg	EPA 6010	

Sample ID: 13

Laboratory ID: J242427-011

Analyte	Result	Reporting Limit	Units	Method	Notes
Lead, Pb	6.0	0.5	mg/kg	EPA 6010	

Sample ID: 16

Laboratory ID: J242427-012

Analyte	Result	Reporting Limit	Units	Method	Notes
Lead, Pb	3.3	0.5	mg/kg	EPA 6010	

Sample ID: 11-1

Laboratory ID: J242427-013

Analyte	Result	Reporting Limit	Units	Method	Notes
Lead, Pb	18.9	0.5	mg/kg	EPA 6010	

Sample ID: 19-1

Laboratory ID: J242427-014

Analyte	Result	Reporting Limit	Units	Method	Notes
Lead, Pb	6.3	0.5	mg/kg	EPA 6010	

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Colby Wakeman
Lab Director

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Project: Brookfield - Irvine
Project Number: 185806655
Project Manager: Josh Sargent

Reported
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DETECTIONS SUMMARY

Sample ID: 20-1

Laboratory ID: J242427-015

Analyte	Result	Reporting Limit	Units	Method	Notes
Lead, Pb	4.8	0.5	mg/kg	EPA 6010	

Sample ID: 21-1

Laboratory ID: J242427-016

Analyte	Result	Reporting Limit	Units	Method	Notes
Lead, Pb	3.7	0.5	mg/kg	EPA 6010	

Sample ID: 19

Laboratory ID: J242427-017

Analyte	Result	Reporting Limit	Units	Method	Notes
4,4'-DDE	22.5	10.0	µg/kg	EPA 8081	

Sample ID: 20

Laboratory ID: J242427-018

Analyte	Result	Reporting Limit	Units	Method	Notes
4,4'-DDE	105	100	µg/kg	EPA 8081	
4,4'-DDT	59.9	20.0	µg/kg	EPA 8081	
Endrin	11.0	10.0	µg/kg	EPA 8081	

Sample ID: 11

Laboratory ID: J242427-019

Analyte	Result	Reporting Limit	Units	Method	Notes
4,4'-DDE	737	200	µg/kg	EPA 8081	
4,4'-DDT	579	200	µg/kg	EPA 8081	
Endrin	158	100	µg/kg	EPA 8081	

Sample ID: 21

Laboratory ID: J242427-020

No Results Detected

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Colby Wakeman
Lab Director

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Project: Brookfield - Irvine
Project Number: 185806655
Project Manager: Josh Sargent

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DETECTIONS SUMMARY

Sample ID: Composite 1

Laboratory ID: J242427-021

Analyte	Result	Reporting Limit	Units	Method	Notes
Barium, Ba	85.3	0.5	mg/kg	EPA 6010	
Cadmium, Cd	2.2	0.5	mg/kg	EPA 6010	
Chromium, Cr	11.0	0.5	mg/kg	EPA 6010	
Cobalt, Co	4.9	0.5	mg/kg	EPA 6010	
Copper, Cu	6.4	0.5	mg/kg	EPA 6010	
Lead, Pb	3.4	0.5	mg/kg	EPA 6010	
Molybdenum, Mo	1.1	0.5	mg/kg	EPA 6010	
Nickel, Ni	4.9	0.5	mg/kg	EPA 6010	
Vanadium, V	33.4	0.5	mg/kg	EPA 6010	
Zinc, Zn	40.2	0.5	mg/kg	EPA 6010	
4,4'-DDE	11.1	10.0	µg/kg	EPA 8081	

Sample ID: SP1-10

Laboratory ID: J242427-028

Analyte	Result	Reporting Limit	Units	Method	Notes
Barium, Ba	61.1	0.5	mg/kg	EPA 6010	
Cadmium, Cd	2.2	0.5	mg/kg	EPA 6010	
Chromium, Cr	11.1	0.5	mg/kg	EPA 6010	
Cobalt, Co	3.8	0.5	mg/kg	EPA 6010	
Copper, Cu	7.3	0.5	mg/kg	EPA 6010	
Lead, Pb	3.7	0.5	mg/kg	EPA 6010	
Molybdenum, Mo	1.7	0.5	mg/kg	EPA 6010	
Nickel, Ni	7.1	0.5	mg/kg	EPA 6010	
Vanadium, V	28.3	0.5	mg/kg	EPA 6010	
Zinc, Zn	31.4	1.0	mg/kg	EPA 6010	
Mercury, Hg	0.028	0.020	mg/kg	EPA 7471	
C23 - C40	27.6	10.0	mg/kg	EPA 8015	

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DETECTIONS SUMMARY

Sample ID: SP1-20

Laboratory ID: J242427-029

Analyte	Result	Reporting Limit	Units	Method	Notes
Barium, Ba	95.2	0.5	mg/kg	EPA 6010	
Cadmium, Cd	2.1	0.5	mg/kg	EPA 6010	
Chromium, Cr	10.7	0.5	mg/kg	EPA 6010	
Cobalt, Co	5.4	0.5	mg/kg	EPA 6010	
Copper, Cu	6.3	0.5	mg/kg	EPA 6010	
Lead, Pb	3.1	0.5	mg/kg	EPA 6010	
Nickel, Ni	5.8	0.5	mg/kg	EPA 6010	
Vanadium, V	32.0	0.5	mg/kg	EPA 6010	
Zinc, Zn	41.3	1.0	mg/kg	EPA 6010	

Sample ID: SP2-10

Laboratory ID: J242427-030

Analyte	Result	Reporting Limit	Units	Method	Notes
Barium, Ba	57.4	0.5	mg/kg	EPA 6010	
Cadmium, Cd	1.4	0.5	mg/kg	EPA 6010	
Chromium, Cr	7.5	0.5	mg/kg	EPA 6010	
Cobalt, Co	2.9	0.5	mg/kg	EPA 6010	
Copper, Cu	5.8	0.5	mg/kg	EPA 6010	
Lead, Pb	2.6	0.5	mg/kg	EPA 6010	
Molybdenum, Mo	1.2	0.5	mg/kg	EPA 6010	
Nickel, Ni	4.7	0.5	mg/kg	EPA 6010	
Vanadium, V	19.6	0.5	mg/kg	EPA 6010	
Zinc, Zn	27.7	1.0	mg/kg	EPA 6010	

Sample ID: SP2-20

Laboratory ID: J242427-031

Analyte	Result	Reporting Limit	Units	Method	Notes
Arsenic, As	6.8	5.0	mg/kg	EPA 6010	
Barium, Ba	52.2	0.5	mg/kg	EPA 6010	

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Colby Wakeman
Lab Director

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Project Number: 185806655
Project Manager: Josh Sargent

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DETECTIONS SUMMARY

Sample ID: SP2-20

Laboratory ID: J242427-031

Analyte	Result	Reporting Limit	Units	Method	Notes
Cadmium, Cd	1.2	0.5	mg/kg	EPA 6010	
Chromium, Cr	8.1	0.5	mg/kg	EPA 6010	
Cobalt, Co	3.9	0.5	mg/kg	EPA 6010	
Copper, Cu	7.3	0.5	mg/kg	EPA 6010	
Lead, Pb	3.6	0.5	mg/kg	EPA 6010	
Molybdenum, Mo	0.5	0.5	mg/kg	EPA 6010	
Nickel, Ni	3.8	0.5	mg/kg	EPA 6010	
Vanadium, V	24.1	0.5	mg/kg	EPA 6010	
Zinc, Zn	30.2	1.0	mg/kg	EPA 6010	

Jones Environmental, Inc.



Colby Wakeman
Lab Director

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735 EastCarnegie Drive, Suite 280
San Bernardino, CA 92408

Project: Brookfield - Irvine
Project Number: 185806655
Project Manager: Josh Sargent

Reported
09/10/24 14:54

1
J242427-001(Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyzed	Method	Notes
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Lead by EPA 6010

Lead, Pb	6.7	0.5	mg/kg	1	QC2408337	08/20/24	EPA 6010	
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Jones Environmental, Inc.



Colby Wakeman
Lab Director

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735 EastCarnegie Drive, Suite 280
San Bernardino, CA 92408

Project: Brookfield - Irvine
Project Number: 185806655
Project Manager: Josh Sargent

Reported
09/10/24 14:54

2
J242427-002(Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyzed	Method	Notes
Lead by EPA 6010								
Lead, Pb	7.3	0.5	mg/kg	1	QC2408337	08/20/24	EPA 6010	



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735 EastCarnegie Drive, Suite 280
San Bernardino, CA 92408

Project: Brookfield - Irvine
Project Number: 185806655
Project Manager: Josh Sargent

Reported
09/10/24 14:54

3
J242427-003(Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyzed	Method	Notes
Lead by EPA 6010								
Lead, Pb	4.6	0.5	mg/kg	1	QC2408337	08/20/24	EPA 6010	

Jones Environmental, Inc.



Colby Wakeman
Lab Director

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Stantec Consulting
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San Bernardino, CA 92408

Project: Brookfield - Irvine
Project Number: 185806655
Project Manager: Josh Sargent

Reported
09/10/24 14:54

4
J242427-004(Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyzed	Method	Notes
Lead by EPA 6010								
Lead, Pb	3.1	0.5	mg/kg	1	QC2408337	08/20/24	EPA 6010	

Stantec Consulting
735 EastCarnegie Drive, Suite 280
San Bernardino, CA 92408

Project: Brookfield - Irvine
Project Number: 185806655
Project Manager: Josh Sargent

Reported
09/10/24 14:54

5
J242427-005(Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyzed	Method	Notes
Lead by EPA 6010								
Lead, Pb	4.5	0.5	mg/kg	1	QC2408337	08/20/24	EPA 6010	



Stantec Consulting
735 EastCarnegie Drive, Suite 280
San Bernardino, CA 92408Project: Brookfield - Irvine
Project Number: 185806655
Project Manager: Josh SargentReported
09/10/24 14:546
J242427-006(Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyzed	Method	Notes
Lead by EPA 6010								
Lead, Pb	4.3	0.5	mg/kg	1	QC2408337	08/20/24	EPA 6010	



Stantec Consulting
735 EastCarnegie Drive, Suite 280
San Bernardino, CA 92408

Project: Brookfield - Irvine
Project Number: 185806655
Project Manager: Josh Sargent

Reported
09/10/24 14:54

7
J242427-007(Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyzed	Method	Notes
Lead by EPA 6010								
Lead, Pb	5.9	0.5	mg/kg	1	QC2408337	08/20/24	EPA 6010	

Stantec Consulting
735 EastCarnegie Drive, Suite 280
San Bernardino, CA 92408

Project: Brookfield - Irvine
Project Number: 185806655
Project Manager: Josh Sargent

Reported
09/10/24 14:54

8
J242427-008(Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyzed	Method	Notes
Lead by EPA 6010								
Lead, Pb	5.3	0.5	mg/kg	1	QC2408337	08/20/24	EPA 6010	

Jones Environmental, Inc.



Colby Wakeman
Lab Director

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Stantec Consulting
735 EastCarnegie Drive, Suite 280
San Bernardino, CA 92408Project: Brookfield - Irvine
Project Number: 185806655
Project Manager: Josh SargentReported
09/10/24 14:549
J242427-009(Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyzed	Method	Notes
Lead by EPA 6010								
Lead, Pb	4.7	0.5	mg/kg	1	QC2408337	08/20/24	EPA 6010	



Stantec Consulting
735 EastCarnegie Drive, Suite 280
San Bernardino, CA 92408Project: Brookfield - Irvine
Project Number: 185806655
Project Manager: Josh SargentReported
09/10/24 14:5412
J242427-010(Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyzed	Method	Notes
Lead by EPA 6010								
Lead, Pb	5.8	0.5	mg/kg	1	QC2408337	08/20/24	EPA 6010	

Jones Environmental, Inc.

Colby Wakeman
Lab Director

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13
J242427-011(Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyzed	Method	Notes
Lead by EPA 6010								
Lead, Pb	6.0	0.5	mg/kg	1	QC2408337	08/20/24	EPA 6010	

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16
J242427-012(Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyzed	Method	Notes
Lead by EPA 6010								
Lead, Pb	3.3	0.5	mg/kg	1	QC2408337	08/20/24	EPA 6010	

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11-1
J242427-013(Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyzed	Method	Notes
Lead by EPA 6010								
Lead, Pb	18.9	0.5	mg/kg	1	QC2408337	08/20/24	EPA 6010	



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19-1
J242427-014(Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyzed	Method	Notes
Lead by EPA 6010								
Lead, Pb	6.3	0.5	mg/kg	1	QC2408337	08/20/24	EPA 6010	

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09/10/24 14:5420-1
J242427-015(Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyzed	Method	Notes
Lead by EPA 6010								
Lead, Pb	4.8	0.5	mg/kg	1	QC2408337	08/20/24	EPA 6010	



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21-1
J242427-016(Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyzed	Method	Notes
Lead by EPA 6010								
Lead, Pb	3.7	0.5	mg/kg	1	QC2408337	08/20/24	EPA 6010	

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19
J242427-017(Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyzed	Method	Notes
Chlorinated Pesticides by GC/ECD by EPA 8081								
alpha-BHC	ND	10.0	µg/kg	1	QC2408399	08/21/24	EPA 8081	
beta-BHC	ND	10.0	µg/kg	"	"	"	"	
gamma-BHC (Lindane)	ND	10.0	µg/kg	"	"	"	"	
Heptachlor	ND	10.0	µg/kg	"	"	"	"	
delta-BHC	ND	10.0	µg/kg	"	"	"	"	
Aldrin	ND	10.0	µg/kg	"	"	"	"	
Heptachlor epoxide	ND	10.0	µg/kg	"	"	"	"	
gamma-Chlordane	ND	10.0	µg/kg	"	"	"	"	
alpha-Chlordane	ND	10.0	µg/kg	"	"	"	"	
Endosulfan I	ND	10.0	µg/kg	"	"	"	"	
4,4'-DDE	22.5	10.0	µg/kg	"	"	"	"	
Dieldrin	ND	10.0	µg/kg	"	"	"	"	
Endrin	ND	10.0	µg/kg	"	"	"	"	
4,4'-DDD	ND	10.0	µg/kg	"	"	"	"	
Endosulfan II	ND	10.0	µg/kg	"	"	"	"	
4,4'-DDT	ND	10.0	µg/kg	"	"	"	"	
Endrin aldehyde	ND	10.0	µg/kg	"	"	"	"	
Endosulfan sulfate	ND	10.0	µg/kg	"	"	"	"	
Methoxychlor	ND	20.0	µg/kg	"	"	"	"	
Endrin ketone	ND	10.0	µg/kg	"	"	"	"	
Toxaphene	ND	20.0	µg/kg	"	"	"	"	
Technical Chlordane	ND	20.0	µg/kg	"	"	"	"	

Surrogate: TCMX 73.35 % 30 - 135

Surrogate: Decachlorobiphenyl 91.24 % 30 - 135

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Project Number: 185806655
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Reported
09/10/24 14:54

20
J242427-018(Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyzed	Method	Notes
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Chlorinated Pesticides by GC/ECD by EPA 8081

alpha-BHC	ND	10.0	µg/kg	1	QC2408399	08/21/24	EPA 8081	
beta-BHC	ND	10.0	µg/kg	"	"	"	"	
gamma-BHC (Lindane)	ND	10.0	µg/kg	"	"	"	"	
Heptachlor	ND	10.0	µg/kg	"	"	"	"	
delta-BHC	ND	10.0	µg/kg	"	"	"	"	
Aldrin	ND	10.0	µg/kg	"	"	"	"	
Heptachlor epoxide	ND	10.0	µg/kg	"	"	"	"	
gamma-Chlordane	ND	10.0	µg/kg	"	"	"	"	
alpha-Chlordane	ND	10.0	µg/kg	"	"	"	"	
Endosulfan I	ND	10.0	µg/kg	"	"	"	"	
4,4'-DDE	105	100	µg/kg	10	"	"	"	
Dieldrin	ND	10.0	µg/kg	1	"	"	"	
Endrin	11.0	10.0	µg/kg	"	"	"	"	
4,4'-DDD	ND	10.0	µg/kg	"	"	"	"	
Endosulfan II	ND	10.0	µg/kg	"	"	"	"	
4,4'-DDT	59.9	20.0	µg/kg	2	"	"	"	
Endrin aldehyde	ND	10.0	µg/kg	1	"	"	"	
Endosulfan sulfate	ND	10.0	µg/kg	"	"	"	"	
Methoxychlor	ND	20.0	µg/kg	"	"	"	"	
Endrin ketone	ND	10.0	µg/kg	"	"	"	"	
Toxaphene	ND	20.0	µg/kg	"	"	"	"	
Technical Chlordane	ND	20.0	µg/kg	"	"	"	"	

Surrogate: TCMX 69.91 % 30 - 135

Surrogate: Decachlorobiphenyl 91.61 % 30 - 135

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Reported
09/10/24 14:54

11
J242427-019(Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyzed	Method	Notes
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Chlorinated Pesticides by GC/ECD by EPA 8081

alpha-BHC	ND	10.0	µg/kg	1	QC2408399	08/21/24	EPA 8081	
beta-BHC	ND	10.0	µg/kg	"	"	"	"	
gamma-BHC (Lindane)	ND	10.0	µg/kg	"	"	"	"	
Heptachlor	ND	10.0	µg/kg	"	"	"	"	
delta-BHC	ND	10.0	µg/kg	"	"	"	"	
Aldrin	ND	10.0	µg/kg	"	"	"	"	
Heptachlor epoxide	ND	10.0	µg/kg	"	"	"	"	
gamma-Chlordane	ND	10.0	µg/kg	"	"	"	"	
alpha-Chlordane	ND	10.0	µg/kg	"	"	"	"	
Endosulfan I	ND	10.0	µg/kg	"	"	"	"	
4,4'-DDE	737	200	µg/kg	20	"	"	"	
Dieldrin	ND	10.0	µg/kg	1	"	"	"	
Endrin	158	100	µg/kg	10	"	"	"	
4,4'-DDD	ND	10.0	µg/kg	1	"	"	"	
Endosulfan II	ND	10.0	µg/kg	"	"	"	"	
4,4'-DDT	579	200	µg/kg	20	"	"	"	
Endrin aldehyde	ND	10.0	µg/kg	1	"	"	"	
Endosulfan sulfate	ND	10.0	µg/kg	"	"	"	"	
Methoxychlor	ND	20.0	µg/kg	"	"	"	"	
Endrin ketone	ND	10.0	µg/kg	"	"	"	"	
Toxaphene	ND	20.0	µg/kg	"	"	"	"	
Technical Chlordane	ND	20.0	µg/kg	"	"	"	"	

Surrogate: TCMX 66.96 % 30 - 135

Surrogate: Decachlorobiphenyl 87.09 % 30 - 135

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Reported
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21
J242427-020(Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyzed	Method	Notes
Chlorinated Pesticides by GC/ECD by EPA 8081								
alpha-BHC	ND	10.0	µg/kg	1	QC2408399	08/21/24	EPA 8081	
beta-BHC	ND	10.0	µg/kg	"	"	"	"	
gamma-BHC (Lindane)	ND	10.0	µg/kg	"	"	"	"	
Heptachlor	ND	10.0	µg/kg	"	"	"	"	
delta-BHC	ND	10.0	µg/kg	"	"	"	"	
Aldrin	ND	10.0	µg/kg	"	"	"	"	
Heptachlor epoxide	ND	10.0	µg/kg	"	"	"	"	
gamma-Chlordane	ND	10.0	µg/kg	"	"	"	"	
alpha-Chlordane	ND	10.0	µg/kg	"	"	"	"	
Endosulfan I	ND	10.0	µg/kg	"	"	"	"	
4,4'-DDE	ND	10.0	µg/kg	"	"	"	"	
Dieldrin	ND	10.0	µg/kg	"	"	"	"	
Endrin	ND	10.0	µg/kg	"	"	"	"	
4,4'-DDD	ND	10.0	µg/kg	"	"	"	"	
Endosulfan II	ND	10.0	µg/kg	"	"	"	"	
4,4'-DDT	ND	10.0	µg/kg	"	"	"	"	
Endrin aldehyde	ND	10.0	µg/kg	"	"	"	"	
Endosulfan sulfate	ND	10.0	µg/kg	"	"	"	"	
Methoxychlor	ND	20.0	µg/kg	"	"	"	"	
Endrin ketone	ND	10.0	µg/kg	"	"	"	"	
Toxaphene	ND	20.0	µg/kg	"	"	"	"	
Technical Chlordane	ND	20.0	µg/kg	"	"	"	"	

Surrogate: TCMX 67.36 % 30 - 135

Surrogate: Decachlorobiphenyl 85.06 % 30 - 135

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Composite 1
J242427-021(Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyzed	Method	Notes
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CAM 17 Metals by ICP-OES by EPA 6010

Silver, Ag	ND	0.5	mg/kg	1	QC2408338	08/20/24	EPA 6010	
Arsenic, As	ND	5.0	mg/kg	"	"	"	"	
Barium, Ba	85.3	0.5	mg/kg	"	"	"	"	
Beryllium, Be	ND	0.5	mg/kg	"	"	"	"	
Cadmium, Cd	2.2	0.5	mg/kg	"	"	"	"	
Cobalt, Co	4.9	0.5	mg/kg	"	"	"	"	
Chromium, Cr	11.0	0.5	mg/kg	"	"	"	"	
Copper, Cu	6.4	0.5	mg/kg	"	"	"	"	
Molybdenum, Mo	1.1	0.5	mg/kg	"	"	"	"	
Nickel, Ni	4.9	0.5	mg/kg	"	"	"	"	
Lead, Pb	3.4	0.5	mg/kg	"	"	"	"	
Antimony, Sb	ND	5.0	mg/kg	"	"	"	"	
Selenium, Se	ND	5.0	mg/kg	"	"	"	"	
Thallium, Tl	ND	5.0	mg/kg	"	"	"	"	
Vanadium, V	33.4	0.5	mg/kg	"	"	"	"	
Zinc, Zn	40.2	0.5	mg/kg	"	"	"	"	

Chlorinated Pesticides by GC/ECD by EPA 8081

alpha-BHC	ND	10.0	µg/kg	1	QC2408399	08/21/24	EPA 8081	
beta-BHC	ND	10.0	µg/kg	"	"	"	"	
gamma-BHC (Lindane)	ND	10.0	µg/kg	"	"	"	"	
Heptachlor	ND	10.0	µg/kg	"	"	"	"	
delta-BHC	ND	10.0	µg/kg	"	"	"	"	
Aldrin	ND	10.0	µg/kg	"	"	"	"	
Heptachlor epoxide	ND	10.0	µg/kg	"	"	"	"	
gamma-Chlordane	ND	10.0	µg/kg	"	"	"	"	
alpha-Chlordane	ND	10.0	µg/kg	"	"	"	"	
Endosulfan I	ND	10.0	µg/kg	"	"	"	"	
4,4'-DDE	11.1	10.0	µg/kg	"	"	"	"	
Dieldrin	ND	10.0	µg/kg	"	"	"	"	
Endrin	ND	10.0	µg/kg	"	"	"	"	
4,4'-DDD	ND	10.0	µg/kg	"	"	"	"	
Endosulfan II	ND	10.0	µg/kg	"	"	"	"	
4,4'-DDT	ND	10.0	µg/kg	"	"	"	"	
Endrin aldehyde	ND	10.0	µg/kg	"	"	"	"	
Endosulfan sulfate	ND	10.0	µg/kg	"	"	"	"	
Methoxychlor	ND	20.0	µg/kg	"	"	"	"	
Endrin ketone	ND	10.0	µg/kg	"	"	"	"	
Toxaphene	ND	20.0	µg/kg	"	"	"	"	
Technical Chlordane	ND	20.0	µg/kg	"	"	"	"	

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Composite 1
J242427-021(Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyzed	Method	Notes
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Chlorinated Pesticides by GC/ECD by EPA 8081

Surrogate: TCMX	63.96 %	30 - 135
Surrogate: Decachlorobiphenyl	79.49 %	30 - 135

Mercury by Cold Vapor Atomic Absorption by EPA 7471

Mercury, Hg	ND	0.020	mg/kg	1	QC2408332	08/20/24	EPA 7471
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Total Petroleum Hydrocarbons by EPA 8015

C13 - C22	ND	10.0	mg/kg	1	QC2408394	08/22/24	EPA 8015
C23 - C40	ND	10.0	mg/kg	"	"	"	"

Surrogate: Hexacosane	64.67 %	50 - 140
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Volatile Organic Compounds by EPA 8260

Benzene	ND	1.0	µg/kg	1	QC2408396	08/21/24	EPA 8260
Bromobenzene	ND	1.0	µg/kg	"	"	"	"
Bromodichloromethane	ND	1.0	µg/kg	"	"	"	"
Bromoform	ND	1.0	µg/kg	"	"	"	"
n-Butylbenzene	ND	1.0	µg/kg	"	"	"	"
sec-Butylbenzene	ND	1.0	µg/kg	"	"	"	"
tert-Butylbenzene	ND	1.0	µg/kg	"	"	"	"
Carbon tetrachloride	ND	1.0	µg/kg	"	"	"	"
Chlorobenzene	ND	1.0	µg/kg	"	"	"	"
Chloroform	ND	1.0	µg/kg	"	"	"	"
2-Chlorotoluene	ND	1.0	µg/kg	"	"	"	"
4-Chlorotoluene	ND	1.0	µg/kg	"	"	"	"
Dibromochloromethane	ND	1.0	µg/kg	"	"	"	"
1,2-Dibromo-3-chloropropane	ND	1.0	µg/kg	"	"	"	"
1,2-Dibromoethane (EDB)	ND	1.0	µg/kg	"	"	"	"
Dibromomethane	ND	1.0	µg/kg	"	"	"	"
1,2-Dichlorobenzene	ND	1.0	µg/kg	"	"	"	"
1,3-Dichlorobenzene	ND	1.0	µg/kg	"	"	"	"
1,4-Dichlorobenzene	ND	1.0	µg/kg	"	"	"	"
1,1-Dichloroethane	ND	1.0	µg/kg	"	"	"	"
1,2-Dichloroethane	ND	1.0	µg/kg	"	"	"	"
1,1-Dichloroethene	ND	1.0	µg/kg	"	"	"	"
cis-1,2-Dichloroethene	ND	1.0	µg/kg	"	"	"	"
trans-1,2-Dichloroethene	ND	1.0	µg/kg	"	"	"	"
1,2-Dichloropropane	ND	1.0	µg/kg	"	"	"	"
1,3-Dichloropropane	ND	1.0	µg/kg	"	"	"	"
2,2-Dichloropropane	ND	1.0	µg/kg	"	"	"	"
1,1-Dichloropropene	ND	1.0	µg/kg	"	"	"	"

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Project Manager: Josh Sargent

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Composite 1
J242427-021(Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyzed	Method	Notes
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Volatile Organic Compounds by EPA 8260

cis-1,3-Dichloropropene	ND	1.0	µg/kg	1	QC2408396	08/21/24	EPA 8260	
trans-1,3-Dichloropropene	ND	1.0	µg/kg	"	"	"	"	
Ethylbenzene	ND	1.0	µg/kg	"	"	"	"	
Freon 11	ND	5.0	µg/kg	"	"	"	"	
Freon 12	ND	5.0	µg/kg	"	"	"	"	
Freon 113	ND	5.0	µg/kg	"	"	"	"	
Hexachlorobutadiene	ND	1.0	µg/kg	"	"	"	"	
Isopropylbenzene	ND	1.0	µg/kg	"	"	"	"	
4-Isopropyltoluene	ND	1.0	µg/kg	"	"	"	"	
Methylene chloride	ND	1.0	µg/kg	"	"	"	"	
Naphthalene	ND	5.0	µg/kg	"	"	"	"	
n-Propylbenzene	ND	1.0	µg/kg	"	"	"	"	
Styrene	ND	1.0	µg/kg	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	1.0	µg/kg	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.0	µg/kg	"	"	"	"	
Tetrachloroethene	ND	1.0	µg/kg	"	"	"	"	
Toluene	ND	1.0	µg/kg	"	"	"	"	
1,2,3-Trichlorobenzene	ND	3.0	µg/kg	"	"	"	"	
1,2,4-Trichlorobenzene	ND	3.0	µg/kg	"	"	"	"	
1,1,1-Trichloroethane	ND	1.0	µg/kg	"	"	"	"	
1,1,2-Trichloroethane	ND	1.0	µg/kg	"	"	"	"	
Trichloroethene	ND	1.0	µg/kg	"	"	"	"	
1,2,3-Trichloropropane	ND	1.0	µg/kg	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.0	µg/kg	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0	µg/kg	"	"	"	"	
Vinyl chloride	ND	1.0	µg/kg	"	"	"	"	
m+p-Xylene	ND	2.0	µg/kg	"	"	"	"	
o-Xylene	ND	1.0	µg/kg	"	"	"	"	
Methyl-tert-butylether	ND	5.0	µg/kg	"	"	"	"	
Ethyl-tert-butylether	ND	5.0	µg/kg	"	"	"	"	
Di-isopropylether	ND	5.0	µg/kg	"	"	"	"	
tert-amylmethylether	ND	5.0	µg/kg	"	"	"	"	
tert-Butylalcohol	ND	50.0	µg/kg	"	"	"	"	
Gasoline Range Organics (C4-C12)	ND	0.20	mg/kg	"	"	"	"	

Surrogate: Toluene-d8 92.73 % 60 - 140

Surrogate: Dibromofluoromethane 130.23 % 60 - 140

Surrogate: 4-Bromofluorobenzene 82.52 % 60 - 140

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Project: Brookfield - Irvine
Project Number: 185806655
Project Manager: Josh Sargent

Reported
09/10/24 14:54

SP1-10
J242427-028(Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyzed	Method	Notes
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CAM 17 Metals by ICP-OES by EPA 6010

Silver, Ag	ND	0.5	mg/kg	1	QC2408330	08/20/24	EPA 6010	
Arsenic, As	ND	5.0	mg/kg	"	"	"	"	
Barium, Ba	61.1	0.5	mg/kg	"	"	"	"	
Beryllium, Be	ND	0.5	mg/kg	"	"	"	"	
Cadmium, Cd	2.2	0.5	mg/kg	"	"	"	"	
Cobalt, Co	3.8	0.5	mg/kg	"	"	"	"	
Chromium, Cr	11.1	0.5	mg/kg	"	"	"	"	
Copper, Cu	7.3	0.5	mg/kg	"	"	"	"	
Molybdenum, Mo	1.7	0.5	mg/kg	"	"	"	"	
Nickel, Ni	7.1	0.5	mg/kg	"	"	"	"	
Lead, Pb	3.7	0.5	mg/kg	"	"	"	"	
Antimony, Sb	ND	5.0	mg/kg	"	"	"	"	
Selenium, Se	ND	5.0	mg/kg	"	"	"	"	
Thallium, Tl	ND	5.0	mg/kg	"	"	"	"	
Vanadium, V	28.3	0.5	mg/kg	"	"	"	"	
Zinc, Zn	31.4	1.0	mg/kg	"	"	"	"	

Chlorinated Pesticides by GC/ECD by EPA 8081

alpha-BHC	ND	10.0	µg/kg	1	QC2408399	08/21/24	EPA 8081	
beta-BHC	ND	10.0	µg/kg	"	"	"	"	
gamma-BHC (Lindane)	ND	10.0	µg/kg	"	"	"	"	
Heptachlor	ND	10.0	µg/kg	"	"	"	"	
delta-BHC	ND	10.0	µg/kg	"	"	"	"	
Aldrin	ND	10.0	µg/kg	"	"	"	"	
Heptachlor epoxide	ND	10.0	µg/kg	"	"	"	"	
gamma-Chlordane	ND	10.0	µg/kg	"	"	"	"	
alpha-Chlordane	ND	10.0	µg/kg	"	"	"	"	
Endosulfan I	ND	10.0	µg/kg	"	"	"	"	
4,4'-DDE	ND	10.0	µg/kg	"	"	"	"	
Dieldrin	ND	10.0	µg/kg	"	"	"	"	
Endrin	ND	10.0	µg/kg	"	"	"	"	
4,4'-DDD	ND	10.0	µg/kg	"	"	"	"	
Endosulfan II	ND	10.0	µg/kg	"	"	"	"	
4,4'-DDT	ND	10.0	µg/kg	"	"	"	"	
Endrin aldehyde	ND	10.0	µg/kg	"	"	"	"	
Endosulfan sulfate	ND	10.0	µg/kg	"	"	"	"	
Methoxychlor	ND	20.0	µg/kg	"	"	"	"	
Endrin ketone	ND	10.0	µg/kg	"	"	"	"	
Toxaphene	ND	20.0	µg/kg	"	"	"	"	
Technical Chlordane	ND	20.0	µg/kg	"	"	"	"	

Jones Environmental, Inc.



Colby Wakeman
Lab Director

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Stantec Consulting
735 East Carnegie Drive, Suite 280
San Bernardino, CA 92408

Project: Brookfield - Irvine
Project Number: 185806655
Project Manager: Josh Sargent

Reported
09/10/24 14:54

SP1-10
J242427-028(Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyzed	Method	Notes
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Chlorinated Pesticides by GC/ECD by EPA 8081

Surrogate: TCMX	82.35 %	30 - 135
Surrogate: Decachlorobiphenyl	91.08 %	30 - 135

Mercury by Cold Vapor Atomic Absorption by EPA 7471

Mercury, Hg	0.028	0.020	mg/kg	1	QC2408332	08/20/24	EPA 7471
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Total Petroleum Hydrocarbons by EPA 8015

C13 - C22	ND	10.0	mg/kg	1	QC2408394	08/22/24	EPA 8015
C23 - C40	27.6	10.0	mg/kg	"	"	"	"

Surrogate: Hexacosane	64.99 %	50 - 140
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Volatile Organic Compounds by EPA 8260

Benzene	ND	1.0	µg/kg	1	QC2408396	08/21/24	EPA 8260
Bromobenzene	ND	1.0	µg/kg	"	"	"	"
Bromodichloromethane	ND	1.0	µg/kg	"	"	"	"
Bromoform	ND	1.0	µg/kg	"	"	"	"
n-Butylbenzene	ND	1.0	µg/kg	"	"	"	"
sec-Butylbenzene	ND	1.0	µg/kg	"	"	"	"
tert-Butylbenzene	ND	1.0	µg/kg	"	"	"	"
Carbon tetrachloride	ND	1.0	µg/kg	"	"	"	"
Chlorobenzene	ND	1.0	µg/kg	"	"	"	"
Chloroform	ND	1.0	µg/kg	"	"	"	"
2-Chlorotoluene	ND	1.0	µg/kg	"	"	"	"
4-Chlorotoluene	ND	1.0	µg/kg	"	"	"	"
Dibromochloromethane	ND	1.0	µg/kg	"	"	"	"
1,2-Dibromo-3-chloropropane	ND	1.0	µg/kg	"	"	"	"
1,2-Dibromoethane (EDB)	ND	1.0	µg/kg	"	"	"	"
Dibromomethane	ND	1.0	µg/kg	"	"	"	"
1,2-Dichlorobenzene	ND	1.0	µg/kg	"	"	"	"
1,3-Dichlorobenzene	ND	1.0	µg/kg	"	"	"	"
1,4-Dichlorobenzene	ND	1.0	µg/kg	"	"	"	"
1,1-Dichloroethane	ND	1.0	µg/kg	"	"	"	"
1,2-Dichloroethane	ND	1.0	µg/kg	"	"	"	"
1,1-Dichloroethene	ND	1.0	µg/kg	"	"	"	"
cis-1,2-Dichloroethene	ND	1.0	µg/kg	"	"	"	"
trans-1,2-Dichloroethene	ND	1.0	µg/kg	"	"	"	"
1,2-Dichloropropane	ND	1.0	µg/kg	"	"	"	"
1,3-Dichloropropane	ND	1.0	µg/kg	"	"	"	"
2,2-Dichloropropane	ND	1.0	µg/kg	"	"	"	"
1,1-Dichloropropene	ND	1.0	µg/kg	"	"	"	"

Jones Environmental, Inc.



Colby Wakeman
Lab Director

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Stantec Consulting
735 EastCarnegie Drive, Suite 280
San Bernardino, CA 92408

Project: Brookfield - Irvine
Project Number: 185806655
Project Manager: Josh Sargent

Reported
09/10/24 14:54

SP1-10
J242427-028(Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyzed	Method	Notes
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Volatile Organic Compounds by EPA 8260

cis-1,3-Dichloropropene	ND	1.0	µg/kg	1	QC2408396	08/21/24	EPA 8260	
trans-1,3-Dichloropropene	ND	1.0	µg/kg	"	"	"	"	
Ethylbenzene	ND	1.0	µg/kg	"	"	"	"	
Freon 11	ND	5.0	µg/kg	"	"	"	"	
Freon 12	ND	5.0	µg/kg	"	"	"	"	
Freon 113	ND	5.0	µg/kg	"	"	"	"	
Hexachlorobutadiene	ND	1.0	µg/kg	"	"	"	"	
Isopropylbenzene	ND	1.0	µg/kg	"	"	"	"	
4-Isopropyltoluene	ND	1.0	µg/kg	"	"	"	"	
Methylene chloride	ND	1.0	µg/kg	"	"	"	"	
Naphthalene	ND	5.0	µg/kg	"	"	"	"	
n-Propylbenzene	ND	1.0	µg/kg	"	"	"	"	
Styrene	ND	1.0	µg/kg	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	1.0	µg/kg	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.0	µg/kg	"	"	"	"	
Tetrachloroethene	ND	1.0	µg/kg	"	"	"	"	
Toluene	ND	1.0	µg/kg	"	"	"	"	
1,2,3-Trichlorobenzene	ND	3.0	µg/kg	"	"	"	"	
1,2,4-Trichlorobenzene	ND	3.0	µg/kg	"	"	"	"	
1,1,1-Trichloroethane	ND	1.0	µg/kg	"	"	"	"	
1,1,2-Trichloroethane	ND	1.0	µg/kg	"	"	"	"	
Trichloroethene	ND	1.0	µg/kg	"	"	"	"	
1,2,3-Trichloropropane	ND	1.0	µg/kg	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.0	µg/kg	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0	µg/kg	"	"	"	"	
Vinyl chloride	ND	1.0	µg/kg	"	"	"	"	
m+p-Xylene	ND	2.0	µg/kg	"	"	"	"	
o-Xylene	ND	1.0	µg/kg	"	"	"	"	
Methyl-tert-butylether	ND	5.0	µg/kg	"	"	"	"	
Ethyl-tert-butylether	ND	5.0	µg/kg	"	"	"	"	
Di-isopropylether	ND	5.0	µg/kg	"	"	"	"	
tert-amylmethylether	ND	5.0	µg/kg	"	"	"	"	
tert-Butylalcohol	ND	50.0	µg/kg	"	"	"	"	
Gasoline Range Organics (C4-C12)	ND	0.20	mg/kg	"	"	"	"	

Surrogate: Toluene-d8 91.14 % 60 - 140

Surrogate: Dibromofluoromethane 124.26 % 60 - 140

Surrogate: 4-Bromofluorobenzene 78.55 % 60 - 140

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735 EastCarnegie Drive, Suite 280
San Bernardino, CA 92408

Project: Brookfield - Irvine
Project Number: 185806655
Project Manager: Josh Sargent

Reported
09/10/24 14:54

SP1-20
J242427-029(Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyzed	Method	Notes
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CAM 17 Metals by ICP-OES by EPA 6010

Silver, Ag	ND	0.5	mg/kg	1	QC2408330	08/20/24	EPA 6010	
Arsenic, As	ND	5.0	mg/kg	"	"	"	"	
Barium, Ba	95.2	0.5	mg/kg	"	"	"	"	
Beryllium, Be	ND	0.5	mg/kg	"	"	"	"	
Cadmium, Cd	2.1	0.5	mg/kg	"	"	"	"	
Cobalt, Co	5.4	0.5	mg/kg	"	"	"	"	
Chromium, Cr	10.7	0.5	mg/kg	"	"	"	"	
Copper, Cu	6.3	0.5	mg/kg	"	"	"	"	
Molybdenum, Mo	ND	0.5	mg/kg	"	"	"	"	
Nickel, Ni	5.8	0.5	mg/kg	"	"	"	"	
Lead, Pb	3.1	0.5	mg/kg	"	"	"	"	
Antimony, Sb	ND	5.0	mg/kg	"	"	"	"	
Selenium, Se	ND	5.0	mg/kg	"	"	"	"	
Thallium, Tl	ND	5.0	mg/kg	"	"	"	"	
Vanadium, V	32.0	0.5	mg/kg	"	"	"	"	
Zinc, Zn	41.3	1.0	mg/kg	"	"	"	"	

Chlorinated Pesticides by GC/ECD by EPA 8081

alpha-BHC	ND	10.0	µg/kg	1	QC2408399	08/21/24	EPA 8081	
beta-BHC	ND	10.0	µg/kg	"	"	"	"	
gamma-BHC (Lindane)	ND	10.0	µg/kg	"	"	"	"	
Heptachlor	ND	10.0	µg/kg	"	"	"	"	
delta-BHC	ND	10.0	µg/kg	"	"	"	"	
Aldrin	ND	10.0	µg/kg	"	"	"	"	
Heptachlor epoxide	ND	10.0	µg/kg	"	"	"	"	
gamma-Chlordane	ND	10.0	µg/kg	"	"	"	"	
alpha-Chlordane	ND	10.0	µg/kg	"	"	"	"	
Endosulfan I	ND	10.0	µg/kg	"	"	"	"	
4,4'-DDE	ND	10.0	µg/kg	"	"	"	"	
Dieldrin	ND	10.0	µg/kg	"	"	"	"	
Endrin	ND	10.0	µg/kg	"	"	"	"	
4,4'-DDD	ND	10.0	µg/kg	"	"	"	"	
Endosulfan II	ND	10.0	µg/kg	"	"	"	"	
4,4'-DDT	ND	10.0	µg/kg	"	"	"	"	
Endrin aldehyde	ND	10.0	µg/kg	"	"	"	"	
Endosulfan sulfate	ND	10.0	µg/kg	"	"	"	"	
Methoxychlor	ND	20.0	µg/kg	"	"	"	"	
Endrin ketone	ND	10.0	µg/kg	"	"	"	"	
Toxaphene	ND	20.0	µg/kg	"	"	"	"	
Technical Chlordane	ND	20.0	µg/kg	"	"	"	"	

Jones Environmental, Inc.



Colby Wakeman
Lab Director

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Stantec Consulting
735 East Carnegie Drive, Suite 280
San Bernardino, CA 92408

Project: Brookfield - Irvine
Project Number: 185806655
Project Manager: Josh Sargent

Reported
09/10/24 14:54

SP1-20
J242427-029(Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyzed	Method	Notes
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Chlorinated Pesticides by GC/ECD by EPA 8081

Surrogate: TCMX	88.16 %	30 - 135
Surrogate: Decachlorobiphenyl	91.99 %	30 - 135

Mercury by Cold Vapor Atomic Absorption by EPA 7471

Mercury, Hg	ND	0.020	mg/kg	1	QC2408332	08/20/24	EPA 7471
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Total Petroleum Hydrocarbons by EPA 8015

C13 - C22	ND	10.0	mg/kg	1	QC2408394	08/22/24	EPA 8015
C23 - C40	ND	10.0	mg/kg	"	"	"	"

Surrogate: Hexacosane	70.38 %	50 - 140
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Volatile Organic Compounds by EPA 8260

Benzene	ND	1.0	µg/kg	1	QC2408396	08/21/24	EPA 8260
Bromobenzene	ND	1.0	µg/kg	"	"	"	"
Bromodichloromethane	ND	1.0	µg/kg	"	"	"	"
Bromoform	ND	1.0	µg/kg	"	"	"	"
n-Butylbenzene	ND	1.0	µg/kg	"	"	"	"
sec-Butylbenzene	ND	1.0	µg/kg	"	"	"	"
tert-Butylbenzene	ND	1.0	µg/kg	"	"	"	"
Carbon tetrachloride	ND	1.0	µg/kg	"	"	"	"
Chlorobenzene	ND	1.0	µg/kg	"	"	"	"
Chloroform	ND	1.0	µg/kg	"	"	"	"
2-Chlorotoluene	ND	1.0	µg/kg	"	"	"	"
4-Chlorotoluene	ND	1.0	µg/kg	"	"	"	"
Dibromochloromethane	ND	1.0	µg/kg	"	"	"	"
1,2-Dibromo-3-chloropropane	ND	1.0	µg/kg	"	"	"	"
1,2-Dibromoethane (EDB)	ND	1.0	µg/kg	"	"	"	"
Dibromomethane	ND	1.0	µg/kg	"	"	"	"
1,2-Dichlorobenzene	ND	1.0	µg/kg	"	"	"	"
1,3-Dichlorobenzene	ND	1.0	µg/kg	"	"	"	"
1,4-Dichlorobenzene	ND	1.0	µg/kg	"	"	"	"
1,1-Dichloroethane	ND	1.0	µg/kg	"	"	"	"
1,2-Dichloroethane	ND	1.0	µg/kg	"	"	"	"
1,1-Dichloroethene	ND	1.0	µg/kg	"	"	"	"
cis-1,2-Dichloroethene	ND	1.0	µg/kg	"	"	"	"
trans-1,2-Dichloroethene	ND	1.0	µg/kg	"	"	"	"
1,2-Dichloropropane	ND	1.0	µg/kg	"	"	"	"
1,3-Dichloropropane	ND	1.0	µg/kg	"	"	"	"
2,2-Dichloropropane	ND	1.0	µg/kg	"	"	"	"
1,1-Dichloropropene	ND	1.0	µg/kg	"	"	"	"

Jones Environmental, Inc.



Colby Wakeman
Lab Director

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Stantec Consulting
735 EastCarnegie Drive, Suite 280
San Bernardino, CA 92408

Project: Brookfield - Irvine
Project Number: 185806655
Project Manager: Josh Sargent

Reported
09/10/24 14:54

SP1-20
J242427-029(Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyzed	Method	Notes
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Volatile Organic Compounds by EPA 8260

cis-1,3-Dichloropropene	ND	1.0	µg/kg	1	QC2408396	08/21/24	EPA 8260	
trans-1,3-Dichloropropene	ND	1.0	µg/kg	"	"	"	"	
Ethylbenzene	ND	1.0	µg/kg	"	"	"	"	
Freon 11	ND	5.0	µg/kg	"	"	"	"	
Freon 12	ND	5.0	µg/kg	"	"	"	"	
Freon 113	ND	5.0	µg/kg	"	"	"	"	
Hexachlorobutadiene	ND	1.0	µg/kg	"	"	"	"	
Isopropylbenzene	ND	1.0	µg/kg	"	"	"	"	
4-Isopropyltoluene	ND	1.0	µg/kg	"	"	"	"	
Methylene chloride	ND	1.0	µg/kg	"	"	"	"	
Naphthalene	ND	5.0	µg/kg	"	"	"	"	
n-Propylbenzene	ND	1.0	µg/kg	"	"	"	"	
Styrene	ND	1.0	µg/kg	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	1.0	µg/kg	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.0	µg/kg	"	"	"	"	
Tetrachloroethene	ND	1.0	µg/kg	"	"	"	"	
Toluene	ND	1.0	µg/kg	"	"	"	"	
1,2,3-Trichlorobenzene	ND	3.0	µg/kg	"	"	"	"	
1,2,4-Trichlorobenzene	ND	3.0	µg/kg	"	"	"	"	
1,1,1-Trichloroethane	ND	1.0	µg/kg	"	"	"	"	
1,1,2-Trichloroethane	ND	1.0	µg/kg	"	"	"	"	
Trichloroethene	ND	1.0	µg/kg	"	"	"	"	
1,2,3-Trichloropropane	ND	1.0	µg/kg	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.0	µg/kg	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0	µg/kg	"	"	"	"	
Vinyl chloride	ND	1.0	µg/kg	"	"	"	"	
m+p-Xylene	ND	2.0	µg/kg	"	"	"	"	
o-Xylene	ND	1.0	µg/kg	"	"	"	"	
Methyl-tert-butylether	ND	5.0	µg/kg	"	"	"	"	
Ethyl-tert-butylether	ND	5.0	µg/kg	"	"	"	"	
Di-isopropylether	ND	5.0	µg/kg	"	"	"	"	
tert-amylmethylether	ND	5.0	µg/kg	"	"	"	"	
tert-Butylalcohol	ND	50.0	µg/kg	"	"	"	"	
Gasoline Range Organics (C4-C12)	ND	0.20	mg/kg	"	"	"	"	

Surrogate: Toluene-d8 91.59 % 60 - 140

Surrogate: Dibromofluoromethane 126.63 % 60 - 140

Surrogate: 4-Bromofluorobenzene 80.54 % 60 - 140

Jones Environmental, Inc.



Colby Wakeman
Lab Director

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Stantec Consulting
735 East Carnegie Drive, Suite 280
San Bernardino, CA 92408

Project: Brookfield - Irvine
Project Number: 185806655
Project Manager: Josh Sargent

Reported
09/10/24 14:54

SP2-10
J242427-030(Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyzed	Method	Notes
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CAM 17 Metals by ICP-OES by EPA 6010

Silver, Ag	ND	0.5	mg/kg	1	QC2408330	08/20/24	EPA 6010	
Arsenic, As	ND	5.0	mg/kg	"	"	"	"	
Barium, Ba	57.4	0.5	mg/kg	"	"	"	"	
Beryllium, Be	ND	0.5	mg/kg	"	"	"	"	
Cadmium, Cd	1.4	0.5	mg/kg	"	"	"	"	
Cobalt, Co	2.9	0.5	mg/kg	"	"	"	"	
Chromium, Cr	7.5	0.5	mg/kg	"	"	"	"	
Copper, Cu	5.8	0.5	mg/kg	"	"	"	"	
Molybdenum, Mo	1.2	0.5	mg/kg	"	"	"	"	
Nickel, Ni	4.7	0.5	mg/kg	"	"	"	"	
Lead, Pb	2.6	0.5	mg/kg	"	"	"	"	
Antimony, Sb	ND	5.0	mg/kg	"	"	"	"	
Selenium, Se	ND	5.0	mg/kg	"	"	"	"	
Thallium, Tl	ND	5.0	mg/kg	"	"	"	"	
Vanadium, V	19.6	0.5	mg/kg	"	"	"	"	
Zinc, Zn	27.7	1.0	mg/kg	"	"	"	"	

Chlorinated Pesticides by GC/ECD by EPA 8081

alpha-BHC	ND	10.0	µg/kg	1	QC2408399	08/21/24	EPA 8081	
beta-BHC	ND	10.0	µg/kg	"	"	"	"	
gamma-BHC (Lindane)	ND	10.0	µg/kg	"	"	"	"	
Heptachlor	ND	10.0	µg/kg	"	"	"	"	
delta-BHC	ND	10.0	µg/kg	"	"	"	"	
Aldrin	ND	10.0	µg/kg	"	"	"	"	
Heptachlor epoxide	ND	10.0	µg/kg	"	"	"	"	
gamma-Chlordane	ND	10.0	µg/kg	"	"	"	"	
alpha-Chlordane	ND	10.0	µg/kg	"	"	"	"	
Endosulfan I	ND	10.0	µg/kg	"	"	"	"	
4,4'-DDE	ND	10.0	µg/kg	"	"	"	"	
Dieldrin	ND	10.0	µg/kg	"	"	"	"	
Endrin	ND	10.0	µg/kg	"	"	"	"	
4,4'-DDD	ND	10.0	µg/kg	"	"	"	"	
Endosulfan II	ND	10.0	µg/kg	"	"	"	"	
4,4'-DDT	ND	10.0	µg/kg	"	"	"	"	
Endrin aldehyde	ND	10.0	µg/kg	"	"	"	"	
Endosulfan sulfate	ND	10.0	µg/kg	"	"	"	"	
Methoxychlor	ND	20.0	µg/kg	"	"	"	"	
Endrin ketone	ND	10.0	µg/kg	"	"	"	"	
Toxaphene	ND	20.0	µg/kg	"	"	"	"	
Technical Chlordane	ND	20.0	µg/kg	"	"	"	"	

Jones Environmental, Inc.



Colby Wakeman
Lab Director

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Stantec Consulting
735 EastCarnegie Drive, Suite 280
San Bernardino, CA 92408

Project: Brookfield - Irvine
Project Number: 185806655
Project Manager: Josh Sargent

Reported
09/10/24 14:54

SP2-10
J242427-030(Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyzed	Method	Notes
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Chlorinated Pesticides by GC/ECD by EPA 8081

Surrogate: TCMX	74.39 %	30 - 135
Surrogate: Decachlorobiphenyl	82.19 %	30 - 135

Mercury by Cold Vapor Atomic Absorption by EPA 7471

Mercury, Hg	ND	0.020	mg/kg	1	QC2408332	08/20/24	EPA 7471
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Total Petroleum Hydrocarbons by EPA 8015

C13 - C22	ND	10.0	mg/kg	1	QC2408394	08/22/24	EPA 8015
C23 - C40	ND	10.0	mg/kg	"	"	"	"

Surrogate: Hexacosane	87.83 %	50 - 140
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Volatile Organic Compounds by EPA 8260

Benzene	ND	1.0	µg/kg	1	QC2408396	08/21/24	EPA 8260
Bromobenzene	ND	1.0	µg/kg	"	"	"	"
Bromodichloromethane	ND	1.0	µg/kg	"	"	"	"
Bromoform	ND	1.0	µg/kg	"	"	"	"
n-Butylbenzene	ND	1.0	µg/kg	"	"	"	"
sec-Butylbenzene	ND	1.0	µg/kg	"	"	"	"
tert-Butylbenzene	ND	1.0	µg/kg	"	"	"	"
Carbon tetrachloride	ND	1.0	µg/kg	"	"	"	"
Chlorobenzene	ND	1.0	µg/kg	"	"	"	"
Chloroform	ND	1.0	µg/kg	"	"	"	"
2-Chlorotoluene	ND	1.0	µg/kg	"	"	"	"
4-Chlorotoluene	ND	1.0	µg/kg	"	"	"	"
Dibromochloromethane	ND	1.0	µg/kg	"	"	"	"
1,2-Dibromo-3-chloropropane	ND	1.0	µg/kg	"	"	"	"
1,2-Dibromoethane (EDB)	ND	1.0	µg/kg	"	"	"	"
Dibromomethane	ND	1.0	µg/kg	"	"	"	"
1,2- Dichlorobenzene	ND	1.0	µg/kg	"	"	"	"
1,3-Dichlorobenzene	ND	1.0	µg/kg	"	"	"	"
1,4-Dichlorobenzene	ND	1.0	µg/kg	"	"	"	"
1,1-Dichloroethane	ND	1.0	µg/kg	"	"	"	"
1,2-Dichloroethane	ND	1.0	µg/kg	"	"	"	"
1,1-Dichloroethene	ND	1.0	µg/kg	"	"	"	"
cis-1,2-Dichloroethene	ND	1.0	µg/kg	"	"	"	"
trans-1,2-Dichloroethene	ND	1.0	µg/kg	"	"	"	"
1,2-Dichloropropane	ND	1.0	µg/kg	"	"	"	"
1,3-Dichloropropane	ND	1.0	µg/kg	"	"	"	"
2,2-Dichloropropane	ND	1.0	µg/kg	"	"	"	"
1,1-Dichloropropene	ND	1.0	µg/kg	"	"	"	"

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Project Number: 185806655
Project Manager: Josh Sargent

Reported
09/10/24 14:54

SP2-10
J242427-030(Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyzed	Method	Notes
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Volatile Organic Compounds by EPA 8260

cis-1,3-Dichloropropene	ND	1.0	µg/kg	1	QC2408396	08/21/24	EPA 8260	
trans-1,3-Dichloropropene	ND	1.0	µg/kg	"	"	"	"	
Ethylbenzene	ND	1.0	µg/kg	"	"	"	"	
Freon 11	ND	5.0	µg/kg	"	"	"	"	
Freon 12	ND	5.0	µg/kg	"	"	"	"	
Freon 113	ND	5.0	µg/kg	"	"	"	"	
Hexachlorobutadiene	ND	1.0	µg/kg	"	"	"	"	
Isopropylbenzene	ND	1.0	µg/kg	"	"	"	"	
4-Isopropyltoluene	ND	1.0	µg/kg	"	"	"	"	
Methylene chloride	ND	1.0	µg/kg	"	"	"	"	
Naphthalene	ND	5.0	µg/kg	"	"	"	"	
n-Propylbenzene	ND	1.0	µg/kg	"	"	"	"	
Styrene	ND	1.0	µg/kg	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	1.0	µg/kg	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.0	µg/kg	"	"	"	"	
Tetrachloroethene	ND	1.0	µg/kg	"	"	"	"	
Toluene	ND	1.0	µg/kg	"	"	"	"	
1,2,3-Trichlorobenzene	ND	3.0	µg/kg	"	"	"	"	
1,2,4-Trichlorobenzene	ND	3.0	µg/kg	"	"	"	"	
1,1,1-Trichloroethane	ND	1.0	µg/kg	"	"	"	"	
1,1,2-Trichloroethane	ND	1.0	µg/kg	"	"	"	"	
Trichloroethene	ND	1.0	µg/kg	"	"	"	"	
1,2,3-Trichloropropane	ND	1.0	µg/kg	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.0	µg/kg	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0	µg/kg	"	"	"	"	
Vinyl chloride	ND	1.0	µg/kg	"	"	"	"	
m+p-Xylene	ND	2.0	µg/kg	"	"	"	"	
o-Xylene	ND	1.0	µg/kg	"	"	"	"	
Methyl-tert-butylether	ND	5.0	µg/kg	"	"	"	"	
Ethyl-tert-butylether	ND	5.0	µg/kg	"	"	"	"	
Di-isopropylether	ND	5.0	µg/kg	"	"	"	"	
tert-amylmethylether	ND	5.0	µg/kg	"	"	"	"	
tert-Butylalcohol	ND	50.0	µg/kg	"	"	"	"	
Gasoline Range Organics (C4-C12)	ND	0.20	mg/kg	"	"	"	"	

Surrogate: Toluene-d8 92.23 % 60 - 140

Surrogate: Dibromofluoromethane 126.33 % 60 - 140

Surrogate: 4-Bromofluorobenzene 80.29 % 60 - 140

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Project: Brookfield - Irvine
Project Number: 185806655
Project Manager: Josh Sargent

Reported
09/10/24 14:54

SP2-20
J242427-031(Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyzed	Method	Notes
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CAM 17 Metals by ICP-OES by EPA 6010

Silver, Ag	ND	0.5	mg/kg	1	QC2408330	08/20/24	EPA 6010	
Arsenic, As	6.8	5.0	mg/kg	"	"	"	"	
Barium, Ba	52.2	0.5	mg/kg	"	"	"	"	
Beryllium, Be	ND	0.5	mg/kg	"	"	"	"	
Cadmium, Cd	1.2	0.5	mg/kg	"	"	"	"	
Cobalt, Co	3.9	0.5	mg/kg	"	"	"	"	
Chromium, Cr	8.1	0.5	mg/kg	"	"	"	"	
Copper, Cu	7.3	0.5	mg/kg	"	"	"	"	
Molybdenum, Mo	0.5	0.5	mg/kg	"	"	"	"	
Nickel, Ni	3.8	0.5	mg/kg	"	"	"	"	
Lead, Pb	3.6	0.5	mg/kg	"	"	"	"	
Antimony, Sb	ND	5.0	mg/kg	"	"	"	"	
Selenium, Se	ND	5.0	mg/kg	"	"	"	"	
Thallium, Tl	ND	5.0	mg/kg	"	"	"	"	
Vanadium, V	24.1	0.5	mg/kg	"	"	"	"	
Zinc, Zn	30.2	1.0	mg/kg	"	"	"	"	

Chlorinated Pesticides by GC/ECD by EPA 8081

alpha-BHC	ND	10.0	µg/kg	1	QC2408399	08/21/24	EPA 8081	
beta-BHC	ND	10.0	µg/kg	"	"	"	"	
gamma-BHC (Lindane)	ND	10.0	µg/kg	"	"	"	"	
Heptachlor	ND	10.0	µg/kg	"	"	"	"	
delta-BHC	ND	10.0	µg/kg	"	"	"	"	
Aldrin	ND	10.0	µg/kg	"	"	"	"	
Heptachlor epoxide	ND	10.0	µg/kg	"	"	"	"	
gamma-Chlordane	ND	10.0	µg/kg	"	"	"	"	
alpha-Chlordane	ND	10.0	µg/kg	"	"	"	"	
Endosulfan I	ND	10.0	µg/kg	"	"	"	"	
4,4'-DDE	ND	10.0	µg/kg	"	"	"	"	
Dieldrin	ND	10.0	µg/kg	"	"	"	"	
Endrin	ND	10.0	µg/kg	"	"	"	"	
4,4'-DDD	ND	10.0	µg/kg	"	"	"	"	
Endosulfan II	ND	10.0	µg/kg	"	"	"	"	
4,4'-DDT	ND	10.0	µg/kg	"	"	"	"	
Endrin aldehyde	ND	10.0	µg/kg	"	"	"	"	
Endosulfan sulfate	ND	10.0	µg/kg	"	"	"	"	
Methoxychlor	ND	20.0	µg/kg	"	"	"	"	
Endrin ketone	ND	10.0	µg/kg	"	"	"	"	
Toxaphene	ND	20.0	µg/kg	"	"	"	"	
Technical Chlordane	ND	20.0	µg/kg	"	"	"	"	

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SP2-20
J242427-031(Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyzed	Method	Notes
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Chlorinated Pesticides by GC/ECD by EPA 8081

Surrogate: TCMX	88.52 %	30 - 135
Surrogate: Decachlorobiphenyl	93.62 %	30 - 135

Mercury by Cold Vapor Atomic Absorption by EPA 7471

Mercury, Hg	ND	0.020	mg/kg	1	QC2408332	08/20/24	EPA 7471
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Total Petroleum Hydrocarbons by EPA 8015

C13 - C22	ND	10.0	mg/kg	1	QC2408394	08/22/24	EPA 8015
C23 - C40	ND	10.0	mg/kg	"	"	"	"

Surrogate: Hexacosane	74.34 %	50 - 140
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Volatile Organic Compounds by EPA 8260

Benzene	ND	1.0	µg/kg	1	QC2408396	08/21/24	EPA 8260
Bromobenzene	ND	1.0	µg/kg	"	"	"	"
Bromodichloromethane	ND	1.0	µg/kg	"	"	"	"
Bromoform	ND	1.0	µg/kg	"	"	"	"
n-Butylbenzene	ND	1.0	µg/kg	"	"	"	"
sec-Butylbenzene	ND	1.0	µg/kg	"	"	"	"
tert-Butylbenzene	ND	1.0	µg/kg	"	"	"	"
Carbon tetrachloride	ND	1.0	µg/kg	"	"	"	"
Chlorobenzene	ND	1.0	µg/kg	"	"	"	"
Chloroform	ND	1.0	µg/kg	"	"	"	"
2-Chlorotoluene	ND	1.0	µg/kg	"	"	"	"
4-Chlorotoluene	ND	1.0	µg/kg	"	"	"	"
Dibromochloromethane	ND	1.0	µg/kg	"	"	"	"
1,2-Dibromo-3-chloropropane	ND	1.0	µg/kg	"	"	"	"
1,2-Dibromoethane (EDB)	ND	1.0	µg/kg	"	"	"	"
Dibromomethane	ND	1.0	µg/kg	"	"	"	"
1,2-Dichlorobenzene	ND	1.0	µg/kg	"	"	"	"
1,3-Dichlorobenzene	ND	1.0	µg/kg	"	"	"	"
1,4-Dichlorobenzene	ND	1.0	µg/kg	"	"	"	"
1,1-Dichloroethane	ND	1.0	µg/kg	"	"	"	"
1,2-Dichloroethane	ND	1.0	µg/kg	"	"	"	"
1,1-Dichloroethene	ND	1.0	µg/kg	"	"	"	"
cis-1,2-Dichloroethene	ND	1.0	µg/kg	"	"	"	"
trans-1,2-Dichloroethene	ND	1.0	µg/kg	"	"	"	"
1,2-Dichloropropane	ND	1.0	µg/kg	"	"	"	"
1,3-Dichloropropane	ND	1.0	µg/kg	"	"	"	"
2,2-Dichloropropane	ND	1.0	µg/kg	"	"	"	"
1,1-Dichloropropene	ND	1.0	µg/kg	"	"	"	"

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SP2-20
J242427-031(Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyzed	Method	Notes
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Volatile Organic Compounds by EPA 8260

cis-1,3-Dichloropropene	ND	1.0	µg/kg	1	QC2408396	08/21/24	EPA 8260	
trans-1,3-Dichloropropene	ND	1.0	µg/kg	"	"	"	"	
Ethylbenzene	ND	1.0	µg/kg	"	"	"	"	
Freon 11	ND	5.0	µg/kg	"	"	"	"	
Freon 12	ND	5.0	µg/kg	"	"	"	"	
Freon 113	ND	5.0	µg/kg	"	"	"	"	
Hexachlorobutadiene	ND	1.0	µg/kg	"	"	"	"	
Isopropylbenzene	ND	1.0	µg/kg	"	"	"	"	
4-Isopropyltoluene	ND	1.0	µg/kg	"	"	"	"	
Methylene chloride	ND	1.0	µg/kg	"	"	"	"	
Naphthalene	ND	5.0	µg/kg	"	"	"	"	
n-Propylbenzene	ND	1.0	µg/kg	"	"	"	"	
Styrene	ND	1.0	µg/kg	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	1.0	µg/kg	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.0	µg/kg	"	"	"	"	
Tetrachloroethene	ND	1.0	µg/kg	"	"	"	"	
Toluene	ND	1.0	µg/kg	"	"	"	"	
1,2,3-Trichlorobenzene	ND	3.0	µg/kg	"	"	"	"	
1,2,4-Trichlorobenzene	ND	3.0	µg/kg	"	"	"	"	
1,1,1-Trichloroethane	ND	1.0	µg/kg	"	"	"	"	
1,1,2-Trichloroethane	ND	1.0	µg/kg	"	"	"	"	
Trichloroethene	ND	1.0	µg/kg	"	"	"	"	
1,2,3-Trichloropropane	ND	1.0	µg/kg	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.0	µg/kg	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0	µg/kg	"	"	"	"	
Vinyl chloride	ND	1.0	µg/kg	"	"	"	"	
m+p-Xylene	ND	2.0	µg/kg	"	"	"	"	
o-Xylene	ND	1.0	µg/kg	"	"	"	"	
Methyl-tert-butylether	ND	5.0	µg/kg	"	"	"	"	
Ethyl-tert-butylether	ND	5.0	µg/kg	"	"	"	"	
Di-isopropylether	ND	5.0	µg/kg	"	"	"	"	
tert-amylmethylether	ND	5.0	µg/kg	"	"	"	"	
tert-Butylalcohol	ND	50.0	µg/kg	"	"	"	"	
Gasoline Range Organics (C4-C12)	ND	0.20	mg/kg	"	"	"	"	

Surrogate: Toluene-d8 91.04 % 60 - 140

Surrogate: Dibromofluoromethane 125.26 % 60 - 140

Surrogate: 4-Bromofluorobenzene 77.91 % 60 - 140

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Project: Brookfield - Irvine
Project Number: 185806655
Project Manager: Josh Sargent

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CAM 17 Metals by ICP-OES by EPA 6010 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	%REC Limits	Notes
Batch QC2408330 - EPA 6010										
CCV 1										
Barium, Ba	1.0	0.5	%	1		101	90 - 110		110	
Cobalt, Co	1.0	0.5	%	1		103	90 - 110		110	
Lead, Pb	1.0	0.5	%	1		100	90 - 110		110	
Selenium, Se	1.0	5.0	%	1		100	90 - 110		110	
Zinc, Zn	1.0	0.5	%	1		100	90 - 110		110	
LCS 1										
Barium, Ba	238	0.5	%	200		119	80 - 120			
Cobalt, Co	59.8	0.5	%	50		120	80 - 120			
Lead, Pb	59.1	0.5	%	50		118	80 - 120			
Selenium, Se	231	5.0	%	200		116	80 - 120			
Zinc, Zn	48.1	0.5	%	50		96	80 - 120			
LCSD 1										
Barium, Ba	236	0.5	%	200		118	80 - 120	0.63	120	
Cobalt, Co	60.0	0.5	%	50		120	80 - 120	0.32	120	
Lead, Pb	59.3	0.5	%	50		119	80 - 120	0.32	120	
Selenium, Se	235	5.0	%	200		117	80 - 120	1.50	120	
Zinc, Zn	47.9	0.5	%	50		96	80 - 120	0.35	120	
Method Blank 1										
Silver, Ag	ND	0.5	mg/kg							
Arsenic, As	ND	5.0	mg/kg							
Barium, Ba	ND	0.5	mg/kg							
Beryllium, Be	ND	0.5	mg/kg							
Cadmium, Cd	ND	0.5	mg/kg							
Cobalt, Co	ND	0.5	mg/kg							
Chromium, Cr	ND	0.5	mg/kg							
Copper, Cu	ND	0.5	mg/kg							
Molybdenum, Mo	ND	0.5	mg/kg							
Nickel, Ni	ND	0.5	mg/kg							
Lead, Pb	ND	0.5	mg/kg							
Antimony, Sb	ND	5.0	mg/kg							
Selenium, Se	ND	5.0	mg/kg							
Thallium, Tl	ND	5.0	mg/kg							
Vanadium, V	ND	0.5	mg/kg							
Zinc, Zn	ND	0.5	mg/kg							

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Project Number: 185806655
Project Manager: Josh Sargent

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CAM 17 Metals by ICP-OES by EPA 6010 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	%REC Limits	Notes
Batch QC2408338 - EPA 6010										
CCV 1										
Barium, Ba	1.0	0.5	%	1		98	90 - 110		110	
Cobalt, Co	1.0	0.5	%	1		101	90 - 110		110	
Lead, Pb	1.0	0.5	%	1		98	90 - 110		110	
Selenium, Se	1.0	5.0	%	1		100	90 - 110		110	
Zinc, Zn	1.0	0.5	%	1		95	90 - 110		110	
LCS 1										
Barium, Ba	222	0.5	%	200		111	80 - 120			
Cobalt, Co	55.4	0.5	%	50		111	80 - 120			
Lead, Pb	54.1	0.5	%	50		108	80 - 120			
Selenium, Se	212	5.0	%	200		106	80 - 120			
Zinc, Zn	44.8	0.5	%	50		90	80 - 120			
LCSD 1										
Barium, Ba	219	0.5	%	200		109	80 - 120	1.36	120	
Cobalt, Co	54.2	0.5	%	50		108	80 - 120	2.37	120	
Lead, Pb	52.7	0.5	%	50		105	80 - 120	2.55	120	
Selenium, Se	205	5.0	%	200		103	80 - 120	3.31	120	
Zinc, Zn	44.1	0.5	%	50		88	80 - 120	1.62	120	
Method Blank 1										
Silver, Ag	ND	0.5	mg/kg							
Arsenic, As	ND	5.0	mg/kg							
Barium, Ba	ND	0.5	mg/kg							
Beryllium, Be	ND	0.5	mg/kg							
Cadmium, Cd	ND	0.5	mg/kg							
Cobalt, Co	ND	0.5	mg/kg							
Chromium, Cr	ND	0.5	mg/kg							
Copper, Cu	ND	0.5	mg/kg							
Molybdenum, Mo	ND	0.5	mg/kg							
Nickel, Ni	ND	0.5	mg/kg							
Lead, Pb	ND	0.5	mg/kg							
Antimony, Sb	ND	5.0	mg/kg							
Selenium, Se	ND	5.0	mg/kg							
Thallium, Tl	ND	5.0	mg/kg							
Vanadium, V	ND	0.5	mg/kg							
Zinc, Zn	ND	0.5	mg/kg							

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Project: Brookfield - Irvine
Project Number: 185806655
Project Manager: Josh Sargent

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09/10/24 14:54

Total Petroleum Hydrocarbons by EPA 8015 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	%REC Limits	Notes
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Batch QC2408394 - EPA 8015
CCV 1

C10 - C28	888	10.0	%	1000		89	80 - 120		120	
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LCS 1

C10 - C28	381	10.0	%	500		76	60 - 140			
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<i>Surrogate: Hexacosane</i>		88.32 %		50 - 140						
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LCSD 1

C10 - C28	386	10.0	%	500		77	60 - 140	1.48	140	
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<i>Surrogate: Hexacosane</i>		85.33 %		50 - 140						
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Method Blank 1

C10 - C28	ND	10.0	mg/kg
C13 - C15	ND	1.0	mg/kg
C16 - C17	ND	1.0	mg/kg
C18 - C19	ND	1.0	mg/kg
C20 - C23	ND	1.0	mg/kg
C24 - C27	ND	1.0	mg/kg
C28 - C31	ND	1.0	mg/kg
C32 - C35	ND	1.0	mg/kg
C36 - C40	ND	1.0	mg/kg
C13 - C22	ND	10.0	mg/kg
C23 - C40	ND	10.0	mg/kg

<i>Surrogate: Hexacosane</i>		84.16 %		50 - 140						
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Stantec Consulting
735 EastCarnegie Drive, Suite 280
San Bernardino, CA 92408

Project: Brookfield - Irvine
Project Number: 185806655
Project Manager: Josh Sargent

Reported
09/10/24 14:54

Lead by EPA 6010 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	%REC Limits	Notes
Batch QC2408337 - EPA 6010										
CCV 1										
Lead, Pb	1.0	0.5	%	1		98	90 - 110		110	
LCS 1										
Lead, Pb	54.1	0.5	%	50		108	80 - 120			
LCSD 1										
Lead, Pb	52.7	0.5	%	50		105	80 - 120	2.55	120	
Method Blank 1										
Lead, Pb	ND	0.5	mg/kg							

Stantec Consulting
735 East Carnegie Drive, Suite 280
San Bernardino, CA 92408

Project: Brookfield - Irvine
Project Number: 185806655
Project Manager: Josh Sargent

Reported
09/10/24 14:54

Mercury by Cold Vapor Atomic Absorption by EPA 7471 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	%REC Limits	Notes
Batch QC2408332 - EPA 7471										
CCV 1										
Mercury, Hg	4.607	0.020	%	5		92	80 - 120		120	
LCS 1										
Mercury, Hg	1.04	0.020	%	1		104	80 - 120			
LCSD 1										
Mercury, Hg	1.04	0.020	%	1		104	80 - 120	0.58	120	
Method Blank 1										
Mercury, Hg	ND	0.020	mg/kg							

Stantec Consulting
735 EastCarnegie Drive, Suite 280
San Bernardino, CA 92408

Project: Brookfield - Irvine
Project Number: 185806655
Project Manager: Josh Sargent

Reported
09/10/24 14:54

Chlorinated Pesticides by GC/ECD by EPA 8081 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	%REC Limits	Notes
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Batch QC2408399 - EPA 8081

CCV 1

alpha-BHC	47.5	10.0	%	50		95	80 - 120		120	
Heptachlor	56.5	10.0	%	50		113	80 - 120		120	
Aldrin	54.8	10.0	%	50		110	80 - 120		120	
Heptachlor epoxide	56.8	10.0	%	50		114	80 - 120		120	
gamma-Chlordane	52.8	10.0	%	50		106	80 - 120		120	
Endosulfan I	58.7	10.0	%	50		117	80 - 120		120	
4,4'-DDE	112	10.0	%	100		112	80 - 120		120	
Dieldrin	111	10.0	%	100		111	80 - 120		120	
Endrin	117	10.0	%	100		117	80 - 120		120	
4,4'-DDD	115	10.0	%	100		115	80 - 120		120	
Endosulfan II	118	10.0	%	100		118	80 - 120		120	
4,4'-DDT	120	10.0	%	100		120	80 - 120		120	
Endrin ketone	115	10.0	%	100		115	80 - 120		120	

LCS 1

alpha-BHC	91.4	10.0	%	100		91	60 - 140			
Heptachlor	107	10.0	%	100		107	60 - 140			
Aldrin	106	10.0	%	100		106	60 - 140			
Heptachlor epoxide	114	10.0	%	100		114	60 - 140			
gamma-Chlordane	102	10.0	%	100		102	60 - 140			
Endosulfan I	91.1	10.0	%	100		91	60 - 140			
4,4'-DDE	108	10.0	%	100		108	60 - 140			
Dieldrin	119	10.0	%	100		119	60 - 140			
Endrin	110	10.0	%	100		110	60 - 140			
4,4'-DDD	125	10.0	%	100		125	60 - 140			
Endosulfan II	121	10.0	%	100		121	60 - 140			
4,4'-DDT	120	10.0	%	100		120	60 - 140			
Endrin ketone	135	10.0	%	100		135	60 - 140			

Surrogate: TCMX 91.55 % 30 - 135

Surrogate: Decachlorobiphenyl 119.93 % 30 - 135

LCSD 1

alpha-BHC	91.8	10.0	%	100		92	60 - 140	0.39	140	
Heptachlor	110	10.0	%	100		110	60 - 140	2.26	140	
Aldrin	108	10.0	%	100		108	60 - 140	2.41	140	
Heptachlor epoxide	116	10.0	%	100		116	60 - 140	1.73	140	
gamma-Chlordane	104	10.0	%	100		104	60 - 140	1.83	140	
Endosulfan I	101	10.0	%	100		101	60 - 140	10.51	140	

Jones Environmental, Inc.



Colby Wakeman
Lab Director

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Stantec Consulting
735 EastCarnegie Drive, Suite 280
San Bernardino, CA 92408

Project: Brookfield - Irvine
Project Number: 185806655
Project Manager: Josh Sargent

Reported
09/10/24 14:54

Chlorinated Pesticides by GC/ECD by EPA 8081 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	%REC Limits	Notes
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Batch QC2408399 - EPA 8081

LCSD 1

4,4'-DDE	110	10.0	%	100		110	60 - 140	2.15	140	
Dieldrin	121	10.0	%	100		121	60 - 140	1.94	140	
Endrin	116	10.0	%	100		116	60 - 140	4.95	140	
4,4'-DDD	124	10.0	%	100		124	60 - 140	0.56	140	
Endosulfan II	126	10.0	%	100		126	60 - 140	3.94	140	
4,4'-DDT	126	10.0	%	100		126	60 - 140	4.26	140	
Endrin ketone	135	10.0	%	100		135	60 - 140	0.45	140	

Surrogate: TCMX 92.53 % 30 - 135

Surrogate: Decachlorobiphenyl 120.01 % 30 - 135

Method Blank 1

alpha-BHC	ND	10.0	µg/kg							
beta-BHC	ND	10.0	µg/kg							
gamma-BHC (Lindane)	ND	10.0	µg/kg							
Heptachlor	ND	10.0	µg/kg							
delta-BHC	ND	10.0	µg/kg							
Aldrin	ND	10.0	µg/kg							
Heptachlor epoxide	ND	10.0	µg/kg							
gamma-Chlordane	ND	10.0	µg/kg							
alpha-Chlordane	ND	10.0	µg/kg							
Endosulfan I	ND	10.0	µg/kg							
4,4'-DDE	ND	10.0	µg/kg							
Dieldrin	ND	10.0	µg/kg							
Endrin	ND	10.0	µg/kg							
4,4'-DDD	ND	10.0	µg/kg							
Endosulfan II	ND	10.0	µg/kg							
4,4'-DDT	ND	10.0	µg/kg							
Endrin aldehyde	ND	10.0	µg/kg							
Endosulfan sulfate	ND	10.0	µg/kg							
Methoxychlor	ND	20.0	µg/kg							
Endrin ketone	ND	10.0	µg/kg							
Toxaphene	ND	20.0	µg/kg							
Technical Chlordane	ND	20.0	µg/kg							

Surrogate: TCMX 92.68 % 30 - 135

Surrogate: Decachlorobiphenyl 115.72 % 30 - 135

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Colby Wakeman
Lab Director

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Stantec Consulting
735 EastCarnegie Drive, Suite 280
San Bernardino, CA 92408

Project: Brookfield - Irvine
Project Number: 185806655
Project Manager: Josh Sargent

Reported
09/10/24 14:54

Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	%REC Limits	Notes
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Batch QC2408396 - EPA 8260

CCV 1

Benzene	269	1.0	%	250		108	80 - 120		120	
Chlorobenzene	286	1.0	%	250		114	80 - 120		120	
1,1-Dichloroethene	274	1.0	%	250		110	80 - 120		120	
cis-1,2-Dichloroethene	273	1.0	%	250		109	80 - 120		120	
Ethylbenzene	274	1.0	%	250		110	80 - 120		120	
Tetrachloroethene	267	1.0	%	250		107	80 - 120		120	
Toluene	291	1.0	%	250		117	80 - 120		120	
1,1,1-Trichloroethane	236	1.0	%	250		94	80 - 120		120	
Trichloroethene	239	1.0	%	250		96	80 - 120		120	
1,2,4-Trimethylbenzene	260	1.0	%	250		104	80 - 120		120	
Vinyl chloride	254	1.0	%	250		102	80 - 120		120	

LCS 1

Benzene	51.7	1.0	%	50		103	70 - 130			
Chlorobenzene	57.9	1.0	%	50		116	70 - 130			
1,1-Dichloroethene	53.0	1.0	%	50		106	60 - 140			
cis-1,2-Dichloroethene	50.7	1.0	%	50		101	70 - 130			
Ethylbenzene	43.8	1.0	%	50		88	70 - 130			
Tetrachloroethene	53.8	1.0	%	50		108	70 - 130			
Toluene	53.4	1.0	%	50		107	70 - 130			
1,1,1-Trichloroethane	50.1	1.0	%	50		100	70 - 130			
Trichloroethene	52.8	1.0	%	50		106	70 - 130			
1,2,4-Trimethylbenzene	41.9	1.0	%	50		84	70 - 130			
Vinyl chloride	39.5	1.0	%	50		79	60 - 140			

Surrogate: Toluene-d8 93.60 % 60 - 140
Surrogate: Dibromofluoromethane 113.18 % 60 - 140
Surrogate: 4-Bromofluorobenzene 96.31 % 60 - 140

LCSD 1

Benzene	54.4	1.0	%	50		109	70 - 130	5.01	130	
Chlorobenzene	60.1	1.0	%	50		120	70 - 130	3.75	130	
1,1-Dichloroethene	56.5	1.0	%	50		113	60 - 140	6.33	140	
cis-1,2-Dichloroethene	54.1	1.0	%	50		108	70 - 130	6.54	130	
Ethylbenzene	47.7	1.0	%	50		95	70 - 130	8.60	130	
Tetrachloroethene	57.0	1.0	%	50		114	70 - 130	5.92	130	
Toluene	55.7	1.0	%	50		111	70 - 130	4.21	130	
1,1,1-Trichloroethane	53.7	1.0	%	50		107	70 - 130	6.95	130	
Trichloroethene	55.5	1.0	%	50		111	70 - 130	4.87	130	

Jones Environmental, Inc.



Colby Wakeman
Lab Director

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Stantec Consulting
735 EastCarnegie Drive, Suite 280
San Bernardino, CA 92408

Project: Brookfield - Irvine
Project Number: 185806655
Project Manager: Josh Sargent

Reported
09/10/24 14:54

Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	%REC Limits	Notes
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Batch QC2408396 - EPA 8260

LCSD 1

1,2,4-Trimethylbenzene	41.4	1.0	%	50		83	70 - 130	1.30	130	
Vinyl chloride	40.8	1.0	%	50		82	60 - 140	3.39	140	

Surrogate: Toluene-d8	93.99 %	60 - 140
Surrogate: Dibromofluoromethane	116.36 %	60 - 140
Surrogate: 4-Bromofluorobenzene	96.30 %	60 - 140

Method Blank 1

Benzene	ND	1.0	µg/kg
Bromobenzene	ND	1.0	µg/kg
Bromodichloromethane	ND	1.0	µg/kg
Bromoform	ND	1.0	µg/kg
n-Butylbenzene	ND	1.0	µg/kg
sec-Butylbenzene	ND	1.0	µg/kg
tert-Butylbenzene	ND	1.0	µg/kg
Carbon tetrachloride	ND	1.0	µg/kg
Chlorobenzene	ND	1.0	µg/kg
Chloroform	ND	1.0	µg/kg
2-Chlorotoluene	ND	1.0	µg/kg
4-Chlorotoluene	ND	1.0	µg/kg
Dibromochloromethane	ND	1.0	µg/kg
1,2-Dibromo-3-chloropropane	ND	1.0	µg/kg
1,2-Dibromoethane (EDB)	ND	1.0	µg/kg
Dibromomethane	ND	1.0	µg/kg
1,2-Dichlorobenzene	ND	1.0	µg/kg
1,3-Dichlorobenzene	ND	1.0	µg/kg
1,4-Dichlorobenzene	ND	1.0	µg/kg
1,1-Dichloroethane	ND	1.0	µg/kg
1,2-Dichloroethane	ND	1.0	µg/kg
1,1-Dichloroethene	ND	1.0	µg/kg
cis-1,2-Dichloroethene	ND	1.0	µg/kg
trans-1,2-Dichloroethene	ND	1.0	µg/kg
1,2-Dichloropropane	ND	1.0	µg/kg
1,3-Dichloropropane	ND	1.0	µg/kg
2,2-Dichloropropane	ND	1.0	µg/kg
1,1-Dichloropropene	ND	1.0	µg/kg
cis-1,3-Dichloropropene	ND	1.0	µg/kg
trans-1,3-Dichloropropene	ND	1.0	µg/kg
Ethylbenzene	ND	1.0	µg/kg

Jones Environmental, Inc.



Colby Wakeman
Lab Director

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Stantec Consulting
735 EastCarnegie Drive, Suite 280
San Bernardino, CA 92408

Project: Brookfield - Irvine
Project Number: 185806655
Project Manager: Josh Sargent

Reported
09/10/24 14:54

Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	%REC Limits	Notes
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Batch QC2408396 - EPA 8260

Method Blank 1

Freon 11	ND	5.0	µg/kg							
Freon 12	ND	5.0	µg/kg							
Freon 113	ND	5.0	µg/kg							
Hexachlorobutadiene	ND	1.0	µg/kg							
Isopropylbenzene	ND	1.0	µg/kg							
4-Isopropyltoluene	ND	1.0	µg/kg							
Methylene chloride	ND	1.0	µg/kg							
Naphthalene	ND	5.0	µg/kg							
n-Propylbenzene	ND	1.0	µg/kg							
Styrene	ND	1.0	µg/kg							
1,1,1,2-Tetrachloroethane	ND	1.0	µg/kg							
1,1,2,2-Tetrachloroethane	ND	1.0	µg/kg							
Tetrachloroethene	ND	1.0	µg/kg							
Toluene	ND	1.0	µg/kg							
1,2,3-Trichlorobenzene	ND	3.0	µg/kg							
1,2,4-Trichlorobenzene	ND	3.0	µg/kg							
1,1,1-Trichloroethane	ND	1.0	µg/kg							
1,1,2-Trichloroethane	ND	1.0	µg/kg							
Trichloroethene	ND	1.0	µg/kg							
1,2,3-Trichloropropane	ND	1.0	µg/kg							
1,2,4-Trimethylbenzene	ND	1.0	µg/kg							
1,3,5-Trimethylbenzene	ND	1.0	µg/kg							
Vinyl chloride	ND	1.0	µg/kg							
m+p-Xylene	ND	2.0	µg/kg							
o-Xylene	ND	1.0	µg/kg							
Methyl-tert-butylether	ND	5.0	µg/kg							
Ethyl-tert-butylether	ND	5.0	µg/kg							
Di-isopropylether	ND	5.0	µg/kg							
tert-amylmethylether	ND	5.0	µg/kg							
tert-Butylalcohol	ND	50.0	µg/kg							
Gasoline Range Organics (C4-C12)	ND	0.20	mg/kg							
Surrogate: Toluene-d8		84.58 %	60 - 140							
Surrogate: Dibromofluoromethane		110.66 %	60 - 140							
Surrogate: 4-Bromofluorobenzene		68.04 %	60 - 140							

Jones Environmental, Inc.



Colby Wakeman
Lab Director

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Stantec Consulting
735 EastCarnegie Drive, Suite 280
San Bernardino, CA 92408Project: Brookfield - Irvine
Project Number: 185806655
Project Manager: Josh SargentReported
09/10/24 14:54**Notes and Definitions**

- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- E Estimated Concentration; concentration exceeds calibration range.
- LCC Leak Check Compound
- MDL Compound Reported to Method Detection Limit
- 1 Recovery outside of acceptable limits. LCS/LCSD recoveries and %RSD were within QC limits, therefore data was accepted.
- SMS Sample matrix prevented adequate surrogate recovery.
- J Value less than PQL but greater than MDL.
- HHSR High hydrocarbon concentration in this sample prevented adequate surrogate recovery.
- HHSR High hydrocarbon concentration in this sample prevented adequate surrogate recovery.
- OV Sample was filtered in the lab before extraction.
- HHTAR High hydrocarbon concentration prevented in-range recovery of target analytes.
- IHRPD Target analyte recoveries were outside of range but accepted due to passing RPDs
- AROL Target analyte recovery exceeded recovery range but was accepted due to ND of that analyte in MB and sample(s).
- ISO-H Isomers could not be sufficiently chromatographically resolved according to method requirements due to hydrocarbon interference or other matrix effects. The isomers' reported individual concentrations were each calculated as the average of each of the individual isomers' concentrations.
- 2 Recovery outside of acceptable limits for either LCS or LCSD. CCV and LCS or LCSD recoveries were within limits; therefore data was accepted.
- 3 RPD outside of acceptable limits. Target analyte recoveries were within QC limits; therefore, data was accepted.
- 4 LCS and/or LCSD recoveries exceeded acceptability ranges. Target analyte recoveries were accepted due to passing CCV, in-range LCS/LCSD RPDs, and a clean MB in which all target analytes were < RL.
- 4 LCS and/or LCSD recoveries exceeded acceptability ranges. Target analyte recoveries were accepted due to passing CCV, in-range LCS/LCSD RPDs, and a clean MB in which all target analytes were < RL.
- SMTAR Sample matrix prevented adequate recovery of target analytes.





11007 Forest Pl.
Santa Fe Springs, CA 90670
(714) 449-9937
reports@jonesenv.com
www.jonesenv.com

Chain-of-Custody Record

Turnaround Time Requested:

- ☐ Immediate Attention - 200% (Advanced notice only)
- ☐ One Day TAT - 100% (Cut off time 11AM)
- ☐ Two Day TAT - 50% (Cut off time 12AM)
- ☐ Three Day TAT - 25% (Cut off time 1PM)
- ☐ Four Day TAT - 10% (Cut off time 2PM)
- ☒ Normal - No Surcharge

LAB USE ONLY

Jones Project #

J242427

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of

☐ EDF* - 10% Surcharge

*Global ID:

Temperature:

Cooler 1: 21.5 °C

Cooler 2: °C

Cooler 3: °C

Date needed by:

Analysis Requested

Sample Container / Preservative
Abbreviations

AS - Acetate Sleeve
SS - Stainless Steel Sleeve
BS - Brass Sleeve
G - Glass
AB - Amber Bottle
P - Plastic
SOBI - Sodium Bisulfate
MeOH - Methanol
HCl - Hydrochloric Acid
HNO3 - Nitric Acid
O - Other (See Notes)

Sample Matrix:

Soil (S), Sludge (SL), Aqueous (A), Free Product (FP)

Lead by 6010B
OCPS by 8081A

Arsenic [Added 091024-JC]

Number of Containers

Notes & Special Instructions

Arsenic added on a 48
HRS TAT-JC 091024

Client	Stantec
Project Name	Brookfield Irvine
Project Address	
Email	joshua.sargent@stantec.com
Phone	
Report To	josh.sargent
Sampler	Alex Solobin

Sample ID	Sample Collection Date	Sample Collection Time	Laboratory Sample ID	Preservative	Sample Container	Sample Matrix:	Soil (S), Sludge (SL), Aqueous (A), Free Product (FP)	Number of Containers	Notes & Special Instructions
13	8-16-24	1245	-011	Free	G	S	X	1	
16		1040	-012				X		
18 11-1	09/10 JC	930	-013				X		
19	09/10 JC	450	-014				X		
20	09/10 JC	1015	-015				X		
21	09/10 JC	1327	-016				X		
19-1 19	09/10 JC	1010	-017				X		
20-1	09/10 JC	1030	-018				X		
18-1 11	09/10 JC	935	-019				X		
21-1	09/10 JC	1307	-020				X		

Relinquished By (Signature)	Printed Name	Received By (Signature)	Printed Name	Total Number of Containers
<i>[Signature]</i>	Alex Solobin	<i>[Signature]</i>		10
Company	Date	Company	Date	
Stantec	8-16-24 1700			
Relinquished By (Signature)	Printed Name	Received By Laboratory (Signature)	Printed Name	Client signature on this Chain of Custody form constitutes acknowledgement that the above analyses have been requested, and the information provided herein is correct and accurate.
		<i>[Signature]</i>		
Company	Date	Company	Date	
		Jones	8/16/24 1700	

Chain-of-Custody Record

Turnaround Time Requested:

- ☐ Immediate Attention - 200% (Advanced notice only)
- ☐ One Day TAT - 100% (Cut off time 11AM)
- ☐ Two Day TAT - 50% (Cut off time 12AM)
- ☐ Three Day TAT - 25% (Cut off time 1PM)
- ☐ Four Day TAT - 10% (Cut off time 2PM)
- ☒ Normal - No Surcharge

LAB USE ONLY

Jones Project #

5242427

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of

☐ EDF* - 10% Surcharge

*Global ID:

Temperature:

Cooler 1: 21.5 °C

Cooler 2: _____ °C

Cooler 3: _____ °C

Sample ID	Sample Collection Date	Sample Collection Time	Laboratory Sample ID	Preservative	Sample Container	Sample Soil (S), Slur (SL), Tissue (T), Other (O)													Number	Notes & Special Instructions
Composite 1	8-16-24	1050	-021	Fec	G	S	X	X	X	X									1	
Relinquished By (Signature)			Printed Name		Received By (Signature)			Printed Name						1			Total Number of Containers			
Company			Date		Time		Company			Date			Time							
Relinquished By (Signature)			Printed Name		Received By Laboratory (Signature)			Printed Name									Client signature on this Chain of Custody form constitutes acknowledgement that the above analyses have been requested, and the information provided herein is correct and accurate.			
Company			Date		Time		Company			Date			Time							

Logo



714-449-9937
562-646-1611

11007 FOREST PLACE
SANTA FE SPRINGS, CA 90670
WWW.JONESENV.COM

30 August 2024

Josh Sargent
Stantec Consulting
735 EastCarnegie Drive, Suite 280
San Bernardino, CA 92408

Re: Brookfield - Irvine

Enclosed are the results of analyses for samples received by the laboratory on 08/21/24. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Colby", is positioned above the printed name and title.

Colby Wakeman
Lab Director

Stantec Consulting
735 EastCarnegie Drive, Suite 280
San Bernardino, CA 92408

Project: Brookfield - Irvine
Project Number: 185806655
Project Manager: Josh Sargent

Reported
08/30/24 10:17

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SV-1-5	J242459-001	Soil Vapor	08/21/2024 09:35	08/21/2024 11:02
SV-1-15	J242459-002	Soil Vapor	08/21/2024 09:36	08/21/2024 11:02
SV-2-5	J242459-003	Soil Vapor	08/21/2024 09:55	08/21/2024 11:02
SV-2-15	J242459-004	Soil Vapor	08/21/2024 09:55	08/21/2024 11:02

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Lab Director

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Project Number: 185806655
Project Manager: Josh Sargent

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DETECTIONS SUMMARY

Sample ID: SV-1-5

Laboratory ID: J242459-001

Analyte	Result	Reporting Limit	Units	Method	Notes
1,1-Dichloroethene	4	1	µg/m3	EPA 8260	
Freon 12	6	5	µg/m3	EPA 8260	
Naphthalene	2	2	µg/m3	EPA 8260	
tert-Butylalcohol	79	25	µg/m3	EPA 8260	
Tetrachloroethene	6	2	µg/m3	EPA 8260	
Trichloroethene	2	2	µg/m3	EPA 8260	

Sample ID: SV-1-15

Laboratory ID: J242459-002

Analyte	Result	Reporting Limit	Units	Method	Notes
1,1-Dichloroethene	3	1	µg/m3	EPA 8260	
1,2,4-Trimethylbenzene	3	2	µg/m3	EPA 8260	
Chloroform	3	2	µg/m3	EPA 8260	
Naphthalene	3	2	µg/m3	EPA 8260	
tert-Butylalcohol	57	25	µg/m3	EPA 8260	
Tetrachloroethene	11	2	µg/m3	EPA 8260	

Sample ID: SV-2-5

Laboratory ID: J242459-003

Analyte	Result	Reporting Limit	Units	Method	Notes
1,1-Dichloroethene	3	1	µg/m3	EPA 8260	
Freon 12	6	5	µg/m3	EPA 8260	
Naphthalene	2	2	µg/m3	EPA 8260	
tert-Butylalcohol	70	25	µg/m3	EPA 8260	
Tetrachloroethene	5	2	µg/m3	EPA 8260	

Sample ID: SV-2-15

Laboratory ID: J242459-004

Analyte	Result	Reporting Limit	Units	Method	Notes
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Project Manager: Josh Sargent

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DETECTIONS SUMMARY

Sample ID: SV-2-15

Laboratory ID: J242459-004

Analyte	Result	Reporting Limit	Units	Method	Notes
1,1-Dichloroethene	2	1	µg/m3	EPA 8260	
1,2,4-Trimethylbenzene	12	2	µg/m3	EPA 8260	
1,3,5-Trimethylbenzene	5	2	µg/m3	EPA 8260	
4-Isopropyltoluene	3	2	µg/m3	EPA 8260	
Chloroform	3	2	µg/m3	EPA 8260	
m,p-Xylene	5	5	µg/m3	EPA 8260	
Naphthalene	2	2	µg/m3	EPA 8260	
o-Xylene	2	2	µg/m3	EPA 8260	
tert-Butylalcohol	92	25	µg/m3	EPA 8260	
Tetrachloroethene	11	2	µg/m3	EPA 8260	

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Project: Brookfield - Irvine
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Project Manager: Josh Sargent

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SV-1-5
J242459-001(Soil Vapor)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyzed	Method	Notes
Ultra Low ug/m3 by EPA 8260								
Benzene	ND	0.5	µg/m3	1	QC2408418	08/22/24	EPA 8260	
Bromodichloromethane	ND	2	µg/m3	"	"	"	"	
Bromoform	ND	2	µg/m3	"	"	"	"	
n-Butylbenzene	ND	5	µg/m3	"	"	"	"	
sec-Butylbenzene	ND	5	µg/m3	"	"	"	"	
tert-Butylbenzene	ND	5	µg/m3	"	"	"	"	
Carbon tetrachloride	ND	1	µg/m3	"	"	"	"	
Chlorobenzene	ND	2	µg/m3	"	"	"	"	
Chloroform	ND	2	µg/m3	"	"	"	"	
Dibromochloromethane	ND	2	µg/m3	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.5	µg/m3	"	"	"	"	
1,2-Dichlorobenzene	ND	2	µg/m3	"	"	"	"	
1,3-Dichlorobenzene	ND	2	µg/m3	"	"	"	"	
1,4-Dichlorobenzene	ND	2	µg/m3	"	"	"	"	
Freon 12	6	5	µg/m3	"	"	"	"	
Freon 11	ND	5	µg/m3	"	"	"	"	
Freon 113	ND	5	µg/m3	"	"	"	"	
1,1-Dichloroethane	ND	1	µg/m3	"	"	"	"	
1,2-Dichloroethane	ND	1	µg/m3	"	"	"	"	
1,1-Dichloroethene	4	1	µg/m3	"	"	"	"	
cis-1,2-Dichloroethene	ND	1	µg/m3	"	"	"	"	
trans-1,2-Dichloroethene	ND	1	µg/m3	"	"	"	"	
Ethylbenzene	ND	2	µg/m3	"	"	"	"	
Isopropylbenzene	ND	2	µg/m3	"	"	"	"	
4-Isopropyltoluene	ND	2	µg/m3	"	"	"	"	
Methylene chloride	0.0000000000	2		"	"	"	"	
Naphthalene	2	2	µg/m3	"	"	"	"	
n-Propylbenzene	ND	2	µg/m3	"	"	"	"	
Styrene	ND	2	µg/m3	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	1	µg/m3	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	2	µg/m3	"	"	"	"	
Tetrachloroethene	6	2	µg/m3	"	"	"	"	
Toluene	ND	2	µg/m3	"	"	"	"	
1,1,1-Trichloroethane	ND	1	µg/m3	"	"	"	"	
1,1,2-Trichloroethane	ND	1	µg/m3	"	"	"	"	
Trichloroethene	2	2	µg/m3	"	"	"	"	
1,2,4-Trimethylbenzene	ND	2	µg/m3	"	"	"	"	
1,3,5-Trimethylbenzene	ND	2	µg/m3	"	"	"	"	

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Project Number: 185806655
Project Manager: Josh Sargent

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SV-1-5
J242459-001(Soil Vapor)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyzed	Method	Notes
Ultra Low ug/m3 by EPA 8260								
Vinyl chloride	ND	0.5	µg/m3	1	QC2408418	08/22/24	EPA 8260	
m,p-Xylene	ND	5	µg/m3	"	"	"	"	
o-Xylene	ND	2	µg/m3	"	"	"	"	
Methyl-tert-butylether	ND	5	µg/m3	"	"	"	"	
Ethyl-tert-butylether	ND	5	µg/m3	"	"	"	"	
Di-isopropylether	ND	5	µg/m3	"	"	"	"	
tert-amylmethylether	ND	5	µg/m3	"	"	"	"	
tert-Butylalcohol	79	25	µg/m3	"	"	"	"	
Gasoline Range Organics (C4-C12)	ND	1000	µg/m3	"	"	"	"	
n-Hexane (LCC)	ND	20	µg/m3	"	"	"	"	
n-Pentane (LCC)	ND	20	µg/m3	"	"	"	"	
Acetone (LCC)	ND	20	µg/m3	"	"	"	"	
<i>Surrogate: Toluene-d8</i>	<i>102.58 %</i>	<i>60 - 140</i>						
<i>Surrogate: Dibromofluoromethane</i>	<i>91.66 %</i>	<i>60 - 140</i>						
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>96.22 %</i>	<i>60 - 140</i>						

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Project: Brookfield - Irvine
Project Number: 185806655
Project Manager: Josh Sargent

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SV-1-15
J242459-002(Soil Vapor)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyzed	Method	Notes
Ultra Low ug/m3 by EPA 8260								
Benzene	ND	0.5	µg/m3	1	QC2408418	08/22/24	EPA 8260	
Bromodichloromethane	ND	2	µg/m3	"	"	"	"	
Bromoform	ND	2	µg/m3	"	"	"	"	
n-Butylbenzene	ND	5	µg/m3	"	"	"	"	
sec-Butylbenzene	ND	5	µg/m3	"	"	"	"	
tert-Butylbenzene	ND	5	µg/m3	"	"	"	"	
Carbon tetrachloride	ND	1	µg/m3	"	"	"	"	
Chlorobenzene	ND	2	µg/m3	"	"	"	"	
Chloroform	3	2	µg/m3	"	"	"	"	
Dibromochloromethane	ND	2	µg/m3	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.5	µg/m3	"	"	"	"	
1,2-Dichlorobenzene	ND	2	µg/m3	"	"	"	"	
1,3-Dichlorobenzene	ND	2	µg/m3	"	"	"	"	
1,4-Dichlorobenzene	ND	2	µg/m3	"	"	"	"	
Freon 12	ND	5	µg/m3	"	"	"	"	
Freon 11	ND	5	µg/m3	"	"	"	"	
Freon 113	ND	5	µg/m3	"	"	"	"	
1,1-Dichloroethane	ND	1	µg/m3	"	"	"	"	
1,2-Dichloroethane	ND	1	µg/m3	"	"	"	"	
1,1-Dichloroethene	3	1	µg/m3	"	"	"	"	
cis-1,2-Dichloroethene	ND	1	µg/m3	"	"	"	"	
trans-1,2-Dichloroethene	ND	1	µg/m3	"	"	"	"	
Ethylbenzene	ND	2	µg/m3	"	"	"	"	
Isopropylbenzene	ND	2	µg/m3	"	"	"	"	
4-Isopropyltoluene	ND	2	µg/m3	"	"	"	"	
Methylene chloride	0.0000000000	2	"	"	"	"	"	
Naphthalene	3	2	µg/m3	"	"	"	"	
n-Propylbenzene	ND	2	µg/m3	"	"	"	"	
Styrene	ND	2	µg/m3	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	1	µg/m3	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	2	µg/m3	"	"	"	"	
Tetrachloroethene	11	2	µg/m3	"	"	"	"	
Toluene	ND	2	µg/m3	"	"	"	"	
1,1,1-Trichloroethane	ND	1	µg/m3	"	"	"	"	
1,1,2-Trichloroethane	ND	1	µg/m3	"	"	"	"	
Trichloroethene	ND	2	µg/m3	"	"	"	"	
1,2,4-Trimethylbenzene	3	2	µg/m3	"	"	"	"	
1,3,5-Trimethylbenzene	ND	2	µg/m3	"	"	"	"	

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Project Manager: Josh Sargent

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SV-1-15
J242459-002(Soil Vapor)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyzed	Method	Notes
Ultra Low ug/m3 by EPA 8260								
Vinyl chloride	ND	0.5	µg/m3	1	QC2408418	08/22/24	EPA 8260	
m,p-Xylene	ND	5	µg/m3	"	"	"	"	
o-Xylene	ND	2	µg/m3	"	"	"	"	
Methyl-tert-butylether	ND	5	µg/m3	"	"	"	"	
Ethyl-tert-butylether	ND	5	µg/m3	"	"	"	"	
Di-isopropylether	ND	5	µg/m3	"	"	"	"	
tert-amylmethylether	ND	5	µg/m3	"	"	"	"	
tert-Butylalcohol	57	25	µg/m3	"	"	"	"	
Gasoline Range Organics (C4-C12)	ND	1000	µg/m3	"	"	"	"	
n-Hexane (LCC)	ND	20	µg/m3	"	"	"	"	
n-Pentane (LCC)	ND	20	µg/m3	"	"	"	"	
Acetone (LCC)	ND	20	µg/m3	"	"	"	"	
<i>Surrogate: Toluene-d8</i>	99.96 %	60 - 140						
<i>Surrogate: Dibromofluoromethane</i>	90.62 %	60 - 140						
<i>Surrogate: 4-Bromofluorobenzene</i>	97.12 %	60 - 140						

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Project Number: 185806655
Project Manager: Josh Sargent

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SV-2-5
J242459-003(Soil Vapor)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyzed	Method	Notes
Ultra Low ug/m3 by EPA 8260								
Benzene	ND	0.5	µg/m3	1	QC2408418	08/22/24	EPA 8260	
Bromodichloromethane	ND	2	µg/m3	"	"	"	"	
Bromoform	ND	2	µg/m3	"	"	"	"	
n-Butylbenzene	ND	5	µg/m3	"	"	"	"	
sec-Butylbenzene	ND	5	µg/m3	"	"	"	"	
tert-Butylbenzene	ND	5	µg/m3	"	"	"	"	
Carbon tetrachloride	ND	1	µg/m3	"	"	"	"	
Chlorobenzene	ND	2	µg/m3	"	"	"	"	
Chloroform	ND	2	µg/m3	"	"	"	"	
Dibromochloromethane	ND	2	µg/m3	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.5	µg/m3	"	"	"	"	
1,2-Dichlorobenzene	ND	2	µg/m3	"	"	"	"	
1,3-Dichlorobenzene	ND	2	µg/m3	"	"	"	"	
1,4-Dichlorobenzene	ND	2	µg/m3	"	"	"	"	
Freon 12	6	5	µg/m3	"	"	"	"	
Freon 11	ND	5	µg/m3	"	"	"	"	
Freon 113	ND	5	µg/m3	"	"	"	"	
1,1-Dichloroethane	ND	1	µg/m3	"	"	"	"	
1,2-Dichloroethane	ND	1	µg/m3	"	"	"	"	
1,1-Dichloroethene	3	1	µg/m3	"	"	"	"	
cis-1,2-Dichloroethene	ND	1	µg/m3	"	"	"	"	
trans-1,2-Dichloroethene	ND	1	µg/m3	"	"	"	"	
Ethylbenzene	ND	2	µg/m3	"	"	"	"	
Isopropylbenzene	ND	2	µg/m3	"	"	"	"	
4-Isopropyltoluene	ND	2	µg/m3	"	"	"	"	
Methylene chloride	0.0000000000	2		"	"	"	"	
Naphthalene	2	2	µg/m3	"	"	"	"	
n-Propylbenzene	ND	2	µg/m3	"	"	"	"	
Styrene	ND	2	µg/m3	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	1	µg/m3	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	2	µg/m3	"	"	"	"	
Tetrachloroethene	5	2	µg/m3	"	"	"	"	
Toluene	ND	2	µg/m3	"	"	"	"	
1,1,1-Trichloroethane	ND	1	µg/m3	"	"	"	"	
1,1,2-Trichloroethane	ND	1	µg/m3	"	"	"	"	
Trichloroethene	ND	2	µg/m3	"	"	"	"	
1,2,4-Trimethylbenzene	ND	2	µg/m3	"	"	"	"	
1,3,5-Trimethylbenzene	ND	2	µg/m3	"	"	"	"	

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Project Number: 185806655
Project Manager: Josh Sargent

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SV-2-5
J242459-003(Soil Vapor)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyzed	Method	Notes
Ultra Low ug/m3 by EPA 8260								
Vinyl chloride	ND	0.5	µg/m3	1	QC2408418	08/22/24	EPA 8260	
m,p-Xylene	ND	5	µg/m3	"	"	"	"	
o-Xylene	ND	2	µg/m3	"	"	"	"	
Methyl-tert-butylether	ND	5	µg/m3	"	"	"	"	
Ethyl-tert-butylether	ND	5	µg/m3	"	"	"	"	
Di-isopropylether	ND	5	µg/m3	"	"	"	"	
tert-amylmethylether	ND	5	µg/m3	"	"	"	"	
tert-Butylalcohol	70	25	µg/m3	"	"	"	"	
Gasoline Range Organics (C4-C12)	ND	1000	µg/m3	"	"	"	"	
n-Hexane (LCC)	ND	20	µg/m3	"	"	"	"	
n-Pentane (LCC)	ND	20	µg/m3	"	"	"	"	
Acetone (LCC)	ND	20	µg/m3	"	"	"	"	
<i>Surrogate: Toluene-d8</i>	<i>102.04 %</i>	<i>60 - 140</i>						
<i>Surrogate: Dibromofluoromethane</i>	<i>85.03 %</i>	<i>60 - 140</i>						
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>92.40 %</i>	<i>60 - 140</i>						

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Project Number: 185806655
Project Manager: Josh Sargent

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08/30/24 10:17

SV-2-15
J242459-004(Soil Vapor)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyzed	Method	Notes
Ultra Low ug/m3 by EPA 8260								
Benzene	ND	0.5	µg/m3	1	QC2408418	08/22/24	EPA 8260	
Bromodichloromethane	ND	2	µg/m3	"	"	"	"	
Bromoform	ND	2	µg/m3	"	"	"	"	
n-Butylbenzene	ND	5	µg/m3	"	"	"	"	
sec-Butylbenzene	ND	5	µg/m3	"	"	"	"	
tert-Butylbenzene	ND	5	µg/m3	"	"	"	"	
Carbon tetrachloride	ND	1	µg/m3	"	"	"	"	
Chlorobenzene	ND	2	µg/m3	"	"	"	"	
Chloroform	3	2	µg/m3	"	"	"	"	
Dibromochloromethane	ND	2	µg/m3	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.5	µg/m3	"	"	"	"	
1,2-Dichlorobenzene	ND	2	µg/m3	"	"	"	"	
1,3-Dichlorobenzene	ND	2	µg/m3	"	"	"	"	
1,4-Dichlorobenzene	ND	2	µg/m3	"	"	"	"	
Freon 12	ND	5	µg/m3	"	"	"	"	
Freon 11	ND	5	µg/m3	"	"	"	"	
Freon 113	ND	5	µg/m3	"	"	"	"	
1,1-Dichloroethane	ND	1	µg/m3	"	"	"	"	
1,2-Dichloroethane	ND	1	µg/m3	"	"	"	"	
1,1-Dichloroethene	2	1	µg/m3	"	"	"	"	
cis-1,2-Dichloroethene	ND	1	µg/m3	"	"	"	"	
trans-1,2-Dichloroethene	ND	1	µg/m3	"	"	"	"	
Ethylbenzene	ND	2	µg/m3	"	"	"	"	
Isopropylbenzene	ND	2	µg/m3	"	"	"	"	
4-Isopropyltoluene	3	2	µg/m3	"	"	"	"	
Methylene chloride	0.0000000000	2		"	"	"	"	
Naphthalene	2	2	µg/m3	"	"	"	"	
n-Propylbenzene	ND	2	µg/m3	"	"	"	"	
Styrene	ND	2	µg/m3	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	1	µg/m3	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	2	µg/m3	"	"	"	"	
Tetrachloroethene	11	2	µg/m3	"	"	"	"	
Toluene	ND	2	µg/m3	"	"	"	"	
1,1,1-Trichloroethane	ND	1	µg/m3	"	"	"	"	
1,1,2-Trichloroethane	ND	1	µg/m3	"	"	"	"	
Trichloroethene	ND	2	µg/m3	"	"	"	"	
1,2,4-Trimethylbenzene	12	2	µg/m3	"	"	"	"	
1,3,5-Trimethylbenzene	5	2	µg/m3	"	"	"	"	

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Lab Director

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Stantec Consulting
735 EastCarnegie Drive, Suite 280
San Bernardino, CA 92408

Project: Brookfield - Irvine
Project Number: 185806655
Project Manager: Josh Sargent

Reported
08/30/24 10:17

SV-2-15
J242459-004(Soil Vapor)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyzed	Method	Notes
Ultra Low ug/m3 by EPA 8260								
Vinyl chloride	ND	0.5	µg/m3	1	QC2408418	08/22/24	EPA 8260	
m,p-Xylene	5	5	µg/m3	"	"	"	"	
o-Xylene	2	2	µg/m3	"	"	"	"	
Methyl-tert-butylether	ND	5	µg/m3	"	"	"	"	
Ethyl-tert-butylether	ND	5	µg/m3	"	"	"	"	
Di-isopropylether	ND	5	µg/m3	"	"	"	"	
tert-amylmethylether	ND	5	µg/m3	"	"	"	"	
tert-Butylalcohol	92	25	µg/m3	"	"	"	"	
Gasoline Range Organics (C4-C12)	ND	1000	µg/m3	"	"	"	"	
n-Hexane (LCC)	ND	20	µg/m3	"	"	"	"	
n-Pentane (LCC)	ND	20	µg/m3	"	"	"	"	
Acetone (LCC)	ND	20	µg/m3	"	"	"	"	
<i>Surrogate: Toluene-d8</i>	<i>100.88 %</i>	<i>60 - 140</i>						
<i>Surrogate: Dibromofluoromethane</i>	<i>91.36 %</i>	<i>60 - 140</i>						
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>94.46 %</i>	<i>60 - 140</i>						

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Project: Brookfield - Irvine
Project Number: 185806655
Project Manager: Josh Sargent

Reported
08/30/24 10:17

Ultra Low ug/m3 by EPA 8260 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	%REC Limits	Notes
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Batch QC2408418 - EPA 8260

CCV 1

Benzene	10.9	0.5	%	10		109	80 - 120		120	
Chlorobenzene	10	2	%	10		103	80 - 120		120	
1,1-Dichloroethene	11	1	%	10		106	80 - 120		120	
cis-1,2-Dichloroethene	10	1	%	10		97	80 - 120		120	
Ethylbenzene	10	2	%	10		102	80 - 120		120	
Tetrachloroethene	10	2	%	10		105	80 - 120		120	
Toluene	11	2	%	10		107	80 - 120		120	
1,1,1-Trichloroethane	10	1	%	10		102	80 - 120		120	
Trichloroethene	10	2	%	10		102	80 - 120		120	
1,2,4-Trimethylbenzene	10	2	%	10		101	80 - 120		120	
Vinyl chloride	11.7	0.5	%	10		117	80 - 120		120	

LCS 1

Benzene	2.76	0.5	%	2.5		110	70 - 130			
Chlorobenzene	2.71	2	%	2.5		108	70 - 130			
1,1-Dichloroethene	2.78	1	%	2.5		111	60 - 140			
cis-1,2-Dichloroethene	2.54	1	%	2.5		101	70 - 130			
Ethylbenzene	2.59	2	%	2.5		104	70 - 130			
Tetrachloroethene	2.57	2	%	2.5		103	70 - 130			
Toluene	2.70	2	%	2.5		108	70 - 130			
1,1,1-Trichloroethane	2.32	1	%	2.5		93	70 - 130			
Trichloroethene	2.92	2	%	2.5		117	70 - 130			
1,2,4-Trimethylbenzene	2.51	2	%	2.5		100	70 - 130			
Vinyl chloride	2.65	0.5	%	2.5		106	60 - 140			

Surrogate: Toluene-d8 101.14 % 60 - 140

Surrogate: Dibromofluoromethane 96.18 % 60 - 140

Surrogate: 4-Bromofluorobenzene 98.38 % 60 - 140

LCSD 1

Benzene	2.68	0.5	%	2.5		107		2.77		
Chlorobenzene	2.60	2	%	2.5		104		4.05		
1,1-Dichloroethene	2.79	1	%	2.5		112		0.39		
cis-1,2-Dichloroethene	2.28	1	%	2.5		91		10.53		
Ethylbenzene	2.38	2	%	2.5		95		8.63		
Tetrachloroethene	2.72	2	%	2.5		109		5.86		
Toluene	2.60	2	%	2.5		104		3.44		
1,1,1-Trichloroethane	2.56	1	%	2.5		103		10.09		

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08/30/24 10:17

Ultra Low ug/m3 by EPA 8260 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	%REC Limits	Notes
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Batch QC2408418 - EPA 8260

LCSD 1

Trichloroethene	2.51	2	%	2.5		100		14.99		
1,2,4-Trimethylbenzene	2.53	2	%	2.5		101		0.95		
Vinyl chloride	2.85	0.5	%	2.5		114		7.15		

Surrogate: Toluene-d8	101.08 %	60 - 140
Surrogate: Dibromofluoromethane	97.98 %	60 - 140
Surrogate: 4-Bromofluorobenzene	99.68 %	60 - 140

Method Blank 1

Methylene chloride	ND		µg/m3
Benzene	ND	0.5	µg/m3
Bromodichloromethane	ND	2	µg/m3
Bromoform	ND	2	µg/m3
n-Butylbenzene	ND	5	µg/m3
sec-Butylbenzene	ND	5	µg/m3
tert-Butylbenzene	ND	5	µg/m3
Carbon tetrachloride	ND	1	µg/m3
Chlorobenzene	ND	2	µg/m3
Chloroform	ND	2	µg/m3
Dibromochloromethane	ND	2	µg/m3
1,2-Dibromoethane (EDB)	ND	0.5	µg/m3
1,2-Dichlorobenzene	ND	2	µg/m3
1,3-Dichlorobenzene	ND	2	µg/m3
1,4-Dichlorobenzene	ND	2	µg/m3
Freon 12	ND	5	µg/m3
Freon 11	ND	5	µg/m3
Freon 113	ND	5	µg/m3
1,1-Dichloroethane	ND	1	µg/m3
1,2-Dichloroethane	ND	1	µg/m3
1,1-Dichloroethene	ND	1	µg/m3
cis-1,2-Dichloroethene	ND	1	µg/m3
trans-1,2-Dichloroethene	ND	1	µg/m3
Ethylbenzene	ND	2	µg/m3
Isopropylbenzene	ND	2	µg/m3
4-Isopropyltoluene	ND	2	µg/m3
Naphthalene	ND	2	µg/m3
n-Propylbenzene	ND	2	µg/m3

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08/30/24 10:17

Ultra Low ug/m3 by EPA 8260 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	%REC Limits	Notes
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Batch QC2408418 - EPA 8260

Method Blank 1

Styrene	ND	2	µg/m3
1,1,1,2-Tetrachloroethane	ND	1	µg/m3
1,1,2,2-Tetrachloroethane	ND	2	µg/m3
Tetrachloroethene	ND	2	µg/m3
Toluene	ND	2	µg/m3
1,1,1-Trichloroethane	ND	1	µg/m3
1,1,2-Trichloroethane	ND	1	µg/m3
Trichloroethene	ND	2	µg/m3
1,2,4-Trimethylbenzene	ND	2	µg/m3
1,3,5-Trimethylbenzene	ND	2	µg/m3
Vinyl chloride	ND	0.5	µg/m3
m,p-Xylene	ND	5	µg/m3
o-Xylene	ND	2	µg/m3
Methyl-tert-butylether	ND	5	µg/m3
Ethyl-tert-butylether	ND	5	µg/m3
Di-isopropylether	ND	5	µg/m3
tert-amylmethylether	ND	5	µg/m3
tert-Butylalcohol	ND	25	µg/m3
Gasoline Range Organics (C4-C12)	ND	1000	µg/m3
n-Hexane (LCC)	ND	20	µg/m3
n-Pentane (LCC)	ND	20	µg/m3
Acetone (LCC)	ND	20	µg/m3

Surrogate: Toluene-d8	100.49 %	60 - 140
Surrogate: Dibromofluoromethane	94.76 %	60 - 140
Surrogate: 4-Bromofluorobenzene	97.10 %	60 - 140

Sample Blank 1

Methylene chloride	ND		µg/m3
Benzene	ND	0.5	µg/m3
Bromodichloromethane	ND	2	µg/m3
Bromoform	ND	2	µg/m3
n-Butylbenzene	ND	5	µg/m3
sec-Butylbenzene	ND	5	µg/m3
tert-Butylbenzene	ND	5	µg/m3
Carbon tetrachloride	ND	1	µg/m3
Chlorobenzene	ND	2	µg/m3

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	%REC Limits	Notes
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Batch QC2408418 - EPA 8260

Sample Blank 1

Chloroform	ND	2	µg/m3
Dibromochloromethane	ND	2	µg/m3
1,2-Dibromoethane (EDB)	ND	0.5	µg/m3
1,2-Dichlorobenzene	ND	2	µg/m3
1,3-Dichlorobenzene	ND	2	µg/m3
1,4-Dichlorobenzene	ND	2	µg/m3
Freon 12	ND	5	µg/m3
Freon 11	ND	5	µg/m3
Freon 113	ND	5	µg/m3
1,1-Dichloroethane	ND	1	µg/m3
1,2-Dichloroethane	ND	1	µg/m3
1,1-Dichloroethene	ND	1	µg/m3
cis-1,2-Dichloroethene	ND	1	µg/m3
trans-1,2-Dichloroethene	ND	1	µg/m3
Ethylbenzene	ND	2	µg/m3
Isopropylbenzene	ND	2	µg/m3
4-Isopropyltoluene	ND	2	µg/m3
Naphthalene	ND	2	µg/m3
n-Propylbenzene	ND	2	µg/m3
Styrene	ND	2	µg/m3
1,1,1,2-Tetrachloroethane	ND	1	µg/m3
1,1,2,2-Tetrachloroethane	ND	2	µg/m3
Tetrachloroethene	ND	2	µg/m3
Toluene	ND	2	µg/m3
1,1,1-Trichloroethane	ND	1	µg/m3
1,1,2-Trichloroethane	ND	1	µg/m3
Trichloroethene	ND	2	µg/m3
1,2,4-Trimethylbenzene	ND	2	µg/m3
1,3,5-Trimethylbenzene	ND	2	µg/m3
Vinyl chloride	ND	0.5	µg/m3
m,p-Xylene	ND	5	µg/m3
o-Xylene	ND	2	µg/m3
Methyl-tert-butylether	ND	5	µg/m3
Ethyl-tert-butylether	ND	5	µg/m3
Di-isopropylether	ND	5	µg/m3
tert-amylmethylether	ND	5	µg/m3
tert-Butylalcohol	ND	25	µg/m3

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08/30/24 10:17

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	%REC Limits	Notes
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Batch QC2408418 - EPA 8260

Sample Blank 1

Gasoline Range Organics (C4-C12)	ND	1000	µg/m3							
n-Hexane (LCC)	ND	20	µg/m3							
n-Pentane (LCC)	ND	20	µg/m3							
Acetone (LCC)	ND	20	µg/m3							
<i>Surrogate: Toluene-d8</i>		<i>100.79 %</i>	<i>60 - 140</i>							
<i>Surrogate: Dibromofluoromethane</i>		<i>89.95 %</i>	<i>60 - 140</i>							
<i>Surrogate: 4-Bromofluorobenzene</i>		<i>98.29 %</i>	<i>60 - 140</i>							

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Reported
08/30/24 10:17

Notes and Definitions

- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- E Estimated Concentration; concentration exceeds calibration range.
- LCC Leak Check Compound
- MDL Compound Reported to Method Detection Limit
- 1 Recovery outside of acceptable limits. LCS/LCSD recoveries and %RSD were within QC limits, therefore data was accepted.
- SMSR Sample matrix prevented adequate surrogate recovery.
- J Value less than PQL but greater than MDL.
- HHSR High hydrocarbon concentration in this sample prevented adequate surrogate recovery.
- SMTAR Sample matrix prevented adequate recovery of target analytes.
- OV Sample was filtered in the lab before extraction.
- HHTAR High hydrocarbon concentration prevented in-range recovery of target analytes.
- IHRPD Target analyte recoveries were outside of range but accepted due to passing RPDs
- AROL Target analyte recovery exceeded recovery range but was accepted due to ND of that analyte in MB and sample(s).
- ISO-H Isomers could not be sufficiently chromatographically resolved according to method requirements due to hydrocarbon interference or other matrix effects. The isomers' reported individual concentrations were each calculated as the average of each of the individual isomers' concentrations.
- 2 Recovery outside of acceptable limits for either LCS or LCSD. CCV and LCS or LCSD recoveries were within limits; therefore data was accepted.
- 3 RPD outside of acceptable limits. Target analyte recoveries were within QC limits; therefore, data was accepted.
- 4 LCS and/or LCSD recoveries exceeded acceptability ranges. Target analyte recoveries were accepted due to passing CCV, in-range LCS/LCSD RPDs, and a clean MB in which all target analytes were < RL.
- SMTAR Sample matrix prevented adequate recovery of target analytes.
- RV Surrogate recovery outside of control limits due to required dilution.

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Login Report

Customer Name: Stantec Consulting

Order ID: J242459

Purchase Order:

Order Date: 8/21/2024

Project ID: Brookfield - Irvine

Comment:

Sample #:	J242459-001	Customer Sample #:	SV-1-5	Site:	
Recv'd:	<input checked="" type="checkbox"/>	Collector:		Date Collected:	08/21/24 9:35 AM
Quantity:	1	Matrix:	Soil Vapor	Date Received:	08/21/24 11:02 AM
Comment:					
Test	Test Group		Method	Due Date	Priority
Ultra Low ug/m3			EPA 8260	8/29/2024	

Sample #:	J242459-002	Customer Sample #:	SV-1-15	Site:	
Recv'd:	<input checked="" type="checkbox"/>	Collector:		Date Collected:	08/21/24 9:36 AM
Quantity:	1	Matrix:	Soil Vapor	Date Received:	08/21/24 11:02 AM
Comment:					
Test	Test Group		Method	Due Date	Priority
Ultra Low ug/m3			EPA 8260	8/29/2024	

Sample #:	J242459-003	Customer Sample #:	SV-2-5	Site:	
Recv'd:	<input checked="" type="checkbox"/>	Collector:		Date Collected:	08/21/24 9:55 AM
Quantity:	1	Matrix:	Soil Vapor	Date Received:	08/21/24 11:02 AM
Comment:					
Test	Test Group		Method	Due Date	Priority
Ultra Low ug/m3			EPA 8260	8/29/2024	

Sample #:	J242459-004	Customer Sample #:	SV-2-15	Site:	
Recv'd:	<input checked="" type="checkbox"/>	Collector:		Date Collected:	08/21/24 9:55 AM
Quantity:	1	Matrix:	Soil Vapor	Date Received:	08/21/24 11:02 AM
Comment:					
Test	Test Group		Method	Due Date	Priority
Ultra Low ug/m3			EPA 8260	8/29/2024	

Customer Name: Stantec Consulting

Order ID: J242459

Purchase Order:

Order Date: 8/21/2024

Project ID: Brookfield - Irvine

Comment:

SAMPLE CONDITION RECORD

1. Are the samples within correct temperature criteria? (0 - 6°C)	N/A
2. If not within temp. criteria, were samples received on ice?	N/A
3. If not within temp. criteria, were samples received chilled on same day of sampling?	N/A
4. Is the Chain of Custody (COC) received filled out completely?	Yes
5. Does the total number of containers received match COC?	Yes
6. Are the sample container label(s) consistent with COC?	Yes
7. Are the sample container(s) intact and in good condition?	Yes
8. Were the proper containers & sufficient volume for analyses requested on COC?	Yes
9. Was the proper preservative indicated on COC/container for analyses requested?	N/A
10. Are the containers for volatile analysis free of headspace? (EPA 8260 water)	N/A
EDF Requested	No