

Appendix F

7th & Campbell, LP

Service Request Application – Preliminary Site Review, submitted to Alameda County Department of Environmental Health Local Oversight Program, September 18, 2020



Alameda County Department of Environmental Health Local Oversight Program

1131 Harbor Bay Pkwy, Alameda, CA 94502

Phone: 510-567-6700 ♦ Fax: 510-337-9335 ♦ Web: <https://deh.acgov.org/landwater/lop.page>

Service Request Application – Preliminary Site Review

OFFICE USE ONLY

Date Rec'd: _____ Rec'd By: _____ Amt \$: _____ PE Code: _____ RO#: _____ GT ID#: _____

SERVICE REQUEST TYPE & MINIMUM FEE DEPOSIT

SERVICE REQUEST TYPE	FEE	PE CODE	SERVICE CODE	SERVICE REQUEST TYPE	FEE	PE CODE	SERVICE CODE
<input checked="" type="checkbox"/> APPLICATION PROCESSING FEE (1 HOUR)	\$174	5504	312	<input checked="" type="checkbox"/> CONSULTATION MEETING (TWO STAFF, 2 HOUR STAFF TIME)	\$696	5502	707
<input checked="" type="checkbox"/> REVIEW ENVIRONMENTAL & PROJECT DOCUMENTS & DATABASES (3 HOURS STAFF TIME)	\$522	5502	311	TOTAL FEES DUE	\$1,392		

Indicated fees are due upon application submittal. Fees can be paid via cash, credit card, check or money order. Please return this application to ACDEH in person, or by mail at 1131 Harbor Bay Parkway, Ste 111, Alameda CA, 94502.

SITE ADDRESS - For Multiple Addresses/APNs use Address Form on Page 6

Alameda County Assessor's Parcel Numbers (APNs) list all:	006-0017-017	006-0017-019	006-0017-021
	006-0017-018	006-0017-020	006-0017-022
Street: 1666 7 th Street	City: Oakland	State: CA	Zip Code: 94607

PROPERTY OWNER INFORMATION

Property Owner Name: City of Oakland	Type of Entity: City Government
Mailing Address (<input type="checkbox"/> same as site address)	
Street: 250 Frank H. Ogawa Plaza, 5 th Floor	City: Oakland State: CA Zip Code: 94612
Phone: 510-238-3623	Email: cmulvey@oaklandnet.com

RESPONSIBLE PARTY ENTERING AGREEMENT

Name: 7 th & Campbell, LP	Relationship to Property Owner: Party to a DDA with Owner
Mailing Address	
Street: 92 Natoma, Suite 210	City: San Francisco State: CA Zip Code: 94105
Phone: 510-289-1502	Email: Adhi.Nagraj@McCormackBaron.com

AFFIDAVIT

- I attest under penalty of perjury to the truth and correction of all the facts, exhibits, reports, and attachments presented with and made a part of this request.
- Responsible Party and Current Property Owner represent that the Responsible Party has the authority to make this request for preliminary site review.**
- I agree to pay all fees and costs associated with receiving the necessary approvals for my project.

Property Owner Signature: 	Date: 9/15/2020
Responsible Party's Signature: 	Date: 9/18/2020

OFFICE USE ONLY

Application Completeness Review:	LOP Staff Signature: _____	Date: _____
Refund Amount: \$ _____	LOP PM Signature: _____	Date: _____



Service Request Application – Preliminary Site Review

Initiating Action for Service Request (CHECK APPLICABLE BOX)

ENVIRONMENTAL DUE DILIGENCE

- Property Transaction Self-Initiated Site Assessment
- Bank Re-Financing Other _____

PROPERTY REDEVELOPMENT

- Planning/Building Department Clearance
- Other _____

Site Information Summary

The site has been primarily occupied by mixed-used buildings from 1889 until the 1970s, when the buildings were beginning to be removed. All but one building was removed in the early 2000s, with the last building reportedly removed between 2012 and 2014. Currently, three modular buildings are present in the southern portion of the site, and the remainder of the site consists of undeveloped land used for urban farming.

SCA Environmental, Inc.'s 2019 Phase I Environmental Site Assessment (ESA) identified several recognized environmental conditions (RECs) in connection with the site, which included the following:

1. The presence of various nearby properties adjacent to the site, under regulatory oversight, that have documented subsurface contamination that may affect the environmental conditions beneath the site;
2. A former structure at the site was labeled "coal," which could indicate coal was burned and could contribute to subsurface contamination; and
3. Various neighboring properties within close proximity to the site included historical automobile service stations or dry cleaning facilities. Although no contamination was confirmed at these historical sites, the possibility of contamination cannot be ruled out.

As a result, Langan Engineering and Environmental Services, Inc. (Langan) completed a Phase II ESA in June 2020. A total of eight exploratory borings (EB-1 through EB-8) were advanced to depths between eight and 15 feet below ground surface (bgs) across the site. Exploratory borings EB-1 and EB-6 were advanced to a depth of 15 feet bgs for the installation of two groundwater monitoring wells (MW-1 and MW-2, respectively). In addition, environmental samples were collected from two geotechnical exploratory borings (B-1 and B-2).

Where explored, the site is blanketed by approximately five to seven feet of undocumented fill, which is predominately composed of sand with varying amounts of clay, silt, gravel, brick fragments and organics. Native silty/clayey sand (locally referred to as Merritt sand) underlines the fill.



Service Request Application – Preliminary Site Review

Soil, soil vapor, and groundwater samples were collected for chemical analysis. Analytical testing indicated the following:

1. Five soil samples exceeded the State of California hazardous waste criteria and, if excavated, the material from these areas will require disposal as Class I non-Resource Conservation and Recovery Act (RCRA) hazardous waste.
2. The soil vapor analytical results indicate that Volatile Organic Compounds (VOCs) benzene, methylene chloride, PCE, and vinyl chloride are present at concentrations exceeding their respective Regional Water Quality Control Board (RWQCB) residential Environmental Screening Levels (ESLs) for vapor intrusion.
3. Stabilized groundwater levels observed in the on-site monitoring wells ranged from eight to nine feet bgs. Groundwater analytical results did not exceed their applicable vapor intrusion residential ESLs, or the established Maximum Contaminant Levels (MCLs)/direct exposure ESLs.

Remedial measures are planned as part of redevelopment for short- and long-term protection of human receptors. The currently proposed measures include hazardous soil removal during construction and installation of a passive vapor mitigation system (VMS) to resolve the identified RECs.



Service Request Application – Preliminary Site Review

Project Description Summary

Based on the most recent conceptual design, the proposed development will consist of a five-story at-grade structure (i.e. no basements are currently planned) having a building footprint of approximately 27,300 square feet. The mixed-use building will consist of 79 planned residential units, areas designated for commercial use, and parking on the ground floor. We understand that a portion of the proposed building will be offset approximately 15 feet from the northern property boundary to accommodate open space and urban farming. We anticipate that the excavation depths during the proposed development may range between three to eight feet below ground surface (bgs) to accommodate foundation installation, utility trenching, and other subsurface features (i.e. elevator pits, sand interceptors, grease interceptors, car stackers, etc.). The site is currently owned by the City of Oakland and is proposed for development as low-income affordable housing.

Based on the results of the Phase II ESA and the planned affordable housing project, 7th and Campbell, LP is interested in engaging with Alameda County Department of Environmental Health (ACDEH) for regulatory oversight during property redevelopment.

See attached for the latest planning approvals. The planning department permit # is PLN16056; 0 7th Street, and no building department permit number is available at this time.

Proposed project development schedule:

- Submit for plan check February 2021
- Secure building permits July 2021
- Construction start September 2021
- Complete construction February 2023



Service Request Application – Preliminary Site Review

Required Documents

The Responsible Party shall submit to ACDEH all background information, environmental assessment reports (including Phase I/II Environmental Assessment Reports), analytical results, and if redevelopment is proposed, additional documents as listed below. If select documents are not available or applicable, please provide an explanation in the text box below. All available information is to be provided to ACDEH by the Responsible Party with this completed application. ACDEH will review the application and contact the Responsible Party within five (5) days of receipt to schedule a meeting.

SUBMIT THE FOLLOWING WITH THIS APPLICATION AND FEES.

Environmental Due Diligence (for all Sites)

- Parcel Map/ Site Map
- Legal Description¹
- Phase I Reports
- Phase II Reports
- Geophysical Survey Reports
- Geotechnical Reports

- Summary Figures illustrating all parcel boundaries, and historic, current and proposed site configurations in relation to sampling locations
- Summary Tables of all Analytical Data
- Boring Logs
- Aerial Photos
- Sanborn Maps

Site Development Package

- Planning Department Permit #__PLN16056; 0 7th Street_____
- Entitlement Approvals or Conceptual Development Plan
- CEQA Documents (exempt, see attached planning approval document)
- Subdivision Parcel Maps
- Building Permit #_____
- Building Plan Set
- Grading Plans including Cut/Fill Balance
- Utility Plans
- Demolition Plans including Lead, Asbestos, and PCB Abatement Documentation
- Property Transactions and Proposed Project Development Schedule

¹ Legal description is the geographical description of a real estate property for identifying and locating the property. A legal description of the property clearly identifies the location, boundaries, and any existing easements of the property. Legal description is available on the deed.

List Not Applicable or Unavailable Documents

The following is not applicable or available at this time:

1. CEQA Documents
2. Subdivision Parcel Maps
3. Building Permit #
4. Building Plan Set
5. Grading Plans including Cut/Fill Balance
6. Utility Plans
7. Demolition Plans including Lead, Asbestos, and PCB



Alameda County Department of Environmental Health Local Oversight Program

1131 Harbor Bay Pkwy, Alameda, CA 94502

Phone: 510-567-6700 ♦ Fax: 510-337-9335 ♦ Web: <https://deh.acgov.org/landwater/lop.page>

Service Request Application – Preliminary Site Review

8. Abatement Documentation

Application Instructions

To initiate regulatory review on a project, complete and submit this Service Request Application, review fee and required documents. Fill in all blanks.

Submit the completed application form including required documents in PDF format to:

Paresh Khatri
Alameda County Department of Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502
(email preferred: paresh.khatri@acgov.org).

Submit the associated fees to:

Alameda County Department of Environmental Health
c/o Finance Department
1131 Harbor Bay Parkway
Alameda, CA 94502-6577
(Fees can be paid via cash, credit card, check or money order in-person)

This deposit will be applied towards work performed for opening an account, preliminary site review time by Alameda County Department of Environmental Health (ACDEH) staff, inter-agency coordination, and an in-person meeting with you and your environmental professional. An application processing fee of \$174 will be charged for processing each Service Request Application. Incomplete applications (missing key information and/or supporting documents) will be rejected by ACDEH and will be assessed an additional re-submittal processing fee of \$174.00.

Once the application has been accepted and fees received, an Identification Number will be established in the State Water Board's GeoTracker website (<http://geotracker.waterboards.ca.gov/>). ACDEH will upload all technical reports/submittals to GeoTracker.

ACDEH will conduct an initial screening of the application for completeness and will contact the applicant within five (5) business days to schedule a meeting or provide notification of an incomplete application requiring resubmittal.

Once ACDEH deems the application is complete, ACDEH will review the submitted information to determine whether regulatory environmental oversight is required. If it is determined that regulatory oversight is required, ACDEH will consult with the Regional Water Board or Department of Toxic Substances Control staff to determine lead agency status.

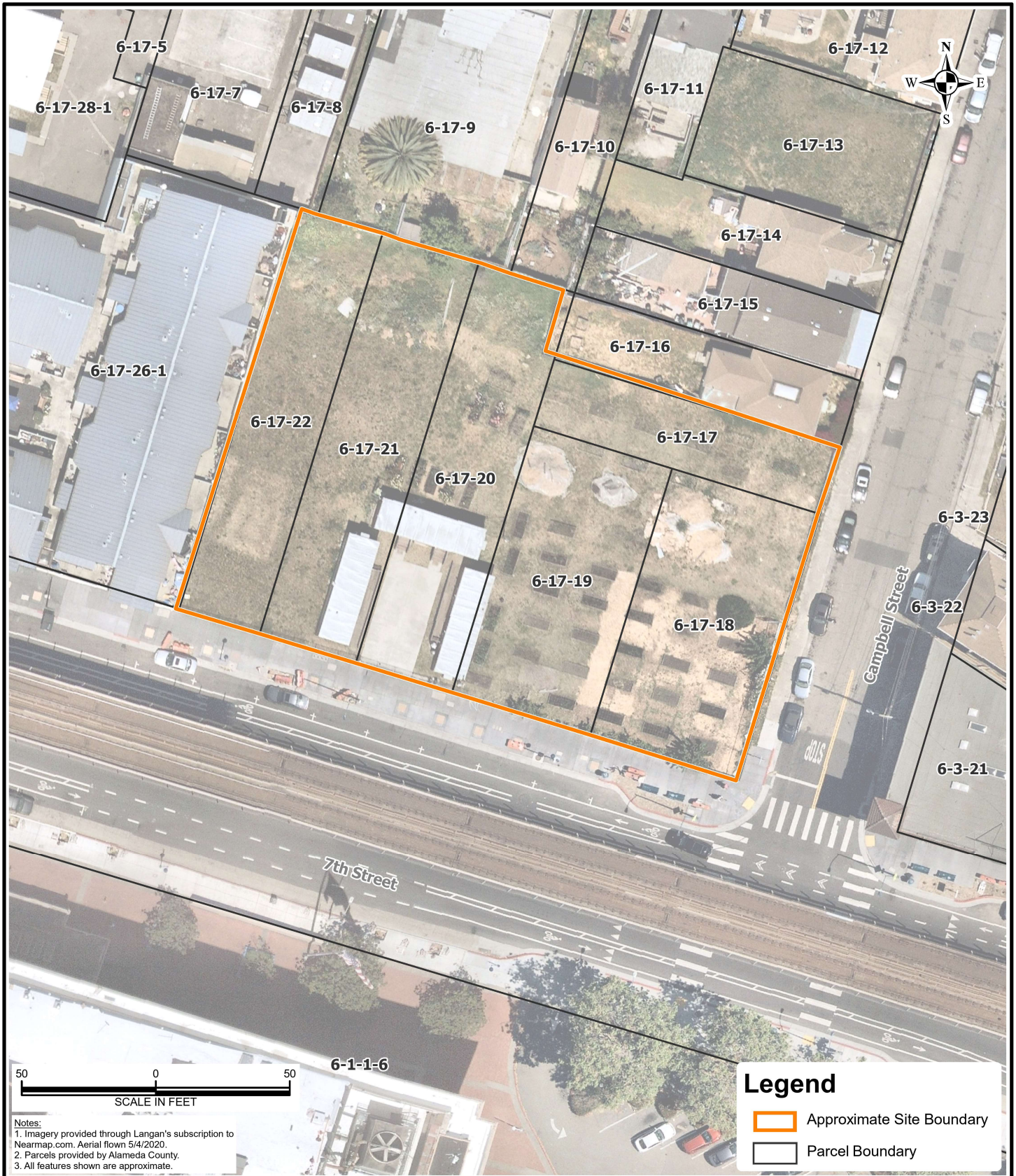


Service Request Application – Preliminary Site Review

Multiple Addresses / APNs Form

Site Addresses	
SITE ADDRESS: (Street, City, Zip)	CAMPBELL ST OAKLAND 94607
Associated APN:	006-0017-017
SITE ADDRESS: (Street, City, Zip)	7TH ST OAKLAND 94607
Associated APN:	006-0017-018
SITE ADDRESS: (Street, City, Zip)	1664 7TH ST OAKLAND 94606
Associated APN:	006-0017-019
SITE ADDRESS: (Street, City, Zip)	1666 7TH ST OAKLAND 94607
Associated APN:	006-0017-020
SITE ADDRESS: (Street, City, Zip)	1672 7TH ST OAKLAND 94607
Associated APN:	006-0017-021
SITE ADDRESS: (Street, City, Zip)	1676 7TH ST OAKLAND 94607
Associated APN:	006-0017-022
SOURCE:	Alameda County Assessor's Parcel Viewer http://gis.acgov.org/Html5Viewer/index.html?viewer=parcel_viewer

1. Parcel_Map



Notes:
 1. Imagery provided through Langan's subscription to Nearmap.com. Aerial flown 5/4/2020.
 2. Parcels provided by Alameda County.
 3. All features shown are approximate.

Legend

- Approximate Site Boundary
- Parcel Boundary

<p>LANGAN</p> <p>501 14th Street, 3rd Floor Oakland, CA 94612-1420 T: 510.874.7000 F: 510.874.7001 www.langan.com</p> <p>Langan Engineering & Environmental Services, Inc. Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C. Langan International LLC Collectively known as Langan</p>	<p>Project</p> <p style="text-align: center;">1666 7TH STREET</p> <p style="text-align: center;">OAKLAND</p> <p>ALAMEDA COUNTY CA</p>	<p>Drawing Title</p> <p style="text-align: center;">SITE LAYOUT</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Project No. 750664801</td> <td style="width: 50%;">Figure</td> </tr> <tr> <td>Date 8/25/2020</td> <td rowspan="3" style="text-align: center; vertical-align: middle; font-size: 2em;">2</td> </tr> <tr> <td>Scale 1" = 50 feet</td> </tr> <tr> <td>Drawn By OG</td> </tr> </table>	Project No. 750664801	Figure	Date 8/25/2020	2	Scale 1" = 50 feet	Drawn By OG
Project No. 750664801	Figure								
Date 8/25/2020	2								
Scale 1" = 50 feet									
Drawn By OG									

2. Legal Description

EXHIBIT A

The land referred to is situated in the County of Alameda, City of Oakland, State of California, and is described as follows:

Parcel One:

Beginning at a point on the Western line of Campbell Street, distant thereon 104 feet Northerly from the Northern line of 7th Street, formerly Railroad Avenue; thence Northerly along the said line of Campbell Street 26 feet; thence at right angles Westerly 111.67 feet; thence at right angles Southerly 26 feet; thence at right angles Easterly 111.67 feet to the point of beginning.

Parcel Two:

A non-exclusive perpetual easement and right of way, for ingress and egress of pedestrians, and for an overhanging stairway, to be appurtenant to and for the use of the owner, or owners, of Parcel 1 herein described, over the following described parcel of land;

Beginning at a point on the Western line of Campbell Street, distant thereon 130 feet Northerly from the Northern line of 7th Street, formerly Railroad Avenue; thence Northerly along the said line of Campbell Street 1.50 feet; thence at right angles Westerly 50.50 feet; thence at right angles Northerly 2 feet; thence at right angles Westerly 23.50 feet; thence at right angles Southerly 3.50 feet; thence at right angles Easterly 74 feet to the point of beginning.

APN: 006-0017-017

Parcel Three:

Lots 28 and 29, Block 526, Map of the Gibbons Property at Oakland Point, filed July 16, 1870, Map Book 1, Page 31, Alameda County Records.

APN: 006-0017-018

Parcel Four:

Lots 30 and 31, Block 526, Map of the Gibbons Property at Oakland Point, filed July 16, 1870, Map Book 1, Page 31, Alameda County Records.

APN: 006-0017-019

Parcel Five:

Lot 34 and the Western 12.50 feet of Lot 33, in Block 526, as said Lots and Block are delineated and shown on the Map entitled, "Map of the Gibbons Property at Oakland Point", filed July 16, 1870, in Book 1 of Maps, Page 31, Alameda County Records.

APN: 006-0017-021

Parcel Six:

Lot 35 and the Eastern 6.40 feet of Lot 36, Block 526, Map of the Gibbons Property at Oakland Point, filed July 16, 1870, Map Book 1, Page 31, Alameda County Records.

APN: 006-0017-022

Parcel Seven:

Commencing at a point on the Northern line of 7th Street, distant thereon one hundred and eleven (111) feet eight (8) inches Westerly from the intersection thereof with the Western line of Campbell Street; thence Westerly along said line of 7th Street; thirty-seven (37) feet six (6) inches; thence at right angles Northerly one hundred and fifty-six (156) feet; thence at right angles Easterly thirty-seven (37) feet six (6) inches; and thence at right angles Southerly one hundred and fifty-six (156) feet, to the point of commencement.

Being Lot numbered thirty-two (32) and the Eastern one-half (1/2) of Lot numbered thirty-three (33) in Block five hundred and twenty-six (526) as per "Map of the Gibbons Property at Oakland Point", filed July 16, 1870, in the Office of the County Recorder of Alameda County.

APN: 006-0017-020

Appendix G

**Alameda County Department of Environmental Health (ACDEH)
Conditional Approval of the Work Plan for Additional Environmental Site Assessment, December 10,
2020**



December 10, 2020

Adhi Nagraj (*Sent via E-mail to: Adhi.Nagraj@McCormackBaron.com*)
7th & Campbell, LP
2625 Alcatraz Avenue #501
Berkeley, California, 94705

Shola Olatoye (*Sent via E-mail to: solatoye@oaklandca.gov*)
City of Oakland
250 Frank Ogawa Plaza, Suite 5313
Oakland, California, 94612

Subject: Conditional Approval of the *Work Plan for Additional Environmental Site Assessment*
Site Cleanup Program Case No. RO0003462 and GeoTracker Global ID T10000016250
7th & Campbell Redevelopment
1666 7th Street, Oakland, CA 94612
Assessor's Parcel Numbers: 6-17-19, 6-17-22, 6-17-20, 6-17-21, 6-17-17, and 6-17-18

Dear Responsible Parties:

On November 13, 2020, the site developer, 7th & Campbell, LP (the responsible party; [RP]) with acknowledgment from the current property owner, City of Oakland, entered into a Voluntary Remedial Action Agreement (VRAA) with Alameda County Department of Environmental Health (ACDEH) to provide regulatory oversight of environmental site investigations and cleanup under the subject Site Cleanup Program (SCP) Case RO0003462 to facilitate site redevelopment

The subject site is located on the northern side of 7th Street, between Campbell Street and Willow Street in the Prescott neighborhood of West Oakland and consists of six parcels (cumulatively the "Site") which totals approximately 0.66 acres. All six parcels are currently owned by the City of Oakland. Historic land use on these parcels included but were not limited to various residential, commercial, and industrial configurations including wood/coal storage and burning operations, a fire station, pharmaceutical manufacturing, shoe polish manufacturing and several urban farming operations. A summary of the site setting and historical land use for each parcel is provided in the *Phase I Environmental Site Assessment (Phase I ESA)*, dated January 2019, and prepared on behalf of McCormack Baron Salazar by SCA Environmental, Inc (SCA). An electronic copy of the *Phase I ESA* can be referenced on the State Water Board's GeoTracker website.

ACDEH understand the proposed redevelopment includes a five-story at-grade structure with a building footprint of approximately 27,300 square feet. The mixed-use building will consist of 79 affordable residential units, areas designated for commercial use, and parking on the ground floor. The northern property boundary is planned for landscape areas and urban farming. Redevelopment will include the demolition of the existing modular structures and excavation of soil to approximately three to eight feet below ground surface (bgs) for construction of the building foundation, utility trenching, and other subsurface features (i.e. elevators pits).

In order to redevelop the Site, environmental investigations are required to evaluate impacts to the subsurface from historic land use and develop corrective actions to reduce risk to construction workers, the surrounding community, and occupants of the new development. Environmental investigations were conducted without ACDEH oversight in June 2020 to evaluate subsurface soil, groundwater, and soil vapor conditions. Eight exploratory borings (EB-1 through EB-2) were advanced up to a depth of 15 feet bgs. Subsurface soils observed during this investigation consisted of 5 to 7 feet fill material across the entire site underlain predominately by silty and clayey sands, respectively. Two permanent groundwater monitoring wells (MW-1 and MW-2) and four temporary soil vapor probes (SV-1 through SV-4) were advanced to a total depth of 15 feet bgs and 5 feet bgs, respectively. Monitoring wells were screened between 5 to 15 feet bgs. Stabilized groundwater encountered during this investigation was reported between 8 to 9 feet bgs.

Analytical results from this investigation documented chemicals of concern (COCs) in soil, soil vapor, and groundwater samples associated with historic land-use. Soil COCs identified during investigation activities included semi-volatile organic compounds (SVOCs) including benzo(a)pyrene; volatile organic compounds (VOCs) including 1,2-dibromoethene and tetrachloroethene (PCE); metals including barium, chromium, lead, nickel, and zinc above laboratory detection limits. Soil COCs above the January 2019 California Regional Water Quality Control Board, Bay Area Region residential land-use environmental screening levels (ESLs) included lead and benzo(a)pyrene. Soil vapor COCs identified concentrations of VOCs including benzene, methylene chloride, PCE, and vinyl chloride above the January 2019 ESLs for vapor intrusion. Groundwater COCs identified detections of SVOCs and metals above laboratory detection limits but below residential vapor intrusion ESLs.

Based on this initial investigation, Langan Engineering and Environmental Services, Inc (Langan) has submitted the following documents on behalf of the RP for ACDEH review and approval:

- *Figure 1 – Site Plan with Environmental Boring Locations (Figure 1)*, dated November 12, 2020 and transmitted via email to ACDEH on November 19, 2020
- *Figure 2 – Site Plan with Historical Features (Figure 2)*, dated November 16, 2020 and transmitted via email to ACDEH on November 19, 2020
- *Table 2 – Groundwater Sampling and Analysis Plan (Table 2)*, dated November 2020 and transmitted via email to ACDEH on November 19, 2020
- *Table 3 – Soil Vapor Sampling and Analysis Plan (Table 3)*, dated November 2020 and transmitted via email to ACDEH on November 19, 2020
- *Revised Table 1 – Soil Sampling and Analysis Plan (Table 1)*, dated November 2020 and transmitted via email to ACDEH on November 24, 2020

Collectively the above-listed document submittals make up the framework for the proposed *Work Plan for Additional Environmental Site Assessment* (the “*Work Plan*”). The *Work Plan’s* proposed scope of work and associated sampling analysis plan is discussed below.

WORK PLAN SCOPE OF WORK

The *Work Plan* proposes the collection of soil, groundwater, and soil gas to inform the development of a corrective action plan (CAP) to outline corrective actions and mitigation measures that may be implemented during Site development activities. The *Work Plan* also includes a scope of work to address data gaps as discussed in a series of weekly conference calls with the property owner (City of Oakland),

the developer (7th & Campbell, LP), their environmental consultant (Langan), their construction team (MPI Homes and Slosky & Company, Inc.), and ACDEH from November 2020 through December 2020. The objective of the *Work Plan* is to further characterize and delineate potential environmental impacts in soil, groundwater, and soil vapor at the Site from historic land-use and inform development of the CAP. The scope of work as presented in *Table 1* through *Table 3* of the *Work Plan* proposes the following:

- Advancement of 15 borings (SS-1, through SS-11, EB-9 through EB11, and B-1) at depth intervals ranging from 1.0 to 15 feet bgs to evaluate shallow soil conditions from construction /fill material, hazardous waste classification, and vertical delineation of COCs;
- Collection of groundwater samples from 3 grab groundwater locations (EB-9-GW through EB-11-GW) and 2 existing well locations (MW-1 and MW-2) for the evaluation of total petroleum hydrocarbons, VOC, and SVOC impacts; and
- Collection soil gas samples from five temporary soil gas well locations (SG-1 through SG-5) for the evaluation of potential VOC impacts;

CONDITIONAL APPROVAL OF WORK PLAN

With the provision that the information provided to this agency is accurate and representative of currently known Site conditions, ACDEH approves of the implementation of the *Work Plan*. Therefore, at this juncture, ACDEH requests that 7th & Campbell, LP proceed with advancement of the 15 borings and collection of soil, groundwater, and soil gas samples and submit the deliverables documenting advancement in accordance with the compliance schedule listed below.

ACDEH requests that 7th & Campbell, LP perform the proposed work and schedule a meeting with ACDEH, the property owner, and your environmental consultant and construction team within two weeks of completing field activities to discuss the data. ACDEH requests that comprehensive tables and figures presenting results of this and all environmental investigations conducted at the Site be submitted to ACDEH for review one week before the scheduled meeting. Please email the case worker (andrew.york@acgov.org) to setup a meeting date and time and also provide 72-hour advanced written notification (email) to this office prior to the start of field activities.

The *Work Plan* package must be submitted to the State Water Resources Control Board's GeoTracker website in accordance with the *Responsible Party (ies) Legal Requirement/Obligations Instructions* included as **Attachment 2** prior to the commencement of field activities.

LIST OF DELIVERABLES AND COMPLIANCE DATES

ACDEH's approval of the *Work Plan* for advancement of 15 borings, and collection of soil, groundwater, and soil gas samples is conditioned upon submittal of the deliverables listed below. ACDEH requests that you prepare the deliverables in accordance with the requirements provided in **Attachment 1 – Deliverable Requirements** and submit them to the State Water Resources Control Board's GeoTracker website in compliance with the requirements identified in ACDEH's *Responsible Party(ies) Legal Requirement/Obligations Instructions* included as **Attachment 2**. ACDEH also requests email notification verifying upload of the requested deliverables to the Case file on GeoTracker be provided to the primary caseworker, Drew York (andrew.york@acgov.org).

DRAFT SUBSURFACE RESULTS

- a. **Deliverable:** Draft Summary Tables and Figures
Submittal Compliance Date: Monday, January 11, 2021 or sooner
File Name: RO3462_DRAFT_SWI_FIGS_TABLES_2021-01-11

GEOTRACKER COMPLIANCE AUDIT

- b. **Deliverable:** GeoTracker Database Compliance Certification Letter
Submittal Compliance Date: Monday, January 11, 2021 and ongoing as field activities including but not limited to soil vapor probe installation and monitoring
File Name: RO3462_GEOTRK_AUDIT_2021-01-11

CLOSING

Thank you for your cooperation. ACDEH looks forward to working with 7th & Campbell, LP to evaluate subsurface conditions and implement appropriate corrective actions in conjunction with Site redevelopment activities and advance the case toward closure. If you have any questions, please call me at (510) 639-1276 or send me an email message at andrew.york@acgov.org.

Sincerely,



Drew J. York
Senior Hazardous Materials Specialist



Dilan Roe, PE, C73703
Chief - Land Water Division

Encl.: Attachment 1 – Deliverable Requirements
Attachment 2 – Responsible Party (ies) Legal Requirement/Obligations Instructions

cc: Ali Kashani, MPI Homes (Sent via E-mail to: akashani@mpihomes.com)
Clinton Werden, Slosky & Company, Inc. (Sent via E-mail to: CWerden@slosky.com)
Adam Brown, Langan (Sent via E-mail to: abrown@langan.com)
Brendan Hayward, Langan (Sent via E-mail to: bhayward@langan.com)
Peter Cusack, Langan (Sent via E-mail to: pcusack@Langan.com)
Bill Gilchrist, City of Oakland (Sent via E-mail to: WGilchrist@oaklandca.gov)
Vanessa Kennedy, City of Oakland (Sent via E-mail to: VKennedy@oaklandca.gov)
Christia Mulvey, City of Oakland (Sent via E-mail to: cmulvey@oaklandnet.com)
Ed Manasse, City of Oakland (Sent via E-mail to: EManasse@oaklandca.gov)
Heather Klein, City of Oakland (Sent via E-mail to: HKlein@oaklandca.gov)
Mark Arniola, City of Oakland (Sent via E-mail to: MArniola@oaklandca.gov)
Dilan Roe, ACDEH, Chief Land and Water Division (Sent via E-mail to: dilan.roe@acgov.org)
Paresh Khatri, ACDEH (Sent via E-mail to: paresh.khatri@acgov.org)
Drew York, ACDEH (Sent via E-mail to: andrew.york@acgov.org)
Electronic File, GeoTracker

ATTACHMENT 1

Alameda County Department of
Environmental Health Local
Oversight Program

Case No.: R00003462
Global ID: T10000016250
Case Name: 7th & Campbell Redevelopment
Case Address: 1666 7th Street, Oakland, CA
94612
Directive Letter December 10, 2020
Issue Date:

Attachment 1 – Deliverable Requirements

PURPOSE

The purpose of this document is to identify requisite elements for each of the deliverables requested by Alameda County Department of Environmental Health's (ACDEH) directives regarding the path forward for the Site.

ACDEH requests that you prepare the deliverables listed in the *directive letter dated December 10, 2020* in accordance with the corresponding *Deliverable Requirements* provided below and submit the deliverables to the State Water Resources Control Board's GeoTracker website in compliance with the requirements identified in *Attachment 2*.

DELIVERABLE REQUIREMENTS

DRAFT SUBSURFACE RESULTS

- a) **Summary Tables and Figures** - Prior to the meeting ACDEH requests that investigation results approved in this directive letter be summarized in tables and figures and sent to ACDEH via email at least one week prior to the determined meeting. The summary tables must include the recent January 2019 San Francisco Bay Regional Water Quality Control Board's ESLs and include all Site data. Additionally, the updated figures must include all recent and historic concentrations above 2019 ESLs with associated chemical isoconcentration contours.

GEOTRACKER AUDIT

- b) Site data and documents are maintained in the case file on State Water Board's GeoTracker website. The database acts as repositories for Portable Document Format (PDF) files of regulatory directives and reports and has the functionality to store electronic compliance data in Electronic Deliverable Format (EDF) including analytical laboratory data for soil, vapor, and groundwater samples, monitoring well depth-to-water measurements, and surveyed location and elevation data for sampling locations. GeoTracker reporting requirements are described in Section 3893 of the California Code of Regulations. Based on a brief compliance audit and review of electronic submittal of information (ESI) the Site is not in compliance with ESI requirements.

ACDEH requests 7th & Campbell, LP conduct a thorough compliance audit and upload all historical environmental documents related to the subject site including but not limited the missing soil and groundwater analytical data, documents and reports, maps, and boring logs to GeoTracker.

Attachment 1 – Deliverable Requirements

GeoTracker Compliance Audit – Based on ACDEH’s brief compliance audit, non-compliant GeoTracker requirements are identified in the table below.

Table A1 – Non-compliant GeoTracker Requirements	
<input checked="" type="checkbox"/> Latitude and longitude of wells (GEO_XY)	<input checked="" type="checkbox"/> Surveyed elevation of wells (GEO_Z)
<input checked="" type="checkbox"/> Elevation of groundwater in wells (GEO_WELL)	<input type="checkbox"/> Boring log (GEO_BORE)
<input type="checkbox"/> Technical report (GEO_REPORT)	<input type="checkbox"/> Laboratory Electronic Data Files (EDF)
<input checked="" type="checkbox"/> Depth and length of screened interval of wells (Field Point ID)	<input type="checkbox"/> Site map(s) depicting location of <u>all</u> sampling points (GEO_MAP)

Details pertaining to the GeoTracker compliance issues identified in ACDEH’s review of the case file are summarized below:

- I. **GEO_XY** – Surveyed latitude and longitude data was identified as absent for groundwater monitoring wells MW-1 and MW-2;
- II. **GEO_Z** – Surveyed elevation data was identified as absent for groundwater monitoring wells MW-1 and MW-2;
- III. **GEO_WELL** – Depth to groundwater data was identified as absent for groundwater monitoring wells MW-1 and MW-2; and
- IV. **FIELD POINT ID** - Depth to top of casing and length of screened interval was identified as absent in field point IDs for groundwater monitoring wells MW-1 and MW-2.

ATTACHMENT 2

Alameda County Environmental Cleanup Oversight Programs (LOP and SCP)	REVISION DATE: May 19, 2020
	ISSUE DATE: July 25, 2012
	PREVIOUS REVISIONS: September 17, 2013, May 15, 2014, December 12, 2016, December 14, 2017
SECTION: ACDEH Procedures	SUBJECT: Responsible Party(ies) Legal Requirements / Obligations

REPORT & DELIVERABLE REQUESTS

Alameda County Department of Environmental Health (ACDEH) Cleanup Oversight Programs, Local Oversight Program (LOP) and Site Cleanup Program (SCP) require submission of all reports in electronic form to the State Water Board's (SWB) GeoTracker website in accordance with California Code of Regulations, Title 23, Chapter 30, Division 3, Article 2, Section 3892 and Chapter 16, Article 11, Division 3.

Leaking Underground Fuel Tank (LUFT) Cases

Reports and deliverable requests are pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party (RP) in conjunction with an unauthorized release from a petroleum underground storage tank (UST) system.

Site Cleanup Program (SCP) Cases

For non-petroleum UST cases, reports and deliverables requests are pursuant to California Health and Safety Code Section 101480.

ELECTRONIC SUBMITTAL OF REPORTS

A complete report submittal includes the PDF report and all associated electronic data files, including but not limited to GEO_MAP, GEO_XY, GEO_Z, GEO_BORE, GEO_WELL, and laboratory analytical data in Electronic Deliverable Format™ (EDF). Additional information on these requirements is available on the State Water Board's website (http://www.waterboards.ca.gov/water_issues/programs/ust/electronic_submittal/)

- Do not upload draft reports to GeoTracker
- Rotate each page in the PDF document in the direction that will make it easiest to read on a computer monitor.

GEOTRACKER UPLOAD CERTIFICATION

Each report submittal is to include a GeoTracker Upload Summary Table with GeoTracker valid values¹ as illustrated in the example below to facilitate ACDEH review and verify compliance with GeoTracker requirements.

GeoTracker Upload Table Example

Report Title	Sample Period	PDF Report	GEO_MAPS	Sample ID	Matrix	GEO_Z	GEO_XY	GEO_BORE	GEO_WELL	EDF
2016 Subsurface Investigation Report	2016 S1	✓	✓	Effluent	SO	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✓
2012 Site Assessment Work Plan	2012	✓	✓			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2010 GW Investigation Report	2008 Q4	✓	✓	SB-10	W	✓	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✓
				SB-10-6	SO	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✓
				MW-1	WG	✓	✓	✓	✓	✓
				SW-1	W	✓	✓	✓	✓	✓

¹ GeoTracker Survey XYZ, Well Data, and Site Map Guidelines & Restrictions, CA State Water Resources Control Board, April 2005

Alameda County Environmental Cleanup Oversight Programs (LOP and SCP)	REVISION DATE: NA
	ISSUE DATE: December 14, 2017
	PREVIOUS REVISIONS: September 17, 2013, May 15, 2014, December 12, 2016
SECTION: ACDEH Procedures	SUBJECT: Responsible Party(ies) Legal Requirements / Obligations

ACKNOWLEDGEMENT STATEMENT

All work plans, technical reports, or technical documents submitted to ACDEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I have read and acknowledge the content, recommendations and/or conclusions contained in the attached document or report submitted on my behalf to the State Water Board's GeoTracker website." This letter must be signed by the Responsible Party, or legally authorized representative of the Responsible Party.

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6731, 6735, and 7835) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately licensed or certified professional and include the professional registration stamp, signature, and statement of professional certification. Additional information is available on the Board of Professional Engineers, Land Surveyors, and Geologists website at: <http://www.bpelsg.ca.gov/laws/index.shtml>.

UNDERGROUND STORAGE TANK CLEANUP FUND

For LUFT cases, RP's non-compliance with these regulations may result in ineligibility to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse the cost of cleanup. Additional information is available on the internet at: https://www.waterboards.ca.gov/water_issues/programs/ustcf/

AGENCY OVERSIGHT

Significant delays in conducting site assessment/cleanup or report submittals may result in referral of the case to the Regional Water Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to \$10,000 per day for each day of violation.

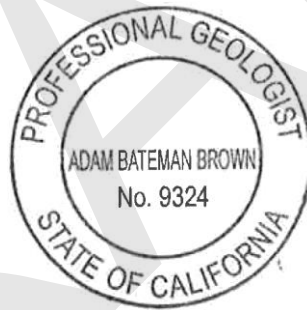
Appendix H

**Langan Engineering and Environmental Services, Inc.
Draft Corrective Action Plan, 1666 7th Street, December 23, 2020**

DRAFT CORRECTIVE ACTION PLAN
1666 7th Street
Oakland, California

Prepared For:
Alameda County Department of Environmental Health
1131 Harbor Bay Parkway
Alameda, California 94502

Prepared By:
Langan Engineering and Environmental Services, Inc.
501 14th Street, 3rd Floor
Oakland, California 94612



Adam Brown

Adam Brown, PG
Senior Project Geologist

Peter J. Cusack

Peter J. Cusack
Senior Associate/Vice President

23 December 2020
750664801

LANGAN

23 December 2020

Andrew York
Alameda County Health Care Services Agency
Department of Environmental Health, Local Oversight Program
1131 Harbor Bay Parkway
Alameda, California 94502

**Subject: Draft Corrective Action Plan
1666 7th Street
Oakland, California
Langan Project No. 750664801**

Dear Andrew York:

On behalf of 7th & Campbell, LP (Client), Langan Engineering and Environmental Services, Inc. (Langan) has prepared the enclosed *Draft Corrective Action Plan* (CAP) for the 1666 7th Street project (site) located in Oakland, California (Figure 1). The site is currently owned by the City of Oakland and is proposed for development as mixed use including affordable housing. A portion of the on-site soil containing contaminants exceeding State of California hazardous waste thresholds and San Francisco Bay Regional Water Quality Control Board (RWQCB) Environmental Screening Levels (ESLs) will be removed and properly disposed of off-site during construction. The remainder of the on-site soil (not removed during construction) exceeding State of California hazardous waste thresholds and RWQCB ESLs will be encapsulated in place. In addition, the development is also being designed to incorporate a passive vapor mitigation system (VMS), with active capabilities, to protect the future building occupants and site users from potential vapor intrusion concerns due to the presence of volatile organic compounds (VOCs) in the soil vapor beneath the site.

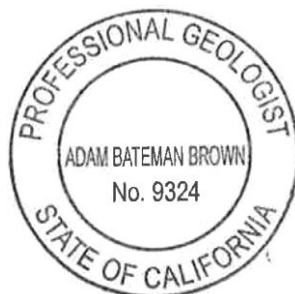
This CAP was prepared by Langan under the supervision of the Professional Geologist whose seal and signature appear hereon. The findings, recommendations, specifications, and/or professional opinions are presented within the limits described by the Client, after being prepared in accordance with generally accepted environmental professional practices. No warranty is expressed or implied.

If you have any questions or comments, please do not hesitate to contact Adam Brown at (415) 238-6149.

Sincerely yours,
Langan Engineering and Environmental Services, Inc.



Adam Brown, PG
Senior Project Geologist



Peter J. Cusack
Senior Associate/Vice President

750664801 DRAFT Corrective Action Plan_1666 7th Street_ABB 12-23-2020

TABLE OF CONTENTS

EXECUTIVE SUMMARY	1
1.0 INTRODUCTION	4
2.0 SITE AND PROJECT DESCRIPTION	4
3.0 ENVIRONMENTAL ASSESSMENTS AND REGULATORY ENGAGEMENT	5
3.1 Phase I Environmental Site Assessments	5
3.2 Phase II Environmental Site Assessment	6
3.2.1 Soil Testing and Analytical Results	7
3.2.2 Groundwater Testing and Analytical Results	8
3.2.3 Soil Vapor Testing and Analytical Results	8
3.3 Regulatory Engagement and Additional Environmental Assessments	9
4.0 CONCEPTUAL SITE MODEL	10
4.1 Geology and Hydrogeology	10
4.1.1 Geology	10
4.1.2 Hydrogeology	10
4.2 Current Extent of Contamination	11
4.2.1 Soil	11
4.2.2 Groundwater	11
4.2.3 Soil Vapor	12
4.3 Additional Environmental Investigation	12
4.4 Potential Receptors and Exposure Pathways	12
5.0 CORRECTIVE ACTION OBJECTIVES	13
5.1 Corrective Action Objectives for Soil	13
5.2 Corrective Action Objectives for Groundwater	14
5.3 Corrective Action Objectives for Soil Vapor	15
6.0 CORRECTIVE ACTIONS	15
6.1 Corrective Action for Soil	15
6.2 Corrective Action for Soil Vapor	18
7.0 CONCLUSIONS	19
8.0 PROPOSED SCHEDULE AND NEXT STEPS	20
REFERENCES	21

TABLES

FIGURES

APPENDICES

ATTACHMENTS

TABLES

Table 1	Soil Analytical Results – Non-Metals
Table 2	Soil Analytical Results – Metals
Table 3	Groundwater Analytical Results – Non-Metals
Table 4	Groundwater Analytical Results – Metals
Table 5	Soil Vapor Analytical Results
Table 6	Soil Sampling and Analysis Plan
Table 7	Groundwater Sampling and Analysis Plan
Table 8	Soil Vapor Sampling and Analysis Plan

FIGURES

Figure 1	Site Location Map
Figure 2	Site Plan with Sampling Locations and Cross Sections
Figure 3	Site Plan with Historical Features (1889-1970)
Figure 4	Idealized Subsurface Profile A-A'
Figure 5	Idealized Subsurface Profile B-B'
Figure 6	Site Plan with Fill Thickness Measurements
Figure 7	Site Plan with Soil Concentrations Exceeding Hazardous Waste Thresholds

APPENDICES

Appendix A	Exploratory Boring Logs and Well Construction Details
Appendix B	Certified Analytical Laboratory Reports
Appendix C	Proposed Schedule

Acronym and Abbreviation List

ACDEH	Alameda County Department of Environmental Health
Basin Plan	Water Quality Control Plan for the San Francisco Bay Basin
bgs	below ground surface
BMPs	Best Management Practices
CIH	Certified Industrial Hygienist
CAP	Corrective Action Plan
CAM	California Assessment Manual
CSM	Conceptual Site Model
CWA	Clean Water Act
DPT	Direct push technology
DTSC	Department of Toxic Substances Control
DMP	Dust Management Plan
EBMUD	East Bay Municipal Utility District
ESLs	Environmental Screening Levels
ESA	Environmental Site Assessment
HASP	Health and Safety Plan
HAZWOPER	Hazardous Waste Operations and Emergency Response
Langan	Langan Engineering and Environmental Services, Inc.
LUC	Land Use Covenant
MCL	Maximum Contaminant Level
mg/kg	Milligrams per kilogram
mg/L	Milligrams per liter
NPDES	National Pollution Discharge Elimination System
OCPs	Organochlorine Pesticides
O&M	Operation and Maintenance
PCBs	Polychlorinated Biphenyls
PE	Professional Engineer
ppm	parts per million
%V	percent volume

RAIP	Remedial Action Implementation Plan
RMP	Risk Management Plan
RWQCB	San Francisco Bay Regional Water Quality Control Board
SGMP	Soil and Groundwater Management Plan
STLC	Soluble Threshold Limit Concentration
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
SVOCs	Semi-volatile Organic Compounds
USA	Underground Services Alert
USCS	Unified Soil Classification System
VMEC	Vapor Mitigation Engineering Control
VMS	Vapor Mitigation System
VOCs	Volatile Organic Compounds
VRAA	Voluntary Remedial Action Application
µg/L	micrograms per liter
µg/m ³	micrograms per cubic meter

DRAFT CORRECTIVE ACTION PLAN
1666 7th Street
Oakland, California

EXECUTIVE SUMMARY

This *Draft Corrective Action Plan* (CAP) was prepared for the proposed development at 1666 7th Street (site) in Oakland, California (Figure 1). Recent environmental investigations document that soil is contaminated by the presence of heavy metals and semivolatile organic compounds (SVOCs), specifically benzo(a)pyrene, and soil vapor is contaminated by several volatile organic compounds (VOCs). The objectives of this CAP are to evaluate existing site conditions and the future site use and propose corrective action measures to address identified contamination at the property.

The site is currently occupied by three modular buildings with a concrete pavement slab between the buildings, and the remainder of the site is being used as a community garden/urban farm. The site is planned for redevelopment which will include the construction of a mixed-use five-story at-grade structure (i.e. no basements are currently planned) with a building footprint of approximately 27,300 square feet. The mixed-use building is planned to consist of 79 residential units, areas designated for commercial use, and parking on the ground floor. A 15-foot offset from the northern property boundary will also accommodate an open space and raised-bed urban farming. Excavation depths are anticipated to range between three to eight feet below ground surface (bgs) to accommodate foundation installation, utility trenching, and other subsurface features (i.e. elevator pits, sand interceptors, grease interceptors, etc.).

Recent soil, groundwater, and soil vapor analytical results were compared to San Francisco Bay Regional Water Quality Control Board (RWQCB) Residential Environmental Screening Levels dated February 2019 (ESLs)¹. In general, total lead was detected at concentrations above the residential ESL in soil, while benzo(a)pyrene was also detected in soil exceeding the residential ESL at one location. Exceedances in soil are primarily associated with undocumented fill material present beneath the site. In addition, VOCs were detected above the residential ESLs in soil vapor. No constituents in groundwater were detected above their respective residential ESLs.

¹ RWQCB ESLs: Soil Direct Exposure Human Health Risk Levels, Shallow Soil Exposure (Table S-1); Groundwater Maximum Contaminant Levels (MCLs), Direct Exposure Human Health Risk Levels (Table GW-1); Groundwater Vapor Intrusion Human Health Risk Levels (Table GW-3); Subslab/Soil Gas Vapor Intrusion: Human Health Risk Levels (Table SG-1); dated (REV. 2) 2019.

Based on the current extent of contamination, corrective action objectives and alternatives were established for soil and soil vapor. The corrective action objectives and alternatives for soil are as follows:

- Manage contaminated soil during construction in accordance with applicable Local, State, and Federal requirements including a combination of soil removal and off-site disposal, and encapsulation of residual contamination beneath the building foundation and/or imported soil cover with demarcation layer.
- As necessary during structural excavation and utility trenching, remove and dispose of contaminated fill material, containing concentrations of lead and benzo(a)pyrene exceeding the residential ESL and/or hazardous waste thresholds, at off-site licensed landfills.
- Limit site workers' and users' exposure to soil during construction and the future use of the site.
- Remove contaminated soil from utility corridors and backfill with imported material meeting ACDEH's *Soil Import/Export Characterization Requirements* dated 9 August 2019 (ACDEH, 2019b).
- Upon completion of construction related excavation activities, the remainder of the site soil that is not removed will be capped in place beneath an engineered cap consisting of hardscape (i.e. pavements, and building slab and foundations) or landscaping (minimum two feet of imported soil with demarcation layer).

As part of the corrective action objectives and alternatives, the project will develop and implement a soil and groundwater management plan (SGMP) and dust management plan (DMP) to reduce soil exposure risk to construction workers and off-site receptors during construction as well as a Remedial Action Implementation Plan (RAIP) detailing the proposed soil remediation approach.

The corrective action objective for soil vapor is to mitigate potential risk of vapor intrusion into indoor air from VOCs detected at elevated concentrations beneath the site. Therefore, the corrective action alternative will include installing a passive VMS underneath the building slab during development. The passive VMS will consist of a continuous, spray-applied vapor barrier membrane located immediately beneath the structural building slab combined with a horizontal collection and venting system installed below the vapor barrier membrane to allow any soil vapors that would otherwise collect beneath the slab to migrate and vent to the atmosphere outside the building. Below-grade utility conduits entering the building will be sealed to prevent VOC

migration along the conduits from outside the building into the sub-slab space beneath the building. The passive VMS will be designed with the option for in-line mechanical blowers on the roof level in the event an active vacuum is needed to make the system perform effectively.

DRAFT

1.0 INTRODUCTION

On behalf of 7th & Campbell, LP (Client), Langan Engineering and Environmental Services, Inc. (Langan) has prepared this *Draft Corrective Action Plan (CAP)* for the proposed development at 1666 7th Street (site) in Oakland, California (Figure 1). The recent Phase II Environmental Site Assessment (ESA) completed by Langan in June 2020 indicated that a layer of undocumented fill material with elevated concentrations of lead and benzo(a)pyrene is present beneath the site. In addition, soil vapor analytical results from this Phase II ESA identified that select volatile organic compounds (VOCs) are present at elevated concentrations in soil vapor and may be the result of off-site historical land use operations. Concentrations of total lead and one semi-volatile organic compound (SVOC), benzo(a)pyrene, in soil, and several VOCs (benzene, methylene chloride, tetrachloroethene [PCE], and vinyl chloride) in soil vapor exceed the San Francisco Bay Regional Water Quality Control Board (RWQCB) Environmental Screening Levels (ESLs)² for residential land use. In addition, soluble concentrations of lead in soil exceed State of California hazardous waste thresholds, and if excavated, this material will need to be handled as a State of California Class I non-Resource Conservation and Recovery Act (RCRA) hazardous waste.

The objectives of this CAP are to summarize the extent of contamination and propose corrective action measures based on the future site use. This CAP presents the site background, a conceptual site model (CSM) including geologic and hydrogeologic conditions, site conditions including current extent of contamination, corrective action objectives, and proposed corrective action alternatives.

2.0 SITE AND PROJECT DESCRIPTION

The site is located at 1666 7th Street in Oakland, California within an area of mixed commercial and residential properties. The site is bordered by 7th Street to the south, Campbell Street to the east, one-story residential buildings to the north, and a two- to three-story mixed-use apartment building to the west of the site. The site is approximately 130 by 220 feet in plan dimensions and has the following Alameda County Assessor's Parcel Numbers (APNs): 006-0017-017, 006-0017-018, 006-0017-019, 006-0017-020, 006-0017-021, and 006-0017-022. The site is currently

² RWQCB ESLs: Soil Direct Exposure Human Health Risk Levels, Shallow Soil Exposure (Table S-1); Groundwater Maximum Contaminant Levels (MCLs), Direct Exposure Human Health Risk Levels (Table GW-1); Groundwater Vapor Intrusion Human Health Risk Levels (Table GW-3); Subslab/Soil Gas Vapor Intrusion: Human Health Risk Levels (Table SG-1); dated (REV. 2) 2019.

occupied by three modular buildings with a concrete pavement slab between the buildings, and the remainder of the site is being used as a community garden/urban farm.

It is our understanding that the site is currently owned by the City of Oakland and is proposed for development as mixed use, including affordable housing. The proposed development will consist of a mixed-use five-story at-grade structure (i.e. no basements are currently planned) with a building footprint of approximately 27,300 square feet. The mixed-use building is planned to consist of 79 residential units, areas designated for commercial use, and parking on the ground floor. A 15-foot offset from the northern property boundary will also accommodate an open space and raised-bed urban farming. Excavation depths are anticipated to range between three to eight feet below ground surface (bgs) to accommodate foundation installation, utility trenching, and other subsurface features (i.e. elevator pits, sand interceptors, grease interceptors, etc.).

3.0 ENVIRONMENTAL ASSESSMENTS AND REGULATORY ENGAGEMENT

The sections below provide a brief summary of the environmental assessments previously conducted at the site, and the current status of regulatory engagement with Alameda County Department of Environmental Health (ACDEH).

3.1 Phase I Environmental Site Assessments

Langan reviewed the following Phase I ESAs prepared by others for the site:

- *Phase I – Preliminary Environmental Site Assessment, Planned Redevelopment Project, 1600 – 1642 7th Street Between Peralta and Campbell Streets, 718 Campbell Street and 631 8th Street, Oakland, California* dated 5 January 1995 prepared by Geotechnical Engineering, Inc.;
- *Phase I Environmental Site Assessment, 1650-1676 7th Street and 711-715 Campbell Street, Oakland, California* dated 23 April 2003 prepared by ACC Environmental Consultants; and
- *Phase I Environmental Site Assessment, 1650-1676 7th Street and 711-715 Campbell Street, Oakland, California 94607* dated January 2019 prepared by SCA Environmental, Inc.

Based on the review of the environmental reports provided, the site has been primarily occupied by mixed-used buildings from 1889 until the 1970s, when the buildings were beginning to be removed. All but one building was removed in the early 2000s, with the last building reportedly removed between 2012 and 2014. Currently, three modular buildings are present in the southern portion of the site, and the remainder of the site consists of undeveloped land used for urban

farming. SCA Environmental Inc.'s 2019 Phase I ESA identified several recognized environmental conditions (RECs) in connection with the site, which included the following:

- The presence of various nearby properties adjacent to the site, under regulatory oversight, that have documented subsurface contamination that may affect the environmental conditions beneath the site;
- A former structure at the site was labeled "coal," which could indicate coal was burned and could contribute to subsurface contamination; and
- Various neighboring properties within close proximity to the site included historical automobile service stations or dry cleaning facilities. Although no contamination was confirmed at these historical sites, the possibility of contamination cannot be ruled out.

In addition and in coordination with ACDEH, Langan reviewed the site's available Sanborn Fire Insurance Maps (Sanborn Maps) from 1889 to 1970. The Sanborn Map evaluation indicated nearby upgradient off-site land use including, but not limited to, shoe polish manufacturing, volatile storage, iron works, and pharmaceutical manufacturing (as shown on Figure 3). These nearby historical land uses may have contaminated the subsurface near the site and could have contributed to the soil vapor concentrations identified during Langan's Phase II ESA described further below.

3.2 Phase II Environmental Site Assessment

Based on the RECs identified, Langan performed a Phase II ESA in June 2020 to evaluate the quality of the soil, soil vapor, and groundwater that may be encountered during redevelopment. The locations and depths of the soil borings were selected based on the proposed building footprint to provide lateral and vertical coverage (where accessible), to characterize soil that will most likely be excavated during construction. In addition, soil vapor and groundwater sampling and analytical testing were completed to evaluate potential vapor intrusion concerns beneath the site.

A total of eight exploratory borings (EB-1 through EB-8) were advanced to depths between eight and 15 feet bgs (Figure 2). In addition, two permanent groundwater monitoring wells (MW-1 and MW-2) and four temporary soil vapor probes (SV-1 through SV-4) were installed at the site. Boring logs and well construction details from the Phase II ESA are presented in Appendix A as Figures A-1 through A-8. The soil encountered was classified in accordance with the soil classification chart in Figure A-9 (Appendix A). In connection with the geotechnical investigation performed on-site, which was completed in conjunction with the Phase II ESA, environmental soil samples

were collected from exploratory borings B-1 and B-2 at depths of 1.5, 3.0 and 5.0 feet bgs for chemical analysis. Appendix A also includes the borings logs from the geotechnical investigation.

Laboratory analytical results were compared to RWQCB ESLs, and State and Federal hazardous waste thresholds for landfill disposal considerations. Where applicable, Langan compared analytical results to both the Cancer Risk and Non-Cancer Hazard ESLs to evaluate concentrations in soil, soil vapor, and groundwater. The laboratory analytical results are summarized in Tables 1 through 5, and the certified laboratory analytical reports and chain-of-custody records are included in Appendix B.

3.2.1 Soil Testing and Analytical Results

Soil samples collected during the Phase II ESA were analyzed for some or all of the following compounds listed below:

- Total petroleum hydrocarbons as gasoline (TPHg), total petroleum hydrocarbons as diesel (TPHd), and total petroleum hydrocarbons as motor oil (TPHmo) by EPA Method 8015M;
- VOCs by EPA Method 8260B;
- semi-volatile organic compounds (SVOCs) by EPA Method 8270C;
- asbestos by California Air Resource Board (CARB) 435 Method;
- organochlorine pesticides (OCPs) by EPA Method 8081A;
- polychlorinated biphenyls (PCBs) by EPA Method 8082;
- California Assessment Manual (CAM) 17 metals by EPA Method 6020;
- organophosphorous pesticides by EPA Method 8141A; and
- chlorinated herbicides by EPA Method 8151A.

A total of five soil samples (B-1-1.5, B-1-5, EB-3-1.5, EB-4-1.5, and EB-8-1.5) collected during the Phase II ESA exceeded the residential ESL for lead (80 milligrams per kilogram [mg/kg]) and STLC threshold (5 milligrams per liter [mg/L]), and (if excavated) material from these areas will require handling and disposal as State of California Class I non-RCRA hazardous waste during construction. In addition, one SVOC (benzo(a)pyrene), was detected above the cancer risk residential ESL (0.11 mg/kg) in two samples from B-1 (B-1-1.5 and B-1-5). No other constituents in soil analyzed during the Phase II ESA were detected above their respective ESLs in any of the soil samples analyzed. The boring locations and approximate depths exceeding hazardous waste thresholds are listed below:

- B-1: State of California Class I non-RCRA hazardous material from approximately 0 to 2.5 feet bgs and from 4 to 6 feet bgs.
- EB-3 and EB-4: State of California Class I non-RCRA hazardous material from approximately 0 to 2.5 feet bgs.
- EB-8: State of California Class I non-RCRA hazardous material from approximately 0 to 2.5 feet bgs.

Please note the B-1 area requires additional vertical delineation to understand the depth of soluble lead concentrations exceeding hazardous waste thresholds beneath the site. This area of the site is proposed for further exploration, which is included in the additional environmental subsurface investigation scope discussed in Section 4.3 below.

3.2.2 Groundwater Testing and Analytical Results

The groundwater samples collected during the Phase II ESA from the on-site monitoring wells were analyzed for the following:

- TPHg, TPHd, and TPHmo by EPA Method 8015M;
- VOCs by EPA Method 8260B;
- SVOCs by EPA Method 8270C;
- total CAM 17 metals by EPA Method E200.8; and
- dissolved CAM 17 metals by EPA Method E200.8.

Based on the groundwater analytical results collected to date, none of the organic compounds analyzed in groundwater exceed their applicable vapor intrusion residential ESLs, or the established U.S. Environmental Protection Agency Maximum Contaminant Levels (MCLs)/direct exposure ESLs. In addition, none of the total or dissolved metals analyzed in groundwater exceed their respective MCLs/direct exposure ESLs. As stated in the Phase II ESA report (Langan, 2020a), groundwater beneath the site is not a drinking water source.

3.2.3 Soil Vapor Testing and Analytical Results

The soil vapor samples collected during the Phase II ESA were analyzed for the following:

- VOCs by EPA Method TO-15;
- Helium by ASTM D-1946 (leak test compound); and
- Oxygen, Methane, and Carbon Dioxide by ASTM D-1946.

The following VOCs were detected in soil vapor exceeding their respective vapor intrusion ESLs:

- Benzene was detected in all five soil vapor samples collected at concentrations ranging from 4.86 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) to 146 $\mu\text{g}/\text{m}^3$, all of which exceed the residential ESL cancer risk vapor intrusion human health risk level of 3.2 $\mu\text{g}/\text{m}^3$.
- Methylene chloride was detected in soil vapor sample SV-3 at a concentration of 35.6 $\mu\text{g}/\text{m}^3$, which exceeds the residential ESL cancer risk vapor intrusion human health risk level of 34 $\mu\text{g}/\text{m}^3$.
- PCE was detected in all five soil vapor samples at concentrations ranging from 0.983 $\mu\text{g}/\text{m}^3$ to 44.9 $\mu\text{g}/\text{m}^3$. Concentrations of PCE in four soil vapor samples (SV-1, SV-2, SV-4, and DUP-1) exceed the residential ESL cancer risk vapor intrusion human health risk level of 15 $\mu\text{g}/\text{m}^3$.
- Vinyl chloride was detected in one soil vapor sample (SV-4) at a concentration of 0.427 $\mu\text{g}/\text{m}^3$, which exceeds the residential ESL cancer risk vapor intrusion human health risk level of 0.32 $\mu\text{g}/\text{m}^3$.

Figure 3 illustrates the location of soil vapor concentrations exceeding applicable ESLs. The remaining VOCs in soil vapor were below their respective ESLs. In addition to VOCs, methane was analyzed in all five samples collected, and only one sample (SV-4) detected methane above the laboratory reporting limit (10 parts per million [ppm]) at a concentration of 101 ppm. The lower explosive limit (LEL) for methane is 5 percent volume (%V) (or 50,000 ppm); therefore, the sample concentration detected is well below the LEL and does not require further evaluation.

3.3 Regulatory Engagement and Additional Environmental Assessments

Since the completion of the Phase II ESA, 7th & Campbell, LP (Client and Responsible Party) has entered into a Voluntary Remedial Action Agreement (VRAA) with ACDEH. During meetings with ACDEH over the course of October, November, and December 2020, ACDEH has requested that the project complete an additional environmental investigation to further evaluate soil, soil vapor, and groundwater conditions beneath the site. Therefore, Langan prepared the *Additional Environmental Investigation Work Plan* dated 9 December 2020, (Langan, 2020b) which was approved by ACDEH in their letter dated 10 December 2020. The additional environmental investigation is discussed in Section 4.3 below.

4.0 CONCEPTUAL SITE MODEL

This CSM describes the geology, depth to groundwater and groundwater flow direction, current known extent of contamination in soil, groundwater, and soil vapor beneath the site, contaminants of concern, potential receptors, potential contaminant migration, and exposure pathways.

4.1 Geology and Hydrogeology

The site lithology and groundwater conditions are summarized below and idealized cross-sections are illustrated on Figures 4 and 5. Figure 2 illustrates the locations of the cross-sections relative to the exploratory borings completed on-site.

4.1.1 Geology

The results of previous subsurface investigations indicate that the site is generally underlain by shallow undocumented fill ranging up to seven feet thick. The fill is predominately composed of sand with varying amounts of clay, silt, gravel, brick fragments and organics. At the locations explored, the fill is loose and does not appear to have been compacted during its placement.

Native silty/clayey sand (locally referred to as Merritt Sand) underlines the fill. In general, the Merritt Sand is medium dense at the surface of the unit and generally increases in relative density with depth; becoming dense at a depth of 10 to 15 feet beneath the existing ground surface. However, within the Merritt Sand, we encountered a 3- to 5-foot-thick layer that is loose to medium dense across the site at depths ranging from about 20 to 25 feet bgs. The Merritt Sand encountered beneath this loose to medium dense zone is dense to very dense. Merritt sand extends to the maximum depth explored. Based on available geologic maps and our understanding of the site vicinity, we conclude the Merritt Sand is underlain by interbedded stiff to hard clays and dense sand of the Alameda formation, which extends to bedrock. Bedrock is likely on the order of 250 feet bgs. Environmental and geotechnical boring logs prepared by Langan are provided in Appendix A and idealized subsurface profiles are presented in Figures 4 and 5. Figure 6 depicts the approximate thickness of fill material across the site.

4.1.2 Hydrogeology

Unstabilized groundwater levels were observed during drilling at depths ranging from approximately seven to 11 feet bgs. Stabilized groundwater levels observed in the on-site groundwater monitoring wells, approximately five days after installation, ranged from eight to nine feet bgs. We anticipate that the groundwater flow direction is to the southwest toward the

San Francisco Bay, and that groundwater may be encountered at various depths throughout the year influenced by seasonal variations in rainfall. Based on the anticipated excavation depths, there is a potential that groundwater will be encountered during excavation of the deeper subsurface installations (i.e. elevator pit).

4.2 Current Extent of Contamination

The objective of this section is to identify the extent of contaminants likely to be in soil, soil vapor, and groundwater based on the existing analytical data. For comparison purposes, soil, soil vapor, and groundwater analytical results were compared to the 2019 RWQCB residential ESLs. Tables 1 through 5 provide a summary of analytical results for soil, soil vapor, and groundwater from the Phase II ESA completed in June 2020.

4.2.1 Soil

Based on the results of the Phase II ESA (Tables 1 and 2), concentrations of total and soluble lead in soil are the primary contaminants of concern. Lead exceeding the residential ESL was detected in samples collected at depths of 1.5 feet and 5 feet bgs. Two soil samples collected at one boring location (B-1) in the northwest corner of the site detected elevated benzo(a)pyrene at concentrations exceeding the residential ESL at 1.5 feet and 5 feet bgs. Exceedances of the residential ESL for lead were also detected in these samples. Based on the borings advanced to date and idealized cross sections, the fill is thickest in this northwest corner of the site where B-1 was located. Exceedances of the residential ESL for lead were in shallow soils collected within the undocumented fill layer. Native material, where analyzed, did not contain elevated soil concentrations for heavy metals or organic compounds.

In addition to the residential ESL exceedances, soluble lead was also detected exceeding the STLC State of California hazardous waste threshold at boring locations B-1, EB-3, EB-4, and EB-8. Residential ESL exceedances for total lead occurred at the sample locations where soluble lead exceeded State of California hazardous waste thresholds. Figure 7 (prepared using the available data) illustrates the extent of soil concentrations exceeding the State of California hazardous waste threshold for soluble lead.

4.2.2 Groundwater

Groundwater was observed at approximately eight feet bgs at the site. None of the constituents detected in groundwater exceeded their respective MCL/direct exposure ESLs or their applicable vapor intrusion residential ESLs. Based on the Phase II ESA results (Tables 3 and 4), groundwater is not a documented source of contamination at the site.

4.2.3 Soil Vapor

Soil vapor analytical results from the Phase II ESA (Table 5) detected concentrations of benzene, methylene chloride, PCE, and vinyl chloride exceeding their respective residential vapor intrusion ESLs. The VOCs present in soil vapor pose a potential vapor intrusion concern for the future redevelopment project. These VOCs were not detected in soil, with the exception of one low level concentration of PCE in soil sample EB-6-1.5. In addition, these VOCs were not detected in groundwater. Based on the absence of these VOCs in groundwater and the neighboring site history (shoe polish manufacturing, volatile storage, iron works, and pharmaceutical manufacturing), the elevated soil vapor concentrations beneath the site may be associated with an off-site source.

4.3 Additional Environmental Investigation

As discussed in Section 3.3, an additional environmental investigation is currently planned to further evaluate soil, soil vapor, and groundwater conditions beneath the site. A total of 12 additional soil borings will be advanced, five permanent soil vapor probes will be installed, and three temporary groundwater monitoring sampling locations will be installed across the site. The proposed sampling locations are illustrated on Figures 2 and 3. The additional sampling and analysis plans for soil, groundwater, and soil vapor is provided in Tables 6 through 8, respectively. The *Additional Environmental Investigation Work Plan* dated 9 December 2020 (Langan, 2020b) was approved by ACDEH in their letter dated 10 December 2020, and is scheduled to begin on 17 December 2020 and conclude on 21 December 2020. Per ACDEH's 10 December 2020 Directive Letter, Langan will prepare draft tables and figures summarizing the investigation results for ACDEH's review and approval. The additional environmental investigation findings will be included in the Remedial Action Implementation Plan (RAIP), which will be prepared and submitted to ACDEH prior to the start of construction.

4.4 Potential Receptors and Exposure Pathways

The site is located in an area of mixed commercial and residential use. The proposed development at the site will consist of a mixed-use building with residential units, areas designated for commercial use, parking on the ground floor, and a raised-bed urban farming area. Future site users are anticipated to include residents, site visitors, commercial employees, and construction workers. Due to concentrations of lead and SVOCs detected in soil, and VOCs detected in soil vapor, potential exposure pathways to future site users include:

- Construction workers: direct contact with soil during construction;

- Construction workers: inhalation of vapors from soil vapor during construction;
- Construction workers and off-site public: inhalation of potential fugitive dust during construction;
- Construction workers and off-site public: direct contact with stormwater runoff during construction rain events;
- Site visitors, workers, and residents: direct contact and dust inhalation from soil in urban farming areas; and
- Site visitors, workers and residents: inhalation of vapors in indoor air due to vapor intrusion of contaminants in the underlying soil vapor.

The RWQCB's Water Quality Control Plan for the San Francisco Bay Basin Plan (Basin Plan) designates groundwater in the site vicinity as having beneficial uses which include domestic and municipal supply. However, the East Bay Municipal Utility District (EBMUD) provides inhabitants of this area with potable drinking water and groundwater beneath the site is not a current drinking water source. The site lies within the Santa Clara Valley East Bay Plain groundwater sub-basin of the Santa Clara Valley groundwater basin (Figure 2-10 of Basin Plan) (RWQCB, 2019b). In addition to domestic and municipal water supply, the existing and potential beneficial uses for groundwater include industrial process, industrial service, and agricultural water supply (Table 2-2 of Basin Plan). Based on the Phase II ESA, groundwater does not exceed MCLs/direct exposure ESLs, or applicable vapor intrusion ESLs. Therefore, based on the current use of the groundwater beneath the site, potential exposure pathways regarding contaminated groundwater do not exist.

5.0 CORRECTIVE ACTION OBJECTIVES

The objective of the corrective actions is to be protective of human health and the environment during and after redevelopment.

5.1 Corrective Action Objectives for Soil

Lead and, to a lesser extent, benzo(a)pyrene, have been detected at elevated concentrations in the shallow fill material beneath the site (upper five feet bgs). The resulting corrective action objectives for soil include:

- Managing contaminated soil during construction in accordance with applicable Local, State, and Federal requirements; and

- A combination of soil removal and off-site disposal, and encapsulation of residual contamination beneath the building foundation and/or the installation of an imported soil cover with demarcation layer.

Contaminated soil encountered during construction (structural excavation and utility trenching) will be removed via standard excavation equipment and disposed of off-site at regulated landfills. The material to be encountered during redevelopment includes concentrations of contaminants that exceed residential ESLs and hazardous waste thresholds. The redevelopment project does not anticipate removing the entirety of the contaminated fill beneath the site. Therefore, residual soil contamination that is left in place, will be capped beneath an engineered cover (i.e. building foundation or imported soil with demarcation layer). The partial removal of contaminated soil will significantly reduce concentrations of contaminants beneath the site, while the subsequent capping will be protective of future site users by eliminating the direct exposure pathway. In addition, the urban farming area will be remediated to remove soil contamination to the extent necessary to eliminate direct exposure pathways related to future on-site farming activities. The redevelopment project also plans to construct clean utility corridors by removing contaminated soil during utility trenching, and plans to backfill utility corridors with acceptable imported material. Imported material will be evaluated based on ACDEH's *Soil Import/Export Characterization Requirements* dated 9 August 2019 (ACDEH, 2019b). This will allow utility workers to complete anticipated repairs and improvements without encountering contamination.

Prior to soil removal, appropriate mitigative controls to minimize potential soil exposure pathways will be established in a Soil and Groundwater Management Plan (SGMP) that will be implemented during construction. The residual soil contamination, encapsulated beneath the site, will be managed by developing a Risk Management Plan (RMP) that requires proper maintenance of the engineered cap, and best management practices (BMPs) in the event the engineered cap is or must be breached.

5.2 Corrective Action Objectives for Groundwater

Based on the Phase II ESA results, it is unlikely that groundwater will require corrective action. In the event construction dewatering and groundwater discharge is required during construction, a permit from EBMUD will be obtained to facilitate proper groundwater discharge. Based on the available data, it is unlikely that the groundwater would require pre-treatment prior to EBMUD disposal (excluding a settling tank for suspended solids). However, EBMUD determines final acceptance of the groundwater into the sanitary sewer system according to the guidelines established in the EBMUD Special Discharge Permit Standard Terms and Conditions updated

March 2017. During construction, dewatered groundwater should not be discharged to the sanitary sewer or storm drain without proper permit (EMBUD or National Pollution Discharge Elimination System [NPDES], respectively). If an NPDES permit is pursued for discharge to the storm drain, coordination with ACDEH and the RWQCB would be necessary and pre-treatment would most likely be required prior to groundwater disposal.

5.3 Corrective Action Objectives for Soil Vapor

The corrective action objective for soil vapor is to mitigate potential risk of vapor intrusion into indoor air related to VOCs detected at elevated concentrations in soil vapor. This will be completed by the installation of passive VMS beneath the building slab and performance monitoring upon completion of the project. Performance monitoring will be necessary to confirm that the passive VMS is operating as designed and sufficiently mitigating against vapor intrusion into the indoor air space. If performance monitoring detects elevated concentrations of VOCs beneath the building slab during passive operation, the VMS will be turned active to facilitate the removal of the VOCs from the subsurface. The passive VMS will include active design elements as contingency capabilities (i.e. in-line blowers on the roof level). The VMS drawings and details will be included in a Basis of Design (BOD) submitted to ACDEH for review and approval. The VMS BOD will be prepared in accordance with ACDEH's *BOD Checklist for Vapor Intrusion Mitigation Systems - Working Draft* dated 27 November 2019 (ACDEH, 2019a). Upon completion of the project, a Vapor Mitigation Engineering Control (VMEC) Operation and Maintenance (O&M) Manual will be prepared detailing the requirements for long-term maintenance, operation, and annual inspection of the VMS.

6.0 CORRECTIVE ACTIONS

The selected corrective actions presented below are based on the proposed redevelopment and future land use at the site.

6.1 Corrective Action for Soil

A formal evaluation of potential remedial alternatives was not performed to address contamination identified in soil because the appropriate technology was apparent based on proposed redevelopment plan. The current redevelopment plan includes excavation of soil during construction (structural excavation and utility trenching), and subsequent encapsulation of residual soil beneath the building slab and/or imported soil (i.e. cap). It is anticipated that the partial excavation and off-site disposal of contaminated soil during construction will significantly reduce concentrations of contaminants beneath the site.

The corrective action for contaminated soil is to remove the material via standard excavation equipment, and dispose of the contaminated soil off-site at regulated landfills. If necessary during construction, contaminated soil will be appropriately stockpiled (on plastic and covered with weighed-down plastic sheeting) for either placement underneath the cap or to be exported off-site at a later date. The material to be encountered during redevelopment contains concentrations of contaminants that exceed residential ESLs and/or hazardous waste thresholds. Therefore, excavated contaminated soil designated for off-site disposal will be segregated based on analytical testing to properly characterize the material as hazardous or non-hazardous for landfill acceptance. Langan will prepare a RAIP for ACDEH review and approval detailing the proposed soil remediation and encapsulation approach. The RAIP will also include the results from the additional environmental investigation as described in Section 4.3 above.

The construction related excavation activities will also remove contaminated soil from utility corridors, and the project will import and backfill with acceptable material. Imported material will be evaluated based on ACDEH's *Soil Import/Export Characterization Requirements* (ACDEH, 2019b). The imported material will be appropriately characterized and the analytical testing results will be submitted to ACDEH for review and approval prior to the material arriving on-site. The removal of contaminated soil from utility corridors will eliminate the direct exposure pathway for utility workers who are anticipated to make route repairs and complete site improvements after redevelopment is completed. In addition, the contaminated soil in the proposed urban farming area will be excavated to a minimum depth of two feet bgs. At the bottom of the excavation in the urban farming area, a demarcation layer will be installed to separate underlying contaminated soil from the overlying imported soil. It is important to note that the proposed urban farming will utilize raised beds and does not anticipate using material below grade during cultivation. The removal of contaminated soil to a minimum depth of two feet bgs and installation of a demarcation layer will also be adopted in landscaping areas included in the redevelopment plan. The remaining residual soil contamination that is not removed during construction will be encapsulated beneath the site. The capping of the residual contamination will be protective of future site users by eliminating the direct exposure pathway.

Prior to the start of construction, Langan will prepare a SGMP for ACDEH review and approval. The SGMP will outline measures to minimize potential exposure scenarios to construction workers, site users, and the public during redevelopment caused by the presence of soil concentrations exceeding residential ESLs and hazardous waste thresholds. In addition, the SMP will establish appropriate mitigation measure to be implemented by the general contractor and their subcontractors during construction to properly handle, manage, segregate, and dispose of

contaminated material. The SGMP will also contain contingency procedures to be implemented during construction activities if unanticipated subsurface conditions or other contamination is encountered (i.e. underground storage tanks [USTs], petroleum odors, etc.).

In addition to the SGMP, Langan will prepare a DMP, which will include procedures to mitigate fugitive dust from soil disturbing activities to manage potential risk of exposure to construction workers and off-site receptors during redevelopment. This will include recommended dust suppression measures to be implemented by the contractor, which will be monitored at the site boundary using proper dust monitoring equipment. Based on the perimeter air monitoring results, visual observations of fugitive dust, and/or complaints of excessive dust generation by off-site parties, additional dust suppression measures may need to be implemented. Dust suppression measures could include, but are not limited to, wetting down soil, covering stockpiles, monitoring wind speeds and terminating earthwork when wind speeds exceed an average sustained speed of 25 miles per hour, or wet sweeping or vacuuming paved areas.

Due to the presence of contamination at the site, a site specific Health and Safety Plan (HASP) will also be implemented prior to redevelopment activities. The HASP will outline health and safety requirements to minimize worker and public exposure to hazardous substances during construction. The HASP should be prepared by a certified industrial hygienist (CIH) on behalf of the general contractor. The HASP will describe health and safety training requirements (i.e. trained in accordance with Section 1910.120 of 29 Code of Federal Regulations [HAZWOPER training]), specific personal hygiene, and monitoring equipment that will be used during construction. A Stormwater Pollution Prevention Plan (SWPPP) will also be developed for the project. The SWPPP will describe the general contractor's implementation procedures to prevent stormwater contamination, control sedimentation and erosion, and comply with the requirements of the Clean Water Act (CWA).

Upon substantial completion of the redevelopment project, Langan will prepare a construction completion report detailing the proper implementation of the CAP and RAIP for ACDEH review and approval. The residual soil contamination left in place beneath the site will be managed by developing a comprehensive RMP. The RMP will identify areas of residual contamination, require proper maintenance of the engineered cap, and include best management practices (BMPs) to be implemented in the event the engineered cap is breached. In addition, a Land Use Covenant (LUC) will be recorded with the Alameda County's Assessor's Office to protect the public from unsafe exposure to hazardous substances remaining in place at the property.

6.2 Corrective Action for Soil Vapor

A formal evaluation of potential remedial alternatives was not performed to address contamination in soil vapor because the appropriate technology was apparent based on the proposed redevelopment plan. The following measures will be implemented to address potential vapor intrusion to indoor air due to soil vapor contamination that will be encountered during redevelopment:

- Due to elevated concentrations of contaminants in soil vapor, a passive VMS will be installed beneath the proposed building.
- The passive VMS will consist of a continuous, spray-applied vapor barrier membrane located immediately beneath the structural building slab combined with a horizontal collection and venting system installed below the vapor barrier membrane to allow any soil vapors that would otherwise collect beneath the slab to migrate and vent to the atmosphere outside the building.
- Below-grade utility conduits entering the building will be sealed to prevent VOC migration along the conduits from outside the building into the sub-slab space beneath the building.
- In the event it is necessary, the passive VMS will be designed with the capability to operate as an active system (i.e. in-line blowers on the roof level) to provide mechanical assistance with the proper mitigation of soil vapor beneath the site.
- The design of the passive VMS will be performed by a professional engineer (PE) registered in the State of California and in accordance with ACDEH's *BOD Checklist for Vapor Intrusion Mitigation Systems - Working Draft* (ACDEH, 2019a). The VMS BOD will be submitted to ACDEH for review and approval prior to installation.
- Langan will observe and document the proper installation of the VMS at the site under the supervision of the PE.
- A completion report will be prepared documenting the proper installation of the VMS and include updated record drawings as needed.
- A VMEC O&M Manual will also be prepared for the long-term operation and maintenance of the VMS.
- Upon substantial completion of the project, performance monitoring will be performed to evaluate the effectiveness of the VMS and to determine if any modifications are necessary.

7.0 CONCLUSIONS

This CAP was prepared for the proposed redevelopment at 1666 7th Street in Oakland, California. Recent environmental investigations indicate that soil is contaminated with elevated concentrations of lead and one SVOC (beno(a)pyrene) in soil, and VOCs in soil vapor. The objectives of this CAP are to identify potential remedial alternatives, based on existing site conditions and planned future use, and propose corrective action measures. The corrective action objectives for the site are to

1. Reduce the lead and benzo(a)pyrene contamination in soil through excavation during construction;
2. Encapsulate the residual soil contamination that is not removed during construction, which will be managed by a RMP and LUC;
3. Reduce potential risk of construction worker and public exposure by maintaining proper soil and groundwater management and adequate dust control throughout construction;
4. The construction of clean utility corridors for future repairs and building improvements;
5. The removal of contaminated soil to a minimum of two feet bgs in the area proposed for urban farming, and backfilling with appropriate imported soil (with demarcation layer) to protect exposure to soil contamination during future farming activities; and
6. To install a passive VMS to mitigate potential risk of vapor intrusion into indoor air related to VOCs in soil vapor.

Excavation depths are anticipated to range between three to eight feet bgs for site redevelopment. The corrective action for soil is to excavate and dispose of soil encountered during redevelopment and to minimize dust during construction. The excavated soil will also be segregated for disposal based on hazardous waste thresholds and landfill acceptance. Remaining contaminated soil, not removed during construction, will be capped in place to limit exposure.

Based on recent depth to groundwater measurements (eight feet bgs), it is anticipated that groundwater dewatering may be necessary during deeper excavations (i.e. elevator pit). Although there is not specific corrective action for groundwater as groundwater contamination does not exist based on available data, extracted groundwater should be managed in accordance with applicable Local, State, and Federal requirements. If dewatered groundwater discharge and disposal via the sanitary sewer is necessary, it is not anticipated to require treatment; however, discharge will require an approved permit with EBMUD.

Due to elevated concentrations of VOCs in soil vapor, the soil vapor corrective action is the installation of a passive VMS which will be installed directly underneath the proposed building slab. The passive VMS will be designed with active capabilities including in-line blowers on the roof level.

8.0 PROPOSED SCHEDULE AND NEXT STEPS

The following schedule for remedial planning and design, pre-design investigations, and corrective action implementation is included in Appendix C. Below is a summary of the proposed schedule:

- Additional Environmental Investigation: December 2020
- CAP Submittal: December 2020
- Fact Sheet and Public Comment Period: January 2021
 - Preparation of Fact Sheet based on the CAP
- RAIP Submittal: February 2021
 - RAIP will provide updates based on the findings from the additional environmental investigation completed in December 2020.
- VMS BOD Submittal: March 2021
- Corrective Action Implementation: September 2021 to February 2022
- Excavation and Site Development: September 2021 to August 2023
- Construction Completion Reporting: April 2022
 - Summary of VMS installation and soil remediation.
- RMP, VMEC O&M Manual, and LUC Submittal: June 2022
- VMS Performance Monitoring: October 2023 through October 2024

REFERENCES

ACDEH, 2019a. *Basis of Design (BOD) Checklist for Vapor Intrusion Mitigation Systems – Working Draft*. 27 November.

ACDEH, 2019b. *Soil Import/Export Characterization Requirements*. 9 August.

ACC Environmental Consultants, 2003. *Phase I Environmental Site Assessment, 1650-1676 7th Street and 711-715 Campbell Street, Oakland, California*. 23 April.

EBMUD, 2017. *Special Discharge Permit Standard Terms and Conditions*. Updated March.

Geotechnical Engineering, Inc., 1995. *Phase I – Preliminary Environmental Site Assessment, Planned Redevelopment Project, 1600 – 1642 7th Street Between Peralta and Campbell Streets, 718 Campbell Street and 631 8th Street, Oakland, California*. 5 January.

Langan Engineering and Environmental Services, Inc., 2020a. *Phase II Environmental Site Assessment, 1666 7th Street, Oakland, California*. 24 August.

Langan Engineering and Environmental Services, Inc., 2020b. *Additional Environmental Investigation Work Plan, 1666 7th Street, Oakland, California*. 10 December.

San Francisco Bay Regional Water Quality Control Board (RWQCB), 2019a. *Environmental Screening Levels*. February.

San Francisco Bay Regional Water Quality Control Board (RWQCB), 2019b. San Francisco Bay (Region 2) Water Quality Control Plan (Basin Plan). 5 November.

SCA Environmental, Inc., 2019. *Phase I Environmental Site Assessment, 1650-1676 7th Street and 711-715 Campbell Street, Oakland, California 94607*. January.

DRAFT

TABLES

Table 1
Soil Analytical Results - Non-Metals
1666 7th Street
Oakland, California

Petroleum Hydrocarbons			OCPs								PCBs		Organo-phosphorous Pesticides	Chlorinated Herbicides	Asbestos (CARB 435)
Gasoline Range TPH(g) (C6-C12)	Diesel Range Organics TPH(d) (C10-C23)	TPH-Motor Oil TPH(mo) (C18-C36)	4,4'-DDD	4,4'-DDE	4,4'-DDT	Alpha Chlordane	Chlordane (Technical)	Dieldrin	Gamma-Chlordane	All Other OCPs	Aroclor 1254	Total PCBs			
(mg/kg)															%
31	5.9	250	< 0.0001	0.00057	0.00090	0.00015 P	< 0.0025	< 0.0001	0.00024	ND	0.0095 A	0.0095	ND	ND	ND
2.5	< 1.0	14	< 0.0001	0.00015 P	0.00072	< 0.0001	< 0.0025	< 0.0001	0.00016	ND	0.0058 A	0.0058	ND	ND	ND
3.9	1.6	43	< 0.002	< 0.002	0.010	< 0.002	< 0.0025	< 0.002	< 0.002	ND	< 0.1	ND	ND	ND	ND
< 1.0	6.4	92	0.00023	0.0018	0.0086	0.00057	< 0.0025	0.00053	0.00061	ND	< 0.005	ND	ND	ND	ND
< 1.0	< 1.0	< 5.0	< 0.0001	0.00042	0.00080	< 0.0001	< 0.0025	< 0.0001	< 0.0001	ND	< 0.005	ND	ND	ND	ND
< 1.0	< 1.0	< 5.0	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0025	< 0.0001	< 0.0001	ND	< 0.005	ND	ND	ND	ND
< 1.0	< 1.0	< 5.0	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0025	< 0.0001	< 0.0001	ND	< 0.005	ND	ND	ND	ND
< 1.0	< 1.0	6.7	< 0.0001	< 0.0001	0.00033 P	< 0.0001	< 0.0025	< 0.0001	< 0.0001	ND	< 0.005	ND	ND	ND	ND
< 1.0	1.5	< 5.0	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0025	< 0.0001	< 0.0001	ND	< 0.005	ND	ND	ND	ND
< 1.0	< 1.0	< 5.0	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0025	< 0.0001	< 0.0001	ND	< 0.005	ND	ND	ND	ND
< 1.0	21	300	0.0020	0.049	0.032	0.0014	0.013	< 0.0001	0.0018	ND	< 0.005	ND	ND	ND	ND
< 1.0	< 1.0	5.2	< 0.0001	0.00015	< 0.0001	< 0.0001	< 0.0025	< 0.0001	< 0.0001	ND	< 0.005	ND	ND	ND	ND
< 1.0	< 1.0	< 5.0	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0025	< 0.0001	< 0.0001	ND	< 0.005	ND	ND	ND	ND
< 1.0	1.6	38	0.00025	0.0024	0.0086	0.00024 P	< 0.005	0.00024	0.00022	ND	< 0.01	ND	ND	ND	ND
< 1.0	1.2	15	< 0.0001	< 0.0001	0.0020 P	< 0.001	< 0.025	< 0.001	< 0.001	ND	< 0.05	ND	ND	ND	ND
< 1.0	< 1.0	< 5.0	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0025	< 0.0001	< 0.0001	ND	< 0.005	ND	ND	ND	ND
< 1.0	< 1.0	< 5.0	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0025	< 0.0001	< 0.0001	ND	< 0.005	ND	ND	ND	ND
< 1.0	< 1.0	< 5.0	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0025	< 0.0001	< 0.0001	ND	< 0.005	ND	ND	ND	ND
< 1.0	< 1.0	< 5.0	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0025	< 0.0001	< 0.0001	ND	< 0.005	ND	ND	ND	ND
< 1.0	< 1.0	< 5.0	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0025	< 0.0001	< 0.0001	ND	< 0.005	ND	ND	ND	ND
< 1.0	< 1.0	< 5.0	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0025	< 0.0001	< 0.0001	ND	< 0.005	ND	ND	ND	ND
< 1.0	< 1.0	< 5.0	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0025	< 0.0001	< 0.0001	ND	< 0.005	ND	ND	ND	ND
< 1.0	< 1.0	< 5.0	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0025	< 0.0001	< 0.0001	ND	< 0.005	ND	ND	ND	ND
< 1.0	1.5	21	< 0.0005	0.00074	0.0029	< 0.0005	< 0.012	0.0005	< 0.00055	ND	< 0.025	ND	ND	ND	ND
< 1.0	< 1.0	< 5.0	< 0.0001	< 0.0001	0.00038	< 0.0001	< 0.0025	< 0.0001	< 0.0001	ND	< 0.005	ND	ND	ND	ND
Screening Criteria															
-	-	-	2.7	1.8	1.9	-	0.48	0.037	-	Various	-	0.23	Various	Various	-
430	260	12,000	-	-	37	-	36	3.5	-	Various	-	-	Various	Various	-
-	-	-	12	8.3	8.5	-	2.2	0.16	-	Various	-	0.94	Various	Various	-
2,000	1,200	180,000	-	-	-	-	500	48	-	Various	-	-	Various	Various	-

Notes:

- TPHg - Total Petroleum Hydrocarbons as Gasoline, EPA Method 8015M
- TPHd - Total Petroleum Hydrocarbons as Diesel, EPA Method 8015M
- TPHmo - Total Petroleum Hydrocarbons as Motor Oil, EPA Method 8015M
- VOCs - Volatile Organic Compounds, EPA Method 8260B
- SVOCs - Semi-volatile Organic Compounds, EPA Method 8270C
- PCBs - Polychlorinated Biphenyls, EPA Method 8082
- OCPs - Organochlorine Pesticides, EPA Method 8081A
- Organophosphorous Pesticides, EPA Method 8141A
- Chlorinated Herbicides, EPA Method 8151A
- Asbestos by California Air Resource Board (CARB) 435 Method
- DDD - dichlorodiphenyldichloroethane
- DDE - dichlorodiphenyldichloroethylene
- DDT - Dichlorodiphenyltrichloroethane
- PCE - Tetrachloroethene
- mg/kg - milligrams per kilograms

< 0.0001 - Analyte was not detected at or above the laboratory reporting limit

¹ - Residential Environmental Screening Levels (ESLs), San Francisco Bay Regional Water Quality Control Board (RWQCB), Direct Exposure Human Health Risk Screening Levels, Shallow Soil Exposure (Table S-1) 2019

² - Commercial/Industrial Environmental Screening Levels (ESLs), San Francisco Bay Regional Water Quality Control Board (RWQCB), Direct Exposure Human Health Risk Screening Levels, Shallow Soil Exposure (Table S-1) 2019

A - The reported value is determined using a "single point" calibration by gas chromatography with electron capture detector as allowed by the method.

B - Analyte detected in the associated Method Blank and in the sample

P - Agreement between quantitative confirmation results exceed method recommended limits

- Criteria not established

0.2 - sample concentration exceeds residential ESL

Table 2
Soil Analytical Results - Metals
1666 7th Street
Oakland, California

Sample ID	Sample Depth	Date Sampled	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	STLC Chromium	Cobalt	Copper	Lead	STLC Lead	TCLP Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	
			(mg/kg)					(mg/L)	(mg/kg)			(mg/L)		(mg/kg)									
B-1-1.5	1.5	5/29/2020	0.74	4.2	160	< 0.5	1.1 B	34	--	4.1	21	150	11	< 0.1	0.43	< 0.5	21	< 0.5	< 0.5	< 0.5	< 0.5	26	180
B-1-3	3	5/29/2020	< 0.5	2.6	76	< 0.5	0.53 B	40	--	4	9.7	49	--	--	< 0.05	< 0.5	22	< 0.5	< 0.5	< 0.5	< 0.5	28	75
B-1-5	5	5/29/2020	< 0.5	2.6	87	< 0.5	0.65 B	34	--	3.4	12	85	6.2	0.1	0.059	< 0.5	19	< 0.5	< 0.5	< 0.5	< 0.5	25	110
B-2-1.5	1.5	5/29/2020	< 0.5	2.4	77	< 0.5	0.44 B	38	--	4.1	12	77	3.0	--	0.13	< 0.5	23	< 0.5	< 0.5	< 0.5	< 0.5	27	120
B-2-3	3	5/29/2020	< 0.5	2.2	53	< 0.5	< 0.25	44	--	3.7	7.3	8.9	--	--	< 0.05	< 0.5	24	< 0.5	< 0.5	< 0.5	< 0.5	29	28
EB-1-1.5	1.5	6/10/2020	< 0.5	2.3	80	< 0.5	< 0.5	39	--	3.0	9.1	45	--	--	0.060	< 0.5	20	< 0.5	< 0.5	< 0.5	< 0.5	28	26
EB-1-3.0	3.0	6/10/2020	< 0.5	1.6	48	< 0.5	< 0.5	32	--	3.2	5.0	3	--	--	< 0.05	< 0.5	15	< 0.5	< 0.5	< 0.5	< 0.5	21	17
EB-2-1.5	1.5	6/11/2020	< 0.5	2.6	73	< 0.5	< 0.5	36	--	4.0	9.0	44	--	--	0.075	< 0.5	21	< 0.5	< 0.5	< 0.5	< 0.5	26	62
EB-2-3.0	3.0	6/11/2020	< 0.5	2.0	54	< 0.5	< 0.5	40	--	3.6	6.3	2.4	--	--	< 0.05	< 0.5	23	< 0.5	< 0.5	< 0.5	< 0.5	27	18
EB-2-7.0	7.0	6/11/2020	< 0.5	3.3	54	< 0.5	< 0.5	42	--	4.6	7.5	3.1	--	--	< 0.05	< 0.5	34	< 0.5	< 0.5	< 0.5	< 0.5	35	23
EB-3-1.5	1.5	6/11/2020	1.2	5.6	210	< 0.5	2.2 B	45	--	6.7	27	390	160	0.69	1.3	< 0.5	35	< 0.5	< 0.5	< 0.5	< 0.5	34	270
EB-3-3.0	3.0	6/11/2020	< 0.5	3.1	59	< 0.5	< 0.5	59	< 0.10	8.2	7.9	3.5	--	--	< 0.05	< 0.5	44	< 0.5	< 0.5	< 0.5	< 0.5	40	33
EB-3-7.0	7.0	6/11/2020	< 0.5	3.2	74	< 0.5	< 0.5	44	--	6.2	8.8	3.2	--	--	< 0.05	< 0.5	41	< 0.5	< 0.5	< 0.5	< 0.5	33	25
EB-4-1.5	1.5	6/11/2020	1.3	5.9	240	< 0.5	1.2 B	41	--	7.5	45	370	8.4	0.1	0.29	0.54	30	< 0.5	< 0.5	< 0.5	< 0.5	31	300
EB-4-3.0	3.0	6/11/2020	0.59	2.2	71	< 0.5	< 0.5	34	--	5.4	9.0	51	3.6	--	0.064	< 0.5	20	< 0.5	< 0.5	< 0.5	< 0.5	26	82
EB-4-5.0	5.0	6/11/2020	< 0.5	2.8	68	< 0.5	< 0.5	40	--	12	7.6	7.2	--	--	< 0.05	< 0.5	33	< 0.5	< 0.5	< 0.5	< 0.5	33	57
EB-5-1.5	1.5	6/11/2020	< 0.5	2.4	91	< 0.5	< 0.5	38	--	4.1	9.8	27	--	--	0.14	< 0.5	20	< 0.5	< 0.5	< 0.5	< 0.5	26	29
EB-5-3.0	3.0	6/11/2020	< 0.5	2.2	66	< 0.5	< 0.5	40	--	4.5	6.7	2.5	--	--	< 0.05	< 0.5	22	< 0.5	< 0.5	< 0.5	< 0.5	28	19
EB-6-1.5	1.5	6/10/2020	< 0.5	1.9	68	< 0.5	< 0.5	34	--	5.2	6.9	3.5	--	--	< 0.05	< 0.5	23	< 0.5	< 0.5	< 0.5	< 0.5	24	76
EB-6-3.0	3.0	6/10/2020	< 0.5	1.8	62	< 0.5	< 0.5	31	--	3.4	5.8	2.2	--	--	< 0.05	< 0.5	19	< 0.5	< 0.5	< 0.5	< 0.5	24	27
EB-6-5.0	5.0	6/10/2020	< 0.5	2.4	46	< 0.5	< 0.5	38	--	6.0	5.9	2.8	--	--	0.069	< 0.5	26	< 0.5	< 0.5	< 0.5	< 0.5	28	18
EB-7-1.5	1.5	6/11/2020	< 0.5	2.4	55	< 0.5	< 0.5	38	--	4.2	7.2	6.3	--	--	< 0.05	< 0.5	21	< 0.5	< 0.5	< 0.5	< 0.5	27	25
EB-7-3.0	3.0	6/11/2020	< 0.5	2.5	50	< 0.5	< 0.5	42	--	3.6	7.1	2.9	--	--	< 0.05	< 0.5	23	< 0.5	< 0.5	< 0.5	< 0.5	32	20
EB-7-5.0	5.0	6/11/2020	< 0.5	4.1	53	< 0.5	< 0.5	53	< 0.10	5.0	8.9	4.9	--	--	< 0.05	< 0.5	35	< 0.5	< 0.5	< 0.5	< 0.5	41	23
EB-8-1.5	1.5	6/11/2020	2.2	5.2	330	< 0.5	3.8	57	0.79	5.3	150	690	25	< 0.10	0.98	0.57	27	< 0.5	0.55	< 0.5	< 0.5	29	530
EB-8-3.0	3.0	6/11/2020	< 0.5	2.3	61	< 0.5	< 0.5	37	--	3.7	9	24	--	--	0.072	< 0.5	21	< 0.5	< 0.5	< 0.5	< 0.5	28	43
Hazardous Waste Criteria																							
TTLIC			500	50	10,000	75	100	2,500	--	8,000	2,500	1,000	--	--	20	3,500	2,000	100	500	700	2,400	5,000	
STLC			15	5	100	0.75	1	--	5	80	25	--	5	--	0.2	350	20	1	5	7.0	24	250	
TCLP			--	5	--	--	1	5	--	--	--	--	--	5	0.2	--	--	1	5	--	--	--	
Screening Criteria																							
Residential ESLs ¹	Cancer Risk		--	0.067	--	1,600	910	--	--	420	--	82	--	--	--	--	15,000	--	--	--	--	--	
	Non-Cancer Hazard		11	0.26	15,000	16	78	--	--	23	3,100	80	--	--	13	390	820	390	390	0.78	390	23,000	
Commercial/ Industrial ESLs ²	Cancer Risk		--	0.31	--	6,900	4,000	--	--	1,900	--	380	--	--	--	--	64,000	--	--	--	--	--	
	Non-Cancer Hazard		160	3.6	220,000	230	1,100	--	--	350	47,000	320	--	--	190	5,800	11,000	5,800	5,800	12	5,800	350,000	
Background Metal Concentrations³			1.5-7.1	1.2-31	41-411	0.29-1.1	0.27-3.3	10-142	--	6.5-25.5	5.4-100	4.8-65	--	--	0.07-0.6	0.33-11.4	16-144	< 0.25-7	0.2-2.2	< 0.25-42.5	22-90	33-282	

Notes:
mg/kg - milligrams per kilogram
mg/L - milligrams per liter
< 0.5 - Analyte was not detected at or above the laboratory reporting limit
-- Not analyzed or criteria not established
RCRA - Resource Conservation and Recovery Act
TTLIC - State of California Total Threshold Limit Concentration for Class I Non-RCRA Hazardous Waste
STLC - State of California Soluble Threshold Limit Concentration for Class I Non-RCRA Hazardous Waste
TCLP - Federal Toxicity Characteristic Leaching Procedure for Class I RCRA Hazardous Waste
B - Analyte detected in the associated Method Blank and in the sample
¹ - Residential Environmental Screening Levels (ESLs), San Francisco Bay Regional Water Quality Control Board (RWQCB), Direct Exposure Human Health Risk Screening Levels, Shallow Soil Exposure (Table S-1), 2019.
² - Commercial/Industrial Environmental Screening Levels (ESLs), San Francisco Bay Regional Water Quality Control Board (RWQCB), Direct Exposure Human Health Risk Screening Levels, Shallow Soil Exposure (Table S-1), 2019.
³ - Environmental Resources Management. Feasibility Study, Hookston Station, Pleasant Hill, California. Appendix A, Table A-2, "Comparison of Background Concentrations of Metals in Bay Area Soils," July 2006.

Bold - sample concentration exceeds hazardous waste criteria
150 - sample concentration exceeds residential ESL and background levels
390 - sample concentration exceeds residential and commercial/industrial ESL and background levels

Table 3
Groundwater Analytical Results - Non-Metals
 1666 7th Street
 Oakland, California

Sample ID	Date Sampled	VOCs	SVOCs				All Other SVOCs	Petroleum Hydrocarbons		
			Diethyl Phthalate	Dimethyl Phthalate	Di-N-Butyl Phthalate	Gasoline Range Organics		Diesel Range Organics	TPH-Motor Oil (C18-C36)	
						TPH(g) (C6-C12)		TPH(d) (C10-C23)	TPH(mo) (C18-C36)	
(µg/L)										
MW-1	6/15/2020	ND	< 0.24	< 0.049	< 0.24	ND	< 50	< 50	< 250	
MW-2	6/15/2020	ND	0.081	0.012	0.050	ND	< 50	< 50	< 250	
Screening Criteria										
MCL Priority ¹		Various	15,000	--	--	Various	760	200	--	
Residential ESLs ²	Cancer Risk	Various	--	--	--	Various	--	--	--	
	Non-cancer Hazard	Various	--	--	--	Various	--	--	--	
Commercial/Industrial ESLs ³	Cancer Risk	Various	--	--	--	Various	--	--	--	
	Non-cancer Hazard	Various	--	--	--	Various	--	--	--	

Notes:

µg/L - micrograms per liter

ND - Analyte was not detected above the laboratory reporting limit

TPHg - Total Petroleum Hydrocarbons as Gasoline, EPA Method 8015M

TPHd - Total Petroleum Hydrocarbons as Diesel Range, EPA Method 8015M

TPHmo - Total Petroleum Hydrocarbons as Motor Oil, EPA Method 8015M

VOC - Volatile Organics Compounds, EPA Method 8260B

SVOC - Semi-volatile Organics Compounds, EPA Method 8270C

-- Criteria not established

¹ Maximum Contaminant Levels (MCLs), San Francisco Bay Regional Water Quality Control Board (RWQCB) Environmental Screening Levels (ESLs), Groundwater Summary, Direct Exposure Human Health Risk Screening Levels, (Table GW-1). 2019.

² Residential Environmental Screening Levels (ESLs), San Francisco Bay Regional Water Quality Control Board (RWQCB), Groundwater Summary, Vapor Intrusion Human Health Risk Levels, (Table GW-3). 2019.

³ Commercial/Industrial Environmental Screening Levels (ESLs), San Francisco Bay Regional Water Quality Control Board (RWQCB), Groundwater Summary, Vapor Intrusion Human Health Risk Levels, (Table GW-3). 2019.

**Table 4
Groundwater Analytical Results - Metals
1666 7th Street
Oakland, California**

Sample ID	Date Sampled	Metals																
		Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
		(µg/L)																
		Total Metals																
MW-1	6/15/2020	< 0.5	1.2	40	< 0.5	< 0.5	0.58	< 0.5	< 0.5	< 0.5	< 0.05	0.80	2.9	< 0.5	< 0.5	< 0.5	1.9	< 20
MW-2	6/15/2020	< 0.5	1.2	36	< 0.5	< 0.5	2.3	< 0.5	0.70	0.52	< 0.05	3.6	5.4	1.7	< 0.5	< 0.5	2.0	< 20
		Dissolved Metals																
MW-1	6/15/2020	< 0.5	1.1	38	< 0.5	< 0.25	< 0.5	< 0.5	< 0.5	< 0.5	< 0.05	0.75	2.8	< 0.5	< 0.19	< 0.5	1.8	< 15
MW-2	6/15/2020	< 0.5	1.1	33	< 0.5	< 0.25	1.5	< 0.5	< 0.5	< 0.5	< 0.05	3.8	4.6	1.9	< 0.19	< 0.5	1.4	< 15
		Screening Criteria																
MCL Priority¹		6	10	1,000	4	5	50	6	1,000	15	2	100	100	50	100	2	--	5,000

Notes:

< 0.5 - Analyte was not detected above the laboratory reporting limit

µg/L - micrograms per liter

¹ Maximum Contaminant Levels (MCLs), San Francisco Bay Regional Water Quality Control Board (RWQCB) Environmental Screening Levels (ESLs), Groundwater Summary, Direct Exposure Human Health Risk Screening Levels, (Table GW-1). 2019.

-- Criteria not established

Table 5
Soil Vapor Analytical Results
1666 7th Street
Oakland, California

Sample ID	Date Sampled	VOCs																				All Other VOCs	Fixed Gases			
		1,1-Dichloroethene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene (Mesitylene)	Benzene	Bromo-methane	Chloro-form	Chloro-ethane	Chlorom-ethane	Ethyl-benzene	Freon-11	Freon-12	Naphthalene	Methylene Chloride	Styrene	PCE	Toluene	Vinyl Chloride	m,p-Xylene	o-Xylene	Total Xylenes		Methane	Carbon Dioxide	Helium	Oxygen
		(µg/m ³)																					ppmv	%V		
SV-1	6/10/2020	< 0.397	4.02	1.49	40.2	< 0.388	1.42	< 0.264	1.65	15.7	1.47	1.38	< 0.786	< 10.4	24.1	25.8	43.6	< 0.0895	25.2	15.1	40.2	ND	ND	1.68	ND	18.1
SV-2	6/10/2020	< 0.397	1.20	< 0.492	8.24	< 0.388	0.703	< 0.264	< 0.207	3.09	2.01	2.45	0.924	< 10.4	0.822	17.2	179	< 0.0895	8.23	2.88	11.1	ND	ND	0.693	ND	18.9
SV-3	6/10/2020	< 0.397	< 0.492	< 0.492	4.86	< 0.388	1.29	< 0.264	1.12	1.09	2.22	2.21	< 0.786	< 10.4	< 0.426	0.983	37.7	< 0.0895	1.62	0.882	2.50	ND	ND	4.74	ND	16.4
SV-4	6/10/2020	0.594	2.61	1.35	146	0.824	1.35	0.790	4.30	14.3	2.49	2.03	< 0.786	< 10.4	5.89	44.9	96.7	0.427	33.2	17.2	50.4	ND	101	0.195	ND	16.1
DUP-1	6/10/2020	< 0.397	4.13	2.11	41.1	< 0.368	1.37	< 0.264	2.12	15.0	1.37	1.45	< 0.786	< 10.4	22.7	24.1	41.2	< 0.0895	24.2	14.4	38.5	ND	ND	1.73	ND	17.2
Screening Criteria																										
Residential ESL	Cancer Risk	-	-	-	3.2	-	4.1	-	-	37	-	-	2.8	34	-	15	-	0.32	-	-	-	Various	-	-	-	-
	Noncancer Hazard	2,400	-	-	100	170	3,400	350,000	3,100	35,000	-	-	100	14,000	31,000	1,400	10,000	3,500	-	-	3,500	Various	-	-	-	-
Commercial/Industrial	Cancer Risk	-	-	-	14	-	18	-	-	160	-	-	12	410	-	67	-	5.2	-	-	-	Various	-	-	-	-
	Noncancer Hazard	10,000	-	-	440	730	14,000	1,500,000	13,000	150,000	-	-	440	58,000	130,000	5,800	44,000	15,000	-	-	15,000	Various	-	-	-	-

Notes:

µg/m³ - micrograms per cubic meter

VOC - Volatile Organics Compounds, Method TO-15

PCE - Tetrachloroethene

%-V - Percent volume

< 0.397 - Analyte was not detected above the laboratory reporting limit.

- Criteria not established

Freon-11 - trichlorofluoromethane

Freon-12 - dichlorodifluoromethane

8.24 - sample concentration exceeds residential ESL

40.2 - sample concentration exceeds residential and commercial/industrial ESL

¹Residential Environmental Screening Levels (ESLs), San Francisco Bay Regional Water Quality Control Board (RWQCB), Vapor Summary, Subslab/Soil Gas Vapor Intrusion: Human Health Risk Levels (Table SG-1), 2019.

²Commercial/Industrial Environmental Screening Levels (ESLs), San Francisco Bay Regional Water Quality Control Board (RWQCB), Vapor Summary, Subslab/Soil Gas Vapor Intrusion: Human Health Risk Levels (Table SG-1), 2019.

Table 6
Soil Sampling and Analysis Plan
1666 7th Street
Oakland, California

Sample ID	Depth (feet bgs)	Analyses										Notes	
		TPH g,d,mo by EPA 8015M	VOCs by EPA 5035 ¹	SVOCs by EPA 8270C ²	OCPs by EPA 8081A	Organo-phosphorous Pesticides by EPA Method 8141A	Chlorinated Herbicides by EPA Method 8151A	PCBs by EPA 8082	CAM 17 by EPA 6020	Total Lead by EPA 6020	Asbestos by EPA CARB 435		HOLD
Proposed Samples and Analyses for Additional Investigation													
SS-1-1	1.0	X	X	X	X			X	X		X		Shallow testing for building materials contamination
SS-1-1.5	1.5									X			Hazardous soil delineation
SS-1-3.0	3.0											X	Held, will be analyzed pending results above
SS-1-5.0	5.0											X	Held, will be analyzed pending results above
SS-2-1	1.0	X						X	X		X		Shallow testing for building materials contamination
SS-2-1.5	1.5									X			Hazardous soil delineation
SS-2-3.0	3.0											X	Held, will be analyzed pending results above
SS-3-1	1.0	X	X	X	X			X	X		X		Shallow testing for building materials contamination
SS-3-1.5	1.5									X			Hazardous soil delineation
SS-3-3.0	3.0											X	Held, will be analyzed pending results above
SS-4-1	1.0	X						X	X		X		Shallow testing for building materials contamination
SS-4-1.5	1.5									X			Hazardous soil delineation
SS-4-3.0	3.0											X	Held, will be analyzed pending results above
SS-5-1	1.0	X	X	X	X			X	X		X		Shallow testing for building materials contamination
SS-5-1.5	1.5									X			Hazardous soil delineation
SS-5-3.0	3.0											X	Held, will be analyzed pending results above
SS-6-1	1.0	X						X	X		X		Shallow testing for building materials contamination
SS-6-1.5	1.5									X			Hazardous soil delineation
SS-6-3.0	3.0											X	Held, will be analyzed pending results above
SS-7-1	1.0	X						X	X		X		Shallow testing for building materials contamination
SS-7-1.5	1.5									X			Hazardous soil delineation
SS-7-3.0	3.0											X	Held, will be analyzed pending results above
SS-8-1	1.0	X	X	X	X			X	X		X		Shallow testing for building materials contamination
SS-8-1.5	1.5									X			Hazardous soil delineation
SS-8-3.0	3.0											X	Held, will be analyzed pending results above
SS-9-1	1.0	X						X	X		X		Shallow testing for building materials contamination
SS-9-1.5	1.5									X			Hazardous soil delineation
SS-9-3.0	3.0											X	Held, will be analyzed pending results above
SS-10-1	1.0	X	X	X	X			X	X		X		Shallow testing for building materials contamination
SS-10-1.5	1.5									X			Hazardous soil delineation
SS-10-3.0	3.0											X	Held, will be analyzed pending results above
SS-11-1	1.0	X						X	X		X		Shallow testing for building materials contamination
SS-11-1.5	1.5									X			Hazardous soil delineation
SS-11-3.0	3.0											X	Held, will be analyzed pending results above
EB-9-1	1.0	X						X	X		X		Shallow testing for building materials contamination
EB-9-1.5	1.5									X			Hazardous soil delineation
EB-9-3.0	3.0											X	Held, will be analyzed pending results above
EB-9-5.0	5.0	X	X						X				Hazardous soil delineation
EB-9-8.0	8.0											X	Held, will be analyzed pending results above
EB-9-10.0	10.0											X	Held, will be analyzed pending results above
EB-9-15.0	15.0											X	Held, will be analyzed pending results above
EB-10-1	1.0	X	X	X	X			X	X		X		Shallow testing for building materials contamination
EB-10-1.5	1.5									X			Hazardous soil delineation
EB-10-3.0	3.0											X	Held, will be analyzed pending results above
EB-10-5.0	5.0	X	X						X				Hazardous soil delineation
EB-10-8.0	8.0											X	Held, will be analyzed pending results above
EB-10-10.0	10.0											X	Held, will be analyzed pending results above
EB-10-15.0	15.0											X	Held, will be analyzed pending results above
EB-11-1	1.0	X	X	X	X			X	X		X		Shallow testing for building materials contamination
EB-11-1.5	1.5									X			Hazardous soil delineation
EB-11-3.0	3.0											X	Held, will be analyzed pending results above
EB-11-5.0	5.0	X	X						X				Hazardous soil delineation
EB-11-8.0	8.0											X	Held, will be analyzed pending results above
EB-11-10.0	10.0											X	Held, will be analyzed pending results above
EB-11-15.0	15.0											X	Held, will be analyzed pending results above
B-1-1	1.0											X	Held, data already exists
B-1-1.5	1.5											X	Held, data already exists
B-1-3.0	3.0											X	Held, data already exists
B-1-5.0	5.0											X	Held, data already exists

Table 6
Soil Sampling and Analysis Plan
1666 7th Street
Oakland, California

Sample ID	Depth (feet bgs)	Analyses											Notes
		TPH g,d,mo by EPA 8015M	VOCs by EPA 5035 ¹	SVOCs by EPA 8270C ²	OCPs by EPA 8081A	Organo-phosphorous Pesticides by EPA Method 8141A	Chlorinated Herbicides by EPA Method 8151A	PCBs by EPA 8082	CAM 17 by EPA 6020	Total Lead by EPA 6020	Asbestos by EPA CARB 435	HOLD	
Proposed Samples and Analyses for Additional Investigation													
B-1-6.0	6.0			X						X			Hazardous soil and SVOCs delineation
B-1-7.0	7.0											X	Held, will be analyzed pending results above
B-1-8.0	8.0											X	Held, will be analyzed pending results above
Total Number of Proposed Samples per Analysis		17	10	8	7	0	0	14	17	15	14		
Previously Collected Samples and Analyses from June 2020 Investigation													
Nearest corresponding proposed boring: EB-9, approximately 17 feet away, and revisiting B-1													
B-1-1.5	1.5	X	X	X	X	X	X	X	X	X	X	X	Additional samples proposed deeper at B-1 to further vertically delineate hazardous soil concentrations and SVOCs (specifically Benzo (a) Pyrene)
B-1-3.0	3.0	X	X	X	X	X	X	X	X	X	X	X	
B-1-5.0	5.0	X	X	X	X	X	X	X	X	X	X	X	
Nearest corresponding proposed boring: EB-11, approximately 17 feet away													
B-2-1.5	1.5	X	X	X	X	X	X	X	X	X	X	X	
B-2-3.0	3.0	X	X	X	X	X	X	X	X	X	X	X	
Nearest corresponding proposed boring: SS-8, approximately 50 feet away;													
EB-1-1.5	1.5	X	X	X	X	X	X	X	X	X	X	X	
EB-1-3.0	3.0	X	X	X	X	X	X	X	X	X	X	X	
Nearest corresponding proposed borings: SS-9, approximately 27 feet away; SS-10, approximately 27 feet away													
EB-2-1.5	1.5	X	X	X	X	X	X	X	X	X	X	X	
EB-2-3.0	3.0	X	X	X	X	X	X	X	X	X	X	X	
EB-2-7.0	7.0	X	X	X	X	X	X	X	X	X	X	X	
Nearest corresponding proposed borings: SS-11, approximately 15 feet away; SS-6, approximately 58 feet away;													
EB-3-1.5	1.5	X	X	X	X	X	X	X	X	X	X	X	Additional samples proposed to further horizontally delineate hazardous soil concentrations
EB-3-3.0	3.0	X	X	X	X	X	X	X	X	X	X	X	
EB-3-7.0	7.0	X	X	X	X	X	X	X	X	X	X	X	
Nearest corresponding proposed borings: SS-7, approximately 27 feet away; SS-5, approximately 39 feet away;													
EB-4-1.5	1.5	X	X	X	X	X	X	X	X	X	X	X	Additional samples proposed to further horizontally delineate hazardous soil concentrations
EB-4-3.0	3.0	X	X	X	X	X	X	X	X	X	X	X	
EB-4-5.0	5.0	X	X	X	X	X	X	X	X	X	X	X	
Nearest corresponding proposed boring: SS-2, approximately 32 feet away;													
EB-5-1.5	3.0	X	X	X	X	X	X	X	X	X	X	X	
EB-5-3.0	3.0	X	X	X	X	X	X	X	X	X	X	X	
Nearest corresponding proposed borings: SS-3, approximately 27 feet away; SS-6 approximately 50 feet away;													
EB-6-1.5	1.5	X	X	X	X	X	X	X	X	X	X	X	
EB-6-3.0	3.0	X	X	X	X	X	X	X	X	X	X	X	
EB-6-5.0	5.0	X	X	X	X	X	X	X	X	X	X	X	
Nearest corresponding proposed boring: SS-4, approximately 24 feet away;													
EB-7-1.5	1.5	X	X	X	X	X	X	X	X	X	X	X	
EB-7-3.0	3.0	X	X	X	X	X	X	X	X	X	X	X	
EB-7-5.0	5.0	X	X	X	X	X	X	X	X	X	X	X	
Nearest corresponding proposed boring: SS-1, approximately 44 feet away;													
EB-8-1.5	1.5	X	X	X	X	X	X	X	X	X	X	X	Additional samples proposed to further horizontally delineate hazardous soil concentrations
EB-8-3.0	3.0	X	X	X	X	X	X	X	X	X	X	X	
Total Number of Samples per Analysis Already Collected		26	26	26	26	26	26	26	26	0	26		
Total Number of Samples per Analysis Combined		43	36	34	33	26	26	40	43	15	40		

Notes:

bgs - below ground surface

EPA - Environmental Protection Agency

TPHg - Total Petroleum Hydrocarbons as Gasoline, EPA Method 8015M

TPHd - Total Petroleum Hydrocarbons as Diesel, EPA Method 8015M

TPHmo - Total Petroleum Hydrocarbons as Motor Oil, EPA Method 8015M

VOCs - Volatile Organic Compounds, EPA Method 8260B

SVOCs - Semi-volatile Organic Compounds, EPA Method 8270C

PCBs - Polychlorinated Biphenyls, EPA Method 8082

CAM 17 - California Assessment Manual Metals

OCPs - Organochlorine Pesticides, EPA Method 8081A

Asbestos by California Air Resource Board (CARB) 435 Method

¹Soil samples will be collected by EPA Method 5035 (EnCore samples)

²Soil samples will be analyzed for low level SVOCs by EPA Method 8270C

X - Analysis performed during previous investigation

X - Sample concentration exceeds residential³ and commercial/industrial⁴ ESL and background levels

X - Sample concentration exceeds residential³ ESL and background levels

X - sample concentration exceeds hazardous waste criteria

³ - Residential Environmental Screening Levels (ESLs), San Francisco Bay Regional Water Quality Control Board (RWQCB), Direct Exposure Human Health Risk Screening Levels, Shallow Soil Exposure (Table S-1), 2019.

⁴ - Commercial/Industrial Environmental Screening Levels (ESLs), San Francisco Bay Regional Water Quality Control Board (RWQCB), Direct Exposure Human Health Risk Screening Levels, Shallow Soil Exposure (Table S-1), 2019.

Table 7
Groundwater Sampling and Analysis Plan
1666 7th Street
Oakland, California

Langan Project Number 750664801
December 2020

Sample ID	Analyses		
	TPH g,d,mo by EPA 8015M	VOCs by EPA 8260B	SVOCs by EPA 8270C
EB-9-GW	X	X	X
EB-10-GW	X	X	X
EB-11-GW	X	X	X
MW-1	X	X	X
MW-2	X	X	X
DUP-GW	X	X	X
Total Number of Samples per Analysis	6	6	6

Notes:

bgs - below ground surface

EPA - Environmental Protection Agency

MW-1 and MW-2 groundwater samples will be collected from existing on-site monitoring wells

Groundwater anticipated at approximately 8 feet bgs. Borings EB-9, EB-10, and EB-11 will be advanced to 15 feet bgs with temporary well screen from 5 - 15 feet bgs

TPHg - Total Petroleum Hydrocarbons as Gasoline, EPA Method 8015M

TPHd - Total Petroleum Hydrocarbons as Diesel, EPA Method 8015M

TPHmo - Total Petroleum Hydrocarbons as Motor Oil, EPA Method 8015M

VOCs - Volatile Organic Compounds, EPA Method 8260B

SVOCs - Semi-volatile Organic Compounds, EPA Method 8270C

DUP - Duplicate groundwater sample is proposed for collection from EB-10-GW

Table 8
Soil Vapor Sampling and Analysis Plan
1666 7th Street
Oakland, California

Langan Project Number: 750664801
December 2020

Sample ID	Analyses		
	VOCs by EPA TO-15	Helium by EPA 1946	Methane, Oxygen, and Carbon Dioxide by ASTM D-1946
SG-1	X	X	X
SG-2	X	X	X
SG-3	X	X	X
SG-4	X	X	X
SG-5	X	X	X
DUP-SV	X	X	X
Total Number of Samples per Analysis	6	6	6

Notes:

bgs - below ground surface

EPA - Environmental Protection Agency

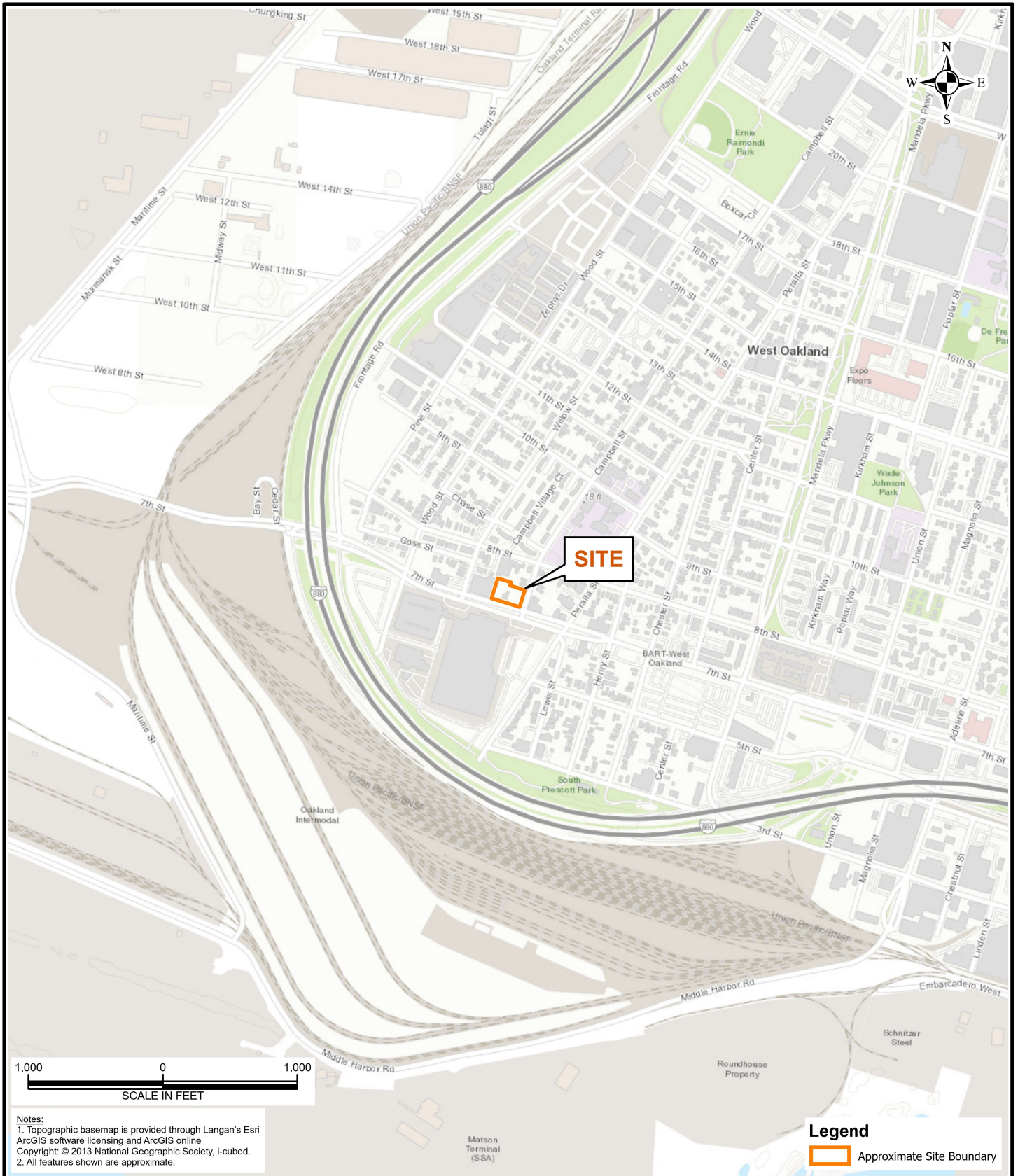
Permanent soil vapor probes will be installed at 5 feet bgs

VOCs - Volatile Organic Compounds, EPA Method TO-15

DUP - Duplicate soil vapor sample proposed for collection from SG-2

DRAFT

FIGURES



LANGAN
 501 14th Street, 3rd Floor
 Oakland, CA 94612-1420
 T: 510.874.7000 F: 510.874.7001 www.langan.com

Langan Engineering & Environmental Services, Inc.
 Langan Engineering, Environmental, Surveying,
 Landscape Architecture and Geology, D.P.C.
 Langan International LLC
 Collectively known as Langan

Project
1666 7TH STREET
 OAKLAND
 ALAMEDA COUNTY CA

Drawing Title
SITE LOCATION MAP

Project No. 750664801	Figure 1
Date 12/11/2020	
Scale 1" = 1,000 feet	
Drawn By JNE	



Legend

- Proposed shallow soil boring
- ▲ Approximate location of proposed permanent soil vapor probe
- Approximate location of proposed soil and groundwater boring
- Approximate location of environmental boring, Langan June 2020
- Approximate location of environmental boring/monitoring well, Langan June 2020
- Approximate location of geotechnical boring, Langan June 2020
- Approximate location of temporary soil vapor probe, Langan June 2020
- ➔ Inferred groundwater flow direction
- Approximate location of cross section
- Approximate site boundary

Notes:
 1. Aerial imagery provided by Near Map, 10/12/2020.
 2. All features shown are approximate.

LANGAN

501 14th Street, 3rd Floor
 Oakland, CA 94612-1420
 T: 510.874.7000 F: 510.874.7001 www.langan.com

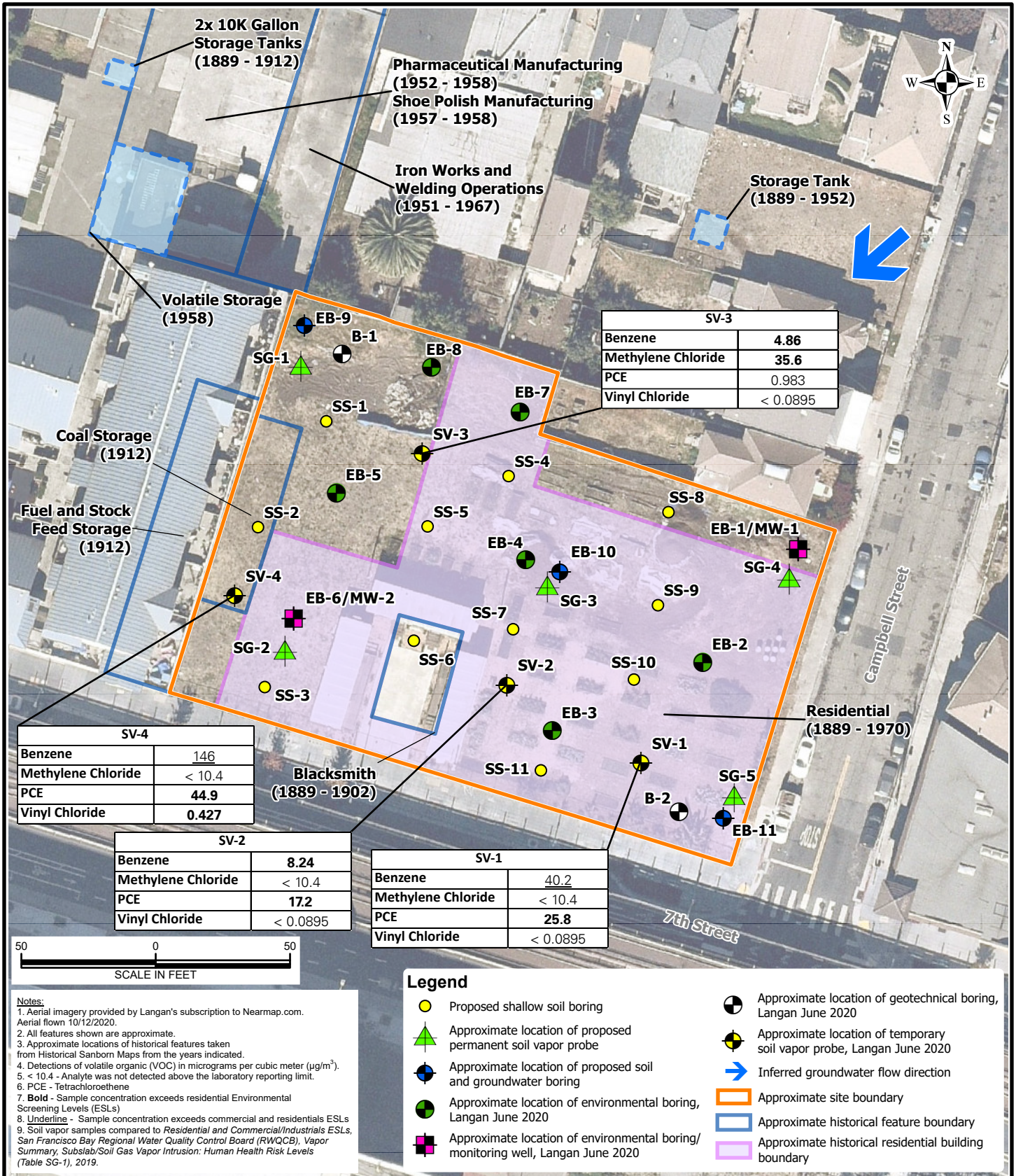
Langan Engineering & Environmental Services, Inc.
 Langan Engineering, Environmental, Surveying,
 Landscape Architecture and Geology, D.P.C.
 Langan International LLC
 Collectively known as Langan

Project
1666 7TH STREET
 OAKLAND
 ALAMEDA COUNTY CALIFORNIA

Figure
SITE PLAN WITH SAMPLING LOCATIONS AND CROSS SECTIONS

Project No.
 750664801
 Date
 12/11/2020
 Scale
 1" = 50'
 Drawn By
 JNE

Figure
2



SV-3	
Benzene	4.86
Methylene Chloride	35.6
PCE	0.983
Vinyl Chloride	< 0.0895

SV-4	
Benzene	146
Methylene Chloride	< 10.4
PCE	44.9
Vinyl Chloride	0.427

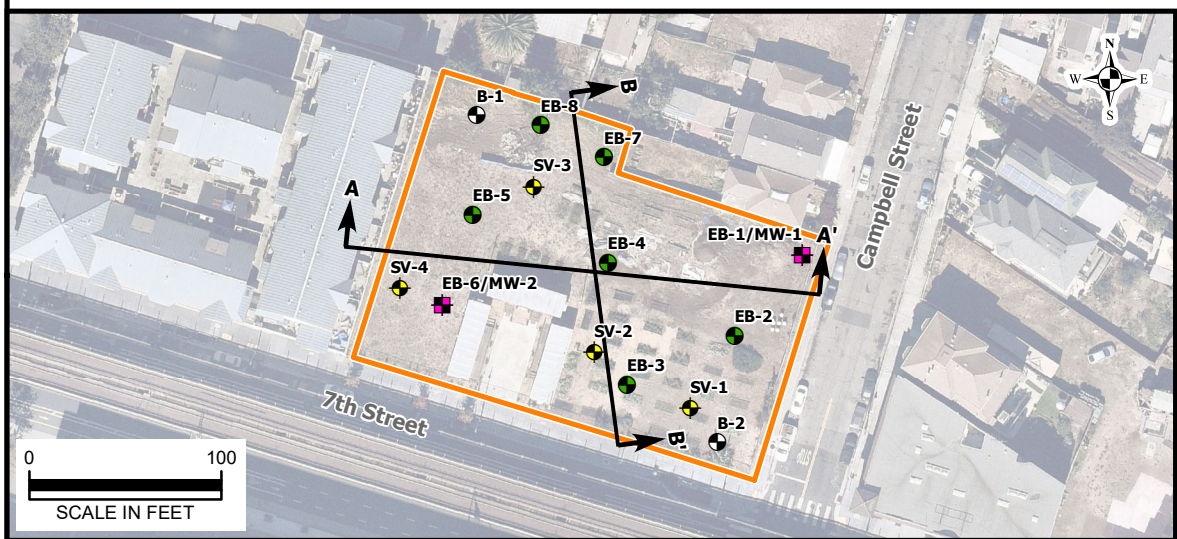
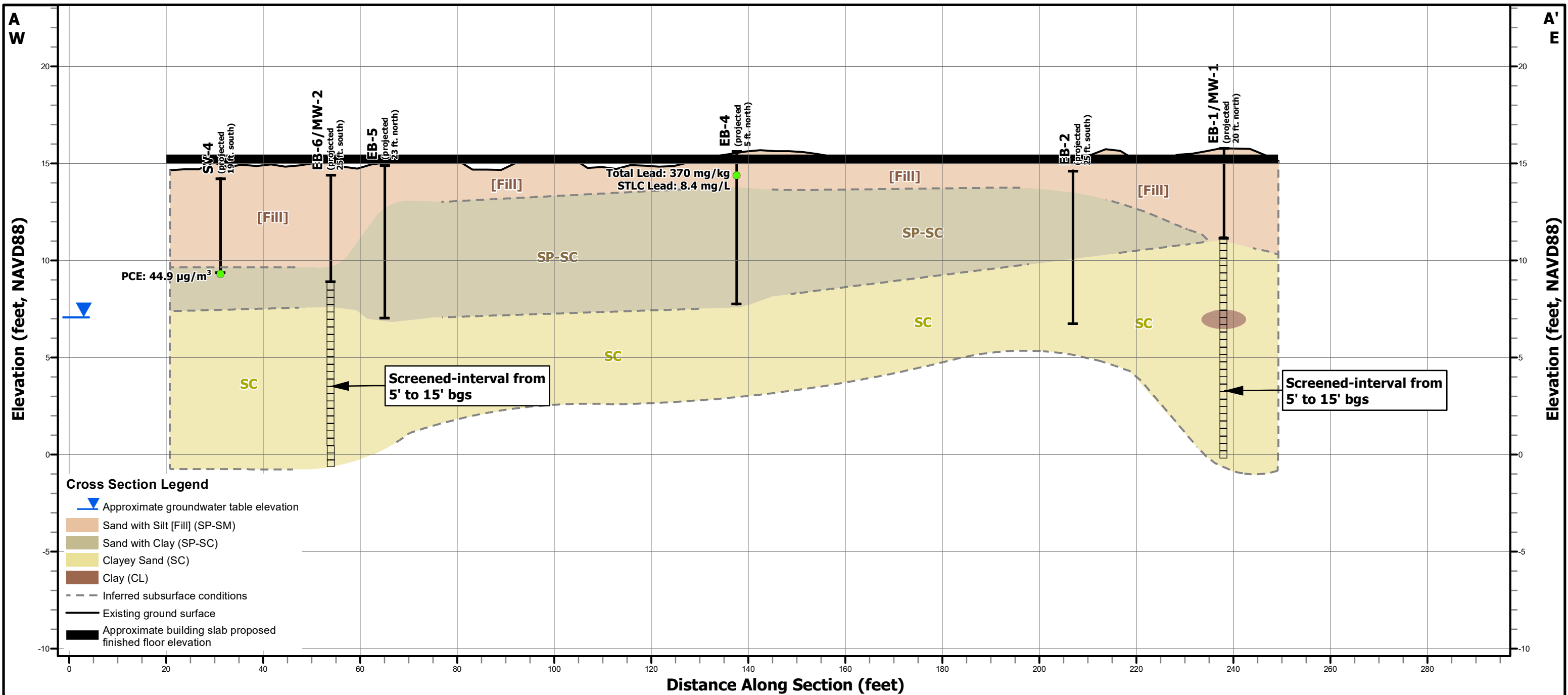
SV-2	
Benzene	8.24
Methylene Chloride	< 10.4
PCE	17.2
Vinyl Chloride	< 0.0895

SV-1	
Benzene	40.2
Methylene Chloride	< 10.4
PCE	25.8
Vinyl Chloride	< 0.0895

Notes:
 1. Aerial imagery provided by Langan's subscription to Nearmap.com. Aerial flown 10/12/2020.
 2. All features shown are approximate.
 3. Approximate locations of historical features taken from Historical Sanborn Maps from the years indicated.
 4. Detections of volatile organic (VOC) in micrograms per cubic meter ($\mu\text{g}/\text{m}^3$).
 5. < 10.4 - Analyte was not detected above the laboratory reporting limit.
 6. PCE - Tetrachloroethene
 7. **Bold** - Sample concentration exceeds residential Environmental Screening Levels (ESLs)
 8. Underline - Sample concentration exceeds commercial and residential ESLs
 9. Soil vapor samples compared to Residential and Commercial/Industrial ESLs, San Francisco Bay Regional Water Quality Control Board (RWQCB), Vapor Summary, Subslab/Soil Gas Vapor Intrusion: Human Health Risk Levels (Table SG-1), 2019.

- Legend**
- Proposed shallow soil boring
 - ▲ Approximate location of proposed permanent soil vapor probe
 - Approximate location of proposed soil and groundwater boring
 - Approximate location of environmental boring, Langan June 2020
 - Approximate location of environmental boring/monitoring well, Langan June 2020
 - ⊗ Approximate location of geotechnical boring, Langan June 2020
 - Approximate location of temporary soil vapor probe, Langan June 2020
 - ➔ Inferred groundwater flow direction
 - Approximate site boundary
 - Approximate historical feature boundary
 - Approximate historical residential building boundary

<p>LANGAN</p> <p>501 14th Street, 3rd Floor Oakland, CA 94612-1420 T: 510.874.7000 F: 510.874.7001 www.langan.com</p> <p>Langan Engineering & Environmental Services, Inc. Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C. Langan International LLC Collectively known as Langan</p>	<p>Project</p> <p style="font-size: 1.2em; font-weight: bold;">1666 7TH STREET</p> <p style="text-align: center;">OAKLAND</p> <p>ALAMEDA COUNTY CA</p>	<p>Drawing Title</p> <p style="text-align: center; font-size: 1.2em; font-weight: bold;">SITE PLAN WITH HISTORICAL FEATURES (1889-1970)</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Project No. 750664801</td> <td style="width: 50%;">Figure</td> </tr> <tr> <td>Date 12/14/2020</td> <td rowspan="3" style="text-align: center; font-size: 2em; font-weight: bold;">3</td> </tr> <tr> <td>Scale 1" = 50 feet</td> </tr> <tr> <td>Drawn By NB</td> </tr> </table>	Project No. 750664801	Figure	Date 12/14/2020	3	Scale 1" = 50 feet	Drawn By NB
	Project No. 750664801	Figure							
Date 12/14/2020	3								
Scale 1" = 50 feet									
Drawn By NB									



LANGAN

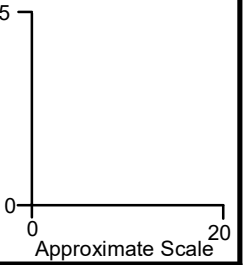
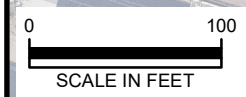
501 14TH Street, 3rd Floor
Oakland, CA 94612-1420
T: 510.874.7000 F: 510.874.7001 www.langan.com

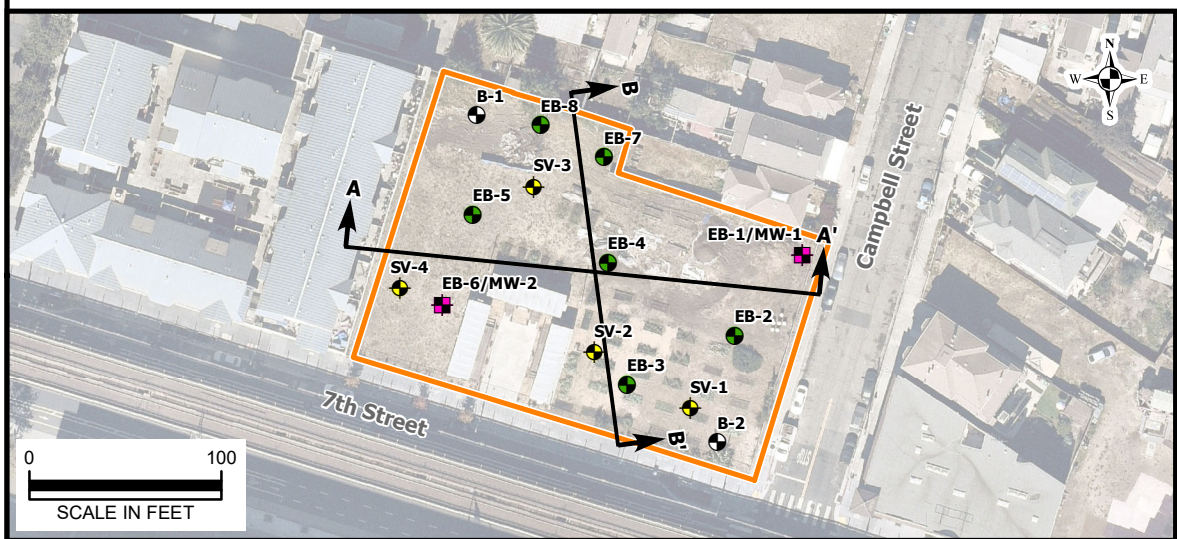
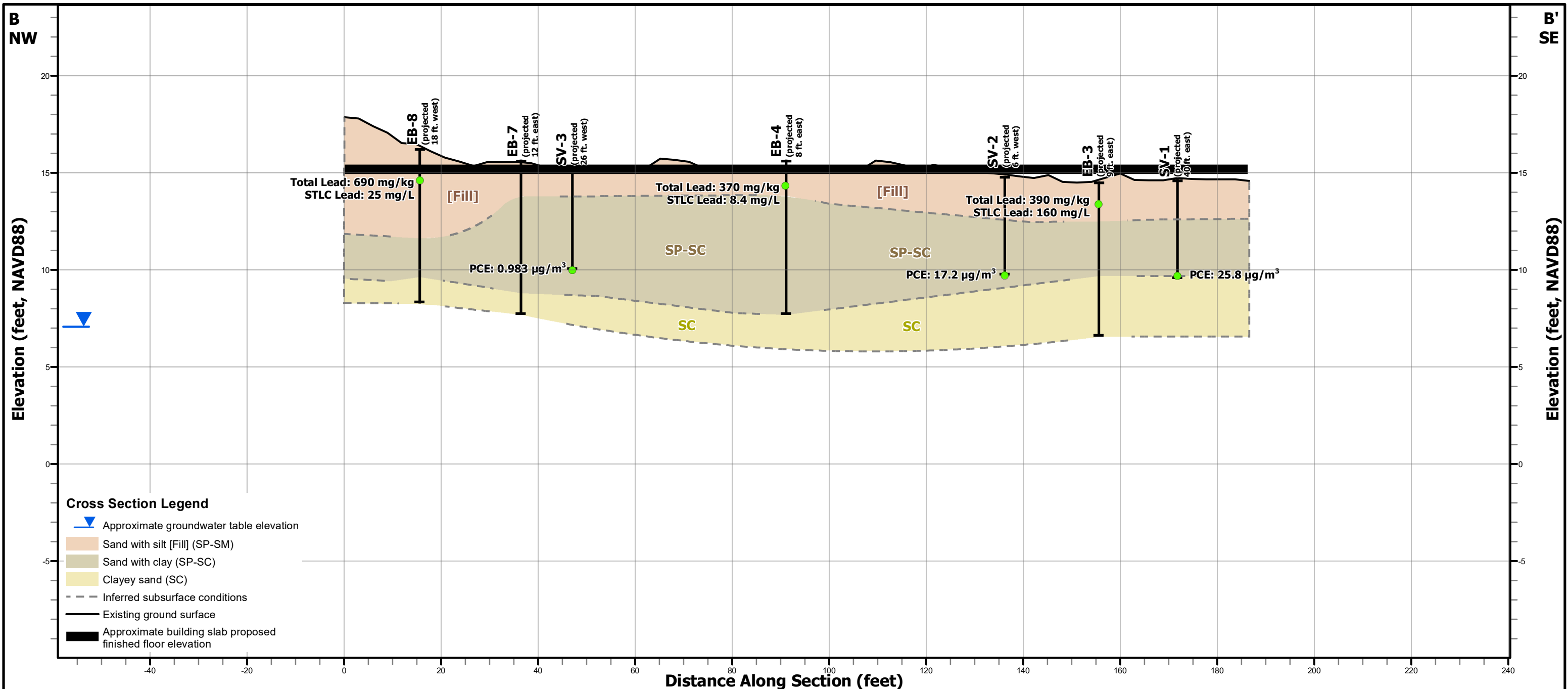
Langan Engineering & Environmental Services, Inc.
Langan Engineering, Environmental, Surveying and Landscape Architecture, D.P.C.
Langan International LLC
Collectively known as Langan

Project
1666 7TH STREET
OAKLAND
ALAMEDA COUNTY CALIFORNIA

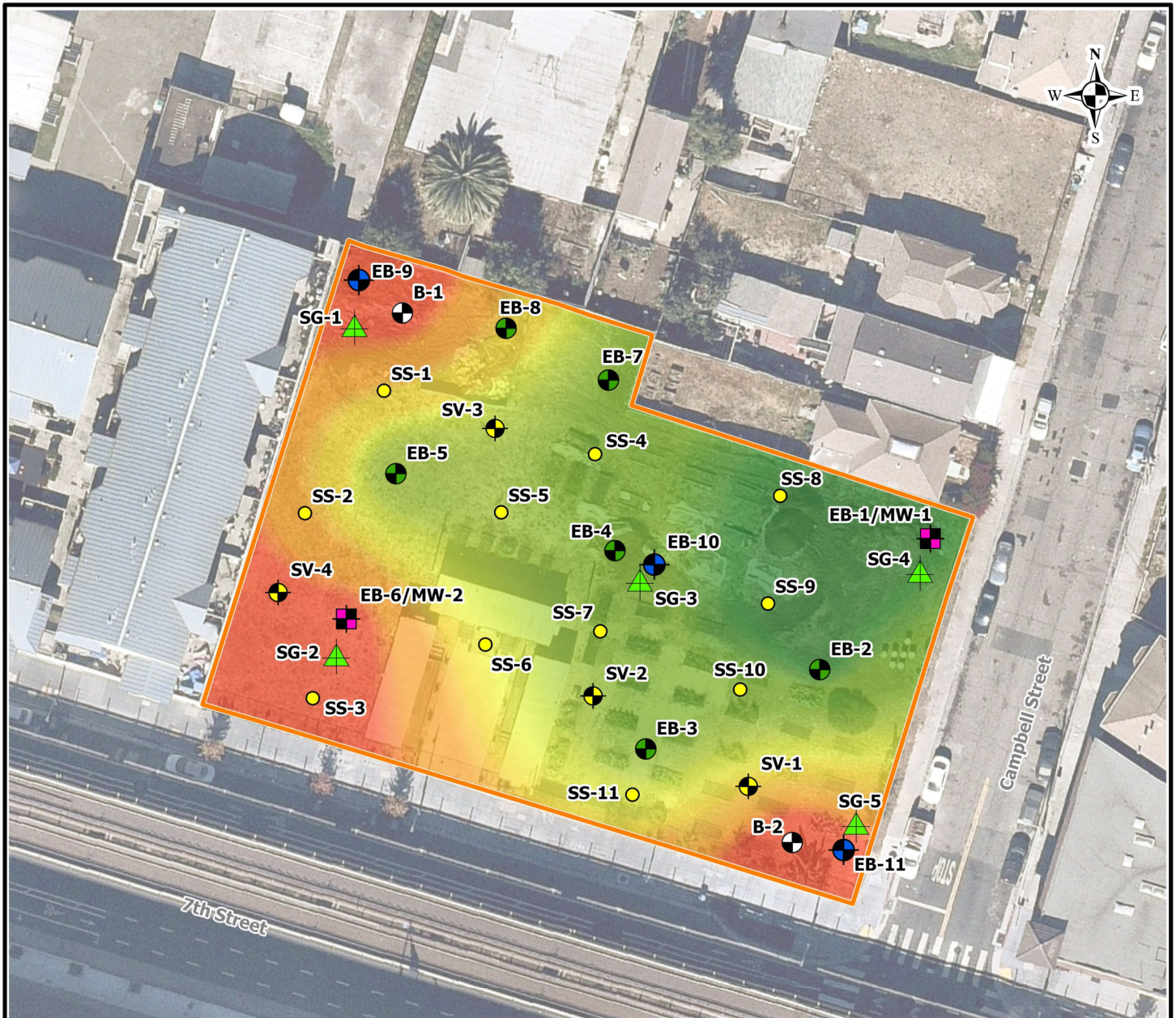
Figure Title
IDEALIZED SUBSURFACE PROFILE A-A'

Project No. 750664801	Figure 4
Date 12/16/2020	
Scale AS SHOWN	
Drawn By OG	





<p>LANGAN</p> <p>501 14TH Street, 3rd Floor Oakland, CA 94612-1420 T: 510.874.7000 F: 510.874.7001 www.langan.com</p> <p>Langan Engineering & Environmental Services, Inc. Langan Engineering, Environmental, Surveying and Landscape Architecture, D.P.C. Langan International LLC Collectively known as Langan</p>	<p>Project</p> <p>1666 7TH STREET</p> <p>OAKLAND</p> <p>ALAMEDA COUNTY CALIFORNIA</p>	<p>Figure Title</p> <p>IDEALIZED SUBSURFACE PROFILE B-B'</p>	<p>Project No.</p> <p>750664801</p> <p>Date</p> <p>12/11/2020</p> <p>Scale</p> <p>AS SHOWN</p> <p>Drawn By</p> <p>OG</p>	<p>Figure</p> <p>5</p>
	<p>Approximate Scale</p> <p>0 100</p> <p>SCALE IN FEET</p>			

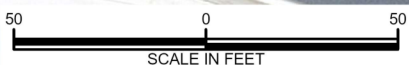


Legend

- Proposed shallow soil boring
- Approximate location of proposed permanent soil vapor probe
- Approximate location of proposed soil and groundwater boring
- Approximate location of environmental boring, Langan June 2020
- Approximate location of environmental boring/monitoring well, Langan June 2020
- Approximate location of geotechnical boring, Langan June 2020
- Approximate location of temporary soil vapor probe, Langan June 2020
- Approximate site boundary

Approximate Fill Thickness (in feet)

- 0-2
- 2-3
- 3-4
- 4-5
- 5-6



Notes:
 1. All features shown are approximate.
 2. * - Soil concentrations at 5 ft. bgs exceeds STLC for lead
 3. ft. - feet
 4. bgs - below ground surface
 5. STLC - Soluble Threshold Limit Concentration
 6. RCRA - Resource Conservation and Recovery Act

 501 14th Street, 3rd Floor Oakland, CA 94612-1420 T: 510.874.7000 F: 510.874.7001 www.langan.com Langan Engineering & Environmental Services, Inc. Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C. Langan International LLC Collectively known as Langan	Project 1666 7TH STREET OAKLAND ALAMEDA COUNTY CA	Drawing Title SITE PLAN WITH FILL THICKNESS MEASUREMENTS	Project No. 750664801 Date 12/15/2020 Scale 1" = 50 feet Drawn By OG	Figure 6
	© 2020 Langan			



Legend

- Proposed shallow soil boring
- Approximate location of proposed permanent soil vapor probe
- Approximate location of proposed soil and groundwater boring
- Approximate location of environmental boring, Langan June 2020
- Approximate location of environmental boring/monitoring well, Langan June 2020
- Approximate location of geotechnical boring, Langan June 2020
- Approximate location of temporary soil vapor probe, Langan June 2020
- Approximate site boundary
- Approximate area with soil concentrations exceeding State of California Class I non-RCRA Hazardous Waste Thresholds
- Approximate depth of material exceeding hazardous waste thresholds



Notes:
 1. All features shown are approximate.
 2. * - Soil concentrations at 5 ft. bgs exceeds STLC for lead
 3. ft. - feet
 4. bgs - below ground surface
 5. STLC - Soluble Threshold Limit Concentration
 6. RCRA - Resource Conservation and Recovery Act

 501 14th Street, 3rd Floor Oakland, CA 94612-1420 T: 510.874.7000 F: 510.874.7001 www.langan.com Langan Engineering & Environmental Services, Inc. Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C. Langan International LLC Collectively known as Langan	Project 1666 7TH STREET OAKLAND ALAMEDA COUNTY CA	Drawing Title SITE PLAN WITH SOIL CONCENTRATIONS EXCEEDING HAZARDOUS WASTE THRESHOLDS	Project No. 750664801 Date 12/15/2020 Scale 1" = 50 feet Drawn By OG	Figure 7
	© 2020 Langan			

APPENDIX A
EXPLORATORY BORING LOGS AND WELL CONSTRUCTION DETAILS

DRAFT

PROJECT:

1666 7TH STREET
Oakland, California

Log of Boring EB-1/MW-1

PAGE 1 OF 1

Boring location: See Site Plan, Figure 2

Logged by: B. Hayward

Date started: 6/10/20

Date finished: 6/10/20

Drilling method: Direct Push Technology/Hollow-stem Auger

Hammer weight/drop:

Hammer type: Automatic

Sampler: 4' Continuous

DEPTH (feet)	SAMPLES				OVM (ppm)	LITHOLOGY	MATERIAL DESCRIPTION	Well Completion Details
	Sample Number	Sample	Blow Count	Recovery (inches)				
1					0.0	SP-SM	<p>SAND with SILT (SP-SM) 90% sand, 10% fines, loose, dry, poorly graded, no odor</p>	<p>Flush mounted completion</p> <p>Blank Casing From 0 To 5 Feet</p> <p>Grout From 0 To 3 Feet</p> <p>Bentonite From 3 To 4 Feet</p> <p>5 to 15 Feet Sch 40 PVC screen</p>
2	EB-1-1.5	•		20/48"				
3	EB-1-3.0	•			0.0			
4						SC	<p>CLAYEY SAND (SC) 70% sand, 30% fines, tan, dense, moist, poorly graded, no odor wet at 7 feet</p>	<p>4 to 15 Feet #2/12 sand</p>
5	EB-1-5.0	•		34/48"	0.0			
6					0.0			
7					0.0			
8							▼	
9							clay lens at 9 feet	
10					0.0			
11					48/48"		▼	
12					0.0			
13								
14					48/48"			
15					0.0			
16					0.0			

TEST ENVIRONMENTAL WELL REV1 750664801-1666 7TH ST. ENV.GPJ TEMPLATE_CA-MODIFIED.GDT 7/9/20

Boring terminated at a depth of 16 feet below ground surface.
Boring completed as Monitoring well MW-1.
Initial groundwater level at 11.6 feet bgs and static groundwater level at 8.6 feet below ground surface.
Boring initially advanced using direct push and then the monitoring well installed using hollow-stem augers.

LANGAN

Project No.:
750664801

Figure:
A-1

PROJECT:

1666 7TH STREET
Oakland, California

Log of Boring EB-2

PAGE 1 OF 1

Boring location: See Site Plan, Figure 2

Logged by: B. Hayward

Date started: 6/11/20

Date finished: 6/11/20

Drilling method: Direct Push Technology

Hammer weight/drop:

Hammer type: Automatic

Sampler: 4' Continuous

DEPTH (feet)	SAMPLES				OVM (ppm)	LITHOLOGY	MATERIAL DESCRIPTION
	Sample Number	Sample	Blow Count	Recovery (Inches)			
1					0.0	SP-SM	SAND with SILT (SP-SM) 90% sand, 10% fines, brown, loose, moist, poorly graded, no odor, brick fragments [FILL]
2	EB-2-1.5	•		36/48"	0.0	SP-SC	
3	EB-2-3.0	•					SAND with CLAY (SP-SC) 85% sand, 15% fines, light brown, medium dense, moist, poorly graded, no odor
4					0.0		
5	EB-2-5.0	•			0.1	SC	CLAYEY SAND (SC) medium dense, moist, poorly graded, no odor
6				42/48"	0.0		
7	EB-2-7.0	•			0.0		wet at 7 to 8 feet
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							

Boring terminated at a depth of 8 feet below ground surface.
Boring backfilled with cement grout.
Groundwater encountered at 7 to 8 feet below ground surface.



Project No.: 750664801

Figure: A-2

TEST ENVIRONMENTAL INCHES 750664801-1666 7TH ST ENV.GPJ TEMPLATE CA-MODIFIED.GDT 7/9/20

PROJECT:

1666 7TH STREET
Oakland, California

Log of Boring EB-3

PAGE 1 OF 1

Boring location: See Site Plan, Figure 2

Logged by: B. Hayward

Date started: 6/11/20

Date finished: 6/11/20

Drilling method: Direct Push Technology

Hammer weight/drop:

Hammer type: Automatic

Sampler: 4' Continuous

DEPTH (feet)	SAMPLES				OVM (ppm)	LITHOLOGY	MATERIAL DESCRIPTION
	Sample Number	Sample	Blow Count	Recovery (Inches)			
1					0.2	SP-SM	SAND with SILT (SP-SM) 90% sand, 10% fines, dark brown, loose, dry, poorly graded, no odor [FILL] asphalt at 1 foot
2	EB-3-1.5	•		33/ 48"	0.1	SP-SC	SAND with CLAY (SP-SC) 85% sand, 15% fines, brown, medium dense, moist, poorly graded, no odor
3	EB-3-3.0	•					
4					0.0	SC	CLAYEY SAND (SC) tan, medium dense, moist to wet, no odor water
5	EB-3-5.0	•		0.4			
6				42/ 48"	0.5	SC	
7	EB-3-7.0	•			0.1		
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							

Boring terminated at a depth of 8 feet below ground surface.
Boring backfilled with cement grout.
Groundwater encountered at 6.5 feet.

LANGAN

Project No.:
750664801

Figure:
A-3

TEST ENVIRONMENTAL INCHES 750664801-1666 7TH ST ENV.GPJ TEMPLATE CA-MODIFIED.GDT 7/9/20

PROJECT:

1666 7TH STREET
Oakland, California

Log of Boring EB-4

PAGE 1 OF 1

Boring location: See Site Plan, Figure 2

Logged by: B. Hayward

Date started: 6/11/20

Date finished: 6/11/20

Drilling method: Direct Push Technology

Hammer weight/drop:

Hammer type: Automatic

Sampler: 4' Continuous

DEPTH (feet)	SAMPLES				OVM (ppm)	LITHOLOGY	MATERIAL DESCRIPTION
	Sample Number	Sample	Blow Count	Recovery (Inches)			
1					0.0	SP-SM	SAND with SILT (SP-SM) 90% sand, 10% fines, dark brown [FILL]
2	EB-4-1.5	•		24/48"	0.1		brick and mortar debris
3	EB-4-3.0	•			0.0		SAND with CLAY (SP-SC) 85% sand, 15% fines, tan, moist, poorly graded, no odor
4					0.1		increasing moisture with depth
5	EB-4-5.0	•			0.0	SP-SC	
6				48/48"	0.2		
7					0.2		
8					0.1		
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							

Boring terminated at a depth of 8 feet below ground surface.
Boring backfilled with cement grout.

LANGAN

Project No.:
750664801

Figure:
A-4

TEST ENVIRONMENTAL INCHES 750664801-1666 7TH ST ENV.GPJ TEMPLATE CA-MODIFIED.GDT 7/9/20

PROJECT:

1666 7TH STREET
Oakland, California

Log of Boring EB-5

PAGE 1 OF 1

Boring location: See Site Plan, Figure 2

Logged by: B. Hayward

Date started: 6/11/20

Date finished: 6/11/20

Drilling method: Direct Push Technology

Hammer weight/drop:

Hammer type: Automatic

Sampler: 4' Continuous

DEPTH (feet)	SAMPLES				OVM (ppm)	LITHOLOGY	MATERIAL DESCRIPTION
	Sample Number	Sample	Blow Count	Recovery (Inches)			
1						SP-SM	SAND with SILT (SP-SM) 90% sand, 10% fines, brown, dry, no odor, trace brick, mortar fragments [FILL]
2	EB-5-1.5	•		38/48"	0.1		
3	EB-5-3.0	•			0.0		SAND with CLAY (SP-SC) tan, medium dense, moist, no odor
4					0.0		
5	EB-5-5.0	•		44/48"	0.1	SP-SC	increasing moisture with depth
6					0.2		
7					0.0		
8					0.0		
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							

Boring terminated at a depth of 8 feet below ground surface.
Boring backfilled with cement grout.

LANGAN

Project No.:
750664801

Figure:
A-5

TEST ENVIRONMENTAL INCHES 750664801-1666 7TH ST ENV.GPJ TEMPLATE CA-MODIFIED.GDT 7/9/20

PROJECT:

1666 7TH STREET
Oakland, California

Log of Boring EB-6/MW-2

PAGE 1 OF 1

Boring location: See Site Plan, Figure 2

Logged by: B. Hayward

Date started: 6/10/20

Date finished: 6/10/20

Drilling method: Direct Push Technology

Hammer weight/drop:

Hammer type: Automatic

Sampler: 4' Continuous

DEPTH (feet)	SAMPLES				OVM (ppm)	LITHOLOGY	MATERIAL DESCRIPTION	Well Completion Details
	Sample Number	Sample	Blow Count	Recovery (inches)				
1					0.0	SP-SM	SAND with SILT (SP-SM) 90% sand, 10% fines, brown, loose, dry, poorly graded, no odor, trace brick, gravel [FILL]	
2	EB-6-1.5	•		33/48"	0.2			
3	EB-6-3.0	•			0.1			
4					0.0	SP-SC	SAND with CLAY (SP-SC) tan, medium dense, poorly graded, no odor	
5	EB-6-5.0	•		48/48"	0.1			
6					0.0	SC	CLAYEY SAND (SC) 70% sand, 30% fines, tan, medium dense, moist, poorly graded, no odor	
7					0.0			
8					0.0			
9					0.0			
10				48/48"	0.2			
11					0.0		moist, appear saturated	
12					0.1			
13					0.2			
14				36/36"	0.2			
15					0.1			

TEST ENVIRONMENTAL WELL REV1 750664801-1666 7TH ST. ENV.GPJ TEMPLATE_CA-MODIFIED.GDT 7/9/20

Boring terminated at a depth of 15 feet below ground surface.
 Boring completed as Monitoring well MW-2
 Initial groundwater level at 11.2 feet bgs and static groundwater level at 7.75 feet below ground surface.
 Boring initially advanced using direct push and then the monitoring well installed using hollow-stem augers.



Project No.: 750664801

Figure: A-6

PROJECT:

**1666 7TH STREET
Oakland, California**

Log of Boring EB-7

PAGE 1 OF 1

Boring location: See Site Plan, Figure 2

Logged by: B. Hayward

Date started: 6/11/20

Date finished: 6/11/20

Drilling method: Direct Push Technology

Hammer weight/drop:

Hammer type: Automatic

Sampler: 4' Continuous

DEPTH (feet)	SAMPLES				OVM (ppm)	LITHOLOGY	MATERIAL DESCRIPTION
	Sample Number	Sample	Blow Count	Recovery (inches)			
1						SP-SM	SAND with SILT (SP-SM) 90% sand, 10% fines, tan, loose, dry, no odor, some brick debris, mortar, concrete glass [FILL]
2	EB-7-1.5	•		32/ 48"	0.1	SP-SC	SAND with CLAY (SP-SC) 85% sand, 15% fines, tan, moist, medium density, no odor
3	EB-7-3.0	•			0.0		
4					0.2	SP-SC	
5	EB-7-5.0	•		0.0			
6				38/ 48"	0.1	SC	increasing density and moisture with depth, trace oxidized gravel, laminations starting at 7 feet
7					0.0		
8					0.0		CLAYEY SAND (SC) 75% sand, 25% fines, tan with gray lensing (organics), dense, moist, some organics and roots visible
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							

Boring terminated at a depth of 8 feet below ground surface.
Boring backfilled with cement grout.



Project No.: 750664801

Figure: A-7

TEST ENVIRONMENTAL INCHES 750664801-1666 7TH ST ENV.GPJ TEMPLATE CA-MODIFIED.GDT 7/9/20

PROJECT:

1666 7TH STREET
Oakland, California

Log of Boring EB-8

PAGE 1 OF 1

Boring location: See Site Plan, Figure 2

Logged by: B. Hayward

Date started: 6/11/20

Date finished: 6/11/20

Drilling method: Direct Push Technology

Hammer weight/drop:

Hammer type: Automatic

Sampler: 4' Continuous

DEPTH (feet)	SAMPLES				OVM (ppm)	LITHOLOGY	MATERIAL DESCRIPTION
	Sample Number	Sample	Blow Count	Recovery (Inches)			
1					0.0		SAND with SILT (SP-SM) 90% sand, 10% fines, brown, loose, dry, no odor, brick, glass, concrete debris [FILL]
2	EB-8-1.5	•		20/48"		SP-SM	
3	EB-8-3.0	•					
4					0.1		
5	EB-8-5.0	•		38/48"	0.1	SP-SC	SAND with CLAY (SP-SC) 85% sand, 15% fines, tan, medium dense, moist, no odor, some lensing with black sand/clay, oxidized black gravel
6							
7					0.0		
8					0.0	SC	CLAYEY SAND (SC) 75% sand, 25% fines, tan, dense, wet, no odor wet at 7 feet
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							

TEST ENVIRONMENTAL INCHES 750664801-1666 7TH ST ENV.GPJ TEMPLATE CA-MODIFIED.GDT 7/9/20

Boring terminated at a depth of 8 feet below ground surface.
Boring backfilled with cement grout.
Groundwater encountered at 7 feet below ground surface.



Project No.: 750664801

Figure: A-8

UNIFIED SOIL CLASSIFICATION SYSTEM

Major Divisions		Symbols	Typical Names
Coarse-Grained Soils (more than half of soil > no. 200 sieve size)	Gravels (More than half of coarse fraction > no. 4 sieve size)	GW	Well-graded gravels or gravel-sand mixtures, little or no fines
		GP	Poorly-graded gravels or gravel-sand mixtures, little or no fines
		GM	Silty gravels, gravel-sand-silt mixtures
		GC	Clayey gravels, gravel-sand-clay mixtures
	Sands (More than half of coarse fraction < no. 4 sieve size)	SW	Well-graded sands or gravelly sands, little or no fines
		SP	Poorly-graded sands or gravelly sands, little or no fines
		SM	Silty sands, sand-silt mixtures
		SC	Clayey sands, sand-clay mixtures
Fine-Grained Soils (more than half of soil < no. 200 sieve size)	Silts and Clays LL = < 50	ML	Inorganic silts and clayey silts of low plasticity, sandy silts, gravelly silts
		CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, lean clays
		OL	Organic silts and organic silt-clays of low plasticity
	Silts and Clays LL = > 50	MH	Inorganic silts of high plasticity
		CH	Inorganic clays of high plasticity, fat clays
		OH	Organic silts and clays of high plasticity
Highly Organic Soils		PT	Peat and other highly organic soils

SAMPLE DESIGNATIONS/SYMBOLS

GRAIN SIZE CHART		
Classification	Range of Grain Sizes	
	U.S. Standard Sieve Size	Grain Size in Millimeters
Boulders	Above 12"	Above 305
Cobbles	12" to 3"	305 to 76.2
Gravel coarse fine	3" to No. 4 3" to 3/4" 3/4" to No. 4	76.2 to 4.76 76.2 to 19.1 19.1 to 4.76
Sand coarse medium fine	No. 4 to No. 200 No. 4 to No. 10 No. 10 to No. 40 No. 40 to No. 200	4.76 to 0.075 4.76 to 2.00 2.00 to 0.420 0.420 to 0.075
Silt and Clay	Below No. 200	Below 0.075

- Sample taken with Sprague & Henwood split-barrel sampler with a 3.0-inch outside diameter and a 2.43-inch inside diameter. Darkened area indicates soil recovered
- Classification sample taken with Standard Penetration Test sampler
- Undisturbed sample taken with thin-walled tube
- Disturbed sample
- Sampling attempted with no recovery
- Core sample
- Analytical laboratory sample
- Sample taken with Direct Push or Drive sampler
- Sonic

- Unstabilized groundwater level
- Stabilized groundwater level

SAMPLER TYPE

- C Core barrel
- CA California split-barrel sampler with 2.5-inch outside diameter and a 1.93-inch inside diameter
- D&M Dames & Moore piston sampler using 2.5-inch outside diameter, thin-walled tube
- O Osterberg piston sampler using 3.0-inch outside diameter, thin-walled Shelby tube
- PT Pitcher tube sampler using 3.0-inch outside diameter, thin-walled Shelby tube
- S&H Sprague & Henwood split-barrel sampler with a 3.0-inch outside diameter and a 2.43-inch inside diameter
- SPT Standard Penetration Test (SPT) split-barrel sampler with a 2.0-inch outside diameter and a 1.5-inch inside diameter
- ST Shelby Tube (3.0-inch outside diameter, thin-walled tube) advanced with hydraulic pressure

Langan Engineering and Environmental Services, Inc. 501 14th Street, 3rd Floor Oakland, CA 94612 T: 510.874.7000 F: 510.874.7001 www.langan.com	Project 1666 7TH STREET OAKLAND ALAMEDA COUNTY CALIFORNIA	Drawing Title SOIL CLASSIFICATION CHART	Project No. 750664801 Date 06/18/2020 Drawn By AG Checked By BH	
			A-9	

PROJECT:

1666 7TH STREET
Oakland, California

Log of Boring B-1

Boring location: See Site Plan, Figure 2

Logged by: N. Jose
Drilled By: Gregg Drilling

Date started: 5/29/20

Date finished: 5/29/20

Drilling method: Hollow Stem Auger

Hammer weight/drop: 140 lbs./30 inches

Hammer type: Automatic Safety

Samplers: Standard Penetration Test (SPT)

LABORATORY TEST DATA

DEPTH (feet)	SAMPLES			SPT N-Value ¹	LITHOLOGY	MATERIAL DESCRIPTION	Type of Strength Test	Confining Pressure Lbs/Sq Ft	Shear Strength Lbs/Sq Ft	Fines %	Natural Moisture Content, %	Dry Density Lbs/Cu Ft
	Sampler Type	Sample	Blows/6"									
						Ground Surface Elevation: 10.1 feet ²						
1	HA					8 inches topsoil						
2	HA				SM	SILTY SAND with GRAVEL (SM) dark brown, loose, dry, fine- to coarse-grained, fine to coarse subangular to subrounded gravel, organic odor [FILL]						
3	HA											
4	HA				SC	CLAYEY SAND (SC) brown, loose, dry to moist, fine- to medium-grained, brick fragments, trace organics [FILL]						
5						yellow-brown to dark brown, trace fine subrounded gravel				20	17.5	
6	SPT		1	5	SM	SILTY SAND (SM) light-brown with gray and yellow-brown mottling, loose, moist, fine- to medium-grained [FILL]						
7			2									
8	SPT		3	20		SILTY SAND (SM) yellow-brown to brown, medium dense increased silt content						
9			7									
10			10			▽ brown with gray mottling, wet (5/29/20, 8:30 a.m.)						
11	SPT		3	24								
12			9									
13			11									
15					SM	gray-brown to yellow-brown, dense, wet						19.0
16	SPT		7	38								
17			16									
18			16									
20						fine- to medium-grained						
21	SPT		12	48								18.1
22			20									
23			20									
24						CLAYEY SILTY SAND (SC-SM) yellow-brown, loose to medium dense, wet, fine- to medium-grained						
25						LL = 19, PI = 6, See Figure D-1						
26	SPT		2	10	SC-SM					26.1	16.5	
27			4									
28			4									
29					SM	SILTY SAND (SM) yellow-brown, dense, wet, fine- to medium-grained, trace clay						
30												

LANGAN

Project No.: 750664801

Figure: B-1a

TEST GEOTECH LOG 750664801-1666 7TH ST GEO.GPJ TR.GDT 8/13/20

PROJECT:

1666 7TH STREET
Oakland, California

Log of Boring B-1

DEPTH (feet)	SAMPLES				LITHOLOGY	MATERIAL DESCRIPTION	LABORATORY TEST DATA						
	Sampler Type	Sample	Blows/6"	SPT N-Value ¹			Type of Strength Test	Confining Pressure Lbs/Sq Ft	Shear Strength Lbs/Sq Ft	Fines %	Natural Moisture Content, %	Dry Density Lbs/Cu Ft	
31	SPT		3 19 22	49		SILTY SAND (SM) (continued)							
32													
33													
34													
35													
36													
37													
38													
39													
40													
41	SPT		5 13 20	40	SM								
42													
43													
44													
45													
46													
47													
48													
49													
50													
51	SPT		7 14 32	55		very dense							
52													
53													
54													
55													
56													
57													
58													
59													
60													

TEST GEOTECH LOG 750664801-1666 7TH ST GEO.GPJ TR.GDT 8/13/20

Boring terminated at a depth of 51.5 feet below ground surface.
Boring backfilled with cement grout.
Groundwater encountered at 10 feet below ground surface during drilling.
HA = Hand Auger.

¹ SPT blow counts were converted to SPT N-Values using a correction factors of 1.2, respectively to account for sampler type and hammer energy.
² Elevations based on 'Boundary & Topographic Survey' by Bay Area Land Survey Inc. dated June 2016, Oakland City Datum.



Project No.:
750664801

Figure:
B-1b

PROJECT:

1666 7TH STREET
Oakland, California

Log of Boring B-2

PAGE 1 OF 2

Boring location: See Site Plan, Figure 2

Logged by: N. Jose
Drilled By: Gregg Drilling

Date started: 5/29/20

Date finished: 5/29/20

Drilling method: Hollow Stem Auger

Hammer weight/drop: 140 lbs./30 inches

Hammer type: Automatic Safety

LABORATORY TEST DATA

Samplers: Standard Penetration Test (SPT)

DEPTH (feet)	SAMPLES			SPT N-Value ¹	LITHOLOGY	MATERIAL DESCRIPTION	Type of Strength Test	Confining Pressure Lbs/Sq Ft	Shear Strength Lbs/Sq Ft	Fines %	Natural Moisture Content, %	Dry Density Lbs/Cu Ft
	Sampler Type	Sample	Blows/6"									
Ground Surface Elevation: 9.2 feet ²												
1	HA				SM	6 inches topsoil						
2	HA					SILTY SAND with GRAVEL (SM) red-brown to brown, loose, moist, fine- to medium-grained, fine subangular to subrounded gravel, wood debris [FILL] yellow-brown					8.5	
3	HA											
4	HA											
5	SPT		5	26	SM	SILTY SAND (SM) gray-brown to yellow-brown with orange mottling, medium dense, moist, fine- to medium-grained				29.5	19.0	
6	SPT		9									
7	SPT		13									
8	SPT		5	24	SM	yellow-brown with gray-brown mottling (5/29/20, 12:13 p.m.)						
9			9									
10			11				medium dense to dense					
11	SPT		6	30	SM							
12			11									
13			14									
15	SPT		6	26	SM	yellow-brown with orange and gray-brown mottling, medium dense				14	19.8	
16			8									
17			14									
20	SPT		3	10	SC-SM	CLAYEY SILTY SAND (SC - SM) yellow-brown with orange and gray-brown mottling, loose to medium dense, wet, fine- to medium-grained LL = 18, PI = 6, See Figure D-1				35.1	17.1	
21			4									
22	SPT		0	4	SP-SM	SAND with SILT (SP-SM) yellow-brown with orange mottling, loose, wet, fine- to medium grained PI = Non Plastic, See Figure D-1				8.6	20.3	
23			0									
24	SPT		0	4	SM							
25			0									
26	SPT		6	35	SM	SILTY SAND (SM) gray-brown, dense, wet, fine- to medium-grained						
27			9									
28	SPT		11	60	SM	very dense						
29			23									
30			26									

TEST GEOTECH LOG 750664801-1666 7TH ST. GEO.GPJ TR.GDT 8/13/20

LANGAN

Project No.: 750664801

Figure: B-2a

PROJECT:

1666 7TH STREET
Oakland, California

Log of Boring B-2

PAGE 2 OF 2

DEPTH (feet)	SAMPLES				LITHOLOGY	MATERIAL DESCRIPTION	LABORATORY TEST DATA							
	Sampler Type	Sample	Blows/6"	SPT N-Value ¹			Type of Strength Test	Confining Pressure Lbs/Sq Ft	Shear Strength Lbs/Sq Ft	Fines %	Natural Moisture Content, %	Dry Density Lbs/Cu Ft		
31	SPT		10 13 25	46	SM	SILTY SAND (SM) (continued)								
32						yellow-brown to gray-brown, dense, wet, fine- to medium-grained								
33														
34														
35														
36														
37														
38														
39														
40	SPT		11 15 25	48										
41														
42														
43														
44														
45	SPT		5 9 14	28*		PI = Non Plastic, See Figure D-1					17.1	20.5		
46														
47						At 45 feet bgs, driller encountered heaving sands entering the hollow stem auger. SPT sampler could not be driven at the target depth of 50 feet bgs.								
48														
49						Driller drilled to a depth of 53 feet bgs, but soil samples could not be collected due to the presence of heaving sands.								
50														
51														
52														
53														
54														
55														
56														
57														
58														
59														
60														

TEST GEOTECH LOG 750664801-1666 7TH ST GEO.GPJ TR.GDT 8/13/20

Boring terminated at a depth of 53 feet below ground surface.
Boring backfilled with cement grout.
Groundwater encountered at 10 feet below ground surface during drilling.
HA = Hand Auger.

¹ SPT blow counts were converted to SPT N-Values using a correction factors of 1.2, respectively to account for sampler type and hammer energy.
² Blow Count may be disturbed - heaving sands likely present in the hollow stem auger.
³ Elevations based on 'Boundary & Topographic Survey' by Bay Area Land Survey Inc. dated June 2016, Oakland City Datum.



UNIFIED SOIL CLASSIFICATION SYSTEM

Major Divisions		Symbols	Typical Names
Coarse-Grained Soils (more than half of soil > no. 200 sieve size)	Gravels (More than half of coarse fraction > no. 4 sieve size)	GW	Well-graded gravels or gravel-sand mixtures, little or no fines
		GP	Poorly-graded gravels or gravel-sand mixtures, little or no fines
		GM	Silty gravels, gravel-sand-silt mixtures
		GC	Clayey gravels, gravel-sand-clay mixtures
	Sands (More than half of coarse fraction < no. 4 sieve size)	SW	Well-graded sands or gravelly sands, little or no fines
		SP	Poorly-graded sands or gravelly sands, little or no fines
		SM	Silty sands, sand-silt mixtures
		SC	Clayey sands, sand-clay mixtures
Fine-Grained Soils (more than half of soil < no. 200 sieve size)	Silts and Clays LL = < 50	ML	Inorganic silts and clayey silts of low plasticity, sandy silts, gravelly silts
		CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, lean clays
		OL	Organic silts and organic silt-clays of low plasticity
	Silts and Clays LL = > 50	MH	Inorganic silts of high plasticity
		CH	Inorganic clays of high plasticity, fat clays
		OH	Organic silts and clays of high plasticity
Highly Organic Soils		PT	Peat and other highly organic soils

SAMPLE DESIGNATIONS/SYMBOLS

GRAIN SIZE CHART		
Classification	Range of Grain Sizes	
	U.S. Standard Sieve Size	Grain Size in Millimeters
Boulders	Above 12"	Above 305
Cobbles	12" to 3"	305 to 76.2
Gravel coarse fine	3" to No. 4 3" to 3/4" 3/4" to No. 4	76.2 to 4.76 76.2 to 19.1 19.1 to 4.76
Sand coarse medium fine	No. 4 to No. 200 No. 4 to No. 10 No. 10 to No. 40 No. 40 to No. 200	4.76 to 0.075 4.76 to 2.00 2.00 to 0.420 0.420 to 0.075
Silt and Clay	Below No. 200	Below 0.075

- Sample taken with Sprague & Henwood split-barrel sampler with a 3.0-inch outside diameter and a 2.43-inch inside diameter. Darkened area indicates soil recovered
- Classification sample taken with Standard Penetration Test sampler
- Undisturbed sample taken with thin-walled tube
- Disturbed sample
- Sampling attempted with no recovery
- Core sample
- Analytical laboratory sample
- Sample taken with Direct Push or Drive sampler
- Sonic

- Unstabilized groundwater level
- Stabilized groundwater level

SAMPLER TYPE

- C Core barrel
- CA California split-barrel sampler with 2.5-inch outside diameter and a 1.93-inch inside diameter
- D&M Dames & Moore piston sampler using 2.5-inch outside diameter, thin-walled tube
- O Osterberg piston sampler using 3.0-inch outside diameter, thin-walled Shelby tube
- PT Pitcher tube sampler using 3.0-inch outside diameter, thin-walled Shelby tube
- S&H Sprague & Henwood split-barrel sampler with a 3.0-inch outside diameter and a 2.43-inch inside diameter
- SPT Standard Penetration Test (SPT) split-barrel sampler with a 2.0-inch outside diameter and a 1.5-inch inside diameter
- ST Shelby Tube (3.0-inch outside diameter, thin-walled tube) advanced with hydraulic pressure



T: 510.874.7000 F: 510.874.7001 www.langan.com

Project
1666 7TH STREET
OAKLAND
ALAMEDA COUNTY CALIFORNIA

Drawing Title
SOIL CLASSIFICATION CHART

Project No.
750664801
Date
06/15/2020
Drawn By
AG
Checked By
RN

Figure
B-3

APPENDIX B
CERTIFIED ANALYTICAL LABORATORY REPORTS

DRAFT



McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 2006034

Report Created for: Langan

501 14th Street, 3rd Floor
Oakland, CA 94612

Project Contact: Adam Brown

Project P.O.:

Project: 750664801; 1666 7th St.

Project Received: 06/01/2020

Analytical Report reviewed & approved for release on 06/09/2020 by:

Jennifer Lagerbom
Project Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.





Glossary of Terms & Qualifier Definitions

Client: Langan
Project: 750664801; 1666 7th St.
WorkOrder: 2006034

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
CPT	Consumer Product Testing not NELAP Accredited
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
LQL	Lowest Quantitation Level
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
TZA	TimeZone Net Adjustment for sample collected outside of MAI's UTC.
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)



Glossary of Terms & Qualifier Definitions

Client: Langan
Project: 750664801; 1666 7th St.
WorkOrder: 2006034

Analytical Qualifiers

A	The reported value is determined using a "single point" calibration by GC-ECD as allowed by the method.
B	Analyte detected in the associated Method Blank and in the sample
J	Result is less than the RL/ML but greater than the MDL. The reported concentration is an estimated value.
P	Agreement between quantitative confirmation results exceed method recommended limits
S	Spike recovery outside accepted recovery limits
a1	Sample diluted due to matrix interference
c1	Surrogate recovery outside of the control limits due to the dilution of the sample.
c2	Surrogate recovery outside of the control limits due to matrix interference.
c3	The efficiency of elemental Platinum & Gold recovery by our digestion method is unknown but is suspected to be low to very low
d1	Weakly modified or unmodified gasoline is significant
d7	Strongly aged gasoline or diesel range compounds are significant in the TPH(g) chromatogram
d9	No recognizable pattern
e2	Diesel range compounds are significant; no recognizable pattern
e7	Oil range compounds are significant
e8	Pattern resembles kerosene/kerosene range/jet fuel range
h7	Copper (EPA 3660B) cleanup

Quality Control Qualifiers

F1	MS/MSD recovery and/or RPD is out of acceptance criteria; LCS validates the prep batch.
F2	LCS/LCSD recovery and/or RPD/RSD is out of acceptance criteria.



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/05/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW3550B/3640Am/3630Cm
Analytical Method: SW8081A/8082
Unit: mg/kg

Organochlorine Pesticides + PCBs

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-1-1.5	2006034-001A	Soil	05/29/2020 08:10	GC23 06082008.d	199616

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
Aldrin	ND		0.00010	1	06/08/2020 16:47
a-BHC	ND		0.00010	1	06/08/2020 16:47
b-BHC	ND		0.00030	1	06/08/2020 16:47
d-BHC	ND		0.00020	1	06/08/2020 16:47
g-BHC	ND		0.00010	1	06/08/2020 16:47
Chlordane (Technical)	ND		0.0025	1	06/08/2020 16:47
a-Chlordane	0.00015	P	0.00010	1	06/08/2020 16:47
g-Chlordane	0.00024		0.00010	1	06/08/2020 16:47
p,p-DDD	ND		0.00010	1	06/08/2020 16:47
p,p-DDE	0.00057		0.00010	1	06/08/2020 16:47
p,p-DDT	0.00090		0.00010	1	06/08/2020 16:47
Dieldrin	ND		0.00010	1	06/08/2020 16:47
Endosulfan I	ND		0.00010	1	06/08/2020 16:47
Endosulfan II	ND		0.00010	1	06/08/2020 16:47
Endosulfan sulfate	ND		0.00010	1	06/08/2020 16:47
Endrin	ND		0.00010	1	06/08/2020 16:47
Endrin aldehyde	ND		0.00010	1	06/08/2020 16:47
Endrin ketone	ND		0.00010	1	06/08/2020 16:47
Heptachlor	ND		0.00010	1	06/08/2020 16:47
Heptachlor epoxide	ND		0.00010	1	06/08/2020 16:47
Hexachlorobenzene	ND		0.0010	1	06/08/2020 16:47
Hexachlorocyclopentadiene	ND		0.0020	1	06/08/2020 16:47
Methoxychlor	ND		0.00020	1	06/08/2020 16:47
Toxaphene	ND		0.0050	1	06/08/2020 16:47
Aroclor1016	ND		0.0050	1	06/08/2020 16:47
Aroclor1221	ND		0.0050	1	06/08/2020 16:47
Aroclor1232	ND		0.0050	1	06/08/2020 16:47
Aroclor1242	ND		0.0050	1	06/08/2020 16:47
Aroclor1248	ND		0.0050	1	06/08/2020 16:47
Aroclor1254	0.0095	A	0.0050	1	06/08/2020 16:47
Aroclor1260	ND		0.0050	1	06/08/2020 16:47
PCBs, total	0.0095		0.0050	1	06/08/2020 16:47

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	99	20-145	06/08/2020 16:47

Analyst(s): LT

Analytical Comments: h7

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/05/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW3550B/3640Am/3630Cm
Analytical Method: SW8081A/8082
Unit: mg/kg

Organochlorine Pesticides + PCBs

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-1-3	2006034-002A	Soil	05/29/2020 08:12	GC23 06052014.d	199616

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
Aldrin	ND		0.00010	1	06/05/2020 16:55
a-BHC	ND		0.00010	1	06/05/2020 16:55
b-BHC	ND		0.00030	1	06/05/2020 16:55
d-BHC	ND		0.00020	1	06/05/2020 16:55
g-BHC	ND		0.00010	1	06/05/2020 16:55
Chlordane (Technical)	ND		0.0025	1	06/05/2020 16:55
a-Chlordane	ND		0.00010	1	06/05/2020 16:55
g-Chlordane	0.00016		0.00010	1	06/05/2020 16:55
p,p-DDD	ND		0.00010	1	06/05/2020 16:55
p,p-DDE	0.00015	P	0.00010	1	06/05/2020 16:55
p,p-DDT	0.00072		0.00010	1	06/05/2020 16:55
Dieldrin	ND		0.00010	1	06/05/2020 16:55
Endosulfan I	ND		0.00010	1	06/05/2020 16:55
Endosulfan II	ND		0.00010	1	06/05/2020 16:55
Endosulfan sulfate	ND		0.00010	1	06/05/2020 16:55
Endrin	ND		0.00010	1	06/05/2020 16:55
Endrin aldehyde	ND		0.00010	1	06/05/2020 16:55
Endrin ketone	ND		0.00010	1	06/05/2020 16:55
Heptachlor	ND		0.00010	1	06/05/2020 16:55
Heptachlor epoxide	ND		0.00010	1	06/05/2020 16:55
Hexachlorobenzene	ND		0.0010	1	06/05/2020 16:55
Hexachlorocyclopentadiene	ND		0.0020	1	06/05/2020 16:55
Methoxychlor	ND		0.00020	1	06/05/2020 16:55
Toxaphene	ND		0.0050	1	06/05/2020 16:55
Aroclor1016	ND		0.0050	1	06/05/2020 16:55
Aroclor1221	ND		0.0050	1	06/05/2020 16:55
Aroclor1232	ND		0.0050	1	06/05/2020 16:55
Aroclor1242	ND		0.0050	1	06/05/2020 16:55
Aroclor1248	ND		0.0050	1	06/05/2020 16:55
Aroclor1254	0.0058	A	0.0050	1	06/05/2020 16:55
Aroclor1260	ND		0.0050	1	06/05/2020 16:55
PCBs, total	0.0058		0.0050	1	06/05/2020 16:55

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	123	20-145	06/05/2020 16:55

Analyst(s): LT

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/05/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW3550B/3640Am/3630Cm
Analytical Method: SW8081A/8082
Unit: mg/kg

Organochlorine Pesticides + PCBs

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-1-5	2006034-003A	Soil	05/29/2020 08:15	GC23 06082009.d	199616

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.0020	20	06/08/2020 17:03
a-BHC	ND	0.0020	20	06/08/2020 17:03
b-BHC	ND	0.0060	20	06/08/2020 17:03
d-BHC	ND	0.0040	20	06/08/2020 17:03
g-BHC	ND	0.0020	20	06/08/2020 17:03
Chlordane (Technical)	ND	0.050	20	06/08/2020 17:03
a-Chlordane	ND	0.0020	20	06/08/2020 17:03
g-Chlordane	ND	0.0020	20	06/08/2020 17:03
p,p-DDD	ND	0.0020	20	06/08/2020 17:03
p,p-DDE	ND	0.0020	20	06/08/2020 17:03
p,p-DDT	0.010	0.0020	20	06/08/2020 17:03
Dieldrin	ND	0.0020	20	06/08/2020 17:03
Endosulfan I	ND	0.0020	20	06/08/2020 17:03
Endosulfan II	ND	0.0020	20	06/08/2020 17:03
Endosulfan sulfate	ND	0.0020	20	06/08/2020 17:03
Endrin	ND	0.0020	20	06/08/2020 17:03
Endrin aldehyde	ND	0.0020	20	06/08/2020 17:03
Endrin ketone	ND	0.0020	20	06/08/2020 17:03
Heptachlor	ND	0.0020	20	06/08/2020 17:03
Heptachlor epoxide	ND	0.0020	20	06/08/2020 17:03
Hexachlorobenzene	ND	0.020	20	06/08/2020 17:03
Hexachlorocyclopentadiene	ND	0.040	20	06/08/2020 17:03
Methoxychlor	ND	0.0040	20	06/08/2020 17:03
Toxaphene	ND	0.10	20	06/08/2020 17:03
Aroclor1016	ND	0.10	20	06/08/2020 17:03
Aroclor1221	ND	0.10	20	06/08/2020 17:03
Aroclor1232	ND	0.10	20	06/08/2020 17:03
Aroclor1242	ND	0.10	20	06/08/2020 17:03
Aroclor1248	ND	0.10	20	06/08/2020 17:03
Aroclor1254	ND	0.10	20	06/08/2020 17:03
Aroclor1260	ND	0.10	20	06/08/2020 17:03
PCBs, total	ND	0.10	20	06/08/2020 17:03

Surrogates	REC (%)	Qualifiers	Limits	Date Analyzed
Decachlorobiphenyl	172	S	20-145	06/08/2020 17:03

Analyst(s): LT

Analytical Comments: c1

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/05/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW3550B/3640Am/3630Cm
Analytical Method: SW8081A/8082
Unit: mg/kg

Organochlorine Pesticides + PCBs

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-2-1.5	2006034-004A	Soil	05/29/2020 12:25	GC23 06052016.d	199616

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.00010	1	06/05/2020 17:27
a-BHC	ND	0.00010	1	06/05/2020 17:27
b-BHC	ND	0.00030	1	06/05/2020 17:27
d-BHC	ND	0.00020	1	06/05/2020 17:27
g-BHC	ND	0.00010	1	06/05/2020 17:27
Chlordane (Technical)	ND	0.0025	1	06/05/2020 17:27
a-Chlordane	0.00057	0.00010	1	06/05/2020 17:27
g-Chlordane	0.00061	0.00010	1	06/05/2020 17:27
p,p-DDD	0.00023	0.00010	1	06/05/2020 17:27
p,p-DDE	0.0018	0.00010	1	06/05/2020 17:27
p,p-DDT	0.0086	0.00010	1	06/05/2020 17:27
Dieldrin	0.00053	0.00010	1	06/05/2020 17:27
Endosulfan I	ND	0.00010	1	06/05/2020 17:27
Endosulfan II	ND	0.00010	1	06/05/2020 17:27
Endosulfan sulfate	ND	0.00010	1	06/05/2020 17:27
Endrin	ND	0.00010	1	06/05/2020 17:27
Endrin aldehyde	ND	0.00010	1	06/05/2020 17:27
Endrin ketone	ND	0.00010	1	06/05/2020 17:27
Heptachlor	ND	0.00010	1	06/05/2020 17:27
Heptachlor epoxide	ND	0.00010	1	06/05/2020 17:27
Hexachlorobenzene	ND	0.0010	1	06/05/2020 17:27
Hexachlorocyclopentadiene	ND	0.0020	1	06/05/2020 17:27
Methoxychlor	ND	0.00020	1	06/05/2020 17:27
Toxaphene	ND	0.0050	1	06/05/2020 17:27
Aroclor1016	ND	0.0050	1	06/05/2020 17:27
Aroclor1221	ND	0.0050	1	06/05/2020 17:27
Aroclor1232	ND	0.0050	1	06/05/2020 17:27
Aroclor1242	ND	0.0050	1	06/05/2020 17:27
Aroclor1248	ND	0.0050	1	06/05/2020 17:27
Aroclor1254	ND	0.0050	1	06/05/2020 17:27
Aroclor1260	ND	0.0050	1	06/05/2020 17:27
PCBs, total	ND	0.0050	1	06/05/2020 17:27

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	105	20-145	06/05/2020 17:27

Analyst(s): LT

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/05/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW3550B/3640Am/3630Cm
Analytical Method: SW8081A/8082
Unit: mg/kg

Organochlorine Pesticides + PCBs

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-2-3	2006034-005A	Soil	05/29/2020 12:30	GC23 06082010.d	199616

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.00010	1	06/08/2020 17:19
a-BHC	ND	0.00010	1	06/08/2020 17:19
b-BHC	ND	0.00030	1	06/08/2020 17:19
d-BHC	ND	0.00020	1	06/08/2020 17:19
g-BHC	ND	0.00010	1	06/08/2020 17:19
Chlordane (Technical)	ND	0.0025	1	06/08/2020 17:19
a-Chlordane	ND	0.00010	1	06/08/2020 17:19
g-Chlordane	ND	0.00010	1	06/08/2020 17:19
p,p-DDD	ND	0.00010	1	06/08/2020 17:19
p,p-DDE	0.00042	0.00010	1	06/08/2020 17:19
p,p-DDT	0.00080	0.00010	1	06/08/2020 17:19
Dieldrin	ND	0.00010	1	06/08/2020 17:19
Endosulfan I	ND	0.00010	1	06/08/2020 17:19
Endosulfan II	ND	0.00010	1	06/08/2020 17:19
Endosulfan sulfate	ND	0.00010	1	06/08/2020 17:19
Endrin	ND	0.00010	1	06/08/2020 17:19
Endrin aldehyde	ND	0.00010	1	06/08/2020 17:19
Endrin ketone	ND	0.00010	1	06/08/2020 17:19
Heptachlor	ND	0.00010	1	06/08/2020 17:19
Heptachlor epoxide	ND	0.00010	1	06/08/2020 17:19
Hexachlorobenzene	ND	0.0010	1	06/08/2020 17:19
Hexachlorocyclopentadiene	ND	0.0020	1	06/08/2020 17:19
Methoxychlor	ND	0.00020	1	06/08/2020 17:19
Toxaphene	ND	0.0050	1	06/08/2020 17:19
Aroclor1016	ND	0.0050	1	06/08/2020 17:19
Aroclor1221	ND	0.0050	1	06/08/2020 17:19
Aroclor1232	ND	0.0050	1	06/08/2020 17:19
Aroclor1242	ND	0.0050	1	06/08/2020 17:19
Aroclor1248	ND	0.0050	1	06/08/2020 17:19
Aroclor1254	ND	0.0050	1	06/08/2020 17:19
Aroclor1260	ND	0.0050	1	06/08/2020 17:19
PCBs, total	ND	0.0050	1	06/08/2020 17:19

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	124	20-145	06/08/2020 17:19

Analyst(s): LT



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/03/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/kg

Organophosphorous Pesticides by GC-MS (EPA 8141 Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-1-1.5	2006034-001A	Soil	05/29/2020 08:10	GC25 F0603200217.D	199412

Analytes	Result	RL	DF	Date Analyzed
Alachlor	ND	5.0	50	06/03/2020 21:44
Atrazine	ND	5.0	50	06/03/2020 21:44
Azinphos methyl (Guthion)	ND	5.0	50	06/03/2020 21:44
Bolstar (Sulprofos)	ND	5.0	50	06/03/2020 21:44
Chlorpyrifos	ND	5.0	50	06/03/2020 21:44
Coumaphos	ND	5.0	50	06/03/2020 21:44
Demeton	ND	5.0	50	06/03/2020 21:44
Diazinon	ND	5.0	50	06/03/2020 21:44
Dichlorvos (DDVP)	ND	5.0	50	06/03/2020 21:44
Dimethoate	ND	5.0	50	06/03/2020 21:44
Disulfoton (Di-Syston)	ND	5.0	50	06/03/2020 21:44
EPN	ND	5.0	50	06/03/2020 21:44
EPTC	ND	5.0	50	06/03/2020 21:44
Ethion	ND	5.0	50	06/03/2020 21:44
Ethoprop	ND	5.0	50	06/03/2020 21:44
Ethyl parathion	ND	5.0	50	06/03/2020 21:44
Fensulfothion	ND	5.0	50	06/03/2020 21:44
Fenthion	ND	5.0	50	06/03/2020 21:44
Fonofos	ND	5.0	50	06/03/2020 21:44
Malathion	ND	5.0	50	06/03/2020 21:44
Mevinphos (Phosdrin)	ND	5.0	50	06/03/2020 21:44
Molinate	ND	5.0	50	06/03/2020 21:44
Methyl parathion	ND	5.0	50	06/03/2020 21:44
Phorate (Thimet)	ND	5.0	50	06/03/2020 21:44
Prometon	ND	5.0	50	06/03/2020 21:44
Ronnel	ND	5.0	50	06/03/2020 21:44
Simazine	ND	5.0	50	06/03/2020 21:44
Stirofos (Tetrachlorvinphos)	ND	5.0	50	06/03/2020 21:44
Terbacil	ND	5.0	50	06/03/2020 21:44
Terbufos (Terbuphos)	ND	5.0	50	06/03/2020 21:44
Thiobencarb	ND	5.0	50	06/03/2020 21:44
Tokuthion (Prothiofos)	ND	5.0	50	06/03/2020 21:44
Trichloronate (Agritox)	ND	5.0	50	06/03/2020 21:44

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/03/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/kg

Organophosphorous Pesticides by GC-MS (EPA 8141 Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-1-1.5	2006034-001A	Soil	05/29/2020 08:10	GC25 F0603200217.D	199412

Analytes	Result	RL	DF	Date Analyzed
----------	--------	----	----	---------------

Surrogates	REC (%)	Qualifiers	Limits	Date Analyzed
1-Bromo-2-Nitrobenzene	0	S	60-140	06/03/2020 21:44

Analyst(s): STA **Analytical Comments:** a1,c1



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/03/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/kg

Organophosphorous Pesticides by GC-MS (EPA 8141 Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-1-3	2006034-002A	Soil	05/29/2020 08:12	GC25 F0603200218.D	199412
<u>Analytes</u>	<u>Result</u>		<u>RL</u> <u>DF</u>		<u>Date Analyzed</u>
Alachlor	ND		1.0 10		06/03/2020 22:10
Atrazine	ND		1.0 10		06/03/2020 22:10
Azinphos methyl (Guthion)	ND		1.0 10		06/03/2020 22:10
Bolstar (Sulprofos)	ND		1.0 10		06/03/2020 22:10
Chlorpyrifos	ND		1.0 10		06/03/2020 22:10
Coumaphos	ND		1.0 10		06/03/2020 22:10
Demeton	ND		1.0 10		06/03/2020 22:10
Diazinon	ND		1.0 10		06/03/2020 22:10
Dichlorvos (DDVP)	ND		1.0 10		06/03/2020 22:10
Dimethoate	ND		1.0 10		06/03/2020 22:10
Disulfoton (Di-Syston)	ND		1.0 10		06/03/2020 22:10
EPN	ND		1.0 10		06/03/2020 22:10
EPTC	ND		1.0 10		06/03/2020 22:10
Ethion	ND		1.0 10		06/03/2020 22:10
Ethoprop	ND		1.0 10		06/03/2020 22:10
Ethyl parathion	ND		1.0 10		06/03/2020 22:10
Fensulfothion	ND		1.0 10		06/03/2020 22:10
Fenthion	ND		1.0 10		06/03/2020 22:10
Fonofos	ND		1.0 10		06/03/2020 22:10
Malathion	ND		1.0 10		06/03/2020 22:10
Mevinphos (Phosdrin)	ND		1.0 10		06/03/2020 22:10
Molinate	ND		1.0 10		06/03/2020 22:10
Methyl parathion	ND		1.0 10		06/03/2020 22:10
Phorate (Thimet)	ND		1.0 10		06/03/2020 22:10
Prometon	ND		1.0 10		06/03/2020 22:10
Ronnel	ND		1.0 10		06/03/2020 22:10
Simazine	ND		1.0 10		06/03/2020 22:10
Stirofos (Tetrachlorvinphos)	ND		1.0 10		06/03/2020 22:10
Terbacil	ND		1.0 10		06/03/2020 22:10
Terbufos (Terbuphos)	ND		1.0 10		06/03/2020 22:10
Thiobencarb	ND		1.0 10		06/03/2020 22:10
Tokuthion (Prothiofos)	ND		1.0 10		06/03/2020 22:10
Trichloronate (Agritox)	ND		1.0 10		06/03/2020 22:10

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/03/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/kg

Organophosphorous Pesticides by GC-MS (EPA 8141 Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-1-3	2006034-002A	Soil	05/29/2020 08:12	GC25 F0603200218.D	199412

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
1-Bromo-2-Nitrobenzene	117	60-140		06/03/2020 22:10

Analyst(s): STA **Analytical Comments:** a1



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/03/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/kg

Organophosphorous Pesticides by GC-MS (EPA 8141 Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-1-5	2006034-003A	Soil	05/29/2020 08:15	GC25 F0603200219.D	199412
<u>Analytes</u>	<u>Result</u>		<u>RL</u> <u>DF</u>		<u>Date Analyzed</u>
Alachlor	ND		5.0 50		06/03/2020 22:37
Atrazine	ND		5.0 50		06/03/2020 22:37
Azinphos methyl (Guthion)	ND		5.0 50		06/03/2020 22:37
Bolstar (Sulprofos)	ND		5.0 50		06/03/2020 22:37
Chlorpyrifos	ND		5.0 50		06/03/2020 22:37
Coumaphos	ND		5.0 50		06/03/2020 22:37
Demeton	ND		5.0 50		06/03/2020 22:37
Diazinon	ND		5.0 50		06/03/2020 22:37
Dichlorvos (DDVP)	ND		5.0 50		06/03/2020 22:37
Dimethoate	ND		5.0 50		06/03/2020 22:37
Disulfoton (Di-Syston)	ND		5.0 50		06/03/2020 22:37
EPN	ND		5.0 50		06/03/2020 22:37
EPTC	ND		5.0 50		06/03/2020 22:37
Ethion	ND		5.0 50		06/03/2020 22:37
Ethoprop	ND		5.0 50		06/03/2020 22:37
Ethyl parathion	ND		5.0 50		06/03/2020 22:37
Fensulfothion	ND		5.0 50		06/03/2020 22:37
Fenthion	ND		5.0 50		06/03/2020 22:37
Fonofos	ND		5.0 50		06/03/2020 22:37
Malathion	ND		5.0 50		06/03/2020 22:37
Mevinphos (Phosdrin)	ND		5.0 50		06/03/2020 22:37
Molinate	ND		5.0 50		06/03/2020 22:37
Methyl parathion	ND		5.0 50		06/03/2020 22:37
Phorate (Thimet)	ND		5.0 50		06/03/2020 22:37
Prometon	ND		5.0 50		06/03/2020 22:37
Ronnel	ND		5.0 50		06/03/2020 22:37
Simazine	ND		5.0 50		06/03/2020 22:37
Stirofos (Tetrachlorvinphos)	ND		5.0 50		06/03/2020 22:37
Terbacil	ND		5.0 50		06/03/2020 22:37
Terbufos (Terbuphos)	ND		5.0 50		06/03/2020 22:37
Thiobencarb	ND		5.0 50		06/03/2020 22:37
Tokuthion (Prothiofos)	ND		5.0 50		06/03/2020 22:37
Trichloronate (Agritox)	ND		5.0 50		06/03/2020 22:37

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/03/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/kg

Organophosphorous Pesticides by GC-MS (EPA 8141 Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-1-5	2006034-003A	Soil	05/29/2020 08:15	GC25 F0603200219.D	199412

Analytes	Result	RL	DF	Date Analyzed
----------	--------	----	----	---------------

Surrogates	REC (%)	Qualifiers	Limits	Date Analyzed
1-Bromo-2-Nitrobenzene	0	S	60-140	06/03/2020 22:37

Analyst(s): STA **Analytical Comments:** a1,c3



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/03/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/kg

Organophosphorous Pesticides by GC-MS (EPA 8141 Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-2-1.5	2006034-004A	Soil	05/29/2020 12:25	GC25 F0603200220.D	199412

Analytes	Result	RL	DF	Date Analyzed
Alachlor	ND	5.0	50	06/03/2020 23:04
Atrazine	ND	5.0	50	06/03/2020 23:04
Azinphos methyl (Guthion)	ND	5.0	50	06/03/2020 23:04
Bolstar (Sulprofos)	ND	5.0	50	06/03/2020 23:04
Chlorpyrifos	ND	5.0	50	06/03/2020 23:04
Coumaphos	ND	5.0	50	06/03/2020 23:04
Demeton	ND	5.0	50	06/03/2020 23:04
Diazinon	ND	5.0	50	06/03/2020 23:04
Dichlorvos (DDVP)	ND	5.0	50	06/03/2020 23:04
Dimethoate	ND	5.0	50	06/03/2020 23:04
Disulfoton (Di-Syston)	ND	5.0	50	06/03/2020 23:04
EPN	ND	5.0	50	06/03/2020 23:04
EPTC	ND	5.0	50	06/03/2020 23:04
Ethion	ND	5.0	50	06/03/2020 23:04
Ethoprop	ND	5.0	50	06/03/2020 23:04
Ethyl parathion	ND	5.0	50	06/03/2020 23:04
Fensulfothion	ND	5.0	50	06/03/2020 23:04
Fenthion	ND	5.0	50	06/03/2020 23:04
Fonofos	ND	5.0	50	06/03/2020 23:04
Malathion	ND	5.0	50	06/03/2020 23:04
Mevinphos (Phosdrin)	ND	5.0	50	06/03/2020 23:04
Molinate	ND	5.0	50	06/03/2020 23:04
Methyl parathion	ND	5.0	50	06/03/2020 23:04
Phorate (Thimet)	ND	5.0	50	06/03/2020 23:04
Prometon	ND	5.0	50	06/03/2020 23:04
Ronnel	ND	5.0	50	06/03/2020 23:04
Simazine	ND	5.0	50	06/03/2020 23:04
Stirofos (Tetrachlorvinphos)	ND	5.0	50	06/03/2020 23:04
Terbacil	ND	5.0	50	06/03/2020 23:04
Terbufos (Terbuphos)	ND	5.0	50	06/03/2020 23:04
Thiobencarb	ND	5.0	50	06/03/2020 23:04
Tokuthion (Prothiofos)	ND	5.0	50	06/03/2020 23:04
Trichloronate (Agritox)	ND	5.0	50	06/03/2020 23:04

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/03/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/kg

Organophosphorous Pesticides by GC-MS (EPA 8141 Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-2-1.5	2006034-004A	Soil	05/29/2020 12:25	GC25 F0603200220.D	199412

Analytes	Result	RL	DF	Date Analyzed
----------	--------	----	----	---------------

Surrogates	REC (%)	Qualifiers	Limits	Date Analyzed
1-Bromo-2-Nitrobenzene	0	S	60-140	06/03/2020 23:04

Analyst(s): STA **Analytical Comments:** a1,c3



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/03/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/kg

Organophosphorous Pesticides by GC-MS (EPA 8141 Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-2-3	2006034-005A	Soil	05/29/2020 12:30	GC25 F0603200221.D	199412
<u>Analytes</u>	<u>Result</u>		<u>RL</u> <u>DF</u>		<u>Date Analyzed</u>
Alachlor	ND		0.10 1		06/03/2020 23:31
Atrazine	ND		0.10 1		06/03/2020 23:31
Azinphos methyl (Guthion)	ND		0.10 1		06/03/2020 23:31
Bolstar (Sulprofos)	ND		0.10 1		06/03/2020 23:31
Chloropyrifos	ND		0.10 1		06/03/2020 23:31
Coumaphos	ND		0.10 1		06/03/2020 23:31
Demeton	ND		0.10 1		06/03/2020 23:31
Diazinon	ND		0.10 1		06/03/2020 23:31
Dichlorvos (DDVP)	ND		0.10 1		06/03/2020 23:31
Dimethoate	ND		0.10 1		06/03/2020 23:31
Disulfoton (Di-Syston)	ND		0.10 1		06/03/2020 23:31
EPN	ND		0.10 1		06/03/2020 23:31
EPTC	ND		0.10 1		06/03/2020 23:31
Ethion	ND		0.10 1		06/03/2020 23:31
Ethoprop	ND		0.10 1		06/03/2020 23:31
Ethyl parathion	ND		0.10 1		06/03/2020 23:31
Fensulfothion	ND		0.10 1		06/03/2020 23:31
Fenthion	ND		0.10 1		06/03/2020 23:31
Fonofos	ND		0.10 1		06/03/2020 23:31
Malathion	ND		0.10 1		06/03/2020 23:31
Mevinphos (Phosdrin)	ND		0.10 1		06/03/2020 23:31
Molinate	ND		0.10 1		06/03/2020 23:31
Methyl parathion	ND		0.10 1		06/03/2020 23:31
Phorate (Thimet)	ND		0.10 1		06/03/2020 23:31
Prometon	ND		0.10 1		06/03/2020 23:31
Ronnel	ND		0.10 1		06/03/2020 23:31
Simazine	ND		0.10 1		06/03/2020 23:31
Stirofos (Tetrachlorvinphos)	ND		0.10 1		06/03/2020 23:31
Terbacil	ND		0.10 1		06/03/2020 23:31
Terbufos (Terbuphos)	ND		0.10 1		06/03/2020 23:31
Thiobencarb	ND		0.10 1		06/03/2020 23:31
Tokuthion (Prothiofos)	ND		0.10 1		06/03/2020 23:31
Trichloronate (Agritox)	ND		0.10 1		06/03/2020 23:31

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/03/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/kg

Organophosphorous Pesticides by GC-MS (EPA 8141 Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-2-3	2006034-005A	Soil	05/29/2020 12:30	GC25 F0603200221.D	199412

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
1-Bromo-2-Nitrobenzene	81	60-140		06/03/2020 23:31

Analyst(s): STA



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/03/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW8151A
Analytical Method: SW8151A
Unit: mg/kg

Chlorinated Herbicides by GC-ECD

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-1-1.5	2006034-001A	Soil	05/29/2020 08:10	GC15A 06032009.D	199411

Analytes	Result	RL	DF	Date Analyzed
Acifluorfen	ND	0.50	10	06/03/2020 17:35
Bentazon	ND	0.50	10	06/03/2020 17:35
Chloramben	ND	0.50	10	06/03/2020 17:35
2,4-D (Dichlorophenoxyacetic acid)	ND	0.50	10	06/03/2020 17:35
2,4-DB	ND	0.50	10	06/03/2020 17:35
Dalapon	ND	1.0	10	06/03/2020 17:35
DCPA (mono & diacid)	ND	0.50	10	06/03/2020 17:35
Dicamba	ND	0.50	10	06/03/2020 17:35
3,5-Dichlorobenzoic Acid	ND	0.50	10	06/03/2020 17:35
Dichloroprop	ND	0.50	10	06/03/2020 17:35
Dinoseb (DNBP)	ND	0.50	10	06/03/2020 17:35
MCPA	ND	50	10	06/03/2020 17:35
MCPP	ND	50	10	06/03/2020 17:35
4-Nitrophenol	ND	0.50	10	06/03/2020 17:35
Pentachlorophenol (PCP)	ND	0.50	10	06/03/2020 17:35
Picloram	ND	0.50	10	06/03/2020 17:35
2,4,5-T (Trichlorophenoxy acetic acid)	ND	0.50	10	06/03/2020 17:35
2,4,5-TP (Silvex)	ND	0.50	10	06/03/2020 17:35

Surrogates	REC (%)	Limits	Date Analyzed
DCAA	104	63-121	06/03/2020 17:35

Analyst(s): DP **Analytical Comments:** a1



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/03/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW8151A
Analytical Method: SW8151A
Unit: mg/kg

Chlorinated Herbicides by GC-ECD

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-1-3	2006034-002A	Soil	05/29/2020 08:12	GC15A 06032012.D	199411

Analytes	Result	RL	DF	Date Analyzed
Acifluorfen	ND	0.50	10	06/03/2020 18:52
Bentazon	ND	0.50	10	06/03/2020 18:52
Chloramben	ND	0.50	10	06/03/2020 18:52
2,4-D (Dichlorophenoxyacetic acid)	ND	0.50	10	06/03/2020 18:52
2,4-DB	ND	0.50	10	06/03/2020 18:52
Dalapon	ND	1.0	10	06/03/2020 18:52
DCPA (mono & diacid)	ND	0.50	10	06/03/2020 18:52
Dicamba	ND	0.50	10	06/03/2020 18:52
3,5-Dichlorobenzoic Acid	ND	0.50	10	06/03/2020 18:52
Dichloroprop	ND	0.50	10	06/03/2020 18:52
Dinoseb (DNBP)	ND	0.50	10	06/03/2020 18:52
MCPA	ND	50	10	06/03/2020 18:52
MCPP	ND	50	10	06/03/2020 18:52
4-Nitrophenol	ND	0.50	10	06/03/2020 18:52
Pentachlorophenol (PCP)	ND	0.50	10	06/03/2020 18:52
Picloram	ND	0.50	10	06/03/2020 18:52
2,4,5-T (Trichlorophenoxy acetic acid)	ND	0.50	10	06/03/2020 18:52
2,4,5-TP (Silvex)	ND	0.50	10	06/03/2020 18:52

Surrogates	REC (%)	Limits	Date Analyzed
DCAA	97	63-121	06/03/2020 18:52

Analyst(s): DP **Analytical Comments:** a1



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/03/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW8151A
Analytical Method: SW8151A
Unit: mg/kg

Chlorinated Herbicides by GC-ECD

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-1-5	2006034-003A	Soil	05/29/2020 08:15	GC15A 06032013.D	199411

Analytes	Result	RL	DF	Date Analyzed
Acifluorfen	ND	0.50	10	06/03/2020 19:18
Bentazon	ND	0.50	10	06/03/2020 19:18
Chloramben	ND	0.50	10	06/03/2020 19:18
2,4-D (Dichlorophenoxyacetic acid)	ND	0.50	10	06/03/2020 19:18
2,4-DB	ND	0.50	10	06/03/2020 19:18
Dalapon	ND	1.0	10	06/03/2020 19:18
DCPA (mono & diacid)	ND	0.50	10	06/03/2020 19:18
Dicamba	ND	0.50	10	06/03/2020 19:18
3,5-Dichlorobenzoic Acid	ND	0.50	10	06/03/2020 19:18
Dichloroprop	ND	0.50	10	06/03/2020 19:18
Dinoseb (DNBP)	ND	0.50	10	06/03/2020 19:18
MCPA	ND	50	10	06/03/2020 19:18
MCPP	ND	50	10	06/03/2020 19:18
4-Nitrophenol	ND	0.50	10	06/03/2020 19:18
Pentachlorophenol (PCP)	ND	0.50	10	06/03/2020 19:18
Picloram	ND	0.50	10	06/03/2020 19:18
2,4,5-T (Trichlorophenoxy acetic acid)	ND	0.50	10	06/03/2020 19:18
2,4,5-TP (Silvex)	ND	0.50	10	06/03/2020 19:18

Surrogates	REC (%)	Limits	Date Analyzed
DCAA	110	63-121	06/03/2020 19:18

Analyst(s): DP

Analytical Comments: a1



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/03/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW8151A
Analytical Method: SW8151A
Unit: mg/kg

Chlorinated Herbicides by GC-ECD

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-2-1.5	2006034-004A	Soil	05/29/2020 12:25	GC15A 06032014.D	199411

Analytes	Result	RL	DF	Date Analyzed
Acifluorfen	ND	0.50	10	06/03/2020 19:43
Bentazon	ND	0.50	10	06/03/2020 19:43
Chloramben	ND	0.50	10	06/03/2020 19:43
2,4-D (Dichlorophenoxyacetic acid)	ND	0.50	10	06/03/2020 19:43
2,4-DB	ND	0.50	10	06/03/2020 19:43
Dalapon	ND	1.0	10	06/03/2020 19:43
DCPA (mono & diacid)	ND	0.50	10	06/03/2020 19:43
Dicamba	ND	0.50	10	06/03/2020 19:43
3,5-Dichlorobenzoic Acid	ND	0.50	10	06/03/2020 19:43
Dichloroprop	ND	0.50	10	06/03/2020 19:43
Dinoseb (DNBP)	ND	0.50	10	06/03/2020 19:43
MCPA	ND	50	10	06/03/2020 19:43
MCPP	ND	50	10	06/03/2020 19:43
4-Nitrophenol	ND	0.50	10	06/03/2020 19:43
Pentachlorophenol (PCP)	ND	0.50	10	06/03/2020 19:43
Picloram	ND	0.50	10	06/03/2020 19:43
2,4,5-T (Trichlorophenoxy acetic acid)	ND	0.50	10	06/03/2020 19:43
2,4,5-TP (Silvex)	ND	0.50	10	06/03/2020 19:43

Surrogates	REC (%)	Limits	Date Analyzed
DCAA	98	63-121	06/03/2020 19:43

Analyst(s): DP **Analytical Comments:** a1



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/03/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW8151A
Analytical Method: SW8151A
Unit: mg/kg

Chlorinated Herbicides by GC-ECD

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-2-3	2006034-005A	Soil	05/29/2020 12:30	GC15A 06032015.D	199411

Analytes	Result	RL	DF	Date Analyzed
Acifluorfen	ND	0.050	1	06/03/2020 20:09
Bentazon	ND	0.050	1	06/03/2020 20:09
Chloramben	ND	0.050	1	06/03/2020 20:09
2,4-D (Dichlorophenoxyacetic acid)	ND	0.050	1	06/03/2020 20:09
2,4-DB	ND	0.050	1	06/03/2020 20:09
Dalapon	ND	0.10	1	06/03/2020 20:09
DCPA (mono & diacid)	ND	0.050	1	06/03/2020 20:09
Dicamba	ND	0.050	1	06/03/2020 20:09
3,5-Dichlorobenzoic Acid	ND	0.050	1	06/03/2020 20:09
Dichloroprop	ND	0.050	1	06/03/2020 20:09
Dinoseb (DNBP)	ND	0.050	1	06/03/2020 20:09
MCPA	ND	5.0	1	06/03/2020 20:09
MCPP	ND	5.0	1	06/03/2020 20:09
4-Nitrophenol	ND	0.050	1	06/03/2020 20:09
Pentachlorophenol (PCP)	ND	0.050	1	06/03/2020 20:09
Picloram	ND	0.050	1	06/03/2020 20:09
2,4,5-T (Trichlorophenoxy acetic acid)	ND	0.050	1	06/03/2020 20:09
2,4,5-TP (Silvex)	ND	0.050	1	06/03/2020 20:09

Surrogates	REC (%)	Limits	
DCAA	109	63-121	06/03/2020 20:09

Analyst(s): DP



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/01/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-1-1.5	2006034-001A	Soil	05/29/2020 08:10	GC18 06062023.D	199318

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	06/06/2020 21:59
tert-Amyl methyl ether (TAME)	ND	0.0050	1	06/06/2020 21:59
Benzene	ND	0.0050	1	06/06/2020 21:59
Bromobenzene	ND	0.0050	1	06/06/2020 21:59
Bromochloromethane	ND	0.0050	1	06/06/2020 21:59
Bromodichloromethane	ND	0.0010	1	06/06/2020 21:59
Bromoform	ND	0.0050	1	06/06/2020 21:59
Bromomethane	ND	0.0050	1	06/06/2020 21:59
2-Butanone (MEK)	ND	0.020	1	06/06/2020 21:59
t-Butyl alcohol (TBA)	ND	0.050	1	06/06/2020 21:59
n-Butyl benzene	ND	0.0050	1	06/06/2020 21:59
sec-Butyl benzene	ND	0.0050	1	06/06/2020 21:59
tert-Butyl benzene	ND	0.0050	1	06/06/2020 21:59
Carbon Disulfide	ND	0.0050	1	06/06/2020 21:59
Carbon Tetrachloride	ND	0.0050	1	06/06/2020 21:59
Chlorobenzene	ND	0.0050	1	06/06/2020 21:59
Chloroethane	ND	0.0050	1	06/06/2020 21:59
Chloroform	ND	0.0050	1	06/06/2020 21:59
Chloromethane	ND	0.0050	1	06/06/2020 21:59
2-Chlorotoluene	ND	0.0050	1	06/06/2020 21:59
4-Chlorotoluene	ND	0.0050	1	06/06/2020 21:59
Dibromochloromethane	ND	0.0050	1	06/06/2020 21:59
1,2-Dibromo-3-chloropropane	ND	0.00042	1	06/06/2020 21:59
1,2-Dibromoethane (EDB)	ND	0.00012	1	06/06/2020 21:59
Dibromomethane	ND	0.0050	1	06/06/2020 21:59
1,2-Dichlorobenzene	ND	0.0050	1	06/06/2020 21:59
1,3-Dichlorobenzene	ND	0.0050	1	06/06/2020 21:59
1,4-Dichlorobenzene	ND	0.0050	1	06/06/2020 21:59
Dichlorodifluoromethane	ND	0.0050	1	06/06/2020 21:59
1,1-Dichloroethane	ND	0.0050	1	06/06/2020 21:59
1,2-Dichloroethane (1,2-DCA)	ND	0.00025	1	06/06/2020 21:59
1,1-Dichloroethene	ND	0.00025	1	06/06/2020 21:59
cis-1,2-Dichloroethene	ND	0.0050	1	06/06/2020 21:59
trans-1,2-Dichloroethene	ND	0.0050	1	06/06/2020 21:59
1,2-Dichloropropane	ND	0.0050	1	06/06/2020 21:59
1,3-Dichloropropane	ND	0.0050	1	06/06/2020 21:59
2,2-Dichloropropane	ND	0.0050	1	06/06/2020 21:59

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/01/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-1-1.5	2006034-001A	Soil	05/29/2020 08:10	GC18 06062023.D	199318

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	06/06/2020 21:59
cis-1,3-Dichloropropene	ND	0.0050	1	06/06/2020 21:59
trans-1,3-Dichloropropene	ND	0.0050	1	06/06/2020 21:59
Diisopropyl ether (DIPE)	ND	0.0050	1	06/06/2020 21:59
Ethylbenzene	ND	0.0050	1	06/06/2020 21:59
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	06/06/2020 21:59
Freon 113	ND	0.0050	1	06/06/2020 21:59
Hexachlorobutadiene	ND	0.0050	1	06/06/2020 21:59
Hexachloroethane	ND	0.0050	1	06/06/2020 21:59
2-Hexanone	ND	0.0050	1	06/06/2020 21:59
Isopropylbenzene	ND	0.0050	1	06/06/2020 21:59
4-Isopropyl toluene	ND	0.0050	1	06/06/2020 21:59
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/06/2020 21:59
Methylene chloride	ND	0.010	1	06/06/2020 21:59
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	06/06/2020 21:59
Naphthalene	ND	0.0050	1	06/06/2020 21:59
n-Propyl benzene	ND	0.0050	1	06/06/2020 21:59
Styrene	ND	0.0050	1	06/06/2020 21:59
1,1,1,2-Tetrachloroethane	ND	0.0050	1	06/06/2020 21:59
1,1,2,2-Tetrachloroethane	ND	0.00025	1	06/06/2020 21:59
Tetrachloroethene	ND	0.0010	1	06/06/2020 21:59
Toluene	ND	0.0050	1	06/06/2020 21:59
1,2,3-Trichlorobenzene	ND	0.0050	1	06/06/2020 21:59
1,2,4-Trichlorobenzene	ND	0.0050	1	06/06/2020 21:59
1,1,1-Trichloroethane	ND	0.0050	1	06/06/2020 21:59
1,1,2-Trichloroethane	ND	0.0050	1	06/06/2020 21:59
Trichloroethene	ND	0.0050	1	06/06/2020 21:59
Trichlorofluoromethane	ND	0.0050	1	06/06/2020 21:59
1,2,3-Trichloropropane	ND	0.00013	1	06/06/2020 21:59
1,2,4-Trimethylbenzene	ND	0.0050	1	06/06/2020 21:59
1,3,5-Trimethylbenzene	ND	0.0050	1	06/06/2020 21:59
Vinyl Chloride	ND	0.00025	1	06/06/2020 21:59
m,p-Xylene	ND	0.0050	1	06/06/2020 21:59
o-Xylene	ND	0.0050	1	06/06/2020 21:59
Xylenes, Total	ND	0.0050	1	06/06/2020 21:59

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/01/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-1-1.5	2006034-001A	Soil	05/29/2020 08:10	GC18 06062023.D	199318

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	86	82-136		06/06/2020 21:59
Toluene-d8	97	92-139		06/06/2020 21:59
4-BFB	96	82-135		06/06/2020 21:59
Benzene-d6	73	55-122		06/06/2020 21:59
Ethylbenzene-d10	86	58-141		06/06/2020 21:59
1,2-DCB-d4	63	51-107		06/06/2020 21:59

Analyst(s): AK



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/01/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-1-3	2006034-002A	Soil	05/29/2020 08:12	GC18 06062024.D	199318

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	06/06/2020 22:38
tert-Amyl methyl ether (TAME)	ND	0.0050	1	06/06/2020 22:38
Benzene	ND	0.0050	1	06/06/2020 22:38
Bromobenzene	ND	0.0050	1	06/06/2020 22:38
Bromochloromethane	ND	0.0050	1	06/06/2020 22:38
Bromodichloromethane	ND	0.0010	1	06/06/2020 22:38
Bromoform	ND	0.0050	1	06/06/2020 22:38
Bromomethane	ND	0.0050	1	06/06/2020 22:38
2-Butanone (MEK)	ND	0.020	1	06/06/2020 22:38
t-Butyl alcohol (TBA)	ND	0.050	1	06/06/2020 22:38
n-Butyl benzene	ND	0.0050	1	06/06/2020 22:38
sec-Butyl benzene	ND	0.0050	1	06/06/2020 22:38
tert-Butyl benzene	ND	0.0050	1	06/06/2020 22:38
Carbon Disulfide	ND	0.0050	1	06/06/2020 22:38
Carbon Tetrachloride	ND	0.0050	1	06/06/2020 22:38
Chlorobenzene	ND	0.0050	1	06/06/2020 22:38
Chloroethane	ND	0.0050	1	06/06/2020 22:38
Chloroform	ND	0.0050	1	06/06/2020 22:38
Chloromethane	ND	0.0050	1	06/06/2020 22:38
2-Chlorotoluene	ND	0.0050	1	06/06/2020 22:38
4-Chlorotoluene	ND	0.0050	1	06/06/2020 22:38
Dibromochloromethane	ND	0.0050	1	06/06/2020 22:38
1,2-Dibromo-3-chloropropane	ND	0.00025	1	06/06/2020 22:38
1,2-Dibromoethane (EDB)	ND	0.00011	1	06/06/2020 22:38
Dibromomethane	ND	0.0050	1	06/06/2020 22:38
1,2-Dichlorobenzene	ND	0.0050	1	06/06/2020 22:38
1,3-Dichlorobenzene	ND	0.0050	1	06/06/2020 22:38
1,4-Dichlorobenzene	ND	0.0050	1	06/06/2020 22:38
Dichlorodifluoromethane	ND	0.0050	1	06/06/2020 22:38
1,1-Dichloroethane	ND	0.0050	1	06/06/2020 22:38
1,2-Dichloroethane (1,2-DCA)	ND	0.00025	1	06/06/2020 22:38
1,1-Dichloroethene	ND	0.00025	1	06/06/2020 22:38
cis-1,2-Dichloroethene	ND	0.0050	1	06/06/2020 22:38
trans-1,2-Dichloroethene	ND	0.0050	1	06/06/2020 22:38
1,2-Dichloropropane	ND	0.0050	1	06/06/2020 22:38
1,3-Dichloropropane	ND	0.0050	1	06/06/2020 22:38
2,2-Dichloropropane	ND	0.0050	1	06/06/2020 22:38

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/01/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-1-3	2006034-002A	Soil	05/29/2020 08:12	GC18 06062024.D	199318

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	06/06/2020 22:38
cis-1,3-Dichloropropene	ND	0.0050	1	06/06/2020 22:38
trans-1,3-Dichloropropene	ND	0.0050	1	06/06/2020 22:38
Diisopropyl ether (DIPE)	ND	0.0050	1	06/06/2020 22:38
Ethylbenzene	ND	0.0050	1	06/06/2020 22:38
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	06/06/2020 22:38
Freon 113	ND	0.0050	1	06/06/2020 22:38
Hexachlorobutadiene	ND	0.0050	1	06/06/2020 22:38
Hexachloroethane	ND	0.0050	1	06/06/2020 22:38
2-Hexanone	ND	0.0050	1	06/06/2020 22:38
Isopropylbenzene	ND	0.0050	1	06/06/2020 22:38
4-Isopropyl toluene	ND	0.0050	1	06/06/2020 22:38
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/06/2020 22:38
Methylene chloride	ND	0.010	1	06/06/2020 22:38
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	06/06/2020 22:38
Naphthalene	ND	0.0050	1	06/06/2020 22:38
n-Propyl benzene	ND	0.0050	1	06/06/2020 22:38
Styrene	ND	0.0050	1	06/06/2020 22:38
1,1,1,2-Tetrachloroethane	ND	0.0050	1	06/06/2020 22:38
1,1,2,2-Tetrachloroethane	ND	0.00025	1	06/06/2020 22:38
Tetrachloroethene	ND	0.0010	1	06/06/2020 22:38
Toluene	ND	0.0050	1	06/06/2020 22:38
1,2,3-Trichlorobenzene	ND	0.0050	1	06/06/2020 22:38
1,2,4-Trichlorobenzene	ND	0.0050	1	06/06/2020 22:38
1,1,1-Trichloroethane	ND	0.0050	1	06/06/2020 22:38
1,1,2-Trichloroethane	ND	0.0050	1	06/06/2020 22:38
Trichloroethene	ND	0.0050	1	06/06/2020 22:38
Trichlorofluoromethane	ND	0.0050	1	06/06/2020 22:38
1,2,3-Trichloropropane	ND	0.00010	1	06/06/2020 22:38
1,2,4-Trimethylbenzene	ND	0.0050	1	06/06/2020 22:38
1,3,5-Trimethylbenzene	ND	0.0050	1	06/06/2020 22:38
Vinyl Chloride	ND	0.00025	1	06/06/2020 22:38
m,p-Xylene	ND	0.0050	1	06/06/2020 22:38
o-Xylene	ND	0.0050	1	06/06/2020 22:38
Xylenes, Total	ND	0.0050	1	06/06/2020 22:38

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/01/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-1-3	2006034-002A	Soil	05/29/2020 08:12	GC18 06062024.D	199318

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	86	82-136		06/06/2020 22:38
Toluene-d8	98	92-139		06/06/2020 22:38
4-BFB	97	82-135		06/06/2020 22:38
Benzene-d6	81	55-122		06/06/2020 22:38
Ethylbenzene-d10	95	58-141		06/06/2020 22:38
1,2-DCB-d4	70	51-107		06/06/2020 22:38

Analyst(s): AK



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/01/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-1-5	2006034-003A	Soil	05/29/2020 08:15	GC18 06062025.D	199318

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	06/06/2020 23:18
tert-Amyl methyl ether (TAME)	ND	0.0050	1	06/06/2020 23:18
Benzene	ND	0.0050	1	06/06/2020 23:18
Bromobenzene	ND	0.0050	1	06/06/2020 23:18
Bromochloromethane	ND	0.0050	1	06/06/2020 23:18
Bromodichloromethane	ND	0.0010	1	06/06/2020 23:18
Bromoform	ND	0.0050	1	06/06/2020 23:18
Bromomethane	ND	0.0050	1	06/06/2020 23:18
2-Butanone (MEK)	ND	0.020	1	06/06/2020 23:18
t-Butyl alcohol (TBA)	ND	0.050	1	06/06/2020 23:18
n-Butyl benzene	ND	0.0050	1	06/06/2020 23:18
sec-Butyl benzene	ND	0.0050	1	06/06/2020 23:18
tert-Butyl benzene	ND	0.0050	1	06/06/2020 23:18
Carbon Disulfide	ND	0.0050	1	06/06/2020 23:18
Carbon Tetrachloride	ND	0.0050	1	06/06/2020 23:18
Chlorobenzene	ND	0.0050	1	06/06/2020 23:18
Chloroethane	ND	0.0050	1	06/06/2020 23:18
Chloroform	ND	0.0050	1	06/06/2020 23:18
Chloromethane	ND	0.0050	1	06/06/2020 23:18
2-Chlorotoluene	ND	0.0050	1	06/06/2020 23:18
4-Chlorotoluene	ND	0.0050	1	06/06/2020 23:18
Dibromochloromethane	ND	0.0050	1	06/06/2020 23:18
1,2-Dibromo-3-chloropropane	ND	0.00038	1	06/06/2020 23:18
1,2-Dibromoethane (EDB)	ND	0.00010	1	06/06/2020 23:18
Dibromomethane	ND	0.0050	1	06/06/2020 23:18
1,2-Dichlorobenzene	ND	0.0050	1	06/06/2020 23:18
1,3-Dichlorobenzene	ND	0.0050	1	06/06/2020 23:18
1,4-Dichlorobenzene	ND	0.0050	1	06/06/2020 23:18
Dichlorodifluoromethane	ND	0.0050	1	06/06/2020 23:18
1,1-Dichloroethane	ND	0.0050	1	06/06/2020 23:18
1,2-Dichloroethane (1,2-DCA)	ND	0.00025	1	06/06/2020 23:18
1,1-Dichloroethene	ND	0.00025	1	06/06/2020 23:18
cis-1,2-Dichloroethene	ND	0.0050	1	06/06/2020 23:18
trans-1,2-Dichloroethene	ND	0.0050	1	06/06/2020 23:18
1,2-Dichloropropane	ND	0.0050	1	06/06/2020 23:18
1,3-Dichloropropane	ND	0.0050	1	06/06/2020 23:18
2,2-Dichloropropane	ND	0.0050	1	06/06/2020 23:18

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/01/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-1-5	2006034-003A	Soil	05/29/2020 08:15	GC18 06062025.D	199318

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	06/06/2020 23:18
cis-1,3-Dichloropropene	ND	0.0050	1	06/06/2020 23:18
trans-1,3-Dichloropropene	ND	0.0050	1	06/06/2020 23:18
Diisopropyl ether (DIPE)	ND	0.0050	1	06/06/2020 23:18
Ethylbenzene	ND	0.0050	1	06/06/2020 23:18
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	06/06/2020 23:18
Freon 113	ND	0.0050	1	06/06/2020 23:18
Hexachlorobutadiene	ND	0.0050	1	06/06/2020 23:18
Hexachloroethane	ND	0.0050	1	06/06/2020 23:18
2-Hexanone	ND	0.0050	1	06/06/2020 23:18
Isopropylbenzene	ND	0.0050	1	06/06/2020 23:18
4-Isopropyl toluene	ND	0.0050	1	06/06/2020 23:18
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/06/2020 23:18
Methylene chloride	ND	0.010	1	06/06/2020 23:18
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	06/06/2020 23:18
Naphthalene	ND	0.0050	1	06/06/2020 23:18
n-Propyl benzene	ND	0.0050	1	06/06/2020 23:18
Styrene	ND	0.0050	1	06/06/2020 23:18
1,1,1,2-Tetrachloroethane	ND	0.0050	1	06/06/2020 23:18
1,1,2,2-Tetrachloroethane	ND	0.00025	1	06/06/2020 23:18
Tetrachloroethene	ND	0.0010	1	06/06/2020 23:18
Toluene	ND	0.0050	1	06/06/2020 23:18
1,2,3-Trichlorobenzene	ND	0.0050	1	06/06/2020 23:18
1,2,4-Trichlorobenzene	ND	0.0050	1	06/06/2020 23:18
1,1,1-Trichloroethane	ND	0.0050	1	06/06/2020 23:18
1,1,2-Trichloroethane	ND	0.0050	1	06/06/2020 23:18
Trichloroethene	ND	0.0050	1	06/06/2020 23:18
Trichlorofluoromethane	ND	0.0050	1	06/06/2020 23:18
1,2,3-Trichloropropane	ND	0.00010	1	06/06/2020 23:18
1,2,4-Trimethylbenzene	ND	0.0050	1	06/06/2020 23:18
1,3,5-Trimethylbenzene	ND	0.0050	1	06/06/2020 23:18
Vinyl Chloride	ND	0.00025	1	06/06/2020 23:18
m,p-Xylene	ND	0.0050	1	06/06/2020 23:18
o-Xylene	ND	0.0050	1	06/06/2020 23:18
Xylenes, Total	ND	0.0050	1	06/06/2020 23:18

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/01/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-1-5	2006034-003A	Soil	05/29/2020 08:15	GC18 06062025.D	199318

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	86	82-136		06/06/2020 23:18
Toluene-d8	97	92-139		06/06/2020 23:18
4-BFB	93	82-135		06/06/2020 23:18
Benzene-d6	75	55-122		06/06/2020 23:18
Ethylbenzene-d10	88	58-141		06/06/2020 23:18
1,2-DCB-d4	66	51-107		06/06/2020 23:18

Analyst(s): AK



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/01/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-2-1.5	2006034-004A	Soil	05/29/2020 12:25	GC18 06062026.D	199318

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	06/06/2020 23:57
tert-Amyl methyl ether (TAME)	ND	0.0050	1	06/06/2020 23:57
Benzene	ND	0.0050	1	06/06/2020 23:57
Bromobenzene	ND	0.0050	1	06/06/2020 23:57
Bromochloromethane	ND	0.0050	1	06/06/2020 23:57
Bromodichloromethane	ND	0.0010	1	06/06/2020 23:57
Bromoform	ND	0.0050	1	06/06/2020 23:57
Bromomethane	ND	0.0050	1	06/06/2020 23:57
2-Butanone (MEK)	ND	0.020	1	06/06/2020 23:57
t-Butyl alcohol (TBA)	ND	0.050	1	06/06/2020 23:57
n-Butyl benzene	ND	0.0050	1	06/06/2020 23:57
sec-Butyl benzene	ND	0.0050	1	06/06/2020 23:57
tert-Butyl benzene	ND	0.0050	1	06/06/2020 23:57
Carbon Disulfide	ND	0.0050	1	06/06/2020 23:57
Carbon Tetrachloride	ND	0.0050	1	06/06/2020 23:57
Chlorobenzene	ND	0.0050	1	06/06/2020 23:57
Chloroethane	ND	0.0050	1	06/06/2020 23:57
Chloroform	ND	0.0050	1	06/06/2020 23:57
Chloromethane	ND	0.0050	1	06/06/2020 23:57
2-Chlorotoluene	ND	0.0050	1	06/06/2020 23:57
4-Chlorotoluene	ND	0.0050	1	06/06/2020 23:57
Dibromochloromethane	ND	0.0050	1	06/06/2020 23:57
1,2-Dibromo-3-chloropropane	ND	0.00038	1	06/06/2020 23:57
1,2-Dibromoethane (EDB)	ND	0.00011	1	06/06/2020 23:57
Dibromomethane	ND	0.0050	1	06/06/2020 23:57
1,2-Dichlorobenzene	ND	0.0050	1	06/06/2020 23:57
1,3-Dichlorobenzene	ND	0.0050	1	06/06/2020 23:57
1,4-Dichlorobenzene	ND	0.0050	1	06/06/2020 23:57
Dichlorodifluoromethane	ND	0.0050	1	06/06/2020 23:57
1,1-Dichloroethane	ND	0.0050	1	06/06/2020 23:57
1,2-Dichloroethane (1,2-DCA)	ND	0.00025	1	06/06/2020 23:57
1,1-Dichloroethene	ND	0.00025	1	06/06/2020 23:57
cis-1,2-Dichloroethene	ND	0.0050	1	06/06/2020 23:57
trans-1,2-Dichloroethene	ND	0.0050	1	06/06/2020 23:57
1,2-Dichloropropane	ND	0.0050	1	06/06/2020 23:57
1,3-Dichloropropane	ND	0.0050	1	06/06/2020 23:57
2,2-Dichloropropane	ND	0.0050	1	06/06/2020 23:57

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/01/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-2-1.5	2006034-004A	Soil	05/29/2020 12:25	GC18 06062026.D	199318

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	06/06/2020 23:57
cis-1,3-Dichloropropene	ND	0.0050	1	06/06/2020 23:57
trans-1,3-Dichloropropene	ND	0.0050	1	06/06/2020 23:57
Diisopropyl ether (DIPE)	ND	0.0050	1	06/06/2020 23:57
Ethylbenzene	ND	0.0050	1	06/06/2020 23:57
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	06/06/2020 23:57
Freon 113	ND	0.0050	1	06/06/2020 23:57
Hexachlorobutadiene	ND	0.0050	1	06/06/2020 23:57
Hexachloroethane	ND	0.0050	1	06/06/2020 23:57
2-Hexanone	ND	0.0050	1	06/06/2020 23:57
Isopropylbenzene	ND	0.0050	1	06/06/2020 23:57
4-Isopropyl toluene	ND	0.0050	1	06/06/2020 23:57
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/06/2020 23:57
Methylene chloride	ND	0.010	1	06/06/2020 23:57
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	06/06/2020 23:57
Naphthalene	ND	0.0050	1	06/06/2020 23:57
n-Propyl benzene	ND	0.0050	1	06/06/2020 23:57
Styrene	ND	0.0050	1	06/06/2020 23:57
1,1,1,2-Tetrachloroethane	ND	0.0050	1	06/06/2020 23:57
1,1,2,2-Tetrachloroethane	ND	0.00025	1	06/06/2020 23:57
Tetrachloroethene	ND	0.0010	1	06/06/2020 23:57
Toluene	ND	0.0050	1	06/06/2020 23:57
1,2,3-Trichlorobenzene	ND	0.0050	1	06/06/2020 23:57
1,2,4-Trichlorobenzene	ND	0.0050	1	06/06/2020 23:57
1,1,1-Trichloroethane	ND	0.0050	1	06/06/2020 23:57
1,1,2-Trichloroethane	ND	0.0050	1	06/06/2020 23:57
Trichloroethene	ND	0.0050	1	06/06/2020 23:57
Trichlorofluoromethane	ND	0.0050	1	06/06/2020 23:57
1,2,3-Trichloropropane	ND	0.00010	1	06/06/2020 23:57
1,2,4-Trimethylbenzene	ND	0.0050	1	06/06/2020 23:57
1,3,5-Trimethylbenzene	ND	0.0050	1	06/06/2020 23:57
Vinyl Chloride	ND	0.00025	1	06/06/2020 23:57
m,p-Xylene	ND	0.0050	1	06/06/2020 23:57
o-Xylene	ND	0.0050	1	06/06/2020 23:57
Xylenes, Total	ND	0.0050	1	06/06/2020 23:57

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/01/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-2-1.5	2006034-004A	Soil	05/29/2020 12:25	GC18 06062026.D	199318

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	87	82-136		06/06/2020 23:57
Toluene-d8	96	92-139		06/06/2020 23:57
4-BFB	93	82-135		06/06/2020 23:57
Benzene-d6	76	55-122		06/06/2020 23:57
Ethylbenzene-d10	88	58-141		06/06/2020 23:57
1,2-DCB-d4	66	51-107		06/06/2020 23:57

Analyst(s): AK



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/01/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-2-3	2006034-005A	Soil	05/29/2020 12:30	GC18 06062027.D	199318

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	06/07/2020 00:37
tert-Amyl methyl ether (TAME)	ND	0.0050	1	06/07/2020 00:37
Benzene	ND	0.0050	1	06/07/2020 00:37
Bromobenzene	ND	0.0050	1	06/07/2020 00:37
Bromochloromethane	ND	0.0050	1	06/07/2020 00:37
Bromodichloromethane	ND	0.0010	1	06/07/2020 00:37
Bromoform	ND	0.0050	1	06/07/2020 00:37
Bromomethane	ND	0.0050	1	06/07/2020 00:37
2-Butanone (MEK)	ND	0.020	1	06/07/2020 00:37
t-Butyl alcohol (TBA)	ND	0.050	1	06/07/2020 00:37
n-Butyl benzene	ND	0.0050	1	06/07/2020 00:37
sec-Butyl benzene	ND	0.0050	1	06/07/2020 00:37
tert-Butyl benzene	ND	0.0050	1	06/07/2020 00:37
Carbon Disulfide	ND	0.0050	1	06/07/2020 00:37
Carbon Tetrachloride	ND	0.0050	1	06/07/2020 00:37
Chlorobenzene	ND	0.0050	1	06/07/2020 00:37
Chloroethane	ND	0.0050	1	06/07/2020 00:37
Chloroform	ND	0.0050	1	06/07/2020 00:37
Chloromethane	ND	0.0050	1	06/07/2020 00:37
2-Chlorotoluene	ND	0.0050	1	06/07/2020 00:37
4-Chlorotoluene	ND	0.0050	1	06/07/2020 00:37
Dibromochloromethane	ND	0.0050	1	06/07/2020 00:37
1,2-Dibromo-3-chloropropane	ND	0.00025	1	06/07/2020 00:37
1,2-Dibromoethane (EDB)	ND	0.00010	1	06/07/2020 00:37
Dibromomethane	ND	0.0050	1	06/07/2020 00:37
1,2-Dichlorobenzene	ND	0.0050	1	06/07/2020 00:37
1,3-Dichlorobenzene	ND	0.0050	1	06/07/2020 00:37
1,4-Dichlorobenzene	ND	0.0050	1	06/07/2020 00:37
Dichlorodifluoromethane	ND	0.0050	1	06/07/2020 00:37
1,1-Dichloroethane	ND	0.0050	1	06/07/2020 00:37
1,2-Dichloroethane (1,2-DCA)	ND	0.00025	1	06/07/2020 00:37
1,1-Dichloroethene	ND	0.00025	1	06/07/2020 00:37
cis-1,2-Dichloroethene	ND	0.0050	1	06/07/2020 00:37
trans-1,2-Dichloroethene	ND	0.0050	1	06/07/2020 00:37
1,2-Dichloropropane	ND	0.0050	1	06/07/2020 00:37
1,3-Dichloropropane	ND	0.0050	1	06/07/2020 00:37
2,2-Dichloropropane	ND	0.0050	1	06/07/2020 00:37

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/01/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-2-3	2006034-005A	Soil	05/29/2020 12:30	GC18 06062027.D	199318

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	06/07/2020 00:37
cis-1,3-Dichloropropene	ND	0.0050	1	06/07/2020 00:37
trans-1,3-Dichloropropene	ND	0.0050	1	06/07/2020 00:37
Diisopropyl ether (DIPE)	ND	0.0050	1	06/07/2020 00:37
Ethylbenzene	ND	0.0050	1	06/07/2020 00:37
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	06/07/2020 00:37
Freon 113	ND	0.0050	1	06/07/2020 00:37
Hexachlorobutadiene	ND	0.0050	1	06/07/2020 00:37
Hexachloroethane	ND	0.0050	1	06/07/2020 00:37
2-Hexanone	ND	0.0050	1	06/07/2020 00:37
Isopropylbenzene	ND	0.0050	1	06/07/2020 00:37
4-Isopropyl toluene	ND	0.0050	1	06/07/2020 00:37
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/07/2020 00:37
Methylene chloride	ND	0.010	1	06/07/2020 00:37
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	06/07/2020 00:37
Naphthalene	ND	0.0050	1	06/07/2020 00:37
n-Propyl benzene	ND	0.0050	1	06/07/2020 00:37
Styrene	ND	0.0050	1	06/07/2020 00:37
1,1,1,2-Tetrachloroethane	ND	0.0050	1	06/07/2020 00:37
1,1,2,2-Tetrachloroethane	ND	0.00025	1	06/07/2020 00:37
Tetrachloroethene	ND	0.0010	1	06/07/2020 00:37
Toluene	ND	0.0050	1	06/07/2020 00:37
1,2,3-Trichlorobenzene	ND	0.0050	1	06/07/2020 00:37
1,2,4-Trichlorobenzene	ND	0.0050	1	06/07/2020 00:37
1,1,1-Trichloroethane	ND	0.0050	1	06/07/2020 00:37
1,1,2-Trichloroethane	ND	0.0050	1	06/07/2020 00:37
Trichloroethene	ND	0.0050	1	06/07/2020 00:37
Trichlorofluoromethane	ND	0.0050	1	06/07/2020 00:37
1,2,3-Trichloropropane	ND	0.00010	1	06/07/2020 00:37
1,2,4-Trimethylbenzene	ND	0.0050	1	06/07/2020 00:37
1,3,5-Trimethylbenzene	ND	0.0050	1	06/07/2020 00:37
Vinyl Chloride	ND	0.00025	1	06/07/2020 00:37
m,p-Xylene	ND	0.0050	1	06/07/2020 00:37
o-Xylene	ND	0.0050	1	06/07/2020 00:37
Xylenes, Total	ND	0.0050	1	06/07/2020 00:37

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/01/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-2-3	2006034-005A	Soil	05/29/2020 12:30	GC18 06062027.D	199318

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	87	82-136		06/07/2020 00:37
Toluene-d8	97	92-139		06/07/2020 00:37
4-BFB	95	82-135		06/07/2020 00:37
Benzene-d6	74	55-122		06/07/2020 00:37
Ethylbenzene-d10	87	58-141		06/07/2020 00:37
1,2-DCB-d4	66	51-107		06/07/2020 00:37

Analyst(s): AK



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/05/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-1-1.5	2006034-001A	Soil	05/29/2020 08:10	GC17 06052017.D	199589

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.026	20	06/05/2020 16:26
Acenaphthylene	ND	0.026	20	06/05/2020 16:26
Acetochlor	ND	5.0	20	06/05/2020 16:26
Anthracene	ND	0.026	20	06/05/2020 16:26
Benzidine	ND	25	20	06/05/2020 16:26
Benzo (a) anthracene	ND	0.26	20	06/05/2020 16:26
Benzo (a) pyrene	0.20	0.050	20	06/05/2020 16:26
Benzo (b) fluoranthene	0.18	0.13	20	06/05/2020 16:26
Benzo (g,h,i) perylene	0.28	0.050	20	06/05/2020 16:26
Benzo (k) fluoranthene	0.068	0.026	20	06/05/2020 16:26
Benzyl Alcohol	ND	25	20	06/05/2020 16:26
1,1-Biphenyl	ND	0.26	20	06/05/2020 16:26
Bis (2-chloroethoxy) Methane	ND	5.0	20	06/05/2020 16:26
Bis (2-chloroethyl) Ether	ND	0.050	20	06/05/2020 16:26
Bis (2-chloroisopropyl) Ether	ND	0.26	20	06/05/2020 16:26
Bis (2-ethylhexyl) Adipate	ND	5.0	20	06/05/2020 16:26
Bis (2-ethylhexyl) Phthalate	ND	0.50	20	06/05/2020 16:26
4-Bromophenyl Phenyl Ether	ND	5.0	20	06/05/2020 16:26
Butylbenzyl Phthalate	ND	0.50	20	06/05/2020 16:26
4-Chloroaniline	ND	0.050	20	06/05/2020 16:26
4-Chloro-3-methylphenol	ND	5.0	20	06/05/2020 16:26
2-Chloronaphthalene	ND	5.0	20	06/05/2020 16:26
2-Chlorophenol	ND	0.26	20	06/05/2020 16:26
4-Chlorophenyl Phenyl Ether	ND	5.0	20	06/05/2020 16:26
Chrysene	0.13	0.050	20	06/05/2020 16:26
Dibenzo (a,h) anthracene	ND	0.050	20	06/05/2020 16:26
Dibenzofuran	ND	5.0	20	06/05/2020 16:26
Di-n-butyl Phthalate	ND	0.26	20	06/05/2020 16:26
1,2-Dichlorobenzene	ND	5.0	20	06/05/2020 16:26
1,3-Dichlorobenzene	ND	5.0	20	06/05/2020 16:26
1,4-Dichlorobenzene	ND	5.0	20	06/05/2020 16:26
3,3-Dichlorobenzidine	ND	0.050	20	06/05/2020 16:26
2,4-Dichlorophenol	ND	0.26	20	06/05/2020 16:26
Diethyl Phthalate	ND	0.26	20	06/05/2020 16:26
2,4-Dimethylphenol	ND	5.0	20	06/05/2020 16:26
Dimethyl Phthalate	0.098	0.050	20	06/05/2020 16:26
4,6-Dinitro-2-methylphenol	ND	25	20	06/05/2020 16:26

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/05/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected		Instrument	Batch ID
B-1-1.5	2006034-001A	Soil	05/29/2020 08:10		GC17 06052017.D	199589
Analytes	Result		RL	DF	Date Analyzed	
2,4-Dinitrophenol	ND		5.0	20	06/05/2020 16:26	
2,4-Dinitrotoluene	ND		0.26	20	06/05/2020 16:26	
2,6-Dinitrotoluene	ND		0.26	20	06/05/2020 16:26	
Di-n-octyl Phthalate	ND		0.26	20	06/05/2020 16:26	
1,2-Diphenylhydrazine	ND		5.0	20	06/05/2020 16:26	
Fluoranthene	0.24		0.026	20	06/05/2020 16:26	
Fluorene	ND		0.050	20	06/05/2020 16:26	
Hexachlorobenzene	ND		0.026	20	06/05/2020 16:26	
Hexachlorobutadiene	ND		0.050	20	06/05/2020 16:26	
Hexachlorocyclopentadiene	ND		40	20	06/05/2020 16:26	
Hexachloroethane	ND		0.26	20	06/05/2020 16:26	
Indeno (1,2,3-cd) pyrene	ND		0.26	20	06/05/2020 16:26	
Isophorone	ND		5.0	20	06/05/2020 16:26	
2-Methylnaphthalene	0.082		0.050	20	06/05/2020 16:26	
2-Methylphenol (o-Cresol)	ND		5.0	20	06/05/2020 16:26	
3 & 4-Methylphenol (m,p-Cresol)	ND		5.0	20	06/05/2020 16:26	
Naphthalene	0.062		0.026	20	06/05/2020 16:26	
2-Nitroaniline	ND		25	20	06/05/2020 16:26	
3-Nitroaniline	ND		25	20	06/05/2020 16:26	
4-Nitroaniline	ND		25	20	06/05/2020 16:26	
Nitrobenzene	ND		5.0	20	06/05/2020 16:26	
2-Nitrophenol	ND		25	20	06/05/2020 16:26	
4-Nitrophenol	ND		25	20	06/05/2020 16:26	
N-Nitrosodiphenylamine	ND		5.0	20	06/05/2020 16:26	
N-Nitrosodi-n-propylamine	ND		5.0	20	06/05/2020 16:26	
Pentachlorophenol	ND		1.2	20	06/05/2020 16:26	
Phenanthrene	0.20		0.10	20	06/05/2020 16:26	
Phenol	ND		1.0	20	06/05/2020 16:26	
Pyrene	0.37		0.050	20	06/05/2020 16:26	
Pyridine	ND		5.0	20	06/05/2020 16:26	
1,2,4-Trichlorobenzene	ND		5.0	20	06/05/2020 16:26	
2,4,5-Trichlorophenol	ND		0.050	20	06/05/2020 16:26	
2,4,6-Trichlorophenol	ND		0.26	20	06/05/2020 16:26	

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/05/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-1-1.5	2006034-001A	Soil	05/29/2020 08:10	GC17 06052017.D	199589

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>	
2-Fluorophenol	66		60-130	06/05/2020 16:26
Phenol-d5	54	S	60-130	06/05/2020 16:26
Nitrobenzene-d5	51	S	60-130	06/05/2020 16:26
2-Fluorobiphenyl	66		60-130	06/05/2020 16:26
2,4,6-Tribromophenol	26	S	50-130	06/05/2020 16:26
4-Terphenyl-d14	67		50-130	06/05/2020 16:26

Analyst(s): HD

Analytical Comments: c1



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/05/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-1-3	2006034-002A	Soil	05/29/2020 08:12	GC17 06052018.D	199589

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.0026	2	06/05/2020 16:54
Acenaphthylene	0.0091	0.0026	2	06/05/2020 16:54
Acetochlor	ND	0.50	2	06/05/2020 16:54
Anthracene	0.0033	0.0026	2	06/05/2020 16:54
Benzidine	ND	2.5	2	06/05/2020 16:54
Benzo (a) anthracene	ND	0.026	2	06/05/2020 16:54
Benzo (a) pyrene	0.043	0.0050	2	06/05/2020 16:54
Benzo (b) fluoranthene	0.041	0.013	2	06/05/2020 16:54
Benzo (g,h,i) perylene	0.068	0.0050	2	06/05/2020 16:54
Benzo (k) fluoranthene	0.014	0.0026	2	06/05/2020 16:54
Benzyl Alcohol	ND	2.5	2	06/05/2020 16:54
1,1-Biphenyl	ND	0.026	2	06/05/2020 16:54
Bis (2-chloroethoxy) Methane	ND	0.50	2	06/05/2020 16:54
Bis (2-chloroethyl) Ether	ND	0.0050	2	06/05/2020 16:54
Bis (2-chloroisopropyl) Ether	ND	0.026	2	06/05/2020 16:54
Bis (2-ethylhexyl) Adipate	ND	0.50	2	06/05/2020 16:54
Bis (2-ethylhexyl) Phthalate	ND	0.050	2	06/05/2020 16:54
4-Bromophenyl Phenyl Ether	ND	0.50	2	06/05/2020 16:54
Butylbenzyl Phthalate	ND	0.050	2	06/05/2020 16:54
4-Chloroaniline	ND	0.0050	2	06/05/2020 16:54
4-Chloro-3-methylphenol	ND	0.50	2	06/05/2020 16:54
2-Chloronaphthalene	ND	0.50	2	06/05/2020 16:54
2-Chlorophenol	ND	0.026	2	06/05/2020 16:54
4-Chlorophenyl Phenyl Ether	ND	0.50	2	06/05/2020 16:54
Chrysene	0.028	0.0050	2	06/05/2020 16:54
Dibenzo (a,h) anthracene	0.0080	0.0050	2	06/05/2020 16:54
Dibenzofuran	ND	0.50	2	06/05/2020 16:54
Di-n-butyl Phthalate	ND	0.026	2	06/05/2020 16:54
1,2-Dichlorobenzene	ND	0.50	2	06/05/2020 16:54
1,3-Dichlorobenzene	ND	0.50	2	06/05/2020 16:54
1,4-Dichlorobenzene	ND	0.50	2	06/05/2020 16:54
3,3-Dichlorobenzidine	ND	0.0050	2	06/05/2020 16:54
2,4-Dichlorophenol	ND	0.026	2	06/05/2020 16:54
Diethyl Phthalate	ND	0.026	2	06/05/2020 16:54
2,4-Dimethylphenol	ND	0.50	2	06/05/2020 16:54
Dimethyl Phthalate	ND	0.0050	2	06/05/2020 16:54
4,6-Dinitro-2-methylphenol	ND	2.5	2	06/05/2020 16:54

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/05/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected		Instrument	Batch ID
B-1-3	2006034-002A	Soil	05/29/2020 08:12		GC17 06052018.D	199589
Analytes	Result		RL	DF	Date Analyzed	
2,4-Dinitrophenol	ND		0.50	2	06/05/2020 16:54	
2,4-Dinitrotoluene	ND		0.026	2	06/05/2020 16:54	
2,6-Dinitrotoluene	ND		0.026	2	06/05/2020 16:54	
Di-n-octyl Phthalate	ND		0.026	2	06/05/2020 16:54	
1,2-Diphenylhydrazine	ND		0.50	2	06/05/2020 16:54	
Fluoranthene	0.055		0.0026	2	06/05/2020 16:54	
Fluorene	ND		0.0050	2	06/05/2020 16:54	
Hexachlorobenzene	ND		0.0026	2	06/05/2020 16:54	
Hexachlorobutadiene	ND		0.0050	2	06/05/2020 16:54	
Hexachlorocyclopentadiene	ND		4.0	2	06/05/2020 16:54	
Hexachloroethane	ND		0.026	2	06/05/2020 16:54	
Indeno (1,2,3-cd) pyrene	0.038		0.026	2	06/05/2020 16:54	
Isophorone	ND		0.50	2	06/05/2020 16:54	
2-Methylnaphthalene	0.0076		0.0050	2	06/05/2020 16:54	
2-Methylphenol (o-Cresol)	ND		0.50	2	06/05/2020 16:54	
3 & 4-Methylphenol (m,p-Cresol)	ND		0.50	2	06/05/2020 16:54	
Naphthalene	0.0068		0.0026	2	06/05/2020 16:54	
2-Nitroaniline	ND		2.5	2	06/05/2020 16:54	
3-Nitroaniline	ND		2.5	2	06/05/2020 16:54	
4-Nitroaniline	ND		2.5	2	06/05/2020 16:54	
Nitrobenzene	ND		0.50	2	06/05/2020 16:54	
2-Nitrophenol	ND		2.5	2	06/05/2020 16:54	
4-Nitrophenol	ND		2.5	2	06/05/2020 16:54	
N-Nitrosodiphenylamine	ND		0.50	2	06/05/2020 16:54	
N-Nitrosodi-n-propylamine	ND		0.50	2	06/05/2020 16:54	
Pentachlorophenol	ND		0.12	2	06/05/2020 16:54	
Phenanthrene	0.034		0.010	2	06/05/2020 16:54	
Phenol	ND		0.10	2	06/05/2020 16:54	
Pyrene	0.058		0.0050	2	06/05/2020 16:54	
Pyridine	ND		0.50	2	06/05/2020 16:54	
1,2,4-Trichlorobenzene	ND		0.50	2	06/05/2020 16:54	
2,4,5-Trichlorophenol	ND		0.0050	2	06/05/2020 16:54	
2,4,6-Trichlorophenol	ND		0.026	2	06/05/2020 16:54	

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/05/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-1-3	2006034-002A	Soil	05/29/2020 08:12	GC17 06052018.D	199589

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>	
2-Fluorophenol	65		60-130	06/05/2020 16:54
Phenol-d5	64		60-130	06/05/2020 16:54
Nitrobenzene-d5	51	S	60-130	06/05/2020 16:54
2-Fluorobiphenyl	53	S	60-130	06/05/2020 16:54
2,4,6-Tribromophenol	38	S	50-130	06/05/2020 16:54
4-Terphenyl-d14	49	S	50-130	06/05/2020 16:54

Analyst(s): HD

Analytical Comments: c1



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/05/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-1-5	2006034-003A	Soil	05/29/2020 08:15	GC21 06082004.D	199589

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.0065	5	06/08/2020 09:22
Acenaphthylene	0.022	0.0065	5	06/08/2020 09:22
Acetochlor	ND	1.2	5	06/08/2020 09:22
Anthracene	0.019	0.0065	5	06/08/2020 09:22
Benzidine	ND	6.2	5	06/08/2020 09:22
Benzo (a) anthracene	0.087	0.065	5	06/08/2020 09:22
Benzo (a) pyrene	0.15	0.012	5	06/08/2020 09:22
Benzo (b) fluoranthene	0.13	0.032	5	06/08/2020 09:22
Benzo (g,h,i) perylene	0.20	0.012	5	06/08/2020 09:22
Benzo (k) fluoranthene	0.059	0.0065	5	06/08/2020 09:22
Benzyl Alcohol	ND	6.2	5	06/08/2020 09:22
1,1-Biphenyl	ND	0.065	5	06/08/2020 09:22
Bis (2-chloroethoxy) Methane	ND	1.2	5	06/08/2020 09:22
Bis (2-chloroethyl) Ether	ND	0.012	5	06/08/2020 09:22
Bis (2-chloroisopropyl) Ether	ND	0.065	5	06/08/2020 09:22
Bis (2-ethylhexyl) Adipate	ND	1.2	5	06/08/2020 09:22
Bis (2-ethylhexyl) Phthalate	ND	0.12	5	06/08/2020 09:22
4-Bromophenyl Phenyl Ether	ND	1.2	5	06/08/2020 09:22
Butylbenzyl Phthalate	ND	0.12	5	06/08/2020 09:22
4-Chloroaniline	ND	0.012	5	06/08/2020 09:22
4-Chloro-3-methylphenol	ND	1.2	5	06/08/2020 09:22
2-Chloronaphthalene	ND	1.2	5	06/08/2020 09:22
2-Chlorophenol	ND	0.065	5	06/08/2020 09:22
4-Chlorophenyl Phenyl Ether	ND	1.2	5	06/08/2020 09:22
Chrysene	0.12	0.012	5	06/08/2020 09:22
Dibenzo (a,h) anthracene	0.024	0.012	5	06/08/2020 09:22
Dibenzofuran	ND	1.2	5	06/08/2020 09:22
Di-n-butyl Phthalate	ND	0.065	5	06/08/2020 09:22
1,2-Dichlorobenzene	ND	1.2	5	06/08/2020 09:22
1,3-Dichlorobenzene	ND	1.2	5	06/08/2020 09:22
1,4-Dichlorobenzene	ND	1.2	5	06/08/2020 09:22
3,3-Dichlorobenzidine	ND	0.012	5	06/08/2020 09:22
2,4-Dichlorophenol	ND	0.065	5	06/08/2020 09:22
Diethyl Phthalate	ND	0.065	5	06/08/2020 09:22
2,4-Dimethylphenol	ND	1.2	5	06/08/2020 09:22
Dimethyl Phthalate	ND	0.012	5	06/08/2020 09:22
4,6-Dinitro-2-methylphenol	ND	6.2	5	06/08/2020 09:22

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/05/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-1-5	2006034-003A	Soil	05/29/2020 08:15	GC21 06082004.D	199589
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
2,4-Dinitrophenol	ND		1.2	5	06/08/2020 09:22
2,4-Dinitrotoluene	ND		0.065	5	06/08/2020 09:22
2,6-Dinitrotoluene	ND		0.065	5	06/08/2020 09:22
Di-n-octyl Phthalate	ND		0.065	5	06/08/2020 09:22
1,2-Diphenylhydrazine	ND		1.2	5	06/08/2020 09:22
Fluoranthene	0.29		0.0065	5	06/08/2020 09:22
Fluorene	ND		0.012	5	06/08/2020 09:22
Hexachlorobenzene	ND		0.0065	5	06/08/2020 09:22
Hexachlorobutadiene	ND		0.012	5	06/08/2020 09:22
Hexachlorocyclopentadiene	ND		10	5	06/08/2020 09:22
Hexachloroethane	ND		0.065	5	06/08/2020 09:22
Indeno (1,2,3-cd) pyrene	0.12		0.065	5	06/08/2020 09:22
Isophorone	ND		1.2	5	06/08/2020 09:22
2-Methylnaphthalene	0.016		0.012	5	06/08/2020 09:22
2-Methylphenol (o-Cresol)	ND		1.2	5	06/08/2020 09:22
3 & 4-Methylphenol (m,p-Cresol)	ND		1.2	5	06/08/2020 09:22
Naphthalene	0.016		0.0065	5	06/08/2020 09:22
2-Nitroaniline	ND		6.2	5	06/08/2020 09:22
3-Nitroaniline	ND		6.2	5	06/08/2020 09:22
4-Nitroaniline	ND		6.2	5	06/08/2020 09:22
Nitrobenzene	ND		1.2	5	06/08/2020 09:22
2-Nitrophenol	ND		6.2	5	06/08/2020 09:22
4-Nitrophenol	ND		6.2	5	06/08/2020 09:22
N-Nitrosodiphenylamine	ND		1.2	5	06/08/2020 09:22
N-Nitrosodi-n-propylamine	ND		1.2	5	06/08/2020 09:22
Pentachlorophenol	ND		0.31	5	06/08/2020 09:22
Phenanthrene	0.17		0.025	5	06/08/2020 09:22
Phenol	ND		0.25	5	06/08/2020 09:22
Pyrene	0.30		0.012	5	06/08/2020 09:22
Pyridine	ND		1.2	5	06/08/2020 09:22
1,2,4-Trichlorobenzene	ND		1.2	5	06/08/2020 09:22
2,4,5-Trichlorophenol	ND		0.012	5	06/08/2020 09:22
2,4,6-Trichlorophenol	ND		0.065	5	06/08/2020 09:22

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/05/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-1-5	2006034-003A	Soil	05/29/2020 08:15	GC21 06082004.D	199589

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>	
2-Fluorophenol	58	S	60-130	06/08/2020 09:22
Phenol-d5	52	S	60-130	06/08/2020 09:22
Nitrobenzene-d5	52	S	60-130	06/08/2020 09:22
2-Fluorobiphenyl	56	S	60-130	06/08/2020 09:22
2,4,6-Tribromophenol	38	S	50-130	06/08/2020 09:22
4-Terphenyl-d14	54		50-130	06/08/2020 09:22

Analyst(s): HD

Analytical Comments: c1



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/05/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected		Instrument	Batch ID
B-2-1.5	2006034-004A	Soil	05/29/2020 12:25		GC21 06082006.D	199589
Analytes	Result	RL	DF	Date Analyzed		
Acenaphthene	ND	0.0065	5	06/08/2020 10:22		
Acenaphthylene	0.0088	0.0065	5	06/08/2020 10:22		
Acetochlor	ND	1.2	5	06/08/2020 10:22		
Anthracene	0.016	0.0065	5	06/08/2020 10:22		
Benzidine	ND	6.2	5	06/08/2020 10:22		
Benzo (a) anthracene	ND	0.065	5	06/08/2020 10:22		
Benzo (a) pyrene	0.063	0.012	5	06/08/2020 10:22		
Benzo (b) fluoranthene	0.067	0.032	5	06/08/2020 10:22		
Benzo (g,h,i) perylene	0.095	0.012	5	06/08/2020 10:22		
Benzo (k) fluoranthene	0.025	0.0065	5	06/08/2020 10:22		
Benzyl Alcohol	ND	6.2	5	06/08/2020 10:22		
1,1-Biphenyl	ND	0.065	5	06/08/2020 10:22		
Bis (2-chloroethoxy) Methane	ND	1.2	5	06/08/2020 10:22		
Bis (2-chloroethyl) Ether	ND	0.012	5	06/08/2020 10:22		
Bis (2-chloroisopropyl) Ether	ND	0.065	5	06/08/2020 10:22		
Bis (2-ethylhexyl) Adipate	ND	1.2	5	06/08/2020 10:22		
Bis (2-ethylhexyl) Phthalate	ND	0.12	5	06/08/2020 10:22		
4-Bromophenyl Phenyl Ether	ND	1.2	5	06/08/2020 10:22		
Butylbenzyl Phthalate	ND	0.12	5	06/08/2020 10:22		
4-Chloroaniline	ND	0.012	5	06/08/2020 10:22		
4-Chloro-3-methylphenol	ND	1.2	5	06/08/2020 10:22		
2-Chloronaphthalene	ND	1.2	5	06/08/2020 10:22		
2-Chlorophenol	ND	0.065	5	06/08/2020 10:22		
4-Chlorophenyl Phenyl Ether	ND	1.2	5	06/08/2020 10:22		
Chrysene	0.056	0.012	5	06/08/2020 10:22		
Dibenzo (a,h) anthracene	0.018	0.012	5	06/08/2020 10:22		
Dibenzofuran	ND	1.2	5	06/08/2020 10:22		
Di-n-butyl Phthalate	ND	0.065	5	06/08/2020 10:22		
1,2-Dichlorobenzene	ND	1.2	5	06/08/2020 10:22		
1,3-Dichlorobenzene	ND	1.2	5	06/08/2020 10:22		
1,4-Dichlorobenzene	ND	1.2	5	06/08/2020 10:22		
3,3-Dichlorobenzidine	ND	0.012	5	06/08/2020 10:22		
2,4-Dichlorophenol	ND	0.065	5	06/08/2020 10:22		
Diethyl Phthalate	ND	0.065	5	06/08/2020 10:22		
2,4-Dimethylphenol	ND	1.2	5	06/08/2020 10:22		
Dimethyl Phthalate	ND	0.012	5	06/08/2020 10:22		
4,6-Dinitro-2-methylphenol	ND	6.2	5	06/08/2020 10:22		

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/05/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-2-1.5	2006034-004A	Soil	05/29/2020 12:25	GC21 06082006.D	199589
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
2,4-Dinitrophenol	ND		1.2	5	06/08/2020 10:22
2,4-Dinitrotoluene	ND		0.065	5	06/08/2020 10:22
2,6-Dinitrotoluene	ND		0.065	5	06/08/2020 10:22
Di-n-octyl Phthalate	ND		0.065	5	06/08/2020 10:22
1,2-Diphenylhydrazine	ND		1.2	5	06/08/2020 10:22
Fluoranthene	0.088		0.0065	5	06/08/2020 10:22
Fluorene	ND		0.012	5	06/08/2020 10:22
Hexachlorobenzene	ND		0.0065	5	06/08/2020 10:22
Hexachlorobutadiene	ND		0.012	5	06/08/2020 10:22
Hexachlorocyclopentadiene	ND		10	5	06/08/2020 10:22
Hexachloroethane	ND		0.065	5	06/08/2020 10:22
Indeno (1,2,3-cd) pyrene	0.065		0.065	5	06/08/2020 10:22
Isophorone	ND		1.2	5	06/08/2020 10:22
2-Methylnaphthalene	ND		0.012	5	06/08/2020 10:22
2-Methylphenol (o-Cresol)	ND		1.2	5	06/08/2020 10:22
3 & 4-Methylphenol (m,p-Cresol)	ND		1.2	5	06/08/2020 10:22
Naphthalene	ND		0.0065	5	06/08/2020 10:22
2-Nitroaniline	ND		6.2	5	06/08/2020 10:22
3-Nitroaniline	ND		6.2	5	06/08/2020 10:22
4-Nitroaniline	ND		6.2	5	06/08/2020 10:22
Nitrobenzene	ND		1.2	5	06/08/2020 10:22
2-Nitrophenol	ND		6.2	5	06/08/2020 10:22
4-Nitrophenol	ND		6.2	5	06/08/2020 10:22
N-Nitrosodiphenylamine	ND		1.2	5	06/08/2020 10:22
N-Nitrosodi-n-propylamine	ND		1.2	5	06/08/2020 10:22
Pentachlorophenol	ND		0.31	5	06/08/2020 10:22
Phenanthrene	0.081		0.025	5	06/08/2020 10:22
Phenol	ND		0.25	5	06/08/2020 10:22
Pyrene	0.089		0.012	5	06/08/2020 10:22
Pyridine	ND		1.2	5	06/08/2020 10:22
1,2,4-Trichlorobenzene	ND		1.2	5	06/08/2020 10:22
2,4,5-Trichlorophenol	ND		0.012	5	06/08/2020 10:22
2,4,6-Trichlorophenol	ND		0.065	5	06/08/2020 10:22

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/05/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-2-1.5	2006034-004A	Soil	05/29/2020 12:25	GC21 06082006.D	199589

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>	
2-Fluorophenol	64		60-130	06/08/2020 10:22
Phenol-d5	53	S	60-130	06/08/2020 10:22
Nitrobenzene-d5	49	S	60-130	06/08/2020 10:22
2-Fluorobiphenyl	58	S	60-130	06/08/2020 10:22
2,4,6-Tribromophenol	37	S	50-130	06/08/2020 10:22
4-Terphenyl-d14	61		50-130	06/08/2020 10:22

Analyst(s): HD

Analytical Comments: c1



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/05/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-2-3	2006034-005A	Soil	05/29/2020 12:30	GC17 06052021.D	199589

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.0013	1	06/05/2020 18:16
Acenaphthylene	ND	0.0013	1	06/05/2020 18:16
Acetochlor	ND	0.25	1	06/05/2020 18:16
Anthracene	ND	0.0013	1	06/05/2020 18:16
Benzidine	ND	1.2	1	06/05/2020 18:16
Benzo (a) anthracene	ND	0.013	1	06/05/2020 18:16
Benzo (a) pyrene	ND	0.0025	1	06/05/2020 18:16
Benzo (b) fluoranthene	ND	0.0063	1	06/05/2020 18:16
Benzo (g,h,i) perylene	ND	0.0025	1	06/05/2020 18:16
Benzo (k) fluoranthene	ND	0.0013	1	06/05/2020 18:16
Benzyl Alcohol	ND	1.2	1	06/05/2020 18:16
1,1-Biphenyl	ND	0.013	1	06/05/2020 18:16
Bis (2-chloroethoxy) Methane	ND	0.25	1	06/05/2020 18:16
Bis (2-chloroethyl) Ether	ND	0.0025	1	06/05/2020 18:16
Bis (2-chloroisopropyl) Ether	ND	0.013	1	06/05/2020 18:16
Bis (2-ethylhexyl) Adipate	ND	0.25	1	06/05/2020 18:16
Bis (2-ethylhexyl) Phthalate	ND	0.025	1	06/05/2020 18:16
4-Bromophenyl Phenyl Ether	ND	0.25	1	06/05/2020 18:16
Butylbenzyl Phthalate	ND	0.025	1	06/05/2020 18:16
4-Chloroaniline	ND	0.0025	1	06/05/2020 18:16
4-Chloro-3-methylphenol	ND	0.25	1	06/05/2020 18:16
2-Chloronaphthalene	ND	0.25	1	06/05/2020 18:16
2-Chlorophenol	ND	0.013	1	06/05/2020 18:16
4-Chlorophenyl Phenyl Ether	ND	0.25	1	06/05/2020 18:16
Chrysene	ND	0.0025	1	06/05/2020 18:16
Dibenzo (a,h) anthracene	ND	0.0025	1	06/05/2020 18:16
Dibenzofuran	ND	0.25	1	06/05/2020 18:16
Di-n-butyl Phthalate	ND	0.013	1	06/05/2020 18:16
1,2-Dichlorobenzene	ND	0.25	1	06/05/2020 18:16
1,3-Dichlorobenzene	ND	0.25	1	06/05/2020 18:16
1,4-Dichlorobenzene	ND	0.25	1	06/05/2020 18:16
3,3-Dichlorobenzidine	ND	0.0025	1	06/05/2020 18:16
2,4-Dichlorophenol	ND	0.013	1	06/05/2020 18:16
Diethyl Phthalate	ND	0.013	1	06/05/2020 18:16
2,4-Dimethylphenol	ND	0.25	1	06/05/2020 18:16
Dimethyl Phthalate	ND	0.0025	1	06/05/2020 18:16
4,6-Dinitro-2-methylphenol	ND	1.2	1	06/05/2020 18:16

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/05/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-2-3	2006034-005A	Soil	05/29/2020 12:30	GC17 06052021.D	199589

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrophenol	ND	0.25	1	06/05/2020 18:16
2,4-Dinitrotoluene	ND	0.013	1	06/05/2020 18:16
2,6-Dinitrotoluene	ND	0.013	1	06/05/2020 18:16
Di-n-octyl Phthalate	ND	0.013	1	06/05/2020 18:16
1,2-Diphenylhydrazine	ND	0.25	1	06/05/2020 18:16
Fluoranthene	0.0014	0.0013	1	06/05/2020 18:16
Fluorene	ND	0.0025	1	06/05/2020 18:16
Hexachlorobenzene	ND	0.0013	1	06/05/2020 18:16
Hexachlorobutadiene	ND	0.0025	1	06/05/2020 18:16
Hexachlorocyclopentadiene	ND	2.0	1	06/05/2020 18:16
Hexachloroethane	ND	0.013	1	06/05/2020 18:16
Indeno (1,2,3-cd) pyrene	ND	0.013	1	06/05/2020 18:16
Isophorone	ND	0.25	1	06/05/2020 18:16
2-Methylnaphthalene	ND	0.0025	1	06/05/2020 18:16
2-Methylphenol (o-Cresol)	ND	0.25	1	06/05/2020 18:16
3 & 4-Methylphenol (m,p-Cresol)	ND	0.25	1	06/05/2020 18:16
Naphthalene	ND	0.0013	1	06/05/2020 18:16
2-Nitroaniline	ND	1.2	1	06/05/2020 18:16
3-Nitroaniline	ND	1.2	1	06/05/2020 18:16
4-Nitroaniline	ND	1.2	1	06/05/2020 18:16
Nitrobenzene	ND	0.25	1	06/05/2020 18:16
2-Nitrophenol	ND	1.2	1	06/05/2020 18:16
4-Nitrophenol	ND	1.2	1	06/05/2020 18:16
N-Nitrosodiphenylamine	ND	0.25	1	06/05/2020 18:16
N-Nitrosodi-n-propylamine	ND	0.25	1	06/05/2020 18:16
Pentachlorophenol	ND	0.062	1	06/05/2020 18:16
Phenanthrene	ND	0.0050	1	06/05/2020 18:16
Phenol	ND	0.050	1	06/05/2020 18:16
Pyrene	ND	0.0025	1	06/05/2020 18:16
Pyridine	ND	0.25	1	06/05/2020 18:16
1,2,4-Trichlorobenzene	ND	0.25	1	06/05/2020 18:16
2,4,5-Trichlorophenol	ND	0.0025	1	06/05/2020 18:16
2,4,6-Trichlorophenol	ND	0.013	1	06/05/2020 18:16

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/05/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-2-3	2006034-005A	Soil	05/29/2020 12:30	GC17 06052021.D	199589

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>	
2-Fluorophenol	90		60-130	06/05/2020 18:16
Phenol-d5	87		60-130	06/05/2020 18:16
Nitrobenzene-d5	66		60-130	06/05/2020 18:16
2-Fluorobiphenyl	68		60-130	06/05/2020 18:16
2,4,6-Tribromophenol	9	S	50-130	06/05/2020 18:16
4-Terphenyl-d14	68		50-130	06/05/2020 18:16

Analyst(s): HD

Analytical Comments: c2



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/02/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-1-1.5	2006034-001A	Soil	05/29/2020 08:10	ICP-MS5 175SMPL.d	199339

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
Antimony	0.74		0.50	1	06/03/2020 13:39
Arsenic	4.2		0.50	1	06/03/2020 13:39
Barium	160		5.0	1	06/03/2020 13:39
Beryllium	ND		0.50	1	06/03/2020 13:39
Cadmium	1.1	B	0.25	1	06/03/2020 13:39
Chromium	34		0.50	1	06/03/2020 13:39
Cobalt	4.1		0.50	1	06/03/2020 13:39
Copper	21		0.50	1	06/03/2020 13:39
Lead	150		0.50	1	06/03/2020 13:39
Mercury	0.43		0.050	1	06/03/2020 13:39
Molybdenum	ND		0.50	1	06/03/2020 13:39
Nickel	21		0.50	1	06/03/2020 13:39
Selenium	ND		0.50	1	06/03/2020 13:39
Silver	ND		0.50	1	06/03/2020 13:39
Thallium	ND		0.50	1	06/03/2020 13:39
Vanadium	26		0.50	1	06/03/2020 13:39
Zinc	180		5.0	1	06/03/2020 13:39

Surrogates	REC (%)	Limits	
Terbium	108	70-130	06/03/2020 13:39

Analyst(s): WV



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/02/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-1-3	2006034-002A	Soil	05/29/2020 08:12	ICP-MS5 190SMPL.d	199339

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
Antimony	ND		0.50	1	06/02/2020 19:17
Arsenic	2.6		0.50	1	06/02/2020 19:17
Barium	76		5.0	1	06/02/2020 19:17
Beryllium	ND		0.50	1	06/02/2020 19:17
Cadmium	0.53	B	0.25	1	06/02/2020 19:17
Chromium	40		0.50	1	06/02/2020 19:17
Cobalt	4.0		0.50	1	06/02/2020 19:17
Copper	9.7		0.50	1	06/02/2020 19:17
Lead	49		0.50	1	06/02/2020 19:17
Mercury	ND		0.050	1	06/02/2020 19:17
Molybdenum	ND		0.50	1	06/02/2020 19:17
Nickel	22		0.50	1	06/02/2020 19:17
Selenium	ND		0.50	1	06/02/2020 19:17
Silver	ND		0.50	1	06/02/2020 19:17
Thallium	ND		0.50	1	06/02/2020 19:17
Vanadium	28		0.50	1	06/02/2020 19:17
Zinc	75		5.0	1	06/02/2020 19:17

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	111	70-130	06/02/2020 19:17

Analyst(s): WV



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/02/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-1-5	2006034-003A	Soil	05/29/2020 08:15	ICP-MS5 193SMPL.d	199339

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
Antimony	ND		0.50	1	06/02/2020 19:27
Arsenic	2.6		0.50	1	06/02/2020 19:27
Barium	87		5.0	1	06/02/2020 19:27
Beryllium	ND		0.50	1	06/02/2020 19:27
Cadmium	0.65	B	0.25	1	06/02/2020 19:27
Chromium	34		0.50	1	06/02/2020 19:27
Cobalt	3.4		0.50	1	06/02/2020 19:27
Copper	12		0.50	1	06/02/2020 19:27
Lead	85		0.50	1	06/02/2020 19:27
Mercury	0.059		0.050	1	06/02/2020 19:27
Molybdenum	ND		0.50	1	06/02/2020 19:27
Nickel	19		0.50	1	06/02/2020 19:27
Selenium	ND		0.50	1	06/02/2020 19:27
Silver	ND		0.50	1	06/02/2020 19:27
Thallium	ND		0.50	1	06/02/2020 19:27
Vanadium	25		0.50	1	06/02/2020 19:27
Zinc	110		5.0	1	06/02/2020 19:27

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	114	70-130	06/02/2020 19:27

Analyst(s): WV



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/02/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-2-1.5	2006034-004A	Soil	05/29/2020 12:25	ICP-MS5 194SMPL.d	199339

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
Antimony	ND		0.50	1	06/02/2020 19:30
Arsenic	2.4		0.50	1	06/02/2020 19:30
Barium	77		5.0	1	06/02/2020 19:30
Beryllium	ND		0.50	1	06/02/2020 19:30
Cadmium	0.44	B	0.25	1	06/02/2020 19:30
Chromium	38		0.50	1	06/02/2020 19:30
Cobalt	4.1		0.50	1	06/02/2020 19:30
Copper	12		0.50	1	06/02/2020 19:30
Lead	77		0.50	1	06/02/2020 19:30
Mercury	0.13		0.050	1	06/02/2020 19:30
Molybdenum	ND		0.50	1	06/02/2020 19:30
Nickel	23		0.50	1	06/02/2020 19:30
Selenium	ND		0.50	1	06/02/2020 19:30
Silver	ND		0.50	1	06/02/2020 19:30
Thallium	ND		0.50	1	06/02/2020 19:30
Vanadium	27		0.50	1	06/02/2020 19:30
Zinc	120		5.0	1	06/02/2020 19:30

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	110	70-130	06/02/2020 19:30

Analyst(s): WV



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/02/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-2-3	2006034-005A	Soil	05/29/2020 12:30	ICP-MS5 158SMPL.d	199339

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	06/02/2020 17:34
Arsenic	2.2	0.50	1	06/02/2020 17:34
Barium	53	5.0	1	06/02/2020 17:34
Beryllium	ND	0.50	1	06/02/2020 17:34
Cadmium	ND	0.25	1	06/02/2020 17:34
Chromium	44	0.50	1	06/02/2020 17:34
Cobalt	3.7	0.50	1	06/02/2020 17:34
Copper	7.3	0.50	1	06/02/2020 17:34
Lead	8.9	0.50	1	06/02/2020 17:34
Mercury	ND	0.050	1	06/02/2020 17:34
Molybdenum	ND	0.50	1	06/02/2020 17:34
Nickel	24	0.50	1	06/02/2020 17:34
Selenium	ND	0.50	1	06/02/2020 17:34
Silver	ND	0.50	1	06/02/2020 17:34
Thallium	ND	0.50	1	06/02/2020 17:34
Vanadium	29	0.50	1	06/02/2020 17:34
Zinc	28	5.0	1	06/02/2020 17:34

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	107	70-130	06/02/2020 17:34

Analyst(s): MIG



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/01/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW5035
Analytical Method: SW8021B/8015Bm
Unit: mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-1-1.5	2006034-001A	Soil	05/29/2020 08:10	GC7 06042015.D	199297

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	31	1.0	1	06/04/2020 19:48
MTBE	---	0.050	1	06/04/2020 19:48
Benzene	---	0.0050	1	06/04/2020 19:48
Toluene	---	0.0050	1	06/04/2020 19:48
Ethylbenzene	---	0.0050	1	06/04/2020 19:48
m,p-Xylene	---	0.010	1	06/04/2020 19:48
o-Xylene	---	0.0050	1	06/04/2020 19:48
Xylenes	---	0.0050	1	06/04/2020 19:48

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	99	62-126	06/04/2020 19:48

Analyst(s): IA Analytical Comments: d7,d9

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-1-3	2006034-002A	Soil	05/29/2020 08:12	GC7 06042016.D	199297

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	2.5	1.0	1	06/04/2020 20:19
MTBE	---	0.050	1	06/04/2020 20:19
Benzene	---	0.0050	1	06/04/2020 20:19
Toluene	---	0.0050	1	06/04/2020 20:19
Ethylbenzene	---	0.0050	1	06/04/2020 20:19
m,p-Xylene	---	0.010	1	06/04/2020 20:19
o-Xylene	---	0.0050	1	06/04/2020 20:19
Xylenes	---	0.0050	1	06/04/2020 20:19

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	91	62-126	06/04/2020 20:19

Analyst(s): IA Analytical Comments: d1

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/01/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW5035
Analytical Method: SW8021B/8015Bm
Unit: mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-1-5	2006034-003A	Soil	05/29/2020 08:15	GC7 06042022.D	199297

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	3.9	1.0	1	06/04/2020 23:20
MTBE	---	0.050	1	06/04/2020 23:20
Benzene	---	0.0050	1	06/04/2020 23:20
Toluene	---	0.0050	1	06/04/2020 23:20
Ethylbenzene	---	0.0050	1	06/04/2020 23:20
m,p-Xylene	---	0.010	1	06/04/2020 23:20
o-Xylene	---	0.0050	1	06/04/2020 23:20
Xylenes	---	0.0050	1	06/04/2020 23:20

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	86	62-126	06/04/2020 23:20

Analyst(s): IA Analytical Comments: d1

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-2-1.5	2006034-004A	Soil	05/29/2020 12:25	GC7 06042023.D	199297

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	06/04/2020 23:50
MTBE	---	0.050	1	06/04/2020 23:50
Benzene	---	0.0050	1	06/04/2020 23:50
Toluene	---	0.0050	1	06/04/2020 23:50
Ethylbenzene	---	0.0050	1	06/04/2020 23:50
m,p-Xylene	---	0.010	1	06/04/2020 23:50
o-Xylene	---	0.0050	1	06/04/2020 23:50
Xylenes	---	0.0050	1	06/04/2020 23:50

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	92	62-126	06/04/2020 23:50

Analyst(s): IA

(Cont.)



Analytical Report

Client: Langan	WorkOrder: 2006034
Date Received: 06/01/2020 15:30	Extraction Method: SW5035
Date Prepared: 06/01/2020	Analytical Method: SW8021B/8015Bm
Project: 750664801; 1666 7th St.	Unit: mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-2-3	2006034-005A	Soil	05/29/2020 12:30	GC19 06032012.D	199337

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	06/03/2020 20:20
MTBE	---	0.050	1	06/03/2020 20:20
Benzene	---	0.0050	1	06/03/2020 20:20
Toluene	---	0.0050	1	06/03/2020 20:20
Ethylbenzene	---	0.0050	1	06/03/2020 20:20
m,p-Xylene	---	0.010	1	06/03/2020 20:20
o-Xylene	---	0.0050	1	06/03/2020 20:20
Xylenes	---	0.0050	1	06/03/2020 20:20

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	85	62-126	06/03/2020 20:20

Analyst(s): IA



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/01/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW3550B
Analytical Method: SW8015B
Unit: mg/Kg

Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-1-1.5	2006034-001A	Soil	05/29/2020 08:10	GC39B 06042039.D	199294
<u>Analytes</u>		<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)		5.9	5.0	5	06/04/2020 22:26
TPH-Motor Oil (C18-C36)		250	25	5	06/04/2020 22:26
<u>Surrogates</u>		<u>REC (%)</u>	<u>Limits</u>		
C9		96	70-130		06/04/2020 22:26
<u>Analyst(s):</u> JIS			<u>Analytical Comments:</u> e7,e2		

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-1-3	2006034-002A	Soil	05/29/2020 08:12	GC11B 06042053.D	199294
<u>Analytes</u>		<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)		ND	1.0	1	06/05/2020 02:25
TPH-Motor Oil (C18-C36)		14	5.0	1	06/05/2020 02:25
<u>Surrogates</u>		<u>REC (%)</u>	<u>Limits</u>		
C9		98	70-130		06/05/2020 02:25
<u>Analyst(s):</u> JIS			<u>Analytical Comments:</u> e7		

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-1-5	2006034-003A	Soil	05/29/2020 08:15	GC11A 06042048.D	199294
<u>Analytes</u>		<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)		1.6	1.0	1	06/05/2020 00:32
TPH-Motor Oil (C18-C36)		43	5.0	1	06/05/2020 00:32
<u>Surrogates</u>		<u>REC (%)</u>	<u>Limits</u>		
C9		91	70-130		06/05/2020 00:32
<u>Analyst(s):</u> JIS			<u>Analytical Comments:</u> e7,e2		

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/01/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW3550B
Analytical Method: SW8015B
Unit: mg/Kg

Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-2-1.5	2006034-004A	Soil	05/29/2020 12:25	GC39B 06042033.D	199294

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	6.4	1.0	1	06/04/2020 20:29
TPH-Motor Oil (C18-C36)	92	5.0	1	06/04/2020 20:29

Surrogates	REC (%)	Limits	Date Analyzed
C9	100	70-130	06/04/2020 20:29

Analyst(s): JIS

Analytical Comments: e7,e2,e8

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-2-3	2006034-005A	Soil	05/29/2020 12:30	GC11B 06042045.D	199294

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	06/04/2020 23:54
TPH-Motor Oil (C18-C36)	ND	5.0	1	06/04/2020 23:54

Surrogates	REC (%)	Limits	Date Analyzed
C9	98	70-130	06/04/2020 23:54

Analyst(s): JIS



Quality Control Report

Client: Langan
Date Prepared: 06/05/2020
Date Analyzed: 06/05/2020
Instrument: GC40
Matrix: Soil
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
BatchID: 199616
Extraction Method: SW3550B/3640Am/3630Cm
Analytical Method: SW8081A/8082
Unit: mg/kg
Sample ID: MB/LCS/LCSD-199616

QC Summary Report for SW8081A/8082

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Aldrin	ND	0.0000360	0.000100	-	-	-
a-BHC	ND	0.0000250	0.000100	-	-	-
b-BHC	ND	0.000250	0.000300	-	-	-
d-BHC	ND	0.000130	0.000200	-	-	-
g-BHC	ND	0.0000660	0.000100	-	-	-
Chlordane (Technical)	ND	0.000430	0.00250	-	-	-
a-Chlordane	ND	0.0000950	0.000100	-	-	-
g-Chlordane	ND	0.0000470	0.000100	-	-	-
p,p-DDD	ND	0.0000430	0.000100	-	-	-
p,p-DDE	ND	0.0000940	0.000100	-	-	-
p,p-DDT	ND	0.0000920	0.000100	-	-	-
Dieldrin	ND	0.0000610	0.000100	-	-	-
Endosulfan I	ND	0.0000480	0.000100	-	-	-
Endosulfan II	ND	0.0000760	0.000100	-	-	-
Endosulfan sulfate	ND	0.0000780	0.000100	-	-	-
Endrin	ND	0.0000350	0.000100	-	-	-
Endrin aldehyde	ND	0.0000670	0.000100	-	-	-
Endrin ketone	ND	0.0000840	0.000100	-	-	-
Heptachlor	ND	0.0000400	0.000100	-	-	-
Heptachlor epoxide	ND	0.0000540	0.000100	-	-	-
Hexachlorobenzene	ND	0.000110	0.00100	-	-	-
Hexachlorocyclopentadiene	ND	0.000340	0.00200	-	-	-
Methoxychlor	ND	0.000130	0.000200	-	-	-
Toxaphene	ND	0.00340	0.00500	-	-	-
Aroclor1016	ND	0.00200	0.00500	-	-	-
Aroclor1221	ND	0.00220	0.00500	-	-	-
Aroclor1232	ND	0.00220	0.00500	-	-	-
Aroclor1242	ND	0.00220	0.00500	-	-	-
Aroclor1248	ND	0.00220	0.00500	-	-	-
Aroclor1254	ND	0.00220	0.00500	-	-	-
Aroclor1260	ND	0.00220	0.00500	-	-	-
Surrogate Recovery						
Decachlorobiphenyl	0.00465			0.005	93	28-170

(Cont.)



Quality Control Report

Client: Langan
Date Prepared: 06/05/2020
Date Analyzed: 06/05/2020
Instrument: GC40
Matrix: Soil
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
BatchID: 199616
Extraction Method: SW3550B/3640Am/3630Cm
Analytical Method: SW8081A/8082
Unit: mg/kg
Sample ID: MB/LCS/LCSD-199616

QC Summary Report for SW8081A/8082

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Aldrin	0.00343	0.00371	0.0050	69	74	31-155	7.97	20
a-BHC	0.00354	0.00383	0.0050	71	77	32-160	8.03	20
b-BHC	0.00370	0.00404	0.0050	74	81	44-149	8.83	20
d-BHC	0.00394	0.00434	0.0050	79	87	37-157	9.65	20
g-BHC	0.00353	0.00384	0.0050	71	77	43-154	8.33	20
a-Chlordane	0.00327	0.00358	0.0050	65	72	39-150	9.02	20
g-Chlordane	0.00362	0.00396	0.0050	72	79	39-151	8.80	20
p,p-DDD	0.00389	0.00429	0.0050	78	86	30-158	9.61	20
p,p-DDE	0.00354	0.00387	0.0050	71	77	47-149	8.86	20
p,p-DDT	0.00376	0.00416	0.0050	75	83	56-166	10.1	20
Dieldrin	0.00404	0.00441	0.0050	81	88	50-163	8.80	20
Endosulfan I	0.00354	0.00384	0.0050	71	77	45-159	7.99	20
Endosulfan II	0.00376	0.00413	0.0050	75	83	41-155	9.32	20
Endosulfan sulfate	0.00385	0.00425	0.0050	77	85	45-156	10.0	20
Endrin	0.00385	0.00425	0.0050	77	85	54-154	9.74	20
Endrin aldehyde	0.00350	0.00384	0.0050	70	77	27-159	9.24	20
Endrin ketone	0.00331	0.00366	0.0050	66	73	40-147	10.2	20
Heptachlor	0.00366	0.00393	0.0050	73	79	52-165	7.19	20
Heptachlor epoxide	0.00350	0.00379	0.0050	70	76	46-145	7.89	20
Hexachlorobenzene	0.00310	0.00335	0.0050	62	67	22-156	7.53	20
Hexachlorocyclopentadiene	0.00237	0.00245	0.0050	47	49	43-173	3.35	20
Methoxychlor	0.00398	0.00435	0.0050	80	87	49-150	8.86	20
Aroclor1016	0.0122	0.0121	0.015	81	81	49-120	1.17	20
Aroclor1260	0.0136	0.0128	0.015	91	86	48-160	5.78	20
Surrogate Recovery								
Decachlorobiphenyl	0.00476	0.00506	0.0050	95	101	28-170	6.02	20



Quality Control Report

Client: Langan
Date Prepared: 06/03/2020
Date Analyzed: 06/03/2020
Instrument: GC25
Matrix: Soil
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
BatchID: 199412
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/kg
Sample ID: MB/LCS/LCSD-199412

QC Summary Report for SW8270C (ON/P Pesticides)

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Alachlor	ND	0.0420	0.100	-	-	-
Atrazine	ND	0.0230	0.100	-	-	-
Azinphos methyl (Guthion)	ND	0.0730	0.100	-	-	-
Bolstar (Sulprofos)	ND	0.0530	0.100	-	-	-
Chloropyrifos	ND	0.0550	0.100	-	-	-
Coumaphos	ND	0.0700	0.100	-	-	-
Demeton	ND	0.0430	0.100	-	-	-
Diazinon	ND	0.0420	0.100	-	-	-
Dichlorvos (DDVP)	ND	0.0360	0.100	-	-	-
Dimethoate	ND	0.0360	0.100	-	-	-
Disulfoton (Di-Syston)	ND	0.0510	0.100	-	-	-
EPN	ND	0.0560	0.100	-	-	-
EPTC	ND	0.0260	0.100	-	-	-
Ethion	ND	0.0360	0.100	-	-	-
Ethoprop	ND	0.0350	0.100	-	-	-
Ethyl parathion	ND	0.0250	0.100	-	-	-
Fensulfothion	ND	0.0540	0.100	-	-	-
Fenthion	ND	0.0440	0.100	-	-	-
Fonofos	ND	0.0380	0.100	-	-	-
Malathion	ND	0.0460	0.100	-	-	-
Mevinphos (Phosdrin)	ND	0.0780	0.100	-	-	-
Molinate	ND	0.0340	0.100	-	-	-
Methyl parathion	ND	0.0400	0.100	-	-	-
Phorate (Thimet)	ND	0.0440	0.100	-	-	-
Prometon	ND	0.0370	0.100	-	-	-
Ronnel	ND	0.0460	0.100	-	-	-
Simazine	ND	0.0660	0.100	-	-	-
Stirofos (Tetrachlorvinphos)	ND	0.0440	0.100	-	-	-
Terbacil	ND	0.0330	0.100	-	-	-
Terbufos (Terbuphos)	ND	0.0520	0.100	-	-	-
Thiobencarb	ND	0.0330	0.100	-	-	-
Tokuthion (Prothiofos)	ND	0.0410	0.100	-	-	-
Trichloronate (Agritox)	ND	0.0570	0.100	-	-	-

Surrogate Recovery

1-Bromo-2-Nitrobenzene	0.175			0.2	87	60-140
------------------------	-------	--	--	-----	----	--------

(Cont.)



Quality Control Report

Client: Langan
Date Prepared: 06/03/2020
Date Analyzed: 06/03/2020
Instrument: GC25
Matrix: Soil
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
BatchID: 199412
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/kg
Sample ID: MB/LCS/LCSD-199412

QC Summary Report for SW8270C (ON/P Pesticides)

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Alachlor	0.522	0.517	0.60	87	86	50-160	0.914	20
Atrazine	0.521	0.519	0.60	87	87	50-160	0.397	20
Azinphos methyl (Guthion)	0.679	0.669	0.60	113	111	60-140	1.56	20
Bolstar (Sulprofos)	0.599	0.604	0.60	100	101	60-140	0.873	20
Chloropyrifos	0.514	0.461	0.60	86	77	60-140	10.9	20
Coumaphos	0.699	0.722	0.60	116	120	60-140	3.31	20
Demeton	0.632	0.629	0.60	105	105	60-140	0.442	20
Diazinon	0.485	0.480	0.60	81	80	60-140	0.931	20
Dichlorvos (DDVP)	0.448	0.452	0.60	75	75	60-140	0.888	20
Dimethoate	0.608	0.615	0.60	101	103	60-140	1.24	20
Disulfoton (Di-Syston)	0.532	0.534	0.60	89	89	50-160	0.380	20
EPN	0.794	0.732	0.60	132	122	60-140	8.07	20
EPTC	0.458	0.457	0.60	76	76	60-140	0.280	20
Ethion	0.574	0.574	0.60	96	96	60-140	0.104	20
Ethoprop	0.602	0.603	0.60	100	101	60-140	0.131	20
Ethyl parathion	0.587	0.577	0.60	98	96	60-140	1.76	20
Fensulfothion	0.754	0.743	0.60	126	124	60-140	1.46	20
Fenthion	0.497	0.506	0.60	83	84	50-160	1.64	20
Fonofos	0.467	0.468	0.60	78	78	60-140	0.294	20
Malathion	0.577	0.585	0.60	96	98	60-140	1.42	20
Mevinphos (Phosdrin)	0.655	0.570	0.60	109	95	60-140	14.0	20
Molinate	0.507	0.495	0.60	85	82	60-140	2.49	20
Methyl parathion	0.592	0.582	0.60	99	97	50-160	1.56	20
Phorate (Thimet)	0.504	0.509	0.60	84	85	60-140	0.953	20
Prometon	0.590	0.584	0.60	98	97	60-140	0.983	20
Ronnel	0.471	0.489	0.60	78	81	60-140	3.68	20
Simazine	0.497	0.509	0.60	83	85	60-140	2.39	20
Stirofos (Tetrachlorvinphos)	0.621	0.607	0.60	104	101	60-140	2.39	20
Terbacil	0.636	0.662	0.60	106	110	60-140	3.90	20
Terbufos (Terbuphos)	0.497	0.505	0.60	83	84	60-140	1.58	20
Thiobencarb	0.507	0.509	0.60	84	85	60-140	0.425	20
Tokuthion (Prothiofos)	0.588	0.585	0.60	98	98	60-140	0.414	20
Trichloronate (Agritox)	0.519	0.495	0.60	87	83	60-140	4.74	20
Surrogate Recovery								
1-Bromo-2-Nitrobenzene	0.194	0.192	0.20	97	96	60-140	0.772	20



Quality Control Report

Client: Langan
Date Prepared: 06/03/2020
Date Analyzed: 06/03/2020
Instrument: GC15A
Matrix: Soil
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
BatchID: 199411
Extraction Method: SW8151A
Analytical Method: SW8151A
Unit: mg/kg
Sample ID: MB/LCS/LCSD-199411
 2006034-004AMS/MSD

QC Summary Report for SW8151A

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Acifluorfen	ND	0.0390	0.0500	-	-	-
Bentazon	ND	0.0120	0.0500	-	-	-
Chloramben	ND	0.0250	0.0500	-	-	-
2,4-D (Dichlorophenoxyacetic acid)	ND	0.0150	0.0500	-	-	-
2,4-DB	ND	0.0190	0.0500	-	-	-
Dalapon	ND	0.0770	0.100	-	-	-
DCPA (mono & diacid)	ND	0.0120	0.0500	-	-	-
Dicamba	ND	0.0110	0.0500	-	-	-
3,5-Dichlorobenzoic Acid	ND	0.0110	0.0500	-	-	-
Dichloroprop	ND	0.0170	0.0500	-	-	-
Dinoseb (DNBP)	ND	0.0180	0.0500	-	-	-
MCPA	ND	1.30	5.00	-	-	-
MCPP	ND	1.40	5.00	-	-	-
4-Nitrophenol	ND	0.0280	0.0500	-	-	-
Pentachlorophenol (PCP)	ND	0.0130	0.0500	-	-	-
Picloram	ND	0.00900	0.0500	-	-	-
2,4,5-T (Trichlorophenoxy acetic acid)	ND	0.00950	0.0500	-	-	-
2,4,5-TP (Silvex)	ND	0.00790	0.0500	-	-	-
Surrogate Recovery						
DCAA	0.116			0.1	116	77-116



Quality Control Report

Client: Langan
Date Prepared: 06/03/2020
Date Analyzed: 06/03/2020
Instrument: GC15A
Matrix: Soil
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
BatchID: 199411
Extraction Method: SW8151A
Analytical Method: SW8151A
Unit: mg/kg
Sample ID: MB/LCS/LCSD-199411
 2006034-004AMS/MSD

QC Summary Report for SW8151A

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Acifluorfen	0.105	0.108	0.10	105	108	31-145	2.54	30
Bentazon	0.0976	0.0945	0.10	98	94	60-140	3.28	30
Chloramben	0.0988	0.102	0.10	99	101	60-140	2.71	30
2,4-D (Dichlorophenoxyacetic acid)	0.0956	0.0979	0.10	96	98	72-121	2.39	30
2,4-DB	0.102	0.106	0.10	102	106	69-134	4.29	30
Dalapon	0.0980	0.101	0.10	98	101	73-117	3.31	30
DCPA (mono & diacid)	0.0909	0.0929	0.10	91	93	60-140	2.11	30
Dicamba	0.0952	0.0971	0.10	95	97	71-121	1.90	30
3,5-Dichlorobenzoic Acid	0.0890	0.0914	0.10	89	91	60-140	2.66	30
Dichloroprop	0.0905	0.0923	0.10	90	92	60-140	1.97	30
Dinoseb (DNBP)	0.0992	0.102	0.10	99	102	60-140	2.52	30
MCPA	9.22	9.41	10	92	94	60-140	2.07	30
MCPP	9.46	9.83	10	95	98	60-140	3.79	30
4-Nitrophenol	0.0792	0.0822	0.10	79	82	60-140	3.74	30
Pentachlorophenol (PCP)	0.107	0.109	0.10	107	109	68-135	1.95	30
Picloram	0.106	0.109	0.10	106	109	60-140	2.60	30
2,4,5-T (Trichlorophenoxy acetic acid)	0.0938	0.0962	0.10	94	96	60-140	2.50	30
2,4,5-TP (Silvex)	0.0994	0.102	0.10	99	102	70-130	2.55	30

Surrogate Recovery

DCAA	0.114	0.111	0.10	114	111	77-116	2.56	30
------	-------	-------	------	-----	-----	--------	------	----

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Acifluorfen	10	0.116	0.120	0.10	ND<0.50	116	120	60-140	3.46	30
Bentazon	10	0.104	0.104	0.10	ND<0.50	104	104	60-140	0.478	30
Chloramben	10	0.0858	0.0927	0.10	ND<0.50	86	93	60-140	7.69	30
2,4-D (Dichlorophenoxyacetic acid)	10	0.0928	0.0928	0.10	ND<0.50	93	93	56-156	0.0679	30
2,4-DB	10	0.0882	0.102	0.10	ND<0.50	88	102	45-164	14.6	30
Dalapon	10	0.0953	0.0951	0.10	ND<1.0	95	95	54-142	0.300	30
DCPA (mono & diacid)	10	0.0904	0.0932	0.10	ND<0.50	90	93	60-140	3.14	30
Dicamba	10	0.0731	0.0777	0.10	ND<0.50	73	78	65-131	6.10	30
3,5-Dichlorobenzoic Acid	10	0.0967	0.0932	0.10	ND<0.50	97	93	60-140	3.74	30
Dichloroprop	10	0.104	0.0996	0.10	ND<0.50	104	100	60-140	4.66	30
Dinoseb (DNBP)	10	0.0841	0.0871	0.10	ND<0.50	84	87	60-140	3.48	30
MCPA	10	10.2	11.5	10	ND<50	102	115	60-140	11.9	30
MCPP	10	9.24	8.91	10	ND<50	92	89	60-140	3.53	30

(Cont.)



Quality Control Report

Client: Langan
Date Prepared: 06/03/2020
Date Analyzed: 06/03/2020
Instrument: GC15A
Matrix: Soil
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
BatchID: 199411
Extraction Method: SW8151A
Analytical Method: SW8151A
Unit: mg/kg
Sample ID: MB/LCS/LCSD-199411
 2006034-004AMS/MSD

QC Summary Report for SW8151A

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
4-Nitrophenol	10	0.0813	0.0846	0.10	ND<0.50	81	85	60-140	4.02	30
Pentachlorophenol (PCP)	10	0.0777	0.0778	0.10	ND<0.50	78	78	60-140	0.197	30
Picloram	10	0.0912	0.0933	0.10	ND<0.50	91	93	60-140	2.20	30
2,4,5-T (Trichlorophenoxy acetic acid)	10	0.0913	0.0947	0.10	ND<0.50	91	95	60-140	3.63	30
2,4,5-TP (Silvex)	10	0.0873	0.0894	0.10	ND<0.50	87	89	61-131	2.37	30
Surrogate Recovery										
DCAA	10	0.100	0.100	0.10		100	100	63-121	0.0468	20



Quality Control Report

Client: Langan
Date Prepared: 06/01/2020
Date Analyzed: 06/02/2020
Instrument: GC38
Matrix: Soil
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
BatchID: 199318
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg
Sample ID: MB/LCS/LCSD-199318

QC Summary Report for SW8260B

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Acetone	ND	0.0670	0.100	-	-	-
tert-Amyl methyl ether (TAME)	ND	0.000780	0.00500	-	-	-
Benzene	ND	0.000980	0.00500	-	-	-
Bromobenzene	ND	0.00120	0.00500	-	-	-
Bromochloromethane	ND	0.00110	0.00500	-	-	-
Bromodichloromethane	ND	0.000280	0.00100	-	-	-
Bromoform	0.00215,J	0.00170	0.00500	-	-	-
Bromomethane	ND	0.00180	0.00500	-	-	-
2-Butanone (MEK)	0.0187,J	0.0110	0.0200	-	-	-
t-Butyl alcohol (TBA)	ND	0.0320	0.0500	-	-	-
n-Butyl benzene	ND	0.00210	0.00500	-	-	-
sec-Butyl benzene	ND	0.00170	0.00500	-	-	-
tert-Butyl benzene	ND	0.00130	0.00500	-	-	-
Carbon Disulfide	ND	0.00300	0.00500	-	-	-
Carbon Tetrachloride	ND	0.000900	0.00500	-	-	-
Chlorobenzene	ND	0.000860	0.00500	-	-	-
Chloroethane	ND	0.00200	0.00500	-	-	-
Chloroform	ND	0.000110	0.00500	-	-	-
Chloromethane	ND	0.00260	0.00500	-	-	-
2-Chlorotoluene	ND	0.00160	0.00500	-	-	-
4-Chlorotoluene	ND	0.00120	0.00500	-	-	-
Dibromochloromethane	ND	0.000190	0.00500	-	-	-
1,2-Dibromo-3-chloropropane	ND	0.000160	0.000250	-	-	-
1,2-Dibromoethane (EDB)	0.0000450,J	0.0000340	0.000100	-	-	-
Dibromomethane	ND	0.000810	0.00500	-	-	-
1,2-Dichlorobenzene	ND	0.00110	0.00500	-	-	-
1,3-Dichlorobenzene	ND	0.00100	0.00500	-	-	-
1,4-Dichlorobenzene	ND	0.000850	0.00500	-	-	-
Dichlorodifluoromethane	ND	0.00130	0.00500	-	-	-
1,1-Dichloroethane	ND	0.000880	0.00500	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	0.0000430	0.000250	-	-	-
1,1-Dichloroethene	0.0000354,J	0.0000280	0.000250	-	-	-
cis-1,2-Dichloroethene	ND	0.000840	0.00500	-	-	-
trans-1,2-Dichloroethene	ND	0.00110	0.00500	-	-	-
1,2-Dichloropropane	ND	0.000800	0.00500	-	-	-
1,3-Dichloropropane	ND	0.000700	0.00500	-	-	-
2,2-Dichloropropane	ND	0.00190	0.00500	-	-	-
1,1-Dichloropropene	ND	0.000830	0.00500	-	-	-

(Cont.)



Quality Control Report

Client: Langan
Date Prepared: 06/01/2020
Date Analyzed: 06/02/2020
Instrument: GC38
Matrix: Soil
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
BatchID: 199318
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg
Sample ID: MB/LCS/LCSD-199318

QC Summary Report for SW8260B

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
cis-1,3-Dichloropropene	ND	0.00170	0.00500	-	-	-
trans-1,3-Dichloropropene	ND	0.00200	0.00500	-	-	-
Diisopropyl ether (DIPE)	ND	0.00110	0.00500	-	-	-
Ethylbenzene	ND	0.000950	0.00500	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	0.00110	0.00500	-	-	-
Freon 113	ND	0.00110	0.00500	-	-	-
Hexachlorobutadiene	ND	0.00230	0.00500	-	-	-
Hexachloroethane	ND	0.00140	0.00500	-	-	-
2-Hexanone	ND	0.00310	0.00500	-	-	-
Isopropylbenzene	ND	0.00170	0.00500	-	-	-
4-Isopropyl toluene	ND	0.00150	0.00500	-	-	-
Methyl-t-butyl ether (MTBE)	ND	0.00170	0.00500	-	-	-
Methylene chloride	ND	0.00800	0.0100	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	0.00290	0.00500	-	-	-
Naphthalene	ND	0.00360	0.00500	-	-	-
n-Propyl benzene	ND	0.00160	0.00500	-	-	-
Styrene	ND	0.00270	0.00500	-	-	-
1,1,1,2-Tetrachloroethane	ND	0.000890	0.00500	-	-	-
1,1,2,2-Tetrachloroethane	0.0000886,J	0.0000870	0.000250	-	-	-
Tetrachloroethene	ND	0.000200	0.00100	-	-	-
Toluene	ND	0.00160	0.00500	-	-	-
1,2,3-Trichlorobenzene	ND	0.00370	0.00500	-	-	-
1,2,4-Trichlorobenzene	ND	0.00180	0.00500	-	-	-
1,1,1-Trichloroethane	ND	0.000840	0.00500	-	-	-
1,1,2-Trichloroethane	ND	0.000670	0.00500	-	-	-
Trichloroethene	ND	0.00160	0.00500	-	-	-
Trichlorofluoromethane	ND	0.00140	0.00500	-	-	-
1,2,3-Trichloropropane	0.0000660,J	0.0000420	0.000100	-	-	-
1,2,4-Trimethylbenzene	ND	0.00150	0.00500	-	-	-
1,3,5-Trimethylbenzene	ND	0.00160	0.00500	-	-	-
Vinyl Chloride	ND	0.0000530	0.000250	-	-	-
m,p-Xylene	ND	0.00230	0.00500	-	-	-
o-Xylene	ND	0.000740	0.00500	-	-	-

(Cont.)



Quality Control Report

Client: Langan	WorkOrder: 2006034
Date Prepared: 06/01/2020	BatchID: 199318
Date Analyzed: 06/02/2020	Extraction Method: SW5030B
Instrument: GC38	Analytical Method: SW8260B
Matrix: Soil	Unit: mg/kg
Project: 750664801; 1666 7th St.	Sample ID: MB/LCS/LCSD-199318

QC Summary Report for SW8260B

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Surrogate Recovery						
Dibromofluoromethane	0.124			0.125	100	87-127
Toluene-d8	0.133			0.125	106	93-141
4-BFB	0.0120			0.0125	96	84-137
Benzene-d6	0.106			0.1	106	67-131
Ethylbenzene-d10	0.110			0.1	109	78-153
1,2-DCB-d4	0.0831			0.1	83	63-109



Quality Control Report

Client: Langan
Date Prepared: 06/01/2020
Date Analyzed: 06/02/2020
Instrument: GC38
Matrix: Soil
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
BatchID: 199318
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg
Sample ID: MB/LCS/LCSD-199318

QC Summary Report for SW8260B

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Acetone	0.230	0.236	0.20	115	118	48-156	2.77	30
tert-Amyl methyl ether (TAME)	0.0166	0.0169	0.020	83	84	56-115	1.50	30
Benzene	0.0187	0.0186	0.020	93	93	63-131	0.272	30
Bromobenzene	0.0188	0.0191	0.020	94	95	66-127	1.26	30
Bromochloromethane	0.0193	0.0190	0.020	97	95	64-124	1.42	30
Bromodichloromethane	0.0183	0.0184	0.020	92	92	64-120	0.689	30
Bromoform	0.0179	0.0182	0.020	90	91	48-92	1.76	30
Bromomethane	0.0147	0.0146	0.020	73	73	25-163	0.852	30
2-Butanone (MEK)	0.0776	0.0855	0.080	97	107	51-133	9.62	30
t-Butyl alcohol (TBA)	0.0754	0.0794	0.080	94	99	52-129	5.28	30
n-Butyl benzene	0.0231	0.0233	0.020	116	117	83-200	0.882	30
sec-Butyl benzene	0.0223	0.0224	0.020	112	112	81-199	0.376	30
tert-Butyl benzene	0.0217	0.0220	0.020	108	110	79-178	1.56	30
Carbon Disulfide	0.0164	0.0161	0.020	82	81	64-136	1.57	30
Carbon Tetrachloride	0.0200	0.0201	0.020	100	101	66-140	0.390	30
Chlorobenzene	0.0180	0.0179	0.020	90	90	73-116	0.495	30
Chloroethane	0.0152	0.0150	0.020	76	75	35-147	0.849	30
Chloroform	0.0202	0.0202	0.020	101	101	65-130	0.429	30
Chloromethane	0.0108	0.0106	0.020	54	53	30-137	2.16	30
2-Chlorotoluene	0.0204	0.0209	0.020	102	104	75-152	2.56	30
4-Chlorotoluene	0.0198	0.0197	0.020	99	99	71-148	0.429	30
Dibromochloromethane	0.0177	0.0178	0.020	89	89	61-106	0.666	30
1,2-Dibromo-3-chloropropane	0.00734	0.00752	0.010	73	75	36-120	2.50	30
1,2-Dibromoethane (EDB)	0.00850	0.00857	0.010	85	86	67-118	0.790	30
Dibromomethane	0.0163	0.0166	0.020	82	83	61-116	1.27	30
1,2-Dichlorobenzene	0.0157	0.0159	0.020	78	80	59-106	1.49	30
1,3-Dichlorobenzene	0.0188	0.0190	0.020	94	95	75-129	1.23	30
1,4-Dichlorobenzene	0.0172	0.0174	0.020	86	87	66-127	1.14	30
Dichlorodifluoromethane	0.00350	0.00352	0.020	18	18	13-74	0.456	30
1,1-Dichloroethane	0.0188	0.0188	0.020	94	94	65-134	0.00982	30
1,2-Dichloroethane (1,2-DCA)	0.0191	0.0192	0.020	96	96	57-131	0.590	30
1,1-Dichloroethene	0.0184	0.0184	0.020	92	92	62-127	0.0397	30
cis-1,2-Dichloroethene	0.0182	0.0183	0.020	91	91	66-130	0.316	30
trans-1,2-Dichloroethene	0.0179	0.0178	0.020	90	89	60-131	0.929	30
1,2-Dichloropropane	0.0179	0.0180	0.020	90	90	63-127	0.121	30
1,3-Dichloropropane	0.0191	0.0182	0.020	96	91	68-124	4.94	30
2,2-Dichloropropane	0.0191	0.0189	0.020	95	94	63-150	0.891	30
1,1-Dichloropropene	0.0179	0.0181	0.020	89	90	67-134	1.03	30

(Cont.)



Quality Control Report

Client: Langan
Date Prepared: 06/01/2020
Date Analyzed: 06/02/2020
Instrument: GC38
Matrix: Soil
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
BatchID: 199318
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg
Sample ID: MB/LCS/LCSD-199318

QC Summary Report for SW8260B

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
cis-1,3-Dichloropropene	0.0208	0.0209	0.020	104	104	65-138	0.0494	30
trans-1,3-Dichloropropene	0.0210	0.0211	0.020	105	106	66-124	0.680	30
Diisopropyl ether (DIPE)	0.0179	0.0179	0.020	89	89	58-129	0.211	30
Ethylbenzene	0.0198	0.0198	0.020	99	99	73-145	0.305	30
Ethyl tert-butyl ether (ETBE)	0.0172	0.0173	0.020	86	87	62-125	0.447	30
Freon 113	0.0147	0.0147	0.020	73	73	55-116	0.0712	30
Hexachlorobutadiene	0.0236	0.0237	0.020	118	118	75-178	0.428	30
Hexachloroethane	0.0217	0.0219	0.020	109	109	75-152	0.627	30
2-Hexanone	0.0161	0.0164	0.020	80	82	41-113	1.98	30
Isopropylbenzene	0.0219	0.0221	0.020	109	111	67-172	1.10	30
4-Isopropyl toluene	0.0222	0.0223	0.020	111	112	88-171	0.544	30
Methyl-t-butyl ether (MTBE)	0.0180	0.0181	0.020	90	90	58-122	0.582	30
Methylene chloride	0.0193	0.0193	0.020	96	97	57-140	0.104	30
4-Methyl-2-pentanone (MIBK)	0.0155	0.0162	0.020	78	81	42-117	4.18	30
Naphthalene	0.00911	0.00946	0.020	46	47	29-65	3.82	30
n-Propyl benzene	0.0228	0.0230	0.020	114	115	85-174	0.880	30
Styrene	0.0180	0.0180	0.020	90	90	63-126	0.130	30
1,1,1,2-Tetrachloroethane	0.0183	0.0185	0.020	91	93	68-131	1.38	30
1,1,2,2-Tetrachloroethane	0.0172	0.0176	0.020	86	88	45-121	1.69	30
Tetrachloroethene	0.0200	0.0200	0.020	100	100	65-150	0.109	30
Toluene	0.0190	0.0191	0.020	95	96	72-135	0.414	30
1,2,3-Trichlorobenzene	0.0114	0.0113	0.020	57	56	35-80	0.912	30
1,2,4-Trichlorobenzene	0.0141	0.0145	0.020	71	73	45-103	2.85	30
1,1,1-Trichloroethane	0.0178	0.0179	0.020	89	90	67-137	0.458	30
1,1,2-Trichloroethane	0.0174	0.0173	0.020	87	86	67-117	0.448	30
Trichloroethene	0.0170	0.0170	0.020	85	85	62-135	0.198	30
Trichlorofluoromethane	0.0143	0.0143	0.020	72	72	56-124	0.0666	30
1,2,3-Trichloropropane	0.00890	0.00905	0.010	89	90	58-133	1.62	30
1,2,4-Trimethylbenzene	0.0200	0.0200	0.020	100	100	78-161	0.395	30
1,3,5-Trimethylbenzene	0.0214	0.0215	0.020	107	108	85-170	0.725	30
Vinyl Chloride	0.00558	0.00553	0.010	56	55	32-142	0.777	30
m,p-Xylene	0.0389	0.0392	0.040	97	98	70-138	0.621	30
o-Xylene	0.0186	0.0184	0.020	93	92	69-135	0.705	30

(Cont.)



Quality Control Report

Client: Langan
Date Prepared: 06/01/2020
Date Analyzed: 06/02/2020
Instrument: GC38
Matrix: Soil
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
BatchID: 199318
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg
Sample ID: MB/LCS/LCSD-199318

QC Summary Report for SW8260B

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Surrogate Recovery								
Dibromofluoromethane	0.126	0.120	0.12	101	96	87-127	4.79	30
Toluene-d8	0.128	0.127	0.12	102	102	93-141	0.0983	30
4-BFB	0.0121	0.0123	0.012	97	98	84-137	1.07	30
Benzene-d6	0.0912	0.0919	0.10	91	92	67-131	0.757	30
Ethylbenzene-d10	0.0960	0.0969	0.10	96	97	78-153	0.950	30
1,2-DCB-d4	0.0778	0.0785	0.10	78	79	63-109	0.884	30



Quality Control Report

Client: Langan
Date Prepared: 06/05/2020
Date Analyzed: 06/05/2020
Instrument: GC21
Matrix: Soil
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
BatchID: 199589
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg
Sample ID: MB/LCS/LCSD-199589
 2006034-005AMS/MSD

QC Summary Report for SW8270C (Low Level) w/ GPC

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Benzoic Acid	ND	0.370	1.20	-	-	-
Acenaphthene	ND	0.000510	0.00130	-	-	-
Acenaphthylene	ND	0.000300	0.00130	-	-	-
Acetochlor	ND	0.0320	0.250	-	-	-
Anthracene	ND	0.000850	0.00130	-	-	-
Benzidine	ND	0.120	1.20	-	-	-
Benzo (a) anthracene	ND	0.00400	0.0130	-	-	-
Benzo (a) pyrene	ND	0.00120	0.00250	-	-	-
Benzo (b) fluoranthene	ND	0.00110	0.00630	-	-	-
Benzo (g,h,i) perylene	ND	0.00160	0.00250	-	-	-
Benzo (k) fluoranthene	ND	0.00120	0.00130	-	-	-
Benzyl Alcohol	ND	0.630	1.20	-	-	-
1,1-Biphenyl	ND	0.00280	0.0130	-	-	-
Bis (2-chloroethoxy) Methane	ND	0.0280	0.250	-	-	-
Bis (2-chloroethyl) Ether	ND	0.00150	0.00250	-	-	-
Bis (2-chloroisopropyl) Ether	ND	0.00350	0.0130	-	-	-
Bis (2-ethylhexyl) Adipate	ND	0.0440	0.250	-	-	-
Bis (2-ethylhexyl) Phthalate	ND	0.0110	0.0250	-	-	-
4-Bromophenyl Phenyl Ether	ND	0.0330	0.250	-	-	-
Butylbenzyl Phthalate	ND	0.00550	0.0250	-	-	-
4-Chloroaniline	ND	0.000660	0.00250	-	-	-
4-Chloro-3-methylphenol	ND	0.0320	0.250	-	-	-
2-Chloronaphthalene	ND	0.0200	0.250	-	-	-
2-Chlorophenol	ND	0.00190	0.0130	-	-	-
4-Chlorophenyl Phenyl Ether	ND	0.0290	0.250	-	-	-
Chrysene	ND	0.00140	0.00250	-	-	-
Dibenzo (a,h) anthracene	ND	0.00140	0.00250	-	-	-
Dibenzofuran	ND	0.0150	0.250	-	-	-
Di-n-butyl Phthalate	ND	0.00520	0.0130	-	-	-
1,2-Dichlorobenzene	ND	0.0170	0.250	-	-	-
1,3-Dichlorobenzene	ND	0.0210	0.250	-	-	-
1,4-Dichlorobenzene	ND	0.0270	0.250	-	-	-
3,3-Dichlorobenzidine	ND	0.00100	0.00250	-	-	-
2,4-Dichlorophenol	ND	0.000500	0.0130	-	-	-
Diethyl Phthalate	ND	0.00350	0.0130	-	-	-
2,4-Dimethylphenol	ND	0.0310	0.250	-	-	-
Dimethyl Phthalate	ND	0.00120	0.00250	-	-	-
4,6-Dinitro-2-methylphenol	ND	0.180	1.20	-	-	-

(Cont.)



Quality Control Report

Client: Langan
Date Prepared: 06/05/2020
Date Analyzed: 06/05/2020
Instrument: GC21
Matrix: Soil
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
BatchID: 199589
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg
Sample ID: MB/LCS/LCSD-199589
 2006034-005AMS/MSD

QC Summary Report for SW8270C (Low Level) w/ GPC

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
2,4-Dinitrophenol	ND	0.160	0.250	-	-	-
2,4-Dinitrotoluene	ND	0.00240	0.0130	-	-	-
2,6-Dinitrotoluene	ND	0.00150	0.0130	-	-	-
Di-n-octyl Phthalate	ND	0.00490	0.0130	-	-	-
1,2-Diphenylhydrazine	ND	0.0300	0.250	-	-	-
Fluoranthene	ND	0.00120	0.00130	-	-	-
Fluorene	ND	0.00110	0.00250	-	-	-
Hexachlorobenzene	ND	0.000380	0.00130	-	-	-
Hexachlorobutadiene	ND	0.000170	0.00250	-	-	-
Hexachlorocyclopentadiene	ND	0.150	2.00	-	-	-
Hexachloroethane	ND	0.00160	0.0130	-	-	-
Indeno (1,2,3-cd) pyrene	ND	0.00240	0.0130	-	-	-
Isophorone	ND	0.0460	0.250	-	-	-
2-Methylnaphthalene	ND	0.000540	0.00250	-	-	-
2-Methylphenol (o-Cresol)	ND	0.0570	0.250	-	-	-
3 & 4-Methylphenol (m,p-Cresol)	ND	0.0720	0.250	-	-	-
Naphthalene	ND	0.000550	0.00130	-	-	-
2-Nitroaniline	ND	0.0870	1.20	-	-	-
3-Nitroaniline	ND	0.0910	1.20	-	-	-
4-Nitroaniline	ND	0.130	1.20	-	-	-
Nitrobenzene	ND	0.0250	0.250	-	-	-
2-Nitrophenol	ND	0.150	1.20	-	-	-
4-Nitrophenol	ND	0.380	1.20	-	-	-
N-Nitrosodimethylamine	ND	0.140	1.20	-	-	-
N-Nitrosodiphenylamine	ND	0.0260	0.250	-	-	-
N-Nitrosodi-n-propylamine	ND	0.0770	0.250	-	-	-
Pentachlorophenol	ND	0.00990	0.0620	-	-	-
Phenanthrene	ND	0.00120	0.00500	-	-	-
Phenol	ND	0.00500	0.0500	-	-	-
Pyrene	ND	0.000930	0.00250	-	-	-
Pyridine	ND	0.0480	0.250	-	-	-
1,2,4-Trichlorobenzene	ND	0.0250	0.250	-	-	-
2,4,5-Trichlorophenol	ND	0.000740	0.00250	-	-	-
2,4,6-Trichlorophenol	ND	0.000840	0.0130	-	-	-

(Cont.)



Quality Control Report

Client: Langan
Date Prepared: 06/05/2020
Date Analyzed: 06/05/2020
Instrument: GC21
Matrix: Soil
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
BatchID: 199589
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg
Sample ID: MB/LCS/LCSD-199589
 2006034-005AMS/MSD

QC Summary Report for SW8270C (Low Level) w/ GPC

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Surrogate Recovery						
2-Fluorophenol	1.25			1.25	100	60-130
Phenol-d5	1.11			1.25	89	60-130
Nitrobenzene-d5	0.981			1.25	78	60-130
2-Fluorobiphenyl	0.988			1.25	79	60-130
2,4,6-Tribromophenol	0.923			1.25	74	50-130
4-Terphenyl-d14	0.946			1.25	76	50-130



Quality Control Report

Client: Langan
Date Prepared: 06/05/2020
Date Analyzed: 06/05/2020
Instrument: GC21
Matrix: Soil
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
BatchID: 199589
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg
Sample ID: MB/LCS/LCSD-199589
 2006034-005AMS/MSD

QC Summary Report for SW8270C (Low Level) w/ GPC

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Acenaphthene	0.107	0.133	0.12	86	106	60-130	21.3	30
Acenaphthylene	0.0777	0.0952	0.12	62	76	60-130	20.2	30
Anthracene	0.124	0.145	0.12	100	116	60-130	15.1	30
Benzidine	3.65	4.45	12.5	29,F2	36	30-130	19.8	30
Benzo (a) anthracene	0.0955	0.109	0.12	76	88	60-130	13.6	30
Benzo (a) pyrene	0.104	0.120	0.12	83	96	60-130	14.0	30
Benzo (b) fluoranthene	0.0944	0.109	0.12	76	87	40-130	14.6	30
Benzo (g,h,i) perylene	0.122	0.141	0.12	98	113	60-130	14.6	30
Benzo (k) fluoranthene	0.0995	0.116	0.12	80	93	60-130	15.1	30
Benzyl Alcohol	8.96	10.8	12.5	72	87	60-130	18.7	30
Bis (2-chloroethoxy) Methane	2.08	2.47	2.5	83	99	60-130	17.5	30
Bis (2-chloroethyl) Ether	0.0816	0.0948	0.12	65	76	60-130	14.9	30
Bis (2-chloroisopropyl) Ether	0.0915	0.100	0.12	73	80	60-130	9.29	30
Bis (2-ethylhexyl) Adipate	2.20	2.41	2.5	88	96	40-130	9.21	30
Bis (2-ethylhexyl) Phthalate	0.105	0.120	0.12	84	96	60-130	13.3	30
4-Bromophenyl Phenyl Ether	2.16	2.51	2.5	86	100	60-130	15.0	30
Butylbenzyl Phthalate	0.0986	0.112	0.12	79	90	60-130	13.2	30
4-Chloroaniline	0.0652	0.0861	0.12	52	69	40-130	27.7	30
4-Chloro-3-methylphenol	2.12	2.50	2.5	85	100	60-130	16.7	30
2-Chloronaphthalene	2.03	2.42	2.5	81	97	60-130	17.6	30
2-Chlorophenol	0.102	0.118	0.12	82	95	60-130	14.4	30
4-Chlorophenyl Phenyl Ether	2.06	2.47	2.5	82	99	60-130	18.2	30
Chrysene	0.101	0.112	0.12	81	89	60-130	10.1	30
Dibenzo (a,h) anthracene	0.108	0.125	0.12	86	100	60-130	14.9	30
Dibenzofuran	2.03	2.46	2.5	81	98	60-130	19.3	30
Di-n-butyl Phthalate	0.102	0.124	0.12	81	99	60-130	20.2	30
1,2-Dichlorobenzene	2.14	2.43	2.5	86	97	60-130	12.8	30
1,3-Dichlorobenzene	2.04	2.28	2.5	82	91	60-130	11.1	30
1,4-Dichlorobenzene	1.96	2.19	2.5	78	88	60-130	11.1	30
3,3-Dichlorobenzidine	0.0715	0.0847	0.12	57	68	40-130	16.9	30
2,4-Dichlorophenol	0.115	0.135	0.12	92	108	60-130	16.0	30
Diethyl Phthalate	0.109	0.136	0.12	87	109	60-130	22.0	30
2,4-Dimethylphenol	2.45	2.83	2.5	98	113	60-130	14.4	30
Dimethyl Phthalate	0.0999	0.121	0.12	80	97	60-130	18.9	30
4,6-Dinitro-2-methylphenol	8.99	11.3	12.5	72	90	30-130	22.9	30
2,4-Dinitrophenol	1.61	2.25	2.5	64	90	15-130	33.0,F2	30
2,4-Dinitrotoluene	0.121	0.150	0.12	97	120	60-130	21.5	30
2,6-Dinitrotoluene	0.105	0.130	0.12	84	104	60-130	20.6	30

(Cont.)



Quality Control Report

Client: Langan
Date Prepared: 06/05/2020
Date Analyzed: 06/05/2020
Instrument: GC21
Matrix: Soil
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
BatchID: 199589
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg
Sample ID: MB/LCS/LCSD-199589
 2006034-005AMS/MSD

QC Summary Report for SW8270C (Low Level) w/ GPC

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Di-n-octyl Phthalate	0.119	0.134	0.12	95	107	60-130	11.4	30
1,2-Diphenylhydrazine	2.08	2.46	2.5	83	98	60-130	16.6	30
Fluoranthene	0.0998	0.119	0.12	80	95	60-130	17.8	30
Fluorene	0.141	0.137	0.12	113	110	60-130	2.80	30
Hexachlorobenzene	0.100	0.118	0.12	80	95	60-130	16.6	30
Hexachlorobutadiene	0.0999	0.116	0.12	80	92	60-130	14.5	30
Hexachlorocyclopentadiene	9.25	11.4	12.5	74	91	40-130	20.9	30
Hexachloroethane	0.106	0.120	0.12	85	96	60-130	11.8	30
Indeno (1,2,3-cd) pyrene	0.104	0.119	0.12	84	95	60-130	13.3	30
Isophorone	2.04	2.42	2.5	82	97	60-130	17.0	30
2-Methylnaphthalene	0.0952	0.112	0.12	76	89	60-130	16.0	30
2-Methylphenol (o-Cresol)	2.31	2.51	2.5	93	100	60-130	8.07	30
3 & 4-Methylphenol (m,p-Cresol)	2.10	2.43	2.5	84	97	60-130	14.3	30
Naphthalene	0.0801	0.0930	0.12	64	74	60-130	14.9	30
2-Nitroaniline	10.8	13.0	12.5	87	104	60-130	18.5	30
3-Nitroaniline	8.32	10.4	12.5	67	83	30-130	22.2	30
4-Nitroaniline	9.04	11.4	12.5	72	91	60-130	22.9	30
Nitrobenzene	2.03	2.36	2.5	81	95	60-130	15.3	30
2-Nitrophenol	10.8	12.8	12.5	87	102	60-130	16.5	30
4-Nitrophenol	10.0	12.1	12.5	80	97	60-130	18.6	30
N-Nitrosodiphenylamine	2.04	2.44	2.5	81	98	60-130	18.0	30
N-Nitrosodi-n-propylamine	1.74	2.05	2.5	69	82	60-130	16.4	30
Pentachlorophenol	0.480	0.570	0.62	77	91	40-130	16.9	30
Phenanthrene	0.102	0.120	0.12	81	96	60-130	16.5	30
Phenol	0.431	0.493	0.50	86	99	60-130	13.4	30
Pyrene	0.106	0.119	0.12	85	95	60-130	11.4	30
Pyridine	1.27	1.48	2.5	51	59	30-130	15.3	30
1,2,4-Trichlorobenzene	2.08	2.43	2.5	83	97	60-130	15.7	30
2,4,5-Trichlorophenol	0.120	0.141	0.12	96	113	60-130	16.1	30
2,4,6-Trichlorophenol	0.103	0.126	0.12	82	101	60-130	20.2	30

(Cont.)



Quality Control Report

Client: Langan
Date Prepared: 06/05/2020
Date Analyzed: 06/05/2020
Instrument: GC21
Matrix: Soil
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
BatchID: 199589
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg
Sample ID: MB/LCS/LCSD-199589
 2006034-005AMS/MSD

QC Summary Report for SW8270C (Low Level) w/ GPC

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Surrogate Recovery								
2-Fluorophenol	1.07	1.19	1.25	85	95	60-130	10.6	30
Phenol-d5	0.941	1.04	1.25	75	83	60-130	9.56	30
Nitrobenzene-d5	0.936	1.10	1.25	75	88	60-130	15.8	30
2-Fluorobiphenyl	0.932	1.06	1.25	75	85	60-130	13.1	30
2,4,6-Tribromophenol	0.822	0.920	1.25	66	74	50-130	11.2	30
4-Terphenyl-d14	0.946	1.01	1.25	76	81	50-130	6.72	30

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Acenaphthene	1	0.101	0.112	0.12	ND	81	89	60-130	9.70	30
Acenaphthylene	1	0.0732	0.0825	0.12	ND	59,F1	66	60-130	12.0	30
Anthracene	1	0.116	0.124	0.12	ND	92	100	60-130	7.45	30
Benzidine	1	6.03	6.52	12.5	ND	48	52	30-130	7.72	30
Benzo (a) anthracene	1	0.0933	0.0974	0.12	ND	75	78	60-130	4.28	30
Benzo (a) pyrene	1	0.0997	0.107	0.12	ND	79	85	60-130	7.36	30
Benzo (b) fluoranthene	1	0.0909	0.0970	0.62	ND	14,F1	15,F1	40-130	6.51	30
Benzo (g,h,i) perylene	1	0.120	0.125	0.12	ND	95	99	60-130	3.91	30
Benzo (k) fluoranthene	1	0.0892	0.108	0.12	ND	71	86	60-130	18.8	30
Benzyl Alcohol	1	7.99	8.57	12.5	ND	64	69	60-130	7.05	30
Bis (2-chloroethoxy) Methane	1	1.94	2.19	2.5	ND	78	87	60-130	12.0	30
Bis (2-chloroethyl) Ether	1	0.0779	0.0835	0.12	ND	62	67	60-130	6.90	30
Bis (2-chloroisopropyl) Ether	1	0.0784	0.0922	0.12	ND	63	74	60-130	16.1	30
Bis (2-ethylhexyl) Adipate	1	2.00	2.23	2.5	ND	80	89	40-130	11.0	30
Bis (2-ethylhexyl) Phthalate	1	0.0998	0.113	0.12	ND	80	91	60-130	12.8	30
4-Bromophenyl Phenyl Ether	1	2.07	2.23	2.5	ND	83	89	60-130	7.54	30
Butylbenzyl Phthalate	1	0.102	0.110	0.12	ND	81	88	60-130	7.72	30
4-Chloroaniline	1	0.0947	0.106	0.12	ND	76	85	40-130	11.0	30
4-Chloro-3-methylphenol	1	2.03	2.12	2.5	ND	81	85	60-130	4.52	30
2-Chloronaphthalene	1	1.88	2.13	2.5	ND	75	85	60-130	12.2	30
2-Chlorophenol	1	0.0974	0.105	0.12	ND	78	84	60-130	7.72	30
4-Chlorophenyl Phenyl Ether	1	1.94	2.17	2.5	ND	78	87	60-130	11.0	30
Chrysene	1	0.0952	0.101	0.12	ND	76	81	60-130	6.09	30
Dibenzo (a,h) anthracene	1	0.105	0.110	0.12	ND	84	88	60-130	4.86	30
Dibenzofuran	1	1.88	2.13	2.5	ND	75	85	60-130	12.1	30
Di-n-butyl Phthalate	1	0.0965	0.107	0.12	ND	77	85	60-130	10.2	30

(Cont.)



Quality Control Report

Client: Langan
Date Prepared: 06/05/2020
Date Analyzed: 06/05/2020
Instrument: GC21
Matrix: Soil
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
BatchID: 199589
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg
Sample ID: MB/LCS/LCSD-199589
 2006034-005AMS/MSD

QC Summary Report for SW8270C (Low Level) w/ GPC

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
1,2-Dichlorobenzene	1	1.90	2.12	2.5	ND	76	85	60-130	11.1	30
1,3-Dichlorobenzene	1	1.75	1.96	2.5	ND	70	79	60-130	11.4	30
1,4-Dichlorobenzene	1	1.70	1.87	2.5	ND	68	75	60-130	9.58	30
3,3-Dichlorobenzidine	1	0.100	0.107	0.12	ND	80	86	40-130	6.25	30
2,4-Dichlorophenol	1	0.108	0.117	2.5	ND	4,F1	5,F1	60-130	7.66	30
Diethyl Phthalate	1	0.0984	0.111	0.12	ND	79	89	60-130	12.4	30
2,4-Dimethylphenol	1	2.31	2.49	2.5	ND	93	100	60-130	7.43	30
Dimethyl Phthalate	1	0.0960	0.104	0.12	ND	77	83	60-130	7.54	30
4,6-Dinitro-2-methylphenol	1	7.93	8.45	12.5	ND	63	68	30-130	6.34	30
2,4-Dinitrophenol	1	0.854	0.993	2.5	ND	34	40	15-130	15.0	30
2,4-Dinitrotoluene	1	0.113	0.126	0.12	ND	90	101	60-130	10.9	30
2,6-Dinitrotoluene	1	0.0982	0.110	0.12	ND	79	88	60-130	11.7	30
Di-n-octyl Phthalate	1	0.112	0.126	0.12	ND	90	101	60-130	11.7	30
1,2-Diphenylhydrazine	1	2.02	2.12	2.5	ND	81	85	60-130	5.31	30
Fluoranthene	1	0.0954	0.102	0.12	0.001391	75	80	60-130	6.36	30
Fluorene	1	0.105	0.115	0.12	ND	84	92	60-130	9.25	30
Hexachlorobenzene	1	0.0966	0.102	0.12	ND	77	82	60-130	5.88	30
Hexachlorobutadiene	1	0.0901	0.103	0.12	ND	72	82	60-130	13.2	30
Hexachlorocyclopentadiene	1	8.18	9.41	12.5	ND	65	75	40-130	13.9	30
Hexachloroethane	1	0.0928	0.104	0.12	ND	74	84	60-130	11.9	30
Indeno (1,2,3-cd) pyrene	1	0.102	0.108	0.12	ND	82	86	60-130	5.39	30
Isophorone	1	1.93	2.12	2.5	ND	77	85	60-130	9.41	30
2-Methylnaphthalene	1	0.0970	0.106	0.12	ND	78	85	60-130	9.08	30
2-Methylphenol (o-Cresol)	1	2.05	2.26	2.5	ND	82	91	60-130	9.86	30
3 & 4-Methylphenol (m,p-Cresol)	1	2.00	2.10	2.5	ND	80	84	60-130	4.89	30
Naphthalene	1	0.0742	0.0813	0.12	ND	59,F1	65	60-130	9.16	30
2-Nitroaniline	1	10.4	11.6	12.5	ND	83	93	60-130	11.5	30
3-Nitroaniline	1	10.3	11.4	12.5	ND	82	90	30-130	10.0	30
4-Nitroaniline	1	9.37	10.4	12.5	ND	75	83	60-130	10.0	30
Nitrobenzene	1	1.94	2.03	2.5	ND	78	81	60-130	4.38	30
2-Nitrophenol	1	10.2	11.3	12.5	ND	82	90	60-130	9.85	30
4-Nitrophenol	1	9.28	9.94	12.5	ND	74	80	60-130	6.89	30
N-Nitrosodiphenylamine	1	1.96	2.08	2.5	ND	78	83	60-130	6.37	30
N-Nitrosodi-n-propylamine	1	1.64	1.77	2.5	ND	66	71	60-130	7.96	30
Pentachlorophenol	1	0.458	0.485	0.62	ND	73	78	40-130	5.81	30
Phenanthrene	1	0.0980	0.104	0.12	ND	78	83	60-130	5.67	30
Phenol	1	0.413	0.434	0.50	ND	83	87	60-130	4.95	30
Pyrene	1	0.101	0.109	0.12	ND	79	85	60-130	7.20	30

(Cont.)



Quality Control Report

Client: Langan
Date Prepared: 06/05/2020
Date Analyzed: 06/05/2020
Instrument: GC21
Matrix: Soil
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
BatchID: 199589
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg
Sample ID: MB/LCS/LCSD-199589
 2006034-005AMS/MSD

QC Summary Report for SW8270C (Low Level) w/ GPC

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Pyridine	1	0.979	1.27	2.5	ND	39	51	30-130	26.1	30
1,2,4-Trichlorobenzene	1	1.90	2.11	2.5	ND	76	84	60-130	10.0	30
2,4,5-Trichlorophenol	1	0.106	0.120	0.12	ND	85	96	60-130	12.0	30
2,4,6-Trichlorophenol	1	0.0969	0.107	0.12	ND	78	86	60-130	9.99	30
Surrogate Recovery										
2-Fluorophenol	1	1.10	1.09	1.25		88	87	60-130	1.39	30
Phenol-d5	1	0.952	0.987	1.25		76	79	60-130	3.70	30
Nitrobenzene-d5	1	0.942	1.03	1.25		75	83	60-130	9.23	30
2-Fluorobiphenyl	1	0.940	1.00	1.25		75	80	60-130	6.51	30
2,4,6-Tribromophenol	1	0.912	0.942	1.25		73	75	50-130	3.30	30
4-Terphenyl-d14	1	0.933	0.982	1.25		75	79	50-130	5.13	30



Quality Control Report

Client: Langan
Date Prepared: 06/02/2020
Date Analyzed: 06/02/2020
Instrument: ICP-MS5
Matrix: Soil
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
BatchID: 199339
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/kg
Sample ID: MB/LCS/LCSD-199339
 2006034-005AMS/MSD

QC Summary Report for Metals

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Antimony	ND	0.0940	0.500	-	-	-
Arsenic	ND	0.140	0.500	-	-	-
Barium	ND	0.970	5.00	-	-	-
Beryllium	ND	0.0720	0.500	-	-	-
Cadmium	0.0700,J	0.0580	0.250	-	-	-
Chromium	ND	0.0920	0.500	-	-	-
Cobalt	ND	0.0560	0.500	-	-	-
Copper	ND	0.0690	0.500	-	-	-
Lead	ND	0.0940	0.500	-	-	-
Mercury	ND	0.00500	0.0500	-	-	-
Molybdenum	ND	0.230	0.500	-	-	-
Nickel	ND	0.0720	0.500	-	-	-
Selenium	ND	0.130	0.500	-	-	-
Silver	ND	0.0550	0.500	-	-	-
Thallium	ND	0.100	0.500	-	-	-
Vanadium	ND	0.0640	0.500	-	-	-
Zinc	ND	1.40	5.00	-	-	-
Surrogate Recovery						
Terbium	540			500	108	70-130



Quality Control Report

Client: Langan
Date Prepared: 06/02/2020
Date Analyzed: 06/02/2020
Instrument: ICP-MS5
Matrix: Soil
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
BatchID: 199339
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/kg
Sample ID: MB/LCS/LCSD-199339
 2006034-005AMS/MSD

QC Summary Report for Metals

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Antimony	48.4	48.7	50	97	97	75-125	0.620	20
Arsenic	52.2	49.4	50	104	99	75-125	5.53	20
Barium	474	487	500	95	97	75-125	2.71	20
Beryllium	47.5	48.6	50	95	97	75-125	2.34	20
Cadmium	52.5	49.4	50	105	99	75-125	6.08	20
Chromium	52.2	49.0	50	104	98	75-125	6.46	20
Cobalt	49.1	49.7	50	98	99	75-125	1.17	20
Copper	52.5	49.5	50	105	99	75-125	5.79	20
Lead	47.0	49.6	50	94	99	75-125	5.54	20
Mercury	1.31	1.24	1.25	105	99	75-125	5.32	20
Molybdenum	49.2	49.7	50	98	99	75-125	0.964	20
Nickel	52.7	49.6	50	105	99	75-125	6.16	20
Selenium	52.0	49.7	50	104	99	75-125	4.55	20
Silver	46.8	48.4	50	94	97	75-125	3.35	20
Thallium	47.4	50.1	50	95	100	75-125	5.40	20
Vanadium	52.7	49.2	50	105	99	75-125	6.79	20
Zinc	531	497	500	106	99	75-125	6.48	20

Surrogate Recovery

Terbium	528	526	500	106	105	70-130	0.320	20
---------	-----	-----	-----	-----	-----	--------	-------	----

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Antimony	1	50.9	52.2	50	ND	101	104	75-125	2.69	20
Arsenic	1	50.4	51.4	50	2.196	96	98	75-125	1.96	20
Barium	1	552	578	500	53.36	100	105	75-125	4.55	20
Beryllium	1	49.1	51.0	50	ND	98	102	75-125	3.89	20
Cadmium	1	49.7	49.9	50	ND	99	99	75-125	0.396	20
Chromium	1	83.5	91.9	50	44.33	78	95	75-125	9.51	20
Cobalt	1	51.6	55.1	50	3.725	96	103	75-125	6.68	20
Copper	1	55.5	57.4	50	7.324	96	100	75-125	3.42	20
Lead	1	57.9	59.6	50	8.949	98	101	75-125	2.86	20
Mercury	1	1.25	1.28	1.25	ND	99	101	75-125	1.98	20
Molybdenum	1	51.6	52.9	50	ND	103	106	75-125	2.40	20
Nickel	1	71.1	77.0	50	23.80	95	106	75-125	7.89	20
Selenium	1	48.7	48.9	50	ND	97	98	75-125	0.387	20
Silver	1	48.7	50.2	50	ND	97	100	75-125	3.10	20

(Cont.)



Quality Control Report

Client: Langan
Date Prepared: 06/02/2020
Date Analyzed: 06/02/2020
Instrument: ICP-MS5
Matrix: Soil
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
BatchID: 199339
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/kg
Sample ID: MB/LCS/LCSD-199339
 2006034-005AMS/MSD

QC Summary Report for Metals

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Thallium	1	49.5	52.9	50	ND	99	106	75-125	6.63	20
Vanadium	1	75.7	82.7	50	29.00	93	107	75-125	8.93	20
Zinc	1	520	526	500	27.52	98	100	75-125	1.15	20
Surrogate Recovery										
Terbium	1	537	551	500		107	110	70-130	2.69	20

Analyte	DLT Result	DLTRef Val	%D	%D Limit
Antimony	ND<2.50	ND	-	-
Arsenic	ND<2.50	2.196	-	-
Barium	50.0	53.36	6.30	-
Beryllium	ND<2.50	ND	-	-
Cadmium	ND<1.20	ND	-	-
Chromium	43.1	44.33	2.77	20
Cobalt	3.55	3.725	4.70	-
Copper	6.84	7.324	6.61	-
Lead	8.67	8.949	3.12	-
Mercury	ND<0.250	ND	-	-
Molybdenum	ND<2.50	ND	-	-
Nickel	22.5	23.80	5.46	20
Selenium	ND<2.50	ND	-	-
Silver	ND<2.50	ND	-	-
Thallium	ND<2.50	ND	-	-
Vanadium	27.9	29.00	3.79	20
Zinc	31.4	27.52	14.1	-

%D Control Limit applied to analytes with concentrations greater than 25 times the reporting limits.



Quality Control Report

Client: Langan
Date Prepared: 06/01/2020
Date Analyzed: 06/01/2020 - 06/02/2020
Instrument: GC3
Matrix: Soil
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
BatchID: 199297
Extraction Method: SW5035
Analytical Method: SW8021B/8015Bm
Unit: mg/Kg
Sample ID: MB/LCS/LCSD-199297

QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
TPH(g) (C6-C12)	ND	0.700	1.00	-	-	-
MTBE	ND	0.00400	0.0500	-	-	-
Benzene	ND	0.00300	0.00500	-	-	-
Toluene	ND	0.00200	0.00500	-	-	-
Ethylbenzene	ND	0.00220	0.00500	-	-	-
m,p-Xylene	ND	0.00300	0.0100	-	-	-
o-Xylene	ND	0.00100	0.00500	-	-	-

Surrogate Recovery

2-Fluorotoluene	0.0926			0.1	93	75-134
-----------------	--------	--	--	-----	----	--------

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
TPH(btex)	0.562	0.566	0.60	94	94	82-118	0.600	20
MTBE	0.0930	0.0830	0.10	93	83	61-119	11.4	20
Benzene	0.0985	0.0952	0.10	98	95	77-128	3.43	20
Toluene	0.105	0.102	0.10	105	102	74-132	2.91	20
Ethylbenzene	0.102	0.100	0.10	102	100	84-127	2.05	20
m,p-Xylene	0.208	0.204	0.20	104	102	80-120	1.85	20
o-Xylene	0.0984	0.0975	0.10	98	97	80-120	0.875	20

Surrogate Recovery

2-Fluorotoluene	0.0988	0.0947	0.10	99	95	75-134	4.25	20
-----------------	--------	--------	------	----	----	--------	------	----



Quality Control Report

Client: Langan
Date Prepared: 06/01/2020
Date Analyzed: 06/02/2020
Instrument: GC7
Matrix: Soil
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
BatchID: 199337
Extraction Method: SW5035
Analytical Method: SW8021B/8015Bm
Unit: mg/Kg
Sample ID: MB/LCS/LCSD-199337

QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
TPH(g) (C6-C12)	ND	0.700	1.00	-	-	-
MTBE	ND	0.00400	0.0500	-	-	-
Benzene	ND	0.00300	0.00500	-	-	-
Toluene	ND	0.00200	0.00500	-	-	-
Ethylbenzene	ND	0.00220	0.00500	-	-	-
m,p-Xylene	ND	0.00300	0.0100	-	-	-
o-Xylene	ND	0.00100	0.00500	-	-	-

Surrogate Recovery

2-Fluorotoluene	0.0919			0.1	92	75-134
-----------------	--------	--	--	-----	----	--------

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
TPH(btex)	0.647	0.709	0.60	108	118	82-118	9.12	20
MTBE	0.106	0.103	0.10	106	103	61-119	2.89	20
Benzene	0.104	0.101	0.10	104	101	77-128	2.56	20
Toluene	0.108	0.104	0.10	108	104	74-132	3.81	20
Ethylbenzene	0.106	0.105	0.10	106	105	84-127	1.00	20
m,p-Xylene	0.222	0.224	0.20	111	112	80-120	0.560	20
o-Xylene	0.104	0.104	0.10	104	104	80-120	0.414	20

Surrogate Recovery

2-Fluorotoluene	0.0954	0.0964	0.10	95	96	75-134	1.04	20
-----------------	--------	--------	------	----	----	--------	------	----



Quality Control Report

Client: Langan
Date Prepared: 06/01/2020
Date Analyzed: 06/01/2020 - 06/03/2020
Instrument: GC39A, GC6B
Matrix: Soil
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
BatchID: 199294
Extraction Method: SW3550B
Analytical Method: SW8015B
Unit: mg/Kg
Sample ID: MB/LCS/LCSD-199294

QC Report for SW8015B w/out SG Clean-Up

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
TPH-Diesel (C10-C23)	ND	0.830	1.00	-	-	-
TPH-Motor Oil (C18-C36)	ND	3.80	5.00	-	-	-
Surrogate Recovery						
C9	25.1			25	100	70-130

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	39.2	39.5	40	98	99	70-130	0.851	20
Surrogate Recovery								
C9	24.8	24.8	25	99	99	70-130	0.0310	20

1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262



WaterTrax WriteOn EDF

CHAIN-OF-CUSTODY RECORD

WorkOrder: 2006034

ClientCode: TWRK

Excel EQulS Email HardCopy ThirdParty J-flag
 Detection Summary Dry-Weight

Report to:

Adam Brown
Langan
501 14th Street, 3rd Floor
Oakland, CA 94612
(415) 955-9040 FAX: (415) 955-9041

Email: abrown@langan.com
cc/3rd Party: bhayward@langan.com;
PO:
Project: 750664801; 1666 7th St.

Bill to:

Accounts Payable
Langan
135 Main St, Suite 1500
San Francisco, CA 94105
Langan_InvoiceCapture@concurolutio

Requested TAT: 5 days;

Date Received: 06/01/2020

Date Logged: 06/01/2020

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
2006034-001	B-1-1.5	Soil	5/29/2020 08:10	<input type="checkbox"/>	A	A	A	A	A	A	A	A	A	A	A	A	A
2006034-002	B-1-3	Soil	5/29/2020 08:12	<input type="checkbox"/>	A	A	A	A	A	A	A	A	A	A	A	A	A
2006034-003	B-1-5	Soil	5/29/2020 08:15	<input type="checkbox"/>	A	A	A	A	A	A	A	A	A	A	A	A	A
2006034-004	B-2-1.5	Soil	5/29/2020 12:25	<input type="checkbox"/>	A	A	A	A	A	A	A	A	A	A	A	A	A
2006034-005	B-2-3	Soil	5/29/2020 12:30	<input type="checkbox"/>	A	A	A	A	A	A	A	A	A	A	A	A	A
2006034-006	B-2-5	Soil	5/29/2020 12:35	<input checked="" type="checkbox"/>											A	A	

Test Legend:

1	8081pcB_ESL_LL_S	2	8081PCB_S	3	8141_S	4	8151_S
5	8260B_S	6	8270_SCSM_S	7	ASBEST400 (435 CARB)_S	8	CAM17MS_TTLC_S
9	G-MBTEX_S	10	PRDisposal Fee	11	PRHOLD	12	TPH(DMO)_S

Project Manager: Angela Rydelius

Prepared by: Agustina Venegas

The following SamplIDs: 001A, 002A, 003A, 004A, 005A contain testgroup Multi Range_S.

Comments: Needs ESL residential comparison per Adam Brown's email 06/02/2020 CAA

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.



WORK ORDER SUMMARY

Client Name: LANGAN
Client Contact: Adam Brown
Contact's Email: abrown@langan.com

Project: 750664801; 1666 7th St.

Work Order: 2006034
QC Level: LEVEL 2
Date Logged: 6/1/2020

Comments: Needs ESL residential comparison per Adam Brown's email
06/02/2020 CAA

WaterTrax WriteOn EDF Excel EQuIS Email HardCopy ThirdParty J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
2006034-001A	B-1-1.5	Soil	Multi-Range TPH	1	16OZ GJ, Unpres	<input type="checkbox"/>	5/29/2020 8:10	5 days		<input type="checkbox"/>	
			SW6020 (CAM 17)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			Asbestos, 435 CARB 400 Forensics			<input type="checkbox"/>		5 days		<input type="checkbox"/>	SubOut
			SW8270C (Low Level SVOCs) with GPC Cleanup			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8260B (VOCs, Scan- SIM)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8151A (Chlorinated Herbicides)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8270C (ON/P Pesticides)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8081A/8082 (OC Pesticides+PCBs)			<input type="checkbox"/>		5 days		<input checked="" type="checkbox"/>	
SW8081A/8082 (OC Pesticides+PCBs) ESLs			<input type="checkbox"/>		5 days		<input type="checkbox"/>				
2006034-002A	B-1-3	Soil	Multi-Range TPH	1	16OZ GJ, Unpres	<input type="checkbox"/>	5/29/2020 8:12	5 days		<input type="checkbox"/>	
			SW6020 (CAM 17)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			Asbestos, 435 CARB 400 Forensics			<input type="checkbox"/>		5 days		<input type="checkbox"/>	SubOut
			SW8270C (Low Level SVOCs) with GPC Cleanup			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8260B (VOCs, Scan- SIM)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8151A (Chlorinated Herbicides)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).
- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



WORK ORDER SUMMARY

Client Name: LANGAN
Client Contact: Adam Brown
Contact's Email: abrown@langan.com

Project: 750664801; 1666 7th St.

Work Order: 2006034
QC Level: LEVEL 2
Date Logged: 6/1/2020

Comments: Needs ESL residential comparison per Adam Brown's email
06/02/2020 CAA

WaterTrax WriteOn EDF Excel EQuIS Email HardCopy ThirdParty J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut			
2006034-002A	B-1-3	Soil	SW8270C (ON/P Pesticides)	1	16OZ GJ, Unpres	<input type="checkbox"/>	5/29/2020 8:12	5 days		<input type="checkbox"/>				
			SW8081A/8082 (OC Pesticides+PCBs)			<input type="checkbox"/>						5 days	<input checked="" type="checkbox"/>	
			SW8081A/8082 (OC Pesticides+PCBs) ESLs			<input type="checkbox"/>						5 days	<input type="checkbox"/>	
2006034-003A	B-1-5	Soil	Multi-Range TPH	1	16OZ GJ, Unpres	<input type="checkbox"/>	5/29/2020 8:15	5 days		<input type="checkbox"/>				
			SW6020 (CAM 17)			<input type="checkbox"/>						5 days	<input type="checkbox"/>	
			Asbestos, 435 CARB 400 Forensics			<input type="checkbox"/>						5 days	<input type="checkbox"/>	SubOut
			SW8270C (Low Level SVOCs) with GPC Cleanup			<input type="checkbox"/>						5 days	<input type="checkbox"/>	
			SW8260B (VOCs, Scan- SIM)			<input type="checkbox"/>						5 days	<input type="checkbox"/>	
			SW8260B (VOCs)			<input type="checkbox"/>						5 days	<input checked="" type="checkbox"/>	
			SW8151A (Chlorinated Herbicides)			<input type="checkbox"/>						5 days	<input type="checkbox"/>	
			SW8270C (ON/P Pesticides)			<input type="checkbox"/>						5 days	<input type="checkbox"/>	
			SW8081A/8082 (OC Pesticides+PCBs)			<input type="checkbox"/>						5 days	<input checked="" type="checkbox"/>	
SW8081A/8082 (OC Pesticides+PCBs) ESLs	<input type="checkbox"/>	5 days	<input type="checkbox"/>											
2006034-004A	B-2-1.5	Soil	Multi-Range TPH	1	16OZ GJ, Unpres	<input type="checkbox"/>	5/29/2020 12:25	5 days		<input type="checkbox"/>				
			SW6020 (CAM 17)			<input type="checkbox"/>						5 days	<input type="checkbox"/>	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



WORK ORDER SUMMARY

Client Name: LANGAN
Client Contact: Adam Brown
Contact's Email: abrown@langan.com

Project: 750664801; 1666 7th St.

Work Order: 2006034
QC Level: LEVEL 2
Date Logged: 6/1/2020

Comments: Needs ESL residential comparison per Adam Brown's email
06/02/2020 CAA

WaterTrax WriteOn EDF Excel EQUIS Email HardCopy ThirdParty J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut			
2006034-004A	B-2-1.5	Soil	Asbestos, 435 CARB 400 Forensics	1	16OZ GJ, Unpres	<input type="checkbox"/>	5/29/2020 12:25	5 days		<input type="checkbox"/>	SubOut			
			SW8270C (Low Level SVOCs) with GPC Cleanup			<input type="checkbox"/>						5 days		
			SW8260B (VOCs, Scan- SIM)			<input type="checkbox"/>						5 days		
			SW8151A (Chlorinated Herbicides)			<input type="checkbox"/>						5 days		
			SW8270C (ON/P Pesticides)			<input type="checkbox"/>						5 days		
			SW8081A/8082 (OC Pesticides+PCBs)			<input type="checkbox"/>						5 days	<input checked="" type="checkbox"/>	
			SW8081A/8082 (OC Pesticides+PCBs) ESLs			<input type="checkbox"/>						5 days	<input type="checkbox"/>	
2006034-005A	B-2-3	Soil	Multi-Range TPH	1	16OZ GJ, Unpres	<input type="checkbox"/>	5/29/2020 12:30	5 days		<input type="checkbox"/>				
			SW6020 (CAM 17)			<input type="checkbox"/>						5 days		
			Asbestos, 435 CARB 400 Forensics			<input type="checkbox"/>						5 days	<input type="checkbox"/>	SubOut
			SW8270C (Low Level SVOCs) with GPC Cleanup			<input type="checkbox"/>						5 days		
			SW8260B (VOCs, Scan- SIM)			<input type="checkbox"/>						5 days		
			SW8151A (Chlorinated Herbicides)			<input type="checkbox"/>						5 days		
			SW8270C (ON/P Pesticides)			<input type="checkbox"/>						5 days		
SW8081A/8082 (OC Pesticides+PCBs)	<input type="checkbox"/>	5 days	<input checked="" type="checkbox"/>											

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).
- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



WORK ORDER SUMMARY

Client Name: LANGAN
Client Contact: Adam Brown
Contact's Email: abrown@langan.com

Project: 750664801; 1666 7th St.

Work Order: 2006034
QC Level: LEVEL 2
Date Logged: 6/1/2020

Comments: Needs ESL residential comparison per Adam Brown's email
06/02/2020 CAA

WaterTrax WriteOn EDF Excel EQUIS Email HardCopy ThirdParty J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
2006034-005A	B-2-3	Soil	SW8081A/8082 (OC Pesticides+PCBs) ESLs	1	16OZ GJ, Unpres	<input type="checkbox"/>	5/29/2020 12:30	5 days		<input type="checkbox"/>	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

2006034

14644

LANGAN

CHAIN OF CUSTODY RECORD

- 135 Main Street, Suite 1500, San Francisco, CA 94105
- 501 14th Street, Third Floor, Oakland, CA 94612
- 3320 Data Drive, Suite 350, Rancho Cordova, CA 95670-7982
- 1 Almaden Boulevard, Suite 590, San Jose, CA 95113

Site Name: 1666 7th Street.
 Job Number: 750664801
 Project Manager/Contact: Adam Brown ABrown@LANGAN.COM
 Samplers: Noel Jose 415-238-6149
 Recorder (Signature Required): [Signature]

Turnaround
Time
Standard

Field Sample Identification No.	Date	Time	Lab Sample No.	Matrix				No. Containers & Preservative				Analysis Requested										Silica gel clean-up	Hold	Remarks				
				Soil	Water	Air	Other	HCL	H ₂ SO ₄	HNO ₃	Ice	TRH 90 MO - 8015	Vol% - 8040	SVL% - 8070	Pest 8141A	Herb 8161A	POST 808A/PCB 808A	CAM 17 6011/701P	CARD 485									
B-1-1.5	5/21/20	8:10		X										X	X	X	X	X	X	X	X							
B-1-3		8:12												X	X	X	X	X	X	X	X							
B-1-5		8:15												X	X	X	X	X	X	X	X							
B-2-1.5		12:25												X	X	X	X	X	X	X	X							
B-2-3		12:30												X	X	X	X	X	X	X	X							
B-2-5		12:35																				X						

Relinquished by: (Signature) <u>[Signature]</u>	Date: <u>5/29/2020</u>	Time: <u>18:33</u>	Received by: (Signature) <u>[Signature]</u>	Date: <u>6/1/20</u>	Time: <u>12:58</u>
Relinquished by: (Signature) <u>[Signature]</u>	Date: <u>6/1/20</u>	Time: <u>15:30</u>	Received by: (Signature) <u>[Signature]</u>	Date: <u>6/1/2020</u>	Time: <u>15:30</u>
Relinquished by: (Signature)	Date:	Time:	Received by Lab: (Signature)	Date:	Time:

Sent to Laboratory (Name): _____
 Laboratory Comments/Notes: _____

Method of Shipment: Lab courier Fed Ex Airborne UPS
 Hand Carried Private Courier (Co. Name) _____



Sample Receipt Checklist

Client Name: **Langan**
Project: **750664801; 1666 7th St.**

Date and Time Received: **6/1/2020 15:30**
Date Logged: **6/1/2020**
Received by: **Agustina Venegas**
Logged by: **Agustina Venegas**

WorkOrder No: **2006034** Matrix: Soil
Carrier: Benjamin Yslas (MAI Courier)

Chain of Custody (COC) Information

- Chain of custody present? Yes No
- Chain of custody signed when relinquished and received? Yes No
- Chain of custody agrees with sample labels? Yes No
- Sample IDs noted by Client on COC? Yes No
- Date and Time of collection noted by Client on COC? Yes No
- Sampler's name noted on COC? Yes No
- COC agrees with Quote? Yes No NA

Sample Receipt Information

- Custody seals intact on shipping container/cooler? Yes No NA
- Shipping container/cooler in good condition? Yes No
- Samples in proper containers/bottles? Yes No
- Sample containers intact? Yes No
- Sufficient sample volume for indicated test? Yes No

Sample Preservation and Hold Time (HT) Information

- All samples received within holding time? Yes No NA
- Samples Received on Ice? Yes No

(Ice Type: WET ICE)

- Sample/Temp Blank temperature Temp: 1°C NA
- Water - VOA vials have zero headspace / no bubbles? Yes No NA
- Sample labels checked for correct preservation? Yes No
- pH acceptable upon receipt (Metal: <2; Nitrate 353.2/4500NO3: <2; 522: <4; 218.7: >8)? Yes No NA

UCMR Samples:

- pH tested and acceptable upon receipt (200.8: ≤2; 525.3: ≤4; 530: ≤7; 541: <3; 544: <6.5 & 7.5)? Yes No NA
- Free Chlorine tested and acceptable upon receipt (<0.1mg/L)? Yes No NA

Comments:



McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 2006034 A

Report Created for: Langan

501 14th Street, 3rd Floor
Oakland, CA 94612

Project Contact: Adam Brown

Project P.O.:

Project: 750664801; 1666 7th St.

Project Received: 06/01/2020

Analytical Report reviewed & approved for release on 06/22/2020 by:

Yen Cao
Project Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.





Glossary of Terms & Qualifier Definitions

Client: Langan
Project: 750664801; 1666 7th St.
WorkOrder: 2006034 A

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
CPT	Consumer Product Testing not NELAP Accredited
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
LQL	Lowest Quantitation Level
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
TZA	TimeZone Net Adjustment for sample collected outside of MAI's UTC.
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/20/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: CA Title 22
Analytical Method: SW6020
Unit: mg/L

Metals (STLC)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-1-1.5	2006034-001A	Soil	05/29/2020 08:10	ICP-MS4 163SMPL.d	200467

Analytes	Result	RL	DF	Date Analyzed
Lead	11	0.10	1	06/22/2020 13:32

Analyst(s): JAG

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-1-5	2006034-003A	Soil	05/29/2020 08:15	ICP-MS4 174SMPL.d	200467

Analytes	Result	RL	DF	Date Analyzed
Lead	6.2	0.10	1	06/22/2020 14:13

Analyst(s): WV

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-2-1.5	2006034-004A	Soil	05/29/2020 12:25	ICP-MS4 175SMPL.d	200467

Analytes	Result	RL	DF	Date Analyzed
Lead	3.0	0.10	1	06/22/2020 14:16

Analyst(s): WV



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/09/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW1311/SW3010
Analytical Method: SW6020
Unit: mg/L

Metals (TCLP)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-1-1.5	2006034-001A	Soil	05/29/2020 08:10	ICP-MS5 290SMPL.d	199812

Analytes	Result	RL	DF	Date Analyzed
Lead	ND	0.10	1	06/11/2020 01:42

Analyst(s): WV



Quality Control Report

Client: Langan
Date Prepared: 06/20/2020
Date Analyzed: 06/22/2020
Instrument: ICP-MS4
Matrix: Soil
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
BatchID: 200467
Extraction Method: CA Title 22
Analytical Method: SW6020
Unit: mg/L
Sample ID: MB/LCS/LCSD-200467
 2006034-001AMS/MSD

QC Summary Report for Metals (STLC)

Analyte	MB Result	MDL	RL			
Lead	ND	0.100	0.100	-	-	-

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Lead	9.37	9.58	10	94	96	75-125	2.21	20

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Lead	1	21.5	21.1	10	11.28	103	98	75-125	2.04	20

Analyte	DLT Result	DLTRef Val	%D	%D Limit
Lead	11.9	11.28	5.50	20

%D Control Limit applied to analytes with concentrations greater than 25 times the reporting limits.



Quality Control Report

Client:	Langan	WorkOrder:	2006034
Date Prepared:	06/09/2020	BatchID:	199812
Date Analyzed:	06/11/2020	Extraction Method:	SW1311/SW3010
Instrument:	ICP-MS5	Analytical Method:	SW6020
Matrix:	Soil	Unit:	mg/L
Project:	750664801; 1666 7th St.	Sample ID:	MB/LCS/LCSD-199812

QC Summary Report for Metals (TCLP)

Analyte	MB Result	MDL	RL			
Lead	ND	0.100	0.100	-	-	-

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Lead	9.75	9.63	10	98	96	75-125	1.30	20



1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

WaterTrax WriteOn EDF

CHAIN-OF-CUSTODY RECORD

WorkOrder: 2006034 **A** ClientCode: TWRK

Excel EQulS Email HardCopy ThirdParty J-flag
 Detection Summary Dry-Weight

Report to:

Adam Brown
Langan
501 14th Street, 3rd Floor
Oakland, CA 94612
(415) 955-9040 FAX: (415) 955-9041

Email: abrown@langan.com
cc/3rd Party: bhayward@langan.com;
PO:
Project: 750664801; 1666 7th St.

Bill to:

Accounts Payable
Langan
135 Main St, Suite 1500
San Francisco, CA 94105
Langan_InvoiceCapture@concur.solutio

Requested TAT: 5 days;

Date Received: 06/01/2020

Date Logged: 06/01/2020

Date Add-On: 06/09/2020

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
2006034-001	B-1-1.5	Soil	5/29/2020 08:10	<input type="checkbox"/>	A	A											
2006034-003	B-1-5	Soil	5/29/2020 08:15	<input type="checkbox"/>	A												
2006034-004	B-2-1.5	Soil	5/29/2020 12:25	<input type="checkbox"/>	A												

Test Legend:

1	PBMS_STLC_S	2	PBMS_TCLP_S	3		4	
5		6		7		8	
9		10		11		12	

Project Manager: Angela Rydelius

Prepared by: Agustina Venegas

Add-On Prepared By: Maria Venegas

Comments: Needs ESL residential comparison per Adam Brown's email 06/02/2020 CAA. STLC & TCLPs added 6/9/2020 STAT.

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days). Hazardous samples will be returned to client or disposed of at client expense.



WORK ORDER SUMMARY

Client Name: LANGAN
Client Contact: Adam Brown
Contact's Email abrown@langan.com

Project: 750664801; 1666 7th St.

Comments: Needs ESL residential comparison per Adam Brown's email
06/02/2020 CAA. STLC & TCLPs added 6/9/2020 STAT.

Work Order: 2006034
QC Level: LEVEL 2
Date Logged: 6/1/2020
Date Add-On: 6/9/2020

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
2006034-001A	B-1-1.5	Soil	SW6020 (Lead) (TCLP)	1	16OZ GJ, Unpres	5/29/2020 8:10	5 days*		<input type="checkbox"/>	
			SW6020 (Lead) (STLC)				5 days*			
2006034-003A	B-1-5	Soil	SW6020 (Lead) (STLC)	1	16OZ GJ, Unpres	5/29/2020 8:15	5 days*		<input type="checkbox"/>	
2006034-004A	B-2-1.5	Soil	SW6020 (Lead) (STLC)	1	16OZ GJ, Unpres	5/29/2020 12:25	5 days*		<input type="checkbox"/>	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

2006034

14644

LANGAN

CHAIN OF CUSTODY RECORD

- 135 Main Street, Suite 1500, San Francisco, CA 94105
- 501 14th Street, Third Floor, Oakland, CA 94612
- 3320 Data Drive, Suite 350, Rancho Cordova, CA 95670-7982
- 1 Almaden Boulevard, Suite 590, San Jose, CA 95113

Site Name: 1666 7th Street.
 Job Number: 750664801
 Project Manager/Contact: Adam Brown ABrown@LANGAN.COM
 Samplers: Noel Jose 415-238-6149
 Recorder (Signature Required): [Signature]

Analysis Requested

TPH 90 MO - 8015	Vol% - 8040	SVCS - 8070	RES - 8114	HERB - 8151A	POST-808A/PCB 8182	CAM 17 6010/7010	CARB 485	STC Pb	TCLUP Pb	Silica gel clean-up	Hold
------------------	-------------	-------------	------------	--------------	--------------------	------------------	----------	--------	----------	---------------------	------

Turnaround Time
Standard

Field Sample Identification No.	Date	Time	Lab Sample No.	Matrix				No. Containers & Preservative				Analysis Requested		Silica gel clean-up	Hold	Remarks	
				Soil	Water	Air	Other	HCL	H ₂ SO ₄	HNO ₃	Ice						
B-1-1.5	5/21/20	8:10		X									X	X			
B-1-3		8:12											X	X			
B-1-5		8:15											X	X			
B-2-1.5		12:25											X	X			
B-2-3		12:30											X	X			
B-2-5		12:35													X		

Relinquished by: (Signature) <u>[Signature]</u>	Date: <u>5/29/2020</u>	Time: <u>18:33</u>	Received by: (Signature) <u>[Signature]</u>	Date: <u>6/1/20</u>	Time: <u>1258</u>
Relinquished by: (Signature) <u>[Signature]</u>	Date: <u>6/1/20</u>	Time: <u>1530</u>	Received by: (Signature) <u>[Signature]</u>	Date: <u>6/1/2020</u>	Time: <u>1530</u>
Relinquished by: (Signature)	Date:	Time:	Received by Lab: (Signature)	Date:	Time:

Sent to Laboratory (Name): _____
 Laboratory Comments/Notes: Added 6/9/2020 STAT
 Method of Shipment: Lab courier Fed Ex Airborne UPS
 Hand Carried Private Courier (Co. Name) _____



McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 2006034 B

Report Created for: Langan

501 14th Street, 3rd Floor
Oakland, CA 94612

Project Contact: Adam Brown

Project P.O.:

Project: 750664801; 1666 7th St.

Project Received: 06/01/2020

Analytical Report reviewed & approved for release on 06/25/2020 by:

Yen Cao
Project Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.





Glossary of Terms & Qualifier Definitions

Client: Langan
Project: 750664801; 1666 7th St.
WorkOrder: 2006034 B

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
CPT	Consumer Product Testing not NELAP Accredited
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
LQL	Lowest Quantitation Level
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
TZA	TimeZone Net Adjustment for sample collected outside of MAI's UTC.
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)



Analytical Report

Client: Langan
Date Received: 06/01/2020 15:30
Date Prepared: 06/23/2020
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
Extraction Method: SW1311/SW3010
Analytical Method: SW6020
Unit: mg/L

Metals (TCLP)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-1-5	2006034-003A	Soil	05/29/2020 08:15	ICP-MS5 245SMPL.d	200603

Analytes	Result	RL	DF	Date Analyzed
Lead	0.10	0.10	1	06/24/2020 18:43

Analyst(s): WV



Quality Control Report

Client: Langan
Date Prepared: 06/23/2020
Date Analyzed: 06/24/2020
Instrument: ICP-MS5
Matrix: Soil
Project: 750664801; 1666 7th St.

WorkOrder: 2006034
BatchID: 200603
Extraction Method: SW1311/SW3010
Analytical Method: SW6020
Unit: mg/L
Sample ID: MB/LCS/LCSD-200603
2006034-003AMS/MSD

QC Summary Report for Metals (TCLP)

Analyte	MB Result	MDL	RL			
Lead	ND	0.100	0.100	-	-	-

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Lead	10.1	9.94	10	101	99	75-125	1.80	20

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Lead	1	9.98	10.1	10	0.1004	99	100	75-125	1.17	20

Analyte	DLT Result	DLTRef Val	%D	%D Limit
Lead	ND<0.500	0.1004	-	-

%D Control Limit applied to analytes with concentrations greater than 25 times the reporting limits.



1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 2006034 **B** ClientCode: TWRK

- WaterTrax WriteOn EDF Excel EQulS Email HardCopy ThirdParty J-flag
 Detection Summary Dry-Weight

Report to:

Adam Brown
Langan
501 14th Street, 3rd Floor
Oakland, CA 94612
(415) 955-9040 FAX: (415) 955-9041

Email: abrown@langan.com
cc/3rd Party: bhayward@langan.com; mfromstein@lang
PO:
Project: 750664801; 1666 7th St.

Bill to:

Accounts Payable
Langan
135 Main St, Suite 1500
San Francisco, CA 94105
Langan_InvoiceCapture@concur.solutio

Requested TAT: 1 day;

Date Received: 06/01/2020
Date Logged: 06/01/2020
Date Add-On: 06/22/2020

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
2006034-003	B-1-5	Soil	5/29/2020 08:15	<input type="checkbox"/>	A												

Test Legend:

1	PBMS_TCLP_S	2		3		4	
5		6		7		8	
9		10		11		12	

Project Manager: Angela Rydelius

Prepared by: Agustina Venegas

Add-On Prepared By: Agustina Venegas

Comments: Needs ESL residential comparison per Adam Brown's email 06/02/2020 CAA. STLC & TCLPs added 6/9/2020 STAT. TCLP Pb added 6/22/20 RUSH

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days). Hazardous samples will be returned to client or disposed of at client expense.



WORK ORDER SUMMARY

Client Name: LANGAN
Client Contact: Adam Brown
Contact's Email abrown@langan.com

Project: 750664801; 1666 7th St.

Work Order: 2006034
QC Level: LEVEL 2
Date Logged: 6/1/2020
Date Add-On: 6/22/2020

Comments: Needs ESL residential comparison per Adam Brown's email
06/02/2020 CAA. STLC & TCLPs added 6/9/2020 STAT. TCLP
Pb added 6/22/20 DISH

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
2006034-003A	B-1-5	Soil	SW6020 (Lead) (TCLP)	1	16OZ GJ, Unpres	5/29/2020 8:15	1 day*		<input type="checkbox"/>	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

2006034

14644

LANGAN

CHAIN OF CUSTODY RECORD

- 135 Main Street, Suite 1500, San Francisco, CA 94105
- 501 14th Street, Third Floor, Oakland, CA 94612
- 3320 Data Drive, Suite 350, Rancho Cordova, CA 95670-7982
- 1 Almaden Boulevard, Suite 590, San Jose, CA 95113

Site Name: 1666 7th Street.
 Job Number: 750.664801
 Project Manager/Contact: Adam Brown ABrown@LANGAN.COM
 Samplers: Noel Jose 415-238-6149
 Recorder (Signature Required): [Signature]

Turnaround
Time
Standard

Field Sample Identification No.	Date	Time	Lab Sample No.	Matrix				No. Containers & Preservative				Analysis Requested										Silica gel clean-up	Hold	Remarks			
				Soil	Water	Air	Other	HCL	H ₂ SO ₄	HNO ₃	Ice	TPH 90 MO - 8015	Vol% - 8040	SINCS - 8070	Pest 8141A	HCB 8161A	POST-808A/PCB 8182	CAM 17 6010/709	CANES 1485	STC PB	TCLP PB						
B-1-1.5	5/29/20	8:10		X									X	X	X	X	X	X	X	X	X	X	X	X			
B-1-3		8:12											X	X	X	X	X	X	X	X	X	X	X	X			
B-1-5		8:15											X	X	X	X	X	X	X	X	X	X	X	X			
B-2-1.5		12:25											X	X	X	X	X	X	X	X	X	X	X	X			
B-2-3		12:30											X	X	X	X	X	X	X	X	X	X	X	X			
B-2-5		12:35																							X		

Relinquished by: (Signature) <u>[Signature]</u>	Date: <u>5/29/2020</u>	Time: <u>18:33</u>	Received by: (Signature) <u>[Signature]</u>	Date: <u>6/1/20</u>	Time: <u>1258</u>
Relinquished by: (Signature) <u>[Signature]</u>	Date: <u>6/1/20</u>	Time: <u>1530</u>	Received by: (Signature) <u>[Signature]</u>	Date: <u>6/1/2020</u>	Time: <u>1530</u>
Relinquished by: (Signature)	Date:	Time:	Received by Lab: (Signature)	Date:	Time:

Sent to Laboratory (Name): _____
 Laboratory Comments/Notes: Added 6/9/2020 STAT

Method of Shipment: Lab courier Fed Ex Airborne UPS
 Hand Carried Private Courier (Co. Name)

White Copy - Original Yellow Copy - Laboratory Pink Copy - Field COC Number: _____

***TCLP PB Added 6/22/2020 RUSTH.**

1.0C
WET

Bulk Asbestos Material Analysis

(Air Resources Board Method 435, June 6, 1991)

McC Campbell Analytical, Inc.
Account Payable
1534 Willow Pass Rd

Pittsburg, CA 94565

Client ID: A31409
Report Number: N013046
Date Received: 06/03/20
Date Analyzed: 06/05/20
Date Printed: 06/05/20

Job ID/Site: 2006034

SGSFL Job ID: A31409

PLM Report Number: N/A

Total Samples Submitted: 5

Total Samples Analyzed: 5

Sample Preparation and Analysis:

Samples were analyzed by the Air Resources Board's Method 435, Determination of Asbestos Content of Serpentine Aggregate. Samples were ground to 200 particle size in the laboratory. Approximately 1 pint was retained for analysis. Samples were prepared for observation according to the guidelines of Exception I and Exception II as defined by the 435 Method. Samples which contained less than 10% asbestos were prepared for observation according to the point count technique as defined by the 435 Method. This analysis was performed with a standard cross-hair reticle.

Sample ID	Lab Number	Layer Description
-----------	------------	-------------------

B-1-1.5	12310651	Brown Soil
----------------	----------	-------------------

Visual Estimation Results:

Matrix percentage of entire 100

Visual estimation percentage: None Detected

Asbestos type(s) detected: None Detected

Comment: This result meets the requirements of Exception I as defined by the 435 Method.

B-1-3	12310652	Brown Soil
--------------	----------	-------------------

Visual Estimation Results:

Matrix percentage of entire 100

Visual estimation percentage: None Detected

Asbestos type(s) detected: None Detected

Comment: This result meets the requirements of Exception I as defined by the 435 Method.

B-1-5	12310653	Brown Soil
--------------	----------	-------------------

Visual Estimation Results:

Matrix percentage of entire 100

Visual estimation percentage: None Detected

Asbestos type(s) detected: None Detected

Comment: This result meets the requirements of Exception I as defined by the 435 Method.

B-2-1.5	12310654	Brown Soil
----------------	----------	-------------------

Visual Estimation Results:

Matrix percentage of entire 100

Visual estimation percentage: None Detected

Asbestos type(s) detected: None Detected

Comment: This result meets the requirements of Exception I as defined by the 435 Method.

Bulk Asbestos Material Analysis

(Air Resources Board Method 435, June 6, 1991)

McC Campbell Analytical, Inc.
Account Payable
1534 Willow Pass Rd

Pittsburg, CA 94565

Client ID: A31409
Report Number: N013046
Date Received: 06/03/20
Date Analyzed: 06/05/20
Date Printed: 06/05/20

Job ID/Site: 2006034

SGSFL Job ID: A31409

PLM Report Number: N/A

Total Samples Submitted: 5
Total Samples Analyzed: 5

Sample Preparation and Analysis:

Samples were analyzed by the Air Resources Board's Method 435, Determination of Asbestos Content of Serpentine Aggregate. Samples were ground to 200 particle size in the laboratory. Approximately 1 pint was retained for analysis. Samples were prepared for observation according to the guidelines of Exception I and Exception II as defined by the 435 Method. Samples which contained less than 10% asbestos were prepared for observation according to the point count technique as defined by the 435 Method. This analysis was performed with a standard cross-hair reticle.

Sample ID	Lab Number	Layer Description
B-2-3	12310655	Brown Soil

Visual Estimation Results:

Matrix percentage of entire 100

Visual estimation percentage: None Detected

Asbestos type(s) detected: None Detected

Comment: This result meets the requirements of Exception I as defined by the 435 Method.



Tad Thrower, Laboratory Supervisor, Hayward Laboratory

Note: Limit of Quantification (LOQ) = 0.25%. Trace denotes the presence of asbestos below the LOQ. ND = None Detected.

Analytical results and reports are generated by SGS Forensic Laboratories (SGSFL) at the request of and for the exclusive use of the person or entity (client) named on such report. Results, reports or copies of same will not be released by SGSFL to any third party without prior written request from client. This report applies only to the sample(s) tested. Supporting laboratory documentation is available upon request. This report must not be reproduced except in full, unless approved by SGSFL. The client is solely responsible for the use and interpretation of test results and reports requested from SGSFL. SGSFL is not able to assess the degree of hazard resulting from materials analyzed. SGS Forensic Laboratories reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified. All samples were received in acceptable condition unless otherwise noted.



McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 2006696

Report Created for: Langan

501 14th Street, 3rd Floor
Oakland, CA 94612

Project Contact: Adam Brown

Project P.O.:

Project: 750664801; 1666 Seventh Street

Project Received: 06/12/2020

Analytical Report reviewed & approved for release on 06/22/2020 by:

Yen Cao

Project Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.





Glossary of Terms & Qualifier Definitions

Client: Langan
Project: 750664801; 1666 Seventh Street
WorkOrder: 2006696

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
CPT	Consumer Product Testing not NELAP Accredited
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
LQL	Lowest Quantitation Level
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
TZA	TimeZone Net Adjustment for sample collected outside of MAI's UTC.
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)



Glossary of Terms & Qualifier Definitions

Client: Langan
Project: 750664801; 1666 Seventh Street
WorkOrder: 2006696

Analytical Qualifiers

B Analyte detected in the associated Method Blank and in the sample.
J Result is less than the RL/ML but greater than the MDL. The reported concentration is an estimated value.
S Surrogate recovery outside accepted recovery limits.
c2 Surrogate recovery outside of the control limits due to matrix interference.

Quality Control Qualifiers

F1 MS/MSD recovery and/or RPD is out of acceptance criteria; LCS validates the prep batch.



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
Extraction Method: SW3550B/3640Am/3630Cm
Analytical Method: SW8081A/8082
Unit: mg/kg

Organochlorine Pesticides + PCBs

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-6-1.5	2006696-001A	Soil	06/10/2020 10:29	GC23 06162049.d	200152

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.00010	1	06/16/2020 23:21
a-BHC	ND	0.00010	1	06/16/2020 23:21
b-BHC	ND	0.00030	1	06/16/2020 23:21
d-BHC	ND	0.00020	1	06/16/2020 23:21
g-BHC	ND	0.00010	1	06/16/2020 23:21
Chlordane (Technical)	ND	0.0025	1	06/16/2020 23:21
a-Chlordane	ND	0.00010	1	06/16/2020 23:21
g-Chlordane	ND	0.00010	1	06/16/2020 23:21
p,p-DDD	ND	0.00010	1	06/16/2020 23:21
p,p-DDE	ND	0.00010	1	06/16/2020 23:21
p,p-DDT	ND	0.00010	1	06/16/2020 23:21
Dieldrin	ND	0.00010	1	06/16/2020 23:21
Endosulfan I	ND	0.00010	1	06/16/2020 23:21
Endosulfan II	ND	0.00010	1	06/16/2020 23:21
Endosulfan sulfate	ND	0.00010	1	06/16/2020 23:21
Endrin	ND	0.00010	1	06/16/2020 23:21
Endrin aldehyde	ND	0.00010	1	06/16/2020 23:21
Endrin ketone	ND	0.00010	1	06/16/2020 23:21
Heptachlor	ND	0.00010	1	06/16/2020 23:21
Heptachlor epoxide	ND	0.00010	1	06/16/2020 23:21
Hexachlorobenzene	ND	0.0010	1	06/16/2020 23:21
Hexachlorocyclopentadiene	ND	0.0020	1	06/16/2020 23:21
Methoxychlor	ND	0.00020	1	06/16/2020 23:21
Toxaphene	ND	0.0050	1	06/16/2020 23:21
Aroclor1016	ND	0.0050	1	06/16/2020 23:21
Aroclor1221	ND	0.0050	1	06/16/2020 23:21
Aroclor1232	ND	0.0050	1	06/16/2020 23:21
Aroclor1242	ND	0.0050	1	06/16/2020 23:21
Aroclor1248	ND	0.0050	1	06/16/2020 23:21
Aroclor1254	ND	0.0050	1	06/16/2020 23:21
Aroclor1260	ND	0.0050	1	06/16/2020 23:21
PCBs, total	ND	0.0050	1	06/16/2020 23:21

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	95	20-145	06/16/2020 23:21

Analyst(s): LT

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
Extraction Method: SW3550B/3640Am/3630Cm
Analytical Method: SW8081A/8082
Unit: mg/kg

Organochlorine Pesticides + PCBs

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-6-3.0	2006696-002A	Soil	06/10/2020 10:33	GC23 06162061.d	200152

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.00010	1	06/17/2020 02:28
a-BHC	ND	0.00010	1	06/17/2020 02:28
b-BHC	ND	0.00030	1	06/17/2020 02:28
d-BHC	ND	0.00020	1	06/17/2020 02:28
g-BHC	ND	0.00010	1	06/17/2020 02:28
Chlordane (Technical)	ND	0.0025	1	06/17/2020 02:28
a-Chlordane	ND	0.00010	1	06/17/2020 02:28
g-Chlordane	ND	0.00010	1	06/17/2020 02:28
p,p-DDD	ND	0.00010	1	06/17/2020 02:28
p,p-DDE	ND	0.00010	1	06/17/2020 02:28
p,p-DDT	ND	0.00010	1	06/17/2020 02:28
Dieldrin	ND	0.00010	1	06/17/2020 02:28
Endosulfan I	ND	0.00010	1	06/17/2020 02:28
Endosulfan II	ND	0.00010	1	06/17/2020 02:28
Endosulfan sulfate	ND	0.00010	1	06/17/2020 02:28
Endrin	ND	0.00010	1	06/17/2020 02:28
Endrin aldehyde	ND	0.00010	1	06/17/2020 02:28
Endrin ketone	ND	0.00010	1	06/17/2020 02:28
Heptachlor	ND	0.00010	1	06/17/2020 02:28
Heptachlor epoxide	ND	0.00010	1	06/17/2020 02:28
Hexachlorobenzene	ND	0.0010	1	06/17/2020 02:28
Hexachlorocyclopentadiene	ND	0.0020	1	06/17/2020 02:28
Methoxychlor	ND	0.00020	1	06/17/2020 02:28
Toxaphene	ND	0.0050	1	06/17/2020 02:28
Aroclor1016	ND	0.0050	1	06/17/2020 02:28
Aroclor1221	ND	0.0050	1	06/17/2020 02:28
Aroclor1232	ND	0.0050	1	06/17/2020 02:28
Aroclor1242	ND	0.0050	1	06/17/2020 02:28
Aroclor1248	ND	0.0050	1	06/17/2020 02:28
Aroclor1254	ND	0.0050	1	06/17/2020 02:28
Aroclor1260	ND	0.0050	1	06/17/2020 02:28
PCBs, total	ND	0.0050	1	06/17/2020 02:28

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	126	20-145	06/17/2020 02:28

Analyst(s): LT

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
Extraction Method: SW3550B/3640Am/3630Cm
Analytical Method: SW8081A/8082
Unit: mg/kg

Organochlorine Pesticides + PCBs

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-6-5.0	2006696-003A	Soil	06/10/2020 10:36	GC23 06162062.d	200152

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.00010	1	06/17/2020 02:44
a-BHC	ND	0.00010	1	06/17/2020 02:44
b-BHC	ND	0.00030	1	06/17/2020 02:44
d-BHC	ND	0.00020	1	06/17/2020 02:44
g-BHC	ND	0.00010	1	06/17/2020 02:44
Chlordane (Technical)	ND	0.0025	1	06/17/2020 02:44
a-Chlordane	ND	0.00010	1	06/17/2020 02:44
g-Chlordane	ND	0.00010	1	06/17/2020 02:44
p,p-DDD	ND	0.00010	1	06/17/2020 02:44
p,p-DDE	ND	0.00010	1	06/17/2020 02:44
p,p-DDT	ND	0.00010	1	06/17/2020 02:44
Dieldrin	ND	0.00010	1	06/17/2020 02:44
Endosulfan I	ND	0.00010	1	06/17/2020 02:44
Endosulfan II	ND	0.00010	1	06/17/2020 02:44
Endosulfan sulfate	ND	0.00010	1	06/17/2020 02:44
Endrin	ND	0.00010	1	06/17/2020 02:44
Endrin aldehyde	ND	0.00010	1	06/17/2020 02:44
Endrin ketone	ND	0.00010	1	06/17/2020 02:44
Heptachlor	ND	0.00010	1	06/17/2020 02:44
Heptachlor epoxide	ND	0.00010	1	06/17/2020 02:44
Hexachlorobenzene	ND	0.0010	1	06/17/2020 02:44
Hexachlorocyclopentadiene	ND	0.0020	1	06/17/2020 02:44
Methoxychlor	ND	0.00020	1	06/17/2020 02:44
Toxaphene	ND	0.0050	1	06/17/2020 02:44
Aroclor1016	ND	0.0050	1	06/17/2020 02:44
Aroclor1221	ND	0.0050	1	06/17/2020 02:44
Aroclor1232	ND	0.0050	1	06/17/2020 02:44
Aroclor1242	ND	0.0050	1	06/17/2020 02:44
Aroclor1248	ND	0.0050	1	06/17/2020 02:44
Aroclor1254	ND	0.0050	1	06/17/2020 02:44
Aroclor1260	ND	0.0050	1	06/17/2020 02:44
PCBs, total	ND	0.0050	1	06/17/2020 02:44

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	116	20-145	06/17/2020 02:44

Analyst(s): LT

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
Extraction Method: SW3550B/3640Am/3630Cm
Analytical Method: SW8081A/8082
Unit: mg/kg

Organochlorine Pesticides + PCBs

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-1-1.5	2006696-004A	Soil	06/10/2020 13:45	GC23 06162063.d	200152

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.00010	1	06/17/2020 02:59
a-BHC	ND	0.00010	1	06/17/2020 02:59
b-BHC	ND	0.00030	1	06/17/2020 02:59
d-BHC	ND	0.00020	1	06/17/2020 02:59
g-BHC	ND	0.00010	1	06/17/2020 02:59
Chlordane (Technical)	ND	0.0025	1	06/17/2020 02:59
a-Chlordane	ND	0.00010	1	06/17/2020 02:59
g-Chlordane	ND	0.00010	1	06/17/2020 02:59
p,p-DDD	ND	0.00010	1	06/17/2020 02:59
p,p-DDE	ND	0.00010	1	06/17/2020 02:59
p,p-DDT	ND	0.00010	1	06/17/2020 02:59
Dieldrin	ND	0.00010	1	06/17/2020 02:59
Endosulfan I	ND	0.00010	1	06/17/2020 02:59
Endosulfan II	ND	0.00010	1	06/17/2020 02:59
Endosulfan sulfate	ND	0.00010	1	06/17/2020 02:59
Endrin	ND	0.00010	1	06/17/2020 02:59
Endrin aldehyde	ND	0.00010	1	06/17/2020 02:59
Endrin ketone	ND	0.00010	1	06/17/2020 02:59
Heptachlor	ND	0.00010	1	06/17/2020 02:59
Heptachlor epoxide	ND	0.00010	1	06/17/2020 02:59
Hexachlorobenzene	ND	0.0010	1	06/17/2020 02:59
Hexachlorocyclopentadiene	ND	0.0020	1	06/17/2020 02:59
Methoxychlor	ND	0.00020	1	06/17/2020 02:59
Toxaphene	ND	0.0050	1	06/17/2020 02:59
Aroclor1016	ND	0.0050	1	06/17/2020 02:59
Aroclor1221	ND	0.0050	1	06/17/2020 02:59
Aroclor1232	ND	0.0050	1	06/17/2020 02:59
Aroclor1242	ND	0.0050	1	06/17/2020 02:59
Aroclor1248	ND	0.0050	1	06/17/2020 02:59
Aroclor1254	ND	0.0050	1	06/17/2020 02:59
Aroclor1260	ND	0.0050	1	06/17/2020 02:59
PCBs, total	ND	0.0050	1	06/17/2020 02:59

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	101	20-145	06/17/2020 02:59

Analyst(s): LT

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
Extraction Method: SW3550B/3640Am/3630Cm
Analytical Method: SW8081A/8082
Unit: mg/kg

Organochlorine Pesticides + PCBs

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-1-3.0	2006696-005A	Soil	06/10/2020 13:47	GC23 06162064.d	200152

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.00010	1	06/17/2020 03:15
a-BHC	ND	0.00010	1	06/17/2020 03:15
b-BHC	ND	0.00030	1	06/17/2020 03:15
d-BHC	ND	0.00020	1	06/17/2020 03:15
g-BHC	ND	0.00010	1	06/17/2020 03:15
Chlordane (Technical)	ND	0.0025	1	06/17/2020 03:15
a-Chlordane	ND	0.00010	1	06/17/2020 03:15
g-Chlordane	ND	0.00010	1	06/17/2020 03:15
p,p-DDD	ND	0.00010	1	06/17/2020 03:15
p,p-DDE	ND	0.00010	1	06/17/2020 03:15
p,p-DDT	ND	0.00010	1	06/17/2020 03:15
Dieldrin	ND	0.00010	1	06/17/2020 03:15
Endosulfan I	ND	0.00010	1	06/17/2020 03:15
Endosulfan II	ND	0.00010	1	06/17/2020 03:15
Endosulfan sulfate	ND	0.00010	1	06/17/2020 03:15
Endrin	ND	0.00010	1	06/17/2020 03:15
Endrin aldehyde	ND	0.00010	1	06/17/2020 03:15
Endrin ketone	ND	0.00010	1	06/17/2020 03:15
Heptachlor	ND	0.00010	1	06/17/2020 03:15
Heptachlor epoxide	ND	0.00010	1	06/17/2020 03:15
Hexachlorobenzene	ND	0.0010	1	06/17/2020 03:15
Hexachlorocyclopentadiene	ND	0.0020	1	06/17/2020 03:15
Methoxychlor	ND	0.00020	1	06/17/2020 03:15
Toxaphene	ND	0.0050	1	06/17/2020 03:15
Aroclor1016	ND	0.0050	1	06/17/2020 03:15
Aroclor1221	ND	0.0050	1	06/17/2020 03:15
Aroclor1232	ND	0.0050	1	06/17/2020 03:15
Aroclor1242	ND	0.0050	1	06/17/2020 03:15
Aroclor1248	ND	0.0050	1	06/17/2020 03:15
Aroclor1254	ND	0.0050	1	06/17/2020 03:15
Aroclor1260	ND	0.0050	1	06/17/2020 03:15
PCBs, total	ND	0.0050	1	06/17/2020 03:15

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	116	20-145	06/17/2020 03:15

Analyst(s): LT



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/kg

Organophosphorous Pesticides by GC-MS (EPA 8141 Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-6-1.5	2006696-001A	Soil	06/10/2020 10:29	GC25 F0616200107.D	200142

Analytes	Result	RL	DF	Date Analyzed
Alachlor	ND	0.10	1	06/16/2020 16:14
Atrazine	ND	0.10	1	06/16/2020 16:14
Azinphos methyl (Guthion)	ND	0.10	1	06/16/2020 16:14
Bolstar (Sulprofos)	ND	0.10	1	06/16/2020 16:14
Chloropyrifos	ND	0.10	1	06/16/2020 16:14
Coumaphos	ND	0.10	1	06/16/2020 16:14
Demeton	ND	0.10	1	06/16/2020 16:14
Diazinon	ND	0.10	1	06/16/2020 16:14
Dichlorvos (DDVP)	ND	0.10	1	06/16/2020 16:14
Dimethoate	ND	0.10	1	06/16/2020 16:14
Disulfoton (Di-Syston)	ND	0.10	1	06/16/2020 16:14
EPN	ND	0.10	1	06/16/2020 16:14
EPTC	ND	0.10	1	06/16/2020 16:14
Ethion	ND	0.10	1	06/16/2020 16:14
Ethoprop	ND	0.10	1	06/16/2020 16:14
Ethyl parathion	ND	0.10	1	06/16/2020 16:14
Fensulfothion	ND	0.10	1	06/16/2020 16:14
Fenthion	ND	0.10	1	06/16/2020 16:14
Fonofos	ND	0.10	1	06/16/2020 16:14
Malathion	ND	0.10	1	06/16/2020 16:14
Mevinphos (Phosdrin)	ND	0.10	1	06/16/2020 16:14
Molinate	ND	0.10	1	06/16/2020 16:14
Methyl parathion	ND	0.10	1	06/16/2020 16:14
Phorate (Thimet)	ND	0.10	1	06/16/2020 16:14
Prometon	ND	0.10	1	06/16/2020 16:14
Ronnel	ND	0.10	1	06/16/2020 16:14
Simazine	ND	0.10	1	06/16/2020 16:14
Stirofos (Tetrachlorvinphos)	ND	0.10	1	06/16/2020 16:14
Terbacil	ND	0.10	1	06/16/2020 16:14
Terbufos (Terbuphos)	ND	0.10	1	06/16/2020 16:14
Thiobencarb	ND	0.10	1	06/16/2020 16:14
Tokuthion (Prothiofos)	ND	0.10	1	06/16/2020 16:14
Trichloronate (Agritox)	ND	0.10	1	06/16/2020 16:14

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/kg

Organophosphorous Pesticides by GC-MS (EPA 8141 Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-6-1.5	2006696-001A	Soil	06/10/2020 10:29	GC25 F0616200107.D	200142

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Triphenyl phosphate	90	60-140		06/16/2020 16:14

Analyst(s): STA



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/kg

Organophosphorous Pesticides by GC-MS (EPA 8141 Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-6-3.0	2006696-002A	Soil	06/10/2020 10:33	GC25 F0616200108.D	200142

Analytes	Result	RL	DF	Date Analyzed
Alachlor	ND	0.10	1	06/16/2020 16:40
Atrazine	ND	0.10	1	06/16/2020 16:40
Azinphos methyl (Guthion)	ND	0.10	1	06/16/2020 16:40
Bolstar (Sulprofos)	ND	0.10	1	06/16/2020 16:40
Chlorpyrifos	ND	0.10	1	06/16/2020 16:40
Coumaphos	ND	0.10	1	06/16/2020 16:40
Demeton	ND	0.10	1	06/16/2020 16:40
Diazinon	ND	0.10	1	06/16/2020 16:40
Dichlorvos (DDVP)	ND	0.10	1	06/16/2020 16:40
Dimethoate	ND	0.10	1	06/16/2020 16:40
Disulfoton (Di-Syston)	ND	0.10	1	06/16/2020 16:40
EPN	ND	0.10	1	06/16/2020 16:40
EPTC	ND	0.10	1	06/16/2020 16:40
Ethion	ND	0.10	1	06/16/2020 16:40
Ethoprop	ND	0.10	1	06/16/2020 16:40
Ethyl parathion	ND	0.10	1	06/16/2020 16:40
Fensulfothion	ND	0.10	1	06/16/2020 16:40
Fenthion	ND	0.10	1	06/16/2020 16:40
Fonofos	ND	0.10	1	06/16/2020 16:40
Malathion	ND	0.10	1	06/16/2020 16:40
Mevinphos (Phosdrin)	ND	0.10	1	06/16/2020 16:40
Molinate	ND	0.10	1	06/16/2020 16:40
Methyl parathion	ND	0.10	1	06/16/2020 16:40
Phorate (Thimet)	ND	0.10	1	06/16/2020 16:40
Prometon	ND	0.10	1	06/16/2020 16:40
Ronnel	ND	0.10	1	06/16/2020 16:40
Simazine	ND	0.10	1	06/16/2020 16:40
Stirofos (Tetrachlorvinphos)	ND	0.10	1	06/16/2020 16:40
Terbacil	ND	0.10	1	06/16/2020 16:40
Terbufos (Terbuphos)	ND	0.10	1	06/16/2020 16:40
Thiobencarb	ND	0.10	1	06/16/2020 16:40
Tokuthion (Prothiofos)	ND	0.10	1	06/16/2020 16:40
Trichloronate (Agritox)	ND	0.10	1	06/16/2020 16:40

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/kg

Organophosphorous Pesticides by GC-MS (EPA 8141 Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-6-3.0	2006696-002A	Soil	06/10/2020 10:33	GC25 F0616200108.D	200142

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Triphenyl phosphate	90	60-140		06/16/2020 16:40

Analyst(s): STA



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/kg

Organophosphorous Pesticides by GC-MS (EPA 8141 Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-6-5.0	2006696-003A	Soil	06/10/2020 10:36	GC25 F0616200109.D	200142

Analytes	Result	RL	DF	Date Analyzed
Alachlor	ND	0.10	1	06/16/2020 17:07
Atrazine	ND	0.10	1	06/16/2020 17:07
Azinphos methyl (Guthion)	ND	0.10	1	06/16/2020 17:07
Bolstar (Sulprofos)	ND	0.10	1	06/16/2020 17:07
Chlorpyrifos	ND	0.10	1	06/16/2020 17:07
Coumaphos	ND	0.10	1	06/16/2020 17:07
Demeton	ND	0.10	1	06/16/2020 17:07
Diazinon	ND	0.10	1	06/16/2020 17:07
Dichlorvos (DDVP)	ND	0.10	1	06/16/2020 17:07
Dimethoate	ND	0.10	1	06/16/2020 17:07
Disulfoton (Di-Syston)	ND	0.10	1	06/16/2020 17:07
EPN	ND	0.10	1	06/16/2020 17:07
EPTC	ND	0.10	1	06/16/2020 17:07
Ethion	ND	0.10	1	06/16/2020 17:07
Ethoprop	ND	0.10	1	06/16/2020 17:07
Ethyl parathion	ND	0.10	1	06/16/2020 17:07
Fensulfothion	ND	0.10	1	06/16/2020 17:07
Fenthion	ND	0.10	1	06/16/2020 17:07
Fonofos	ND	0.10	1	06/16/2020 17:07
Malathion	ND	0.10	1	06/16/2020 17:07
Mevinphos (Phosdrin)	ND	0.10	1	06/16/2020 17:07
Molinate	ND	0.10	1	06/16/2020 17:07
Methyl parathion	ND	0.10	1	06/16/2020 17:07
Phorate (Thimet)	ND	0.10	1	06/16/2020 17:07
Prometon	ND	0.10	1	06/16/2020 17:07
Ronnel	ND	0.10	1	06/16/2020 17:07
Simazine	ND	0.10	1	06/16/2020 17:07
Stirofos (Tetrachlorvinphos)	ND	0.10	1	06/16/2020 17:07
Terbacil	ND	0.10	1	06/16/2020 17:07
Terbufos (Terbuphos)	ND	0.10	1	06/16/2020 17:07
Thiobencarb	ND	0.10	1	06/16/2020 17:07
Tokuthion (Prothiofos)	ND	0.10	1	06/16/2020 17:07
Trichloronate (Agritox)	ND	0.10	1	06/16/2020 17:07

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/kg

Organophosphorous Pesticides by GC-MS (EPA 8141 Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-6-5.0	2006696-003A	Soil	06/10/2020 10:36	GC25 F0616200109.D	200142

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Triphenyl phosphate	92	60-140		06/16/2020 17:07

Analyst(s): STA



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/kg

Organophosphorous Pesticides by GC-MS (EPA 8141 Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-1-1.5	2006696-004A	Soil	06/10/2020 13:45	GC25 F0616200110.D	200142

Analytes	Result	RL	DF	Date Analyzed
Alachlor	ND	0.10	1	06/16/2020 17:34
Atrazine	ND	0.10	1	06/16/2020 17:34
Azinphos methyl (Guthion)	ND	0.10	1	06/16/2020 17:34
Bolstar (Sulprofos)	ND	0.10	1	06/16/2020 17:34
Chlorpyrifos	ND	0.10	1	06/16/2020 17:34
Coumaphos	ND	0.10	1	06/16/2020 17:34
Demeton	ND	0.10	1	06/16/2020 17:34
Diazinon	ND	0.10	1	06/16/2020 17:34
Dichlorvos (DDVP)	ND	0.10	1	06/16/2020 17:34
Dimethoate	ND	0.10	1	06/16/2020 17:34
Disulfoton (Di-Syston)	ND	0.10	1	06/16/2020 17:34
EPN	ND	0.10	1	06/16/2020 17:34
EPTC	ND	0.10	1	06/16/2020 17:34
Ethion	ND	0.10	1	06/16/2020 17:34
Ethoprop	ND	0.10	1	06/16/2020 17:34
Ethyl parathion	ND	0.10	1	06/16/2020 17:34
Fensulfothion	ND	0.10	1	06/16/2020 17:34
Fenthion	ND	0.10	1	06/16/2020 17:34
Fonofos	ND	0.10	1	06/16/2020 17:34
Malathion	ND	0.10	1	06/16/2020 17:34
Mevinphos (Phosdrin)	ND	0.10	1	06/16/2020 17:34
Molinate	ND	0.10	1	06/16/2020 17:34
Methyl parathion	ND	0.10	1	06/16/2020 17:34
Phorate (Thimet)	ND	0.10	1	06/16/2020 17:34
Prometon	ND	0.10	1	06/16/2020 17:34
Ronnel	ND	0.10	1	06/16/2020 17:34
Simazine	ND	0.10	1	06/16/2020 17:34
Stirofos (Tetrachlorvinphos)	ND	0.10	1	06/16/2020 17:34
Terbacil	ND	0.10	1	06/16/2020 17:34
Terbufos (Terbuphos)	ND	0.10	1	06/16/2020 17:34
Thiobencarb	ND	0.10	1	06/16/2020 17:34
Tokuthion (Prothiofos)	ND	0.10	1	06/16/2020 17:34
Trichloronate (Agritox)	ND	0.10	1	06/16/2020 17:34

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/kg

Organophosphorous Pesticides by GC-MS (EPA 8141 Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-1-1.5	2006696-004A	Soil	06/10/2020 13:45	GC25 F0616200110.D	200142

Analytes	Result	RL	DF	Date Analyzed
----------	--------	----	----	---------------

Surrogates	REC (%)	Limits	Date Analyzed
Triphenyl phosphate	88	60-140	06/16/2020 17:34

Analyst(s): STA



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/kg

Organophosphorous Pesticides by GC-MS (EPA 8141 Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-1-3.0	2006696-005A	Soil	06/10/2020 13:47	GC25 F0616200111.D	200142

Analytes	Result	RL	DF	Date Analyzed
Alachlor	ND	0.10	1	06/16/2020 18:01
Atrazine	ND	0.10	1	06/16/2020 18:01
Azinphos methyl (Guthion)	ND	0.10	1	06/16/2020 18:01
Bolstar (Sulprofos)	ND	0.10	1	06/16/2020 18:01
Chloropyrifos	ND	0.10	1	06/16/2020 18:01
Coumaphos	ND	0.10	1	06/16/2020 18:01
Demeton	ND	0.10	1	06/16/2020 18:01
Diazinon	ND	0.10	1	06/16/2020 18:01
Dichlorvos (DDVP)	ND	0.10	1	06/16/2020 18:01
Dimethoate	ND	0.10	1	06/16/2020 18:01
Disulfoton (Di-Syston)	ND	0.10	1	06/16/2020 18:01
EPN	ND	0.10	1	06/16/2020 18:01
EPTC	ND	0.10	1	06/16/2020 18:01
Ethion	ND	0.10	1	06/16/2020 18:01
Ethoprop	ND	0.10	1	06/16/2020 18:01
Ethyl parathion	ND	0.10	1	06/16/2020 18:01
Fensulfothion	ND	0.10	1	06/16/2020 18:01
Fenthion	ND	0.10	1	06/16/2020 18:01
Fonofos	ND	0.10	1	06/16/2020 18:01
Malathion	ND	0.10	1	06/16/2020 18:01
Mevinphos (Phosdrin)	ND	0.10	1	06/16/2020 18:01
Molinate	ND	0.10	1	06/16/2020 18:01
Methyl parathion	ND	0.10	1	06/16/2020 18:01
Phorate (Thimet)	ND	0.10	1	06/16/2020 18:01
Prometon	ND	0.10	1	06/16/2020 18:01
Ronnel	ND	0.10	1	06/16/2020 18:01
Simazine	ND	0.10	1	06/16/2020 18:01
Stirofos (Tetrachlorvinphos)	ND	0.10	1	06/16/2020 18:01
Terbacil	ND	0.10	1	06/16/2020 18:01
Terbufos (Terbuphos)	ND	0.10	1	06/16/2020 18:01
Thiobencarb	ND	0.10	1	06/16/2020 18:01
Tokuthion (Prothiofos)	ND	0.10	1	06/16/2020 18:01
Trichloronate (Agritox)	ND	0.10	1	06/16/2020 18:01

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/kg

Organophosphorous Pesticides by GC-MS (EPA 8141 Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-1-3.0	2006696-005A	Soil	06/10/2020 13:47	GC25 F0616200111.D	200142

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Triphenyl phosphate	90	60-140		06/16/2020 18:01

Analyst(s): STA



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
Extraction Method: SW8151A
Analytical Method: SW8151A
Unit: mg/kg

Chlorinated Herbicides by GC-ECD

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-6-1.5	2006696-001A	Soil	06/10/2020 10:29	GC15A 06162032.D	200134

Analytes	Result	RL	DF	Date Analyzed
Acifluorfen	ND	0.050	1	06/17/2020 15:07
Bentazon	ND	0.050	1	06/17/2020 15:07
Chloramben	ND	0.050	1	06/17/2020 15:07
2,4-D (Dichlorophenoxyacetic acid)	ND	0.050	1	06/17/2020 15:07
2,4-DB	ND	0.050	1	06/17/2020 15:07
Dalapon	ND	0.10	1	06/17/2020 15:07
DCPA (mono & diacid)	ND	0.050	1	06/17/2020 15:07
Dicamba	ND	0.050	1	06/17/2020 15:07
3,5-Dichlorobenzoic Acid	ND	0.050	1	06/17/2020 15:07
Dichloroprop	ND	0.050	1	06/17/2020 15:07
Dinoseb (DNBP)	ND	0.050	1	06/17/2020 15:07
MCPA	ND	5.0	1	06/17/2020 15:07
MCPP	ND	5.0	1	06/17/2020 15:07
4-Nitrophenol	ND	0.050	1	06/17/2020 15:07
Pentachlorophenol (PCP)	ND	0.050	1	06/17/2020 15:07
Picloram	ND	0.050	1	06/17/2020 15:07
2,4,5-T (Trichlorophenoxy acetic acid)	ND	0.050	1	06/17/2020 15:07
2,4,5-TP (Silvex)	ND	0.050	1	06/17/2020 15:07

Surrogates	REC (%)	Limits	Date Analyzed
DCAA	102	60-140	06/17/2020 15:07

Analyst(s): DP



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
Extraction Method: SW8151A
Analytical Method: SW8151A
Unit: mg/kg

Chlorinated Herbicides by GC-ECD

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-6-3.0	2006696-002A	Soil	06/10/2020 10:33	GC15A 06162035.D	200134

Analytes	Result	RL	DF	Date Analyzed
Acifluorfen	ND	0.050	1	06/17/2020 16:23
Bentazon	ND	0.050	1	06/17/2020 16:23
Chloramben	ND	0.050	1	06/17/2020 16:23
2,4-D (Dichlorophenoxyacetic acid)	ND	0.050	1	06/17/2020 16:23
2,4-DB	ND	0.050	1	06/17/2020 16:23
Dalapon	ND	0.10	1	06/17/2020 16:23
DCPA (mono & diacid)	ND	0.050	1	06/17/2020 16:23
Dicamba	ND	0.050	1	06/17/2020 16:23
3,5-Dichlorobenzoic Acid	ND	0.050	1	06/17/2020 16:23
Dichloroprop	ND	0.050	1	06/17/2020 16:23
Dinoseb (DNBP)	ND	0.050	1	06/17/2020 16:23
MCPA	ND	5.0	1	06/17/2020 16:23
MCPP	ND	5.0	1	06/17/2020 16:23
4-Nitrophenol	ND	0.050	1	06/17/2020 16:23
Pentachlorophenol (PCP)	ND	0.050	1	06/17/2020 16:23
Picloram	ND	0.050	1	06/17/2020 16:23
2,4,5-T (Trichlorophenoxy acetic acid)	ND	0.050	1	06/17/2020 16:23
2,4,5-TP (Silvex)	ND	0.050	1	06/17/2020 16:23

Surrogates	REC (%)	Limits	Date Analyzed
DCAA	97	60-140	06/17/2020 16:23

Analyst(s): DP



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
Extraction Method: SW8151A
Analytical Method: SW8151A
Unit: mg/kg

Chlorinated Herbicides by GC-ECD

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-6-5.0	2006696-003A	Soil	06/10/2020 10:36	GC15A 06162036.D	200134

Analytes	Result	RL	DF	Date Analyzed
Acifluorfen	ND	0.050	1	06/17/2020 16:49
Bentazon	ND	0.050	1	06/17/2020 16:49
Chloramben	ND	0.050	1	06/17/2020 16:49
2,4-D (Dichlorophenoxyacetic acid)	ND	0.050	1	06/17/2020 16:49
2,4-DB	ND	0.050	1	06/17/2020 16:49
Dalapon	ND	0.10	1	06/17/2020 16:49
DCPA (mono & diacid)	ND	0.050	1	06/17/2020 16:49
Dicamba	ND	0.050	1	06/17/2020 16:49
3,5-Dichlorobenzoic Acid	ND	0.050	1	06/17/2020 16:49
Dichloroprop	ND	0.050	1	06/17/2020 16:49
Dinoseb (DNBP)	ND	0.050	1	06/17/2020 16:49
MCPA	ND	5.0	1	06/17/2020 16:49
MCPP	ND	5.0	1	06/17/2020 16:49
4-Nitrophenol	ND	0.050	1	06/17/2020 16:49
Pentachlorophenol (PCP)	ND	0.050	1	06/17/2020 16:49
Picloram	ND	0.050	1	06/17/2020 16:49
2,4,5-T (Trichlorophenoxy acetic acid)	ND	0.050	1	06/17/2020 16:49
2,4,5-TP (Silvex)	ND	0.050	1	06/17/2020 16:49

Surrogates	REC (%)	Limits	
DCAA	94	60-140	06/17/2020 16:49

Analyst(s): DP



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
Extraction Method: SW8151A
Analytical Method: SW8151A
Unit: mg/kg

Chlorinated Herbicides by GC-ECD

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-1-1.5	2006696-004A	Soil	06/10/2020 13:45	GC15A 06192006.D	200134

Analytes	Result	RL	DF	Date Analyzed
Acifluorfen	ND	0.050	1	06/19/2020 14:40
Bentazon	ND	0.050	1	06/19/2020 14:40
Chloramben	ND	0.050	1	06/19/2020 14:40
2,4-D (Dichlorophenoxyacetic acid)	ND	0.050	1	06/19/2020 14:40
2,4-DB	ND	0.050	1	06/19/2020 14:40
Dalapon	ND	0.10	1	06/19/2020 14:40
DCPA (mono & diacid)	ND	0.050	1	06/19/2020 14:40
Dicamba	ND	0.050	1	06/19/2020 14:40
3,5-Dichlorobenzoic Acid	ND	0.050	1	06/19/2020 14:40
Dichloroprop	ND	0.050	1	06/19/2020 14:40
Dinoseb (DNBP)	ND	0.050	1	06/19/2020 14:40
MCPA	ND	5.0	1	06/19/2020 14:40
MCPP	ND	5.0	1	06/19/2020 14:40
4-Nitrophenol	ND	0.050	1	06/19/2020 14:40
Pentachlorophenol (PCP)	ND	0.050	1	06/19/2020 14:40
Picloram	ND	0.050	1	06/19/2020 14:40
2,4,5-T (Trichlorophenoxy acetic acid)	ND	0.050	1	06/19/2020 14:40
2,4,5-TP (Silvex)	ND	0.050	1	06/19/2020 14:40

Surrogates	REC (%)	Limits	
DCAA	91	60-140	06/19/2020 14:40

Analyst(s): DP



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
Extraction Method: SW8151A
Analytical Method: SW8151A
Unit: mg/kg

Chlorinated Herbicides by GC-ECD

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-1-3.0	2006696-005A	Soil	06/10/2020 13:47	GC15A 06162038.D	200134

Analytes	Result	RL	DF	Date Analyzed
Acifluorfen	ND	0.050	1	06/17/2020 17:40
Bentazon	ND	0.050	1	06/17/2020 17:40
Chloramben	ND	0.050	1	06/17/2020 17:40
2,4-D (Dichlorophenoxyacetic acid)	ND	0.050	1	06/17/2020 17:40
2,4-DB	ND	0.050	1	06/17/2020 17:40
Dalapon	ND	0.10	1	06/17/2020 17:40
DCPA (mono & diacid)	ND	0.050	1	06/17/2020 17:40
Dicamba	ND	0.050	1	06/17/2020 17:40
3,5-Dichlorobenzoic Acid	ND	0.050	1	06/17/2020 17:40
Dichloroprop	ND	0.050	1	06/17/2020 17:40
Dinoseb (DNBP)	ND	0.050	1	06/17/2020 17:40
MCPA	ND	5.0	1	06/17/2020 17:40
MCPP	ND	5.0	1	06/17/2020 17:40
4-Nitrophenol	ND	0.050	1	06/17/2020 17:40
Pentachlorophenol (PCP)	ND	0.050	1	06/17/2020 17:40
Picloram	ND	0.050	1	06/17/2020 17:40
2,4,5-T (Trichlorophenoxy acetic acid)	ND	0.050	1	06/17/2020 17:40
2,4,5-TP (Silvex)	ND	0.050	1	06/17/2020 17:40

Surrogates	REC (%)	Limits	Date Analyzed
DCAA	98	60-140	06/17/2020 17:40

Analyst(s): DP



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/12/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected		Instrument	Batch ID
EB-6-1.5	2006696-001A	Soil	06/10/2020 10:29		GC28 06162020.D	200038
Analytes	Result	Qualifiers	RL	DF	Date Analyzed	
Acetone	ND		0.10	1	06/16/2020 20:26	
tert-Amyl methyl ether (TAME)	ND		0.0050	1	06/16/2020 20:26	
Benzene	ND		0.0050	1	06/16/2020 20:26	
Bromobenzene	ND		0.0050	1	06/16/2020 20:26	
Bromochloromethane	ND		0.0050	1	06/16/2020 20:26	
Bromodichloromethane	ND		0.0010	1	06/16/2020 20:26	
Bromoform	ND		0.0050	1	06/16/2020 20:26	
Bromomethane	ND		0.0050	1	06/16/2020 20:26	
2-Butanone (MEK)	ND		0.020	1	06/16/2020 20:26	
t-Butyl alcohol (TBA)	ND		0.050	1	06/16/2020 20:26	
n-Butyl benzene	ND		0.0050	1	06/16/2020 20:26	
sec-Butyl benzene	ND		0.0050	1	06/16/2020 20:26	
tert-Butyl benzene	ND		0.0050	1	06/16/2020 20:26	
Carbon Disulfide	ND		0.0050	1	06/16/2020 20:26	
Carbon Tetrachloride	ND		0.0050	1	06/16/2020 20:26	
Chlorobenzene	ND		0.0050	1	06/16/2020 20:26	
Chloroethane	ND		0.0050	1	06/16/2020 20:26	
Chloroform	ND		0.0050	1	06/16/2020 20:26	
Chloromethane	ND		0.0050	1	06/16/2020 20:26	
2-Chlorotoluene	ND		0.0050	1	06/16/2020 20:26	
4-Chlorotoluene	ND		0.0050	1	06/16/2020 20:26	
Dibromochloromethane	ND		0.0050	1	06/16/2020 20:26	
1,2-Dibromo-3-chloropropane	ND		0.00025	1	06/16/2020 20:26	
1,2-Dibromoethane (EDB)	ND		0.00010	1	06/16/2020 20:26	
Dibromomethane	ND		0.0050	1	06/16/2020 20:26	
1,2-Dichlorobenzene	ND		0.0050	1	06/16/2020 20:26	
1,3-Dichlorobenzene	ND		0.0050	1	06/16/2020 20:26	
1,4-Dichlorobenzene	ND		0.0050	1	06/16/2020 20:26	
Dichlorodifluoromethane	ND		0.0050	1	06/16/2020 20:26	
1,1-Dichloroethane	ND		0.0050	1	06/16/2020 20:26	
1,2-Dichloroethane (1,2-DCA)	ND		0.00025	1	06/16/2020 20:26	
1,1-Dichloroethene	ND		0.00025	1	06/16/2020 20:26	
cis-1,2-Dichloroethene	ND		0.0050	1	06/16/2020 20:26	
trans-1,2-Dichloroethene	ND		0.0050	1	06/16/2020 20:26	
1,2-Dichloropropane	ND		0.0050	1	06/16/2020 20:26	
1,3-Dichloropropane	ND		0.0050	1	06/16/2020 20:26	
2,2-Dichloropropane	ND		0.0050	1	06/16/2020 20:26	

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/12/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-6-1.5	2006696-001A	Soil	06/10/2020 10:29	GC28 06162020.D	200038

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
1,1-Dichloropropene	ND		0.0050	1	06/16/2020 20:26
cis-1,3-Dichloropropene	ND		0.0050	1	06/16/2020 20:26
trans-1,3-Dichloropropene	ND		0.0050	1	06/16/2020 20:26
Diisopropyl ether (DIPE)	ND		0.0050	1	06/16/2020 20:26
Ethylbenzene	ND		0.0050	1	06/16/2020 20:26
Ethyl tert-butyl ether (ETBE)	ND		0.0050	1	06/16/2020 20:26
Freon 113	ND		0.0050	1	06/16/2020 20:26
Hexachlorobutadiene	ND		0.0050	1	06/16/2020 20:26
Hexachloroethane	ND		0.0050	1	06/16/2020 20:26
2-Hexanone	ND		0.0050	1	06/16/2020 20:26
Isopropylbenzene	ND		0.0050	1	06/16/2020 20:26
4-Isopropyl toluene	ND		0.0050	1	06/16/2020 20:26
Methyl-t-butyl ether (MTBE)	ND		0.0050	1	06/16/2020 20:26
Methylene chloride	ND		0.010	1	06/16/2020 20:26
4-Methyl-2-pentanone (MIBK)	ND		0.0050	1	06/16/2020 20:26
Naphthalene	ND		0.0050	1	06/16/2020 20:26
n-Propyl benzene	ND		0.0050	1	06/16/2020 20:26
Styrene	ND		0.0050	1	06/16/2020 20:26
1,1,1,2-Tetrachloroethane	ND		0.0050	1	06/16/2020 20:26
1,1,2,2-Tetrachloroethane	ND		0.00025	1	06/16/2020 20:26
Tetrachloroethene	0.0019	B	0.0010	1	06/16/2020 20:26
Toluene	ND		0.0050	1	06/16/2020 20:26
1,2,3-Trichlorobenzene	ND		0.0050	1	06/16/2020 20:26
1,2,4-Trichlorobenzene	ND		0.0050	1	06/16/2020 20:26
1,1,1-Trichloroethane	ND		0.0050	1	06/16/2020 20:26
1,1,2-Trichloroethane	ND		0.0050	1	06/16/2020 20:26
Trichloroethene	ND		0.0050	1	06/16/2020 20:26
Trichlorofluoromethane	ND		0.0050	1	06/16/2020 20:26
1,2,3-Trichloropropane	ND		0.00010	1	06/16/2020 20:26
1,2,4-Trimethylbenzene	ND		0.0050	1	06/16/2020 20:26
1,3,5-Trimethylbenzene	ND		0.0050	1	06/16/2020 20:26
Vinyl Chloride	ND		0.00025	1	06/16/2020 20:26
m,p-Xylene	ND		0.0050	1	06/16/2020 20:26
o-Xylene	ND		0.0050	1	06/16/2020 20:26
Xylenes, Total	ND		0.0050	1	06/16/2020 20:26

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/12/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-6-1.5	2006696-001A	Soil	06/10/2020 10:29	GC28 06162020.D	200038

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
Dibromofluoromethane	98		82-136		06/16/2020 20:26
Toluene-d8	97		92-139		06/16/2020 20:26
4-BFB	105		82-135		06/16/2020 20:26
Benzene-d6	103		55-122		06/16/2020 20:26
Ethylbenzene-d10	101		58-141		06/16/2020 20:26
1,2-DCB-d4	77		51-107		06/16/2020 20:26

Analyst(s): KF



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/12/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-6-3.0	2006696-002A	Soil	06/10/2020 10:33	GC28 06192025.D	200038

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	06/19/2020 23:48
tert-Amyl methyl ether (TAME)	ND	0.0050	1	06/19/2020 23:48
Benzene	ND	0.0050	1	06/19/2020 23:48
Bromobenzene	ND	0.0050	1	06/19/2020 23:48
Bromochloromethane	ND	0.0050	1	06/19/2020 23:48
Bromodichloromethane	ND	0.0010	1	06/19/2020 23:48
Bromoform	ND	0.0050	1	06/19/2020 23:48
Bromomethane	ND	0.0050	1	06/19/2020 23:48
2-Butanone (MEK)	ND	0.020	1	06/19/2020 23:48
t-Butyl alcohol (TBA)	ND	0.050	1	06/19/2020 23:48
n-Butyl benzene	ND	0.0050	1	06/19/2020 23:48
sec-Butyl benzene	ND	0.0050	1	06/19/2020 23:48
tert-Butyl benzene	ND	0.0050	1	06/19/2020 23:48
Carbon Disulfide	ND	0.0050	1	06/19/2020 23:48
Carbon Tetrachloride	ND	0.0050	1	06/19/2020 23:48
Chlorobenzene	ND	0.0050	1	06/19/2020 23:48
Chloroethane	ND	0.0050	1	06/19/2020 23:48
Chloroform	ND	0.0050	1	06/19/2020 23:48
Chloromethane	ND	0.0050	1	06/19/2020 23:48
2-Chlorotoluene	ND	0.0050	1	06/19/2020 23:48
4-Chlorotoluene	ND	0.0050	1	06/19/2020 23:48
Dibromochloromethane	ND	0.0050	1	06/19/2020 23:48
1,2-Dibromo-3-chloropropane	ND	0.00025	1	06/19/2020 23:48
1,2-Dibromoethane (EDB)	ND	0.00010	1	06/19/2020 23:48
Dibromomethane	ND	0.0050	1	06/19/2020 23:48
1,2-Dichlorobenzene	ND	0.0050	1	06/19/2020 23:48
1,3-Dichlorobenzene	ND	0.0050	1	06/19/2020 23:48
1,4-Dichlorobenzene	ND	0.0050	1	06/19/2020 23:48
Dichlorodifluoromethane	ND	0.0050	1	06/19/2020 23:48
1,1-Dichloroethane	ND	0.0050	1	06/19/2020 23:48
1,2-Dichloroethane (1,2-DCA)	ND	0.00025	1	06/19/2020 23:48
1,1-Dichloroethene	ND	0.00025	1	06/19/2020 23:48
cis-1,2-Dichloroethene	ND	0.0050	1	06/19/2020 23:48
trans-1,2-Dichloroethene	ND	0.0050	1	06/19/2020 23:48
1,2-Dichloropropane	ND	0.0050	1	06/19/2020 23:48
1,3-Dichloropropane	ND	0.0050	1	06/19/2020 23:48
2,2-Dichloropropane	ND	0.0050	1	06/19/2020 23:48

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/12/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-6-3.0	2006696-002A	Soil	06/10/2020 10:33	GC28 06192025.D	200038

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	06/19/2020 23:48
cis-1,3-Dichloropropene	ND	0.0050	1	06/19/2020 23:48
trans-1,3-Dichloropropene	ND	0.0050	1	06/19/2020 23:48
Diisopropyl ether (DIPE)	ND	0.0050	1	06/19/2020 23:48
Ethylbenzene	ND	0.0050	1	06/19/2020 23:48
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	06/19/2020 23:48
Freon 113	ND	0.0050	1	06/19/2020 23:48
Hexachlorobutadiene	ND	0.0050	1	06/19/2020 23:48
Hexachloroethane	ND	0.0050	1	06/19/2020 23:48
2-Hexanone	ND	0.0050	1	06/19/2020 23:48
Isopropylbenzene	ND	0.0050	1	06/19/2020 23:48
4-Isopropyl toluene	ND	0.0050	1	06/19/2020 23:48
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/19/2020 23:48
Methylene chloride	ND	0.010	1	06/19/2020 23:48
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	06/19/2020 23:48
Naphthalene	ND	0.0050	1	06/19/2020 23:48
n-Propyl benzene	ND	0.0050	1	06/19/2020 23:48
Styrene	ND	0.0050	1	06/19/2020 23:48
1,1,1,2-Tetrachloroethane	ND	0.0050	1	06/19/2020 23:48
1,1,2,2-Tetrachloroethane	ND	0.00025	1	06/19/2020 23:48
Tetrachloroethene	ND	0.0010	1	06/19/2020 23:48
Toluene	ND	0.0050	1	06/19/2020 23:48
1,2,3-Trichlorobenzene	ND	0.0050	1	06/19/2020 23:48
1,2,4-Trichlorobenzene	ND	0.0050	1	06/19/2020 23:48
1,1,1-Trichloroethane	ND	0.0050	1	06/19/2020 23:48
1,1,2-Trichloroethane	ND	0.0050	1	06/19/2020 23:48
Trichloroethene	ND	0.0050	1	06/19/2020 23:48
Trichlorofluoromethane	ND	0.0050	1	06/19/2020 23:48
1,2,3-Trichloropropane	ND	0.00010	1	06/19/2020 23:48
1,2,4-Trimethylbenzene	ND	0.0050	1	06/19/2020 23:48
1,3,5-Trimethylbenzene	ND	0.0050	1	06/19/2020 23:48
Vinyl Chloride	ND	0.00025	1	06/19/2020 23:48
m,p-Xylene	ND	0.0050	1	06/19/2020 23:48
o-Xylene	ND	0.0050	1	06/19/2020 23:48
Xylenes, Total	ND	0.0050	1	06/19/2020 23:48

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/12/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-6-3.0	2006696-002A	Soil	06/10/2020 10:33	GC28 06192025.D	200038

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	102	82-136		06/19/2020 23:48
Toluene-d8	99	92-139		06/19/2020 23:48
4-BFB	100	82-135		06/19/2020 23:48
Benzene-d6	97	55-122		06/19/2020 23:48
Ethylbenzene-d10	91	58-141		06/19/2020 23:48
1,2-DCB-d4	72	51-107		06/19/2020 23:48

Analyst(s): KF



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/12/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-6-5.0	2006696-003A	Soil	06/10/2020 10:36	GC28 06162021.D	200038

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	06/16/2020 21:07
tert-Amyl methyl ether (TAME)	ND	0.0050	1	06/16/2020 21:07
Benzene	ND	0.0050	1	06/16/2020 21:07
Bromobenzene	ND	0.0050	1	06/16/2020 21:07
Bromochloromethane	ND	0.0050	1	06/16/2020 21:07
Bromodichloromethane	ND	0.0010	1	06/16/2020 21:07
Bromoform	ND	0.0050	1	06/16/2020 21:07
Bromomethane	ND	0.0050	1	06/16/2020 21:07
2-Butanone (MEK)	ND	0.020	1	06/16/2020 21:07
t-Butyl alcohol (TBA)	ND	0.050	1	06/16/2020 21:07
n-Butyl benzene	ND	0.0050	1	06/16/2020 21:07
sec-Butyl benzene	ND	0.0050	1	06/16/2020 21:07
tert-Butyl benzene	ND	0.0050	1	06/16/2020 21:07
Carbon Disulfide	ND	0.0050	1	06/16/2020 21:07
Carbon Tetrachloride	ND	0.0050	1	06/16/2020 21:07
Chlorobenzene	ND	0.0050	1	06/16/2020 21:07
Chloroethane	ND	0.0050	1	06/16/2020 21:07
Chloroform	ND	0.0050	1	06/16/2020 21:07
Chloromethane	ND	0.0050	1	06/16/2020 21:07
2-Chlorotoluene	ND	0.0050	1	06/16/2020 21:07
4-Chlorotoluene	ND	0.0050	1	06/16/2020 21:07
Dibromochloromethane	ND	0.0050	1	06/16/2020 21:07
1,2-Dibromo-3-chloropropane	ND	0.00025	1	06/16/2020 21:07
1,2-Dibromoethane (EDB)	ND	0.00010	1	06/16/2020 21:07
Dibromomethane	ND	0.0050	1	06/16/2020 21:07
1,2-Dichlorobenzene	ND	0.0050	1	06/16/2020 21:07
1,3-Dichlorobenzene	ND	0.0050	1	06/16/2020 21:07
1,4-Dichlorobenzene	ND	0.0050	1	06/16/2020 21:07
Dichlorodifluoromethane	ND	0.0050	1	06/16/2020 21:07
1,1-Dichloroethane	ND	0.0050	1	06/16/2020 21:07
1,2-Dichloroethane (1,2-DCA)	ND	0.00025	1	06/16/2020 21:07
1,1-Dichloroethene	ND	0.00025	1	06/16/2020 21:07
cis-1,2-Dichloroethene	ND	0.0050	1	06/16/2020 21:07
trans-1,2-Dichloroethene	ND	0.0050	1	06/16/2020 21:07
1,2-Dichloropropane	ND	0.0050	1	06/16/2020 21:07
1,3-Dichloropropane	ND	0.0050	1	06/16/2020 21:07
2,2-Dichloropropane	ND	0.0050	1	06/16/2020 21:07

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/12/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-6-5.0	2006696-003A	Soil	06/10/2020 10:36	GC28 06162021.D	200038

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	06/16/2020 21:07
cis-1,3-Dichloropropene	ND	0.0050	1	06/16/2020 21:07
trans-1,3-Dichloropropene	ND	0.0050	1	06/16/2020 21:07
Diisopropyl ether (DIPE)	ND	0.0050	1	06/16/2020 21:07
Ethylbenzene	ND	0.0050	1	06/16/2020 21:07
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	06/16/2020 21:07
Freon 113	ND	0.0050	1	06/16/2020 21:07
Hexachlorobutadiene	ND	0.0050	1	06/16/2020 21:07
Hexachloroethane	ND	0.0050	1	06/16/2020 21:07
2-Hexanone	ND	0.0050	1	06/16/2020 21:07
Isopropylbenzene	ND	0.0050	1	06/16/2020 21:07
4-Isopropyl toluene	ND	0.0050	1	06/16/2020 21:07
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/16/2020 21:07
Methylene chloride	ND	0.010	1	06/16/2020 21:07
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	06/16/2020 21:07
Naphthalene	ND	0.0050	1	06/16/2020 21:07
n-Propyl benzene	ND	0.0050	1	06/16/2020 21:07
Styrene	ND	0.0050	1	06/16/2020 21:07
1,1,1,2-Tetrachloroethane	ND	0.0050	1	06/16/2020 21:07
1,1,2,2-Tetrachloroethane	ND	0.00025	1	06/16/2020 21:07
Tetrachloroethene	ND	0.0010	1	06/16/2020 21:07
Toluene	ND	0.0050	1	06/16/2020 21:07
1,2,3-Trichlorobenzene	ND	0.0050	1	06/16/2020 21:07
1,2,4-Trichlorobenzene	ND	0.0050	1	06/16/2020 21:07
1,1,1-Trichloroethane	ND	0.0050	1	06/16/2020 21:07
1,1,2-Trichloroethane	ND	0.0050	1	06/16/2020 21:07
Trichloroethene	ND	0.0050	1	06/16/2020 21:07
Trichlorofluoromethane	ND	0.0050	1	06/16/2020 21:07
1,2,3-Trichloropropane	ND	0.00010	1	06/16/2020 21:07
1,2,4-Trimethylbenzene	ND	0.0050	1	06/16/2020 21:07
1,3,5-Trimethylbenzene	ND	0.0050	1	06/16/2020 21:07
Vinyl Chloride	ND	0.00025	1	06/16/2020 21:07
m,p-Xylene	ND	0.0050	1	06/16/2020 21:07
o-Xylene	ND	0.0050	1	06/16/2020 21:07
Xylenes, Total	ND	0.0050	1	06/16/2020 21:07

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/12/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-6-5.0	2006696-003A	Soil	06/10/2020 10:36	GC28 06162021.D	200038

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	109	82-136		06/16/2020 21:07
Toluene-d8	96	92-139		06/16/2020 21:07
4-BFB	104	82-135		06/16/2020 21:07
Benzene-d6	112	55-122		06/16/2020 21:07
Ethylbenzene-d10	98	58-141		06/16/2020 21:07
1,2-DCB-d4	74	51-107		06/16/2020 21:07

Analyst(s): KF



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/12/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-1-1.5	2006696-004A	Soil	06/10/2020 13:45	GC28 06192026.D	200038

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	06/20/2020 00:29
tert-Amyl methyl ether (TAME)	ND	0.0050	1	06/20/2020 00:29
Benzene	ND	0.0050	1	06/20/2020 00:29
Bromobenzene	ND	0.0050	1	06/20/2020 00:29
Bromochloromethane	ND	0.0050	1	06/20/2020 00:29
Bromodichloromethane	ND	0.0010	1	06/20/2020 00:29
Bromoform	ND	0.0050	1	06/20/2020 00:29
Bromomethane	ND	0.0050	1	06/20/2020 00:29
2-Butanone (MEK)	ND	0.020	1	06/20/2020 00:29
t-Butyl alcohol (TBA)	ND	0.050	1	06/20/2020 00:29
n-Butyl benzene	ND	0.0050	1	06/20/2020 00:29
sec-Butyl benzene	ND	0.0050	1	06/20/2020 00:29
tert-Butyl benzene	ND	0.0050	1	06/20/2020 00:29
Carbon Disulfide	ND	0.0050	1	06/20/2020 00:29
Carbon Tetrachloride	ND	0.0050	1	06/20/2020 00:29
Chlorobenzene	ND	0.0050	1	06/20/2020 00:29
Chloroethane	ND	0.0050	1	06/20/2020 00:29
Chloroform	ND	0.0050	1	06/20/2020 00:29
Chloromethane	ND	0.0050	1	06/20/2020 00:29
2-Chlorotoluene	ND	0.0050	1	06/20/2020 00:29
4-Chlorotoluene	ND	0.0050	1	06/20/2020 00:29
Dibromochloromethane	ND	0.0050	1	06/20/2020 00:29
1,2-Dibromo-3-chloropropane	ND	0.00025	1	06/20/2020 00:29
1,2-Dibromoethane (EDB)	ND	0.00010	1	06/20/2020 00:29
Dibromomethane	ND	0.0050	1	06/20/2020 00:29
1,2-Dichlorobenzene	ND	0.0050	1	06/20/2020 00:29
1,3-Dichlorobenzene	ND	0.0050	1	06/20/2020 00:29
1,4-Dichlorobenzene	ND	0.0050	1	06/20/2020 00:29
Dichlorodifluoromethane	ND	0.0050	1	06/20/2020 00:29
1,1-Dichloroethane	ND	0.0050	1	06/20/2020 00:29
1,2-Dichloroethane (1,2-DCA)	ND	0.00025	1	06/20/2020 00:29
1,1-Dichloroethene	ND	0.00025	1	06/20/2020 00:29
cis-1,2-Dichloroethene	ND	0.0050	1	06/20/2020 00:29
trans-1,2-Dichloroethene	ND	0.0050	1	06/20/2020 00:29
1,2-Dichloropropane	ND	0.0050	1	06/20/2020 00:29
1,3-Dichloropropane	ND	0.0050	1	06/20/2020 00:29
2,2-Dichloropropane	ND	0.0050	1	06/20/2020 00:29

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/12/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-1-1.5	2006696-004A	Soil	06/10/2020 13:45	GC28 06192026.D	200038

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	06/20/2020 00:29
cis-1,3-Dichloropropene	ND	0.0050	1	06/20/2020 00:29
trans-1,3-Dichloropropene	ND	0.0050	1	06/20/2020 00:29
Diisopropyl ether (DIPE)	ND	0.0050	1	06/20/2020 00:29
Ethylbenzene	ND	0.0050	1	06/20/2020 00:29
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	06/20/2020 00:29
Freon 113	ND	0.0050	1	06/20/2020 00:29
Hexachlorobutadiene	ND	0.0050	1	06/20/2020 00:29
Hexachloroethane	ND	0.0050	1	06/20/2020 00:29
2-Hexanone	ND	0.0050	1	06/20/2020 00:29
Isopropylbenzene	ND	0.0050	1	06/20/2020 00:29
4-Isopropyl toluene	ND	0.0050	1	06/20/2020 00:29
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/20/2020 00:29
Methylene chloride	ND	0.010	1	06/20/2020 00:29
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	06/20/2020 00:29
Naphthalene	ND	0.0050	1	06/20/2020 00:29
n-Propyl benzene	ND	0.0050	1	06/20/2020 00:29
Styrene	ND	0.0050	1	06/20/2020 00:29
1,1,1,2-Tetrachloroethane	ND	0.0050	1	06/20/2020 00:29
1,1,2,2-Tetrachloroethane	ND	0.00025	1	06/20/2020 00:29
Tetrachloroethene	ND	0.0010	1	06/20/2020 00:29
Toluene	ND	0.0050	1	06/20/2020 00:29
1,2,3-Trichlorobenzene	ND	0.0050	1	06/20/2020 00:29
1,2,4-Trichlorobenzene	ND	0.0050	1	06/20/2020 00:29
1,1,1-Trichloroethane	ND	0.0050	1	06/20/2020 00:29
1,1,2-Trichloroethane	ND	0.0050	1	06/20/2020 00:29
Trichloroethene	ND	0.0050	1	06/20/2020 00:29
Trichlorofluoromethane	ND	0.0050	1	06/20/2020 00:29
1,2,3-Trichloropropane	ND	0.00010	1	06/20/2020 00:29
1,2,4-Trimethylbenzene	ND	0.0050	1	06/20/2020 00:29
1,3,5-Trimethylbenzene	ND	0.0050	1	06/20/2020 00:29
Vinyl Chloride	ND	0.00025	1	06/20/2020 00:29
m,p-Xylene	ND	0.0050	1	06/20/2020 00:29
o-Xylene	ND	0.0050	1	06/20/2020 00:29
Xylenes, Total	ND	0.0050	1	06/20/2020 00:29

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/12/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-1-1.5	2006696-004A	Soil	06/10/2020 13:45	GC28 06192026.D	200038

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	93	82-136		06/20/2020 00:29
Toluene-d8	98	92-139		06/20/2020 00:29
4-BFB	102	82-135		06/20/2020 00:29
Benzene-d6	86	55-122		06/20/2020 00:29
Ethylbenzene-d10	90	58-141		06/20/2020 00:29
1,2-DCB-d4	73	51-107		06/20/2020 00:29

Analyst(s): KF



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/12/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-1-3.0	2006696-005A	Soil	06/10/2020 13:47	GC28 06192027.D	200038

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	06/20/2020 01:10
tert-Amyl methyl ether (TAME)	ND	0.0050	1	06/20/2020 01:10
Benzene	ND	0.0050	1	06/20/2020 01:10
Bromobenzene	ND	0.0050	1	06/20/2020 01:10
Bromochloromethane	ND	0.0050	1	06/20/2020 01:10
Bromodichloromethane	ND	0.0010	1	06/20/2020 01:10
Bromoform	ND	0.0050	1	06/20/2020 01:10
Bromomethane	ND	0.0050	1	06/20/2020 01:10
2-Butanone (MEK)	ND	0.020	1	06/20/2020 01:10
t-Butyl alcohol (TBA)	ND	0.050	1	06/20/2020 01:10
n-Butyl benzene	ND	0.0050	1	06/20/2020 01:10
sec-Butyl benzene	ND	0.0050	1	06/20/2020 01:10
tert-Butyl benzene	ND	0.0050	1	06/20/2020 01:10
Carbon Disulfide	ND	0.0050	1	06/20/2020 01:10
Carbon Tetrachloride	ND	0.0050	1	06/20/2020 01:10
Chlorobenzene	ND	0.0050	1	06/20/2020 01:10
Chloroethane	ND	0.0050	1	06/20/2020 01:10
Chloroform	ND	0.0050	1	06/20/2020 01:10
Chloromethane	ND	0.0050	1	06/20/2020 01:10
2-Chlorotoluene	ND	0.0050	1	06/20/2020 01:10
4-Chlorotoluene	ND	0.0050	1	06/20/2020 01:10
Dibromochloromethane	ND	0.0050	1	06/20/2020 01:10
1,2-Dibromo-3-chloropropane	ND	0.00025	1	06/20/2020 01:10
1,2-Dibromoethane (EDB)	ND	0.00010	1	06/20/2020 01:10
Dibromomethane	ND	0.0050	1	06/20/2020 01:10
1,2-Dichlorobenzene	ND	0.0050	1	06/20/2020 01:10
1,3-Dichlorobenzene	ND	0.0050	1	06/20/2020 01:10
1,4-Dichlorobenzene	ND	0.0050	1	06/20/2020 01:10
Dichlorodifluoromethane	ND	0.0050	1	06/20/2020 01:10
1,1-Dichloroethane	ND	0.0050	1	06/20/2020 01:10
1,2-Dichloroethane (1,2-DCA)	ND	0.00025	1	06/20/2020 01:10
1,1-Dichloroethene	ND	0.00025	1	06/20/2020 01:10
cis-1,2-Dichloroethene	ND	0.0050	1	06/20/2020 01:10
trans-1,2-Dichloroethene	ND	0.0050	1	06/20/2020 01:10
1,2-Dichloropropane	ND	0.0050	1	06/20/2020 01:10
1,3-Dichloropropane	ND	0.0050	1	06/20/2020 01:10
2,2-Dichloropropane	ND	0.0050	1	06/20/2020 01:10

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/12/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-1-3.0	2006696-005A	Soil	06/10/2020 13:47	GC28 06192027.D	200038

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	06/20/2020 01:10
cis-1,3-Dichloropropene	ND	0.0050	1	06/20/2020 01:10
trans-1,3-Dichloropropene	ND	0.0050	1	06/20/2020 01:10
Diisopropyl ether (DIPE)	ND	0.0050	1	06/20/2020 01:10
Ethylbenzene	ND	0.0050	1	06/20/2020 01:10
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	06/20/2020 01:10
Freon 113	ND	0.0050	1	06/20/2020 01:10
Hexachlorobutadiene	ND	0.0050	1	06/20/2020 01:10
Hexachloroethane	ND	0.0050	1	06/20/2020 01:10
2-Hexanone	ND	0.0050	1	06/20/2020 01:10
Isopropylbenzene	ND	0.0050	1	06/20/2020 01:10
4-Isopropyl toluene	ND	0.0050	1	06/20/2020 01:10
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/20/2020 01:10
Methylene chloride	ND	0.010	1	06/20/2020 01:10
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	06/20/2020 01:10
Naphthalene	ND	0.0050	1	06/20/2020 01:10
n-Propyl benzene	ND	0.0050	1	06/20/2020 01:10
Styrene	ND	0.0050	1	06/20/2020 01:10
1,1,1,2-Tetrachloroethane	ND	0.0050	1	06/20/2020 01:10
1,1,2,2-Tetrachloroethane	ND	0.00025	1	06/20/2020 01:10
Tetrachloroethene	ND	0.0010	1	06/20/2020 01:10
Toluene	ND	0.0050	1	06/20/2020 01:10
1,2,3-Trichlorobenzene	ND	0.0050	1	06/20/2020 01:10
1,2,4-Trichlorobenzene	ND	0.0050	1	06/20/2020 01:10
1,1,1-Trichloroethane	ND	0.0050	1	06/20/2020 01:10
1,1,2-Trichloroethane	ND	0.0050	1	06/20/2020 01:10
Trichloroethene	ND	0.0050	1	06/20/2020 01:10
Trichlorofluoromethane	ND	0.0050	1	06/20/2020 01:10
1,2,3-Trichloropropane	ND	0.00010	1	06/20/2020 01:10
1,2,4-Trimethylbenzene	ND	0.0050	1	06/20/2020 01:10
1,3,5-Trimethylbenzene	ND	0.0050	1	06/20/2020 01:10
Vinyl Chloride	ND	0.00025	1	06/20/2020 01:10
m,p-Xylene	ND	0.0050	1	06/20/2020 01:10
o-Xylene	ND	0.0050	1	06/20/2020 01:10
Xylenes, Total	ND	0.0050	1	06/20/2020 01:10

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/12/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-1-3.0	2006696-005A	Soil	06/10/2020 13:47	GC28 06192027.D	200038

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	96		82-136	06/20/2020 01:10
Toluene-d8	98		92-139	06/20/2020 01:10
4-BFB	101		82-135	06/20/2020 01:10
Benzene-d6	87		55-122	06/20/2020 01:10
Ethylbenzene-d10	91		58-141	06/20/2020 01:10
1,2-DCB-d4	72		51-107	06/20/2020 01:10

Analyst(s): KF



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-6-1.5	2006696-001A	Soil	06/10/2020 10:29	GC21 06172040.D	200232

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.0013	1	06/18/2020 01:29
Acenaphthylene	ND	0.0013	1	06/18/2020 01:29
Acetochlor	ND	0.25	1	06/18/2020 01:29
Anthracene	ND	0.0013	1	06/18/2020 01:29
Benzidine	ND	1.2	1	06/18/2020 01:29
Benzo (a) anthracene	ND	0.013	1	06/18/2020 01:29
Benzo (a) pyrene	ND	0.0025	1	06/18/2020 01:29
Benzo (b) fluoranthene	ND	0.0063	1	06/18/2020 01:29
Benzo (g,h,i) perylene	ND	0.0025	1	06/18/2020 01:29
Benzo (k) fluoranthene	ND	0.0013	1	06/18/2020 01:29
Benzyl Alcohol	ND	1.2	1	06/18/2020 01:29
1,1-Biphenyl	ND	0.013	1	06/18/2020 01:29
Bis (2-chloroethoxy) Methane	ND	0.25	1	06/18/2020 01:29
Bis (2-chloroethyl) Ether	ND	0.0025	1	06/18/2020 01:29
Bis (2-chloroisopropyl) Ether	ND	0.013	1	06/18/2020 01:29
Bis (2-ethylhexyl) Adipate	ND	0.25	1	06/18/2020 01:29
Bis (2-ethylhexyl) Phthalate	ND	0.025	1	06/18/2020 01:29
4-Bromophenyl Phenyl Ether	ND	0.25	1	06/18/2020 01:29
Butylbenzyl Phthalate	ND	0.025	1	06/18/2020 01:29
4-Chloroaniline	ND	0.0025	1	06/18/2020 01:29
4-Chloro-3-methylphenol	ND	0.25	1	06/18/2020 01:29
2-Chloronaphthalene	ND	0.25	1	06/18/2020 01:29
2-Chlorophenol	ND	0.013	1	06/18/2020 01:29
4-Chlorophenyl Phenyl Ether	ND	0.25	1	06/18/2020 01:29
Chrysene	ND	0.0025	1	06/18/2020 01:29
Dibenzo (a,h) anthracene	ND	0.0025	1	06/18/2020 01:29
Dibenzofuran	ND	0.25	1	06/18/2020 01:29
Di-n-butyl Phthalate	ND	0.013	1	06/18/2020 01:29
1,2-Dichlorobenzene	ND	0.25	1	06/18/2020 01:29
1,3-Dichlorobenzene	ND	0.25	1	06/18/2020 01:29
1,4-Dichlorobenzene	ND	0.25	1	06/18/2020 01:29
3,3-Dichlorobenzidine	ND	0.0025	1	06/18/2020 01:29
2,4-Dichlorophenol	ND	0.013	1	06/18/2020 01:29
Diethyl Phthalate	ND	0.013	1	06/18/2020 01:29
2,4-Dimethylphenol	ND	0.25	1	06/18/2020 01:29
Dimethyl Phthalate	ND	0.0025	1	06/18/2020 01:29
4,6-Dinitro-2-methylphenol	ND	1.2	1	06/18/2020 01:29

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-6-1.5	2006696-001A	Soil	06/10/2020 10:29	GC21 06172040.D	200232

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrophenol	ND	0.25	1	06/18/2020 01:29
2,4-Dinitrotoluene	ND	0.013	1	06/18/2020 01:29
2,6-Dinitrotoluene	ND	0.013	1	06/18/2020 01:29
Di-n-octyl Phthalate	ND	0.013	1	06/18/2020 01:29
1,2-Diphenylhydrazine	ND	0.25	1	06/18/2020 01:29
Fluoranthene	ND	0.0013	1	06/18/2020 01:29
Fluorene	ND	0.0025	1	06/18/2020 01:29
Hexachlorobenzene	ND	0.0013	1	06/18/2020 01:29
Hexachlorobutadiene	ND	0.0025	1	06/18/2020 01:29
Hexachlorocyclopentadiene	ND	2.0	1	06/18/2020 01:29
Hexachloroethane	ND	0.013	1	06/18/2020 01:29
Indeno (1,2,3-cd) pyrene	ND	0.013	1	06/18/2020 01:29
Isophorone	ND	0.25	1	06/18/2020 01:29
2-Methylnaphthalene	ND	0.0025	1	06/18/2020 01:29
2-Methylphenol (o-Cresol)	ND	0.25	1	06/18/2020 01:29
3 & 4-Methylphenol (m,p-Cresol)	ND	0.25	1	06/18/2020 01:29
Naphthalene	ND	0.0013	1	06/18/2020 01:29
2-Nitroaniline	ND	1.2	1	06/18/2020 01:29
3-Nitroaniline	ND	1.2	1	06/18/2020 01:29
4-Nitroaniline	ND	1.2	1	06/18/2020 01:29
Nitrobenzene	ND	0.25	1	06/18/2020 01:29
2-Nitrophenol	ND	1.2	1	06/18/2020 01:29
4-Nitrophenol	ND	1.2	1	06/18/2020 01:29
N-Nitrosodiphenylamine	ND	0.25	1	06/18/2020 01:29
N-Nitrosodi-n-propylamine	ND	0.25	1	06/18/2020 01:29
Pentachlorophenol	ND	0.062	1	06/18/2020 01:29
Phenanthrene	ND	0.0050	1	06/18/2020 01:29
Phenol	ND	0.050	1	06/18/2020 01:29
Pyrene	ND	0.0025	1	06/18/2020 01:29
Pyridine	ND	0.25	1	06/18/2020 01:29
1,2,4-Trichlorobenzene	ND	0.25	1	06/18/2020 01:29
2,4,5-Trichlorophenol	ND	0.0025	1	06/18/2020 01:29
2,4,6-Trichlorophenol	ND	0.013	1	06/18/2020 01:29

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-6-1.5	2006696-001A	Soil	06/10/2020 10:29	GC21 06172040.D	200232

Analytes	Result	RL	DF	Date Analyzed
----------	--------	----	----	---------------

Surrogates	REC (%)	Qualifiers	Limits	
2-Fluorophenol	94		60-130	06/18/2020 01:29
Phenol-d5	93		60-130	06/18/2020 01:29
Nitrobenzene-d5	72		60-130	06/18/2020 01:29
2-Fluorobiphenyl	66		60-130	06/18/2020 01:29
2,4,6-Tribromophenol	41	S	50-130	06/18/2020 01:29
4-Terphenyl-d14	64		50-130	06/18/2020 01:29

Analyst(s): HD

Analytical Comments: c2



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-6-3.0	2006696-002A	Soil	06/10/2020 10:33	GC21 06172041.D	200232

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.0013	1	06/18/2020 01:56
Acenaphthylene	ND	0.0013	1	06/18/2020 01:56
Acetochlor	ND	0.25	1	06/18/2020 01:56
Anthracene	ND	0.0013	1	06/18/2020 01:56
Benzidine	ND	1.2	1	06/18/2020 01:56
Benzo (a) anthracene	ND	0.013	1	06/18/2020 01:56
Benzo (a) pyrene	ND	0.0025	1	06/18/2020 01:56
Benzo (b) fluoranthene	ND	0.0063	1	06/18/2020 01:56
Benzo (g,h,i) perylene	ND	0.0025	1	06/18/2020 01:56
Benzo (k) fluoranthene	ND	0.0013	1	06/18/2020 01:56
Benzyl Alcohol	ND	1.2	1	06/18/2020 01:56
1,1-Biphenyl	ND	0.013	1	06/18/2020 01:56
Bis (2-chloroethoxy) Methane	ND	0.25	1	06/18/2020 01:56
Bis (2-chloroethyl) Ether	ND	0.0025	1	06/18/2020 01:56
Bis (2-chloroisopropyl) Ether	ND	0.013	1	06/18/2020 01:56
Bis (2-ethylhexyl) Adipate	ND	0.25	1	06/18/2020 01:56
Bis (2-ethylhexyl) Phthalate	ND	0.025	1	06/18/2020 01:56
4-Bromophenyl Phenyl Ether	ND	0.25	1	06/18/2020 01:56
Butylbenzyl Phthalate	ND	0.025	1	06/18/2020 01:56
4-Chloroaniline	ND	0.0025	1	06/18/2020 01:56
4-Chloro-3-methylphenol	ND	0.25	1	06/18/2020 01:56
2-Chloronaphthalene	ND	0.25	1	06/18/2020 01:56
2-Chlorophenol	ND	0.013	1	06/18/2020 01:56
4-Chlorophenyl Phenyl Ether	ND	0.25	1	06/18/2020 01:56
Chrysene	ND	0.0025	1	06/18/2020 01:56
Dibenzo (a,h) anthracene	ND	0.0025	1	06/18/2020 01:56
Dibenzofuran	ND	0.25	1	06/18/2020 01:56
Di-n-butyl Phthalate	ND	0.013	1	06/18/2020 01:56
1,2-Dichlorobenzene	ND	0.25	1	06/18/2020 01:56
1,3-Dichlorobenzene	ND	0.25	1	06/18/2020 01:56
1,4-Dichlorobenzene	ND	0.25	1	06/18/2020 01:56
3,3-Dichlorobenzidine	ND	0.0025	1	06/18/2020 01:56
2,4-Dichlorophenol	ND	0.013	1	06/18/2020 01:56
Diethyl Phthalate	ND	0.013	1	06/18/2020 01:56
2,4-Dimethylphenol	ND	0.25	1	06/18/2020 01:56
Dimethyl Phthalate	ND	0.0025	1	06/18/2020 01:56
4,6-Dinitro-2-methylphenol	ND	1.2	1	06/18/2020 01:56

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-6-3.0	2006696-002A	Soil	06/10/2020 10:33	GC21 06172041.D	200232

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrophenol	ND	0.25	1	06/18/2020 01:56
2,4-Dinitrotoluene	ND	0.013	1	06/18/2020 01:56
2,6-Dinitrotoluene	ND	0.013	1	06/18/2020 01:56
Di-n-octyl Phthalate	ND	0.013	1	06/18/2020 01:56
1,2-Diphenylhydrazine	ND	0.25	1	06/18/2020 01:56
Fluoranthene	ND	0.0013	1	06/18/2020 01:56
Fluorene	ND	0.0025	1	06/18/2020 01:56
Hexachlorobenzene	ND	0.0013	1	06/18/2020 01:56
Hexachlorobutadiene	ND	0.0025	1	06/18/2020 01:56
Hexachlorocyclopentadiene	ND	2.0	1	06/18/2020 01:56
Hexachloroethane	ND	0.013	1	06/18/2020 01:56
Indeno (1,2,3-cd) pyrene	ND	0.013	1	06/18/2020 01:56
Isophorone	ND	0.25	1	06/18/2020 01:56
2-Methylnaphthalene	ND	0.0025	1	06/18/2020 01:56
2-Methylphenol (o-Cresol)	ND	0.25	1	06/18/2020 01:56
3 & 4-Methylphenol (m,p-Cresol)	ND	0.25	1	06/18/2020 01:56
Naphthalene	ND	0.0013	1	06/18/2020 01:56
2-Nitroaniline	ND	1.2	1	06/18/2020 01:56
3-Nitroaniline	ND	1.2	1	06/18/2020 01:56
4-Nitroaniline	ND	1.2	1	06/18/2020 01:56
Nitrobenzene	ND	0.25	1	06/18/2020 01:56
2-Nitrophenol	ND	1.2	1	06/18/2020 01:56
4-Nitrophenol	ND	1.2	1	06/18/2020 01:56
N-Nitrosodiphenylamine	ND	0.25	1	06/18/2020 01:56
N-Nitrosodi-n-propylamine	ND	0.25	1	06/18/2020 01:56
Pentachlorophenol	ND	0.062	1	06/18/2020 01:56
Phenanthrene	ND	0.0050	1	06/18/2020 01:56
Phenol	ND	0.050	1	06/18/2020 01:56
Pyrene	ND	0.0025	1	06/18/2020 01:56
Pyridine	ND	0.25	1	06/18/2020 01:56
1,2,4-Trichlorobenzene	ND	0.25	1	06/18/2020 01:56
2,4,5-Trichlorophenol	ND	0.0025	1	06/18/2020 01:56
2,4,6-Trichlorophenol	ND	0.013	1	06/18/2020 01:56

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-6-3.0	2006696-002A	Soil	06/10/2020 10:33	GC21 06172041.D	200232

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>	
2-Fluorophenol	99		60-130	06/18/2020 01:56
Phenol-d5	96		60-130	06/18/2020 01:56
Nitrobenzene-d5	74		60-130	06/18/2020 01:56
2-Fluorobiphenyl	70		60-130	06/18/2020 01:56
2,4,6-Tribromophenol	32	S	50-130	06/18/2020 01:56
4-Terphenyl-d14	72		50-130	06/18/2020 01:56

Analyst(s): HD

Analytical Comments: c2



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-6-5.0	2006696-003A	Soil	06/10/2020 10:36	GC21 06192014.D	200232

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.0013	1	06/19/2020 13:22
Acenaphthylene	ND	0.0013	1	06/19/2020 13:22
Acetochlor	ND	0.25	1	06/19/2020 13:22
Anthracene	ND	0.0013	1	06/19/2020 13:22
Benzidine	ND	1.2	1	06/19/2020 13:22
Benzo (a) anthracene	ND	0.013	1	06/19/2020 13:22
Benzo (a) pyrene	ND	0.0025	1	06/19/2020 13:22
Benzo (b) fluoranthene	ND	0.0063	1	06/19/2020 13:22
Benzo (g,h,i) perylene	ND	0.0025	1	06/19/2020 13:22
Benzo (k) fluoranthene	ND	0.0013	1	06/19/2020 13:22
Benzyl Alcohol	ND	1.2	1	06/19/2020 13:22
1,1-Biphenyl	ND	0.013	1	06/19/2020 13:22
Bis (2-chloroethoxy) Methane	ND	0.25	1	06/19/2020 13:22
Bis (2-chloroethyl) Ether	ND	0.0025	1	06/19/2020 13:22
Bis (2-chloroisopropyl) Ether	ND	0.013	1	06/19/2020 13:22
Bis (2-ethylhexyl) Adipate	ND	0.25	1	06/19/2020 13:22
Bis (2-ethylhexyl) Phthalate	ND	0.025	1	06/19/2020 13:22
4-Bromophenyl Phenyl Ether	ND	0.25	1	06/19/2020 13:22
Butylbenzyl Phthalate	ND	0.025	1	06/19/2020 13:22
4-Chloroaniline	ND	0.0025	1	06/19/2020 13:22
4-Chloro-3-methylphenol	ND	0.25	1	06/19/2020 13:22
2-Chloronaphthalene	ND	0.25	1	06/19/2020 13:22
2-Chlorophenol	ND	0.013	1	06/19/2020 13:22
4-Chlorophenyl Phenyl Ether	ND	0.25	1	06/19/2020 13:22
Chrysene	ND	0.0025	1	06/19/2020 13:22
Dibenzo (a,h) anthracene	ND	0.0025	1	06/19/2020 13:22
Dibenzofuran	ND	0.25	1	06/19/2020 13:22
Di-n-butyl Phthalate	ND	0.013	1	06/19/2020 13:22
1,2-Dichlorobenzene	ND	0.25	1	06/19/2020 13:22
1,3-Dichlorobenzene	ND	0.25	1	06/19/2020 13:22
1,4-Dichlorobenzene	ND	0.25	1	06/19/2020 13:22
3,3-Dichlorobenzidine	ND	0.0025	1	06/19/2020 13:22
2,4-Dichlorophenol	ND	0.013	1	06/19/2020 13:22
Diethyl Phthalate	ND	0.013	1	06/19/2020 13:22
2,4-Dimethylphenol	ND	0.25	1	06/19/2020 13:22
Dimethyl Phthalate	ND	0.0025	1	06/19/2020 13:22
4,6-Dinitro-2-methylphenol	ND	1.2	1	06/19/2020 13:22

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-6-5.0	2006696-003A	Soil	06/10/2020 10:36	GC21 06192014.D	200232

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrophenol	ND	0.25	1	06/19/2020 13:22
2,4-Dinitrotoluene	ND	0.013	1	06/19/2020 13:22
2,6-Dinitrotoluene	ND	0.013	1	06/19/2020 13:22
Di-n-octyl Phthalate	ND	0.013	1	06/19/2020 13:22
1,2-Diphenylhydrazine	ND	0.25	1	06/19/2020 13:22
Fluoranthene	ND	0.0013	1	06/19/2020 13:22
Fluorene	ND	0.0025	1	06/19/2020 13:22
Hexachlorobenzene	ND	0.0013	1	06/19/2020 13:22
Hexachlorobutadiene	ND	0.0025	1	06/19/2020 13:22
Hexachlorocyclopentadiene	ND	2.0	1	06/19/2020 13:22
Hexachloroethane	ND	0.013	1	06/19/2020 13:22
Indeno (1,2,3-cd) pyrene	ND	0.013	1	06/19/2020 13:22
Isophorone	ND	0.25	1	06/19/2020 13:22
2-Methylnaphthalene	ND	0.0025	1	06/19/2020 13:22
2-Methylphenol (o-Cresol)	ND	0.25	1	06/19/2020 13:22
3 & 4-Methylphenol (m,p-Cresol)	ND	0.25	1	06/19/2020 13:22
Naphthalene	ND	0.0013	1	06/19/2020 13:22
2-Nitroaniline	ND	1.2	1	06/19/2020 13:22
3-Nitroaniline	ND	1.2	1	06/19/2020 13:22
4-Nitroaniline	ND	1.2	1	06/19/2020 13:22
Nitrobenzene	ND	0.25	1	06/19/2020 13:22
2-Nitrophenol	ND	1.2	1	06/19/2020 13:22
4-Nitrophenol	ND	1.2	1	06/19/2020 13:22
N-Nitrosodiphenylamine	ND	0.25	1	06/19/2020 13:22
N-Nitrosodi-n-propylamine	ND	0.25	1	06/19/2020 13:22
Pentachlorophenol	ND	0.062	1	06/19/2020 13:22
Phenanthrene	ND	0.0050	1	06/19/2020 13:22
Phenol	ND	0.050	1	06/19/2020 13:22
Pyrene	ND	0.0025	1	06/19/2020 13:22
Pyridine	ND	0.25	1	06/19/2020 13:22
1,2,4-Trichlorobenzene	ND	0.25	1	06/19/2020 13:22
2,4,5-Trichlorophenol	ND	0.0025	1	06/19/2020 13:22
2,4,6-Trichlorophenol	ND	0.013	1	06/19/2020 13:22

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-6-5.0	2006696-003A	Soil	06/10/2020 10:36	GC21 06192014.D	200232

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>	
2-Fluorophenol	116		60-130	06/19/2020 13:22
Phenol-d5	109		60-130	06/19/2020 13:22
Nitrobenzene-d5	87		60-130	06/19/2020 13:22
2-Fluorobiphenyl	87		60-130	06/19/2020 13:22
2,4,6-Tribromophenol	25	S	50-130	06/19/2020 13:22
4-Terphenyl-d14	81		50-130	06/19/2020 13:22

Analyst(s): HD

Analytical Comments: c2



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-1-1.5	2006696-004A	Soil	06/10/2020 13:45	GC21 06192015.D	200232

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.0013	1	06/19/2020 13:49
Acenaphthylene	ND	0.0013	1	06/19/2020 13:49
Acetochlor	ND	0.25	1	06/19/2020 13:49
Anthracene	ND	0.0013	1	06/19/2020 13:49
Benzidine	ND	1.2	1	06/19/2020 13:49
Benzo (a) anthracene	ND	0.013	1	06/19/2020 13:49
Benzo (a) pyrene	ND	0.0025	1	06/19/2020 13:49
Benzo (b) fluoranthene	ND	0.0063	1	06/19/2020 13:49
Benzo (g,h,i) perylene	0.0030	0.0025	1	06/19/2020 13:49
Benzo (k) fluoranthene	ND	0.0013	1	06/19/2020 13:49
Benzyl Alcohol	ND	1.2	1	06/19/2020 13:49
1,1-Biphenyl	ND	0.013	1	06/19/2020 13:49
Bis (2-chloroethoxy) Methane	ND	0.25	1	06/19/2020 13:49
Bis (2-chloroethyl) Ether	ND	0.0025	1	06/19/2020 13:49
Bis (2-chloroisopropyl) Ether	ND	0.013	1	06/19/2020 13:49
Bis (2-ethylhexyl) Adipate	ND	0.25	1	06/19/2020 13:49
Bis (2-ethylhexyl) Phthalate	ND	0.025	1	06/19/2020 13:49
4-Bromophenyl Phenyl Ether	ND	0.25	1	06/19/2020 13:49
Butylbenzyl Phthalate	ND	0.025	1	06/19/2020 13:49
4-Chloroaniline	ND	0.0025	1	06/19/2020 13:49
4-Chloro-3-methylphenol	ND	0.25	1	06/19/2020 13:49
2-Chloronaphthalene	ND	0.25	1	06/19/2020 13:49
2-Chlorophenol	ND	0.013	1	06/19/2020 13:49
4-Chlorophenyl Phenyl Ether	ND	0.25	1	06/19/2020 13:49
Chrysene	ND	0.0025	1	06/19/2020 13:49
Dibenzo (a,h) anthracene	ND	0.0025	1	06/19/2020 13:49
Dibenzofuran	ND	0.25	1	06/19/2020 13:49
Di-n-butyl Phthalate	ND	0.013	1	06/19/2020 13:49
1,2-Dichlorobenzene	ND	0.25	1	06/19/2020 13:49
1,3-Dichlorobenzene	ND	0.25	1	06/19/2020 13:49
1,4-Dichlorobenzene	ND	0.25	1	06/19/2020 13:49
3,3-Dichlorobenzidine	ND	0.0025	1	06/19/2020 13:49
2,4-Dichlorophenol	ND	0.013	1	06/19/2020 13:49
Diethyl Phthalate	ND	0.013	1	06/19/2020 13:49
2,4-Dimethylphenol	ND	0.25	1	06/19/2020 13:49
Dimethyl Phthalate	ND	0.0025	1	06/19/2020 13:49
4,6-Dinitro-2-methylphenol	ND	1.2	1	06/19/2020 13:49

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-1-1.5	2006696-004A	Soil	06/10/2020 13:45	GC21 06192015.D	200232

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrophenol	ND	0.25	1	06/19/2020 13:49
2,4-Dinitrotoluene	ND	0.013	1	06/19/2020 13:49
2,6-Dinitrotoluene	ND	0.013	1	06/19/2020 13:49
Di-n-octyl Phthalate	ND	0.013	1	06/19/2020 13:49
1,2-Diphenylhydrazine	ND	0.25	1	06/19/2020 13:49
Fluoranthene	ND	0.0013	1	06/19/2020 13:49
Fluorene	ND	0.0025	1	06/19/2020 13:49
Hexachlorobenzene	ND	0.0013	1	06/19/2020 13:49
Hexachlorobutadiene	ND	0.0025	1	06/19/2020 13:49
Hexachlorocyclopentadiene	ND	2.0	1	06/19/2020 13:49
Hexachloroethane	ND	0.013	1	06/19/2020 13:49
Indeno (1,2,3-cd) pyrene	ND	0.013	1	06/19/2020 13:49
Isophorone	ND	0.25	1	06/19/2020 13:49
2-Methylnaphthalene	ND	0.0025	1	06/19/2020 13:49
2-Methylphenol (o-Cresol)	ND	0.25	1	06/19/2020 13:49
3 & 4-Methylphenol (m,p-Cresol)	ND	0.25	1	06/19/2020 13:49
Naphthalene	ND	0.0013	1	06/19/2020 13:49
2-Nitroaniline	ND	1.2	1	06/19/2020 13:49
3-Nitroaniline	ND	1.2	1	06/19/2020 13:49
4-Nitroaniline	ND	1.2	1	06/19/2020 13:49
Nitrobenzene	ND	0.25	1	06/19/2020 13:49
2-Nitrophenol	ND	1.2	1	06/19/2020 13:49
4-Nitrophenol	ND	1.2	1	06/19/2020 13:49
N-Nitrosodiphenylamine	ND	0.25	1	06/19/2020 13:49
N-Nitrosodi-n-propylamine	ND	0.25	1	06/19/2020 13:49
Pentachlorophenol	ND	0.062	1	06/19/2020 13:49
Phenanthrene	ND	0.0050	1	06/19/2020 13:49
Phenol	0.30	0.050	1	06/19/2020 13:49
Pyrene	ND	0.0025	1	06/19/2020 13:49
Pyridine	ND	0.25	1	06/19/2020 13:49
1,2,4-Trichlorobenzene	ND	0.25	1	06/19/2020 13:49
2,4,5-Trichlorophenol	ND	0.0025	1	06/19/2020 13:49
2,4,6-Trichlorophenol	ND	0.013	1	06/19/2020 13:49

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-1-1.5	2006696-004A	Soil	06/10/2020 13:45	GC21 06192015.D	200232

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
-----------------	---------------	-----------	-----------	----------------------

<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>	<u>Date Analyzed</u>
2-Fluorophenol	98		60-130	06/19/2020 13:49
Phenol-d5	94		60-130	06/19/2020 13:49
Nitrobenzene-d5	79		60-130	06/19/2020 13:49
2-Fluorobiphenyl	77		60-130	06/19/2020 13:49
2,4,6-Tribromophenol	25	S	50-130	06/19/2020 13:49
4-Terphenyl-d14	79		50-130	06/19/2020 13:49

Analyst(s): HD

Analytical Comments: c2



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-1-3.0	2006696-005A	Soil	06/10/2020 13:47	GC21 06192020.D	200232

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.0013	1	06/19/2020 16:08
Acenaphthylene	ND	0.0013	1	06/19/2020 16:08
Acetochlor	ND	0.25	1	06/19/2020 16:08
Anthracene	ND	0.0013	1	06/19/2020 16:08
Benzidine	ND	1.2	1	06/19/2020 16:08
Benzo (a) anthracene	ND	0.013	1	06/19/2020 16:08
Benzo (a) pyrene	ND	0.0025	1	06/19/2020 16:08
Benzo (b) fluoranthene	ND	0.0063	1	06/19/2020 16:08
Benzo (g,h,i) perylene	ND	0.0025	1	06/19/2020 16:08
Benzo (k) fluoranthene	ND	0.0013	1	06/19/2020 16:08
Benzyl Alcohol	ND	1.2	1	06/19/2020 16:08
1,1-Biphenyl	ND	0.013	1	06/19/2020 16:08
Bis (2-chloroethoxy) Methane	ND	0.25	1	06/19/2020 16:08
Bis (2-chloroethyl) Ether	ND	0.0025	1	06/19/2020 16:08
Bis (2-chloroisopropyl) Ether	ND	0.013	1	06/19/2020 16:08
Bis (2-ethylhexyl) Adipate	ND	0.25	1	06/19/2020 16:08
Bis (2-ethylhexyl) Phthalate	ND	0.025	1	06/19/2020 16:08
4-Bromophenyl Phenyl Ether	ND	0.25	1	06/19/2020 16:08
Butylbenzyl Phthalate	ND	0.025	1	06/19/2020 16:08
4-Chloroaniline	ND	0.0025	1	06/19/2020 16:08
4-Chloro-3-methylphenol	ND	0.25	1	06/19/2020 16:08
2-Chloronaphthalene	ND	0.25	1	06/19/2020 16:08
2-Chlorophenol	ND	0.013	1	06/19/2020 16:08
4-Chlorophenyl Phenyl Ether	ND	0.25	1	06/19/2020 16:08
Chrysene	ND	0.0025	1	06/19/2020 16:08
Dibenzo (a,h) anthracene	ND	0.0025	1	06/19/2020 16:08
Dibenzofuran	ND	0.25	1	06/19/2020 16:08
Di-n-butyl Phthalate	ND	0.013	1	06/19/2020 16:08
1,2-Dichlorobenzene	ND	0.25	1	06/19/2020 16:08
1,3-Dichlorobenzene	ND	0.25	1	06/19/2020 16:08
1,4-Dichlorobenzene	ND	0.25	1	06/19/2020 16:08
3,3-Dichlorobenzidine	ND	0.0025	1	06/19/2020 16:08
2,4-Dichlorophenol	ND	0.013	1	06/19/2020 16:08
Diethyl Phthalate	ND	0.013	1	06/19/2020 16:08
2,4-Dimethylphenol	ND	0.25	1	06/19/2020 16:08
Dimethyl Phthalate	ND	0.0025	1	06/19/2020 16:08
4,6-Dinitro-2-methylphenol	ND	1.2	1	06/19/2020 16:08

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-1-3.0	2006696-005A	Soil	06/10/2020 13:47	GC21 06192020.D	200232

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrophenol	ND	0.25	1	06/19/2020 16:08
2,4-Dinitrotoluene	ND	0.013	1	06/19/2020 16:08
2,6-Dinitrotoluene	ND	0.013	1	06/19/2020 16:08
Di-n-octyl Phthalate	ND	0.013	1	06/19/2020 16:08
1,2-Diphenylhydrazine	ND	0.25	1	06/19/2020 16:08
Fluoranthene	ND	0.0013	1	06/19/2020 16:08
Fluorene	ND	0.0025	1	06/19/2020 16:08
Hexachlorobenzene	ND	0.0013	1	06/19/2020 16:08
Hexachlorobutadiene	ND	0.0025	1	06/19/2020 16:08
Hexachlorocyclopentadiene	ND	2.0	1	06/19/2020 16:08
Hexachloroethane	ND	0.013	1	06/19/2020 16:08
Indeno (1,2,3-cd) pyrene	ND	0.013	1	06/19/2020 16:08
Isophorone	ND	0.25	1	06/19/2020 16:08
2-Methylnaphthalene	ND	0.0025	1	06/19/2020 16:08
2-Methylphenol (o-Cresol)	ND	0.25	1	06/19/2020 16:08
3 & 4-Methylphenol (m,p-Cresol)	ND	0.25	1	06/19/2020 16:08
Naphthalene	ND	0.0013	1	06/19/2020 16:08
2-Nitroaniline	ND	1.2	1	06/19/2020 16:08
3-Nitroaniline	ND	1.2	1	06/19/2020 16:08
4-Nitroaniline	ND	1.2	1	06/19/2020 16:08
Nitrobenzene	ND	0.25	1	06/19/2020 16:08
2-Nitrophenol	ND	1.2	1	06/19/2020 16:08
4-Nitrophenol	ND	1.2	1	06/19/2020 16:08
N-Nitrosodiphenylamine	ND	0.25	1	06/19/2020 16:08
N-Nitrosodi-n-propylamine	ND	0.25	1	06/19/2020 16:08
Pentachlorophenol	ND	0.062	1	06/19/2020 16:08
Phenanthrene	ND	0.0050	1	06/19/2020 16:08
Phenol	0.14	0.050	1	06/19/2020 16:08
Pyrene	ND	0.0025	1	06/19/2020 16:08
Pyridine	ND	0.25	1	06/19/2020 16:08
1,2,4-Trichlorobenzene	ND	0.25	1	06/19/2020 16:08
2,4,5-Trichlorophenol	ND	0.0025	1	06/19/2020 16:08
2,4,6-Trichlorophenol	ND	0.013	1	06/19/2020 16:08

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-1-3.0	2006696-005A	Soil	06/10/2020 13:47	GC21 06192020.D	200232

Analytes	Result	RL	DF	Date Analyzed
----------	--------	----	----	---------------

Surrogates	REC (%)	Qualifiers	Limits	Date Analyzed
2-Fluorophenol	85		60-130	06/19/2020 16:08
Phenol-d5	83		60-130	06/19/2020 16:08
Nitrobenzene-d5	69		60-130	06/19/2020 16:08
2-Fluorobiphenyl	65		60-130	06/19/2020 16:08
2,4,6-Tribromophenol	16	S	50-130	06/19/2020 16:08
4-Terphenyl-d14	65		50-130	06/19/2020 16:08

Analyst(s): HD

Analytical Comments: c2



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-6-1.5	2006696-001A	Soil	06/10/2020 10:29	ICP-MS5 238SMPL.d	200036

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	06/15/2020 20:07
Arsenic	1.9	0.50	1	06/15/2020 20:07
Barium	68	5.0	1	06/15/2020 20:07
Beryllium	ND	0.50	1	06/15/2020 20:07
Cadmium	ND	0.50	1	06/15/2020 20:07
Chromium	34	0.50	1	06/15/2020 20:07
Cobalt	5.2	0.50	1	06/15/2020 20:07
Copper	6.9	0.50	1	06/15/2020 20:07
Lead	3.5	0.50	1	06/15/2020 20:07
Mercury	ND	0.050	1	06/15/2020 20:07
Molybdenum	ND	0.50	1	06/15/2020 20:07
Nickel	23	0.50	1	06/15/2020 20:07
Selenium	ND	0.50	1	06/15/2020 20:07
Silver	ND	0.50	1	06/15/2020 20:07
Thallium	ND	0.50	1	06/15/2020 20:07
Vanadium	24	0.50	1	06/15/2020 20:07
Zinc	76	5.0	1	06/15/2020 20:07

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	104	70-130	06/15/2020 20:07

Analyst(s): WV



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-6-3.0	2006696-002A	Soil	06/10/2020 10:33	ICP-MS5 147SMPL.d	200040

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	06/16/2020 12:44
Arsenic	1.8	0.50	1	06/16/2020 12:44
Barium	62	5.0	1	06/16/2020 12:44
Beryllium	ND	0.50	1	06/16/2020 12:44
Cadmium	ND	0.50	1	06/16/2020 12:44
Chromium	31	0.50	1	06/16/2020 12:44
Cobalt	3.4	0.50	1	06/16/2020 12:44
Copper	5.8	0.50	1	06/16/2020 12:44
Lead	2.2	0.50	1	06/16/2020 12:44
Mercury	ND	0.050	1	06/16/2020 12:44
Molybdenum	ND	0.50	1	06/16/2020 12:44
Nickel	19	0.50	1	06/16/2020 12:44
Selenium	ND	0.50	1	06/16/2020 12:44
Silver	ND	0.50	1	06/16/2020 12:44
Thallium	ND	0.50	1	06/16/2020 12:44
Vanadium	24	0.50	1	06/16/2020 12:44
Zinc	27	5.0	1	06/16/2020 12:44

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	104	70-130	06/16/2020 12:44

Analyst(s): WV



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-6-5.0	2006696-003A	Soil	06/10/2020 10:36	ICP-MS5 159SMPL.d	200040

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	06/16/2020 13:23
Arsenic	2.4	0.50	1	06/16/2020 13:23
Barium	46	5.0	1	06/16/2020 13:23
Beryllium	ND	0.50	1	06/16/2020 13:23
Cadmium	ND	0.50	1	06/16/2020 13:23
Chromium	38	0.50	1	06/16/2020 13:23
Cobalt	6.0	0.50	1	06/16/2020 13:23
Copper	5.9	0.50	1	06/16/2020 13:23
Lead	2.8	0.50	1	06/16/2020 13:23
Mercury	0.069	0.050	1	06/16/2020 13:23
Molybdenum	ND	0.50	1	06/16/2020 13:23
Nickel	26	0.50	1	06/16/2020 13:23
Selenium	ND	0.50	1	06/16/2020 13:23
Silver	ND	0.50	1	06/16/2020 13:23
Thallium	ND	0.50	1	06/16/2020 13:23
Vanadium	28	0.50	1	06/16/2020 13:23
Zinc	18	5.0	1	06/16/2020 13:23

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	104	70-130	06/16/2020 13:23

Analyst(s): WV



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-1-1.5	2006696-004A	Soil	06/10/2020 13:45	ICP-MS5 160SMPL.d	200040

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	06/16/2020 13:26
Arsenic	2.3	0.50	1	06/16/2020 13:26
Barium	80	5.0	1	06/16/2020 13:26
Beryllium	ND	0.50	1	06/16/2020 13:26
Cadmium	ND	0.50	1	06/16/2020 13:26
Chromium	39	0.50	1	06/16/2020 13:26
Cobalt	3.0	0.50	1	06/16/2020 13:26
Copper	9.1	0.50	1	06/16/2020 13:26
Lead	45	0.50	1	06/16/2020 13:26
Mercury	0.060	0.050	1	06/16/2020 13:26
Molybdenum	ND	0.50	1	06/16/2020 13:26
Nickel	20	0.50	1	06/16/2020 13:26
Selenium	ND	0.50	1	06/16/2020 13:26
Silver	ND	0.50	1	06/16/2020 13:26
Thallium	ND	0.50	1	06/16/2020 13:26
Vanadium	28	0.50	1	06/16/2020 13:26
Zinc	26	5.0	1	06/16/2020 13:26

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	103	70-130	06/16/2020 13:26

Analyst(s): WV



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-1-3.0	2006696-005A	Soil	06/10/2020 13:47	ICP-MS5 161SMPL.d	200040

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	06/16/2020 13:29
Arsenic	1.6	0.50	1	06/16/2020 13:29
Barium	48	5.0	1	06/16/2020 13:29
Beryllium	ND	0.50	1	06/16/2020 13:29
Cadmium	ND	0.50	1	06/16/2020 13:29
Chromium	32	0.50	1	06/16/2020 13:29
Cobalt	3.2	0.50	1	06/16/2020 13:29
Copper	5.0	0.50	1	06/16/2020 13:29
Lead	3.0	0.50	1	06/16/2020 13:29
Mercury	ND	0.050	1	06/16/2020 13:29
Molybdenum	ND	0.50	1	06/16/2020 13:29
Nickel	15	0.50	1	06/16/2020 13:29
Selenium	ND	0.50	1	06/16/2020 13:29
Silver	ND	0.50	1	06/16/2020 13:29
Thallium	ND	0.50	1	06/16/2020 13:29
Vanadium	21	0.50	1	06/16/2020 13:29
Zinc	17	5.0	1	06/16/2020 13:29

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	104	70-130	06/16/2020 13:29

Analyst(s): WV



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/12/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
Extraction Method: SW5035
Analytical Method: SW8021B/8015Bm
Unit: mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-6-1.5	2006696-001A	Soil	06/10/2020 10:29	GC7 06162036.D	200011

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	06/17/2020 05:21
MTBE	---	0.050	1	06/17/2020 05:21
Benzene	---	0.0050	1	06/17/2020 05:21
Toluene	---	0.0050	1	06/17/2020 05:21
Ethylbenzene	---	0.0050	1	06/17/2020 05:21
m,p-Xylene	---	0.010	1	06/17/2020 05:21
o-Xylene	---	0.0050	1	06/17/2020 05:21
Xylenes	---	0.0050	1	06/17/2020 05:21

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	91	62-126	06/17/2020 05:21

Analyst(s): IA

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-6-3.0	2006696-002A	Soil	06/10/2020 10:33	GC19 06162040.D	200011

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	06/17/2020 07:30
MTBE	---	0.050	1	06/17/2020 07:30
Benzene	---	0.0050	1	06/17/2020 07:30
Toluene	---	0.0050	1	06/17/2020 07:30
Ethylbenzene	---	0.0050	1	06/17/2020 07:30
m,p-Xylene	---	0.010	1	06/17/2020 07:30
o-Xylene	---	0.0050	1	06/17/2020 07:30
Xylenes	---	0.0050	1	06/17/2020 07:30

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	80	62-126	06/17/2020 07:30

Analyst(s): IA

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/12/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
Extraction Method: SW5035
Analytical Method: SW8021B/8015Bm
Unit: mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-6-5.0	2006696-003A	Soil	06/10/2020 10:36	GC3 06152035.D	200011

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	06/16/2020 06:20
MTBE	---	0.050	1	06/16/2020 06:20
Benzene	---	0.0050	1	06/16/2020 06:20
Toluene	---	0.0050	1	06/16/2020 06:20
Ethylbenzene	---	0.0050	1	06/16/2020 06:20
m,p-Xylene	---	0.010	1	06/16/2020 06:20
o-Xylene	---	0.0050	1	06/16/2020 06:20
Xylenes	---	0.0050	1	06/16/2020 06:20

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	83	62-126	06/16/2020 06:20

Analyst(s): IA

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-1-1.5	2006696-004A	Soil	06/10/2020 13:45	GC7 06162037.D	200011

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	06/17/2020 05:51
MTBE	---	0.050	1	06/17/2020 05:51
Benzene	---	0.0050	1	06/17/2020 05:51
Toluene	---	0.0050	1	06/17/2020 05:51
Ethylbenzene	---	0.0050	1	06/17/2020 05:51
m,p-Xylene	---	0.010	1	06/17/2020 05:51
o-Xylene	---	0.0050	1	06/17/2020 05:51
Xylenes	---	0.0050	1	06/17/2020 05:51

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	83	62-126	06/17/2020 05:51

Analyst(s): IA

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/12/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
Extraction Method: SW5035
Analytical Method: SW8021B/8015Bm
Unit: mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-1-3.0	2006696-005A	Soil	06/10/2020 13:47	GC7 06162038.D	200011

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	06/17/2020 06:21
MTBE	---	0.050	1	06/17/2020 06:21
Benzene	---	0.0050	1	06/17/2020 06:21
Toluene	---	0.0050	1	06/17/2020 06:21
Ethylbenzene	---	0.0050	1	06/17/2020 06:21
m,p-Xylene	---	0.010	1	06/17/2020 06:21
o-Xylene	---	0.0050	1	06/17/2020 06:21
Xylenes	---	0.0050	1	06/17/2020 06:21

Surrogates	REC (%)	Limits	
2-Fluorotoluene	85	62-126	06/17/2020 06:21

Analyst(s): IA



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/12/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
Extraction Method: SW3550B
Analytical Method: SW8015B
Unit: mg/Kg

Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-6-1.5	2006696-001A	Soil	06/10/2020 10:29	GC6B 06152035.D	200031

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	06/15/2020 20:21
TPH-Motor Oil (C18-C36)	ND	5.0	1	06/15/2020 20:21

Surrogates	REC (%)	Limits
C9	98	70-130

Analyst(s): JIS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-6-3.0	2006696-002A	Soil	06/10/2020 10:33	GC6B 06152045.D	200031

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	06/15/2020 23:36
TPH-Motor Oil (C18-C36)	ND	5.0	1	06/15/2020 23:36

Surrogates	REC (%)	Limits
C9	98	70-130

Analyst(s): JIS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-6-5.0	2006696-003A	Soil	06/10/2020 10:36	GC6B 06152047.D	200031

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	06/16/2020 00:15
TPH-Motor Oil (C18-C36)	ND	5.0	1	06/16/2020 00:15

Surrogates	REC (%)	Limits
C9	97	70-130

Analyst(s): JIS

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/12/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
Extraction Method: SW3550B
Analytical Method: SW8015B
Unit: mg/Kg

Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-1-1.5	2006696-004A	Soil	06/10/2020 13:45	GC6B 06152049.D	200031

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	06/16/2020 00:54
TPH-Motor Oil (C18-C36)	ND	5.0	1	06/16/2020 00:54

Surrogates	REC (%)	Limits	Date Analyzed
C9	97	70-130	06/16/2020 00:54

Analyst(s): JIS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-1-3.0	2006696-005A	Soil	06/10/2020 13:47	GC6B 06152053.D	200031

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	06/16/2020 02:12
TPH-Motor Oil (C18-C36)	ND	5.0	1	06/16/2020 02:12

Surrogates	REC (%)	Limits	Date Analyzed
C9	96	70-130	06/16/2020 02:12

Analyst(s): JIS



Quality Control Report

Client:	Langan	WorkOrder:	2006696
Date Prepared:	06/16/2020	BatchID:	200152
Date Analyzed:	06/16/2020 - 06/17/2020	Extraction Method:	SW3550B/3640Am/3630Cm
Instrument:	GC23	Analytical Method:	SW8081A/8082
Matrix:	Soil	Unit:	mg/kg
Project:	750664801; 1666 Seventh Street	Sample ID:	MB/LCS/LCSD-200152

QC Summary Report for SW8081A/8082

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Aldrin	ND	0.0000360	0.000100	-	-	-
a-BHC	ND	0.0000250	0.000100	-	-	-
b-BHC	ND	0.000250	0.000300	-	-	-
d-BHC	ND	0.000130	0.000200	-	-	-
g-BHC	ND	0.0000660	0.000100	-	-	-
Chlordane (Technical)	ND	0.000430	0.00250	-	-	-
a-Chlordane	ND	0.0000950	0.000100	-	-	-
g-Chlordane	ND	0.0000470	0.000100	-	-	-
p,p-DDD	ND	0.0000430	0.000100	-	-	-
p,p-DDE	ND	0.0000940	0.000100	-	-	-
p,p-DDT	ND	0.0000920	0.000100	-	-	-
Dieldrin	ND	0.0000610	0.000100	-	-	-
Endosulfan I	ND	0.0000480	0.000100	-	-	-
Endosulfan II	ND	0.0000760	0.000100	-	-	-
Endosulfan sulfate	ND	0.0000780	0.000100	-	-	-
Endrin	ND	0.0000350	0.000100	-	-	-
Endrin aldehyde	ND	0.0000670	0.000100	-	-	-
Endrin ketone	ND	0.0000840	0.000100	-	-	-
Heptachlor	ND	0.0000400	0.000100	-	-	-
Heptachlor epoxide	ND	0.0000540	0.000100	-	-	-
Hexachlorobenzene	ND	0.000110	0.00100	-	-	-
Hexachlorocyclopentadiene	ND	0.000340	0.00200	-	-	-
Methoxychlor	ND	0.000130	0.000200	-	-	-
Toxaphene	ND	0.00340	0.00500	-	-	-
Aroclor1016	ND	0.00200	0.00500	-	-	-
Aroclor1221	ND	0.00220	0.00500	-	-	-
Aroclor1232	ND	0.00220	0.00500	-	-	-
Aroclor1242	ND	0.00220	0.00500	-	-	-
Aroclor1248	ND	0.00220	0.00500	-	-	-
Aroclor1254	ND	0.00220	0.00500	-	-	-
Aroclor1260	ND	0.00220	0.00500	-	-	-
Surrogate Recovery						
Decachlorobiphenyl	0.00520			0.005	104	28-170

(Cont.)



Quality Control Report

Client: Langan
Date Prepared: 06/16/2020
Date Analyzed: 06/16/2020 - 06/17/2020
Instrument: GC23
Matrix: Soil
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
BatchID: 200152
Extraction Method: SW3550B/3640Am/3630Cm
Analytical Method: SW8081A/8082
Unit: mg/kg
Sample ID: MB/LCS/LCSD-200152

QC Summary Report for SW8081A/8082

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Aldrin	0.00393	0.00401	0.0050	79	80	31-155	2.04	20
a-BHC	0.00450	0.00455	0.0050	90	91	32-160	1.05	20
b-BHC	0.00401	0.00419	0.0050	80	84	44-149	4.40	20
d-BHC	0.00457	0.00470	0.0050	91	94	37-157	2.71	20
g-BHC	0.00440	0.00455	0.0050	88	91	43-154	3.27	20
a-Chlordane	0.00363	0.00373	0.0050	73	75	39-150	2.54	20
g-Chlordane	0.00409	0.00419	0.0050	82	84	39-151	2.32	20
p,p-DDD	0.00426	0.00440	0.0050	85	88	30-158	3.34	20
p,p-DDE	0.00392	0.00400	0.0050	78	80	47-149	2.09	20
p,p-DDT	0.00422	0.00438	0.0050	84	88	56-166	3.80	20
Dieldrin	0.00444	0.00456	0.0050	89	91	50-163	2.81	20
Endosulfan I	0.00393	0.00402	0.0050	79	80	45-159	2.21	20
Endosulfan II	0.00393	0.00403	0.0050	79	81	41-155	2.53	20
Endosulfan sulfate	0.00404	0.00426	0.0050	81	85	45-156	5.33	20
Endrin	0.00424	0.00435	0.0050	85	87	54-154	2.64	20
Endrin aldehyde	0.00376	0.00390	0.0050	75	78	27-159	3.84	20
Endrin ketone	0.00374	0.00390	0.0050	75	78	40-147	4.34	20
Heptachlor	0.00438	0.00448	0.0050	88	90	52-165	2.37	20
Heptachlor epoxide	0.00384	0.00395	0.0050	77	79	46-145	2.67	20
Hexachlorobenzene	0.00369	0.00377	0.0050	74	75	22-156	2.01	20
Hexachlorocyclopentadiene	0.00295	0.00289	0.0050	59	58	43-173	2.16	20
Methoxychlor	0.00436	0.00458	0.0050	87	92	49-150	4.77	20
Aroclor1016	0.0112	0.0108	0.015	75	72	49-120	3.51	20
Aroclor1260	0.0121	0.0117	0.015	81	78	48-160	3.83	20
Surrogate Recovery								
Decachlorobiphenyl	0.00534	0.00535	0.0050	107	107	28-170	0.171	20



Quality Control Report

Client: Langan
Date Prepared: 06/16/2020
Date Analyzed: 06/16/2020 - 06/17/2020
Instrument: GC25
Matrix: Soil
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
BatchID: 200142
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/kg
Sample ID: MB/LCS/LCSD-200142
 2006696-005AMS/MSD

QC Summary Report for SW8270C (ON/P Pesticides)

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Alachlor	ND	0.0420	0.100	-	-	-
Atrazine	ND	0.0230	0.100	-	-	-
Azinphos methyl (Guthion)	ND	0.0730	0.100	-	-	-
Bolstar (Sulprofos)	ND	0.0530	0.100	-	-	-
Chloropyrifos	ND	0.0550	0.100	-	-	-
Coumaphos	ND	0.0700	0.100	-	-	-
Demeton	ND	0.0430	0.100	-	-	-
Diazinon	ND	0.0420	0.100	-	-	-
Dichlorvos (DDVP)	ND	0.0360	0.100	-	-	-
Dimethoate	ND	0.0360	0.100	-	-	-
Disulfoton (Di-Syston)	ND	0.0510	0.100	-	-	-
EPN	ND	0.0560	0.100	-	-	-
EPTC	ND	0.0260	0.100	-	-	-
Ethion	ND	0.0360	0.100	-	-	-
Ethoprop	ND	0.0350	0.100	-	-	-
Ethyl parathion	ND	0.0250	0.100	-	-	-
Fensulfothion	ND	0.0540	0.100	-	-	-
Fenthion	ND	0.0440	0.100	-	-	-
Fonofos	ND	0.0380	0.100	-	-	-
Malathion	ND	0.0460	0.100	-	-	-
Mevinphos (Phosdrin)	ND	0.0780	0.100	-	-	-
Molinate	ND	0.0340	0.100	-	-	-
Methyl parathion	ND	0.0400	0.100	-	-	-
Phorate (Thimet)	ND	0.0440	0.100	-	-	-
Prometon	ND	0.0370	0.100	-	-	-
Ronnel	ND	0.0460	0.100	-	-	-
Simazine	ND	0.0660	0.100	-	-	-
Stirofos (Tetrachlorvinphos)	ND	0.0440	0.100	-	-	-
Terbacil	ND	0.0330	0.100	-	-	-
Terbufos (Terbuphos)	ND	0.0520	0.100	-	-	-
Thiobencarb	ND	0.0330	0.100	-	-	-
Tokuthion (Prothiofos)	ND	0.0410	0.100	-	-	-
Trichloronate (Agritox)	ND	0.0570	0.100	-	-	-

Surrogate Recovery

Triphenyl phosphate	0.164			0.2	82	60-140
---------------------	-------	--	--	-----	----	--------

(Cont.)



Quality Control Report

Client: Langan
Date Prepared: 06/16/2020
Date Analyzed: 06/16/2020 - 06/17/2020
Instrument: GC25
Matrix: Soil
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
BatchID: 200142
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/kg
Sample ID: MB/LCS/LCSD-200142
 2006696-005AMS/MSD

QC Summary Report for SW8270C (ON/P Pesticides)

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Alachlor	0.526	0.545	0.60	88	91	50-160	3.68	20
Atrazine	0.501	0.516	0.60	83	86	50-160	3.05	20
Azinphos methyl (Guthion)	0.535	0.562	0.60	89	94	60-140	4.82	20
Bolstar (Sulprofos)	0.520	0.544	0.60	87	91	60-140	4.48	20
Chloropyrifos	0.541	0.555	0.60	90	92	60-140	2.51	20
Coumaphos	0.538	0.575	0.60	90	96	60-140	6.77	20
Demeton	0.574	0.602	0.60	96	100	60-140	4.72	20
Diazinon	0.538	0.555	0.60	90	92	60-140	3.16	20
Dichlorvos (DDVP)	0.471	0.508	0.60	79	85	60-140	7.50	20
Dimethoate	0.583	0.562	0.60	97	94	60-140	3.60	20
Disulfoton (Di-Syston)	0.513	0.534	0.60	85	89	50-160	3.95	20
EPN	0.530	0.544	0.60	88	91	60-140	2.61	20
EPTC	0.490	0.506	0.60	82	84	60-140	3.19	20
Ethion	0.556	0.579	0.60	93	97	60-140	3.99	20
Ethoprop	0.545	0.589	0.60	91	98	60-140	7.78	20
Ethyl parathion	0.501	0.505	0.60	84	84	60-140	0.839	20
Fensulfothion	0.663	0.698	0.60	111	116	60-140	5.01	20
Fenthion	0.532	0.559	0.60	89	93	50-160	4.85	20
Fonofos	0.482	0.502	0.60	80	84	60-140	3.97	20
Malathion	0.559	0.593	0.60	93	99	60-140	5.89	20
Mevinphos (Phosdrin)	0.585	0.604	0.60	98	101	60-140	3.08	20
Molinate	0.485	0.516	0.60	81	86	60-140	6.25	20
Methyl parathion	0.520	0.536	0.60	87	89	50-160	3.13	20
Phorate (Thimet)	0.520	0.540	0.60	87	90	60-140	3.75	20
Prometon	0.526	0.554	0.60	88	92	60-140	5.05	20
Ronnel	0.486	0.513	0.60	81	86	60-140	5.34	20
Simazine	0.505	0.524	0.60	84	87	60-140	3.70	20
Stirofos (Tetrachlorvinphos)	0.549	0.555	0.60	92	93	60-140	1.14	20
Terbacil	0.568	0.582	0.60	95	97	60-140	2.55	20
Terbufos (Terbuphos)	0.502	0.510	0.60	84	85	60-140	1.44	20
Thiobencarb	0.498	0.523	0.60	83	87	60-140	4.91	20
Tokuthion (Prothiofos)	0.551	0.570	0.60	92	95	60-140	3.36	20
Trichloronate (Agritox)	0.494	0.524	0.60	82	87	60-140	5.96	20

Surrogate Recovery

Triphenyl phosphate	0.172	0.180	0.20	86	90	60-140	4.73	20
---------------------	-------	-------	------	----	----	--------	------	----

(Cont.)



Quality Control Report

Client: Langan
Date Prepared: 06/16/2020
Date Analyzed: 06/16/2020 - 06/17/2020
Instrument: GC25
Matrix: Soil
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
BatchID: 200142
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/kg
Sample ID: MB/LCS/LCSD-200142
 2006696-005AMS/MSD

QC Summary Report for SW8270C (ON/P Pesticides)

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Alachlor	1	0.540	0.539	0.60	ND	90	90	60-140	0.255	20
Atrazine	1	0.495	0.500	0.60	ND	83	83	60-140	0.895	20
Azinphos methyl (Guthion)	1	0.572	0.599	0.60	ND	95	100	60-140	4.62	20
Bolstar (Sulprofos)	1	0.544	0.559	0.60	ND	91	93	60-140	2.80	20
Chloropyrifos	1	0.545	0.557	0.60	ND	91	93	60-140	2.25	20
Coumaphos	1	0.553	0.599	0.60	ND	92	100	60-140	7.84	20
Demeton	1	0.587	0.607	0.60	ND	98	101	60-140	3.33	20
Diazinon	1	0.505	0.527	0.60	ND	84	88	60-140	4.27	20
Dichlorvos (DDVP)	1	0.505	0.522	0.60	ND	84	87	60-140	3.37	20
Dimethoate	1	0.517	0.566	0.60	ND	86	94	60-140	9.04	20
Disulfoton (Di-Syston)	1	0.530	0.548	0.60	ND	88	91	60-140	3.50	20
EPN	1	0.523	0.578	0.60	ND	87	96	60-140	9.92	20
EPTC	1	0.487	0.501	0.60	ND	81	84	60-140	3.00	20
Ethion	1	0.556	0.586	0.60	ND	93	98	60-140	5.21	20
Ethoprop	1	0.573	0.578	0.60	ND	95	96	60-140	0.851	20
Ethyl parathion	1	0.505	0.509	0.60	ND	84	85	60-140	0.694	20
Fensulfothion	1	0.664	0.782	0.60	ND	111	130	60-140	16.3	20
Fenthion	1	0.538	0.581	0.60	ND	90	97	60-140	7.72	20
Fonofos	1	0.495	0.515	0.60	ND	82	86	60-140	3.90	20
Malathion	1	0.588	0.598	0.60	ND	98	100	60-140	1.56	20
Mevinphos (Phosdrin)	1	0.589	0.610	0.60	ND	98	102	60-140	3.51	20
Molinate	1	0.503	0.526	0.60	ND	84	88	60-140	4.28	20
Methyl parathion	1	0.538	0.592	0.60	ND	90	99	60-140	9.53	20
Phorate (Thimet)	1	0.538	0.551	0.60	ND	90	92	60-140	2.38	20
Prometon	1	0.522	0.600	0.60	ND	87	100	60-140	13.7	20
Ronnel	1	0.524	0.522	0.60	ND	87	87	60-140	0.368	20
Simazine	1	0.490	0.532	0.60	ND	82	89	60-140	8.26	20
Stirofos (Tetrachlorvinphos)	1	0.556	0.606	0.60	ND	93	101	60-140	8.52	20
Terbacil	1	0.547	0.597	0.60	ND	91	99	60-140	8.79	20
Terbufos (Terbuphos)	1	0.533	0.527	0.60	ND	89	88	60-140	1.12	20
Thiobencarb	1	0.517	0.544	0.60	ND	86	91	60-140	4.96	20
Tokuthion (Prothiofos)	1	0.568	0.584	0.60	ND	95	97	60-140	2.79	20
Trichloronate (Agritox)	1	0.520	0.545	0.60	ND	87	91	60-140	4.73	20
Surrogate Recovery										
Triphenyl phosphate	1	0.191	0.186	0.20		96	93	60-140	2.59	20



Quality Control Report

Client:	Langan	WorkOrder:	2006696
Date Prepared:	06/16/2020	BatchID:	200134
Date Analyzed:	06/17/2020	Extraction Method:	SW8151A
Instrument:	GC15A	Analytical Method:	SW8151A
Matrix:	Soil	Unit:	mg/kg
Project:	750664801; 1666 Seventh Street	Sample ID:	MB/LCS/LCSD-200134 2006696-001AMS/MSD

QC Summary Report for SW8151A

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Acifluorfen	ND	0.0260	0.0500	-	-	-
Bentazon	ND	0.0110	0.0500	-	-	-
Chloramben	ND	0.0200	0.0500	-	-	-
2,4-D (Dichlorophenoxyacetic acid)	ND	0.0110	0.0500	-	-	-
2,4-DB	ND	0.0130	0.0500	-	-	-
Dalapon	ND	0.0150	0.100	-	-	-
DCPA (mono & diacid)	ND	0.0100	0.0500	-	-	-
Dicamba	ND	0.0110	0.0500	-	-	-
3,5-Dichlorobenzoic Acid	ND	0.00800	0.0500	-	-	-
Dichloroprop	ND	0.0110	0.0500	-	-	-
Dinoseb (DNBP)	ND	0.0130	0.0500	-	-	-
MCPA	ND	0.910	5.00	-	-	-
MCPP	ND	0.850	5.00	-	-	-
4-Nitrophenol	ND	0.0240	0.0500	-	-	-
Pentachlorophenol (PCP)	ND	0.0110	0.0500	-	-	-
Picloram	ND	0.00940	0.0500	-	-	-
2,4,5-T (Trichlorophenoxy acetic acid)	ND	0.00970	0.0500	-	-	-
2,4,5-TP (Silvex)	ND	0.00690	0.0500	-	-	-
Surrogate Recovery						
DCAA	0.0992			0.1	99	63-129



Quality Control Report

Client:	Langan	WorkOrder:	2006696
Date Prepared:	06/16/2020	BatchID:	200134
Date Analyzed:	06/17/2020	Extraction Method:	SW8151A
Instrument:	GC15A	Analytical Method:	SW8151A
Matrix:	Soil	Unit:	mg/kg
Project:	750664801; 1666 Seventh Street	Sample ID:	MB/LCS/LCSD-200134 2006696-001AMS/MSD

QC Summary Report for SW8151A

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Acifluorfen	0.0805	0.0862	0.10	81	86	60-140	6.77	30
Bentazon	0.0872	0.0885	0.10	87	88	60-140	1.47	30
Chloramben	0.0849	0.0862	0.10	85	86	60-140	1.50	30
2,4-D (Dichlorophenoxyacetic acid)	0.0921	0.0916	0.10	92	92	67-147	0.566	30
2,4-DB	0.0928	0.0963	0.10	93	96	61-152	3.72	30
Dalapon	0.101	0.0915	0.10	101	92	54-153	10.1	30
DCPA (mono & diacid)	0.0792	0.0801	0.10	79	80	60-140	1.03	30
Dicamba	0.0990	0.0979	0.10	99	98	60-146	1.17	30
3,5-Dichlorobenzoic Acid	0.0960	0.0948	0.10	96	95	60-140	1.29	30
Dichloroprop	0.0879	0.0874	0.10	88	87	60-140	0.533	30
Dinoseb (DNBP)	0.0879	0.0878	0.10	88	88	60-140	0.0377	30
MCPA	11.3	11.6	10	113	116	60-140	2.51	30
MCPP	8.27	8.29	10	83	83	60-140	0.244	30
4-Nitrophenol	0.0829	0.0818	0.10	83	82	60-140	1.40	30
Pentachlorophenol (PCP)	0.0962	0.0954	0.10	96	95	60-140	0.861	30
Picloram	0.0806	0.0843	0.10	81	84	60-140	4.48	30
2,4,5-T (Trichlorophenoxy acetic acid)	0.0866	0.0867	0.10	87	87	60-140	0.00842	30
2,4,5-TP (Silvex)	0.0927	0.0923	0.10	93	92	63-145	0.410	30

Surrogate Recovery

DCAA	0.107	0.109	0.10	107	109	63-129	1.37	30
------	-------	-------	------	-----	-----	--------	------	----

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Acifluorfen	1	0.0859	0.0903	0.10	ND	86	90	60-140	4.97	30
Bentazon	1	0.101	0.0992	0.10	ND	101	99	60-140	1.40	30
Chloramben	1	0.0562	0.0786	0.10	ND	56,F1	79	60-140	33.2,F1	30
2,4-D (Dichlorophenoxyacetic acid)	1	0.120	0.125	0.10	ND	120	125	68-142	4.10	30
2,4-DB	1	0.112	0.112	0.10	ND	112	112	60-140	0.567	30
Dalapon	1	0.0894	0.0964	0.10	ND	89	96	59-136	7.52	30
DCPA (mono & diacid)	1	0.0845	0.0872	0.10	ND	84	87	60-140	3.17	30
Dicamba	1	0.0971	0.104	0.10	ND	97	104	57-139	6.78	30
3,5-Dichlorobenzoic Acid	1	0.0981	0.112	0.10	ND	98	112	60-140	13.5	30
Dichloroprop	1	0.0981	0.114	0.10	ND	98	114	60-140	14.6	30
Dinoseb (DNBP)	1	0.0847	0.0906	0.10	ND	85	91	60-140	6.75	30
MCPA	1	10.8	9.15	10	ND	108	91	60-140	16.3	30
MCPP	1	7.68	8.37	10	ND	77	84	60-140	8.62	30

(Cont.)



Quality Control Report

Client:	Langan	WorkOrder:	2006696
Date Prepared:	06/16/2020	BatchID:	200134
Date Analyzed:	06/17/2020	Extraction Method:	SW8151A
Instrument:	GC15A	Analytical Method:	SW8151A
Matrix:	Soil	Unit:	mg/kg
Project:	750664801; 1666 Seventh Street	Sample ID:	MB/LCS/LCSD-200134 2006696-001AMS/MSD

QC Summary Report for SW8151A

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
4-Nitrophenol	1	0.0755	0.0650	0.10	ND	75	65	60-140	14.8	30
Pentachlorophenol (PCP)	1	0.0845	0.0918	0.10	ND	84	92	60-140	8.31	30
Picloram	1	0.0922	0.0971	0.10	ND	92	97	60-140	5.18	30
2,4,5-T (Trichlorophenoxy acetic acid)	1	0.0823	0.0864	0.10	ND	82	86	60-140	4.86	30
2,4,5-TP (Silvex)	1	0.0896	0.0964	0.10	ND	90	96	61-139	7.39	30
Surrogate Recovery										
DCAA	1	0.103	0.107	0.10		103	107	60-140	4.13	20



Quality Control Report

Client: Langan
Date Prepared: 06/12/2020
Date Analyzed: 06/16/2020 - 06/19/2020
Instrument: GC16, GC18
Matrix: Soil
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
BatchID: 200038
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg
Sample ID: MB/LCS/LCSD-200038

QC Summary Report for SW8260B

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Acetone	ND	0.0670	0.100	-	-	-
tert-Amyl methyl ether (TAME)	ND	0.000780	0.00500	-	-	-
Benzene	ND	0.000980	0.00500	-	-	-
Bromobenzene	ND	0.00120	0.00500	-	-	-
Bromochloromethane	ND	0.00110	0.00500	-	-	-
Bromodichloromethane	ND	0.000280	0.00100	-	-	-
Bromoform	ND	0.00170	0.00500	-	-	-
Bromomethane	ND	0.00180	0.00500	-	-	-
2-Butanone (MEK)	ND	0.0110	0.0200	-	-	-
t-Butyl alcohol (TBA)	ND	0.0320	0.0500	-	-	-
n-Butyl benzene	ND	0.00210	0.00500	-	-	-
sec-Butyl benzene	ND	0.00170	0.00500	-	-	-
tert-Butyl benzene	ND	0.00130	0.00500	-	-	-
Carbon Disulfide	ND	0.00300	0.00500	-	-	-
Carbon Tetrachloride	ND	0.000900	0.00500	-	-	-
Chlorobenzene	ND	0.000860	0.00500	-	-	-
Chloroethane	ND	0.00200	0.00500	-	-	-
Chloroform	ND	0.000110	0.00500	-	-	-
Chloromethane	ND	0.00260	0.00500	-	-	-
2-Chlorotoluene	ND	0.00160	0.00500	-	-	-
4-Chlorotoluene	ND	0.00120	0.00500	-	-	-
Dibromochloromethane	ND	0.000190	0.00500	-	-	-
1,2-Dibromo-3-chloropropane	0.000544	0.000160	0.000250	-	-	-
1,2-Dibromoethane (EDB)	0.000134	0.0000340	0.000100	-	-	-
Dibromomethane	ND	0.000810	0.00500	-	-	-
1,2-Dichlorobenzene	ND	0.00110	0.00500	-	-	-
1,3-Dichlorobenzene	ND	0.00100	0.00500	-	-	-
1,4-Dichlorobenzene	ND	0.000850	0.00500	-	-	-
Dichlorodifluoromethane	ND	0.00130	0.00500	-	-	-
1,1-Dichloroethane	ND	0.000880	0.00500	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	0.0000430	0.000250	-	-	-
1,1-Dichloroethene	ND	0.0000280	0.000250	-	-	-
cis-1,2-Dichloroethene	ND	0.000840	0.00500	-	-	-
trans-1,2-Dichloroethene	ND	0.00110	0.00500	-	-	-
1,2-Dichloropropane	ND	0.000800	0.00500	-	-	-
1,3-Dichloropropane	ND	0.000700	0.00500	-	-	-
2,2-Dichloropropane	ND	0.00190	0.00500	-	-	-
1,1-Dichloropropene	ND	0.000830	0.00500	-	-	-

(Cont.)



Quality Control Report

Client: Langan
Date Prepared: 06/12/2020
Date Analyzed: 06/16/2020 - 06/19/2020
Instrument: GC16, GC18
Matrix: Soil
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
BatchID: 200038
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg
Sample ID: MB/LCS/LCSD-200038

QC Summary Report for SW8260B

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
cis-1,3-Dichloropropene	ND	0.00170	0.00500	-	-	-
trans-1,3-Dichloropropene	ND	0.00200	0.00500	-	-	-
Diisopropyl ether (DIPE)	ND	0.00110	0.00500	-	-	-
Ethylbenzene	ND	0.000950	0.00500	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	0.00110	0.00500	-	-	-
Freon 113	ND	0.00110	0.00500	-	-	-
Hexachlorobutadiene	ND	0.00230	0.00500	-	-	-
Hexachloroethane	ND	0.00140	0.00500	-	-	-
2-Hexanone	ND	0.00310	0.00500	-	-	-
Isopropylbenzene	ND	0.00170	0.00500	-	-	-
4-Isopropyl toluene	ND	0.00150	0.00500	-	-	-
Methyl-t-butyl ether (MTBE)	ND	0.00170	0.00500	-	-	-
Methylene chloride	ND	0.00800	0.0100	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	0.00290	0.00500	-	-	-
Naphthalene	ND	0.00360	0.00500	-	-	-
n-Propyl benzene	ND	0.00160	0.00500	-	-	-
Styrene	ND	0.00270	0.00500	-	-	-
1,1,1,2-Tetrachloroethane	ND	0.000890	0.00500	-	-	-
1,1,2,2-Tetrachloroethane	0.000249,J	0.0000870	0.000250	-	-	-
Tetrachloroethene	0.000317,J	0.000200	0.00100	-	-	-
Toluene	ND	0.00160	0.00500	-	-	-
1,2,3-Trichlorobenzene	ND	0.00370	0.00500	-	-	-
1,2,4-Trichlorobenzene	ND	0.00180	0.00500	-	-	-
1,1,1-Trichloroethane	ND	0.000840	0.00500	-	-	-
1,1,2-Trichloroethane	ND	0.000670	0.00500	-	-	-
Trichloroethene	ND	0.00160	0.00500	-	-	-
Trichlorofluoromethane	ND	0.00140	0.00500	-	-	-
1,2,3-Trichloropropane	0.000127	0.0000420	0.000100	-	-	-
1,2,4-Trimethylbenzene	ND	0.00150	0.00500	-	-	-
1,3,5-Trimethylbenzene	ND	0.00160	0.00500	-	-	-
Vinyl Chloride	ND	0.0000530	0.000250	-	-	-
m,p-Xylene	ND	0.00230	0.00500	-	-	-
o-Xylene	ND	0.000740	0.00500	-	-	-

(Cont.)



Quality Control Report

Client: Langan	WorkOrder: 2006696
Date Prepared: 06/12/2020	BatchID: 200038
Date Analyzed: 06/16/2020 - 06/19/2020	Extraction Method: SW5030B
Instrument: GC16, GC18	Analytical Method: SW8260B
Matrix: Soil	Unit: mg/kg
Project: 750664801; 1666 Seventh Street	Sample ID: MB/LCS/LCSD-200038

QC Summary Report for SW8260B

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Surrogate Recovery						
Dibromofluoromethane	0.110			0.125	88	87-127
Toluene-d8	0.121			0.125	97	93-141
4-BFB	0.0127			0.0125	102	84-137
Benzene-d6	0.103			0.1	103	67-131
Ethylbenzene-d10	0.104			0.1	104	78-153
1,2-DCB-d4	0.0806			0.1	81	63-109



Quality Control Report

Client: Langan
Date Prepared: 06/12/2020
Date Analyzed: 06/16/2020 - 06/19/2020
Instrument: GC16, GC18
Matrix: Soil
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
BatchID: 200038
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg
Sample ID: MB/LCS/LCSD-200038

QC Summary Report for SW8260B

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Acetone	0.159	0.160	0.20	79	80	48-156	0.930	30
tert-Amyl methyl ether (TAME)	0.0160	0.0158	0.020	80	79	56-115	1.34	30
Benzene	0.0198	0.0201	0.020	99	100	63-131	1.21	30
Bromobenzene	0.0180	0.0184	0.020	90	92	66-127	2.37	30
Bromochloromethane	0.0198	0.0202	0.020	99	101	64-124	2.00	30
Bromodichloromethane	0.0170	0.0172	0.020	85	86	64-120	1.01	30
Bromoform	0.0119	0.0119	0.020	59	60	48-92	0.177	30
Bromomethane	0.0191	0.0193	0.020	95	96	25-163	0.869	30
2-Butanone (MEK)	0.0660	0.0656	0.080	82	82	51-133	0.615	30
t-Butyl alcohol (TBA)	0.0545	0.0515	0.080	68	64	52-129	5.66	30
n-Butyl benzene	0.0249	0.0256	0.020	124	128	83-200	2.60	30
sec-Butyl benzene	0.0236	0.0247	0.020	118	124	81-199	4.66	30
tert-Butyl benzene	0.0242	0.0251	0.020	121	126	79-178	3.77	30
Carbon Disulfide	0.0189	0.0192	0.020	95	96	64-136	1.68	30
Carbon Tetrachloride	0.0169	0.0173	0.020	84	87	66-140	2.63	30
Chlorobenzene	0.0203	0.0209	0.020	102	104	73-116	2.80	30
Chloroethane	0.0177	0.0182	0.020	89	91	35-147	3.00	30
Chloroform	0.0181	0.0184	0.020	91	92	65-130	1.50	30
Chloromethane	0.0134	0.0136	0.020	67	68	30-137	1.48	30
2-Chlorotoluene	0.0214	0.0224	0.020	107	112	75-152	4.38	30
4-Chlorotoluene	0.0206	0.0211	0.020	103	106	71-148	2.28	30
Dibromochloromethane	0.0174	0.0178	0.020	87	89	61-106	2.25	30
1,2-Dibromo-3-chloropropane	0.00694	0.00662	0.010	69	66	36-120	4.74	30
1,2-Dibromoethane (EDB)	0.00908	0.00917	0.010	91	92	67-118	1.02	30
Dibromomethane	0.0176	0.0177	0.020	88	88	61-116	0.598	30
1,2-Dichlorobenzene	0.0180	0.0178	0.020	90	89	59-106	1.40	30
1,3-Dichlorobenzene	0.0209	0.0212	0.020	105	106	75-129	1.63	30
1,4-Dichlorobenzene	0.0195	0.0199	0.020	97	100	66-127	2.13	30
Dichlorodifluoromethane	0.00871	0.00886	0.020	44	44	13-74	1.75	30
1,1-Dichloroethane	0.0170	0.0174	0.020	85	87	65-134	2.62	30
1,2-Dichloroethane (1,2-DCA)	0.0148	0.0149	0.020	74	74	57-131	0.491	30
1,1-Dichloroethene	0.0198	0.0203	0.020	99	101	62-127	2.65	30
cis-1,2-Dichloroethene	0.0189	0.0198	0.020	95	99	66-130	4.61	30
trans-1,2-Dichloroethene	0.0191	0.0196	0.020	95	98	60-131	2.71	30
1,2-Dichloropropane	0.0174	0.0177	0.020	87	89	63-127	1.59	30
1,3-Dichloropropane	0.0185	0.0188	0.020	93	94	68-124	1.29	30
2,2-Dichloropropane	0.0160	0.0165	0.020	80	82	63-150	2.63	30
1,1-Dichloropropene	0.0180	0.0183	0.020	90	92	67-134	1.80	30

(Cont.)



Quality Control Report

Client: Langan
Date Prepared: 06/12/2020
Date Analyzed: 06/16/2020 - 06/19/2020
Instrument: GC16, GC18
Matrix: Soil
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
BatchID: 200038
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg
Sample ID: MB/LCS/LCSD-200038

QC Summary Report for SW8260B

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
cis-1,3-Dichloropropene	0.0190	0.0195	0.020	95	97	65-138	2.37	30
trans-1,3-Dichloropropene	0.0170	0.0171	0.020	85	86	66-124	1.11	30
Diisopropyl ether (DIPE)	0.0154	0.0156	0.020	77	78	58-129	1.35	30
Ethylbenzene	0.0204	0.0209	0.020	102	105	73-145	2.46	30
Ethyl tert-butyl ether (ETBE)	0.0157	0.0156	0.020	78	78	62-125	0.386	30
Freon 113	0.0163	0.0166	0.020	81	83	55-116	2.06	30
Hexachlorobutadiene	0.0254	0.0262	0.020	127	131	75-178	3.24	30
Hexachloroethane	0.0236	0.0239	0.020	118	120	75-152	1.38	30
2-Hexanone	0.0121	0.0115	0.020	61	58	41-113	4.85	30
Isopropylbenzene	0.0259	0.0268	0.020	130	134	67-172	3.22	30
4-Isopropyl toluene	0.0238	0.0250	0.020	119	125	88-171	5.02	30
Methyl-t-butyl ether (MTBE)	0.0161	0.0158	0.020	80	79	58-122	1.70	30
Methylene chloride	0.0198	0.0203	0.020	99	101	57-140	2.08	30
4-Methyl-2-pentanone (MIBK)	0.0122	0.0122	0.020	61	61	42-117	0.266	30
Naphthalene	0.0114	0.0104	0.020	57	52	29-65	8.90	30
n-Propyl benzene	0.0241	0.0251	0.020	120	125	85-174	4.10	30
Styrene	0.0192	0.0198	0.020	96	99	63-126	3.32	30
1,1,1,2-Tetrachloroethane	0.0189	0.0197	0.020	94	99	68-131	4.37	30
1,1,2,2-Tetrachloroethane	0.0174	0.0170	0.020	87	85	45-121	2.46	30
Tetrachloroethene	0.0216	0.0224	0.020	108	112	65-150	3.61	30
Toluene	0.0205	0.0212	0.020	103	106	72-135	3.04	30
1,2,3-Trichlorobenzene	0.0129	0.0118	0.020	65	59	35-80	9.26	30
1,2,4-Trichlorobenzene	0.0152	0.0151	0.020	76	75	45-103	0.542	30
1,1,1-Trichloroethane	0.0170	0.0175	0.020	85	87	67-137	2.94	30
1,1,2-Trichloroethane	0.0190	0.0197	0.020	95	98	67-117	3.79	30
Trichloroethene	0.0187	0.0191	0.020	93	96	62-135	2.23	30
Trichlorofluoromethane	0.0152	0.0154	0.020	76	77	56-124	1.64	30
1,2,3-Trichloropropane	0.00894	0.00892	0.010	89	89	58-133	0.167	30
1,2,4-Trimethylbenzene	0.0229	0.0234	0.020	114	117	78-161	2.22	30
1,3,5-Trimethylbenzene	0.0240	0.0247	0.020	120	124	85-170	2.89	30
Vinyl Chloride	0.00882	0.00900	0.010	88	90	32-142	2.09	30
m,p-Xylene	0.0415	0.0431	0.040	104	108	70-138	3.74	30
o-Xylene	0.0180	0.0185	0.020	90	92	69-135	2.61	30

(Cont.)



Quality Control Report

Client:	Langan	WorkOrder:	2006696
Date Prepared:	06/12/2020	BatchID:	200038
Date Analyzed:	06/16/2020 - 06/19/2020	Extraction Method:	SW5030B
Instrument:	GC16, GC18	Analytical Method:	SW8260B
Matrix:	Soil	Unit:	mg/kg
Project:	750664801; 1666 Seventh Street	Sample ID:	MB/LCS/LCSD-200038

QC Summary Report for SW8260B

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Surrogate Recovery								
Dibromofluoromethane	0.113	0.113	0.12	91	90	87-127	0.471	30
Toluene-d8	0.120	0.121	0.12	96	97	93-141	1.29	30
4-BFB	0.0123	0.0123	0.012	98	98	84-137	0.0940	30
Benzene-d6	0.0950	0.0964	0.10	95	96	67-131	1.51	30
Ethylbenzene-d10	0.0975	0.102	0.10	98	102	78-153	4.37	30
1,2-DCB-d4	0.0802	0.0818	0.10	80	82	63-109	1.97	30



Quality Control Report

Client: Langan
Date Prepared: 06/17/2020
Date Analyzed: 06/17/2020 - 06/18/2020
Instrument: GC21
Matrix: Soil
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
BatchID: 200232
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg
Sample ID: MB/LCS/LCSD-200232
 2006696-001AMS/MSD

QC Summary Report for SW8270C (Low Level) w/ GPC

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Benzoic Acid	ND	0.370	1.20	-	-	-
Acenaphthene	ND	0.000510	0.00130	-	-	-
Acenaphthylene	ND	0.000300	0.00130	-	-	-
Acetochlor	ND	0.0320	0.250	-	-	-
Anthracene	ND	0.000850	0.00130	-	-	-
Benzidine	ND	0.120	1.20	-	-	-
Benzo (a) anthracene	ND	0.00400	0.0130	-	-	-
Benzo (a) pyrene	ND	0.00120	0.00250	-	-	-
Benzo (b) fluoranthene	ND	0.00110	0.00630	-	-	-
Benzo (g,h,i) perylene	ND	0.00160	0.00250	-	-	-
Benzo (k) fluoranthene	ND	0.00120	0.00130	-	-	-
Benzyl Alcohol	ND	0.630	1.20	-	-	-
1,1-Biphenyl	ND	0.00280	0.0130	-	-	-
Bis (2-chloroethoxy) Methane	ND	0.0280	0.250	-	-	-
Bis (2-chloroethyl) Ether	ND	0.00150	0.00250	-	-	-
Bis (2-chloroisopropyl) Ether	ND	0.00350	0.0130	-	-	-
Bis (2-ethylhexyl) Adipate	ND	0.0440	0.250	-	-	-
Bis (2-ethylhexyl) Phthalate	ND	0.0110	0.0250	-	-	-
4-Bromophenyl Phenyl Ether	ND	0.0330	0.250	-	-	-
Butylbenzyl Phthalate	ND	0.00550	0.0250	-	-	-
4-Chloroaniline	ND	0.000660	0.00250	-	-	-
4-Chloro-3-methylphenol	ND	0.0320	0.250	-	-	-
2-Chloronaphthalene	ND	0.0200	0.250	-	-	-
2-Chlorophenol	ND	0.00190	0.0130	-	-	-
4-Chlorophenyl Phenyl Ether	ND	0.0290	0.250	-	-	-
Chrysene	ND	0.00140	0.00250	-	-	-
Dibenzo (a,h) anthracene	ND	0.00140	0.00250	-	-	-
Dibenzofuran	ND	0.0150	0.250	-	-	-
Di-n-butyl Phthalate	ND	0.00520	0.0130	-	-	-
1,2-Dichlorobenzene	ND	0.0170	0.250	-	-	-
1,3-Dichlorobenzene	ND	0.0210	0.250	-	-	-
1,4-Dichlorobenzene	ND	0.0270	0.250	-	-	-
3,3-Dichlorobenzidine	ND	0.00100	0.00250	-	-	-
2,4-Dichlorophenol	ND	0.000500	0.0130	-	-	-
Diethyl Phthalate	ND	0.00350	0.0130	-	-	-
2,4-Dimethylphenol	ND	0.0310	0.250	-	-	-
Dimethyl Phthalate	ND	0.00120	0.00250	-	-	-
4,6-Dinitro-2-methylphenol	ND	0.180	1.20	-	-	-

(Cont.)



Quality Control Report

Client: Langan
Date Prepared: 06/17/2020
Date Analyzed: 06/17/2020 - 06/18/2020
Instrument: GC21
Matrix: Soil
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
BatchID: 200232
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg
Sample ID: MB/LCS/LCSD-200232
 2006696-001AMS/MSD

QC Summary Report for SW8270C (Low Level) w/ GPC

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
2,4-Dinitrophenol	ND	0.160	0.250	-	-	-
2,4-Dinitrotoluene	ND	0.00240	0.0130	-	-	-
2,6-Dinitrotoluene	ND	0.00150	0.0130	-	-	-
Di-n-octyl Phthalate	ND	0.00490	0.0130	-	-	-
1,2-Diphenylhydrazine	ND	0.0300	0.250	-	-	-
Fluoranthene	ND	0.00120	0.00130	-	-	-
Fluorene	ND	0.00110	0.00250	-	-	-
Hexachlorobenzene	ND	0.000380	0.00130	-	-	-
Hexachlorobutadiene	ND	0.000170	0.00250	-	-	-
Hexachlorocyclopentadiene	ND	0.150	2.00	-	-	-
Hexachloroethane	ND	0.00160	0.0130	-	-	-
Indeno (1,2,3-cd) pyrene	ND	0.00240	0.0130	-	-	-
Isophorone	ND	0.0460	0.250	-	-	-
2-Methylnaphthalene	ND	0.000540	0.00250	-	-	-
2-Methylphenol (o-Cresol)	ND	0.0570	0.250	-	-	-
3 & 4-Methylphenol (m,p-Cresol)	ND	0.0720	0.250	-	-	-
Naphthalene	ND	0.000550	0.00130	-	-	-
2-Nitroaniline	ND	0.0870	1.20	-	-	-
3-Nitroaniline	ND	0.0910	1.20	-	-	-
4-Nitroaniline	ND	0.130	1.20	-	-	-
Nitrobenzene	ND	0.0250	0.250	-	-	-
2-Nitrophenol	ND	0.150	1.20	-	-	-
4-Nitrophenol	ND	0.380	1.20	-	-	-
N-Nitrosodimethylamine	ND	0.140	1.20	-	-	-
N-Nitrosodiphenylamine	ND	0.0260	0.250	-	-	-
N-Nitrosodi-n-propylamine	ND	0.0770	0.250	-	-	-
Pentachlorophenol	ND	0.00990	0.0620	-	-	-
Phenanthrene	ND	0.00120	0.00500	-	-	-
Phenol	ND	0.00500	0.0500	-	-	-
Pyrene	ND	0.000930	0.00250	-	-	-
Pyridine	ND	0.0480	0.250	-	-	-
1,2,4-Trichlorobenzene	ND	0.0250	0.250	-	-	-
2,4,5-Trichlorophenol	ND	0.000740	0.00250	-	-	-
2,4,6-Trichlorophenol	ND	0.000840	0.0130	-	-	-

(Cont.)



Quality Control Report

Client: Langan	WorkOrder: 2006696
Date Prepared: 06/17/2020	BatchID: 200232
Date Analyzed: 06/17/2020 - 06/18/2020	Extraction Method: SW3550B/3640A
Instrument: GC21	Analytical Method: SW8270C
Matrix: Soil	Unit: mg/Kg
Project: 750664801; 1666 Seventh Street	Sample ID: MB/LCS/LCSD-200232 2006696-001AMS/MSD

QC Summary Report for SW8270C (Low Level) w/ GPC

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Surrogate Recovery						
2-Fluorophenol	1.32			1.25	105	60-130
Phenol-d5	1.26			1.25	101	60-130
Nitrobenzene-d5	1.09			1.25	87	60-130
2-Fluorobiphenyl	1.05			1.25	84	60-130
2,4,6-Tribromophenol	0.992			1.25	79	50-130
4-Terphenyl-d14	0.925			1.25	74	50-130



Quality Control Report

Client: Langan
Date Prepared: 06/17/2020
Date Analyzed: 06/17/2020 - 06/18/2020
Instrument: GC21
Matrix: Soil
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
BatchID: 200232
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg
Sample ID: MB/LCS/LCSD-200232
 2006696-001AMS/MSD

QC Summary Report for SW8270C (Low Level) w/ GPC

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Acenaphthene	0.0960	0.0922	0.12	77	74	60-130	4.02	30
Acenaphthylene	0.0998	0.0944	0.12	80	76	60-130	5.52	30
Anthracene	0.102	0.0965	0.12	81	77	60-130	5.08	30
Benzidine	4.66	4.33	12.5	37	35	30-130	7.45	30
Benzo (a) anthracene	0.108	0.0989	0.12	86	79	60-130	8.63	30
Benzo (a) pyrene	0.116	0.107	0.12	93	86	60-130	7.82	30
Benzo (b) fluoranthene	0.114	0.106	0.12	91	85	40-130	6.61	30
Benzo (g,h,i) perylene	0.108	0.0987	0.12	87	79	60-130	9.20	30
Benzo (k) fluoranthene	0.117	0.107	0.12	94	85	60-130	9.14	30
Benzyl Alcohol	10.4	9.45	12.5	83	76	60-130	9.59	30
Bis (2-chloroethoxy) Methane	1.84	1.72	2.5	74	69	60-130	7.15	30
Bis (2-chloroethyl) Ether	0.109	0.0967	0.12	87	77	60-130	12.2	30
Bis (2-chloroisopropyl) Ether	0.0953	0.0852	0.12	76	68	60-130	11.2	30
Bis (2-ethylhexyl) Adipate	2.15	2.03	2.5	86	81	40-130	5.79	30
Bis (2-ethylhexyl) Phthalate	0.118	0.109	0.12	94	88	60-130	7.18	30
4-Bromophenyl Phenyl Ether	1.86	1.65	2.5	74	66	60-130	11.7	30
Butylbenzyl Phthalate	0.121	0.115	0.12	97	92	60-130	5.10	30
4-Chloroaniline	0.0812	0.0761	0.12	65	61	40-130	6.45	30
4-Chloro-3-methylphenol	2.32	2.12	2.5	93	85	60-130	9.27	30
2-Chloronaphthalene	1.87	1.81	2.5	75	72	60-130	3.31	30
2-Chlorophenol	0.121	0.110	0.12	97	88	60-130	9.71	30
4-Chlorophenyl Phenyl Ether	1.80	1.72	2.5	72	69	60-130	4.65	30
Chrysene	0.104	0.0951	0.12	84	76	60-130	9.42	30
Dibenzo (a,h) anthracene	0.106	0.0983	0.12	85	79	60-130	7.59	30
Dibenzofuran	1.89	1.80	2.5	76	72	60-130	5.03	30
Di-n-butyl Phthalate	0.114	0.108	0.12	91	87	60-130	5.40	30
1,2-Dichlorobenzene	2.00	1.80	2.5	80	72	60-130	10.5	30
1,3-Dichlorobenzene	1.98	1.75	2.5	79	70	60-130	12.6	30
1,4-Dichlorobenzene	1.81	1.65	2.5	73	66	60-130	9.19	30
3,3-Dichlorobenzidine	0.0775	0.0717	0.12	62	57	40-130	7.75	30
2,4-Dichlorophenol	0.109	0.101	0.12	87	81	60-130	7.16	30
Diethyl Phthalate	0.102	0.0969	0.12	82	78	60-130	5.14	30
2,4-Dimethylphenol	2.34	2.15	2.5	93	86	60-130	8.44	30
Dimethyl Phthalate	0.0991	0.0942	0.12	79	75	60-130	5.01	30
4,6-Dinitro-2-methylphenol	9.12	8.54	12.5	73	68	30-130	6.49	30
2,4-Dinitrophenol	1.83	1.76	2.5	73	71	15-130	3.62	30
2,4-Dinitrotoluene	0.106	0.102	0.12	85	81	60-130	4.12	30
2,6-Dinitrotoluene	0.102	0.0982	0.12	81	79	60-130	3.52	30

(Cont.)



Quality Control Report

Client: Langan
Date Prepared: 06/17/2020
Date Analyzed: 06/17/2020 - 06/18/2020
Instrument: GC21
Matrix: Soil
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
BatchID: 200232
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg
Sample ID: MB/LCS/LCSD-200232
 2006696-001AMS/MSD

QC Summary Report for SW8270C (Low Level) w/ GPC

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Di-n-octyl Phthalate	0.128	0.122	0.12	103	97	60-130	5.23	30
1,2-Diphenylhydrazine	1.93	1.77	2.5	77	71	60-130	8.58	30
Fluoranthene	0.105	0.0991	0.12	84	79	60-130	5.99	30
Fluorene	0.101	0.0959	0.12	81	77	60-130	5.31	30
Hexachlorobenzene	0.0862	0.0807	0.12	69	65	60-130	6.63	30
Hexachlorobutadiene	0.0972	0.0893	0.12	78	71	60-130	8.52	30
Hexachlorocyclopentadiene	8.78	8.31	12.5	70	66	40-130	5.54	30
Hexachloroethane	0.116	0.103	0.12	93	82	60-130	12.5	30
Indeno (1,2,3-cd) pyrene	0.105	0.0950	0.12	84	76	60-130	10.1	30
Isophorone	2.16	1.96	2.5	86	79	60-130	9.27	30
2-Methylnaphthalene	0.107	0.0971	0.12	86	78	60-130	9.76	30
2-Methylphenol (o-Cresol)	2.03	1.85	2.5	81	74	60-130	9.13	30
3 & 4-Methylphenol (m,p-Cresol)	2.18	1.94	2.5	87	78	60-130	11.4	30
Naphthalene	0.100	0.0920	0.12	80	74	60-130	8.62	30
2-Nitroaniline	10.2	9.66	12.5	82	77	60-130	5.62	30
3-Nitroaniline	8.54	8.30	12.5	68	66	30-130	2.78	30
4-Nitroaniline	8.38	8.04	12.5	67	64	60-130	4.22	30
Nitrobenzene	1.98	1.84	2.5	79	74	60-130	7.17	30
2-Nitrophenol	11.0	10.1	12.5	88	81	60-130	8.76	30
4-Nitrophenol	10.7	10.3	12.5	86	82	60-130	4.07	30
N-Nitrosodiphenylamine	1.83	1.73	2.5	73	69	60-130	5.50	30
N-Nitrosodi-n-propylamine	2.00	1.77	2.5	80	71	60-130	12.1	30
Pentachlorophenol	0.448	0.421	0.62	72	67	40-130	6.08	30
Phenanthrene	0.0933	0.0882	0.12	75	71	60-130	5.61	30
Phenol	0.447	0.399	0.50	89	80	60-130	11.4	30
Pyrene	0.108	0.102	0.12	86	82	60-130	5.13	30
Pyridine	1.75	1.50	2.5	70	60	30-130	15.1	30
1,2,4-Trichlorobenzene	1.82	1.70	2.5	73	68	60-130	6.89	30
2,4,5-Trichlorophenol	0.108	0.104	0.12	87	83	60-130	4.01	30
2,4,6-Trichlorophenol	0.104	0.100	0.12	83	80	60-130	3.56	30

(Cont.)



Quality Control Report

Client: Langan
Date Prepared: 06/17/2020
Date Analyzed: 06/17/2020 - 06/18/2020
Instrument: GC21
Matrix: Soil
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
BatchID: 200232
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg
Sample ID: MB/LCS/LCSD-200232
 2006696-001AMS/MSD

QC Summary Report for SW8270C (Low Level) w/ GPC

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Surrogate Recovery								
2-Fluorophenol	1.21	1.15	1.25	96	92	60-130	4.81	30
Phenol-d5	1.18	1.11	1.25	94	89	60-130	5.91	30
Nitrobenzene-d5	1.04	1.07	1.25	83	86	60-130	2.85	30
2-Fluorobiphenyl	0.988	1.01	1.25	79	81	60-130	1.98	30
2,4,6-Tribromophenol	0.977	0.984	1.25	78	79	50-130	0.704	30
4-Terphenyl-d14	0.946	0.982	1.25	76	79	50-130	3.65	30

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Acenaphthene	1	0.0969	0.0968	0.12	ND	78	77	60-130	0.151	30
Acenaphthylene	1	0.102	0.103	0.12	ND	82	82	60-130	0.791	30
Anthracene	1	0.110	0.108	0.12	ND	88	86	60-130	1.52	30
Benzidine	1	3.16	3.33	12.5	ND	25,F1	27,F1	30-130	5.04	30
Benzo (a) anthracene	1	0.112	0.110	0.12	ND	90	88	60-130	1.58	30
Benzo (a) pyrene	1	0.133	0.132	0.12	ND	107	106	60-130	0.534	30
Benzo (b) fluoranthene	1	0.124	0.126	0.62	ND	20,F1	20,F1	40-130	1.07	30
Benzo (g,h,i) perylene	1	0.120	0.119	0.12	ND	96	95	60-130	0.993	30
Benzo (k) fluoranthene	1	0.118	0.118	0.12	ND	95	95	60-130	0.179	30
Benzyl Alcohol	1	10.4	10.6	12.5	ND	83	85	60-130	1.50	30
Bis (2-chloroethoxy) Methane	1	1.89	1.90	2.5	ND	76	76	60-130	0.182	30
Bis (2-chloroethyl) Ether	1	0.109	0.113	0.12	ND	88	90	60-130	2.90	30
Bis (2-chloroisopropyl) Ether	1	0.0966	0.0985	0.12	ND	77	79	60-130	1.98	30
Bis (2-ethylhexyl) Adipate	1	2.22	2.14	2.5	ND	89	86	40-130	3.71	30
Bis (2-ethylhexyl) Phthalate	1	0.140	0.135	0.12	ND	112	108	60-130	3.65	30
4-Bromophenyl Phenyl Ether	1	1.98	1.90	2.5	ND	79	76	60-130	4.15	30
Butylbenzyl Phthalate	1	0.127	0.122	0.12	ND	102	98	60-130	4.01	30
4-Chloroaniline	1	0.108	0.110	0.12	ND	87	88	40-130	1.16	30
4-Chloro-3-methylphenol	1	2.34	2.36	2.5	ND	94	95	60-130	0.892	30
2-Chloronaphthalene	1	1.94	1.98	2.5	ND	78	79	60-130	1.90	30
2-Chlorophenol	1	0.126	0.128	0.12	ND	101	103	60-130	1.69	30
4-Chlorophenyl Phenyl Ether	1	1.80	1.85	2.5	ND	72	74	60-130	2.64	30
Chrysene	1	0.105	0.102	0.12	ND	84	82	60-130	2.13	30
Dibenzo (a,h) anthracene	1	0.118	0.118	0.12	ND	94	94	60-130	0.211	30
Dibenzofuran	1	1.90	1.92	2.5	ND	76	77	60-130	0.935	30
Di-n-butyl Phthalate	1	0.126	0.124	0.12	ND	101	99	60-130	2.05	30

(Cont.)



Quality Control Report

Client: Langan
Date Prepared: 06/17/2020
Date Analyzed: 06/17/2020 - 06/18/2020
Instrument: GC21
Matrix: Soil
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
BatchID: 200232
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg
Sample ID: MB/LCS/LCSD-200232
 2006696-001AMS/MSD

QC Summary Report for SW8270C (Low Level) w/ GPC

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
1,2-Dichlorobenzene	1	2.03	2.08	2.5	ND	81	83	60-130	2.41	30
1,3-Dichlorobenzene	1	2.01	2.10	2.5	ND	81	84	60-130	4.34	30
1,4-Dichlorobenzene	1	1.87	1.94	2.5	ND	75	77	60-130	3.45	30
3,3-Dichlorobenzidine	1	0.116	0.114	0.12	ND	93	91	40-130	1.49	30
2,4-Dichlorophenol	1	0.113	0.112	2.5	ND	5,F1	4,F1	60-130	0.364	30
Diethyl Phthalate	1	0.100	0.101	0.12	ND	80	80	60-130	0.455	30
2,4-Dimethylphenol	1	2.40	2.31	2.5	ND	96	92	60-130	3.96	30
Dimethyl Phthalate	1	0.0980	0.0980	0.12	ND	78	78	60-130	0.0134	30
4,6-Dinitro-2-methylphenol	1	7.61	7.88	12.5	ND	61	63	30-130	3.55	30
2,4-Dinitrophenol	1	0.511	0.574	2.5	ND	20	23	15-130	11.5	30
2,4-Dinitrotoluene	1	0.103	0.104	0.12	ND	83	83	60-130	0.684	30
2,6-Dinitrotoluene	1	0.103	0.106	0.12	ND	82	85	60-130	2.86	30
Di-n-octyl Phthalate	1	0.161	0.158	0.12	ND	129	126	60-130	2.07	30
1,2-Diphenylhydrazine	1	2.00	1.98	2.5	ND	80	79	60-130	0.733	30
Fluoranthene	1	0.114	0.113	0.12	ND	91	90	60-130	0.921	30
Fluorene	1	0.100	0.0999	0.12	ND	80	80	60-130	0.373	30
Hexachlorobenzene	1	0.0955	0.0944	0.12	ND	76	76	60-130	1.20	30
Hexachlorobutadiene	1	0.103	0.104	0.12	ND	82	84	60-130	1.49	30
Hexachlorocyclopentadiene	1	8.70	8.99	12.5	ND	70	72	40-130	3.25	30
Hexachloroethane	1	0.118	0.119	0.12	ND	94	95	60-130	0.807	30
Indeno (1,2,3-cd) pyrene	1	0.116	0.116	0.12	ND	93	93	60-130	0.216	30
Isophorone	1	2.19	2.18	2.5	ND	87	87	60-130	0.260	30
2-Methylnaphthalene	1	0.108	0.108	0.12	ND	86	87	60-130	0.439	30
2-Methylphenol (o-Cresol)	1	2.03	2.05	2.5	ND	81	82	60-130	0.976	30
3 & 4-Methylphenol (m,p-Cresol)	1	2.19	2.19	2.5	ND	87	88	60-130	0.330	30
Naphthalene	1	0.102	0.102	0.12	ND	82	82	60-130	0.263	30
2-Nitroaniline	1	9.99	10.2	12.5	ND	80	82	60-130	1.95	30
3-Nitroaniline	1	9.97	10.0	12.5	ND	80	80	30-130	0.561	30
4-Nitroaniline	1	9.12	9.24	12.5	ND	73	74	60-130	1.33	30
Nitrobenzene	1	2.04	2.04	2.5	ND	82	82	60-130	0.0184	30
2-Nitrophenol	1	11.2	11.5	12.5	ND	90	92	60-130	2.42	30
4-Nitrophenol	1	10.8	10.8	12.5	ND	86	86	60-130	0.325	30
N-Nitrosodiphenylamine	1	1.99	1.94	2.5	ND	80	78	60-130	2.20	30
N-Nitrosodi-n-propylamine	1	2.02	1.95	2.5	ND	81	78	60-130	3.17	30
Pentachlorophenol	1	0.426	0.417	0.62	ND	68	67	40-130	2.08	30
Phenanthrene	1	0.0981	0.0971	0.12	ND	78	78	60-130	1.04	30
Phenol	1	0.449	0.455	0.50	ND	90	91	60-130	1.34	30
Pyrene	1	0.107	0.105	0.12	ND	86	84	60-130	1.66	30

(Cont.)



Quality Control Report

Client: Langan
Date Prepared: 06/17/2020
Date Analyzed: 06/17/2020 - 06/18/2020
Instrument: GC21
Matrix: Soil
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
BatchID: 200232
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg
Sample ID: MB/LCS/LCSD-200232
 2006696-001AMS/MSD

QC Summary Report for SW8270C (Low Level) w/ GPC

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Pyridine	1	1.63	1.51	2.5	ND	65	60	30-130	7.36	30
1,2,4-Trichlorobenzene	1	1.96	1.99	2.5	ND	78	80	60-130	1.89	30
2,4,5-Trichlorophenol	1	0.114	0.117	0.12	ND	91	94	60-130	2.38	30
2,4,6-Trichlorophenol	1	0.114	0.114	0.12	ND	91	91	60-130	0.000637	30
Surrogate Recovery										
2-Fluorophenol	1	1.21	1.25	1.25		97	100	60-130	3.29	30
Phenol-d5	1	1.16	1.18	1.25		93	94	60-130	1.10	30
Nitrobenzene-d5	1	1.09	1.12	1.25		87	89	60-130	2.09	30
2-Fluorobiphenyl	1	0.997	0.994	1.25		80	80	60-130	0.339	30
2,4,6-Tribromophenol	1	1.06	1.05	1.25		85	84	50-130	1.19	30
4-Terphenyl-d14	1	0.994	0.951	1.25		80	76	50-130	4.44	30



Quality Control Report

Client: Langan	WorkOrder: 2006696
Date Prepared: 06/15/2020	BatchID: 200036
Date Analyzed: 06/15/2020 - 06/16/2020	Extraction Method: SW3050B
Instrument: ICP-MS4, ICP-MS5	Analytical Method: SW6020
Matrix: Soil	Unit: mg/kg
Project: 750664801; 1666 Seventh Street	Sample ID: MB/LCS/LCSD-200036

QC Summary Report for Metals

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Antimony	ND	0.160	0.500	-	-	-
Arsenic	ND	0.150	0.500	-	-	-
Barium	ND	0.570	5.00	-	-	-
Beryllium	ND	0.0730	0.500	-	-	-
Cadmium	ND	0.0610	0.500	-	-	-
Chromium	ND	0.130	0.500	-	-	-
Cobalt	ND	0.0520	0.500	-	-	-
Copper	ND	0.180	0.500	-	-	-
Lead	ND	0.140	0.500	-	-	-
Mercury	ND	0.0320	0.0500	-	-	-
Molybdenum	ND	0.160	0.500	-	-	-
Nickel	ND	0.170	0.500	-	-	-
Selenium	ND	0.150	0.500	-	-	-
Silver	ND	0.120	0.500	-	-	-
Thallium	ND	0.0670	0.500	-	-	-
Vanadium	ND	0.130	0.500	-	-	-
Zinc	ND	3.00	5.00	-	-	-
Surrogate Recovery						
Terbium	504			500	101	70-130



Quality Control Report

Client: Langan
Date Prepared: 06/15/2020
Date Analyzed: 06/15/2020 - 06/16/2020
Instrument: ICP-MS4, ICP-MS5
Matrix: Soil
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
BatchID: 200036
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/kg
Sample ID: MB/LCS/LCSD-200036

QC Summary Report for Metals

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Antimony	47.4	48.3	50	95	97	75-125	1.76	20
Arsenic	46.6	47.9	50	93	96	75-125	2.77	20
Barium	469	470	500	94	94	75-125	0.334	20
Beryllium	44.9	46.3	50	90	93	75-125	3.00	20
Cadmium	47.1	47.4	50	94	95	75-125	0.635	20
Chromium	46.8	47.3	50	94	95	75-125	0.901	20
Cobalt	48.1	50.8	50	96	102	75-125	5.49	20
Copper	47.2	48.1	50	94	96	75-125	1.95	20
Lead	46.0	47.1	50	92	94	75-125	2.45	20
Mercury	1.20	1.23	1.25	96	99	75-125	2.54	20
Molybdenum	48.6	49.0	50	97	98	75-125	0.865	20
Nickel	47.8	49.6	50	96	99	75-125	3.63	20
Selenium	47.4	45.8	50	95	92	75-125	3.27	20
Silver	44.4	45.7	50	89	91	75-125	2.88	20
Thallium	47.0	47.7	50	94	95	75-125	1.52	20
Vanadium	46.9	47.1	50	94	94	75-125	0.364	20
Zinc	476	482	500	95	96	75-125	1.14	20
Surrogate Recovery								
Terbium	507	514	500	101	103	70-130	1.48	20



Quality Control Report

Client: Langan	WorkOrder: 2006696
Date Prepared: 06/15/2020	BatchID: 200040
Date Analyzed: 06/16/2020	Extraction Method: SW3050B
Instrument: ICP-MS5	Analytical Method: SW6020
Matrix: Soil	Unit: mg/kg
Project: 750664801; 1666 Seventh Street	Sample ID: MB/LCS/LCSD-200040 2006696-002AMS/MSD

QC Summary Report for Metals

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Antimony	ND	0.160	0.500	-	-	-
Arsenic	ND	0.150	0.500	-	-	-
Barium	ND	0.570	5.00	-	-	-
Beryllium	ND	0.0730	0.500	-	-	-
Cadmium	0.0690,J	0.0610	0.500	-	-	-
Chromium	ND	0.130	0.500	-	-	-
Cobalt	ND	0.0520	0.500	-	-	-
Copper	ND	0.180	0.500	-	-	-
Lead	ND	0.140	0.500	-	-	-
Mercury	ND	0.0320	0.0500	-	-	-
Molybdenum	ND	0.160	0.500	-	-	-
Nickel	ND	0.170	0.500	-	-	-
Selenium	ND	0.150	0.500	-	-	-
Silver	ND	0.120	0.500	-	-	-
Thallium	ND	0.0670	0.500	-	-	-
Vanadium	ND	0.130	0.500	-	-	-
Zinc	ND	3.00	5.00	-	-	-
Surrogate Recovery						
Terbium	517			500	103	70-130



Quality Control Report

Client:	Langan	WorkOrder:	2006696
Date Prepared:	06/15/2020	BatchID:	200040
Date Analyzed:	06/16/2020	Extraction Method:	SW3050B
Instrument:	ICP-MS5	Analytical Method:	SW6020
Matrix:	Soil	Unit:	mg/kg
Project:	750664801; 1666 Seventh Street	Sample ID:	MB/LCS/LCSD-200040 2006696-002AMS/MSD

QC Summary Report for Metals

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Antimony	52.4	51.2	50	105	102	75-125	2.39	20
Arsenic	49.1	48.7	50	98	97	75-125	0.793	20
Barium	481	475	500	96	95	75-125	1.24	20
Beryllium	49.0	48.2	50	98	96	75-125	1.64	20
Cadmium	47.9	48.4	50	96	97	75-125	0.945	20
Chromium	48.0	48.0	50	96	96	75-125	0.115	20
Cobalt	49.0	48.2	50	98	96	75-125	1.55	20
Copper	48.8	48.7	50	98	97	75-125	0.0308	20
Lead	48.5	48.3	50	97	97	75-125	0.504	20
Mercury	1.18	1.24	1.25	94	99	75-125	4.63	20
Molybdenum	51.6	50.6	50	103	101	75-125	1.98	20
Nickel	48.9	48.6	50	98	97	75-125	0.644	20
Selenium	48.5	48.2	50	97	96	75-125	0.733	20
Silver	48.9	48.0	50	98	96	75-125	1.84	20
Thallium	48.9	48.2	50	98	96	75-125	1.48	20
Vanadium	48.1	48.2	50	96	96	75-125	0.264	20
Zinc	489	488	500	98	98	75-125	0.103	20

Surrogate Recovery

Terbium	524	512	500	105	102	70-130	2.44	20
---------	-----	-----	-----	-----	-----	--------	------	----

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Antimony	1	52.2	52.9	50	ND	104	106	75-125	1.24	20
Arsenic	1	51.7	52.2	50	1.780	100	101	75-125	0.809	20
Barium	1	550	561	500	61.72	98	100	75-125	2.11	20
Beryllium	1	49.1	49.6	50	ND	98	99	75-125	0.967	20
Cadmium	1	48.6	49.4	50	ND	97	99	75-125	1.68	20
Chromium	1	81.2	82.2	50	31.42	100	102	75-125	1.22	20
Cobalt	1	52.9	53.7	50	3.368	99	101	75-125	1.50	20
Copper	1	56.0	56.2	50	5.809	100	101	75-125	0.384	20
Lead	1	52.8	53.1	50	2.200	101	102	75-125	0.676	20
Mercury	1	1.23	1.21	1.25	ND	98	97	75-125	0.984	20
Molybdenum	1	51.7	51.8	50	ND	103	104	75-125	0.164	20
Nickel	1	71.5	71.4	50	19.30	104	104	75-125	0.255	20
Selenium	1	49.6	49.8	50	ND	99	100	75-125	0.423	20
Silver	1	50.0	50.6	50	ND	100	101	75-125	1.21	20

(Cont.)



Quality Control Report

Client: Langan	WorkOrder: 2006696
Date Prepared: 06/15/2020	BatchID: 200040
Date Analyzed: 06/16/2020	Extraction Method: SW3050B
Instrument: ICP-MS5	Analytical Method: SW6020
Matrix: Soil	Unit: mg/kg
Project: 750664801; 1666 Seventh Street	Sample ID: MB/LCS/LCSD-200040 2006696-002AMS/MSD

QC Summary Report for Metals

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Thallium	1	50.5	50.8	50	ND	101	102	75-125	0.523	20
Vanadium	1	77.2	77.4	50	23.77	107	107	75-125	0.177	20
Zinc	1	518	522	500	27.39	98	99	75-125	0.868	20
Surrogate Recovery										
Terbium	1	527	534	500		105	107	70-130	1.24	20

Analyte	DLT Result	DLTRef Val	%D	%D Limit
Antimony	ND<2.50	ND	-	-
Arsenic	ND<2.50	1.780	-	-
Barium	62.5	61.72	1.26	-
Beryllium	ND<2.50	ND	-	-
Cadmium	ND<2.50	ND	-	-
Chromium	33.0	31.42	5.03	20
Cobalt	3.50	3.368	3.92	-
Copper	5.95	5.809	2.43	-
Lead	ND<2.50	2.200	-	-
Mercury	ND<0.250	ND	-	-
Molybdenum	ND<2.50	ND	-	-
Nickel	19.5	19.30	1.04	20
Selenium	ND<2.50	ND	-	-
Silver	ND<2.50	ND	-	-
Thallium	ND<2.50	ND	-	-
Vanadium	25.2	23.77	6.02	20
Zinc	26.2	27.39	4.34	-

%D Control Limit applied to analytes with concentrations greater than 25 times the reporting limits.



Quality Control Report

Client: Langan	WorkOrder: 2006696
Date Prepared: 06/12/2020	BatchID: 200011
Date Analyzed: 06/12/2020 - 06/16/2020	Extraction Method: SW5035
Instrument: GC19	Analytical Method: SW8021B/8015Bm
Matrix: Soil	Unit: mg/Kg
Project: 750664801; 1666 Seventh Street	Sample ID: MB/LCS/LCSD-200011

QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
TPH(g) (C6-C12)	ND	0.700	1.00	-	-	-
MTBE	ND	0.00400	0.0500	-	-	-
Benzene	ND	0.00300	0.00500	-	-	-
Toluene	ND	0.00200	0.00500	-	-	-
Ethylbenzene	ND	0.00220	0.00500	-	-	-
m,p-Xylene	ND	0.00300	0.0100	-	-	-
o-Xylene	ND	0.00100	0.00500	-	-	-

Surrogate Recovery

2-Fluorotoluene	0.0964		0.1	96	75-134
-----------------	--------	--	-----	----	--------

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
TPH(btex)	0.579	0.582	0.60	97	97	82-118	0.500	20
MTBE	0.0783	0.0816	0.10	78	82	61-119	4.14	20
Benzene	0.0995	0.100	0.10	99	100	77-128	0.534	20
Toluene	0.101	0.101	0.10	101	101	74-132	0.0348	20
Ethylbenzene	0.103	0.102	0.10	103	102	84-127	0.837	20
m,p-Xylene	0.214	0.212	0.20	107	106	80-120	0.906	20
o-Xylene	0.104	0.104	0.10	104	104	80-120	0.506	20

Surrogate Recovery

2-Fluorotoluene	0.0970	0.0960	0.10	97	96	75-134	0.997	20
-----------------	--------	--------	------	----	----	--------	-------	----



Quality Control Report

Client: Langan
Date Prepared: 06/12/2020
Date Analyzed: 06/15/2020 - 06/16/2020
Instrument: GC31A, GC6A
Matrix: Soil
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006696
BatchID: 200031
Extraction Method: SW3550B
Analytical Method: SW8015B
Unit: mg/Kg
Sample ID: MB/LCS/LCSD-200031

QC Report for SW8015B w/out SG Clean-Up

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
TPH-Diesel (C10-C23)	ND	0.830	1.00	-	-	-
TPH-Motor Oil (C18-C36)	ND	3.80	5.00	-	-	-
Surrogate Recovery						
C9	22.1			25	88	70-130

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	41.6	41.4	40	104	104	70-130	0.285	20
Surrogate Recovery								
C9	22.0	22.2	25	88	89	70-130	1.06	20



1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 2006696

ClientCode: TWRK

- WaterTrax
 WriteOn
 EDF
 Excel
 EQulS
 Email
 HardCopy
 ThirdParty
 J-flag
 Detection Summary
 Dry-Weight

Report to:

Adam Brown
Langan
501 14th Street, 3rd Floor
Oakland, CA 94612
(415) 955-9040 FAX: (415) 955-9041

Email: abrown@langan.com
cc/3rd Party: bhayward@langan.com; Mfromstein@lang
PO:
Project: 750664801; 1666 Seventh Street

Bill to:

Accounts Payable
Langan
135 Main St, Suite 1500
San Francisco, CA 94105
Langan_InvoiceCapture@concur.solutio

Requested TAT: 5 days;

Date Received: 06/12/2020

Date Logged: 06/12/2020

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
2006696-001	EB-6-1.5	Soil	6/10/2020 10:29	<input type="checkbox"/>	A	A	A	A	A	A	A	A	A	A		A	
2006696-002	EB-6-3.0	Soil	6/10/2020 10:33	<input type="checkbox"/>	A	A	A	A	A	A	A	A	A	A		A	
2006696-003	EB-6-5.0	Soil	6/10/2020 10:36	<input type="checkbox"/>	A	A	A	A	A	A	A	A	A	A		A	
2006696-004	EB-1-1.5	Soil	6/10/2020 13:45	<input type="checkbox"/>	A	A	A	A	A	A	A	A	A	A		A	
2006696-005	EB-1-3.0	Soil	6/10/2020 13:47	<input type="checkbox"/>	A	A	A	A	A	A	A	A	A	A		A	
2006696-006	EB-1-5.0	Soil	6/10/2020 13:53	<input checked="" type="checkbox"/>											A	A	

Test Legend:

1	8081pcB_ESL_LL_S	2	8141_S	3	8151_S	4	8260B_Scan-SIM_S
5	8270_SCSM_GPC_S	6	ASBEST400 (435 CARB)_S	7	CAM17MS_TTLC_S	8	G-MBTX_S
9	PRDisposal Fee	10	PRHOLD	11	TPH(DMO)_S	12	

Project Manager: Angela Rydelius

Prepared by: Agustina Venegas

The following SamplIDs: 001A, 002A, 003A, 004A, 005A contain testgroup Multi Range_S.

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days). Hazardous samples will be returned to client or disposed of at client expense.



WORK ORDER SUMMARY

Client Name: LANGAN
Client Contact: Adam Brown
Contact's Email: abrown@langan.com

Project: 750664801; 1666 Seventh Street

Work Order: 2006696
QC Level: LEVEL 2
Date Logged: 6/12/2020

Comments:

WaterTrax WriteOn EDF Excel EQUIS Email HardCopy ThirdParty J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut			
2006696-001A	EB-6-1.5	Soil	Multi-Range TPH	1	Acetate Liner	<input type="checkbox"/>	6/10/2020 10:29	5 days		<input type="checkbox"/>				
			SW6020 (CAM 17)			<input type="checkbox"/>						5 days	<input type="checkbox"/>	
			Asbestos, 435 CARB 400 Forensics			<input type="checkbox"/>						5 days	<input type="checkbox"/>	SubOut
			SW8270C (Low Level SVOCs) with GPC Cleanup			<input type="checkbox"/>						5 days	<input type="checkbox"/>	
			SW8260B (VOCs, Scan- SIM)			<input type="checkbox"/>						5 days	<input type="checkbox"/>	
			SW8151A (Chlorinated Herbicides)			<input type="checkbox"/>						5 days	<input type="checkbox"/>	
			SW8270C (ON/P Pesticides)			<input type="checkbox"/>						5 days	<input type="checkbox"/>	
2006696-002A	EB-6-3.0	Soil	Multi-Range TPH	1	Acetate Liner	<input type="checkbox"/>	6/10/2020 10:33	5 days		<input type="checkbox"/>				
			SW6020 (CAM 17)			<input type="checkbox"/>						5 days	<input type="checkbox"/>	
			Asbestos, 435 CARB 400 Forensics			<input type="checkbox"/>						5 days	<input type="checkbox"/>	SubOut
			SW8270C (Low Level SVOCs) with GPC Cleanup			<input type="checkbox"/>						5 days	<input type="checkbox"/>	
			SW8260B (VOCs, Scan- SIM)			<input type="checkbox"/>						5 days	<input type="checkbox"/>	
			SW8151A (Chlorinated Herbicides)			<input type="checkbox"/>						5 days	<input type="checkbox"/>	
			SW8270C (ON/P Pesticides)			<input type="checkbox"/>						5 days	<input type="checkbox"/>	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).
- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



WORK ORDER SUMMARY

Client Name: LANGAN
Client Contact: Adam Brown
Contact's Email: abrown@langan.com

Project: 750664801; 1666 Seventh Street

Comments:

Work Order: 2006696
QC Level: LEVEL 2
Date Logged: 6/12/2020

WaterTrax WriteOn EDF Excel EQUIS Email HardCopy ThirdParty J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
2006696-002A	EB-6-3.0	Soil	SW8081A/8082 (OC Pesticides+PCBs) ESLs	1	Acetate Liner	<input type="checkbox"/>	6/10/2020 10:33	5 days		<input type="checkbox"/>	
2006696-003A	EB-6-5.0	Soil	Multi-Range TPH	1	Acetate Liner	<input type="checkbox"/>	6/10/2020 10:36	5 days		<input type="checkbox"/>	
			SW6020 (CAM 17)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			Asbestos, 435 CARB 400 Forensics			<input type="checkbox"/>		5 days		<input type="checkbox"/>	SubOut
			SW8270C (Low Level SVOCs) with GPC Cleanup			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8260B (VOCs, Scan- SIM)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8151A (Chlorinated Herbicides)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8270C (ON/P Pesticides)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8081A/8082 (OC Pesticides+PCBs) ESLs			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
2006696-004A	EB-1-1.5	Soil	Multi-Range TPH	1	Acetate Liner	<input type="checkbox"/>	6/10/2020 13:45	5 days		<input type="checkbox"/>	
			SW6020 (CAM 17)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			Asbestos, 435 CARB 400 Forensics			<input type="checkbox"/>		5 days		<input type="checkbox"/>	SubOut
			SW8270C (Low Level SVOCs) with GPC Cleanup			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8260B (VOCs, Scan- SIM)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8151A (Chlorinated Herbicides)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



WORK ORDER SUMMARY

Client Name: LANGAN
Client Contact: Adam Brown
Contact's Email: abrown@langan.com

Project: 750664801; 1666 Seventh Street

Comments:

Work Order: 2006696
QC Level: LEVEL 2
Date Logged: 6/12/2020

WaterTrax WriteOn EDF Excel EQUIS Email HardCopy ThirdParty J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
2006696-004A	EB-1-1.5	Soil	SW8270C (ON/P Pesticides)	1	Acetate Liner	<input type="checkbox"/>	6/10/2020 13:45	5 days		<input type="checkbox"/>	
			SW8081A/8082 (OC Pesticides+PCBs) ESLs			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
2006696-005A	EB-1-3.0	Soil	Multi-Range TPH	1	Acetate Liner	<input type="checkbox"/>	6/10/2020 13:47	5 days		<input type="checkbox"/>	
			SW6020 (CAM 17)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			Asbestos, 435 CARB 400 Forensics			<input type="checkbox"/>		5 days		<input type="checkbox"/>	SubOut
			SW8270C (Low Level SVOCs) with GPC Cleanup			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8260B (VOCs, Scan- SIM)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8151A (Chlorinated Herbicides)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8270C (ON/P Pesticides)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
SW8081A/8082 (OC Pesticides+PCBs) ESLs			<input type="checkbox"/>		5 days		<input type="checkbox"/>				

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).
- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

* cc: ~~me~~ bhayward@langan.com
 mfromstein@langan.com*

2006694
 14528

LANGAN

CHAIN OF CUSTODY RECORD

- 135 Main Street, Suite 1500, San Francisco, CA 94105
- 501 14th Street, Third Floor, Oakland, CA 94612
- 3320 Data Drive, Suite 350, Rancho Cordova, CA 95670-7982
- 1 Almaden Boulevard, Suite 590, San Jose, CA 95113

Site Name: 1666 Seventh Street

Job Number: 750664801

Project Manager/Contact: Adam Brown, abrown@langan.com

Samplers: ~~MF~~ BWH + MF

Recorder (Signature Required): _____

Turnaround
Time
standard

Field Sample Identification No.	Date	Time	Lab Sample No.	Matrix				No. Containers & Preservative				Analysis Requested										Silica gel clean-up	Hold	Remarks			
				Soil	Water	Air	Other	HCL	H ₂ SO ₄	HNO ₃	Ice	Full TPH (9, d, mo)	VOCs	SVOCs	OCs + PCBs	Pesticides + Herbicides	CAM17 (6026)	CARB 435 as best as									
EB-6-1.5	6/10/2020	1029		X									X	X	X	X	X	X	X							NOTE:	
EB-6-3.0	↓	1033		X									X	X	X	X	X	X	X							Pesticides + herbicides is	
EB-6-5.0		1036		X									X	X	X	X	X	X	X							EPA Methods 8141A/8151A	
EB-1-1.5		1345		X									X	X	X	X	X	X	X								
EB-1-3.0		1347		X									X	X	X	X	X	X	X								
EB-1-5.0		1353		X									X									X					

Relinquished by: (Signature) <u>BWH</u>	Date: <u>6/11/2020</u>	Time: <u>7:07</u>	Received by: (Signature) <u>LAP</u>	Date: <u>6/11/20</u>	Time: <u>1050</u>
Relinquished by: (Signature) <u>LAP</u>	Date: <u>6/12/20</u>	Time: <u>1330</u>	Received by: (Signature) <u>[Signature]</u>	Date: <u>6/12/2020</u>	Time: <u>1330</u>
Relinquished by: (Signature)	Date:	Time:	Received by Lab: (Signature)	Date:	Time:

Sent to Laboratory (Name): _____

Laboratory Comments/Notes: _____

Method of Shipment: Lab courier Fed Ex Airborne UPS
 Hand Carried Private Courier (Co. Name) _____

*ESLs Added 6/12/2020



Sample Receipt Checklist

Client Name: **Langan**
 Project: **750664801; 1666 Seventh Street**
 WorkOrder No: **2006696** Matrix: Soil
 Carrier: Lorenzo Perez (MAI Courier)

Date and Time Received: **6/12/2020 13:30**
 Date Logged: **6/12/2020**
 Received by: Agustina Venegas
 Logged by: Agustina Venegas

Chain of Custody (COC) Information

Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample IDs noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Date and Time of collection noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sampler's name noted on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
COC agrees with Quote?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper containers/bottles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Samples Received on Ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

(Ice Type: WET ICE)

Sample/Temp Blank temperature		Temp: 2.7°C	NA <input type="checkbox"/>
Water - VOA vials have zero headspace / no bubbles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Sample labels checked for correct preservation?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
pH acceptable upon receipt (Metal: <2; Nitrate 353.2/4500NO3: <2; 522: <4; 218.7: >8)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

UCMR Samples:

pH tested and acceptable upon receipt (200.8: ≤2; 525.3: ≤4; 530: ≤7; 541: <3; 544: <6.5 & 7.5)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Free Chlorine tested and acceptable upon receipt (<0.1mg/L)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

Comments:

Bulk Asbestos Material Analysis

(Air Resources Board Method 435, June 6, 1991)

McC Campbell Analytical, Inc.
Account Payable
1534 Willow Pass Rd

Pittsburg, CA 94565

Client ID: A31409
Report Number: N013092
Date Received: 06/17/20
Date Analyzed: 06/23/20
Date Printed: 06/23/20

Job ID/Site: 2006696 - 1666 Seventh St.

SGSFL Job ID: A31409

PLM Report Number: N/A

Total Samples Submitted: 5
Total Samples Analyzed: 5

Sample Preparation and Analysis:

Samples were analyzed by the Air Resources Board's Method 435, Determination of Asbestos Content of Serpentine Aggregate. Samples were ground to 200 particle size in the laboratory. Approximately 1 pint was retained for analysis. Samples were prepared for observation according to the guidelines of Exception I and Exception II as defined by the 435 Method. Samples which contained less than 10% asbestos were prepared for observation according to the point count technique as defined by the 435 Method. This analysis was performed with a standard cross-hair reticle.

Sample ID	Lab Number	Layer Description
-----------	------------	-------------------

EB-6-1.5	12314441	Brown Soil
-----------------	----------	-------------------

Visual Estimation Results:

Matrix percentage of entire 100

Visual estimation percentage: None Detected

Asbestos type(s) detected: None Detected

Comment: This result meets the requirements of Exception I as defined by the 435 Method.

EB-6-3.0	12314442	Brown Soil
-----------------	----------	-------------------

Visual Estimation Results:

Matrix percentage of entire 100

Visual estimation percentage: None Detected

Asbestos type(s) detected: None Detected

Comment: This result meets the requirements of Exception I as defined by the 435 Method.

EB-6-5.0	12314443	Brown Soil
-----------------	----------	-------------------

Visual Estimation Results:

Matrix percentage of entire 100

Visual estimation percentage: None Detected

Asbestos type(s) detected: None Detected

Comment: This result meets the requirements of Exception I as defined by the 435 Method.

EB-1-1.5	12314444	Brown Soil
-----------------	----------	-------------------

Visual Estimation Results:

Matrix percentage of entire 100

Visual estimation percentage: None Detected

Asbestos type(s) detected: None Detected

Comment: This result meets the requirements of Exception I as defined by the 435 Method.

Bulk Asbestos Material Analysis

(Air Resources Board Method 435, June 6, 1991)

McC Campbell Analytical, Inc.
Account Payable
1534 Willow Pass Rd

Pittsburg, CA 94565

Client ID: A31409
Report Number: N013092
Date Received: 06/17/20
Date Analyzed: 06/23/20
Date Printed: 06/23/20

Job ID/Site: 2006696 - 1666 Seventh St.

SGSFL Job ID: A31409

PLM Report Number: N/A

Total Samples Submitted: 5
Total Samples Analyzed: 5

Sample Preparation and Analysis:

Samples were analyzed by the Air Resources Board's Method 435, Determination of Asbestos Content of Serpentine Aggregate. Samples were ground to 200 particle size in the laboratory. Approximately 1 pint was retained for analysis. Samples were prepared for observation according to the guidelines of Exception I and Exception II as defined by the 435 Method. Samples which contained less than 10% asbestos were prepared for observation according to the point count technique as defined by the 435 Method. This analysis was performed with a standard cross-hair reticle.

Sample ID	Lab Number	Layer Description
EB-1-3.0	12314445	Brown Soil

Visual Estimation Results:

Matrix percentage of entire 100

Visual estimation percentage: None Detected

Asbestos type(s) detected: None Detected

Comment: This result meets the requirements of Exception I as defined by the 435 Method.



Tad Thrower, Laboratory Supervisor, Hayward Laboratory

Note: Limit of Quantification (LOQ) = 0.25%. Trace denotes the presence of asbestos below the LOQ. ND = None Detected.

Analytical results and reports are generated by SGS Forensic Laboratories (SGSFL) at the request of and for the exclusive use of the person or entity (client) named on such report. Results, reports or copies of same will not be released by SGSFL to any third party without prior written request from client. This report applies only to the sample(s) tested. Supporting laboratory documentation is available upon request. This report must not be reproduced except in full, unless approved by SGSFL. The client is solely responsible for the use and interpretation of test results and reports requested from SGSFL. SGSFL is not able to assess the degree of hazard resulting from materials analyzed. SGS Forensic Laboratories reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified. All samples were received in acceptable condition unless otherwise noted.



McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 2006697

Report Created for: Langan

501 14th Street, 3rd Floor
Oakland, CA 94612

Project Contact: Adam Brown

Project P.O.:

Project: 750664801; 1666 Seventh Street

Project Received: 06/12/2020

Analytical Report reviewed & approved for release on 06/23/2020 by:

Yen Cao
Project Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.





Glossary of Terms & Qualifier Definitions

Client: Langan
Project: 750664801; 1666 Seventh Street
WorkOrder: 2006697

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
CPT	Consumer Product Testing not NELAP Accredited
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
LQL	Lowest Quantitation Level
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
TZA	TimeZone Net Adjustment for sample collected outside of MAI's UTC.
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)



Glossary of Terms & Qualifier Definitions

Client: Langan
Project: 750664801; 1666 Seventh Street
WorkOrder: 2006697

Analytical Qualifiers

B	Analyte detected in the associated Method Blank and in the sample.
J	Result is less than the RL/ML but greater than the MDL. The reported concentration is an estimated value.
P	Agreement between quantitative confirmation results exceed method recommended limits.
S	Surrogate recovery outside accepted recovery limits.
a1	Sample diluted due to matrix interference.
a3	Sample diluted due to high organic content.
c1	Surrogate recovery outside of the control limits due to the dilution of the sample.
c2	Surrogate recovery outside of the control limits due to matrix interference.
e2	Diesel range compounds are significant; no recognizable pattern.
e7	Oil range compounds are significant.
e8	Pattern resembles kerosene/kerosene range/jet fuel range.

Quality Control Qualifiers

F1	MS/MSD recovery and/or RPD is out of acceptance criteria; LCS validates the prep batch.
----	---



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640Am/3630Cm
Analytical Method: SW8081A/8082
Unit: mg/kg

Organochlorine Pesticides + PCBs

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-2-1.5	2006697-001A	Soil	06/11/2020 08:47	GC20 06172044.D	200152

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
Aldrin	ND		0.00010	1	06/17/2020 19:58
a-BHC	ND		0.00010	1	06/17/2020 19:58
b-BHC	ND		0.00030	1	06/17/2020 19:58
d-BHC	ND		0.00020	1	06/17/2020 19:58
g-BHC	ND		0.00010	1	06/17/2020 19:58
Chlordane (Technical)	ND		0.0025	1	06/17/2020 19:58
a-Chlordane	ND		0.00010	1	06/17/2020 19:58
g-Chlordane	ND		0.00010	1	06/17/2020 19:58
p,p-DDD	ND		0.00010	1	06/17/2020 19:58
p,p-DDE	ND		0.00010	1	06/17/2020 19:58
p,p-DDT	0.00033	P	0.00010	1	06/17/2020 19:58
Dieldrin	ND		0.00010	1	06/17/2020 19:58
Endosulfan I	ND		0.00010	1	06/17/2020 19:58
Endosulfan II	ND		0.00010	1	06/17/2020 19:58
Endosulfan sulfate	ND		0.00010	1	06/17/2020 19:58
Endrin	ND		0.00010	1	06/17/2020 19:58
Endrin aldehyde	ND		0.00010	1	06/17/2020 19:58
Endrin ketone	ND		0.00010	1	06/17/2020 19:58
Heptachlor	ND		0.00010	1	06/17/2020 19:58
Heptachlor epoxide	ND		0.00010	1	06/17/2020 19:58
Hexachlorobenzene	ND		0.0010	1	06/17/2020 19:58
Hexachlorocyclopentadiene	ND		0.0020	1	06/17/2020 19:58
Methoxychlor	ND		0.00020	1	06/17/2020 19:58
Toxaphene	ND		0.0050	1	06/17/2020 19:58
Aroclor1016	ND		0.0050	1	06/17/2020 19:58
Aroclor1221	ND		0.0050	1	06/17/2020 19:58
Aroclor1232	ND		0.0050	1	06/17/2020 19:58
Aroclor1242	ND		0.0050	1	06/17/2020 19:58
Aroclor1248	ND		0.0050	1	06/17/2020 19:58
Aroclor1254	ND		0.0050	1	06/17/2020 19:58
Aroclor1260	ND		0.0050	1	06/17/2020 19:58
PCBs, total	ND		0.0050	1	06/17/2020 19:58

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	114	20-145	06/17/2020 19:58

Analyst(s): CK

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640Am/3630Cm
Analytical Method: SW8081A/8082
Unit: mg/kg

Organochlorine Pesticides + PCBs

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-2-3.0	2006697-002A	Soil	06/11/2020 08:50	GC23 06162065.d	200152

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.00010	1	06/17/2020 03:31
a-BHC	ND	0.00010	1	06/17/2020 03:31
b-BHC	ND	0.00030	1	06/17/2020 03:31
d-BHC	ND	0.00020	1	06/17/2020 03:31
g-BHC	ND	0.00010	1	06/17/2020 03:31
Chlordane (Technical)	ND	0.0025	1	06/17/2020 03:31
a-Chlordane	ND	0.00010	1	06/17/2020 03:31
g-Chlordane	ND	0.00010	1	06/17/2020 03:31
p,p-DDD	ND	0.00010	1	06/17/2020 03:31
p,p-DDE	ND	0.00010	1	06/17/2020 03:31
p,p-DDT	ND	0.00010	1	06/17/2020 03:31
Dieldrin	ND	0.00010	1	06/17/2020 03:31
Endosulfan I	ND	0.00010	1	06/17/2020 03:31
Endosulfan II	ND	0.00010	1	06/17/2020 03:31
Endosulfan sulfate	ND	0.00010	1	06/17/2020 03:31
Endrin	ND	0.00010	1	06/17/2020 03:31
Endrin aldehyde	ND	0.00010	1	06/17/2020 03:31
Endrin ketone	ND	0.00010	1	06/17/2020 03:31
Heptachlor	ND	0.00010	1	06/17/2020 03:31
Heptachlor epoxide	ND	0.00010	1	06/17/2020 03:31
Hexachlorobenzene	ND	0.0010	1	06/17/2020 03:31
Hexachlorocyclopentadiene	ND	0.0020	1	06/17/2020 03:31
Methoxychlor	ND	0.00020	1	06/17/2020 03:31
Toxaphene	ND	0.0050	1	06/17/2020 03:31
Aroclor1016	ND	0.0050	1	06/17/2020 03:31
Aroclor1221	ND	0.0050	1	06/17/2020 03:31
Aroclor1232	ND	0.0050	1	06/17/2020 03:31
Aroclor1242	ND	0.0050	1	06/17/2020 03:31
Aroclor1248	ND	0.0050	1	06/17/2020 03:31
Aroclor1254	ND	0.0050	1	06/17/2020 03:31
Aroclor1260	ND	0.0050	1	06/17/2020 03:31
PCBs, total	ND	0.0050	1	06/17/2020 03:31

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	120	20-145	06/17/2020 03:31

Analyst(s): LT

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640Am/3630Cm
Analytical Method: SW8081A/8082
Unit: mg/kg

Organochlorine Pesticides + PCBs

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-2-7.0	2006697-004A	Soil	06/11/2020 08:56	GC23 06162066.d	200152

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.00010	1	06/17/2020 03:46
a-BHC	ND	0.00010	1	06/17/2020 03:46
b-BHC	ND	0.00030	1	06/17/2020 03:46
d-BHC	ND	0.00020	1	06/17/2020 03:46
g-BHC	ND	0.00010	1	06/17/2020 03:46
Chlordane (Technical)	ND	0.0025	1	06/17/2020 03:46
a-Chlordane	ND	0.00010	1	06/17/2020 03:46
g-Chlordane	ND	0.00010	1	06/17/2020 03:46
p,p-DDD	ND	0.00010	1	06/17/2020 03:46
p,p-DDE	ND	0.00010	1	06/17/2020 03:46
p,p-DDT	ND	0.00010	1	06/17/2020 03:46
Dieldrin	ND	0.00010	1	06/17/2020 03:46
Endosulfan I	ND	0.00010	1	06/17/2020 03:46
Endosulfan II	ND	0.00010	1	06/17/2020 03:46
Endosulfan sulfate	ND	0.00010	1	06/17/2020 03:46
Endrin	ND	0.00010	1	06/17/2020 03:46
Endrin aldehyde	ND	0.00010	1	06/17/2020 03:46
Endrin ketone	ND	0.00010	1	06/17/2020 03:46
Heptachlor	ND	0.00010	1	06/17/2020 03:46
Heptachlor epoxide	ND	0.00010	1	06/17/2020 03:46
Hexachlorobenzene	ND	0.0010	1	06/17/2020 03:46
Hexachlorocyclopentadiene	ND	0.0020	1	06/17/2020 03:46
Methoxychlor	ND	0.00020	1	06/17/2020 03:46
Toxaphene	ND	0.0050	1	06/17/2020 03:46
Aroclor1016	ND	0.0050	1	06/17/2020 03:46
Aroclor1221	ND	0.0050	1	06/17/2020 03:46
Aroclor1232	ND	0.0050	1	06/17/2020 03:46
Aroclor1242	ND	0.0050	1	06/17/2020 03:46
Aroclor1248	ND	0.0050	1	06/17/2020 03:46
Aroclor1254	ND	0.0050	1	06/17/2020 03:46
Aroclor1260	ND	0.0050	1	06/17/2020 03:46
PCBs, total	ND	0.0050	1	06/17/2020 03:46

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	117	20-145	06/17/2020 03:46

Analyst(s): LT

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640Am/3630Cm
Analytical Method: SW8081A/8082
Unit: mg/kg

Organochlorine Pesticides + PCBs

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-3-1.5	2006697-005A	Soil	06/11/2020 09:24	GC20 06172045.D	200152

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.00010	1	06/17/2020 20:14
a-BHC	ND	0.00010	1	06/17/2020 20:14
b-BHC	ND	0.00030	1	06/17/2020 20:14
d-BHC	ND	0.00020	1	06/17/2020 20:14
g-BHC	ND	0.00010	1	06/17/2020 20:14
Chlordane (Technical)	0.013	0.0025	1	06/17/2020 20:14
a-Chlordane	0.0014	0.00010	1	06/17/2020 20:14
g-Chlordane	0.0018	0.00010	1	06/17/2020 20:14
p,p-DDD	0.0020	0.00010	1	06/17/2020 20:14
p,p-DDE	0.049	0.00020	2	06/18/2020 13:10
p,p-DDT	0.032	0.00010	1	06/17/2020 20:14
Dieldrin	ND	0.00010	1	06/17/2020 20:14
Endosulfan I	ND	0.00010	1	06/17/2020 20:14
Endosulfan II	ND	0.00010	1	06/17/2020 20:14
Endosulfan sulfate	ND	0.00010	1	06/17/2020 20:14
Endrin	ND	0.00010	1	06/17/2020 20:14
Endrin aldehyde	ND	0.00010	1	06/17/2020 20:14
Endrin ketone	ND	0.00010	1	06/17/2020 20:14
Heptachlor	ND	0.00010	1	06/17/2020 20:14
Heptachlor epoxide	ND	0.00010	1	06/17/2020 20:14
Hexachlorobenzene	ND	0.0010	1	06/17/2020 20:14
Hexachlorocyclopentadiene	ND	0.0020	1	06/17/2020 20:14
Methoxychlor	ND	0.00020	1	06/17/2020 20:14
Toxaphene	ND	0.0050	1	06/17/2020 20:14
Aroclor1016	ND	0.0050	1	06/17/2020 20:14
Aroclor1221	ND	0.0050	1	06/17/2020 20:14
Aroclor1232	ND	0.0050	1	06/17/2020 20:14
Aroclor1242	ND	0.0050	1	06/17/2020 20:14
Aroclor1248	ND	0.0050	1	06/17/2020 20:14
Aroclor1254	ND	0.0050	1	06/17/2020 20:14
Aroclor1260	ND	0.0050	1	06/17/2020 20:14
PCBs, total	ND	0.0050	1	06/17/2020 20:14

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	100	20-145	06/17/2020 20:14

Analyst(s): CK

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640Am/3630Cm
Analytical Method: SW8081A/8082
Unit: mg/kg

Organochlorine Pesticides + PCBs

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-3-3.0	2006697-007A	Soil	06/11/2020 09:26	GC20 06182017.D	200152

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.00010	1	06/18/2020 13:26
a-BHC	ND	0.00010	1	06/18/2020 13:26
b-BHC	ND	0.00030	1	06/18/2020 13:26
d-BHC	ND	0.00020	1	06/18/2020 13:26
g-BHC	ND	0.00010	1	06/18/2020 13:26
Chlordane (Technical)	ND	0.0025	1	06/18/2020 13:26
a-Chlordane	ND	0.00010	1	06/18/2020 13:26
g-Chlordane	ND	0.00010	1	06/18/2020 13:26
p,p-DDD	ND	0.00010	1	06/18/2020 13:26
p,p-DDE	0.00015	0.00010	1	06/18/2020 13:26
p,p-DDT	ND	0.00010	1	06/18/2020 13:26
Dieldrin	ND	0.00010	1	06/18/2020 13:26
Endosulfan I	ND	0.00010	1	06/18/2020 13:26
Endosulfan II	ND	0.00010	1	06/18/2020 13:26
Endosulfan sulfate	ND	0.00010	1	06/18/2020 13:26
Endrin	ND	0.00010	1	06/18/2020 13:26
Endrin aldehyde	ND	0.00010	1	06/18/2020 13:26
Endrin ketone	ND	0.00010	1	06/18/2020 13:26
Heptachlor	ND	0.00010	1	06/18/2020 13:26
Heptachlor epoxide	ND	0.00010	1	06/18/2020 13:26
Hexachlorobenzene	ND	0.0010	1	06/18/2020 13:26
Hexachlorocyclopentadiene	ND	0.0020	1	06/18/2020 13:26
Methoxychlor	ND	0.00020	1	06/18/2020 13:26
Toxaphene	ND	0.0050	1	06/18/2020 13:26
Aroclor1016	ND	0.0050	1	06/18/2020 13:26
Aroclor1221	ND	0.0050	1	06/18/2020 13:26
Aroclor1232	ND	0.0050	1	06/18/2020 13:26
Aroclor1242	ND	0.0050	1	06/18/2020 13:26
Aroclor1248	ND	0.0050	1	06/18/2020 13:26
Aroclor1254	ND	0.0050	1	06/18/2020 13:26
Aroclor1260	ND	0.0050	1	06/18/2020 13:26
PCBs, total	ND	0.0050	1	06/18/2020 13:26

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	93	20-145	06/18/2020 13:26

Analyst(s): CK

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640Am/3630Cm
Analytical Method: SW8081A/8082
Unit: mg/kg

Organochlorine Pesticides + PCBs

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-3-7.0	2006697-008A	Soil	06/11/2020 09:33	GC23 06162067.d	200152

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.00010	1	06/17/2020 04:02
a-BHC	ND	0.00010	1	06/17/2020 04:02
b-BHC	ND	0.00030	1	06/17/2020 04:02
d-BHC	ND	0.00020	1	06/17/2020 04:02
g-BHC	ND	0.00010	1	06/17/2020 04:02
Chlordane (Technical)	ND	0.0025	1	06/17/2020 04:02
a-Chlordane	ND	0.00010	1	06/17/2020 04:02
g-Chlordane	ND	0.00010	1	06/17/2020 04:02
p,p-DDD	ND	0.00010	1	06/17/2020 04:02
p,p-DDE	ND	0.00010	1	06/17/2020 04:02
p,p-DDT	ND	0.00010	1	06/17/2020 04:02
Dieldrin	ND	0.00010	1	06/17/2020 04:02
Endosulfan I	ND	0.00010	1	06/17/2020 04:02
Endosulfan II	ND	0.00010	1	06/17/2020 04:02
Endosulfan sulfate	ND	0.00010	1	06/17/2020 04:02
Endrin	ND	0.00010	1	06/17/2020 04:02
Endrin aldehyde	ND	0.00010	1	06/17/2020 04:02
Endrin ketone	ND	0.00010	1	06/17/2020 04:02
Heptachlor	ND	0.00010	1	06/17/2020 04:02
Heptachlor epoxide	ND	0.00010	1	06/17/2020 04:02
Hexachlorobenzene	ND	0.0010	1	06/17/2020 04:02
Hexachlorocyclopentadiene	ND	0.0020	1	06/17/2020 04:02
Methoxychlor	ND	0.00020	1	06/17/2020 04:02
Toxaphene	ND	0.0050	1	06/17/2020 04:02
Aroclor1016	ND	0.0050	1	06/17/2020 04:02
Aroclor1221	ND	0.0050	1	06/17/2020 04:02
Aroclor1232	ND	0.0050	1	06/17/2020 04:02
Aroclor1242	ND	0.0050	1	06/17/2020 04:02
Aroclor1248	ND	0.0050	1	06/17/2020 04:02
Aroclor1254	ND	0.0050	1	06/17/2020 04:02
Aroclor1260	ND	0.0050	1	06/17/2020 04:02
PCBs, total	ND	0.0050	1	06/17/2020 04:02

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	131	20-145	06/17/2020 04:02

Analyst(s): LT

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640Am/3630Cm
Analytical Method: SW8081A/8082
Unit: mg/kg

Organochlorine Pesticides + PCBs

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-4-1.5	2006697-009A	Soil	06/11/2020 09:45	GC20 06182018.D	200152

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
Aldrin	ND		0.00020	2	06/18/2020 13:41
a-BHC	ND		0.00020	2	06/18/2020 13:41
b-BHC	ND		0.00060	2	06/18/2020 13:41
d-BHC	ND		0.00040	2	06/18/2020 13:41
g-BHC	ND		0.00020	2	06/18/2020 13:41
Chlordane (Technical)	ND		0.0050	2	06/18/2020 13:41
a-Chlordane	0.00024	P	0.00020	2	06/18/2020 13:41
g-Chlordane	0.00022		0.00020	2	06/18/2020 13:41
p,p-DDD	0.00025		0.00020	2	06/18/2020 13:41
p,p-DDE	0.0024		0.00020	2	06/18/2020 13:41
p,p-DDT	0.0086		0.00020	2	06/18/2020 13:41
Dieldrin	0.00024		0.00020	2	06/18/2020 13:41
Endosulfan I	ND		0.00020	2	06/18/2020 13:41
Endosulfan II	ND		0.00020	2	06/18/2020 13:41
Endosulfan sulfate	ND		0.00020	2	06/18/2020 13:41
Endrin	ND		0.00020	2	06/18/2020 13:41
Endrin aldehyde	ND		0.00020	2	06/18/2020 13:41
Endrin ketone	ND		0.00020	2	06/18/2020 13:41
Heptachlor	ND		0.00020	2	06/18/2020 13:41
Heptachlor epoxide	ND		0.00020	2	06/18/2020 13:41
Hexachlorobenzene	ND		0.0020	2	06/18/2020 13:41
Hexachlorocyclopentadiene	ND		0.0040	2	06/18/2020 13:41
Methoxychlor	ND		0.00040	2	06/18/2020 13:41
Toxaphene	ND		0.010	2	06/18/2020 13:41
Aroclor1016	ND		0.010	2	06/18/2020 13:41
Aroclor1221	ND		0.010	2	06/18/2020 13:41
Aroclor1232	ND		0.010	2	06/18/2020 13:41
Aroclor1242	ND		0.010	2	06/18/2020 13:41
Aroclor1248	ND		0.010	2	06/18/2020 13:41
Aroclor1254	ND		0.010	2	06/18/2020 13:41
Aroclor1260	ND		0.010	2	06/18/2020 13:41
PCBs, total	ND		0.010	2	06/18/2020 13:41

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	114	20-145	06/18/2020 13:41

Analyst(s): CK

Analytical Comments: a1

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640Am/3630Cm
Analytical Method: SW8081A/8082
Unit: mg/kg

Organochlorine Pesticides + PCBs

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-4-3.0	2006697-010A	Soil	06/11/2020 09:50	GC20 06182019.D	200152

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
Aldrin	ND		0.0010	10	06/18/2020 13:57
a-BHC	ND		0.0010	10	06/18/2020 13:57
b-BHC	ND		0.0030	10	06/18/2020 13:57
d-BHC	ND		0.0020	10	06/18/2020 13:57
g-BHC	ND		0.0010	10	06/18/2020 13:57
Chlordane (Technical)	ND		0.025	10	06/18/2020 13:57
a-Chlordane	ND		0.0010	10	06/18/2020 13:57
g-Chlordane	ND		0.0010	10	06/18/2020 13:57
p,p-DDD	ND		0.0010	10	06/18/2020 13:57
p,p-DDE	ND		0.0010	10	06/18/2020 13:57
p,p-DDT	0.0020	P	0.0010	10	06/18/2020 13:57
Dieldrin	ND		0.0010	10	06/18/2020 13:57
Endosulfan I	ND		0.0010	10	06/18/2020 13:57
Endosulfan II	ND		0.0010	10	06/18/2020 13:57
Endosulfan sulfate	ND		0.0010	10	06/18/2020 13:57
Endrin	ND		0.0010	10	06/18/2020 13:57
Endrin aldehyde	ND		0.0010	10	06/18/2020 13:57
Endrin ketone	ND		0.0010	10	06/18/2020 13:57
Heptachlor	ND		0.0010	10	06/18/2020 13:57
Heptachlor epoxide	ND		0.0010	10	06/18/2020 13:57
Hexachlorobenzene	ND		0.010	10	06/18/2020 13:57
Hexachlorocyclopentadiene	ND		0.020	10	06/18/2020 13:57
Methoxychlor	ND		0.0020	10	06/18/2020 13:57
Toxaphene	ND		0.050	10	06/18/2020 13:57
Aroclor1016	ND		0.050	10	06/18/2020 13:57
Aroclor1221	ND		0.050	10	06/18/2020 13:57
Aroclor1232	ND		0.050	10	06/18/2020 13:57
Aroclor1242	ND		0.050	10	06/18/2020 13:57
Aroclor1248	ND		0.050	10	06/18/2020 13:57
Aroclor1254	ND		0.050	10	06/18/2020 13:57
Aroclor1260	ND		0.050	10	06/18/2020 13:57
PCBs, total	ND		0.050	10	06/18/2020 13:57

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	103	20-145	06/18/2020 13:57

Analyst(s): CK

Analytical Comments: a1

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640Am/3630Cm
Analytical Method: SW8081A/8082
Unit: mg/kg

Organochlorine Pesticides + PCBs

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-4-5.0	2006697-011A	Soil	06/11/2020 09:55	GC23 06162068.d	200152

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.00010	1	06/17/2020 04:17
a-BHC	ND	0.00010	1	06/17/2020 04:17
b-BHC	ND	0.00030	1	06/17/2020 04:17
d-BHC	ND	0.00020	1	06/17/2020 04:17
g-BHC	ND	0.00010	1	06/17/2020 04:17
Chlordane (Technical)	ND	0.0025	1	06/17/2020 04:17
a-Chlordane	ND	0.00010	1	06/17/2020 04:17
g-Chlordane	ND	0.00010	1	06/17/2020 04:17
p,p-DDD	ND	0.00010	1	06/17/2020 04:17
p,p-DDE	ND	0.00010	1	06/17/2020 04:17
p,p-DDT	ND	0.00010	1	06/17/2020 04:17
Dieldrin	ND	0.00010	1	06/17/2020 04:17
Endosulfan I	ND	0.00010	1	06/17/2020 04:17
Endosulfan II	ND	0.00010	1	06/17/2020 04:17
Endosulfan sulfate	ND	0.00010	1	06/17/2020 04:17
Endrin	ND	0.00010	1	06/17/2020 04:17
Endrin aldehyde	ND	0.00010	1	06/17/2020 04:17
Endrin ketone	ND	0.00010	1	06/17/2020 04:17
Heptachlor	ND	0.00010	1	06/17/2020 04:17
Heptachlor epoxide	ND	0.00010	1	06/17/2020 04:17
Hexachlorobenzene	ND	0.0010	1	06/17/2020 04:17
Hexachlorocyclopentadiene	ND	0.0020	1	06/17/2020 04:17
Methoxychlor	ND	0.00020	1	06/17/2020 04:17
Toxaphene	ND	0.0050	1	06/17/2020 04:17
Aroclor1016	ND	0.0050	1	06/17/2020 04:17
Aroclor1221	ND	0.0050	1	06/17/2020 04:17
Aroclor1232	ND	0.0050	1	06/17/2020 04:17
Aroclor1242	ND	0.0050	1	06/17/2020 04:17
Aroclor1248	ND	0.0050	1	06/17/2020 04:17
Aroclor1254	ND	0.0050	1	06/17/2020 04:17
Aroclor1260	ND	0.0050	1	06/17/2020 04:17
PCBs, total	ND	0.0050	1	06/17/2020 04:17

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	122	20-145	06/17/2020 04:17

Analyst(s): LT

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640Am/3630Cm
Analytical Method: SW8081A/8082
Unit: mg/kg

Organochlorine Pesticides + PCBs

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-8-1.5	2006697-012A	Soil	06/11/2020 10:33	GC20 06182020.D	200259

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.00050	5	06/18/2020 14:13
a-BHC	ND	0.00050	5	06/18/2020 14:13
b-BHC	ND	0.0015	5	06/18/2020 14:13
d-BHC	ND	0.0010	5	06/18/2020 14:13
g-BHC	ND	0.00050	5	06/18/2020 14:13
Chlordane (Technical)	ND	0.012	5	06/18/2020 14:13
a-Chlordane	ND	0.00050	5	06/18/2020 14:13
g-Chlordane	0.00055	0.00050	5	06/18/2020 14:13
p,p-DDD	ND	0.00050	5	06/18/2020 14:13
p,p-DDE	0.00074	0.00050	5	06/18/2020 14:13
p,p-DDT	0.0029	0.00050	5	06/18/2020 14:13
Dieldrin	ND	0.00050	5	06/18/2020 14:13
Endosulfan I	ND	0.00050	5	06/18/2020 14:13
Endosulfan II	ND	0.00050	5	06/18/2020 14:13
Endosulfan sulfate	ND	0.00050	5	06/18/2020 14:13
Endrin	ND	0.00050	5	06/18/2020 14:13
Endrin aldehyde	ND	0.00050	5	06/18/2020 14:13
Endrin ketone	ND	0.00050	5	06/18/2020 14:13
Heptachlor	ND	0.00050	5	06/18/2020 14:13
Heptachlor epoxide	ND	0.00050	5	06/18/2020 14:13
Hexachlorobenzene	ND	0.0050	5	06/18/2020 14:13
Hexachlorocyclopentadiene	ND	0.010	5	06/18/2020 14:13
Methoxychlor	ND	0.0010	5	06/18/2020 14:13
Toxaphene	ND	0.025	5	06/18/2020 14:13
Aroclor1016	ND	0.025	5	06/18/2020 14:13
Aroclor1221	ND	0.025	5	06/18/2020 14:13
Aroclor1232	ND	0.025	5	06/18/2020 14:13
Aroclor1242	ND	0.025	5	06/18/2020 14:13
Aroclor1248	ND	0.025	5	06/18/2020 14:13
Aroclor1254	ND	0.025	5	06/18/2020 14:13
Aroclor1260	ND	0.025	5	06/18/2020 14:13
PCBs, total	ND	0.025	5	06/18/2020 14:13

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	102	20-145	06/18/2020 14:13

Analyst(s): CK

Analytical Comments: a1

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640Am/3630Cm
Analytical Method: SW8081A/8082
Unit: mg/kg

Organochlorine Pesticides + PCBs

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-8-3.0	2006697-013A	Soil	06/11/2020 10:35	GC20 06172050.D	200259

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.00010	1	06/17/2020 21:33
a-BHC	ND	0.00010	1	06/17/2020 21:33
b-BHC	ND	0.00030	1	06/17/2020 21:33
d-BHC	ND	0.00020	1	06/17/2020 21:33
g-BHC	ND	0.00010	1	06/17/2020 21:33
Chlordane (Technical)	ND	0.0025	1	06/17/2020 21:33
a-Chlordane	ND	0.00010	1	06/17/2020 21:33
g-Chlordane	ND	0.00010	1	06/17/2020 21:33
p,p-DDD	ND	0.00010	1	06/17/2020 21:33
p,p-DDE	ND	0.00010	1	06/17/2020 21:33
p,p-DDT	0.00038	0.00010	1	06/17/2020 21:33
Dieldrin	ND	0.00010	1	06/17/2020 21:33
Endosulfan I	ND	0.00010	1	06/17/2020 21:33
Endosulfan II	ND	0.00010	1	06/17/2020 21:33
Endosulfan sulfate	ND	0.00010	1	06/17/2020 21:33
Endrin	ND	0.00010	1	06/17/2020 21:33
Endrin aldehyde	ND	0.00010	1	06/17/2020 21:33
Endrin ketone	ND	0.00010	1	06/17/2020 21:33
Heptachlor	ND	0.00010	1	06/17/2020 21:33
Heptachlor epoxide	ND	0.00010	1	06/17/2020 21:33
Hexachlorobenzene	ND	0.0010	1	06/17/2020 21:33
Hexachlorocyclopentadiene	ND	0.0020	1	06/17/2020 21:33
Methoxychlor	ND	0.00020	1	06/17/2020 21:33
Toxaphene	ND	0.0050	1	06/17/2020 21:33
Aroclor1016	ND	0.0050	1	06/17/2020 21:33
Aroclor1221	ND	0.0050	1	06/17/2020 21:33
Aroclor1232	ND	0.0050	1	06/17/2020 21:33
Aroclor1242	ND	0.0050	1	06/17/2020 21:33
Aroclor1248	ND	0.0050	1	06/17/2020 21:33
Aroclor1254	ND	0.0050	1	06/17/2020 21:33
Aroclor1260	ND	0.0050	1	06/17/2020 21:33
PCBs, total	ND	0.0050	1	06/17/2020 21:33

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	95	20-145	06/17/2020 21:33

Analyst(s): CK

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640Am/3630Cm
Analytical Method: SW8081A/8082
Unit: mg/kg

Organochlorine Pesticides + PCBs

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-7-1.5	2006697-015A	Soil	06/11/2020 10:09	GC20 06172051.D	200259

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.00010	1	06/17/2020 21:49
a-BHC	ND	0.00010	1	06/17/2020 21:49
b-BHC	ND	0.00030	1	06/17/2020 21:49
d-BHC	ND	0.00020	1	06/17/2020 21:49
g-BHC	ND	0.00010	1	06/17/2020 21:49
Chlordane (Technical)	ND	0.0025	1	06/17/2020 21:49
a-Chlordane	ND	0.00010	1	06/17/2020 21:49
g-Chlordane	ND	0.00010	1	06/17/2020 21:49
p,p-DDD	ND	0.00010	1	06/17/2020 21:49
p,p-DDE	ND	0.00010	1	06/17/2020 21:49
p,p-DDT	ND	0.00010	1	06/17/2020 21:49
Dieldrin	ND	0.00010	1	06/17/2020 21:49
Endosulfan I	ND	0.00010	1	06/17/2020 21:49
Endosulfan II	ND	0.00010	1	06/17/2020 21:49
Endosulfan sulfate	ND	0.00010	1	06/17/2020 21:49
Endrin	ND	0.00010	1	06/17/2020 21:49
Endrin aldehyde	ND	0.00010	1	06/17/2020 21:49
Endrin ketone	ND	0.00010	1	06/17/2020 21:49
Heptachlor	ND	0.00010	1	06/17/2020 21:49
Heptachlor epoxide	ND	0.00010	1	06/17/2020 21:49
Hexachlorobenzene	ND	0.0010	1	06/17/2020 21:49
Hexachlorocyclopentadiene	ND	0.0020	1	06/17/2020 21:49
Methoxychlor	ND	0.00020	1	06/17/2020 21:49
Toxaphene	ND	0.0050	1	06/17/2020 21:49
Aroclor1016	ND	0.0050	1	06/17/2020 21:49
Aroclor1221	ND	0.0050	1	06/17/2020 21:49
Aroclor1232	ND	0.0050	1	06/17/2020 21:49
Aroclor1242	ND	0.0050	1	06/17/2020 21:49
Aroclor1248	ND	0.0050	1	06/17/2020 21:49
Aroclor1254	ND	0.0050	1	06/17/2020 21:49
Aroclor1260	ND	0.0050	1	06/17/2020 21:49
PCBs, total	ND	0.0050	1	06/17/2020 21:49

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	107	20-145	06/17/2020 21:49

Analyst(s): CK

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640Am/3630Cm
Analytical Method: SW8081A/8082
Unit: mg/kg

Organochlorine Pesticides + PCBs

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-7-3.0	2006697-016A	Soil	06/11/2020 10:12	GC20 06172052.D	200259

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.00010	1	06/17/2020 22:05
a-BHC	ND	0.00010	1	06/17/2020 22:05
b-BHC	ND	0.00030	1	06/17/2020 22:05
d-BHC	ND	0.00020	1	06/17/2020 22:05
g-BHC	ND	0.00010	1	06/17/2020 22:05
Chlordane (Technical)	ND	0.0025	1	06/17/2020 22:05
a-Chlordane	ND	0.00010	1	06/17/2020 22:05
g-Chlordane	ND	0.00010	1	06/17/2020 22:05
p,p-DDD	ND	0.00010	1	06/17/2020 22:05
p,p-DDE	ND	0.00010	1	06/17/2020 22:05
p,p-DDT	ND	0.00010	1	06/17/2020 22:05
Dieldrin	ND	0.00010	1	06/17/2020 22:05
Endosulfan I	ND	0.00010	1	06/17/2020 22:05
Endosulfan II	ND	0.00010	1	06/17/2020 22:05
Endosulfan sulfate	ND	0.00010	1	06/17/2020 22:05
Endrin	ND	0.00010	1	06/17/2020 22:05
Endrin aldehyde	ND	0.00010	1	06/17/2020 22:05
Endrin ketone	ND	0.00010	1	06/17/2020 22:05
Heptachlor	ND	0.00010	1	06/17/2020 22:05
Heptachlor epoxide	ND	0.00010	1	06/17/2020 22:05
Hexachlorobenzene	ND	0.0010	1	06/17/2020 22:05
Hexachlorocyclopentadiene	ND	0.0020	1	06/17/2020 22:05
Methoxychlor	ND	0.00020	1	06/17/2020 22:05
Toxaphene	ND	0.0050	1	06/17/2020 22:05
Aroclor1016	ND	0.0050	1	06/17/2020 22:05
Aroclor1221	ND	0.0050	1	06/17/2020 22:05
Aroclor1232	ND	0.0050	1	06/17/2020 22:05
Aroclor1242	ND	0.0050	1	06/17/2020 22:05
Aroclor1248	ND	0.0050	1	06/17/2020 22:05
Aroclor1254	ND	0.0050	1	06/17/2020 22:05
Aroclor1260	ND	0.0050	1	06/17/2020 22:05
PCBs, total	ND	0.0050	1	06/17/2020 22:05

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	98	20-145	06/17/2020 22:05

Analyst(s): CK

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640Am/3630Cm
Analytical Method: SW8081A/8082
Unit: mg/kg

Organochlorine Pesticides + PCBs

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-7-5.0	2006697-017A	Soil	06/11/2020 10:17	GC20 06172053.D	200259

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.00010	1	06/17/2020 22:21
a-BHC	ND	0.00010	1	06/17/2020 22:21
b-BHC	ND	0.00030	1	06/17/2020 22:21
d-BHC	ND	0.00020	1	06/17/2020 22:21
g-BHC	ND	0.00010	1	06/17/2020 22:21
Chlordane (Technical)	ND	0.0025	1	06/17/2020 22:21
a-Chlordane	ND	0.00010	1	06/17/2020 22:21
g-Chlordane	ND	0.00010	1	06/17/2020 22:21
p,p-DDD	ND	0.00010	1	06/17/2020 22:21
p,p-DDE	ND	0.00010	1	06/17/2020 22:21
p,p-DDT	ND	0.00010	1	06/17/2020 22:21
Dieldrin	ND	0.00010	1	06/17/2020 22:21
Endosulfan I	ND	0.00010	1	06/17/2020 22:21
Endosulfan II	ND	0.00010	1	06/17/2020 22:21
Endosulfan sulfate	ND	0.00010	1	06/17/2020 22:21
Endrin	ND	0.00010	1	06/17/2020 22:21
Endrin aldehyde	ND	0.00010	1	06/17/2020 22:21
Endrin ketone	ND	0.00010	1	06/17/2020 22:21
Heptachlor	ND	0.00010	1	06/17/2020 22:21
Heptachlor epoxide	ND	0.00010	1	06/17/2020 22:21
Hexachlorobenzene	ND	0.0010	1	06/17/2020 22:21
Hexachlorocyclopentadiene	ND	0.0020	1	06/17/2020 22:21
Methoxychlor	ND	0.00020	1	06/17/2020 22:21
Toxaphene	ND	0.0050	1	06/17/2020 22:21
Aroclor1016	ND	0.0050	1	06/17/2020 22:21
Aroclor1221	ND	0.0050	1	06/17/2020 22:21
Aroclor1232	ND	0.0050	1	06/17/2020 22:21
Aroclor1242	ND	0.0050	1	06/17/2020 22:21
Aroclor1248	ND	0.0050	1	06/17/2020 22:21
Aroclor1254	ND	0.0050	1	06/17/2020 22:21
Aroclor1260	ND	0.0050	1	06/17/2020 22:21
PCBs, total	ND	0.0050	1	06/17/2020 22:21

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	109	20-145	06/17/2020 22:21

Analyst(s): CK

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640Am/3630Cm
Analytical Method: SW8081A/8082
Unit: mg/kg

Organochlorine Pesticides + PCBs

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-5-1.5	2006697-018A	Soil	06/11/2020 11:12	GC20 06172061.D	200259

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.00010	1	06/18/2020 00:28
a-BHC	ND	0.00010	1	06/18/2020 00:28
b-BHC	ND	0.00030	1	06/18/2020 00:28
d-BHC	ND	0.00020	1	06/18/2020 00:28
g-BHC	ND	0.00010	1	06/18/2020 00:28
Chlordane (Technical)	ND	0.0025	1	06/18/2020 00:28
a-Chlordane	ND	0.00010	1	06/18/2020 00:28
g-Chlordane	ND	0.00010	1	06/18/2020 00:28
p,p-DDD	ND	0.00010	1	06/18/2020 00:28
p,p-DDE	ND	0.00010	1	06/18/2020 00:28
p,p-DDT	ND	0.00010	1	06/18/2020 00:28
Dieldrin	ND	0.00010	1	06/18/2020 00:28
Endosulfan I	ND	0.00010	1	06/18/2020 00:28
Endosulfan II	ND	0.00010	1	06/18/2020 00:28
Endosulfan sulfate	ND	0.00010	1	06/18/2020 00:28
Endrin	ND	0.00010	1	06/18/2020 00:28
Endrin aldehyde	ND	0.00010	1	06/18/2020 00:28
Endrin ketone	ND	0.00010	1	06/18/2020 00:28
Heptachlor	ND	0.00010	1	06/18/2020 00:28
Heptachlor epoxide	ND	0.00010	1	06/18/2020 00:28
Hexachlorobenzene	ND	0.0010	1	06/18/2020 00:28
Hexachlorocyclopentadiene	ND	0.0020	1	06/18/2020 00:28
Methoxychlor	ND	0.00020	1	06/18/2020 00:28
Toxaphene	ND	0.0050	1	06/18/2020 00:28
Aroclor1016	ND	0.0050	1	06/18/2020 00:28
Aroclor1221	ND	0.0050	1	06/18/2020 00:28
Aroclor1232	ND	0.0050	1	06/18/2020 00:28
Aroclor1242	ND	0.0050	1	06/18/2020 00:28
Aroclor1248	ND	0.0050	1	06/18/2020 00:28
Aroclor1254	ND	0.0050	1	06/18/2020 00:28
Aroclor1260	ND	0.0050	1	06/18/2020 00:28
PCBs, total	ND	0.0050	1	06/18/2020 00:28

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	115	20-145	06/18/2020 00:28

Analyst(s): CK

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640Am/3630Cm
Analytical Method: SW8081A/8082
Unit: mg/kg

Organochlorine Pesticides + PCBs

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-5-3.0	2006697-019A	Soil	06/11/2020 11:15	GC20 06172062.D	200259

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.00010	1	06/18/2020 00:44
a-BHC	ND	0.00010	1	06/18/2020 00:44
b-BHC	ND	0.00030	1	06/18/2020 00:44
d-BHC	ND	0.00020	1	06/18/2020 00:44
g-BHC	ND	0.00010	1	06/18/2020 00:44
Chlordane (Technical)	ND	0.0025	1	06/18/2020 00:44
a-Chlordane	ND	0.00010	1	06/18/2020 00:44
g-Chlordane	ND	0.00010	1	06/18/2020 00:44
p,p-DDD	ND	0.00010	1	06/18/2020 00:44
p,p-DDE	ND	0.00010	1	06/18/2020 00:44
p,p-DDT	ND	0.00010	1	06/18/2020 00:44
Dieldrin	ND	0.00010	1	06/18/2020 00:44
Endosulfan I	ND	0.00010	1	06/18/2020 00:44
Endosulfan II	ND	0.00010	1	06/18/2020 00:44
Endosulfan sulfate	ND	0.00010	1	06/18/2020 00:44
Endrin	ND	0.00010	1	06/18/2020 00:44
Endrin aldehyde	ND	0.00010	1	06/18/2020 00:44
Endrin ketone	ND	0.00010	1	06/18/2020 00:44
Heptachlor	ND	0.00010	1	06/18/2020 00:44
Heptachlor epoxide	ND	0.00010	1	06/18/2020 00:44
Hexachlorobenzene	ND	0.0010	1	06/18/2020 00:44
Hexachlorocyclopentadiene	ND	0.0020	1	06/18/2020 00:44
Methoxychlor	ND	0.00020	1	06/18/2020 00:44
Toxaphene	ND	0.0050	1	06/18/2020 00:44
Aroclor1016	ND	0.0050	1	06/18/2020 00:44
Aroclor1221	ND	0.0050	1	06/18/2020 00:44
Aroclor1232	ND	0.0050	1	06/18/2020 00:44
Aroclor1242	ND	0.0050	1	06/18/2020 00:44
Aroclor1248	ND	0.0050	1	06/18/2020 00:44
Aroclor1254	ND	0.0050	1	06/18/2020 00:44
Aroclor1260	ND	0.0050	1	06/18/2020 00:44
PCBs, total	ND	0.0050	1	06/18/2020 00:44

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	113	20-145	06/18/2020 00:44

Analyst(s): CK



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/kg

Organophosphorous Pesticides by GC-MS (EPA 8141 Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-2-1.5	2006697-001A	Soil	06/11/2020 08:47	GC25 F0616200112.D	200142

Analytes	Result	RL	DF	Date Analyzed
Alachlor	ND	0.20	2	06/16/2020 18:27
Atrazine	ND	0.20	2	06/16/2020 18:27
Azinphos methyl (Guthion)	ND	0.20	2	06/16/2020 18:27
Bolstar (Sulprofos)	ND	0.20	2	06/16/2020 18:27
Chloropyrifos	ND	0.20	2	06/16/2020 18:27
Coumaphos	ND	0.20	2	06/16/2020 18:27
Demeton	ND	0.20	2	06/16/2020 18:27
Diazinon	ND	0.20	2	06/16/2020 18:27
Dichlorvos (DDVP)	ND	0.20	2	06/16/2020 18:27
Dimethoate	ND	0.20	2	06/16/2020 18:27
Disulfoton (Di-Syston)	ND	0.20	2	06/16/2020 18:27
EPN	ND	0.20	2	06/16/2020 18:27
EPTC	ND	0.20	2	06/16/2020 18:27
Ethion	ND	0.20	2	06/16/2020 18:27
Ethoprop	ND	0.20	2	06/16/2020 18:27
Ethyl parathion	ND	0.20	2	06/16/2020 18:27
Fensulfothion	ND	0.20	2	06/16/2020 18:27
Fenthion	ND	0.20	2	06/16/2020 18:27
Fonofos	ND	0.20	2	06/16/2020 18:27
Malathion	ND	0.20	2	06/16/2020 18:27
Mevinphos (Phosdrin)	ND	0.20	2	06/16/2020 18:27
Molinate	ND	0.20	2	06/16/2020 18:27
Methyl parathion	ND	0.20	2	06/16/2020 18:27
Phorate (Thimet)	ND	0.20	2	06/16/2020 18:27
Prometon	ND	0.20	2	06/16/2020 18:27
Ronnel	ND	0.20	2	06/16/2020 18:27
Simazine	ND	0.20	2	06/16/2020 18:27
Stirofos (Tetrachlorvinphos)	ND	0.20	2	06/16/2020 18:27
Terbacil	ND	0.20	2	06/16/2020 18:27
Terbufos (Terbuphos)	ND	0.20	2	06/16/2020 18:27
Thiobencarb	ND	0.20	2	06/16/2020 18:27
Tokuthion (Prothiofos)	ND	0.20	2	06/16/2020 18:27
Trichloronate (Agritox)	ND	0.20	2	06/16/2020 18:27

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/kg

Organophosphorous Pesticides by GC-MS (EPA 8141 Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-2-1.5	2006697-001A	Soil	06/11/2020 08:47	GC25 F0616200112.D	200142

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Triphenyl phosphate	72	60-140		06/16/2020 18:27
<u>Analyst(s):</u> STA	<u>Analytical Comments:</u> a3			



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/kg

Organophosphorous Pesticides by GC-MS (EPA 8141 Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-2-3.0	2006697-002A	Soil	06/11/2020 08:50	GC25 F0616200113.D	200142

Analytes	Result	RL	DF	Date Analyzed
Alachlor	ND	0.10	1	06/16/2020 18:54
Atrazine	ND	0.10	1	06/16/2020 18:54
Azinphos methyl (Guthion)	ND	0.10	1	06/16/2020 18:54
Bolstar (Sulprofos)	ND	0.10	1	06/16/2020 18:54
Chlorpyrifos	ND	0.10	1	06/16/2020 18:54
Coumaphos	ND	0.10	1	06/16/2020 18:54
Demeton	ND	0.10	1	06/16/2020 18:54
Diazinon	ND	0.10	1	06/16/2020 18:54
Dichlorvos (DDVP)	ND	0.10	1	06/16/2020 18:54
Dimethoate	ND	0.10	1	06/16/2020 18:54
Disulfoton (Di-Syston)	ND	0.10	1	06/16/2020 18:54
EPN	ND	0.10	1	06/16/2020 18:54
EPTC	ND	0.10	1	06/16/2020 18:54
Ethion	ND	0.10	1	06/16/2020 18:54
Ethoprop	ND	0.10	1	06/16/2020 18:54
Ethyl parathion	ND	0.10	1	06/16/2020 18:54
Fensulfothion	ND	0.10	1	06/16/2020 18:54
Fenthion	ND	0.10	1	06/16/2020 18:54
Fonofos	ND	0.10	1	06/16/2020 18:54
Malathion	ND	0.10	1	06/16/2020 18:54
Mevinphos (Phosdrin)	ND	0.10	1	06/16/2020 18:54
Molinate	ND	0.10	1	06/16/2020 18:54
Methyl parathion	ND	0.10	1	06/16/2020 18:54
Phorate (Thimet)	ND	0.10	1	06/16/2020 18:54
Prometon	ND	0.10	1	06/16/2020 18:54
Ronnel	ND	0.10	1	06/16/2020 18:54
Simazine	ND	0.10	1	06/16/2020 18:54
Stirofos (Tetrachlorvinphos)	ND	0.10	1	06/16/2020 18:54
Terbacil	ND	0.10	1	06/16/2020 18:54
Terbufos (Terbuphos)	ND	0.10	1	06/16/2020 18:54
Thiobencarb	ND	0.10	1	06/16/2020 18:54
Tokuthion (Prothiofos)	ND	0.10	1	06/16/2020 18:54
Trichloronate (Agritox)	ND	0.10	1	06/16/2020 18:54

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/kg

Organophosphorous Pesticides by GC-MS (EPA 8141 Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-2-3.0	2006697-002A	Soil	06/11/2020 08:50	GC25 F0616200113.D	200142

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
-----------------	---------------	-----------	-----------	----------------------

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	
Triphenyl phosphate	84	60-140	06/16/2020 18:54

Analyst(s): STA



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/kg

Organophosphorous Pesticides by GC-MS (EPA 8141 Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-2-7.0	2006697-004A	Soil	06/11/2020 08:56	GC25 F0616200116.D	200142

Analytes	Result	RL	DF	Date Analyzed
Alachlor	ND	0.10	1	06/16/2020 20:14
Atrazine	ND	0.10	1	06/16/2020 20:14
Azinphos methyl (Guthion)	ND	0.10	1	06/16/2020 20:14
Bolstar (Sulprofos)	ND	0.10	1	06/16/2020 20:14
Chloropyrifos	ND	0.10	1	06/16/2020 20:14
Coumaphos	ND	0.10	1	06/16/2020 20:14
Demeton	ND	0.10	1	06/16/2020 20:14
Diazinon	ND	0.10	1	06/16/2020 20:14
Dichlorvos (DDVP)	ND	0.10	1	06/16/2020 20:14
Dimethoate	ND	0.10	1	06/16/2020 20:14
Disulfoton (Di-Syston)	ND	0.10	1	06/16/2020 20:14
EPN	ND	0.10	1	06/16/2020 20:14
EPTC	ND	0.10	1	06/16/2020 20:14
Ethion	ND	0.10	1	06/16/2020 20:14
Ethoprop	ND	0.10	1	06/16/2020 20:14
Ethyl parathion	ND	0.10	1	06/16/2020 20:14
Fensulfothion	ND	0.10	1	06/16/2020 20:14
Fenthion	ND	0.10	1	06/16/2020 20:14
Fonofos	ND	0.10	1	06/16/2020 20:14
Malathion	ND	0.10	1	06/16/2020 20:14
Mevinphos (Phosdrin)	ND	0.10	1	06/16/2020 20:14
Molinate	ND	0.10	1	06/16/2020 20:14
Methyl parathion	ND	0.10	1	06/16/2020 20:14
Phorate (Thimet)	ND	0.10	1	06/16/2020 20:14
Prometon	ND	0.10	1	06/16/2020 20:14
Ronnel	ND	0.10	1	06/16/2020 20:14
Simazine	ND	0.10	1	06/16/2020 20:14
Stirofos (Tetrachlorvinphos)	ND	0.10	1	06/16/2020 20:14
Terbacil	ND	0.10	1	06/16/2020 20:14
Terbufos (Terbuphos)	ND	0.10	1	06/16/2020 20:14
Thiobencarb	ND	0.10	1	06/16/2020 20:14
Tokuthion (Prothiofos)	ND	0.10	1	06/16/2020 20:14
Trichloronate (Agritox)	ND	0.10	1	06/16/2020 20:14

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/kg

Organophosphorous Pesticides by GC-MS (EPA 8141 Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-2-7.0	2006697-004A	Soil	06/11/2020 08:56	GC25 F0616200116.D	200142

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
-----------------	---------------	-----------	-----------	----------------------

<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Triphenyl phosphate	82		60-140	06/16/2020 20:14

Analyst(s): STA



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/kg

Organophosphorous Pesticides by GC-MS (EPA 8141 Basic Target List)

Client ID	Lab ID	Matrix	Date Collected		Instrument	Batch ID
EB-3-1.5	2006697-005A	Soil	06/11/2020 09:24		GC25 F0616200117.D	200142
Analytes	Result		RL	DF		Date Analyzed
Alachlor	ND		5.0	50		06/16/2020 20:41
Atrazine	ND		5.0	50		06/16/2020 20:41
Azinphos methyl (Guthion)	ND		5.0	50		06/16/2020 20:41
Bolstar (Sulprofos)	ND		5.0	50		06/16/2020 20:41
Chlorpyrifos	ND		5.0	50		06/16/2020 20:41
Coumaphos	ND		5.0	50		06/16/2020 20:41
Demeton	ND		5.0	50		06/16/2020 20:41
Diazinon	ND		5.0	50		06/16/2020 20:41
Dichlorvos (DDVP)	ND		5.0	50		06/16/2020 20:41
Dimethoate	ND		5.0	50		06/16/2020 20:41
Disulfoton (Di-Syston)	ND		5.0	50		06/16/2020 20:41
EPN	ND		5.0	50		06/16/2020 20:41
EPTC	ND		5.0	50		06/16/2020 20:41
Ethion	ND		5.0	50		06/16/2020 20:41
Ethoprop	ND		5.0	50		06/16/2020 20:41
Ethyl parathion	ND		5.0	50		06/16/2020 20:41
Fensulfothion	ND		5.0	50		06/16/2020 20:41
Fenthion	ND		5.0	50		06/16/2020 20:41
Fonofos	ND		5.0	50		06/16/2020 20:41
Malathion	ND		5.0	50		06/16/2020 20:41
Mevinphos (Phosdrin)	ND		5.0	50		06/16/2020 20:41
Molinate	ND		5.0	50		06/16/2020 20:41
Methyl parathion	ND		5.0	50		06/16/2020 20:41
Phorate (Thimet)	ND		5.0	50		06/16/2020 20:41
Prometon	ND		5.0	50		06/16/2020 20:41
Ronnel	ND		5.0	50		06/16/2020 20:41
Simazine	ND		5.0	50		06/16/2020 20:41
Stirofos (Tetrachlorvinphos)	ND		5.0	50		06/16/2020 20:41
Terbacil	ND		5.0	50		06/16/2020 20:41
Terbufos (Terbuphos)	ND		5.0	50		06/16/2020 20:41
Thiobencarb	ND		5.0	50		06/16/2020 20:41
Tokuthion (Prothiofos)	ND		5.0	50		06/16/2020 20:41
Trichloronate (Agritox)	ND		5.0	50		06/16/2020 20:41

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/kg

Organophosphorous Pesticides by GC-MS (EPA 8141 Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-3-1.5	2006697-005A	Soil	06/11/2020 09:24	GC25 F0616200117.D	200142

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
-----------------	---------------	-----------	-----------	----------------------

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>
Triphenyl phosphate	123	60-140

Analyst(s): STA Analytical Comments: a3



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/kg

Organophosphorous Pesticides by GC-MS (EPA 8141 Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-3-3.0	2006697-007A	Soil	06/11/2020 09:26	GC25 F0616200118.D	200142

Analytes	Result	RL	DF	Date Analyzed
Alachlor	ND	2.0	20	06/16/2020 21:07
Atrazine	ND	2.0	20	06/16/2020 21:07
Azinphos methyl (Guthion)	ND	2.0	20	06/16/2020 21:07
Bolstar (Sulprofos)	ND	2.0	20	06/16/2020 21:07
Chloropyrifos	ND	2.0	20	06/16/2020 21:07
Coumaphos	ND	2.0	20	06/16/2020 21:07
Demeton	ND	2.0	20	06/16/2020 21:07
Diazinon	ND	2.0	20	06/16/2020 21:07
Dichlorvos (DDVP)	ND	2.0	20	06/16/2020 21:07
Dimethoate	ND	2.0	20	06/16/2020 21:07
Disulfoton (Di-Syston)	ND	2.0	20	06/16/2020 21:07
EPN	ND	2.0	20	06/16/2020 21:07
EPTC	ND	2.0	20	06/16/2020 21:07
Ethion	ND	2.0	20	06/16/2020 21:07
Ethoprop	ND	2.0	20	06/16/2020 21:07
Ethyl parathion	ND	2.0	20	06/16/2020 21:07
Fensulfothion	ND	2.0	20	06/16/2020 21:07
Fenthion	ND	2.0	20	06/16/2020 21:07
Fonofos	ND	2.0	20	06/16/2020 21:07
Malathion	ND	2.0	20	06/16/2020 21:07
Mevinphos (Phosdrin)	ND	2.0	20	06/16/2020 21:07
Molinate	ND	2.0	20	06/16/2020 21:07
Methyl parathion	ND	2.0	20	06/16/2020 21:07
Phorate (Thimet)	ND	2.0	20	06/16/2020 21:07
Prometon	ND	2.0	20	06/16/2020 21:07
Ronnel	ND	2.0	20	06/16/2020 21:07
Simazine	ND	2.0	20	06/16/2020 21:07
Stirofos (Tetrachlorvinphos)	ND	2.0	20	06/16/2020 21:07
Terbacil	ND	2.0	20	06/16/2020 21:07
Terbufos (Terbuphos)	ND	2.0	20	06/16/2020 21:07
Thiobencarb	ND	2.0	20	06/16/2020 21:07
Tokuthion (Prothiofos)	ND	2.0	20	06/16/2020 21:07
Trichloronate (Agritox)	ND	2.0	20	06/16/2020 21:07

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/kg

Organophosphorous Pesticides by GC-MS (EPA 8141 Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-3-3.0	2006697-007A	Soil	06/11/2020 09:26	GC25 F0616200118.D	200142

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Triphenyl phosphate	104	60-140		06/16/2020 21:07
<u>Analyst(s):</u> STA	<u>Analytical Comments:</u> a3			



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/kg

Organophosphorous Pesticides by GC-MS (EPA 8141 Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-3-7.0	2006697-008A	Soil	06/11/2020 09:33	GC25 F0616200119.D	200142

Analytes	Result	RL	DF	Date Analyzed
Alachlor	ND	0.10	1	06/16/2020 21:34
Atrazine	ND	0.10	1	06/16/2020 21:34
Azinphos methyl (Guthion)	ND	0.10	1	06/16/2020 21:34
Bolstar (Sulprofos)	ND	0.10	1	06/16/2020 21:34
Chlorpyrifos	ND	0.10	1	06/16/2020 21:34
Coumaphos	ND	0.10	1	06/16/2020 21:34
Demeton	ND	0.10	1	06/16/2020 21:34
Diazinon	ND	0.10	1	06/16/2020 21:34
Dichlorvos (DDVP)	ND	0.10	1	06/16/2020 21:34
Dimethoate	ND	0.10	1	06/16/2020 21:34
Disulfoton (Di-Syston)	ND	0.10	1	06/16/2020 21:34
EPN	ND	0.10	1	06/16/2020 21:34
EPTC	ND	0.10	1	06/16/2020 21:34
Ethion	ND	0.10	1	06/16/2020 21:34
Ethoprop	ND	0.10	1	06/16/2020 21:34
Ethyl parathion	ND	0.10	1	06/16/2020 21:34
Fensulfothion	ND	0.10	1	06/16/2020 21:34
Fenthion	ND	0.10	1	06/16/2020 21:34
Fonofos	ND	0.10	1	06/16/2020 21:34
Malathion	ND	0.10	1	06/16/2020 21:34
Mevinphos (Phosdrin)	ND	0.10	1	06/16/2020 21:34
Molinate	ND	0.10	1	06/16/2020 21:34
Methyl parathion	ND	0.10	1	06/16/2020 21:34
Phorate (Thimet)	ND	0.10	1	06/16/2020 21:34
Prometon	ND	0.10	1	06/16/2020 21:34
Ronnel	ND	0.10	1	06/16/2020 21:34
Simazine	ND	0.10	1	06/16/2020 21:34
Stirofos (Tetrachlorvinphos)	ND	0.10	1	06/16/2020 21:34
Terbacil	ND	0.10	1	06/16/2020 21:34
Terbufos (Terbuphos)	ND	0.10	1	06/16/2020 21:34
Thiobencarb	ND	0.10	1	06/16/2020 21:34
Tokuthion (Prothiofos)	ND	0.10	1	06/16/2020 21:34
Trichloronate (Agritox)	ND	0.10	1	06/16/2020 21:34

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/kg

Organophosphorous Pesticides by GC-MS (EPA 8141 Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-3-7.0	2006697-008A	Soil	06/11/2020 09:33	GC25 F0616200119.D	200142

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Triphenyl phosphate	94	60-140		06/16/2020 21:34

Analyst(s): STA



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/kg

Organophosphorous Pesticides by GC-MS (EPA 8141 Basic Target List)

Client ID	Lab ID	Matrix	Date Collected		Instrument	Batch ID
EB-4-1.5	2006697-009A	Soil	06/11/2020 09:45		GC25 F0616200120.D	200142
Analytes	Result	RL	DF	Date Analyzed		
Alachlor	ND	2.0	20	06/16/2020 22:00		
Atrazine	ND	2.0	20	06/16/2020 22:00		
Azinphos methyl (Guthion)	ND	2.0	20	06/16/2020 22:00		
Bolstar (Sulprofos)	ND	2.0	20	06/16/2020 22:00		
Chloropyrifos	ND	2.0	20	06/16/2020 22:00		
Coumaphos	ND	2.0	20	06/16/2020 22:00		
Demeton	ND	2.0	20	06/16/2020 22:00		
Diazinon	ND	2.0	20	06/16/2020 22:00		
Dichlorvos (DDVP)	ND	2.0	20	06/16/2020 22:00		
Dimethoate	ND	2.0	20	06/16/2020 22:00		
Disulfoton (Di-Syston)	ND	2.0	20	06/16/2020 22:00		
EPN	ND	2.0	20	06/16/2020 22:00		
EPTC	ND	2.0	20	06/16/2020 22:00		
Ethion	ND	2.0	20	06/16/2020 22:00		
Ethoprop	ND	2.0	20	06/16/2020 22:00		
Ethyl parathion	ND	2.0	20	06/16/2020 22:00		
Fensulfothion	ND	2.0	20	06/16/2020 22:00		
Fenthion	ND	2.0	20	06/16/2020 22:00		
Fonofos	ND	2.0	20	06/16/2020 22:00		
Malathion	ND	2.0	20	06/16/2020 22:00		
Mevinphos (Phosdrin)	ND	2.0	20	06/16/2020 22:00		
Molinate	ND	2.0	20	06/16/2020 22:00		
Methyl parathion	ND	2.0	20	06/16/2020 22:00		
Phorate (Thimet)	ND	2.0	20	06/16/2020 22:00		
Prometon	ND	2.0	20	06/16/2020 22:00		
Ronnel	ND	2.0	20	06/16/2020 22:00		
Simazine	ND	2.0	20	06/16/2020 22:00		
Stirofos (Tetrachlorvinphos)	ND	2.0	20	06/16/2020 22:00		
Terbacil	ND	2.0	20	06/16/2020 22:00		
Terbufos (Terbuphos)	ND	2.0	20	06/16/2020 22:00		
Thiobencarb	ND	2.0	20	06/16/2020 22:00		
Tokuthion (Prothiofos)	ND	2.0	20	06/16/2020 22:00		
Trichloronate (Agritox)	ND	2.0	20	06/16/2020 22:00		

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/kg

Organophosphorous Pesticides by GC-MS (EPA 8141 Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-4-1.5	2006697-009A	Soil	06/11/2020 09:45	GC25 F0616200120.D	200142

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Triphenyl phosphate	81	60-140		06/16/2020 22:00
<u>Analyst(s):</u> STA	<u>Analytical Comments:</u> a3			



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/kg

Organophosphorous Pesticides by GC-MS (EPA 8141 Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-4-3.0	2006697-010A	Soil	06/11/2020 09:50	GC25 F0616200121.D	200142

Analytes	Result	RL	DF	Date Analyzed
Alachlor	ND	1.0	10	06/16/2020 22:27
Atrazine	ND	1.0	10	06/16/2020 22:27
Azinphos methyl (Guthion)	ND	1.0	10	06/16/2020 22:27
Bolstar (Sulprofos)	ND	1.0	10	06/16/2020 22:27
Chlorpyrifos	ND	1.0	10	06/16/2020 22:27
Coumaphos	ND	1.0	10	06/16/2020 22:27
Demeton	ND	1.0	10	06/16/2020 22:27
Diazinon	ND	1.0	10	06/16/2020 22:27
Dichlorvos (DDVP)	ND	1.0	10	06/16/2020 22:27
Dimethoate	ND	1.0	10	06/16/2020 22:27
Disulfoton (Di-Syston)	ND	1.0	10	06/16/2020 22:27
EPN	ND	1.0	10	06/16/2020 22:27
EPTC	ND	1.0	10	06/16/2020 22:27
Ethion	ND	1.0	10	06/16/2020 22:27
Ethoprop	ND	1.0	10	06/16/2020 22:27
Ethyl parathion	ND	1.0	10	06/16/2020 22:27
Fensulfothion	ND	1.0	10	06/16/2020 22:27
Fenthion	ND	1.0	10	06/16/2020 22:27
Fonofos	ND	1.0	10	06/16/2020 22:27
Malathion	ND	1.0	10	06/16/2020 22:27
Mevinphos (Phosdrin)	ND	1.0	10	06/16/2020 22:27
Molinate	ND	1.0	10	06/16/2020 22:27
Methyl parathion	ND	1.0	10	06/16/2020 22:27
Phorate (Thimet)	ND	1.0	10	06/16/2020 22:27
Prometon	ND	1.0	10	06/16/2020 22:27
Ronnel	ND	1.0	10	06/16/2020 22:27
Simazine	ND	1.0	10	06/16/2020 22:27
Stirofos (Tetrachlorvinphos)	ND	1.0	10	06/16/2020 22:27
Terbacil	ND	1.0	10	06/16/2020 22:27
Terbufos (Terbuphos)	ND	1.0	10	06/16/2020 22:27
Thiobencarb	ND	1.0	10	06/16/2020 22:27
Tokuthion (Prothiofos)	ND	1.0	10	06/16/2020 22:27
Trichloronate (Agritox)	ND	1.0	10	06/16/2020 22:27

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/kg

Organophosphorous Pesticides by GC-MS (EPA 8141 Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-4-3.0	2006697-010A	Soil	06/11/2020 09:50	GC25 F0616200121.D	200142

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Triphenyl phosphate	76	60-140		06/16/2020 22:27
Analyst(s): STA	Analytical Comments: a3			



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/kg

Organophosphorous Pesticides by GC-MS (EPA 8141 Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-4-5.0	2006697-011A	Soil	06/11/2020 09:55	GC25 F0616200122.D	200142

Analytes	Result	RL	DF	Date Analyzed
Alachlor	ND	0.10	1	06/16/2020 22:54
Atrazine	ND	0.10	1	06/16/2020 22:54
Azinphos methyl (Guthion)	ND	0.10	1	06/16/2020 22:54
Bolstar (Sulprofos)	ND	0.10	1	06/16/2020 22:54
Chloropyrifos	ND	0.10	1	06/16/2020 22:54
Coumaphos	ND	0.10	1	06/16/2020 22:54
Demeton	ND	0.10	1	06/16/2020 22:54
Diazinon	ND	0.10	1	06/16/2020 22:54
Dichlorvos (DDVP)	ND	0.10	1	06/16/2020 22:54
Dimethoate	ND	0.10	1	06/16/2020 22:54
Disulfoton (Di-Syston)	ND	0.10	1	06/16/2020 22:54
EPN	ND	0.10	1	06/16/2020 22:54
EPTC	ND	0.10	1	06/16/2020 22:54
Ethion	ND	0.10	1	06/16/2020 22:54
Ethoprop	ND	0.10	1	06/16/2020 22:54
Ethyl parathion	ND	0.10	1	06/16/2020 22:54
Fensulfothion	ND	0.10	1	06/16/2020 22:54
Fenthion	ND	0.10	1	06/16/2020 22:54
Fonofos	ND	0.10	1	06/16/2020 22:54
Malathion	ND	0.10	1	06/16/2020 22:54
Mevinphos (Phosdrin)	ND	0.10	1	06/16/2020 22:54
Molinate	ND	0.10	1	06/16/2020 22:54
Methyl parathion	ND	0.10	1	06/16/2020 22:54
Phorate (Thimet)	ND	0.10	1	06/16/2020 22:54
Prometon	ND	0.10	1	06/16/2020 22:54
Ronnel	ND	0.10	1	06/16/2020 22:54
Simazine	ND	0.10	1	06/16/2020 22:54
Stirofos (Tetrachlorvinphos)	ND	0.10	1	06/16/2020 22:54
Terbacil	ND	0.10	1	06/16/2020 22:54
Terbufos (Terbuphos)	ND	0.10	1	06/16/2020 22:54
Thiobencarb	ND	0.10	1	06/16/2020 22:54
Tokuthion (Prothiofos)	ND	0.10	1	06/16/2020 22:54
Trichloronate (Agritox)	ND	0.10	1	06/16/2020 22:54

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/kg

Organophosphorous Pesticides by GC-MS (EPA 8141 Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-4-5.0	2006697-011A	Soil	06/11/2020 09:55	GC25 F0616200122.D	200142

Analytes	Result	RL	DF	Date Analyzed
----------	--------	----	----	---------------

Surrogates	REC (%)	Limits	Date Analyzed
Triphenyl phosphate	85	60-140	06/16/2020 22:54

Analyst(s): STA



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/kg

Organophosphorous Pesticides by GC-MS (EPA 8141 Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-8-1.5	2006697-012A	Soil	06/11/2020 10:33	GC25 F0616200123.D	200142

Analytes	Result	RL	DF	Date Analyzed
Alachlor	ND	1.0	10	06/16/2020 23:20
Atrazine	ND	1.0	10	06/16/2020 23:20
Azinphos methyl (Guthion)	ND	1.0	10	06/16/2020 23:20
Bolstar (Sulprofos)	ND	1.0	10	06/16/2020 23:20
Chlorpyrifos	ND	1.0	10	06/16/2020 23:20
Coumaphos	ND	1.0	10	06/16/2020 23:20
Demeton	ND	1.0	10	06/16/2020 23:20
Diazinon	ND	1.0	10	06/16/2020 23:20
Dichlorvos (DDVP)	ND	1.0	10	06/16/2020 23:20
Dimethoate	ND	1.0	10	06/16/2020 23:20
Disulfoton (Di-Syston)	ND	1.0	10	06/16/2020 23:20
EPN	ND	1.0	10	06/16/2020 23:20
EPTC	ND	1.0	10	06/16/2020 23:20
Ethion	ND	1.0	10	06/16/2020 23:20
Ethoprop	ND	1.0	10	06/16/2020 23:20
Ethyl parathion	ND	1.0	10	06/16/2020 23:20
Fensulfothion	ND	1.0	10	06/16/2020 23:20
Fenthion	ND	1.0	10	06/16/2020 23:20
Fonofos	ND	1.0	10	06/16/2020 23:20
Malathion	ND	1.0	10	06/16/2020 23:20
Mevinphos (Phosdrin)	ND	1.0	10	06/16/2020 23:20
Molinate	ND	1.0	10	06/16/2020 23:20
Methyl parathion	ND	1.0	10	06/16/2020 23:20
Phorate (Thimet)	ND	1.0	10	06/16/2020 23:20
Prometon	ND	1.0	10	06/16/2020 23:20
Ronnel	ND	1.0	10	06/16/2020 23:20
Simazine	ND	1.0	10	06/16/2020 23:20
Stirofos (Tetrachlorvinphos)	ND	1.0	10	06/16/2020 23:20
Terbacil	ND	1.0	10	06/16/2020 23:20
Terbufos (Terbuphos)	ND	1.0	10	06/16/2020 23:20
Thiobencarb	ND	1.0	10	06/16/2020 23:20
Tokuthion (Prothiofos)	ND	1.0	10	06/16/2020 23:20
Trichloronate (Agritox)	ND	1.0	10	06/16/2020 23:20

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/kg

Organophosphorous Pesticides by GC-MS (EPA 8141 Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-8-1.5	2006697-012A	Soil	06/11/2020 10:33	GC25 F0616200123.D	200142

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Triphenyl phosphate	78	60-140		06/16/2020 23:20
Analyst(s): STA	Analytical Comments: a3			



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/kg

Organophosphorous Pesticides by GC-MS (EPA 8141 Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-8-3.0	2006697-013A	Soil	06/11/2020 10:35	GC25 F0616200124.D	200142

Analytes	Result	RL	DF	Date Analyzed
Alachlor	ND	0.10	1	06/16/2020 23:47
Atrazine	ND	0.10	1	06/16/2020 23:47
Azinphos methyl (Guthion)	ND	0.10	1	06/16/2020 23:47
Bolstar (Sulprofos)	ND	0.10	1	06/16/2020 23:47
Chloropyrifos	ND	0.10	1	06/16/2020 23:47
Coumaphos	ND	0.10	1	06/16/2020 23:47
Demeton	ND	0.10	1	06/16/2020 23:47
Diazinon	ND	0.10	1	06/16/2020 23:47
Dichlorvos (DDVP)	ND	0.10	1	06/16/2020 23:47
Dimethoate	ND	0.10	1	06/16/2020 23:47
Disulfoton (Di-Syston)	ND	0.10	1	06/16/2020 23:47
EPN	ND	0.10	1	06/16/2020 23:47
EPTC	ND	0.10	1	06/16/2020 23:47
Ethion	ND	0.10	1	06/16/2020 23:47
Ethoprop	ND	0.10	1	06/16/2020 23:47
Ethyl parathion	ND	0.10	1	06/16/2020 23:47
Fensulfothion	ND	0.10	1	06/16/2020 23:47
Fenthion	ND	0.10	1	06/16/2020 23:47
Fonofos	ND	0.10	1	06/16/2020 23:47
Malathion	ND	0.10	1	06/16/2020 23:47
Mevinphos (Phosdrin)	ND	0.10	1	06/16/2020 23:47
Molinate	ND	0.10	1	06/16/2020 23:47
Methyl parathion	ND	0.10	1	06/16/2020 23:47
Phorate (Thimet)	ND	0.10	1	06/16/2020 23:47
Prometon	ND	0.10	1	06/16/2020 23:47
Ronnel	ND	0.10	1	06/16/2020 23:47
Simazine	ND	0.10	1	06/16/2020 23:47
Stirofos (Tetrachlorvinphos)	ND	0.10	1	06/16/2020 23:47
Terbacil	ND	0.10	1	06/16/2020 23:47
Terbufos (Terbuphos)	ND	0.10	1	06/16/2020 23:47
Thiobencarb	ND	0.10	1	06/16/2020 23:47
Tokuthion (Prothiofos)	ND	0.10	1	06/16/2020 23:47
Trichloronate (Agritox)	ND	0.10	1	06/16/2020 23:47

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/kg

Organophosphorous Pesticides by GC-MS (EPA 8141 Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-8-3.0	2006697-013A	Soil	06/11/2020 10:35	GC25 F0616200124.D	200142

Analytes	Result	RL	DF	Date Analyzed
----------	--------	----	----	---------------

Surrogates	REC (%)	Limits	
Triphenyl phosphate	89	60-140	06/16/2020 23:47

Analyst(s): STA



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/kg

Organophosphorous Pesticides by GC-MS (EPA 8141 Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-7-1.5	2006697-015A	Soil	06/11/2020 10:09	GC25 F0616200125.D	200142

Analytes	Result	RL	DF	Date Analyzed
Alachlor	ND	0.10	1	06/17/2020 00:14
Atrazine	ND	0.10	1	06/17/2020 00:14
Azinphos methyl (Guthion)	ND	0.10	1	06/17/2020 00:14
Bolstar (Sulprofos)	ND	0.10	1	06/17/2020 00:14
Chlorpyrifos	ND	0.10	1	06/17/2020 00:14
Coumaphos	ND	0.10	1	06/17/2020 00:14
Demeton	ND	0.10	1	06/17/2020 00:14
Diazinon	ND	0.10	1	06/17/2020 00:14
Dichlorvos (DDVP)	ND	0.10	1	06/17/2020 00:14
Dimethoate	ND	0.10	1	06/17/2020 00:14
Disulfoton (Di-Syston)	ND	0.10	1	06/17/2020 00:14
EPN	ND	0.10	1	06/17/2020 00:14
EPTC	ND	0.10	1	06/17/2020 00:14
Ethion	ND	0.10	1	06/17/2020 00:14
Ethoprop	ND	0.10	1	06/17/2020 00:14
Ethyl parathion	ND	0.10	1	06/17/2020 00:14
Fensulfothion	ND	0.10	1	06/17/2020 00:14
Fenthion	ND	0.10	1	06/17/2020 00:14
Fonofos	ND	0.10	1	06/17/2020 00:14
Malathion	ND	0.10	1	06/17/2020 00:14
Mevinphos (Phosdrin)	ND	0.10	1	06/17/2020 00:14
Molinate	ND	0.10	1	06/17/2020 00:14
Methyl parathion	ND	0.10	1	06/17/2020 00:14
Phorate (Thimet)	ND	0.10	1	06/17/2020 00:14
Prometon	ND	0.10	1	06/17/2020 00:14
Ronnel	ND	0.10	1	06/17/2020 00:14
Simazine	ND	0.10	1	06/17/2020 00:14
Stirofos (Tetrachlorvinphos)	ND	0.10	1	06/17/2020 00:14
Terbacil	ND	0.10	1	06/17/2020 00:14
Terbufos (Terbuphos)	ND	0.10	1	06/17/2020 00:14
Thiobencarb	ND	0.10	1	06/17/2020 00:14
Tokuthion (Prothiofos)	ND	0.10	1	06/17/2020 00:14
Trichloronate (Agritox)	ND	0.10	1	06/17/2020 00:14

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/kg

Organophosphorous Pesticides by GC-MS (EPA 8141 Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-7-1.5	2006697-015A	Soil	06/11/2020 10:09	GC25 F0616200125.D	200142

Analytes	Result	RL	DF	Date Analyzed
----------	--------	----	----	---------------

Surrogates	REC (%)	Limits	
Triphenyl phosphate	84	60-140	06/17/2020 00:14

Analyst(s): STA



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/kg

Organophosphorous Pesticides by GC-MS (EPA 8141 Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-7-3.0	2006697-016A	Soil	06/11/2020 10:12	GC25 F0616200131.D	200142

Analytes	Result	RL	DF	Date Analyzed
Alachlor	ND	0.10	1	06/17/2020 03:47
Atrazine	ND	0.10	1	06/17/2020 03:47
Azinphos methyl (Guthion)	ND	0.10	1	06/17/2020 03:47
Bolstar (Sulprofos)	ND	0.10	1	06/17/2020 03:47
Chlorpyrifos	ND	0.10	1	06/17/2020 03:47
Coumaphos	ND	0.10	1	06/17/2020 03:47
Demeton	ND	0.10	1	06/17/2020 03:47
Diazinon	ND	0.10	1	06/17/2020 03:47
Dichlorvos (DDVP)	ND	0.10	1	06/17/2020 03:47
Dimethoate	ND	0.10	1	06/17/2020 03:47
Disulfoton (Di-Syston)	ND	0.10	1	06/17/2020 03:47
EPN	ND	0.10	1	06/17/2020 03:47
EPTC	ND	0.10	1	06/17/2020 03:47
Ethion	ND	0.10	1	06/17/2020 03:47
Ethoprop	ND	0.10	1	06/17/2020 03:47
Ethyl parathion	ND	0.10	1	06/17/2020 03:47
Fensulfothion	ND	0.10	1	06/17/2020 03:47
Fenthion	ND	0.10	1	06/17/2020 03:47
Fonofos	ND	0.10	1	06/17/2020 03:47
Malathion	ND	0.10	1	06/17/2020 03:47
Mevinphos (Phosdrin)	ND	0.10	1	06/17/2020 03:47
Molinate	ND	0.10	1	06/17/2020 03:47
Methyl parathion	ND	0.10	1	06/17/2020 03:47
Phorate (Thimet)	ND	0.10	1	06/17/2020 03:47
Prometon	ND	0.10	1	06/17/2020 03:47
Ronnel	ND	0.10	1	06/17/2020 03:47
Simazine	ND	0.10	1	06/17/2020 03:47
Stirofos (Tetrachlorvinphos)	ND	0.10	1	06/17/2020 03:47
Terbacil	ND	0.10	1	06/17/2020 03:47
Terbufos (Terbuphos)	ND	0.10	1	06/17/2020 03:47
Thiobencarb	ND	0.10	1	06/17/2020 03:47
Tokuthion (Prothiofos)	ND	0.10	1	06/17/2020 03:47
Trichloronate (Agritox)	ND	0.10	1	06/17/2020 03:47

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/kg

Organophosphorous Pesticides by GC-MS (EPA 8141 Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-7-3.0	2006697-016A	Soil	06/11/2020 10:12	GC25 F0616200131.D	200142

Analytes	Result	RL	DF	Date Analyzed
----------	--------	----	----	---------------

Surrogates	REC (%)	Limits	Date Analyzed
Triphenyl phosphate	86	60-140	06/17/2020 03:47

Analyst(s): STA



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/kg

Organophosphorous Pesticides by GC-MS (EPA 8141 Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-7-5.0	2006697-017A	Soil	06/11/2020 10:17	GC25 F0616200132.D	200142

Analytes	Result	RL	DF	Date Analyzed
Alachlor	ND	0.10	1	06/17/2020 04:13
Atrazine	ND	0.10	1	06/17/2020 04:13
Azinphos methyl (Guthion)	ND	0.10	1	06/17/2020 04:13
Bolstar (Sulprofos)	ND	0.10	1	06/17/2020 04:13
Chloropyrifos	ND	0.10	1	06/17/2020 04:13
Coumaphos	ND	0.10	1	06/17/2020 04:13
Demeton	ND	0.10	1	06/17/2020 04:13
Diazinon	ND	0.10	1	06/17/2020 04:13
Dichlorvos (DDVP)	ND	0.10	1	06/17/2020 04:13
Dimethoate	ND	0.10	1	06/17/2020 04:13
Disulfoton (Di-Syston)	ND	0.10	1	06/17/2020 04:13
EPN	ND	0.10	1	06/17/2020 04:13
EPTC	ND	0.10	1	06/17/2020 04:13
Ethion	ND	0.10	1	06/17/2020 04:13
Ethoprop	ND	0.10	1	06/17/2020 04:13
Ethyl parathion	ND	0.10	1	06/17/2020 04:13
Fensulfothion	ND	0.10	1	06/17/2020 04:13
Fenthion	ND	0.10	1	06/17/2020 04:13
Fonofos	ND	0.10	1	06/17/2020 04:13
Malathion	ND	0.10	1	06/17/2020 04:13
Mevinphos (Phosdrin)	ND	0.10	1	06/17/2020 04:13
Molinate	ND	0.10	1	06/17/2020 04:13
Methyl parathion	ND	0.10	1	06/17/2020 04:13
Phorate (Thimet)	ND	0.10	1	06/17/2020 04:13
Prometon	ND	0.10	1	06/17/2020 04:13
Ronnel	ND	0.10	1	06/17/2020 04:13
Simazine	ND	0.10	1	06/17/2020 04:13
Stirofos (Tetrachlorvinphos)	ND	0.10	1	06/17/2020 04:13
Terbacil	ND	0.10	1	06/17/2020 04:13
Terbufos (Terbuphos)	ND	0.10	1	06/17/2020 04:13
Thiobencarb	ND	0.10	1	06/17/2020 04:13
Tokuthion (Prothiofos)	ND	0.10	1	06/17/2020 04:13
Trichloronate (Agritox)	ND	0.10	1	06/17/2020 04:13

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/kg

Organophosphorous Pesticides by GC-MS (EPA 8141 Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-7-5.0	2006697-017A	Soil	06/11/2020 10:17	GC25 F0616200132.D	200142

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
-----------------	---------------	-----------	-----------	----------------------

<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Triphenyl phosphate	87		60-140	06/17/2020 04:13

Analyst(s): STA



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/kg

Organophosphorous Pesticides by GC-MS (EPA 8141 Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-5-1.5	2006697-018A	Soil	06/11/2020 11:12	GC25 F0616200133.D	200142

Analytes	Result	RL	DF	Date Analyzed
Alachlor	ND	0.10	1	06/17/2020 04:40
Atrazine	ND	0.10	1	06/17/2020 04:40
Azinphos methyl (Guthion)	ND	0.10	1	06/17/2020 04:40
Bolstar (Sulprofos)	ND	0.10	1	06/17/2020 04:40
Chlorpyrifos	ND	0.10	1	06/17/2020 04:40
Coumaphos	ND	0.10	1	06/17/2020 04:40
Demeton	ND	0.10	1	06/17/2020 04:40
Diazinon	ND	0.10	1	06/17/2020 04:40
Dichlorvos (DDVP)	ND	0.10	1	06/17/2020 04:40
Dimethoate	ND	0.10	1	06/17/2020 04:40
Disulfoton (Di-Syston)	ND	0.10	1	06/17/2020 04:40
EPN	ND	0.10	1	06/17/2020 04:40
EPTC	ND	0.10	1	06/17/2020 04:40
Ethion	ND	0.10	1	06/17/2020 04:40
Ethoprop	ND	0.10	1	06/17/2020 04:40
Ethyl parathion	ND	0.10	1	06/17/2020 04:40
Fensulfothion	ND	0.10	1	06/17/2020 04:40
Fenthion	ND	0.10	1	06/17/2020 04:40
Fonofos	ND	0.10	1	06/17/2020 04:40
Malathion	ND	0.10	1	06/17/2020 04:40
Mevinphos (Phosdrin)	ND	0.10	1	06/17/2020 04:40
Molinate	ND	0.10	1	06/17/2020 04:40
Methyl parathion	ND	0.10	1	06/17/2020 04:40
Phorate (Thimet)	ND	0.10	1	06/17/2020 04:40
Prometon	ND	0.10	1	06/17/2020 04:40
Ronnel	ND	0.10	1	06/17/2020 04:40
Simazine	ND	0.10	1	06/17/2020 04:40
Stirofos (Tetrachlorvinphos)	ND	0.10	1	06/17/2020 04:40
Terbacil	ND	0.10	1	06/17/2020 04:40
Terbufos (Terbuphos)	ND	0.10	1	06/17/2020 04:40
Thiobencarb	ND	0.10	1	06/17/2020 04:40
Tokuthion (Prothiofos)	ND	0.10	1	06/17/2020 04:40
Trichloronate (Agritox)	ND	0.10	1	06/17/2020 04:40

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/kg

Organophosphorous Pesticides by GC-MS (EPA 8141 Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-5-1.5	2006697-018A	Soil	06/11/2020 11:12	GC25 F0616200133.D	200142

Analytes	Result	RL	DF	Date Analyzed
----------	--------	----	----	---------------

Surrogates	REC (%)	Limits	Date Analyzed
Triphenyl phosphate	82	60-140	06/17/2020 04:40

Analyst(s): STA



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/kg

Organophosphorous Pesticides by GC-MS (EPA 8141 Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-5-3.0	2006697-019A	Soil	06/11/2020 11:15	GC25 F0617200207.D	200229

Analytes	Result	RL	DF	Date Analyzed
Alachlor	ND	0.10	1	06/17/2020 16:51
Atrazine	ND	0.10	1	06/17/2020 16:51
Azinphos methyl (Guthion)	ND	0.10	1	06/17/2020 16:51
Bolstar (Sulprofos)	ND	0.10	1	06/17/2020 16:51
Chloropyrifos	ND	0.10	1	06/17/2020 16:51
Coumaphos	ND	0.10	1	06/17/2020 16:51
Demeton	ND	0.10	1	06/17/2020 16:51
Diazinon	ND	0.10	1	06/17/2020 16:51
Dichlorvos (DDVP)	ND	0.10	1	06/17/2020 16:51
Dimethoate	ND	0.10	1	06/17/2020 16:51
Disulfoton (Di-Syston)	ND	0.10	1	06/17/2020 16:51
EPN	ND	0.10	1	06/17/2020 16:51
EPTC	ND	0.10	1	06/17/2020 16:51
Ethion	ND	0.10	1	06/17/2020 16:51
Ethoprop	ND	0.10	1	06/17/2020 16:51
Ethyl parathion	ND	0.10	1	06/17/2020 16:51
Fensulfothion	ND	0.10	1	06/17/2020 16:51
Fenthion	ND	0.10	1	06/17/2020 16:51
Fonofos	ND	0.10	1	06/17/2020 16:51
Malathion	ND	0.10	1	06/17/2020 16:51
Mevinphos (Phosdrin)	ND	0.10	1	06/17/2020 16:51
Molinate	ND	0.10	1	06/17/2020 16:51
Methyl parathion	ND	0.10	1	06/17/2020 16:51
Phorate (Thimet)	ND	0.10	1	06/17/2020 16:51
Prometon	ND	0.10	1	06/17/2020 16:51
Ronnel	ND	0.10	1	06/17/2020 16:51
Simazine	ND	0.10	1	06/17/2020 16:51
Stirofos (Tetrachlorvinphos)	ND	0.10	1	06/17/2020 16:51
Terbacil	ND	0.10	1	06/17/2020 16:51
Terbufos (Terbuphos)	ND	0.10	1	06/17/2020 16:51
Thiobencarb	ND	0.10	1	06/17/2020 16:51
Tokuthion (Prothiofos)	ND	0.10	1	06/17/2020 16:51
Trichloronate (Agritox)	ND	0.10	1	06/17/2020 16:51

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/kg

Organophosphorous Pesticides by GC-MS (EPA 8141 Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-5-3.0	2006697-019A	Soil	06/11/2020 11:15	GC25 F0617200207.D	200229

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
1-Bromo-2-Nitrobenzene	76	60-140		06/17/2020 16:51

Analyst(s): STA



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW8151A
Analytical Method: SW8151A
Unit: mg/kg

Chlorinated Herbicides by GC-ECD

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-2-1.5	2006697-001A	Soil	06/11/2020 08:47	GC15A 06162039.D	200134

Analytes	Result	RL	DF	Date Analyzed
Acifluorfen	ND	0.050	1	06/17/2020 18:05
Bentazon	ND	0.050	1	06/17/2020 18:05
Chloramben	ND	0.050	1	06/17/2020 18:05
2,4-D (Dichlorophenoxyacetic acid)	ND	0.050	1	06/17/2020 18:05
2,4-DB	ND	0.050	1	06/17/2020 18:05
Dalapon	ND	0.10	1	06/17/2020 18:05
DCPA (mono & diacid)	ND	0.050	1	06/17/2020 18:05
Dicamba	ND	0.050	1	06/17/2020 18:05
3,5-Dichlorobenzoic Acid	ND	0.050	1	06/17/2020 18:05
Dichloroprop	ND	0.050	1	06/17/2020 18:05
Dinoseb (DNBP)	ND	0.050	1	06/17/2020 18:05
MCPA	ND	5.0	1	06/17/2020 18:05
MCPP	ND	5.0	1	06/17/2020 18:05
4-Nitrophenol	ND	0.050	1	06/17/2020 18:05
Pentachlorophenol (PCP)	ND	0.050	1	06/17/2020 18:05
Picloram	ND	0.050	1	06/17/2020 18:05
2,4,5-T (Trichlorophenoxy acetic acid)	ND	0.050	1	06/17/2020 18:05
2,4,5-TP (Silvex)	ND	0.050	1	06/17/2020 18:05

Surrogates	REC (%)	Limits	
DCAA	104	60-140	06/17/2020 18:05

Analyst(s): DP



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW8151A
Analytical Method: SW8151A
Unit: mg/kg

Chlorinated Herbicides by GC-ECD

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-2-3.0	2006697-002A	Soil	06/11/2020 08:50	GC15A 06162040.D	200134

Analytes	Result	RL	DF	Date Analyzed
Acifluorfen	ND	0.050	1	06/17/2020 18:31
Bentazon	ND	0.050	1	06/17/2020 18:31
Chloramben	ND	0.050	1	06/17/2020 18:31
2,4-D (Dichlorophenoxyacetic acid)	ND	0.050	1	06/17/2020 18:31
2,4-DB	ND	0.050	1	06/17/2020 18:31
Dalapon	ND	0.10	1	06/17/2020 18:31
DCPA (mono & diacid)	ND	0.050	1	06/17/2020 18:31
Dicamba	ND	0.050	1	06/17/2020 18:31
3,5-Dichlorobenzoic Acid	ND	0.050	1	06/17/2020 18:31
Dichloroprop	ND	0.050	1	06/17/2020 18:31
Dinoseb (DNBP)	ND	0.050	1	06/17/2020 18:31
MCPA	ND	5.0	1	06/17/2020 18:31
MCPP	ND	5.0	1	06/17/2020 18:31
4-Nitrophenol	ND	0.050	1	06/17/2020 18:31
Pentachlorophenol (PCP)	ND	0.050	1	06/17/2020 18:31
Picloram	ND	0.050	1	06/17/2020 18:31
2,4,5-T (Trichlorophenoxy acetic acid)	ND	0.050	1	06/17/2020 18:31
2,4,5-TP (Silvex)	ND	0.050	1	06/17/2020 18:31

Surrogates	REC (%)	Limits	Date Analyzed
DCAA	103	60-140	06/17/2020 18:31

Analyst(s): DP



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW8151A
Analytical Method: SW8151A
Unit: mg/kg

Chlorinated Herbicides by GC-ECD

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-2-7.0	2006697-004A	Soil	06/11/2020 08:56	GC15A 06162044.D	200134

Analytes	Result	RL	DF	Date Analyzed
Acifluorfen	ND	0.050	1	06/17/2020 20:12
Bentazon	ND	0.050	1	06/17/2020 20:12
Chloramben	ND	0.050	1	06/17/2020 20:12
2,4-D (Dichlorophenoxyacetic acid)	ND	0.050	1	06/17/2020 20:12
2,4-DB	ND	0.050	1	06/17/2020 20:12
Dalapon	ND	0.10	1	06/17/2020 20:12
DCPA (mono & diacid)	ND	0.050	1	06/17/2020 20:12
Dicamba	ND	0.050	1	06/17/2020 20:12
3,5-Dichlorobenzoic Acid	ND	0.050	1	06/17/2020 20:12
Dichloroprop	ND	0.050	1	06/17/2020 20:12
Dinoseb (DNBP)	ND	0.050	1	06/17/2020 20:12
MCPA	ND	5.0	1	06/17/2020 20:12
MCPP	ND	5.0	1	06/17/2020 20:12
4-Nitrophenol	ND	0.050	1	06/17/2020 20:12
Pentachlorophenol (PCP)	ND	0.050	1	06/17/2020 20:12
Picloram	ND	0.050	1	06/17/2020 20:12
2,4,5-T (Trichlorophenoxy acetic acid)	ND	0.050	1	06/17/2020 20:12
2,4,5-TP (Silvex)	ND	0.050	1	06/17/2020 20:12

Surrogates	REC (%)	Limits	
DCAA	104	60-140	06/17/2020 20:12

Analyst(s): DP



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW8151A
Analytical Method: SW8151A
Unit: mg/kg

Chlorinated Herbicides by GC-ECD

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-3-1.5	2006697-005A	Soil	06/11/2020 09:24	GC15A 06162042.D	200134

Analytes	Result	RL	DF	Date Analyzed
Acifluorfen	ND	0.50	10	06/17/2020 19:22
Bentazon	ND	0.50	10	06/17/2020 19:22
Chloramben	ND	0.50	10	06/17/2020 19:22
2,4-D (Dichlorophenoxyacetic acid)	ND	0.50	10	06/17/2020 19:22
2,4-DB	ND	0.50	10	06/17/2020 19:22
Dalapon	ND	1.0	10	06/17/2020 19:22
DCPA (mono & diacid)	ND	0.50	10	06/17/2020 19:22
Dicamba	ND	0.50	10	06/17/2020 19:22
3,5-Dichlorobenzoic Acid	ND	0.50	10	06/17/2020 19:22
Dichloroprop	ND	0.50	10	06/17/2020 19:22
Dinoseb (DNBP)	ND	0.50	10	06/17/2020 19:22
MCPA	ND	50	10	06/17/2020 19:22
MCPP	ND	50	10	06/17/2020 19:22
4-Nitrophenol	ND	0.50	10	06/17/2020 19:22
Pentachlorophenol (PCP)	ND	0.50	10	06/17/2020 19:22
Picloram	ND	0.50	10	06/17/2020 19:22
2,4,5-T (Trichlorophenoxy acetic acid)	ND	0.50	10	06/17/2020 19:22
2,4,5-TP (Silvex)	ND	0.50	10	06/17/2020 19:22

Surrogates	REC (%)	Limits	
DCAA	104	60-140	06/17/2020 19:22

Analyst(s): DP

Analytical Comments: a1



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW8151A
Analytical Method: SW8151A
Unit: mg/kg

Chlorinated Herbicides by GC-ECD

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-3-3.0	2006697-007A	Soil	06/11/2020 09:26	GC15A 06162043.D	200134

Analytes	Result	RL	DF	Date Analyzed
Acifluorfen	ND	0.050	1	06/17/2020 19:47
Bentazon	ND	0.050	1	06/17/2020 19:47
Chloramben	ND	0.050	1	06/17/2020 19:47
2,4-D (Dichlorophenoxyacetic acid)	ND	0.050	1	06/17/2020 19:47
2,4-DB	ND	0.050	1	06/17/2020 19:47
Dalapon	ND	0.10	1	06/17/2020 19:47
DCPA (mono & diacid)	ND	0.050	1	06/17/2020 19:47
Dicamba	ND	0.050	1	06/17/2020 19:47
3,5-Dichlorobenzoic Acid	ND	0.050	1	06/17/2020 19:47
Dichloroprop	ND	0.050	1	06/17/2020 19:47
Dinoseb (DNBP)	ND	0.050	1	06/17/2020 19:47
MCPA	ND	5.0	1	06/17/2020 19:47
MCPP	ND	5.0	1	06/17/2020 19:47
4-Nitrophenol	ND	0.050	1	06/17/2020 19:47
Pentachlorophenol (PCP)	ND	0.050	1	06/17/2020 19:47
Picloram	ND	0.050	1	06/17/2020 19:47
2,4,5-T (Trichlorophenoxy acetic acid)	ND	0.050	1	06/17/2020 19:47
2,4,5-TP (Silvex)	ND	0.050	1	06/17/2020 19:47

Surrogates	REC (%)	Limits	
DCAA	98	60-140	06/17/2020 19:47

Analyst(s): DP



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW8151A
Analytical Method: SW8151A
Unit: mg/kg

Chlorinated Herbicides by GC-ECD

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-3-7.0	2006697-008A	Soil	06/11/2020 09:33	GC15A 06162045.D	200134

Analytes	Result	RL	DF	Date Analyzed
Acifluorfen	ND	0.050	1	06/17/2020 20:38
Bentazon	ND	0.050	1	06/17/2020 20:38
Chloramben	ND	0.050	1	06/17/2020 20:38
2,4-D (Dichlorophenoxyacetic acid)	ND	0.050	1	06/17/2020 20:38
2,4-DB	ND	0.050	1	06/17/2020 20:38
Dalapon	ND	0.10	1	06/17/2020 20:38
DCPA (mono & diacid)	ND	0.050	1	06/17/2020 20:38
Dicamba	ND	0.050	1	06/17/2020 20:38
3,5-Dichlorobenzoic Acid	ND	0.050	1	06/17/2020 20:38
Dichloroprop	ND	0.050	1	06/17/2020 20:38
Dinoseb (DNBP)	ND	0.050	1	06/17/2020 20:38
MCPA	ND	5.0	1	06/17/2020 20:38
MCPP	ND	5.0	1	06/17/2020 20:38
4-Nitrophenol	ND	0.050	1	06/17/2020 20:38
Pentachlorophenol (PCP)	ND	0.050	1	06/17/2020 20:38
Picloram	ND	0.050	1	06/17/2020 20:38
2,4,5-T (Trichlorophenoxy acetic acid)	ND	0.050	1	06/17/2020 20:38
2,4,5-TP (Silvex)	ND	0.050	1	06/17/2020 20:38

Surrogates	REC (%)	Limits	
DCAA	95	60-140	06/17/2020 20:38

Analyst(s): DP



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW8151A
Analytical Method: SW8151A
Unit: mg/kg

Chlorinated Herbicides by GC-ECD

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-4-1.5	2006697-009A	Soil	06/11/2020 09:45	GC15A 06162046.D	200134

Analytes	Result	RL	DF	Date Analyzed
Acifluorfen	ND	0.50	10	06/17/2020 21:03
Bentazon	ND	0.50	10	06/17/2020 21:03
Chloramben	ND	0.50	10	06/17/2020 21:03
2,4-D (Dichlorophenoxyacetic acid)	ND	0.50	10	06/17/2020 21:03
2,4-DB	ND	0.50	10	06/17/2020 21:03
Dalapon	ND	1.0	10	06/17/2020 21:03
DCPA (mono & diacid)	ND	0.50	10	06/17/2020 21:03
Dicamba	ND	0.50	10	06/17/2020 21:03
3,5-Dichlorobenzoic Acid	ND	0.50	10	06/17/2020 21:03
Dichloroprop	ND	0.50	10	06/17/2020 21:03
Dinoseb (DNBP)	ND	0.50	10	06/17/2020 21:03
MCPA	ND	50	10	06/17/2020 21:03
MCPP	ND	50	10	06/17/2020 21:03
4-Nitrophenol	ND	0.50	10	06/17/2020 21:03
Pentachlorophenol (PCP)	ND	0.50	10	06/17/2020 21:03
Picloram	ND	0.50	10	06/17/2020 21:03
2,4,5-T (Trichlorophenoxy acetic acid)	ND	0.50	10	06/17/2020 21:03
2,4,5-TP (Silvex)	ND	0.50	10	06/17/2020 21:03

Surrogates	REC (%)	Limits	Date Analyzed
DCAA	109	60-140	06/17/2020 21:03

Analyst(s): DP **Analytical Comments:** a1



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW8151A
Analytical Method: SW8151A
Unit: mg/kg

Chlorinated Herbicides by GC-ECD

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-4-3.0	2006697-010A	Soil	06/11/2020 09:50	GC15A 06162047.D	200134

Analytes	Result	RL	DF	Date Analyzed
Acifluorfen	ND	0.050	1	06/17/2020 21:28
Bentazon	ND	0.050	1	06/17/2020 21:28
Chloramben	ND	0.050	1	06/17/2020 21:28
2,4-D (Dichlorophenoxyacetic acid)	ND	0.050	1	06/17/2020 21:28
2,4-DB	ND	0.050	1	06/17/2020 21:28
Dalapon	ND	0.10	1	06/17/2020 21:28
DCPA (mono & diacid)	ND	0.050	1	06/17/2020 21:28
Dicamba	ND	0.050	1	06/17/2020 21:28
3,5-Dichlorobenzoic Acid	ND	0.050	1	06/17/2020 21:28
Dichloroprop	ND	0.050	1	06/17/2020 21:28
Dinoseb (DNBP)	ND	0.050	1	06/17/2020 21:28
MCPA	ND	5.0	1	06/17/2020 21:28
MCPP	ND	5.0	1	06/17/2020 21:28
4-Nitrophenol	ND	0.050	1	06/17/2020 21:28
Pentachlorophenol (PCP)	ND	0.050	1	06/17/2020 21:28
Picloram	ND	0.050	1	06/17/2020 21:28
2,4,5-T (Trichlorophenoxy acetic acid)	ND	0.050	1	06/17/2020 21:28
2,4,5-TP (Silvex)	ND	0.050	1	06/17/2020 21:28

Surrogates	REC (%)	Limits	
DCAA	112	60-140	06/17/2020 21:28

Analyst(s): DP



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW8151A
Analytical Method: SW8151A
Unit: mg/kg

Chlorinated Herbicides by GC-ECD

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-4-5.0	2006697-011A	Soil	06/11/2020 09:55	GC15A 06162048.D	200134

Analytes	Result	RL	DF	Date Analyzed
Acifluorfen	ND	0.050	1	06/17/2020 21:53
Bentazon	ND	0.050	1	06/17/2020 21:53
Chloramben	ND	0.050	1	06/17/2020 21:53
2,4-D (Dichlorophenoxyacetic acid)	ND	0.050	1	06/17/2020 21:53
2,4-DB	ND	0.050	1	06/17/2020 21:53
Dalapon	ND	0.10	1	06/17/2020 21:53
DCPA (mono & diacid)	ND	0.050	1	06/17/2020 21:53
Dicamba	ND	0.050	1	06/17/2020 21:53
3,5-Dichlorobenzoic Acid	ND	0.050	1	06/17/2020 21:53
Dichloroprop	ND	0.050	1	06/17/2020 21:53
Dinoseb (DNBP)	ND	0.050	1	06/17/2020 21:53
MCPA	ND	5.0	1	06/17/2020 21:53
MCPP	ND	5.0	1	06/17/2020 21:53
4-Nitrophenol	ND	0.050	1	06/17/2020 21:53
Pentachlorophenol (PCP)	ND	0.050	1	06/17/2020 21:53
Picloram	ND	0.050	1	06/17/2020 21:53
2,4,5-T (Trichlorophenoxy acetic acid)	ND	0.050	1	06/17/2020 21:53
2,4,5-TP (Silvex)	ND	0.050	1	06/17/2020 21:53

Surrogates	REC (%)	Limits	Date Analyzed
DCAA	114	60-140	06/17/2020 21:53

Analyst(s): DP



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW8151A
Analytical Method: SW8151A
Unit: mg/kg

Chlorinated Herbicides by GC-ECD

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-8-1.5	2006697-012A	Soil	06/11/2020 10:33	GC15A 06162049.D	200134

Analytes	Result	RL	DF	Date Analyzed
Acifluorfen	ND	0.50	10	06/17/2020 22:18
Bentazon	ND	0.50	10	06/17/2020 22:18
Chloramben	ND	0.50	10	06/17/2020 22:18
2,4-D (Dichlorophenoxyacetic acid)	ND	0.50	10	06/17/2020 22:18
2,4-DB	ND	0.50	10	06/17/2020 22:18
Dalapon	ND	1.0	10	06/17/2020 22:18
DCPA (mono & diacid)	ND	0.50	10	06/17/2020 22:18
Dicamba	ND	0.50	10	06/17/2020 22:18
3,5-Dichlorobenzoic Acid	ND	0.50	10	06/17/2020 22:18
Dichloroprop	ND	0.50	10	06/17/2020 22:18
Dinoseb (DNBP)	ND	0.50	10	06/17/2020 22:18
MCPA	ND	50	10	06/17/2020 22:18
MCPP	ND	50	10	06/17/2020 22:18
4-Nitrophenol	ND	0.50	10	06/17/2020 22:18
Pentachlorophenol (PCP)	ND	0.50	10	06/17/2020 22:18
Picloram	ND	0.50	10	06/17/2020 22:18
2,4,5-T (Trichlorophenoxy acetic acid)	ND	0.50	10	06/17/2020 22:18
2,4,5-TP (Silvex)	ND	0.50	10	06/17/2020 22:18

Surrogates	REC (%)	Limits	
DCAA	119	60-140	06/17/2020 22:18

Analyst(s): DP **Analytical Comments:** a1



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW8151A
Analytical Method: SW8151A
Unit: mg/kg

Chlorinated Herbicides by GC-ECD

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-8-3.0	2006697-013A	Soil	06/11/2020 10:35	GC15A 06162076.D	200134

Analytes	Result	RL	DF	Date Analyzed
Acifluorfen	ND	0.25	5	06/18/2020 19:00
Bentazon	ND	0.25	5	06/18/2020 19:00
Chloramben	ND	0.25	5	06/18/2020 19:00
2,4-D (Dichlorophenoxyacetic acid)	ND	0.25	5	06/18/2020 19:00
2,4-DB	ND	0.25	5	06/18/2020 19:00
Dalapon	ND	0.50	5	06/18/2020 19:00
DCPA (mono & diacid)	ND	0.25	5	06/18/2020 19:00
Dicamba	ND	0.25	5	06/18/2020 19:00
3,5-Dichlorobenzoic Acid	ND	0.25	5	06/18/2020 19:00
Dichloroprop	ND	0.25	5	06/18/2020 19:00
Dinoseb (DNBP)	ND	0.25	5	06/18/2020 19:00
MCPA	ND	25	5	06/18/2020 19:00
MCPP	ND	25	5	06/18/2020 19:00
4-Nitrophenol	ND	0.25	5	06/18/2020 19:00
Pentachlorophenol (PCP)	ND	0.25	5	06/18/2020 19:00
Picloram	ND	0.25	5	06/18/2020 19:00
2,4,5-T (Trichlorophenoxy acetic acid)	ND	0.25	5	06/18/2020 19:00
2,4,5-TP (Silvex)	ND	0.25	5	06/18/2020 19:00

Surrogates	REC (%)	Limits	
DCAA	97	60-140	06/18/2020 19:00

Analyst(s): DP

Analytical Comments: a1



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW8151A
Analytical Method: SW8151A
Unit: mg/kg

Chlorinated Herbicides by GC-ECD

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-7-1.5	2006697-015A	Soil	06/11/2020 10:09	GC15A 06162058.D	200134

Analytes	Result	RL	DF	Date Analyzed
Acifluorfen	ND	0.050	1	06/18/2020 02:03
Bentazon	ND	0.050	1	06/18/2020 02:03
Chloramben	ND	0.050	1	06/18/2020 02:03
2,4-D (Dichlorophenoxyacetic acid)	ND	0.050	1	06/18/2020 02:03
2,4-DB	ND	0.050	1	06/18/2020 02:03
Dalapon	ND	0.10	1	06/18/2020 02:03
DCPA (mono & diacid)	ND	0.050	1	06/18/2020 02:03
Dicamba	ND	0.050	1	06/18/2020 02:03
3,5-Dichlorobenzoic Acid	ND	0.050	1	06/18/2020 02:03
Dichloroprop	ND	0.050	1	06/18/2020 02:03
Dinoseb (DNBP)	ND	0.050	1	06/18/2020 02:03
MCPA	ND	5.0	1	06/18/2020 02:03
MCPP	ND	5.0	1	06/18/2020 02:03
4-Nitrophenol	ND	0.050	1	06/18/2020 02:03
Pentachlorophenol (PCP)	ND	0.050	1	06/18/2020 02:03
Picloram	ND	0.050	1	06/18/2020 02:03
2,4,5-T (Trichlorophenoxy acetic acid)	ND	0.050	1	06/18/2020 02:03
2,4,5-TP (Silvex)	ND	0.050	1	06/18/2020 02:03

Surrogates	REC (%)	Limits	
DCAA	96	60-140	06/18/2020 02:03

Analyst(s): DP



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW8151A
Analytical Method: SW8151A
Unit: mg/kg

Chlorinated Herbicides by GC-ECD

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-7-3.0	2006697-016A	Soil	06/11/2020 10:12	GC15A 06162059.D	200134

Analytes	Result	RL	DF	Date Analyzed
Acifluorfen	ND	0.050	1	06/18/2020 02:28
Bentazon	ND	0.050	1	06/18/2020 02:28
Chloramben	ND	0.050	1	06/18/2020 02:28
2,4-D (Dichlorophenoxyacetic acid)	ND	0.050	1	06/18/2020 02:28
2,4-DB	ND	0.050	1	06/18/2020 02:28
Dalapon	ND	0.10	1	06/18/2020 02:28
DCPA (mono & diacid)	ND	0.050	1	06/18/2020 02:28
Dicamba	ND	0.050	1	06/18/2020 02:28
3,5-Dichlorobenzoic Acid	ND	0.050	1	06/18/2020 02:28
Dichloroprop	ND	0.050	1	06/18/2020 02:28
Dinoseb (DNBP)	ND	0.050	1	06/18/2020 02:28
MCPA	ND	5.0	1	06/18/2020 02:28
MCPP	ND	5.0	1	06/18/2020 02:28
4-Nitrophenol	ND	0.050	1	06/18/2020 02:28
Pentachlorophenol (PCP)	ND	0.050	1	06/18/2020 02:28
Picloram	ND	0.050	1	06/18/2020 02:28
2,4,5-T (Trichlorophenoxy acetic acid)	ND	0.050	1	06/18/2020 02:28
2,4,5-TP (Silvex)	ND	0.050	1	06/18/2020 02:28

Surrogates	REC (%)	Limits	Date Analyzed
DCAA	107	60-140	06/18/2020 02:28

Analyst(s): DP



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW8151A
Analytical Method: SW8151A
Unit: mg/kg

Chlorinated Herbicides by GC-ECD

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-7-5.0	2006697-017A	Soil	06/11/2020 10:17	GC15A 06162060.D	200134

Analytes	Result	RL	DF	Date Analyzed
Acifluorfen	ND	0.050	1	06/18/2020 02:53
Bentazon	ND	0.050	1	06/18/2020 02:53
Chloramben	ND	0.050	1	06/18/2020 02:53
2,4-D (Dichlorophenoxyacetic acid)	ND	0.050	1	06/18/2020 02:53
2,4-DB	ND	0.050	1	06/18/2020 02:53
Dalapon	ND	0.10	1	06/18/2020 02:53
DCPA (mono & diacid)	ND	0.050	1	06/18/2020 02:53
Dicamba	ND	0.050	1	06/18/2020 02:53
3,5-Dichlorobenzoic Acid	ND	0.050	1	06/18/2020 02:53
Dichloroprop	ND	0.050	1	06/18/2020 02:53
Dinoseb (DNBP)	ND	0.050	1	06/18/2020 02:53
MCPA	ND	5.0	1	06/18/2020 02:53
MCPP	ND	5.0	1	06/18/2020 02:53
4-Nitrophenol	ND	0.050	1	06/18/2020 02:53
Pentachlorophenol (PCP)	ND	0.050	1	06/18/2020 02:53
Picloram	ND	0.050	1	06/18/2020 02:53
2,4,5-T (Trichlorophenoxy acetic acid)	ND	0.050	1	06/18/2020 02:53
2,4,5-TP (Silvex)	ND	0.050	1	06/18/2020 02:53

Surrogates	REC (%)	Limits	
DCAA	103	60-140	06/18/2020 02:53

Analyst(s): DP



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW8151A
Analytical Method: SW8151A
Unit: mg/kg

Chlorinated Herbicides by GC-ECD

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-5-1.5	2006697-018A	Soil	06/11/2020 11:12	GC15A 06162061.D	200134

Analytes	Result	RL	DF	Date Analyzed
Acifluorfen	ND	0.50	10	06/18/2020 03:17
Bentazon	ND	0.50	10	06/18/2020 03:17
Chloramben	ND	0.50	10	06/18/2020 03:17
2,4-D (Dichlorophenoxyacetic acid)	ND	0.50	10	06/18/2020 03:17
2,4-DB	ND	0.50	10	06/18/2020 03:17
Dalapon	ND	1.0	10	06/18/2020 03:17
DCPA (mono & diacid)	ND	0.50	10	06/18/2020 03:17
Dicamba	ND	0.50	10	06/18/2020 03:17
3,5-Dichlorobenzoic Acid	ND	0.50	10	06/18/2020 03:17
Dichloroprop	ND	0.50	10	06/18/2020 03:17
Dinoseb (DNBP)	ND	0.50	10	06/18/2020 03:17
MCPA	ND	50	10	06/18/2020 03:17
MCPP	ND	50	10	06/18/2020 03:17
4-Nitrophenol	ND	0.50	10	06/18/2020 03:17
Pentachlorophenol (PCP)	ND	0.50	10	06/18/2020 03:17
Picloram	ND	0.50	10	06/18/2020 03:17
2,4,5-T (Trichlorophenoxy acetic acid)	ND	0.50	10	06/18/2020 03:17
2,4,5-TP (Silvex)	ND	0.50	10	06/18/2020 03:17

Surrogates	REC (%)	Limits	
DCAA	124	60-140	06/18/2020 03:17

Analyst(s): DP



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/16/2020-06/17/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW8151A
Analytical Method: SW8151A
Unit: mg/kg

Chlorinated Herbicides by GC-ECD

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-5-3.0	2006697-019A	Soil	06/11/2020 11:15	GC15A 06162055.D	200227

Analytes	Result	RL	DF	Date Analyzed
Acifluorfen	ND	0.050	1	06/18/2020 00:48
Bentazon	ND	0.050	1	06/18/2020 00:48
Chloramben	ND	0.050	1	06/18/2020 00:48
2,4-D (Dichlorophenoxyacetic acid)	ND	0.050	1	06/18/2020 00:48
2,4-DB	ND	0.050	1	06/18/2020 00:48
Dalapon	ND	0.10	1	06/18/2020 00:48
DCPA (mono & diacid)	ND	0.050	1	06/18/2020 00:48
Dicamba	ND	0.050	1	06/18/2020 00:48
3,5-Dichlorobenzoic Acid	ND	0.050	1	06/18/2020 00:48
Dichloroprop	ND	0.050	1	06/18/2020 00:48
Dinoseb (DNBP)	ND	0.050	1	06/18/2020 00:48
MCPA	ND	5.0	1	06/18/2020 00:48
MCPP	ND	5.0	1	06/18/2020 00:48
4-Nitrophenol	ND	0.050	1	06/18/2020 00:48
Pentachlorophenol (PCP)	ND	0.050	1	06/18/2020 00:48
Picloram	ND	0.050	1	06/18/2020 00:48
2,4,5-T (Trichlorophenoxy acetic acid)	ND	0.050	1	06/18/2020 00:48
2,4,5-TP (Silvex)	ND	0.050	1	06/18/2020 00:48

Surrogates	REC (%)	Limits	Date Analyzed
DCAA	102	60-140	06/18/2020 00:48

Analyst(s): DP



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-2-1.5	2006697-001A	Soil	06/11/2020 08:47	GC28 06202027.D	200074

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	06/21/2020 00:23
tert-Amyl methyl ether (TAME)	ND	0.0050	1	06/21/2020 00:23
Benzene	ND	0.0050	1	06/21/2020 00:23
Bromobenzene	ND	0.0050	1	06/21/2020 00:23
Bromochloromethane	ND	0.0050	1	06/21/2020 00:23
Bromodichloromethane	ND	0.0010	1	06/21/2020 00:23
Bromoform	ND	0.0050	1	06/21/2020 00:23
Bromomethane	ND	0.0050	1	06/21/2020 00:23
2-Butanone (MEK)	ND	0.020	1	06/21/2020 00:23
t-Butyl alcohol (TBA)	ND	0.050	1	06/21/2020 00:23
n-Butyl benzene	ND	0.0050	1	06/21/2020 00:23
sec-Butyl benzene	ND	0.0050	1	06/21/2020 00:23
tert-Butyl benzene	ND	0.0050	1	06/21/2020 00:23
Carbon Disulfide	ND	0.0050	1	06/21/2020 00:23
Carbon Tetrachloride	ND	0.0050	1	06/21/2020 00:23
Chlorobenzene	ND	0.0050	1	06/21/2020 00:23
Chloroethane	ND	0.0050	1	06/21/2020 00:23
Chloroform	ND	0.0050	1	06/21/2020 00:23
Chloromethane	ND	0.0050	1	06/21/2020 00:23
2-Chlorotoluene	ND	0.0050	1	06/21/2020 00:23
4-Chlorotoluene	ND	0.0050	1	06/21/2020 00:23
Dibromochloromethane	ND	0.0050	1	06/21/2020 00:23
1,2-Dibromo-3-chloropropane	ND	0.00025	1	06/21/2020 00:23
1,2-Dibromoethane (EDB)	ND	0.00010	1	06/21/2020 00:23
Dibromomethane	ND	0.0050	1	06/21/2020 00:23
1,2-Dichlorobenzene	ND	0.0050	1	06/21/2020 00:23
1,3-Dichlorobenzene	ND	0.0050	1	06/21/2020 00:23
1,4-Dichlorobenzene	ND	0.0050	1	06/21/2020 00:23
Dichlorodifluoromethane	ND	0.0050	1	06/21/2020 00:23
1,1-Dichloroethane	ND	0.0050	1	06/21/2020 00:23
1,2-Dichloroethane (1,2-DCA)	ND	0.00025	1	06/21/2020 00:23
1,1-Dichloroethene	ND	0.00025	1	06/21/2020 00:23
cis-1,2-Dichloroethene	ND	0.0050	1	06/21/2020 00:23
trans-1,2-Dichloroethene	ND	0.0050	1	06/21/2020 00:23
1,2-Dichloropropane	ND	0.0050	1	06/21/2020 00:23
1,3-Dichloropropane	ND	0.0050	1	06/21/2020 00:23
2,2-Dichloropropane	ND	0.0050	1	06/21/2020 00:23

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-2-1.5	2006697-001A	Soil	06/11/2020 08:47	GC28 06202027.D	200074

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	06/21/2020 00:23
cis-1,3-Dichloropropene	ND	0.0050	1	06/21/2020 00:23
trans-1,3-Dichloropropene	ND	0.0050	1	06/21/2020 00:23
Diisopropyl ether (DIPE)	ND	0.0050	1	06/21/2020 00:23
Ethylbenzene	ND	0.0050	1	06/21/2020 00:23
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	06/21/2020 00:23
Freon 113	ND	0.0050	1	06/21/2020 00:23
Hexachlorobutadiene	ND	0.0050	1	06/21/2020 00:23
Hexachloroethane	ND	0.0050	1	06/21/2020 00:23
2-Hexanone	ND	0.0050	1	06/21/2020 00:23
Isopropylbenzene	ND	0.0050	1	06/21/2020 00:23
4-Isopropyl toluene	ND	0.0050	1	06/21/2020 00:23
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/21/2020 00:23
Methylene chloride	ND	0.010	1	06/21/2020 00:23
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	06/21/2020 00:23
Naphthalene	ND	0.0050	1	06/21/2020 00:23
n-Propyl benzene	ND	0.0050	1	06/21/2020 00:23
Styrene	ND	0.0050	1	06/21/2020 00:23
1,1,1,2-Tetrachloroethane	ND	0.0050	1	06/21/2020 00:23
1,1,2,2-Tetrachloroethane	ND	0.00025	1	06/21/2020 00:23
Tetrachloroethene	ND	0.0010	1	06/21/2020 00:23
Toluene	ND	0.0050	1	06/21/2020 00:23
1,2,3-Trichlorobenzene	ND	0.0050	1	06/21/2020 00:23
1,2,4-Trichlorobenzene	ND	0.0050	1	06/21/2020 00:23
1,1,1-Trichloroethane	ND	0.0050	1	06/21/2020 00:23
1,1,2-Trichloroethane	ND	0.0050	1	06/21/2020 00:23
Trichloroethene	ND	0.0050	1	06/21/2020 00:23
Trichlorofluoromethane	ND	0.0050	1	06/21/2020 00:23
1,2,3-Trichloropropane	ND	0.00010	1	06/21/2020 00:23
1,2,4-Trimethylbenzene	ND	0.0050	1	06/21/2020 00:23
1,3,5-Trimethylbenzene	ND	0.0050	1	06/21/2020 00:23
Vinyl Chloride	ND	0.00025	1	06/21/2020 00:23
m,p-Xylene	ND	0.0050	1	06/21/2020 00:23
o-Xylene	ND	0.0050	1	06/21/2020 00:23
Xylenes, Total	ND	0.0050	1	06/21/2020 00:23

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-2-1.5	2006697-001A	Soil	06/11/2020 08:47	GC28 06202027.D	200074

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	95	82-136		06/21/2020 00:23
Toluene-d8	99	92-139		06/21/2020 00:23
4-BFB	101	82-135		06/21/2020 00:23
Benzene-d6	95	55-122		06/21/2020 00:23
Ethylbenzene-d10	96	58-141		06/21/2020 00:23
1,2-DCB-d4	76	51-107		06/21/2020 00:23

Analyst(s): KF



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-2-3.0	2006697-002A	Soil	06/11/2020 08:50	GC28 06192028.D	200074

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	06/20/2020 01:51
tert-Amyl methyl ether (TAME)	ND	0.0050	1	06/20/2020 01:51
Benzene	ND	0.0050	1	06/20/2020 01:51
Bromobenzene	ND	0.0050	1	06/20/2020 01:51
Bromochloromethane	ND	0.0050	1	06/20/2020 01:51
Bromodichloromethane	ND	0.0010	1	06/20/2020 01:51
Bromoform	ND	0.0050	1	06/20/2020 01:51
Bromomethane	ND	0.0050	1	06/20/2020 01:51
2-Butanone (MEK)	ND	0.020	1	06/20/2020 01:51
t-Butyl alcohol (TBA)	ND	0.050	1	06/20/2020 01:51
n-Butyl benzene	ND	0.0050	1	06/20/2020 01:51
sec-Butyl benzene	ND	0.0050	1	06/20/2020 01:51
tert-Butyl benzene	ND	0.0050	1	06/20/2020 01:51
Carbon Disulfide	ND	0.0050	1	06/20/2020 01:51
Carbon Tetrachloride	ND	0.0050	1	06/20/2020 01:51
Chlorobenzene	ND	0.0050	1	06/20/2020 01:51
Chloroethane	ND	0.0050	1	06/20/2020 01:51
Chloroform	ND	0.0050	1	06/20/2020 01:51
Chloromethane	ND	0.0050	1	06/20/2020 01:51
2-Chlorotoluene	ND	0.0050	1	06/20/2020 01:51
4-Chlorotoluene	ND	0.0050	1	06/20/2020 01:51
Dibromochloromethane	ND	0.0050	1	06/20/2020 01:51
1,2-Dibromo-3-chloropropane	ND	0.00025	1	06/20/2020 01:51
1,2-Dibromoethane (EDB)	ND	0.00010	1	06/20/2020 01:51
Dibromomethane	ND	0.0050	1	06/20/2020 01:51
1,2-Dichlorobenzene	ND	0.0050	1	06/20/2020 01:51
1,3-Dichlorobenzene	ND	0.0050	1	06/20/2020 01:51
1,4-Dichlorobenzene	ND	0.0050	1	06/20/2020 01:51
Dichlorodifluoromethane	ND	0.0050	1	06/20/2020 01:51
1,1-Dichloroethane	ND	0.0050	1	06/20/2020 01:51
1,2-Dichloroethane (1,2-DCA)	ND	0.00025	1	06/20/2020 01:51
1,1-Dichloroethene	ND	0.00025	1	06/20/2020 01:51
cis-1,2-Dichloroethene	ND	0.0050	1	06/20/2020 01:51
trans-1,2-Dichloroethene	ND	0.0050	1	06/20/2020 01:51
1,2-Dichloropropane	ND	0.0050	1	06/20/2020 01:51
1,3-Dichloropropane	ND	0.0050	1	06/20/2020 01:51
2,2-Dichloropropane	ND	0.0050	1	06/20/2020 01:51

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-2-3.0	2006697-002A	Soil	06/11/2020 08:50	GC28 06192028.D	200074

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	06/20/2020 01:51
cis-1,3-Dichloropropene	ND	0.0050	1	06/20/2020 01:51
trans-1,3-Dichloropropene	ND	0.0050	1	06/20/2020 01:51
Diisopropyl ether (DIPE)	ND	0.0050	1	06/20/2020 01:51
Ethylbenzene	ND	0.0050	1	06/20/2020 01:51
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	06/20/2020 01:51
Freon 113	ND	0.0050	1	06/20/2020 01:51
Hexachlorobutadiene	ND	0.0050	1	06/20/2020 01:51
Hexachloroethane	ND	0.0050	1	06/20/2020 01:51
2-Hexanone	ND	0.0050	1	06/20/2020 01:51
Isopropylbenzene	ND	0.0050	1	06/20/2020 01:51
4-Isopropyl toluene	ND	0.0050	1	06/20/2020 01:51
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/20/2020 01:51
Methylene chloride	ND	0.010	1	06/20/2020 01:51
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	06/20/2020 01:51
Naphthalene	ND	0.0050	1	06/20/2020 01:51
n-Propyl benzene	ND	0.0050	1	06/20/2020 01:51
Styrene	ND	0.0050	1	06/20/2020 01:51
1,1,1,2-Tetrachloroethane	ND	0.0050	1	06/20/2020 01:51
1,1,2,2-Tetrachloroethane	ND	0.00025	1	06/20/2020 01:51
Tetrachloroethene	ND	0.0010	1	06/20/2020 01:51
Toluene	ND	0.0050	1	06/20/2020 01:51
1,2,3-Trichlorobenzene	ND	0.0050	1	06/20/2020 01:51
1,2,4-Trichlorobenzene	ND	0.0050	1	06/20/2020 01:51
1,1,1-Trichloroethane	ND	0.0050	1	06/20/2020 01:51
1,1,2-Trichloroethane	ND	0.0050	1	06/20/2020 01:51
Trichloroethene	ND	0.0050	1	06/20/2020 01:51
Trichlorofluoromethane	ND	0.0050	1	06/20/2020 01:51
1,2,3-Trichloropropane	ND	0.00010	1	06/20/2020 01:51
1,2,4-Trimethylbenzene	ND	0.0050	1	06/20/2020 01:51
1,3,5-Trimethylbenzene	ND	0.0050	1	06/20/2020 01:51
Vinyl Chloride	ND	0.00025	1	06/20/2020 01:51
m,p-Xylene	ND	0.0050	1	06/20/2020 01:51
o-Xylene	ND	0.0050	1	06/20/2020 01:51
Xylenes, Total	ND	0.0050	1	06/20/2020 01:51

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-2-3.0	2006697-002A	Soil	06/11/2020 08:50	GC28 06192028.D	200074

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	105	82-136		06/20/2020 01:51
Toluene-d8	100	92-139		06/20/2020 01:51
4-BFB	101	82-135		06/20/2020 01:51
Benzene-d6	103	55-122		06/20/2020 01:51
Ethylbenzene-d10	99	58-141		06/20/2020 01:51
1,2-DCB-d4	79	51-107		06/20/2020 01:51

Analyst(s): KF



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-2-7.0	2006697-004A	Soil	06/11/2020 08:56	GC28 06192029.D	200074

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	06/20/2020 02:31
tert-Amyl methyl ether (TAME)	ND	0.0050	1	06/20/2020 02:31
Benzene	ND	0.0050	1	06/20/2020 02:31
Bromobenzene	ND	0.0050	1	06/20/2020 02:31
Bromochloromethane	ND	0.0050	1	06/20/2020 02:31
Bromodichloromethane	ND	0.0010	1	06/20/2020 02:31
Bromoform	ND	0.0050	1	06/20/2020 02:31
Bromomethane	ND	0.0050	1	06/20/2020 02:31
2-Butanone (MEK)	ND	0.020	1	06/20/2020 02:31
t-Butyl alcohol (TBA)	ND	0.050	1	06/20/2020 02:31
n-Butyl benzene	ND	0.0050	1	06/20/2020 02:31
sec-Butyl benzene	ND	0.0050	1	06/20/2020 02:31
tert-Butyl benzene	ND	0.0050	1	06/20/2020 02:31
Carbon Disulfide	ND	0.0050	1	06/20/2020 02:31
Carbon Tetrachloride	ND	0.0050	1	06/20/2020 02:31
Chlorobenzene	ND	0.0050	1	06/20/2020 02:31
Chloroethane	ND	0.0050	1	06/20/2020 02:31
Chloroform	ND	0.0050	1	06/20/2020 02:31
Chloromethane	ND	0.0050	1	06/20/2020 02:31
2-Chlorotoluene	ND	0.0050	1	06/20/2020 02:31
4-Chlorotoluene	ND	0.0050	1	06/20/2020 02:31
Dibromochloromethane	ND	0.0050	1	06/20/2020 02:31
1,2-Dibromo-3-chloropropane	ND	0.00025	1	06/20/2020 02:31
1,2-Dibromoethane (EDB)	ND	0.00010	1	06/20/2020 02:31
Dibromomethane	ND	0.0050	1	06/20/2020 02:31
1,2-Dichlorobenzene	ND	0.0050	1	06/20/2020 02:31
1,3-Dichlorobenzene	ND	0.0050	1	06/20/2020 02:31
1,4-Dichlorobenzene	ND	0.0050	1	06/20/2020 02:31
Dichlorodifluoromethane	ND	0.0050	1	06/20/2020 02:31
1,1-Dichloroethane	ND	0.0050	1	06/20/2020 02:31
1,2-Dichloroethane (1,2-DCA)	ND	0.00025	1	06/20/2020 02:31
1,1-Dichloroethene	ND	0.00025	1	06/20/2020 02:31
cis-1,2-Dichloroethene	ND	0.0050	1	06/20/2020 02:31
trans-1,2-Dichloroethene	ND	0.0050	1	06/20/2020 02:31
1,2-Dichloropropane	ND	0.0050	1	06/20/2020 02:31
1,3-Dichloropropane	ND	0.0050	1	06/20/2020 02:31
2,2-Dichloropropane	ND	0.0050	1	06/20/2020 02:31

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-2-7.0	2006697-004A	Soil	06/11/2020 08:56	GC28 06192029.D	200074

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	06/20/2020 02:31
cis-1,3-Dichloropropene	ND	0.0050	1	06/20/2020 02:31
trans-1,3-Dichloropropene	ND	0.0050	1	06/20/2020 02:31
Diisopropyl ether (DIPE)	ND	0.0050	1	06/20/2020 02:31
Ethylbenzene	ND	0.0050	1	06/20/2020 02:31
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	06/20/2020 02:31
Freon 113	ND	0.0050	1	06/20/2020 02:31
Hexachlorobutadiene	ND	0.0050	1	06/20/2020 02:31
Hexachloroethane	ND	0.0050	1	06/20/2020 02:31
2-Hexanone	ND	0.0050	1	06/20/2020 02:31
Isopropylbenzene	ND	0.0050	1	06/20/2020 02:31
4-Isopropyl toluene	ND	0.0050	1	06/20/2020 02:31
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/20/2020 02:31
Methylene chloride	ND	0.010	1	06/20/2020 02:31
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	06/20/2020 02:31
Naphthalene	ND	0.0050	1	06/20/2020 02:31
n-Propyl benzene	ND	0.0050	1	06/20/2020 02:31
Styrene	ND	0.0050	1	06/20/2020 02:31
1,1,1,2-Tetrachloroethane	ND	0.0050	1	06/20/2020 02:31
1,1,2,2-Tetrachloroethane	ND	0.00025	1	06/20/2020 02:31
Tetrachloroethene	ND	0.0010	1	06/20/2020 02:31
Toluene	ND	0.0050	1	06/20/2020 02:31
1,2,3-Trichlorobenzene	ND	0.0050	1	06/20/2020 02:31
1,2,4-Trichlorobenzene	ND	0.0050	1	06/20/2020 02:31
1,1,1-Trichloroethane	ND	0.0050	1	06/20/2020 02:31
1,1,2-Trichloroethane	ND	0.0050	1	06/20/2020 02:31
Trichloroethene	ND	0.0050	1	06/20/2020 02:31
Trichlorofluoromethane	ND	0.0050	1	06/20/2020 02:31
1,2,3-Trichloropropane	ND	0.00010	1	06/20/2020 02:31
1,2,4-Trimethylbenzene	ND	0.0050	1	06/20/2020 02:31
1,3,5-Trimethylbenzene	ND	0.0050	1	06/20/2020 02:31
Vinyl Chloride	ND	0.00025	1	06/20/2020 02:31
m,p-Xylene	ND	0.0050	1	06/20/2020 02:31
o-Xylene	ND	0.0050	1	06/20/2020 02:31
Xylenes, Total	ND	0.0050	1	06/20/2020 02:31

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-2-7.0	2006697-004A	Soil	06/11/2020 08:56	GC28 06192029.D	200074

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	95	82-136		06/20/2020 02:31
Toluene-d8	99	92-139		06/20/2020 02:31
4-BFB	100	82-135		06/20/2020 02:31
Benzene-d6	86	55-122		06/20/2020 02:31
Ethylbenzene-d10	91	58-141		06/20/2020 02:31
1,2-DCB-d4	72	51-107		06/20/2020 02:31

Analyst(s): KF



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-3-1.5	2006697-005A	Soil	06/11/2020 09:24	GC28 06192030.D	200074

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	06/20/2020 03:12
tert-Amyl methyl ether (TAME)	ND	0.0050	1	06/20/2020 03:12
Benzene	ND	0.0050	1	06/20/2020 03:12
Bromobenzene	ND	0.0050	1	06/20/2020 03:12
Bromochloromethane	ND	0.0050	1	06/20/2020 03:12
Bromodichloromethane	ND	0.0010	1	06/20/2020 03:12
Bromoform	ND	0.0050	1	06/20/2020 03:12
Bromomethane	ND	0.0050	1	06/20/2020 03:12
2-Butanone (MEK)	ND	0.020	1	06/20/2020 03:12
t-Butyl alcohol (TBA)	ND	0.050	1	06/20/2020 03:12
n-Butyl benzene	ND	0.0050	1	06/20/2020 03:12
sec-Butyl benzene	ND	0.0050	1	06/20/2020 03:12
tert-Butyl benzene	ND	0.0050	1	06/20/2020 03:12
Carbon Disulfide	ND	0.0050	1	06/20/2020 03:12
Carbon Tetrachloride	ND	0.0050	1	06/20/2020 03:12
Chlorobenzene	ND	0.0050	1	06/20/2020 03:12
Chloroethane	ND	0.0050	1	06/20/2020 03:12
Chloroform	ND	0.0050	1	06/20/2020 03:12
Chloromethane	ND	0.0050	1	06/20/2020 03:12
2-Chlorotoluene	ND	0.0050	1	06/20/2020 03:12
4-Chlorotoluene	ND	0.0050	1	06/20/2020 03:12
Dibromochloromethane	ND	0.0050	1	06/20/2020 03:12
1,2-Dibromo-3-chloropropane	ND	0.00025	1	06/20/2020 03:12
1,2-Dibromoethane (EDB)	ND	0.00010	1	06/20/2020 03:12
Dibromomethane	ND	0.0050	1	06/20/2020 03:12
1,2-Dichlorobenzene	ND	0.0050	1	06/20/2020 03:12
1,3-Dichlorobenzene	ND	0.0050	1	06/20/2020 03:12
1,4-Dichlorobenzene	ND	0.0050	1	06/20/2020 03:12
Dichlorodifluoromethane	ND	0.0050	1	06/20/2020 03:12
1,1-Dichloroethane	ND	0.0050	1	06/20/2020 03:12
1,2-Dichloroethane (1,2-DCA)	ND	0.00025	1	06/20/2020 03:12
1,1-Dichloroethene	ND	0.00025	1	06/20/2020 03:12
cis-1,2-Dichloroethene	ND	0.0050	1	06/20/2020 03:12
trans-1,2-Dichloroethene	ND	0.0050	1	06/20/2020 03:12
1,2-Dichloropropane	ND	0.0050	1	06/20/2020 03:12
1,3-Dichloropropane	ND	0.0050	1	06/20/2020 03:12
2,2-Dichloropropane	ND	0.0050	1	06/20/2020 03:12

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-3-1.5	2006697-005A	Soil	06/11/2020 09:24	GC28 06192030.D	200074

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	06/20/2020 03:12
cis-1,3-Dichloropropene	ND	0.0050	1	06/20/2020 03:12
trans-1,3-Dichloropropene	ND	0.0050	1	06/20/2020 03:12
Diisopropyl ether (DIPE)	ND	0.0050	1	06/20/2020 03:12
Ethylbenzene	ND	0.0050	1	06/20/2020 03:12
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	06/20/2020 03:12
Freon 113	ND	0.0050	1	06/20/2020 03:12
Hexachlorobutadiene	ND	0.0050	1	06/20/2020 03:12
Hexachloroethane	ND	0.0050	1	06/20/2020 03:12
2-Hexanone	ND	0.0050	1	06/20/2020 03:12
Isopropylbenzene	ND	0.0050	1	06/20/2020 03:12
4-Isopropyl toluene	ND	0.0050	1	06/20/2020 03:12
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/20/2020 03:12
Methylene chloride	ND	0.010	1	06/20/2020 03:12
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	06/20/2020 03:12
Naphthalene	ND	0.0050	1	06/20/2020 03:12
n-Propyl benzene	ND	0.0050	1	06/20/2020 03:12
Styrene	ND	0.0050	1	06/20/2020 03:12
1,1,1,2-Tetrachloroethane	ND	0.0050	1	06/20/2020 03:12
1,1,2,2-Tetrachloroethane	ND	0.00025	1	06/20/2020 03:12
Tetrachloroethene	ND	0.0010	1	06/20/2020 03:12
Toluene	ND	0.0050	1	06/20/2020 03:12
1,2,3-Trichlorobenzene	ND	0.0050	1	06/20/2020 03:12
1,2,4-Trichlorobenzene	ND	0.0050	1	06/20/2020 03:12
1,1,1-Trichloroethane	ND	0.0050	1	06/20/2020 03:12
1,1,2-Trichloroethane	ND	0.0050	1	06/20/2020 03:12
Trichloroethene	ND	0.0050	1	06/20/2020 03:12
Trichlorofluoromethane	ND	0.0050	1	06/20/2020 03:12
1,2,3-Trichloropropane	ND	0.00010	1	06/20/2020 03:12
1,2,4-Trimethylbenzene	ND	0.0050	1	06/20/2020 03:12
1,3,5-Trimethylbenzene	ND	0.0050	1	06/20/2020 03:12
Vinyl Chloride	ND	0.00025	1	06/20/2020 03:12
m,p-Xylene	ND	0.0050	1	06/20/2020 03:12
o-Xylene	ND	0.0050	1	06/20/2020 03:12
Xylenes, Total	ND	0.0050	1	06/20/2020 03:12

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-3-1.5	2006697-005A	Soil	06/11/2020 09:24	GC28 06192030.D	200074

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	102	82-136		06/20/2020 03:12
Toluene-d8	100	92-139		06/20/2020 03:12
4-BFB	105	82-135		06/20/2020 03:12
Benzene-d6	103	55-122		06/20/2020 03:12
Ethylbenzene-d10	98	58-141		06/20/2020 03:12
1,2-DCB-d4	76	51-107		06/20/2020 03:12

Analyst(s): KF



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-3-3.0	2006697-007A	Soil	06/11/2020 09:26	GC28 06192031.D	200074

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	06/20/2020 03:53
tert-Amyl methyl ether (TAME)	ND	0.0050	1	06/20/2020 03:53
Benzene	ND	0.0050	1	06/20/2020 03:53
Bromobenzene	ND	0.0050	1	06/20/2020 03:53
Bromochloromethane	ND	0.0050	1	06/20/2020 03:53
Bromodichloromethane	ND	0.0010	1	06/20/2020 03:53
Bromoform	ND	0.0050	1	06/20/2020 03:53
Bromomethane	ND	0.0050	1	06/20/2020 03:53
2-Butanone (MEK)	ND	0.020	1	06/20/2020 03:53
t-Butyl alcohol (TBA)	ND	0.050	1	06/20/2020 03:53
n-Butyl benzene	ND	0.0050	1	06/20/2020 03:53
sec-Butyl benzene	ND	0.0050	1	06/20/2020 03:53
tert-Butyl benzene	ND	0.0050	1	06/20/2020 03:53
Carbon Disulfide	ND	0.0050	1	06/20/2020 03:53
Carbon Tetrachloride	ND	0.0050	1	06/20/2020 03:53
Chlorobenzene	ND	0.0050	1	06/20/2020 03:53
Chloroethane	ND	0.0050	1	06/20/2020 03:53
Chloroform	ND	0.0050	1	06/20/2020 03:53
Chloromethane	ND	0.0050	1	06/20/2020 03:53
2-Chlorotoluene	ND	0.0050	1	06/20/2020 03:53
4-Chlorotoluene	ND	0.0050	1	06/20/2020 03:53
Dibromochloromethane	ND	0.0050	1	06/20/2020 03:53
1,2-Dibromo-3-chloropropane	ND	0.00025	1	06/20/2020 03:53
1,2-Dibromoethane (EDB)	ND	0.00010	1	06/20/2020 03:53
Dibromomethane	ND	0.0050	1	06/20/2020 03:53
1,2-Dichlorobenzene	ND	0.0050	1	06/20/2020 03:53
1,3-Dichlorobenzene	ND	0.0050	1	06/20/2020 03:53
1,4-Dichlorobenzene	ND	0.0050	1	06/20/2020 03:53
Dichlorodifluoromethane	ND	0.0050	1	06/20/2020 03:53
1,1-Dichloroethane	ND	0.0050	1	06/20/2020 03:53
1,2-Dichloroethane (1,2-DCA)	ND	0.00025	1	06/20/2020 03:53
1,1-Dichloroethene	ND	0.00025	1	06/20/2020 03:53
cis-1,2-Dichloroethene	ND	0.0050	1	06/20/2020 03:53
trans-1,2-Dichloroethene	ND	0.0050	1	06/20/2020 03:53
1,2-Dichloropropane	ND	0.0050	1	06/20/2020 03:53
1,3-Dichloropropane	ND	0.0050	1	06/20/2020 03:53
2,2-Dichloropropane	ND	0.0050	1	06/20/2020 03:53

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-3-3.0	2006697-007A	Soil	06/11/2020 09:26	GC28 06192031.D	200074

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	06/20/2020 03:53
cis-1,3-Dichloropropene	ND	0.0050	1	06/20/2020 03:53
trans-1,3-Dichloropropene	ND	0.0050	1	06/20/2020 03:53
Diisopropyl ether (DIPE)	ND	0.0050	1	06/20/2020 03:53
Ethylbenzene	ND	0.0050	1	06/20/2020 03:53
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	06/20/2020 03:53
Freon 113	ND	0.0050	1	06/20/2020 03:53
Hexachlorobutadiene	ND	0.0050	1	06/20/2020 03:53
Hexachloroethane	ND	0.0050	1	06/20/2020 03:53
2-Hexanone	ND	0.0050	1	06/20/2020 03:53
Isopropylbenzene	ND	0.0050	1	06/20/2020 03:53
4-Isopropyl toluene	ND	0.0050	1	06/20/2020 03:53
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/20/2020 03:53
Methylene chloride	ND	0.010	1	06/20/2020 03:53
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	06/20/2020 03:53
Naphthalene	ND	0.0050	1	06/20/2020 03:53
n-Propyl benzene	ND	0.0050	1	06/20/2020 03:53
Styrene	ND	0.0050	1	06/20/2020 03:53
1,1,1,2-Tetrachloroethane	ND	0.0050	1	06/20/2020 03:53
1,1,2,2-Tetrachloroethane	ND	0.00025	1	06/20/2020 03:53
Tetrachloroethene	ND	0.0010	1	06/20/2020 03:53
Toluene	ND	0.0050	1	06/20/2020 03:53
1,2,3-Trichlorobenzene	ND	0.0050	1	06/20/2020 03:53
1,2,4-Trichlorobenzene	ND	0.0050	1	06/20/2020 03:53
1,1,1-Trichloroethane	ND	0.0050	1	06/20/2020 03:53
1,1,2-Trichloroethane	ND	0.0050	1	06/20/2020 03:53
Trichloroethene	ND	0.0050	1	06/20/2020 03:53
Trichlorofluoromethane	ND	0.0050	1	06/20/2020 03:53
1,2,3-Trichloropropane	ND	0.00010	1	06/20/2020 03:53
1,2,4-Trimethylbenzene	ND	0.0050	1	06/20/2020 03:53
1,3,5-Trimethylbenzene	ND	0.0050	1	06/20/2020 03:53
Vinyl Chloride	ND	0.00025	1	06/20/2020 03:53
m,p-Xylene	ND	0.0050	1	06/20/2020 03:53
o-Xylene	ND	0.0050	1	06/20/2020 03:53
Xylenes, Total	ND	0.0050	1	06/20/2020 03:53

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-3-3.0	2006697-007A	Soil	06/11/2020 09:26	GC28 06192031.D	200074

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	93	82-136		06/20/2020 03:53
Toluene-d8	100	92-139		06/20/2020 03:53
4-BFB	105	82-135		06/20/2020 03:53
Benzene-d6	88	55-122		06/20/2020 03:53
Ethylbenzene-d10	92	58-141		06/20/2020 03:53
1,2-DCB-d4	74	51-107		06/20/2020 03:53

Analyst(s): KF



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-3-7.0	2006697-008A	Soil	06/11/2020 09:33	GC28 06192032.D	200074

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	06/20/2020 04:33
tert-Amyl methyl ether (TAME)	ND	0.0050	1	06/20/2020 04:33
Benzene	ND	0.0050	1	06/20/2020 04:33
Bromobenzene	ND	0.0050	1	06/20/2020 04:33
Bromochloromethane	ND	0.0050	1	06/20/2020 04:33
Bromodichloromethane	ND	0.0010	1	06/20/2020 04:33
Bromoform	ND	0.0050	1	06/20/2020 04:33
Bromomethane	ND	0.0050	1	06/20/2020 04:33
2-Butanone (MEK)	ND	0.020	1	06/20/2020 04:33
t-Butyl alcohol (TBA)	ND	0.050	1	06/20/2020 04:33
n-Butyl benzene	ND	0.0050	1	06/20/2020 04:33
sec-Butyl benzene	ND	0.0050	1	06/20/2020 04:33
tert-Butyl benzene	ND	0.0050	1	06/20/2020 04:33
Carbon Disulfide	ND	0.0050	1	06/20/2020 04:33
Carbon Tetrachloride	ND	0.0050	1	06/20/2020 04:33
Chlorobenzene	ND	0.0050	1	06/20/2020 04:33
Chloroethane	ND	0.0050	1	06/20/2020 04:33
Chloroform	ND	0.0050	1	06/20/2020 04:33
Chloromethane	ND	0.0050	1	06/20/2020 04:33
2-Chlorotoluene	ND	0.0050	1	06/20/2020 04:33
4-Chlorotoluene	ND	0.0050	1	06/20/2020 04:33
Dibromochloromethane	ND	0.0050	1	06/20/2020 04:33
1,2-Dibromo-3-chloropropane	ND	0.00025	1	06/20/2020 04:33
1,2-Dibromoethane (EDB)	ND	0.00010	1	06/20/2020 04:33
Dibromomethane	ND	0.0050	1	06/20/2020 04:33
1,2-Dichlorobenzene	ND	0.0050	1	06/20/2020 04:33
1,3-Dichlorobenzene	ND	0.0050	1	06/20/2020 04:33
1,4-Dichlorobenzene	ND	0.0050	1	06/20/2020 04:33
Dichlorodifluoromethane	ND	0.0050	1	06/20/2020 04:33
1,1-Dichloroethane	ND	0.0050	1	06/20/2020 04:33
1,2-Dichloroethane (1,2-DCA)	ND	0.00025	1	06/20/2020 04:33
1,1-Dichloroethene	ND	0.00025	1	06/20/2020 04:33
cis-1,2-Dichloroethene	ND	0.0050	1	06/20/2020 04:33
trans-1,2-Dichloroethene	ND	0.0050	1	06/20/2020 04:33
1,2-Dichloropropane	ND	0.0050	1	06/20/2020 04:33
1,3-Dichloropropane	ND	0.0050	1	06/20/2020 04:33
2,2-Dichloropropane	ND	0.0050	1	06/20/2020 04:33

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-3-7.0	2006697-008A	Soil	06/11/2020 09:33	GC28 06192032.D	200074

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	06/20/2020 04:33
cis-1,3-Dichloropropene	ND	0.0050	1	06/20/2020 04:33
trans-1,3-Dichloropropene	ND	0.0050	1	06/20/2020 04:33
Diisopropyl ether (DIPE)	ND	0.0050	1	06/20/2020 04:33
Ethylbenzene	ND	0.0050	1	06/20/2020 04:33
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	06/20/2020 04:33
Freon 113	ND	0.0050	1	06/20/2020 04:33
Hexachlorobutadiene	ND	0.0050	1	06/20/2020 04:33
Hexachloroethane	ND	0.0050	1	06/20/2020 04:33
2-Hexanone	ND	0.0050	1	06/20/2020 04:33
Isopropylbenzene	ND	0.0050	1	06/20/2020 04:33
4-Isopropyl toluene	ND	0.0050	1	06/20/2020 04:33
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/20/2020 04:33
Methylene chloride	ND	0.010	1	06/20/2020 04:33
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	06/20/2020 04:33
Naphthalene	ND	0.0050	1	06/20/2020 04:33
n-Propyl benzene	ND	0.0050	1	06/20/2020 04:33
Styrene	ND	0.0050	1	06/20/2020 04:33
1,1,1,2-Tetrachloroethane	ND	0.0050	1	06/20/2020 04:33
1,1,2,2-Tetrachloroethane	ND	0.00025	1	06/20/2020 04:33
Tetrachloroethene	ND	0.0010	1	06/20/2020 04:33
Toluene	ND	0.0050	1	06/20/2020 04:33
1,2,3-Trichlorobenzene	ND	0.0050	1	06/20/2020 04:33
1,2,4-Trichlorobenzene	ND	0.0050	1	06/20/2020 04:33
1,1,1-Trichloroethane	ND	0.0050	1	06/20/2020 04:33
1,1,2-Trichloroethane	ND	0.0050	1	06/20/2020 04:33
Trichloroethene	ND	0.0050	1	06/20/2020 04:33
Trichlorofluoromethane	ND	0.0050	1	06/20/2020 04:33
1,2,3-Trichloropropane	ND	0.00010	1	06/20/2020 04:33
1,2,4-Trimethylbenzene	ND	0.0050	1	06/20/2020 04:33
1,3,5-Trimethylbenzene	ND	0.0050	1	06/20/2020 04:33
Vinyl Chloride	ND	0.00025	1	06/20/2020 04:33
m,p-Xylene	ND	0.0050	1	06/20/2020 04:33
o-Xylene	ND	0.0050	1	06/20/2020 04:33
Xylenes, Total	ND	0.0050	1	06/20/2020 04:33

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-3-7.0	2006697-008A	Soil	06/11/2020 09:33	GC28 06192032.D	200074

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	104	82-136		06/20/2020 04:33
Toluene-d8	100	92-139		06/20/2020 04:33
4-BFB	103	82-135		06/20/2020 04:33
Benzene-d6	103	55-122		06/20/2020 04:33
Ethylbenzene-d10	99	58-141		06/20/2020 04:33
1,2-DCB-d4	79	51-107		06/20/2020 04:33

Analyst(s): KF



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-4-1.5	2006697-009A	Soil	06/11/2020 09:45	GC28 06192033.D	200074

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	06/20/2020 05:14
tert-Amyl methyl ether (TAME)	ND	0.0050	1	06/20/2020 05:14
Benzene	ND	0.0050	1	06/20/2020 05:14
Bromobenzene	ND	0.0050	1	06/20/2020 05:14
Bromochloromethane	ND	0.0050	1	06/20/2020 05:14
Bromodichloromethane	ND	0.0010	1	06/20/2020 05:14
Bromoform	ND	0.0050	1	06/20/2020 05:14
Bromomethane	ND	0.0050	1	06/20/2020 05:14
2-Butanone (MEK)	ND	0.020	1	06/20/2020 05:14
t-Butyl alcohol (TBA)	ND	0.050	1	06/20/2020 05:14
n-Butyl benzene	ND	0.0050	1	06/20/2020 05:14
sec-Butyl benzene	ND	0.0050	1	06/20/2020 05:14
tert-Butyl benzene	ND	0.0050	1	06/20/2020 05:14
Carbon Disulfide	ND	0.0050	1	06/20/2020 05:14
Carbon Tetrachloride	ND	0.0050	1	06/20/2020 05:14
Chlorobenzene	ND	0.0050	1	06/20/2020 05:14
Chloroethane	ND	0.0050	1	06/20/2020 05:14
Chloroform	ND	0.0050	1	06/20/2020 05:14
Chloromethane	ND	0.0050	1	06/20/2020 05:14
2-Chlorotoluene	ND	0.0050	1	06/20/2020 05:14
4-Chlorotoluene	ND	0.0050	1	06/20/2020 05:14
Dibromochloromethane	ND	0.0050	1	06/20/2020 05:14
1,2-Dibromo-3-chloropropane	ND	0.00025	1	06/20/2020 05:14
1,2-Dibromoethane (EDB)	ND	0.00010	1	06/20/2020 05:14
Dibromomethane	ND	0.0050	1	06/20/2020 05:14
1,2-Dichlorobenzene	ND	0.0050	1	06/20/2020 05:14
1,3-Dichlorobenzene	ND	0.0050	1	06/20/2020 05:14
1,4-Dichlorobenzene	ND	0.0050	1	06/20/2020 05:14
Dichlorodifluoromethane	ND	0.0050	1	06/20/2020 05:14
1,1-Dichloroethane	ND	0.0050	1	06/20/2020 05:14
1,2-Dichloroethane (1,2-DCA)	ND	0.00025	1	06/20/2020 05:14
1,1-Dichloroethene	ND	0.00025	1	06/20/2020 05:14
cis-1,2-Dichloroethene	ND	0.0050	1	06/20/2020 05:14
trans-1,2-Dichloroethene	ND	0.0050	1	06/20/2020 05:14
1,2-Dichloropropane	ND	0.0050	1	06/20/2020 05:14
1,3-Dichloropropane	ND	0.0050	1	06/20/2020 05:14
2,2-Dichloropropane	ND	0.0050	1	06/20/2020 05:14

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-4-1.5	2006697-009A	Soil	06/11/2020 09:45	GC28 06192033.D	200074

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	06/20/2020 05:14
cis-1,3-Dichloropropene	ND	0.0050	1	06/20/2020 05:14
trans-1,3-Dichloropropene	ND	0.0050	1	06/20/2020 05:14
Diisopropyl ether (DIPE)	ND	0.0050	1	06/20/2020 05:14
Ethylbenzene	ND	0.0050	1	06/20/2020 05:14
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	06/20/2020 05:14
Freon 113	ND	0.0050	1	06/20/2020 05:14
Hexachlorobutadiene	ND	0.0050	1	06/20/2020 05:14
Hexachloroethane	ND	0.0050	1	06/20/2020 05:14
2-Hexanone	ND	0.0050	1	06/20/2020 05:14
Isopropylbenzene	ND	0.0050	1	06/20/2020 05:14
4-Isopropyl toluene	ND	0.0050	1	06/20/2020 05:14
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/20/2020 05:14
Methylene chloride	ND	0.010	1	06/20/2020 05:14
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	06/20/2020 05:14
Naphthalene	ND	0.0050	1	06/20/2020 05:14
n-Propyl benzene	ND	0.0050	1	06/20/2020 05:14
Styrene	ND	0.0050	1	06/20/2020 05:14
1,1,1,2-Tetrachloroethane	ND	0.0050	1	06/20/2020 05:14
1,1,2,2-Tetrachloroethane	ND	0.00025	1	06/20/2020 05:14
Tetrachloroethene	ND	0.0010	1	06/20/2020 05:14
Toluene	ND	0.0050	1	06/20/2020 05:14
1,2,3-Trichlorobenzene	ND	0.0050	1	06/20/2020 05:14
1,2,4-Trichlorobenzene	ND	0.0050	1	06/20/2020 05:14
1,1,1-Trichloroethane	ND	0.0050	1	06/20/2020 05:14
1,1,2-Trichloroethane	ND	0.0050	1	06/20/2020 05:14
Trichloroethene	ND	0.0050	1	06/20/2020 05:14
Trichlorofluoromethane	ND	0.0050	1	06/20/2020 05:14
1,2,3-Trichloropropane	ND	0.00010	1	06/20/2020 05:14
1,2,4-Trimethylbenzene	ND	0.0050	1	06/20/2020 05:14
1,3,5-Trimethylbenzene	ND	0.0050	1	06/20/2020 05:14
Vinyl Chloride	ND	0.00025	1	06/20/2020 05:14
m,p-Xylene	ND	0.0050	1	06/20/2020 05:14
o-Xylene	ND	0.0050	1	06/20/2020 05:14
Xylenes, Total	ND	0.0050	1	06/20/2020 05:14

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-4-1.5	2006697-009A	Soil	06/11/2020 09:45	GC28 06192033.D	200074

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	95	82-136		06/20/2020 05:14
Toluene-d8	101	92-139		06/20/2020 05:14
4-BFB	104	82-135		06/20/2020 05:14
Benzene-d6	96	55-122		06/20/2020 05:14
Ethylbenzene-d10	104	58-141		06/20/2020 05:14
1,2-DCB-d4	79	51-107		06/20/2020 05:14

Analyst(s): KF



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-4-3.0	2006697-010A	Soil	06/11/2020 09:50	GC28 06192034.D	200074

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	06/20/2020 05:55
tert-Amyl methyl ether (TAME)	ND	0.0050	1	06/20/2020 05:55
Benzene	ND	0.0050	1	06/20/2020 05:55
Bromobenzene	ND	0.0050	1	06/20/2020 05:55
Bromochloromethane	ND	0.0050	1	06/20/2020 05:55
Bromodichloromethane	ND	0.0010	1	06/20/2020 05:55
Bromoform	ND	0.0050	1	06/20/2020 05:55
Bromomethane	ND	0.0050	1	06/20/2020 05:55
2-Butanone (MEK)	ND	0.020	1	06/20/2020 05:55
t-Butyl alcohol (TBA)	ND	0.050	1	06/20/2020 05:55
n-Butyl benzene	ND	0.0050	1	06/20/2020 05:55
sec-Butyl benzene	ND	0.0050	1	06/20/2020 05:55
tert-Butyl benzene	ND	0.0050	1	06/20/2020 05:55
Carbon Disulfide	ND	0.0050	1	06/20/2020 05:55
Carbon Tetrachloride	ND	0.0050	1	06/20/2020 05:55
Chlorobenzene	ND	0.0050	1	06/20/2020 05:55
Chloroethane	ND	0.0050	1	06/20/2020 05:55
Chloroform	ND	0.0050	1	06/20/2020 05:55
Chloromethane	ND	0.0050	1	06/20/2020 05:55
2-Chlorotoluene	ND	0.0050	1	06/20/2020 05:55
4-Chlorotoluene	ND	0.0050	1	06/20/2020 05:55
Dibromochloromethane	ND	0.0050	1	06/20/2020 05:55
1,2-Dibromo-3-chloropropane	ND	0.00025	1	06/20/2020 05:55
1,2-Dibromoethane (EDB)	ND	0.00010	1	06/20/2020 05:55
Dibromomethane	ND	0.0050	1	06/20/2020 05:55
1,2-Dichlorobenzene	ND	0.0050	1	06/20/2020 05:55
1,3-Dichlorobenzene	ND	0.0050	1	06/20/2020 05:55
1,4-Dichlorobenzene	ND	0.0050	1	06/20/2020 05:55
Dichlorodifluoromethane	ND	0.0050	1	06/20/2020 05:55
1,1-Dichloroethane	ND	0.0050	1	06/20/2020 05:55
1,2-Dichloroethane (1,2-DCA)	ND	0.00025	1	06/20/2020 05:55
1,1-Dichloroethene	ND	0.00025	1	06/20/2020 05:55
cis-1,2-Dichloroethene	ND	0.0050	1	06/20/2020 05:55
trans-1,2-Dichloroethene	ND	0.0050	1	06/20/2020 05:55
1,2-Dichloropropane	ND	0.0050	1	06/20/2020 05:55
1,3-Dichloropropane	ND	0.0050	1	06/20/2020 05:55
2,2-Dichloropropane	ND	0.0050	1	06/20/2020 05:55

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-4-3.0	2006697-010A	Soil	06/11/2020 09:50	GC28 06192034.D	200074

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	06/20/2020 05:55
cis-1,3-Dichloropropene	ND	0.0050	1	06/20/2020 05:55
trans-1,3-Dichloropropene	ND	0.0050	1	06/20/2020 05:55
Diisopropyl ether (DIPE)	ND	0.0050	1	06/20/2020 05:55
Ethylbenzene	ND	0.0050	1	06/20/2020 05:55
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	06/20/2020 05:55
Freon 113	ND	0.0050	1	06/20/2020 05:55
Hexachlorobutadiene	ND	0.0050	1	06/20/2020 05:55
Hexachloroethane	ND	0.0050	1	06/20/2020 05:55
2-Hexanone	ND	0.0050	1	06/20/2020 05:55
Isopropylbenzene	ND	0.0050	1	06/20/2020 05:55
4-Isopropyl toluene	ND	0.0050	1	06/20/2020 05:55
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/20/2020 05:55
Methylene chloride	ND	0.010	1	06/20/2020 05:55
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	06/20/2020 05:55
Naphthalene	ND	0.0050	1	06/20/2020 05:55
n-Propyl benzene	ND	0.0050	1	06/20/2020 05:55
Styrene	ND	0.0050	1	06/20/2020 05:55
1,1,1,2-Tetrachloroethane	ND	0.0050	1	06/20/2020 05:55
1,1,2,2-Tetrachloroethane	ND	0.00025	1	06/20/2020 05:55
Tetrachloroethene	ND	0.0010	1	06/20/2020 05:55
Toluene	ND	0.0050	1	06/20/2020 05:55
1,2,3-Trichlorobenzene	ND	0.0050	1	06/20/2020 05:55
1,2,4-Trichlorobenzene	ND	0.0050	1	06/20/2020 05:55
1,1,1-Trichloroethane	ND	0.0050	1	06/20/2020 05:55
1,1,2-Trichloroethane	ND	0.0050	1	06/20/2020 05:55
Trichloroethene	ND	0.0050	1	06/20/2020 05:55
Trichlorofluoromethane	ND	0.0050	1	06/20/2020 05:55
1,2,3-Trichloropropane	ND	0.00010	1	06/20/2020 05:55
1,2,4-Trimethylbenzene	ND	0.0050	1	06/20/2020 05:55
1,3,5-Trimethylbenzene	ND	0.0050	1	06/20/2020 05:55
Vinyl Chloride	ND	0.00025	1	06/20/2020 05:55
m,p-Xylene	ND	0.0050	1	06/20/2020 05:55
o-Xylene	ND	0.0050	1	06/20/2020 05:55
Xylenes, Total	ND	0.0050	1	06/20/2020 05:55

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-4-3.0	2006697-010A	Soil	06/11/2020 09:50	GC28 06192034.D	200074

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	94	82-136		06/20/2020 05:55
Toluene-d8	101	92-139		06/20/2020 05:55
4-BFB	103	82-135		06/20/2020 05:55
Benzene-d6	96	55-122		06/20/2020 05:55
Ethylbenzene-d10	103	58-141		06/20/2020 05:55
1,2-DCB-d4	80	51-107		06/20/2020 05:55

Analyst(s): KF



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-4-5.0	2006697-011A	Soil	06/11/2020 09:55	GC28 06202005.D	200074

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	06/20/2020 09:22
tert-Amyl methyl ether (TAME)	ND	0.0050	1	06/20/2020 09:22
Benzene	ND	0.0050	1	06/20/2020 09:22
Bromobenzene	ND	0.0050	1	06/20/2020 09:22
Bromochloromethane	ND	0.0050	1	06/20/2020 09:22
Bromodichloromethane	ND	0.0010	1	06/20/2020 09:22
Bromoform	ND	0.0050	1	06/20/2020 09:22
Bromomethane	ND	0.0050	1	06/20/2020 09:22
2-Butanone (MEK)	ND	0.020	1	06/20/2020 09:22
t-Butyl alcohol (TBA)	ND	0.050	1	06/20/2020 09:22
n-Butyl benzene	ND	0.0050	1	06/20/2020 09:22
sec-Butyl benzene	ND	0.0050	1	06/20/2020 09:22
tert-Butyl benzene	ND	0.0050	1	06/20/2020 09:22
Carbon Disulfide	ND	0.0050	1	06/20/2020 09:22
Carbon Tetrachloride	ND	0.0050	1	06/20/2020 09:22
Chlorobenzene	ND	0.0050	1	06/20/2020 09:22
Chloroethane	ND	0.0050	1	06/20/2020 09:22
Chloroform	ND	0.0050	1	06/20/2020 09:22
Chloromethane	ND	0.0050	1	06/20/2020 09:22
2-Chlorotoluene	ND	0.0050	1	06/20/2020 09:22
4-Chlorotoluene	ND	0.0050	1	06/20/2020 09:22
Dibromochloromethane	ND	0.0050	1	06/20/2020 09:22
1,2-Dibromo-3-chloropropane	ND	0.00025	1	06/20/2020 09:22
1,2-Dibromoethane (EDB)	ND	0.00010	1	06/20/2020 09:22
Dibromomethane	ND	0.0050	1	06/20/2020 09:22
1,2-Dichlorobenzene	ND	0.0050	1	06/20/2020 09:22
1,3-Dichlorobenzene	ND	0.0050	1	06/20/2020 09:22
1,4-Dichlorobenzene	ND	0.0050	1	06/20/2020 09:22
Dichlorodifluoromethane	ND	0.0050	1	06/20/2020 09:22
1,1-Dichloroethane	ND	0.0050	1	06/20/2020 09:22
1,2-Dichloroethane (1,2-DCA)	ND	0.00025	1	06/20/2020 09:22
1,1-Dichloroethene	ND	0.00025	1	06/20/2020 09:22
cis-1,2-Dichloroethene	ND	0.0050	1	06/20/2020 09:22
trans-1,2-Dichloroethene	ND	0.0050	1	06/20/2020 09:22
1,2-Dichloropropane	ND	0.0050	1	06/20/2020 09:22
1,3-Dichloropropane	ND	0.0050	1	06/20/2020 09:22
2,2-Dichloropropane	ND	0.0050	1	06/20/2020 09:22

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-4-5.0	2006697-011A	Soil	06/11/2020 09:55	GC28 06202005.D	200074

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	06/20/2020 09:22
cis-1,3-Dichloropropene	ND	0.0050	1	06/20/2020 09:22
trans-1,3-Dichloropropene	ND	0.0050	1	06/20/2020 09:22
Diisopropyl ether (DIPE)	ND	0.0050	1	06/20/2020 09:22
Ethylbenzene	ND	0.0050	1	06/20/2020 09:22
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	06/20/2020 09:22
Freon 113	ND	0.0050	1	06/20/2020 09:22
Hexachlorobutadiene	ND	0.0050	1	06/20/2020 09:22
Hexachloroethane	ND	0.0050	1	06/20/2020 09:22
2-Hexanone	ND	0.0050	1	06/20/2020 09:22
Isopropylbenzene	ND	0.0050	1	06/20/2020 09:22
4-Isopropyl toluene	ND	0.0050	1	06/20/2020 09:22
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/20/2020 09:22
Methylene chloride	ND	0.010	1	06/20/2020 09:22
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	06/20/2020 09:22
Naphthalene	ND	0.0050	1	06/20/2020 09:22
n-Propyl benzene	ND	0.0050	1	06/20/2020 09:22
Styrene	ND	0.0050	1	06/20/2020 09:22
1,1,1,2-Tetrachloroethane	ND	0.0050	1	06/20/2020 09:22
1,1,2,2-Tetrachloroethane	ND	0.00025	1	06/20/2020 09:22
Tetrachloroethene	ND	0.0010	1	06/20/2020 09:22
Toluene	ND	0.0050	1	06/20/2020 09:22
1,2,3-Trichlorobenzene	ND	0.0050	1	06/20/2020 09:22
1,2,4-Trichlorobenzene	ND	0.0050	1	06/20/2020 09:22
1,1,1-Trichloroethane	ND	0.0050	1	06/20/2020 09:22
1,1,2-Trichloroethane	ND	0.0050	1	06/20/2020 09:22
Trichloroethene	ND	0.0050	1	06/20/2020 09:22
Trichlorofluoromethane	ND	0.0050	1	06/20/2020 09:22
1,2,3-Trichloropropane	ND	0.00010	1	06/20/2020 09:22
1,2,4-Trimethylbenzene	ND	0.0050	1	06/20/2020 09:22
1,3,5-Trimethylbenzene	ND	0.0050	1	06/20/2020 09:22
Vinyl Chloride	ND	0.00025	1	06/20/2020 09:22
m,p-Xylene	ND	0.0050	1	06/20/2020 09:22
o-Xylene	ND	0.0050	1	06/20/2020 09:22
Xylenes, Total	ND	0.0050	1	06/20/2020 09:22

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-4-5.0	2006697-011A	Soil	06/11/2020 09:55	GC28 06202005.D	200074

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	93	82-136		06/20/2020 09:22
Toluene-d8	100	92-139		06/20/2020 09:22
4-BFB	103	82-135		06/20/2020 09:22
Benzene-d6	91	55-122		06/20/2020 09:22
Ethylbenzene-d10	95	58-141		06/20/2020 09:22
1,2-DCB-d4	76	51-107		06/20/2020 09:22

Analyst(s): KF



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected		Instrument	Batch ID
EB-8-1.5	2006697-012A	Soil	06/11/2020 10:33		GC18 06192032.D	200074
Analytes	Result	Qualifiers	RL	DF	Date Analyzed	
Acetone	ND		0.10	1	06/20/2020 04:02	
tert-Amyl methyl ether (TAME)	ND		0.0050	1	06/20/2020 04:02	
Benzene	ND		0.0050	1	06/20/2020 04:02	
Bromobenzene	ND		0.0050	1	06/20/2020 04:02	
Bromochloromethane	ND		0.0050	1	06/20/2020 04:02	
Bromodichloromethane	ND		0.0010	1	06/20/2020 04:02	
Bromoform	ND		0.0050	1	06/20/2020 04:02	
Bromomethane	ND		0.0050	1	06/20/2020 04:02	
2-Butanone (MEK)	ND		0.020	1	06/20/2020 04:02	
t-Butyl alcohol (TBA)	ND		0.050	1	06/20/2020 04:02	
n-Butyl benzene	ND		0.0050	1	06/20/2020 04:02	
sec-Butyl benzene	ND		0.0050	1	06/20/2020 04:02	
tert-Butyl benzene	ND		0.0050	1	06/20/2020 04:02	
Carbon Disulfide	ND		0.0050	1	06/20/2020 04:02	
Carbon Tetrachloride	ND		0.0050	1	06/20/2020 04:02	
Chlorobenzene	ND		0.0050	1	06/20/2020 04:02	
Chloroethane	ND		0.0050	1	06/20/2020 04:02	
Chloroform	ND		0.0050	1	06/20/2020 04:02	
Chloromethane	ND		0.0050	1	06/20/2020 04:02	
2-Chlorotoluene	ND		0.0050	1	06/20/2020 04:02	
4-Chlorotoluene	ND		0.0050	1	06/20/2020 04:02	
Dibromochloromethane	ND		0.0050	1	06/20/2020 04:02	
1,2-Dibromo-3-chloropropane	ND		0.00025	1	06/20/2020 04:02	
1,2-Dibromoethane (EDB)	0.00011	B	0.00010	1	06/20/2020 04:02	
Dibromomethane	ND		0.0050	1	06/20/2020 04:02	
1,2-Dichlorobenzene	ND		0.0050	1	06/20/2020 04:02	
1,3-Dichlorobenzene	ND		0.0050	1	06/20/2020 04:02	
1,4-Dichlorobenzene	ND		0.0050	1	06/20/2020 04:02	
Dichlorodifluoromethane	ND		0.0050	1	06/20/2020 04:02	
1,1-Dichloroethane	ND		0.0050	1	06/20/2020 04:02	
1,2-Dichloroethane (1,2-DCA)	ND		0.00025	1	06/20/2020 04:02	
1,1-Dichloroethene	ND		0.00025	1	06/20/2020 04:02	
cis-1,2-Dichloroethene	ND		0.0050	1	06/20/2020 04:02	
trans-1,2-Dichloroethene	ND		0.0050	1	06/20/2020 04:02	
1,2-Dichloropropane	ND		0.0050	1	06/20/2020 04:02	
1,3-Dichloropropane	ND		0.0050	1	06/20/2020 04:02	
2,2-Dichloropropane	ND		0.0050	1	06/20/2020 04:02	

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-8-1.5	2006697-012A	Soil	06/11/2020 10:33	GC18 06192032.D	200074

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
1,1-Dichloropropene	ND		0.0050	1	06/20/2020 04:02
cis-1,3-Dichloropropene	ND		0.0050	1	06/20/2020 04:02
trans-1,3-Dichloropropene	ND		0.0050	1	06/20/2020 04:02
Diisopropyl ether (DIPE)	ND		0.0050	1	06/20/2020 04:02
Ethylbenzene	ND		0.0050	1	06/20/2020 04:02
Ethyl tert-butyl ether (ETBE)	ND		0.0050	1	06/20/2020 04:02
Freon 113	ND		0.0050	1	06/20/2020 04:02
Hexachlorobutadiene	ND		0.0050	1	06/20/2020 04:02
Hexachloroethane	ND		0.0050	1	06/20/2020 04:02
2-Hexanone	ND		0.0050	1	06/20/2020 04:02
Isopropylbenzene	ND		0.0050	1	06/20/2020 04:02
4-Isopropyl toluene	ND		0.0050	1	06/20/2020 04:02
Methyl-t-butyl ether (MTBE)	ND		0.0050	1	06/20/2020 04:02
Methylene chloride	ND		0.010	1	06/20/2020 04:02
4-Methyl-2-pentanone (MIBK)	ND		0.0050	1	06/20/2020 04:02
Naphthalene	ND		0.0050	1	06/20/2020 04:02
n-Propyl benzene	ND		0.0050	1	06/20/2020 04:02
Styrene	ND		0.0050	1	06/20/2020 04:02
1,1,1,2-Tetrachloroethane	ND		0.0050	1	06/20/2020 04:02
1,1,2,2-Tetrachloroethane	ND		0.00025	1	06/20/2020 04:02
Tetrachloroethene	ND		0.0010	1	06/20/2020 04:02
Toluene	ND		0.0050	1	06/20/2020 04:02
1,2,3-Trichlorobenzene	ND		0.0050	1	06/20/2020 04:02
1,2,4-Trichlorobenzene	ND		0.0050	1	06/20/2020 04:02
1,1,1-Trichloroethane	ND		0.0050	1	06/20/2020 04:02
1,1,2-Trichloroethane	ND		0.0050	1	06/20/2020 04:02
Trichloroethene	ND		0.0050	1	06/20/2020 04:02
Trichlorofluoromethane	ND		0.0050	1	06/20/2020 04:02
1,2,3-Trichloropropane	ND		0.00010	1	06/20/2020 04:02
1,2,4-Trimethylbenzene	ND		0.0050	1	06/20/2020 04:02
1,3,5-Trimethylbenzene	ND		0.0050	1	06/20/2020 04:02
Vinyl Chloride	ND		0.00025	1	06/20/2020 04:02
m,p-Xylene	ND		0.0050	1	06/20/2020 04:02
o-Xylene	ND		0.0050	1	06/20/2020 04:02
Xylenes, Total	ND		0.0050	1	06/20/2020 04:02

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-8-1.5	2006697-012A	Soil	06/11/2020 10:33	GC18 06192032.D	200074

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
Dibromofluoromethane	89		82-136		06/20/2020 04:02
Toluene-d8	95		92-139		06/20/2020 04:02
4-BFB	98		82-135		06/20/2020 04:02
Benzene-d6	85		55-122		06/20/2020 04:02
Ethylbenzene-d10	90		58-141		06/20/2020 04:02
1,2-DCB-d4	70		51-107		06/20/2020 04:02

Analyst(s): KF



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected		Instrument	Batch ID
EB-8-3.0	2006697-013A	Soil	06/11/2020 10:35		GC18 06192033.D	200074
Analytes	Result	Qualifiers	RL	DF	Date Analyzed	
Acetone	ND		0.10	1	06/20/2020 04:42	
tert-Amyl methyl ether (TAME)	ND		0.0050	1	06/20/2020 04:42	
Benzene	ND		0.0050	1	06/20/2020 04:42	
Bromobenzene	ND		0.0050	1	06/20/2020 04:42	
Bromochloromethane	ND		0.0050	1	06/20/2020 04:42	
Bromodichloromethane	ND		0.0010	1	06/20/2020 04:42	
Bromoform	ND		0.0050	1	06/20/2020 04:42	
Bromomethane	ND		0.0050	1	06/20/2020 04:42	
2-Butanone (MEK)	ND		0.020	1	06/20/2020 04:42	
t-Butyl alcohol (TBA)	ND		0.050	1	06/20/2020 04:42	
n-Butyl benzene	ND		0.0050	1	06/20/2020 04:42	
sec-Butyl benzene	ND		0.0050	1	06/20/2020 04:42	
tert-Butyl benzene	ND		0.0050	1	06/20/2020 04:42	
Carbon Disulfide	ND		0.0050	1	06/20/2020 04:42	
Carbon Tetrachloride	ND		0.0050	1	06/20/2020 04:42	
Chlorobenzene	ND		0.0050	1	06/20/2020 04:42	
Chloroethane	ND		0.0050	1	06/20/2020 04:42	
Chloroform	ND		0.0050	1	06/20/2020 04:42	
Chloromethane	ND		0.0050	1	06/20/2020 04:42	
2-Chlorotoluene	ND		0.0050	1	06/20/2020 04:42	
4-Chlorotoluene	ND		0.0050	1	06/20/2020 04:42	
Dibromochloromethane	ND		0.0050	1	06/20/2020 04:42	
1,2-Dibromo-3-chloropropane	ND		0.00025	1	06/20/2020 04:42	
1,2-Dibromoethane (EDB)	0.00011	B	0.00010	1	06/20/2020 04:42	
Dibromomethane	ND		0.0050	1	06/20/2020 04:42	
1,2-Dichlorobenzene	ND		0.0050	1	06/20/2020 04:42	
1,3-Dichlorobenzene	ND		0.0050	1	06/20/2020 04:42	
1,4-Dichlorobenzene	ND		0.0050	1	06/20/2020 04:42	
Dichlorodifluoromethane	ND		0.0050	1	06/20/2020 04:42	
1,1-Dichloroethane	ND		0.0050	1	06/20/2020 04:42	
1,2-Dichloroethane (1,2-DCA)	ND		0.00025	1	06/20/2020 04:42	
1,1-Dichloroethene	ND		0.00025	1	06/20/2020 04:42	
cis-1,2-Dichloroethene	ND		0.0050	1	06/20/2020 04:42	
trans-1,2-Dichloroethene	ND		0.0050	1	06/20/2020 04:42	
1,2-Dichloropropane	ND		0.0050	1	06/20/2020 04:42	
1,3-Dichloropropane	ND		0.0050	1	06/20/2020 04:42	
2,2-Dichloropropane	ND		0.0050	1	06/20/2020 04:42	

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-8-3.0	2006697-013A	Soil	06/11/2020 10:35	GC18 06192033.D	200074

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
1,1-Dichloropropene	ND		0.0050	1	06/20/2020 04:42
cis-1,3-Dichloropropene	ND		0.0050	1	06/20/2020 04:42
trans-1,3-Dichloropropene	ND		0.0050	1	06/20/2020 04:42
Diisopropyl ether (DIPE)	ND		0.0050	1	06/20/2020 04:42
Ethylbenzene	ND		0.0050	1	06/20/2020 04:42
Ethyl tert-butyl ether (ETBE)	ND		0.0050	1	06/20/2020 04:42
Freon 113	ND		0.0050	1	06/20/2020 04:42
Hexachlorobutadiene	ND		0.0050	1	06/20/2020 04:42
Hexachloroethane	ND		0.0050	1	06/20/2020 04:42
2-Hexanone	ND		0.0050	1	06/20/2020 04:42
Isopropylbenzene	ND		0.0050	1	06/20/2020 04:42
4-Isopropyl toluene	ND		0.0050	1	06/20/2020 04:42
Methyl-t-butyl ether (MTBE)	ND		0.0050	1	06/20/2020 04:42
Methylene chloride	ND		0.010	1	06/20/2020 04:42
4-Methyl-2-pentanone (MIBK)	ND		0.0050	1	06/20/2020 04:42
Naphthalene	ND		0.0050	1	06/20/2020 04:42
n-Propyl benzene	ND		0.0050	1	06/20/2020 04:42
Styrene	ND		0.0050	1	06/20/2020 04:42
1,1,1,2-Tetrachloroethane	ND		0.0050	1	06/20/2020 04:42
1,1,2,2-Tetrachloroethane	ND		0.00025	1	06/20/2020 04:42
Tetrachloroethene	ND		0.0010	1	06/20/2020 04:42
Toluene	ND		0.0050	1	06/20/2020 04:42
1,2,3-Trichlorobenzene	ND		0.0050	1	06/20/2020 04:42
1,2,4-Trichlorobenzene	ND		0.0050	1	06/20/2020 04:42
1,1,1-Trichloroethane	ND		0.0050	1	06/20/2020 04:42
1,1,2-Trichloroethane	ND		0.0050	1	06/20/2020 04:42
Trichloroethene	ND		0.0050	1	06/20/2020 04:42
Trichlorofluoromethane	ND		0.0050	1	06/20/2020 04:42
1,2,3-Trichloropropane	ND		0.00010	1	06/20/2020 04:42
1,2,4-Trimethylbenzene	ND		0.0050	1	06/20/2020 04:42
1,3,5-Trimethylbenzene	ND		0.0050	1	06/20/2020 04:42
Vinyl Chloride	ND		0.00025	1	06/20/2020 04:42
m,p-Xylene	ND		0.0050	1	06/20/2020 04:42
o-Xylene	ND		0.0050	1	06/20/2020 04:42
Xylenes, Total	ND		0.0050	1	06/20/2020 04:42

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-8-3.0	2006697-013A	Soil	06/11/2020 10:35	GC18 06192033.D	200074

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
Dibromofluoromethane	88		82-136		06/20/2020 04:42
Toluene-d8	95		92-139		06/20/2020 04:42
4-BFB	98		82-135		06/20/2020 04:42
Benzene-d6	89		55-122		06/20/2020 04:42
Ethylbenzene-d10	93		58-141		06/20/2020 04:42
1,2-DCB-d4	75		51-107		06/20/2020 04:42

Analyst(s): KF



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-7-1.5	2006697-015A	Soil	06/11/2020 10:09	GC18 06192034.D	200074

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
Acetone	ND		0.10	1	06/20/2020 05:22
tert-Amyl methyl ether (TAME)	ND		0.0050	1	06/20/2020 05:22
Benzene	ND		0.0050	1	06/20/2020 05:22
Bromobenzene	ND		0.0050	1	06/20/2020 05:22
Bromochloromethane	ND		0.0050	1	06/20/2020 05:22
Bromodichloromethane	ND		0.0010	1	06/20/2020 05:22
Bromoform	ND		0.0050	1	06/20/2020 05:22
Bromomethane	ND		0.0050	1	06/20/2020 05:22
2-Butanone (MEK)	ND		0.020	1	06/20/2020 05:22
t-Butyl alcohol (TBA)	ND		0.050	1	06/20/2020 05:22
n-Butyl benzene	ND		0.0050	1	06/20/2020 05:22
sec-Butyl benzene	ND		0.0050	1	06/20/2020 05:22
tert-Butyl benzene	ND		0.0050	1	06/20/2020 05:22
Carbon Disulfide	ND		0.0050	1	06/20/2020 05:22
Carbon Tetrachloride	ND		0.0050	1	06/20/2020 05:22
Chlorobenzene	ND		0.0050	1	06/20/2020 05:22
Chloroethane	ND		0.0050	1	06/20/2020 05:22
Chloroform	ND		0.0050	1	06/20/2020 05:22
Chloromethane	ND		0.0050	1	06/20/2020 05:22
2-Chlorotoluene	ND		0.0050	1	06/20/2020 05:22
4-Chlorotoluene	ND		0.0050	1	06/20/2020 05:22
Dibromochloromethane	ND		0.0050	1	06/20/2020 05:22
1,2-Dibromo-3-chloropropane	ND		0.00025	1	06/20/2020 05:22
1,2-Dibromoethane (EDB)	0.00011	B	0.00010	1	06/20/2020 05:22
Dibromomethane	ND		0.0050	1	06/20/2020 05:22
1,2-Dichlorobenzene	ND		0.0050	1	06/20/2020 05:22
1,3-Dichlorobenzene	ND		0.0050	1	06/20/2020 05:22
1,4-Dichlorobenzene	ND		0.0050	1	06/20/2020 05:22
Dichlorodifluoromethane	ND		0.0050	1	06/20/2020 05:22
1,1-Dichloroethane	ND		0.0050	1	06/20/2020 05:22
1,2-Dichloroethane (1,2-DCA)	ND		0.00025	1	06/20/2020 05:22
1,1-Dichloroethene	ND		0.00025	1	06/20/2020 05:22
cis-1,2-Dichloroethene	ND		0.0050	1	06/20/2020 05:22
trans-1,2-Dichloroethene	ND		0.0050	1	06/20/2020 05:22
1,2-Dichloropropane	ND		0.0050	1	06/20/2020 05:22
1,3-Dichloropropane	ND		0.0050	1	06/20/2020 05:22
2,2-Dichloropropane	ND		0.0050	1	06/20/2020 05:22

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-7-1.5	2006697-015A	Soil	06/11/2020 10:09	GC18 06192034.D	200074

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
1,1-Dichloropropene	ND		0.0050	1	06/20/2020 05:22
cis-1,3-Dichloropropene	ND		0.0050	1	06/20/2020 05:22
trans-1,3-Dichloropropene	ND		0.0050	1	06/20/2020 05:22
Diisopropyl ether (DIPE)	ND		0.0050	1	06/20/2020 05:22
Ethylbenzene	ND		0.0050	1	06/20/2020 05:22
Ethyl tert-butyl ether (ETBE)	ND		0.0050	1	06/20/2020 05:22
Freon 113	ND		0.0050	1	06/20/2020 05:22
Hexachlorobutadiene	ND		0.0050	1	06/20/2020 05:22
Hexachloroethane	ND		0.0050	1	06/20/2020 05:22
2-Hexanone	ND		0.0050	1	06/20/2020 05:22
Isopropylbenzene	ND		0.0050	1	06/20/2020 05:22
4-Isopropyl toluene	ND		0.0050	1	06/20/2020 05:22
Methyl-t-butyl ether (MTBE)	ND		0.0050	1	06/20/2020 05:22
Methylene chloride	ND		0.010	1	06/20/2020 05:22
4-Methyl-2-pentanone (MIBK)	ND		0.0050	1	06/20/2020 05:22
Naphthalene	ND		0.0050	1	06/20/2020 05:22
n-Propyl benzene	ND		0.0050	1	06/20/2020 05:22
Styrene	ND		0.0050	1	06/20/2020 05:22
1,1,1,2-Tetrachloroethane	ND		0.0050	1	06/20/2020 05:22
1,1,2,2-Tetrachloroethane	ND		0.00025	1	06/20/2020 05:22
Tetrachloroethene	ND		0.0010	1	06/20/2020 05:22
Toluene	ND		0.0050	1	06/20/2020 05:22
1,2,3-Trichlorobenzene	ND		0.0050	1	06/20/2020 05:22
1,2,4-Trichlorobenzene	ND		0.0050	1	06/20/2020 05:22
1,1,1-Trichloroethane	ND		0.0050	1	06/20/2020 05:22
1,1,2-Trichloroethane	ND		0.0050	1	06/20/2020 05:22
Trichloroethene	ND		0.0050	1	06/20/2020 05:22
Trichlorofluoromethane	ND		0.0050	1	06/20/2020 05:22
1,2,3-Trichloropropane	ND		0.00010	1	06/20/2020 05:22
1,2,4-Trimethylbenzene	ND		0.0050	1	06/20/2020 05:22
1,3,5-Trimethylbenzene	ND		0.0050	1	06/20/2020 05:22
Vinyl Chloride	ND		0.00025	1	06/20/2020 05:22
m,p-Xylene	ND		0.0050	1	06/20/2020 05:22
o-Xylene	ND		0.0050	1	06/20/2020 05:22
Xylenes, Total	ND		0.0050	1	06/20/2020 05:22

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-7-1.5	2006697-015A	Soil	06/11/2020 10:09	GC18 06192034.D	200074

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
Dibromofluoromethane	88		82-136		06/20/2020 05:22
Toluene-d8	96		92-139		06/20/2020 05:22
4-BFB	100		82-135		06/20/2020 05:22
Benzene-d6	91		55-122		06/20/2020 05:22
Ethylbenzene-d10	95		58-141		06/20/2020 05:22
1,2-DCB-d4	78		51-107		06/20/2020 05:22

Analyst(s): KF



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected		Instrument	Batch ID
EB-7-3.0	2006697-016A	Soil	06/11/2020 10:12		GC18 06192035.D	200074
Analytes	Result	Qualifiers	RL	DF	Date Analyzed	
Acetone	ND		0.10	1	06/20/2020 06:01	
tert-Amyl methyl ether (TAME)	ND		0.0050	1	06/20/2020 06:01	
Benzene	ND		0.0050	1	06/20/2020 06:01	
Bromobenzene	ND		0.0050	1	06/20/2020 06:01	
Bromochloromethane	ND		0.0050	1	06/20/2020 06:01	
Bromodichloromethane	ND		0.0010	1	06/20/2020 06:01	
Bromoform	ND		0.0050	1	06/20/2020 06:01	
Bromomethane	ND		0.0050	1	06/20/2020 06:01	
2-Butanone (MEK)	ND		0.020	1	06/20/2020 06:01	
t-Butyl alcohol (TBA)	ND		0.050	1	06/20/2020 06:01	
n-Butyl benzene	ND		0.0050	1	06/20/2020 06:01	
sec-Butyl benzene	ND		0.0050	1	06/20/2020 06:01	
tert-Butyl benzene	ND		0.0050	1	06/20/2020 06:01	
Carbon Disulfide	ND		0.0050	1	06/20/2020 06:01	
Carbon Tetrachloride	ND		0.0050	1	06/20/2020 06:01	
Chlorobenzene	ND		0.0050	1	06/20/2020 06:01	
Chloroethane	ND		0.0050	1	06/20/2020 06:01	
Chloroform	ND		0.0050	1	06/20/2020 06:01	
Chloromethane	ND		0.0050	1	06/20/2020 06:01	
2-Chlorotoluene	ND		0.0050	1	06/20/2020 06:01	
4-Chlorotoluene	ND		0.0050	1	06/20/2020 06:01	
Dibromochloromethane	ND		0.0050	1	06/20/2020 06:01	
1,2-Dibromo-3-chloropropane	ND		0.00025	1	06/20/2020 06:01	
1,2-Dibromoethane (EDB)	0.00011	B	0.00010	1	06/20/2020 06:01	
Dibromomethane	ND		0.0050	1	06/20/2020 06:01	
1,2-Dichlorobenzene	ND		0.0050	1	06/20/2020 06:01	
1,3-Dichlorobenzene	ND		0.0050	1	06/20/2020 06:01	
1,4-Dichlorobenzene	ND		0.0050	1	06/20/2020 06:01	
Dichlorodifluoromethane	ND		0.0050	1	06/20/2020 06:01	
1,1-Dichloroethane	ND		0.0050	1	06/20/2020 06:01	
1,2-Dichloroethane (1,2-DCA)	ND		0.00025	1	06/20/2020 06:01	
1,1-Dichloroethene	ND		0.00025	1	06/20/2020 06:01	
cis-1,2-Dichloroethene	ND		0.0050	1	06/20/2020 06:01	
trans-1,2-Dichloroethene	ND		0.0050	1	06/20/2020 06:01	
1,2-Dichloropropane	ND		0.0050	1	06/20/2020 06:01	
1,3-Dichloropropane	ND		0.0050	1	06/20/2020 06:01	
2,2-Dichloropropane	ND		0.0050	1	06/20/2020 06:01	

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-7-3.0	2006697-016A	Soil	06/11/2020 10:12	GC18 06192035.D	200074

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
1,1-Dichloropropene	ND		0.0050	1	06/20/2020 06:01
cis-1,3-Dichloropropene	ND		0.0050	1	06/20/2020 06:01
trans-1,3-Dichloropropene	ND		0.0050	1	06/20/2020 06:01
Diisopropyl ether (DIPE)	ND		0.0050	1	06/20/2020 06:01
Ethylbenzene	ND		0.0050	1	06/20/2020 06:01
Ethyl tert-butyl ether (ETBE)	ND		0.0050	1	06/20/2020 06:01
Freon 113	ND		0.0050	1	06/20/2020 06:01
Hexachlorobutadiene	ND		0.0050	1	06/20/2020 06:01
Hexachloroethane	ND		0.0050	1	06/20/2020 06:01
2-Hexanone	ND		0.0050	1	06/20/2020 06:01
Isopropylbenzene	ND		0.0050	1	06/20/2020 06:01
4-Isopropyl toluene	ND		0.0050	1	06/20/2020 06:01
Methyl-t-butyl ether (MTBE)	ND		0.0050	1	06/20/2020 06:01
Methylene chloride	ND		0.010	1	06/20/2020 06:01
4-Methyl-2-pentanone (MIBK)	ND		0.0050	1	06/20/2020 06:01
Naphthalene	ND		0.0050	1	06/20/2020 06:01
n-Propyl benzene	ND		0.0050	1	06/20/2020 06:01
Styrene	ND		0.0050	1	06/20/2020 06:01
1,1,1,2-Tetrachloroethane	ND		0.0050	1	06/20/2020 06:01
1,1,2,2-Tetrachloroethane	ND		0.00025	1	06/20/2020 06:01
Tetrachloroethene	ND		0.0010	1	06/20/2020 06:01
Toluene	ND		0.0050	1	06/20/2020 06:01
1,2,3-Trichlorobenzene	ND		0.0050	1	06/20/2020 06:01
1,2,4-Trichlorobenzene	ND		0.0050	1	06/20/2020 06:01
1,1,1-Trichloroethane	ND		0.0050	1	06/20/2020 06:01
1,1,2-Trichloroethane	ND		0.0050	1	06/20/2020 06:01
Trichloroethene	ND		0.0050	1	06/20/2020 06:01
Trichlorofluoromethane	ND		0.0050	1	06/20/2020 06:01
1,2,3-Trichloropropane	ND		0.00010	1	06/20/2020 06:01
1,2,4-Trimethylbenzene	ND		0.0050	1	06/20/2020 06:01
1,3,5-Trimethylbenzene	ND		0.0050	1	06/20/2020 06:01
Vinyl Chloride	ND		0.00025	1	06/20/2020 06:01
m,p-Xylene	ND		0.0050	1	06/20/2020 06:01
o-Xylene	ND		0.0050	1	06/20/2020 06:01
Xylenes, Total	ND		0.0050	1	06/20/2020 06:01

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-7-3.0	2006697-016A	Soil	06/11/2020 10:12	GC18 06192035.D	200074

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
Dibromofluoromethane	87		82-136		06/20/2020 06:01
Toluene-d8	97		92-139		06/20/2020 06:01
4-BFB	99		82-135		06/20/2020 06:01
Benzene-d6	92		55-122		06/20/2020 06:01
Ethylbenzene-d10	97		58-141		06/20/2020 06:01
1,2-DCB-d4	77		51-107		06/20/2020 06:01

Analyst(s): KF



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-7-5.0	2006697-017A	Soil	06/11/2020 10:17	GC38 06192025.D	200074

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	06/19/2020 22:16
tert-Amyl methyl ether (TAME)	ND	0.0050	1	06/19/2020 22:16
Benzene	ND	0.0050	1	06/19/2020 22:16
Bromobenzene	ND	0.0050	1	06/19/2020 22:16
Bromochloromethane	ND	0.0050	1	06/19/2020 22:16
Bromodichloromethane	ND	0.0010	1	06/19/2020 22:16
Bromoform	ND	0.0050	1	06/19/2020 22:16
Bromomethane	ND	0.0050	1	06/19/2020 22:16
2-Butanone (MEK)	ND	0.020	1	06/19/2020 22:16
t-Butyl alcohol (TBA)	ND	0.050	1	06/19/2020 22:16
n-Butyl benzene	ND	0.0050	1	06/19/2020 22:16
sec-Butyl benzene	ND	0.0050	1	06/19/2020 22:16
tert-Butyl benzene	ND	0.0050	1	06/19/2020 22:16
Carbon Disulfide	ND	0.0050	1	06/19/2020 22:16
Carbon Tetrachloride	ND	0.0050	1	06/19/2020 22:16
Chlorobenzene	ND	0.0050	1	06/19/2020 22:16
Chloroethane	ND	0.0050	1	06/19/2020 22:16
Chloroform	ND	0.0050	1	06/19/2020 22:16
Chloromethane	ND	0.0050	1	06/19/2020 22:16
2-Chlorotoluene	ND	0.0050	1	06/19/2020 22:16
4-Chlorotoluene	ND	0.0050	1	06/19/2020 22:16
Dibromochloromethane	ND	0.0050	1	06/19/2020 22:16
1,2-Dibromo-3-chloropropane	ND	0.00025	1	06/19/2020 22:16
1,2-Dibromoethane (EDB)	ND	0.00010	1	06/19/2020 22:16
Dibromomethane	ND	0.0050	1	06/19/2020 22:16
1,2-Dichlorobenzene	ND	0.0050	1	06/19/2020 22:16
1,3-Dichlorobenzene	ND	0.0050	1	06/19/2020 22:16
1,4-Dichlorobenzene	ND	0.0050	1	06/19/2020 22:16
Dichlorodifluoromethane	ND	0.0050	1	06/19/2020 22:16
1,1-Dichloroethane	ND	0.0050	1	06/19/2020 22:16
1,2-Dichloroethane (1,2-DCA)	ND	0.00025	1	06/19/2020 22:16
1,1-Dichloroethene	ND	0.00025	1	06/19/2020 22:16
cis-1,2-Dichloroethene	ND	0.0050	1	06/19/2020 22:16
trans-1,2-Dichloroethene	ND	0.0050	1	06/19/2020 22:16
1,2-Dichloropropane	ND	0.0050	1	06/19/2020 22:16
1,3-Dichloropropane	ND	0.0050	1	06/19/2020 22:16
2,2-Dichloropropane	ND	0.0050	1	06/19/2020 22:16

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-7-5.0	2006697-017A	Soil	06/11/2020 10:17	GC38 06192025.D	200074

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	06/19/2020 22:16
cis-1,3-Dichloropropene	ND	0.0050	1	06/19/2020 22:16
trans-1,3-Dichloropropene	ND	0.0050	1	06/19/2020 22:16
Diisopropyl ether (DIPE)	ND	0.0050	1	06/19/2020 22:16
Ethylbenzene	ND	0.0050	1	06/19/2020 22:16
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	06/19/2020 22:16
Freon 113	ND	0.0050	1	06/19/2020 22:16
Hexachlorobutadiene	ND	0.0050	1	06/19/2020 22:16
Hexachloroethane	ND	0.0050	1	06/19/2020 22:16
2-Hexanone	ND	0.0050	1	06/19/2020 22:16
Isopropylbenzene	ND	0.0050	1	06/19/2020 22:16
4-Isopropyl toluene	ND	0.0050	1	06/19/2020 22:16
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/19/2020 22:16
Methylene chloride	ND	0.010	1	06/19/2020 22:16
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	06/19/2020 22:16
Naphthalene	ND	0.0050	1	06/19/2020 22:16
n-Propyl benzene	ND	0.0050	1	06/19/2020 22:16
Styrene	ND	0.0050	1	06/19/2020 22:16
1,1,1,2-Tetrachloroethane	ND	0.0050	1	06/19/2020 22:16
1,1,2,2-Tetrachloroethane	ND	0.00025	1	06/19/2020 22:16
Tetrachloroethene	ND	0.0010	1	06/19/2020 22:16
Toluene	ND	0.0050	1	06/19/2020 22:16
1,2,3-Trichlorobenzene	ND	0.0050	1	06/19/2020 22:16
1,2,4-Trichlorobenzene	ND	0.0050	1	06/19/2020 22:16
1,1,1-Trichloroethane	ND	0.0050	1	06/19/2020 22:16
1,1,2-Trichloroethane	ND	0.0050	1	06/19/2020 22:16
Trichloroethene	ND	0.0050	1	06/19/2020 22:16
Trichlorofluoromethane	ND	0.0050	1	06/19/2020 22:16
1,2,3-Trichloropropane	ND	0.00010	1	06/19/2020 22:16
1,2,4-Trimethylbenzene	ND	0.0050	1	06/19/2020 22:16
1,3,5-Trimethylbenzene	ND	0.0050	1	06/19/2020 22:16
Vinyl Chloride	ND	0.00025	1	06/19/2020 22:16
m,p-Xylene	ND	0.0050	1	06/19/2020 22:16
o-Xylene	ND	0.0050	1	06/19/2020 22:16
Xylenes, Total	ND	0.0050	1	06/19/2020 22:16

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-7-5.0	2006697-017A	Soil	06/11/2020 10:17	GC38 06192025.D	200074

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	97	82-136		06/19/2020 22:16
Toluene-d8	103	92-139		06/19/2020 22:16
4-BFB	96	82-135		06/19/2020 22:16
Benzene-d6	93	55-122		06/19/2020 22:16
Ethylbenzene-d10	94	58-141		06/19/2020 22:16
1,2-DCB-d4	77	51-107		06/19/2020 22:16

Analyst(s): KF



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-5-1.5	2006697-018A	Soil	06/11/2020 11:12	GC38 06192026.D	200074

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	06/19/2020 22:54
tert-Amyl methyl ether (TAME)	ND	0.0050	1	06/19/2020 22:54
Benzene	ND	0.0050	1	06/19/2020 22:54
Bromobenzene	ND	0.0050	1	06/19/2020 22:54
Bromochloromethane	ND	0.0050	1	06/19/2020 22:54
Bromodichloromethane	ND	0.0010	1	06/19/2020 22:54
Bromoform	ND	0.0050	1	06/19/2020 22:54
Bromomethane	ND	0.0050	1	06/19/2020 22:54
2-Butanone (MEK)	ND	0.020	1	06/19/2020 22:54
t-Butyl alcohol (TBA)	ND	0.050	1	06/19/2020 22:54
n-Butyl benzene	ND	0.0050	1	06/19/2020 22:54
sec-Butyl benzene	ND	0.0050	1	06/19/2020 22:54
tert-Butyl benzene	ND	0.0050	1	06/19/2020 22:54
Carbon Disulfide	ND	0.0050	1	06/19/2020 22:54
Carbon Tetrachloride	ND	0.0050	1	06/19/2020 22:54
Chlorobenzene	ND	0.0050	1	06/19/2020 22:54
Chloroethane	ND	0.0050	1	06/19/2020 22:54
Chloroform	ND	0.0050	1	06/19/2020 22:54
Chloromethane	ND	0.0050	1	06/19/2020 22:54
2-Chlorotoluene	ND	0.0050	1	06/19/2020 22:54
4-Chlorotoluene	ND	0.0050	1	06/19/2020 22:54
Dibromochloromethane	ND	0.0050	1	06/19/2020 22:54
1,2-Dibromo-3-chloropropane	ND	0.00025	1	06/19/2020 22:54
1,2-Dibromoethane (EDB)	ND	0.00010	1	06/19/2020 22:54
Dibromomethane	ND	0.0050	1	06/19/2020 22:54
1,2-Dichlorobenzene	ND	0.0050	1	06/19/2020 22:54
1,3-Dichlorobenzene	ND	0.0050	1	06/19/2020 22:54
1,4-Dichlorobenzene	ND	0.0050	1	06/19/2020 22:54
Dichlorodifluoromethane	ND	0.0050	1	06/19/2020 22:54
1,1-Dichloroethane	ND	0.0050	1	06/19/2020 22:54
1,2-Dichloroethane (1,2-DCA)	ND	0.00025	1	06/19/2020 22:54
1,1-Dichloroethene	ND	0.00025	1	06/19/2020 22:54
cis-1,2-Dichloroethene	ND	0.0050	1	06/19/2020 22:54
trans-1,2-Dichloroethene	ND	0.0050	1	06/19/2020 22:54
1,2-Dichloropropane	ND	0.0050	1	06/19/2020 22:54
1,3-Dichloropropane	ND	0.0050	1	06/19/2020 22:54
2,2-Dichloropropane	ND	0.0050	1	06/19/2020 22:54

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-5-1.5	2006697-018A	Soil	06/11/2020 11:12	GC38 06192026.D	200074

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	06/19/2020 22:54
cis-1,3-Dichloropropene	ND	0.0050	1	06/19/2020 22:54
trans-1,3-Dichloropropene	ND	0.0050	1	06/19/2020 22:54
Diisopropyl ether (DIPE)	ND	0.0050	1	06/19/2020 22:54
Ethylbenzene	ND	0.0050	1	06/19/2020 22:54
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	06/19/2020 22:54
Freon 113	ND	0.0050	1	06/19/2020 22:54
Hexachlorobutadiene	ND	0.0050	1	06/19/2020 22:54
Hexachloroethane	ND	0.0050	1	06/19/2020 22:54
2-Hexanone	ND	0.0050	1	06/19/2020 22:54
Isopropylbenzene	ND	0.0050	1	06/19/2020 22:54
4-Isopropyl toluene	ND	0.0050	1	06/19/2020 22:54
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/19/2020 22:54
Methylene chloride	ND	0.010	1	06/19/2020 22:54
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	06/19/2020 22:54
Naphthalene	ND	0.0050	1	06/19/2020 22:54
n-Propyl benzene	ND	0.0050	1	06/19/2020 22:54
Styrene	ND	0.0050	1	06/19/2020 22:54
1,1,1,2-Tetrachloroethane	ND	0.0050	1	06/19/2020 22:54
1,1,2,2-Tetrachloroethane	ND	0.00025	1	06/19/2020 22:54
Tetrachloroethene	ND	0.0010	1	06/19/2020 22:54
Toluene	ND	0.0050	1	06/19/2020 22:54
1,2,3-Trichlorobenzene	ND	0.0050	1	06/19/2020 22:54
1,2,4-Trichlorobenzene	ND	0.0050	1	06/19/2020 22:54
1,1,1-Trichloroethane	ND	0.0050	1	06/19/2020 22:54
1,1,2-Trichloroethane	ND	0.0050	1	06/19/2020 22:54
Trichloroethene	ND	0.0050	1	06/19/2020 22:54
Trichlorofluoromethane	ND	0.0050	1	06/19/2020 22:54
1,2,3-Trichloropropane	ND	0.00010	1	06/19/2020 22:54
1,2,4-Trimethylbenzene	ND	0.0050	1	06/19/2020 22:54
1,3,5-Trimethylbenzene	ND	0.0050	1	06/19/2020 22:54
Vinyl Chloride	ND	0.00025	1	06/19/2020 22:54
m,p-Xylene	ND	0.0050	1	06/19/2020 22:54
o-Xylene	ND	0.0050	1	06/19/2020 22:54
Xylenes, Total	ND	0.0050	1	06/19/2020 22:54

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-5-1.5	2006697-018A	Soil	06/11/2020 11:12	GC38 06192026.D	200074

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	90		82-136	06/19/2020 22:54
Toluene-d8	103		92-139	06/19/2020 22:54
4-BFB	101		82-135	06/19/2020 22:54
Benzene-d6	91		55-122	06/19/2020 22:54
Ethylbenzene-d10	100		58-141	06/19/2020 22:54
1,2-DCB-d4	80		51-107	06/19/2020 22:54

Analyst(s): KF



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-5-3.0	2006697-019A	Soil	06/11/2020 11:15	GC38 06192027.D	200074

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	06/19/2020 23:32
tert-Amyl methyl ether (TAME)	ND	0.0050	1	06/19/2020 23:32
Benzene	ND	0.0050	1	06/19/2020 23:32
Bromobenzene	ND	0.0050	1	06/19/2020 23:32
Bromochloromethane	ND	0.0050	1	06/19/2020 23:32
Bromodichloromethane	ND	0.0010	1	06/19/2020 23:32
Bromoform	ND	0.0050	1	06/19/2020 23:32
Bromomethane	ND	0.0050	1	06/19/2020 23:32
2-Butanone (MEK)	ND	0.020	1	06/19/2020 23:32
t-Butyl alcohol (TBA)	ND	0.050	1	06/19/2020 23:32
n-Butyl benzene	ND	0.0050	1	06/19/2020 23:32
sec-Butyl benzene	ND	0.0050	1	06/19/2020 23:32
tert-Butyl benzene	ND	0.0050	1	06/19/2020 23:32
Carbon Disulfide	ND	0.0050	1	06/19/2020 23:32
Carbon Tetrachloride	ND	0.0050	1	06/19/2020 23:32
Chlorobenzene	ND	0.0050	1	06/19/2020 23:32
Chloroethane	ND	0.0050	1	06/19/2020 23:32
Chloroform	ND	0.0050	1	06/19/2020 23:32
Chloromethane	ND	0.0050	1	06/19/2020 23:32
2-Chlorotoluene	ND	0.0050	1	06/19/2020 23:32
4-Chlorotoluene	ND	0.0050	1	06/19/2020 23:32
Dibromochloromethane	ND	0.0050	1	06/19/2020 23:32
1,2-Dibromo-3-chloropropane	ND	0.00025	1	06/19/2020 23:32
1,2-Dibromoethane (EDB)	ND	0.00010	1	06/19/2020 23:32
Dibromomethane	ND	0.0050	1	06/19/2020 23:32
1,2-Dichlorobenzene	ND	0.0050	1	06/19/2020 23:32
1,3-Dichlorobenzene	ND	0.0050	1	06/19/2020 23:32
1,4-Dichlorobenzene	ND	0.0050	1	06/19/2020 23:32
Dichlorodifluoromethane	ND	0.0050	1	06/19/2020 23:32
1,1-Dichloroethane	ND	0.0050	1	06/19/2020 23:32
1,2-Dichloroethane (1,2-DCA)	ND	0.00025	1	06/19/2020 23:32
1,1-Dichloroethene	ND	0.00025	1	06/19/2020 23:32
cis-1,2-Dichloroethene	ND	0.0050	1	06/19/2020 23:32
trans-1,2-Dichloroethene	ND	0.0050	1	06/19/2020 23:32
1,2-Dichloropropane	ND	0.0050	1	06/19/2020 23:32
1,3-Dichloropropane	ND	0.0050	1	06/19/2020 23:32
2,2-Dichloropropane	ND	0.0050	1	06/19/2020 23:32

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-5-3.0	2006697-019A	Soil	06/11/2020 11:15	GC38 06192027.D	200074

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	06/19/2020 23:32
cis-1,3-Dichloropropene	ND	0.0050	1	06/19/2020 23:32
trans-1,3-Dichloropropene	ND	0.0050	1	06/19/2020 23:32
Diisopropyl ether (DIPE)	ND	0.0050	1	06/19/2020 23:32
Ethylbenzene	ND	0.0050	1	06/19/2020 23:32
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	06/19/2020 23:32
Freon 113	ND	0.0050	1	06/19/2020 23:32
Hexachlorobutadiene	ND	0.0050	1	06/19/2020 23:32
Hexachloroethane	ND	0.0050	1	06/19/2020 23:32
2-Hexanone	ND	0.0050	1	06/19/2020 23:32
Isopropylbenzene	ND	0.0050	1	06/19/2020 23:32
4-Isopropyl toluene	ND	0.0050	1	06/19/2020 23:32
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/19/2020 23:32
Methylene chloride	ND	0.010	1	06/19/2020 23:32
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	06/19/2020 23:32
Naphthalene	ND	0.0050	1	06/19/2020 23:32
n-Propyl benzene	ND	0.0050	1	06/19/2020 23:32
Styrene	ND	0.0050	1	06/19/2020 23:32
1,1,1,2-Tetrachloroethane	ND	0.0050	1	06/19/2020 23:32
1,1,2,2-Tetrachloroethane	ND	0.00025	1	06/19/2020 23:32
Tetrachloroethene	ND	0.0010	1	06/19/2020 23:32
Toluene	ND	0.0050	1	06/19/2020 23:32
1,2,3-Trichlorobenzene	ND	0.0050	1	06/19/2020 23:32
1,2,4-Trichlorobenzene	ND	0.0050	1	06/19/2020 23:32
1,1,1-Trichloroethane	ND	0.0050	1	06/19/2020 23:32
1,1,2-Trichloroethane	ND	0.0050	1	06/19/2020 23:32
Trichloroethene	ND	0.0050	1	06/19/2020 23:32
Trichlorofluoromethane	ND	0.0050	1	06/19/2020 23:32
1,2,3-Trichloropropane	ND	0.00010	1	06/19/2020 23:32
1,2,4-Trimethylbenzene	ND	0.0050	1	06/19/2020 23:32
1,3,5-Trimethylbenzene	ND	0.0050	1	06/19/2020 23:32
Vinyl Chloride	ND	0.00025	1	06/19/2020 23:32
m,p-Xylene	ND	0.0050	1	06/19/2020 23:32
o-Xylene	ND	0.0050	1	06/19/2020 23:32
Xylenes, Total	ND	0.0050	1	06/19/2020 23:32

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-5-3.0	2006697-019A	Soil	06/11/2020 11:15	GC38 06192027.D	200074

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	90	82-136		06/19/2020 23:32
Toluene-d8	103	92-139		06/19/2020 23:32
4-BFB	96	82-135		06/19/2020 23:32
Benzene-d6	88	55-122		06/19/2020 23:32
Ethylbenzene-d10	96	58-141		06/19/2020 23:32
1,2-DCB-d4	79	51-107		06/19/2020 23:32

Analyst(s): KF



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020-06/18/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-2-1.5	2006697-001A	Soil	06/11/2020 08:47	GC21 06202011.D	200232

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.0013	1	06/20/2020 13:58
Acenaphthylene	0.0041	0.0013	1	06/20/2020 13:58
Acetochlor	ND	0.25	1	06/20/2020 13:58
Anthracene	ND	0.0013	1	06/20/2020 13:58
Benzidine	ND	1.2	1	06/20/2020 13:58
Benzo (a) anthracene	ND	0.013	1	06/20/2020 13:58
Benzo (a) pyrene	0.0050	0.0025	1	06/20/2020 13:58
Benzo (b) fluoranthene	ND	0.0063	1	06/20/2020 13:58
Benzo (g,h,i) perylene	0.0078	0.0025	1	06/20/2020 13:58
Benzo (k) fluoranthene	0.0025	0.0013	1	06/20/2020 13:58
Benzyl Alcohol	ND	1.2	1	06/20/2020 13:58
1,1-Biphenyl	ND	0.013	1	06/20/2020 13:58
Bis (2-chloroethoxy) Methane	ND	0.25	1	06/20/2020 13:58
Bis (2-chloroethyl) Ether	ND	0.0025	1	06/20/2020 13:58
Bis (2-chloroisopropyl) Ether	ND	0.013	1	06/20/2020 13:58
Bis (2-ethylhexyl) Adipate	ND	0.25	1	06/20/2020 13:58
Bis (2-ethylhexyl) Phthalate	ND	0.025	1	06/20/2020 13:58
4-Bromophenyl Phenyl Ether	ND	0.25	1	06/20/2020 13:58
Butylbenzyl Phthalate	ND	0.025	1	06/20/2020 13:58
4-Chloroaniline	ND	0.0025	1	06/20/2020 13:58
4-Chloro-3-methylphenol	ND	0.25	1	06/20/2020 13:58
2-Chloronaphthalene	ND	0.25	1	06/20/2020 13:58
2-Chlorophenol	ND	0.013	1	06/20/2020 13:58
4-Chlorophenyl Phenyl Ether	ND	0.25	1	06/20/2020 13:58
Chrysene	0.0041	0.0025	1	06/20/2020 13:58
Dibenzo (a,h) anthracene	ND	0.0025	1	06/20/2020 13:58
Dibenzofuran	ND	0.25	1	06/20/2020 13:58
Di-n-butyl Phthalate	ND	0.013	1	06/20/2020 13:58
1,2-Dichlorobenzene	ND	0.25	1	06/20/2020 13:58
1,3-Dichlorobenzene	ND	0.25	1	06/20/2020 13:58
1,4-Dichlorobenzene	ND	0.25	1	06/20/2020 13:58
3,3-Dichlorobenzidine	ND	0.0025	1	06/20/2020 13:58
2,4-Dichlorophenol	ND	0.013	1	06/20/2020 13:58
Diethyl Phthalate	ND	0.013	1	06/20/2020 13:58
2,4-Dimethylphenol	ND	0.25	1	06/20/2020 13:58
Dimethyl Phthalate	ND	0.0025	1	06/20/2020 13:58
4,6-Dinitro-2-methylphenol	ND	1.2	1	06/20/2020 13:58

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020-06/18/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected		Instrument	Batch ID
EB-2-1.5	2006697-001A	Soil	06/11/2020 08:47		GC21 06202011.D	200232
Analytes	Result	RL	DF	Date Analyzed		
2,4-Dinitrophenol	ND	0.25	1	06/20/2020 13:58		
2,4-Dinitrotoluene	ND	0.013	1	06/20/2020 13:58		
2,6-Dinitrotoluene	ND	0.013	1	06/20/2020 13:58		
Di-n-octyl Phthalate	ND	0.013	1	06/20/2020 13:58		
1,2-Diphenylhydrazine	ND	0.25	1	06/20/2020 13:58		
Fluoranthene	0.0062	0.0013	1	06/20/2020 13:58		
Fluorene	0.0046	0.0025	1	06/20/2020 13:58		
Hexachlorobenzene	ND	0.0013	1	06/20/2020 13:58		
Hexachlorobutadiene	ND	0.0025	1	06/20/2020 13:58		
Hexachlorocyclopentadiene	ND	2.0	1	06/20/2020 13:58		
Hexachloroethane	ND	0.013	1	06/20/2020 13:58		
Indeno (1,2,3-cd) pyrene	ND	0.013	1	06/20/2020 13:58		
Isophorone	ND	0.25	1	06/20/2020 13:58		
2-Methylnaphthalene	0.015	0.0025	1	06/20/2020 13:58		
2-Methylphenol (o-Cresol)	ND	0.25	1	06/20/2020 13:58		
3 & 4-Methylphenol (m,p-Cresol)	ND	0.25	1	06/20/2020 13:58		
Naphthalene	0.010	0.0013	1	06/20/2020 13:58		
2-Nitroaniline	ND	1.2	1	06/20/2020 13:58		
3-Nitroaniline	ND	1.2	1	06/20/2020 13:58		
4-Nitroaniline	ND	1.2	1	06/20/2020 13:58		
Nitrobenzene	ND	0.25	1	06/20/2020 13:58		
2-Nitrophenol	ND	1.2	1	06/20/2020 13:58		
4-Nitrophenol	ND	1.2	1	06/20/2020 13:58		
N-Nitrosodiphenylamine	ND	0.25	1	06/20/2020 13:58		
N-Nitrosodi-n-propylamine	ND	0.25	1	06/20/2020 13:58		
Pentachlorophenol	ND	0.062	1	06/20/2020 13:58		
Phenanthrene	0.0088	0.0050	1	06/20/2020 13:58		
Phenol	ND	0.050	1	06/20/2020 13:58		
Pyrene	0.0080	0.0025	1	06/20/2020 13:58		
Pyridine	ND	0.25	1	06/20/2020 13:58		
1,2,4-Trichlorobenzene	ND	0.25	1	06/20/2020 13:58		
2,4,5-Trichlorophenol	ND	0.0025	1	06/20/2020 13:58		
2,4,6-Trichlorophenol	ND	0.013	1	06/20/2020 13:58		

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020-06/18/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-2-1.5	2006697-001A	Soil	06/11/2020 08:47	GC21 06202011.D	200232

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorophenol	97	60-130		06/20/2020 13:58
Phenol-d5	94	60-130		06/20/2020 13:58
Nitrobenzene-d5	81	60-130		06/20/2020 13:58
2-Fluorobiphenyl	74	60-130		06/20/2020 13:58
2,4,6-Tribromophenol	71	50-130		06/20/2020 13:58
4-Terphenyl-d14	72	50-130		06/20/2020 13:58

Analyst(s): HD



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020-06/18/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-2-3.0	2006697-002A	Soil	06/11/2020 08:50	GC17 06192025.D	200232

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.0013	1	06/19/2020 19:35
Acenaphthylene	ND	0.0013	1	06/19/2020 19:35
Acetochlor	ND	0.25	1	06/19/2020 19:35
Anthracene	ND	0.0013	1	06/19/2020 19:35
Benzidine	ND	1.2	1	06/19/2020 19:35
Benzo (a) anthracene	ND	0.013	1	06/19/2020 19:35
Benzo (a) pyrene	ND	0.0025	1	06/19/2020 19:35
Benzo (b) fluoranthene	ND	0.0063	1	06/19/2020 19:35
Benzo (g,h,i) perylene	ND	0.0025	1	06/19/2020 19:35
Benzo (k) fluoranthene	ND	0.0013	1	06/19/2020 19:35
Benzyl Alcohol	ND	1.2	1	06/19/2020 19:35
1,1-Biphenyl	ND	0.013	1	06/19/2020 19:35
Bis (2-chloroethoxy) Methane	ND	0.25	1	06/19/2020 19:35
Bis (2-chloroethyl) Ether	ND	0.0025	1	06/19/2020 19:35
Bis (2-chloroisopropyl) Ether	ND	0.013	1	06/19/2020 19:35
Bis (2-ethylhexyl) Adipate	ND	0.25	1	06/19/2020 19:35
Bis (2-ethylhexyl) Phthalate	ND	0.025	1	06/19/2020 19:35
4-Bromophenyl Phenyl Ether	ND	0.25	1	06/19/2020 19:35
Butylbenzyl Phthalate	ND	0.025	1	06/19/2020 19:35
4-Chloroaniline	ND	0.0025	1	06/19/2020 19:35
4-Chloro-3-methylphenol	ND	0.25	1	06/19/2020 19:35
2-Chloronaphthalene	ND	0.25	1	06/19/2020 19:35
2-Chlorophenol	ND	0.013	1	06/19/2020 19:35
4-Chlorophenyl Phenyl Ether	ND	0.25	1	06/19/2020 19:35
Chrysene	ND	0.0025	1	06/19/2020 19:35
Dibenzo (a,h) anthracene	ND	0.0025	1	06/19/2020 19:35
Dibenzofuran	ND	0.25	1	06/19/2020 19:35
Di-n-butyl Phthalate	ND	0.013	1	06/19/2020 19:35
1,2-Dichlorobenzene	ND	0.25	1	06/19/2020 19:35
1,3-Dichlorobenzene	ND	0.25	1	06/19/2020 19:35
1,4-Dichlorobenzene	ND	0.25	1	06/19/2020 19:35
3,3-Dichlorobenzidine	ND	0.0025	1	06/19/2020 19:35
2,4-Dichlorophenol	ND	0.013	1	06/19/2020 19:35
Diethyl Phthalate	ND	0.013	1	06/19/2020 19:35
2,4-Dimethylphenol	ND	0.25	1	06/19/2020 19:35
Dimethyl Phthalate	ND	0.0025	1	06/19/2020 19:35
4,6-Dinitro-2-methylphenol	ND	1.2	1	06/19/2020 19:35

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020-06/18/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-2-3.0	2006697-002A	Soil	06/11/2020 08:50	GC17 06192025.D	200232

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrophenol	ND	0.25	1	06/19/2020 19:35
2,4-Dinitrotoluene	ND	0.013	1	06/19/2020 19:35
2,6-Dinitrotoluene	ND	0.013	1	06/19/2020 19:35
Di-n-octyl Phthalate	ND	0.013	1	06/19/2020 19:35
1,2-Diphenylhydrazine	ND	0.25	1	06/19/2020 19:35
Fluoranthene	ND	0.0013	1	06/19/2020 19:35
Fluorene	ND	0.0025	1	06/19/2020 19:35
Hexachlorobenzene	ND	0.0013	1	06/19/2020 19:35
Hexachlorobutadiene	ND	0.0025	1	06/19/2020 19:35
Hexachlorocyclopentadiene	ND	2.0	1	06/19/2020 19:35
Hexachloroethane	ND	0.013	1	06/19/2020 19:35
Indeno (1,2,3-cd) pyrene	ND	0.013	1	06/19/2020 19:35
Isophorone	ND	0.25	1	06/19/2020 19:35
2-Methylnaphthalene	ND	0.0025	1	06/19/2020 19:35
2-Methylphenol (o-Cresol)	ND	0.25	1	06/19/2020 19:35
3 & 4-Methylphenol (m,p-Cresol)	ND	0.25	1	06/19/2020 19:35
Naphthalene	ND	0.0013	1	06/19/2020 19:35
2-Nitroaniline	ND	1.2	1	06/19/2020 19:35
3-Nitroaniline	ND	1.2	1	06/19/2020 19:35
4-Nitroaniline	ND	1.2	1	06/19/2020 19:35
Nitrobenzene	ND	0.25	1	06/19/2020 19:35
2-Nitrophenol	ND	1.2	1	06/19/2020 19:35
4-Nitrophenol	ND	1.2	1	06/19/2020 19:35
N-Nitrosodiphenylamine	ND	0.25	1	06/19/2020 19:35
N-Nitrosodi-n-propylamine	ND	0.25	1	06/19/2020 19:35
Pentachlorophenol	ND	0.062	1	06/19/2020 19:35
Phenanthrene	ND	0.0050	1	06/19/2020 19:35
Phenol	ND	0.050	1	06/19/2020 19:35
Pyrene	ND	0.0025	1	06/19/2020 19:35
Pyridine	ND	0.25	1	06/19/2020 19:35
1,2,4-Trichlorobenzene	ND	0.25	1	06/19/2020 19:35
2,4,5-Trichlorophenol	ND	0.0025	1	06/19/2020 19:35
2,4,6-Trichlorophenol	ND	0.013	1	06/19/2020 19:35

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020-06/18/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-2-3.0	2006697-002A	Soil	06/11/2020 08:50	GC17 06192025.D	200232

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>	
2-Fluorophenol	120		60-130	06/19/2020 19:35
Phenol-d5	110		60-130	06/19/2020 19:35
Nitrobenzene-d5	84		60-130	06/19/2020 19:35
2-Fluorobiphenyl	73		60-130	06/19/2020 19:35
2,4,6-Tribromophenol	16	S	50-130	06/19/2020 19:35
4-Terphenyl-d14	64		50-130	06/19/2020 19:35

Analyst(s): HD

Analytical Comments: c2



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020-06/18/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-2-7.0	2006697-004A	Soil	06/11/2020 08:56	GC17 06192026.D	200232

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.0013	1	06/19/2020 20:03
Acenaphthylene	ND	0.0013	1	06/19/2020 20:03
Acetochlor	ND	0.25	1	06/19/2020 20:03
Anthracene	ND	0.0013	1	06/19/2020 20:03
Benzidine	ND	1.2	1	06/19/2020 20:03
Benzo (a) anthracene	ND	0.013	1	06/19/2020 20:03
Benzo (a) pyrene	ND	0.0025	1	06/19/2020 20:03
Benzo (b) fluoranthene	ND	0.0063	1	06/19/2020 20:03
Benzo (g,h,i) perylene	ND	0.0025	1	06/19/2020 20:03
Benzo (k) fluoranthene	ND	0.0013	1	06/19/2020 20:03
Benzyl Alcohol	ND	1.2	1	06/19/2020 20:03
1,1-Biphenyl	ND	0.013	1	06/19/2020 20:03
Bis (2-chloroethoxy) Methane	ND	0.25	1	06/19/2020 20:03
Bis (2-chloroethyl) Ether	ND	0.0025	1	06/19/2020 20:03
Bis (2-chloroisopropyl) Ether	ND	0.013	1	06/19/2020 20:03
Bis (2-ethylhexyl) Adipate	ND	0.25	1	06/19/2020 20:03
Bis (2-ethylhexyl) Phthalate	ND	0.025	1	06/19/2020 20:03
4-Bromophenyl Phenyl Ether	ND	0.25	1	06/19/2020 20:03
Butylbenzyl Phthalate	ND	0.025	1	06/19/2020 20:03
4-Chloroaniline	ND	0.0025	1	06/19/2020 20:03
4-Chloro-3-methylphenol	ND	0.25	1	06/19/2020 20:03
2-Chloronaphthalene	ND	0.25	1	06/19/2020 20:03
2-Chlorophenol	ND	0.013	1	06/19/2020 20:03
4-Chlorophenyl Phenyl Ether	ND	0.25	1	06/19/2020 20:03
Chrysene	ND	0.0025	1	06/19/2020 20:03
Dibenzo (a,h) anthracene	ND	0.0025	1	06/19/2020 20:03
Dibenzofuran	ND	0.25	1	06/19/2020 20:03
Di-n-butyl Phthalate	ND	0.013	1	06/19/2020 20:03
1,2-Dichlorobenzene	ND	0.25	1	06/19/2020 20:03
1,3-Dichlorobenzene	ND	0.25	1	06/19/2020 20:03
1,4-Dichlorobenzene	ND	0.25	1	06/19/2020 20:03
3,3-Dichlorobenzidine	ND	0.0025	1	06/19/2020 20:03
2,4-Dichlorophenol	ND	0.013	1	06/19/2020 20:03
Diethyl Phthalate	ND	0.013	1	06/19/2020 20:03
2,4-Dimethylphenol	ND	0.25	1	06/19/2020 20:03
Dimethyl Phthalate	ND	0.0025	1	06/19/2020 20:03
4,6-Dinitro-2-methylphenol	ND	1.2	1	06/19/2020 20:03

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020-06/18/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-2-7.0	2006697-004A	Soil	06/11/2020 08:56	GC17 06192026.D	200232

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrophenol	ND	0.25	1	06/19/2020 20:03
2,4-Dinitrotoluene	ND	0.013	1	06/19/2020 20:03
2,6-Dinitrotoluene	ND	0.013	1	06/19/2020 20:03
Di-n-octyl Phthalate	ND	0.013	1	06/19/2020 20:03
1,2-Diphenylhydrazine	ND	0.25	1	06/19/2020 20:03
Fluoranthene	ND	0.0013	1	06/19/2020 20:03
Fluorene	ND	0.0025	1	06/19/2020 20:03
Hexachlorobenzene	ND	0.0013	1	06/19/2020 20:03
Hexachlorobutadiene	ND	0.0025	1	06/19/2020 20:03
Hexachlorocyclopentadiene	ND	2.0	1	06/19/2020 20:03
Hexachloroethane	ND	0.013	1	06/19/2020 20:03
Indeno (1,2,3-cd) pyrene	ND	0.013	1	06/19/2020 20:03
Isophorone	ND	0.25	1	06/19/2020 20:03
2-Methylnaphthalene	ND	0.0025	1	06/19/2020 20:03
2-Methylphenol (o-Cresol)	ND	0.25	1	06/19/2020 20:03
3 & 4-Methylphenol (m,p-Cresol)	ND	0.25	1	06/19/2020 20:03
Naphthalene	ND	0.0013	1	06/19/2020 20:03
2-Nitroaniline	ND	1.2	1	06/19/2020 20:03
3-Nitroaniline	ND	1.2	1	06/19/2020 20:03
4-Nitroaniline	ND	1.2	1	06/19/2020 20:03
Nitrobenzene	ND	0.25	1	06/19/2020 20:03
2-Nitrophenol	ND	1.2	1	06/19/2020 20:03
4-Nitrophenol	ND	1.2	1	06/19/2020 20:03
N-Nitrosodiphenylamine	ND	0.25	1	06/19/2020 20:03
N-Nitrosodi-n-propylamine	ND	0.25	1	06/19/2020 20:03
Pentachlorophenol	ND	0.062	1	06/19/2020 20:03
Phenanthrene	ND	0.0050	1	06/19/2020 20:03
Phenol	ND	0.050	1	06/19/2020 20:03
Pyrene	ND	0.0025	1	06/19/2020 20:03
Pyridine	ND	0.25	1	06/19/2020 20:03
1,2,4-Trichlorobenzene	ND	0.25	1	06/19/2020 20:03
2,4,5-Trichlorophenol	ND	0.0025	1	06/19/2020 20:03
2,4,6-Trichlorophenol	ND	0.013	1	06/19/2020 20:03

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020-06/18/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-2-7.0	2006697-004A	Soil	06/11/2020 08:56	GC17 06192026.D	200232

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>	
2-Fluorophenol	113		60-130	06/19/2020 20:03
Phenol-d5	111		60-130	06/19/2020 20:03
Nitrobenzene-d5	77		60-130	06/19/2020 20:03
2-Fluorobiphenyl	63		60-130	06/19/2020 20:03
2,4,6-Tribromophenol	26	S	50-130	06/19/2020 20:03
4-Terphenyl-d14	58		50-130	06/19/2020 20:03

Analyst(s): HD

Analytical Comments: c2



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020-06/18/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected		Instrument	Batch ID
EB-3-1.5	2006697-005A	Soil	06/11/2020 09:24		GC21 06222009.D	200232
Analytes	Result	RL	DF	Date Analyzed		
Acenaphthene	ND	0.13	100	06/22/2020 12:22		
Acenaphthylene	ND	0.13	100	06/22/2020 12:22		
Acetochlor	ND	25	100	06/22/2020 12:22		
Anthracene	ND	0.13	100	06/22/2020 12:22		
Benzidine	ND	120	100	06/22/2020 12:22		
Benzo (a) anthracene	ND	1.3	100	06/22/2020 12:22		
Benzo (a) pyrene	ND	0.25	100	06/22/2020 12:22		
Benzo (b) fluoranthene	ND	0.63	100	06/22/2020 12:22		
Benzo (g,h,i) perylene	ND	0.25	100	06/22/2020 12:22		
Benzo (k) fluoranthene	ND	0.13	100	06/22/2020 12:22		
Benzyl Alcohol	ND	120	100	06/22/2020 12:22		
1,1-Biphenyl	ND	1.3	100	06/22/2020 12:22		
Bis (2-chloroethoxy) Methane	ND	25	100	06/22/2020 12:22		
Bis (2-chloroethyl) Ether	ND	0.25	100	06/22/2020 12:22		
Bis (2-chloroisopropyl) Ether	ND	1.3	100	06/22/2020 12:22		
Bis (2-ethylhexyl) Adipate	ND	25	100	06/22/2020 12:22		
Bis (2-ethylhexyl) Phthalate	23	2.5	100	06/22/2020 12:22		
4-Bromophenyl Phenyl Ether	ND	25	100	06/22/2020 12:22		
Butylbenzyl Phthalate	10	2.5	100	06/22/2020 12:22		
4-Chloroaniline	ND	0.25	100	06/22/2020 12:22		
4-Chloro-3-methylphenol	ND	25	100	06/22/2020 12:22		
2-Chloronaphthalene	ND	25	100	06/22/2020 12:22		
2-Chlorophenol	ND	1.3	100	06/22/2020 12:22		
4-Chlorophenyl Phenyl Ether	ND	25	100	06/22/2020 12:22		
Chrysene	ND	0.25	100	06/22/2020 12:22		
Dibenzo (a,h) anthracene	ND	0.25	100	06/22/2020 12:22		
Dibenzofuran	ND	25	100	06/22/2020 12:22		
Di-n-butyl Phthalate	ND	1.3	100	06/22/2020 12:22		
1,2-Dichlorobenzene	ND	25	100	06/22/2020 12:22		
1,3-Dichlorobenzene	ND	25	100	06/22/2020 12:22		
1,4-Dichlorobenzene	ND	25	100	06/22/2020 12:22		
3,3-Dichlorobenzidine	ND	0.25	100	06/22/2020 12:22		
2,4-Dichlorophenol	ND	1.3	100	06/22/2020 12:22		
Diethyl Phthalate	ND	1.3	100	06/22/2020 12:22		
2,4-Dimethylphenol	ND	25	100	06/22/2020 12:22		
Dimethyl Phthalate	ND	0.25	100	06/22/2020 12:22		
4,6-Dinitro-2-methylphenol	ND	120	100	06/22/2020 12:22		

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020-06/18/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-3-1.5	2006697-005A	Soil	06/11/2020 09:24	GC21 06222009.D	200232

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrophenol	ND	25	100	06/22/2020 12:22
2,4-Dinitrotoluene	ND	1.3	100	06/22/2020 12:22
2,6-Dinitrotoluene	ND	1.3	100	06/22/2020 12:22
Di-n-octyl Phthalate	ND	1.3	100	06/22/2020 12:22
1,2-Diphenylhydrazine	ND	25	100	06/22/2020 12:22
Fluoranthene	0.15	0.13	100	06/22/2020 12:22
Fluorene	ND	0.25	100	06/22/2020 12:22
Hexachlorobenzene	ND	0.13	100	06/22/2020 12:22
Hexachlorobutadiene	ND	0.25	100	06/22/2020 12:22
Hexachlorocyclopentadiene	ND	200	100	06/22/2020 12:22
Hexachloroethane	ND	1.3	100	06/22/2020 12:22
Indeno (1,2,3-cd) pyrene	ND	1.3	100	06/22/2020 12:22
Isophorone	ND	25	100	06/22/2020 12:22
2-Methylnaphthalene	ND	0.25	100	06/22/2020 12:22
2-Methylphenol (o-Cresol)	ND	25	100	06/22/2020 12:22
3 & 4-Methylphenol (m,p-Cresol)	ND	25	100	06/22/2020 12:22
Naphthalene	ND	0.13	100	06/22/2020 12:22
2-Nitroaniline	ND	120	100	06/22/2020 12:22
3-Nitroaniline	ND	120	100	06/22/2020 12:22
4-Nitroaniline	ND	120	100	06/22/2020 12:22
Nitrobenzene	ND	25	100	06/22/2020 12:22
2-Nitrophenol	ND	120	100	06/22/2020 12:22
4-Nitrophenol	ND	120	100	06/22/2020 12:22
N-Nitrosodiphenylamine	ND	25	100	06/22/2020 12:22
N-Nitrosodi-n-propylamine	ND	25	100	06/22/2020 12:22
Pentachlorophenol	ND	6.2	100	06/22/2020 12:22
Phenanthrene	ND	0.50	100	06/22/2020 12:22
Phenol	ND	5.0	100	06/22/2020 12:22
Pyrene	ND	0.25	100	06/22/2020 12:22
Pyridine	ND	25	100	06/22/2020 12:22
1,2,4-Trichlorobenzene	ND	25	100	06/22/2020 12:22
2,4,5-Trichlorophenol	ND	0.25	100	06/22/2020 12:22
2,4,6-Trichlorophenol	ND	1.3	100	06/22/2020 12:22

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020-06/18/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-3-1.5	2006697-005A	Soil	06/11/2020 09:24	GC21 06222009.D	200232

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>	
2-Fluorophenol	76		60-130	06/22/2020 12:22
Phenol-d5	101		60-130	06/22/2020 12:22
Nitrobenzene-d5	48	S	60-130	06/22/2020 12:22
2-Fluorobiphenyl	72		60-130	06/22/2020 12:22
2,4,6-Tribromophenol	56		50-130	06/22/2020 12:22
4-Terphenyl-d14	74		50-130	06/22/2020 12:22

Analyst(s): HD

Analytical Comments: c1



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020-06/18/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-3-3.0	2006697-007A	Soil	06/11/2020 09:26	GC21 06202013.D	200232

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.0013	1	06/20/2020 14:52
Acenaphthylene	ND	0.0013	1	06/20/2020 14:52
Acetochlor	ND	0.25	1	06/20/2020 14:52
Anthracene	ND	0.0013	1	06/20/2020 14:52
Benzidine	ND	1.2	1	06/20/2020 14:52
Benzo (a) anthracene	ND	0.013	1	06/20/2020 14:52
Benzo (a) pyrene	ND	0.0025	1	06/20/2020 14:52
Benzo (b) fluoranthene	ND	0.0063	1	06/20/2020 14:52
Benzo (g,h,i) perylene	ND	0.0025	1	06/20/2020 14:52
Benzo (k) fluoranthene	ND	0.0013	1	06/20/2020 14:52
Benzyl Alcohol	ND	1.2	1	06/20/2020 14:52
1,1-Biphenyl	ND	0.013	1	06/20/2020 14:52
Bis (2-chloroethoxy) Methane	ND	0.25	1	06/20/2020 14:52
Bis (2-chloroethyl) Ether	ND	0.0025	1	06/20/2020 14:52
Bis (2-chloroisopropyl) Ether	ND	0.013	1	06/20/2020 14:52
Bis (2-ethylhexyl) Adipate	ND	0.25	1	06/20/2020 14:52
Bis (2-ethylhexyl) Phthalate	ND	0.025	1	06/20/2020 14:52
4-Bromophenyl Phenyl Ether	ND	0.25	1	06/20/2020 14:52
Butylbenzyl Phthalate	ND	0.025	1	06/20/2020 14:52
4-Chloroaniline	ND	0.0025	1	06/20/2020 14:52
4-Chloro-3-methylphenol	ND	0.25	1	06/20/2020 14:52
2-Chloronaphthalene	ND	0.25	1	06/20/2020 14:52
2-Chlorophenol	ND	0.013	1	06/20/2020 14:52
4-Chlorophenyl Phenyl Ether	ND	0.25	1	06/20/2020 14:52
Chrysene	ND	0.0025	1	06/20/2020 14:52
Dibenzo (a,h) anthracene	ND	0.0025	1	06/20/2020 14:52
Dibenzofuran	ND	0.25	1	06/20/2020 14:52
Di-n-butyl Phthalate	ND	0.013	1	06/20/2020 14:52
1,2-Dichlorobenzene	ND	0.25	1	06/20/2020 14:52
1,3-Dichlorobenzene	ND	0.25	1	06/20/2020 14:52
1,4-Dichlorobenzene	ND	0.25	1	06/20/2020 14:52
3,3-Dichlorobenzidine	ND	0.0025	1	06/20/2020 14:52
2,4-Dichlorophenol	ND	0.013	1	06/20/2020 14:52
Diethyl Phthalate	ND	0.013	1	06/20/2020 14:52
2,4-Dimethylphenol	ND	0.25	1	06/20/2020 14:52
Dimethyl Phthalate	ND	0.0025	1	06/20/2020 14:52
4,6-Dinitro-2-methylphenol	ND	1.2	1	06/20/2020 14:52

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020-06/18/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-3-3.0	2006697-007A	Soil	06/11/2020 09:26	GC21 06202013.D	200232

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrophenol	ND	0.25	1	06/20/2020 14:52
2,4-Dinitrotoluene	ND	0.013	1	06/20/2020 14:52
2,6-Dinitrotoluene	ND	0.013	1	06/20/2020 14:52
Di-n-octyl Phthalate	ND	0.013	1	06/20/2020 14:52
1,2-Diphenylhydrazine	ND	0.25	1	06/20/2020 14:52
Fluoranthene	ND	0.0013	1	06/20/2020 14:52
Fluorene	ND	0.0025	1	06/20/2020 14:52
Hexachlorobenzene	ND	0.0013	1	06/20/2020 14:52
Hexachlorobutadiene	ND	0.0025	1	06/20/2020 14:52
Hexachlorocyclopentadiene	ND	2.0	1	06/20/2020 14:52
Hexachloroethane	ND	0.013	1	06/20/2020 14:52
Indeno (1,2,3-cd) pyrene	ND	0.013	1	06/20/2020 14:52
Isophorone	ND	0.25	1	06/20/2020 14:52
2-Methylnaphthalene	ND	0.0025	1	06/20/2020 14:52
2-Methylphenol (o-Cresol)	ND	0.25	1	06/20/2020 14:52
3 & 4-Methylphenol (m,p-Cresol)	ND	0.25	1	06/20/2020 14:52
Naphthalene	ND	0.0013	1	06/20/2020 14:52
2-Nitroaniline	ND	1.2	1	06/20/2020 14:52
3-Nitroaniline	ND	1.2	1	06/20/2020 14:52
4-Nitroaniline	ND	1.2	1	06/20/2020 14:52
Nitrobenzene	ND	0.25	1	06/20/2020 14:52
2-Nitrophenol	ND	1.2	1	06/20/2020 14:52
4-Nitrophenol	ND	1.2	1	06/20/2020 14:52
N-Nitrosodiphenylamine	ND	0.25	1	06/20/2020 14:52
N-Nitrosodi-n-propylamine	ND	0.25	1	06/20/2020 14:52
Pentachlorophenol	ND	0.062	1	06/20/2020 14:52
Phenanthrene	ND	0.0050	1	06/20/2020 14:52
Phenol	0.083	0.050	1	06/20/2020 14:52
Pyrene	ND	0.0025	1	06/20/2020 14:52
Pyridine	ND	0.25	1	06/20/2020 14:52
1,2,4-Trichlorobenzene	ND	0.25	1	06/20/2020 14:52
2,4,5-Trichlorophenol	ND	0.0025	1	06/20/2020 14:52
2,4,6-Trichlorophenol	ND	0.013	1	06/20/2020 14:52

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020-06/18/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-3-3.0	2006697-007A	Soil	06/11/2020 09:26	GC21 06202013.D	200232

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorophenol	92	60-130		06/20/2020 14:52
Phenol-d5	93	60-130		06/20/2020 14:52
Nitrobenzene-d5	75	60-130		06/20/2020 14:52
2-Fluorobiphenyl	76	60-130		06/20/2020 14:52
2,4,6-Tribromophenol	76	50-130		06/20/2020 14:52
4-Terphenyl-d14	70	50-130		06/20/2020 14:52

Analyst(s): HD



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020-06/18/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-3-7.0	2006697-008A	Soil	06/11/2020 09:33	GC21 06192021.D	200232

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.0013	1	06/19/2020 16:35
Acenaphthylene	ND	0.0013	1	06/19/2020 16:35
Acetochlor	ND	0.25	1	06/19/2020 16:35
Anthracene	ND	0.0013	1	06/19/2020 16:35
Benzidine	ND	1.2	1	06/19/2020 16:35
Benzo (a) anthracene	ND	0.013	1	06/19/2020 16:35
Benzo (a) pyrene	ND	0.0025	1	06/19/2020 16:35
Benzo (b) fluoranthene	ND	0.0063	1	06/19/2020 16:35
Benzo (g,h,i) perylene	ND	0.0025	1	06/19/2020 16:35
Benzo (k) fluoranthene	ND	0.0013	1	06/19/2020 16:35
Benzyl Alcohol	ND	1.2	1	06/19/2020 16:35
1,1-Biphenyl	ND	0.013	1	06/19/2020 16:35
Bis (2-chloroethoxy) Methane	ND	0.25	1	06/19/2020 16:35
Bis (2-chloroethyl) Ether	ND	0.0025	1	06/19/2020 16:35
Bis (2-chloroisopropyl) Ether	ND	0.013	1	06/19/2020 16:35
Bis (2-ethylhexyl) Adipate	ND	0.25	1	06/19/2020 16:35
Bis (2-ethylhexyl) Phthalate	ND	0.025	1	06/19/2020 16:35
4-Bromophenyl Phenyl Ether	ND	0.25	1	06/19/2020 16:35
Butylbenzyl Phthalate	ND	0.025	1	06/19/2020 16:35
4-Chloroaniline	ND	0.0025	1	06/19/2020 16:35
4-Chloro-3-methylphenol	ND	0.25	1	06/19/2020 16:35
2-Chloronaphthalene	ND	0.25	1	06/19/2020 16:35
2-Chlorophenol	ND	0.013	1	06/19/2020 16:35
4-Chlorophenyl Phenyl Ether	ND	0.25	1	06/19/2020 16:35
Chrysene	ND	0.0025	1	06/19/2020 16:35
Dibenzo (a,h) anthracene	ND	0.0025	1	06/19/2020 16:35
Dibenzofuran	ND	0.25	1	06/19/2020 16:35
Di-n-butyl Phthalate	ND	0.013	1	06/19/2020 16:35
1,2-Dichlorobenzene	ND	0.25	1	06/19/2020 16:35
1,3-Dichlorobenzene	ND	0.25	1	06/19/2020 16:35
1,4-Dichlorobenzene	ND	0.25	1	06/19/2020 16:35
3,3-Dichlorobenzidine	ND	0.0025	1	06/19/2020 16:35
2,4-Dichlorophenol	ND	0.013	1	06/19/2020 16:35
Diethyl Phthalate	ND	0.013	1	06/19/2020 16:35
2,4-Dimethylphenol	ND	0.25	1	06/19/2020 16:35
Dimethyl Phthalate	ND	0.0025	1	06/19/2020 16:35
4,6-Dinitro-2-methylphenol	ND	1.2	1	06/19/2020 16:35

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020-06/18/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-3-7.0	2006697-008A	Soil	06/11/2020 09:33	GC21 06192021.D	200232

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrophenol	ND	0.25	1	06/19/2020 16:35
2,4-Dinitrotoluene	ND	0.013	1	06/19/2020 16:35
2,6-Dinitrotoluene	ND	0.013	1	06/19/2020 16:35
Di-n-octyl Phthalate	ND	0.013	1	06/19/2020 16:35
1,2-Diphenylhydrazine	ND	0.25	1	06/19/2020 16:35
Fluoranthene	ND	0.0013	1	06/19/2020 16:35
Fluorene	ND	0.0025	1	06/19/2020 16:35
Hexachlorobenzene	ND	0.0013	1	06/19/2020 16:35
Hexachlorobutadiene	ND	0.0025	1	06/19/2020 16:35
Hexachlorocyclopentadiene	ND	2.0	1	06/19/2020 16:35
Hexachloroethane	ND	0.013	1	06/19/2020 16:35
Indeno (1,2,3-cd) pyrene	ND	0.013	1	06/19/2020 16:35
Isophorone	ND	0.25	1	06/19/2020 16:35
2-Methylnaphthalene	ND	0.0025	1	06/19/2020 16:35
2-Methylphenol (o-Cresol)	ND	0.25	1	06/19/2020 16:35
3 & 4-Methylphenol (m,p-Cresol)	ND	0.25	1	06/19/2020 16:35
Naphthalene	ND	0.0013	1	06/19/2020 16:35
2-Nitroaniline	ND	1.2	1	06/19/2020 16:35
3-Nitroaniline	ND	1.2	1	06/19/2020 16:35
4-Nitroaniline	ND	1.2	1	06/19/2020 16:35
Nitrobenzene	ND	0.25	1	06/19/2020 16:35
2-Nitrophenol	ND	1.2	1	06/19/2020 16:35
4-Nitrophenol	ND	1.2	1	06/19/2020 16:35
N-Nitrosodiphenylamine	ND	0.25	1	06/19/2020 16:35
N-Nitrosodi-n-propylamine	ND	0.25	1	06/19/2020 16:35
Pentachlorophenol	ND	0.062	1	06/19/2020 16:35
Phenanthrene	ND	0.0050	1	06/19/2020 16:35
Phenol	ND	0.050	1	06/19/2020 16:35
Pyrene	ND	0.0025	1	06/19/2020 16:35
Pyridine	ND	0.25	1	06/19/2020 16:35
1,2,4-Trichlorobenzene	ND	0.25	1	06/19/2020 16:35
2,4,5-Trichlorophenol	ND	0.0025	1	06/19/2020 16:35
2,4,6-Trichlorophenol	ND	0.013	1	06/19/2020 16:35

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020-06/18/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-3-7.0	2006697-008A	Soil	06/11/2020 09:33	GC21 06192021.D	200232

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>	
2-Fluorophenol	90		60-130	06/19/2020 16:35
Phenol-d5	85		60-130	06/19/2020 16:35
Nitrobenzene-d5	72		60-130	06/19/2020 16:35
2-Fluorobiphenyl	76		60-130	06/19/2020 16:35
2,4,6-Tribromophenol	17	S	50-130	06/19/2020 16:35
4-Terphenyl-d14	71		50-130	06/19/2020 16:35

Analyst(s): HD

Analytical Comments: c2



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020-06/18/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected		Instrument	Batch ID
EB-4-1.5	2006697-009A	Soil	06/11/2020 09:45		GC21 06202014.D	200232
Analytes	Result	RL	DF	Date Analyzed		
Acenaphthene	ND	0.0026	2	06/20/2020 15:19		
Acenaphthylene	0.0028	0.0026	2	06/20/2020 15:19		
Acetochlor	ND	0.50	2	06/20/2020 15:19		
Anthracene	ND	0.0026	2	06/20/2020 15:19		
Benzidine	ND	2.5	2	06/20/2020 15:19		
Benzo (a) anthracene	ND	0.026	2	06/20/2020 15:19		
Benzo (a) pyrene	0.016	0.0050	2	06/20/2020 15:19		
Benzo (b) fluoranthene	0.021	0.013	2	06/20/2020 15:19		
Benzo (g,h,i) perylene	0.021	0.0050	2	06/20/2020 15:19		
Benzo (k) fluoranthene	0.0080	0.0026	2	06/20/2020 15:19		
Benzyl Alcohol	ND	2.5	2	06/20/2020 15:19		
1,1-Biphenyl	ND	0.026	2	06/20/2020 15:19		
Bis (2-chloroethoxy) Methane	ND	0.50	2	06/20/2020 15:19		
Bis (2-chloroethyl) Ether	ND	0.0050	2	06/20/2020 15:19		
Bis (2-chloroisopropyl) Ether	ND	0.026	2	06/20/2020 15:19		
Bis (2-ethylhexyl) Adipate	ND	0.50	2	06/20/2020 15:19		
Bis (2-ethylhexyl) Phthalate	ND	0.050	2	06/20/2020 15:19		
4-Bromophenyl Phenyl Ether	ND	0.50	2	06/20/2020 15:19		
Butylbenzyl Phthalate	ND	0.050	2	06/20/2020 15:19		
4-Chloroaniline	ND	0.0050	2	06/20/2020 15:19		
4-Chloro-3-methylphenol	ND	0.50	2	06/20/2020 15:19		
2-Chloronaphthalene	ND	0.50	2	06/20/2020 15:19		
2-Chlorophenol	ND	0.026	2	06/20/2020 15:19		
4-Chlorophenyl Phenyl Ether	ND	0.50	2	06/20/2020 15:19		
Chrysene	0.012	0.0050	2	06/20/2020 15:19		
Dibenzo (a,h) anthracene	0.0054	0.0050	2	06/20/2020 15:19		
Dibenzofuran	ND	0.50	2	06/20/2020 15:19		
Di-n-butyl Phthalate	ND	0.026	2	06/20/2020 15:19		
1,2-Dichlorobenzene	ND	0.50	2	06/20/2020 15:19		
1,3-Dichlorobenzene	ND	0.50	2	06/20/2020 15:19		
1,4-Dichlorobenzene	ND	0.50	2	06/20/2020 15:19		
3,3-Dichlorobenzidine	ND	0.0050	2	06/20/2020 15:19		
2,4-Dichlorophenol	ND	0.026	2	06/20/2020 15:19		
Diethyl Phthalate	ND	0.026	2	06/20/2020 15:19		
2,4-Dimethylphenol	ND	0.50	2	06/20/2020 15:19		
Dimethyl Phthalate	ND	0.0050	2	06/20/2020 15:19		
4,6-Dinitro-2-methylphenol	ND	2.5	2	06/20/2020 15:19		

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020-06/18/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-4-1.5	2006697-009A	Soil	06/11/2020 09:45	GC21 06202014.D	200232

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrophenol	ND	0.50	2	06/20/2020 15:19
2,4-Dinitrotoluene	ND	0.026	2	06/20/2020 15:19
2,6-Dinitrotoluene	ND	0.026	2	06/20/2020 15:19
Di-n-octyl Phthalate	ND	0.026	2	06/20/2020 15:19
1,2-Diphenylhydrazine	ND	0.50	2	06/20/2020 15:19
Fluoranthene	0.018	0.0026	2	06/20/2020 15:19
Fluorene	ND	0.0050	2	06/20/2020 15:19
Hexachlorobenzene	ND	0.0026	2	06/20/2020 15:19
Hexachlorobutadiene	ND	0.0050	2	06/20/2020 15:19
Hexachlorocyclopentadiene	ND	4.0	2	06/20/2020 15:19
Hexachloroethane	ND	0.026	2	06/20/2020 15:19
Indeno (1,2,3-cd) pyrene	ND	0.026	2	06/20/2020 15:19
Isophorone	ND	0.50	2	06/20/2020 15:19
2-Methylnaphthalene	ND	0.0050	2	06/20/2020 15:19
2-Methylphenol (o-Cresol)	ND	0.50	2	06/20/2020 15:19
3 & 4-Methylphenol (m,p-Cresol)	ND	0.50	2	06/20/2020 15:19
Naphthalene	0.0029	0.0026	2	06/20/2020 15:19
2-Nitroaniline	ND	2.5	2	06/20/2020 15:19
3-Nitroaniline	ND	2.5	2	06/20/2020 15:19
4-Nitroaniline	ND	2.5	2	06/20/2020 15:19
Nitrobenzene	ND	0.50	2	06/20/2020 15:19
2-Nitrophenol	ND	2.5	2	06/20/2020 15:19
4-Nitrophenol	ND	2.5	2	06/20/2020 15:19
N-Nitrosodiphenylamine	ND	0.50	2	06/20/2020 15:19
N-Nitrosodi-n-propylamine	ND	0.50	2	06/20/2020 15:19
Pentachlorophenol	ND	0.12	2	06/20/2020 15:19
Phenanthrene	0.010	0.010	2	06/20/2020 15:19
Phenol	ND	0.10	2	06/20/2020 15:19
Pyrene	0.019	0.0050	2	06/20/2020 15:19
Pyridine	ND	0.50	2	06/20/2020 15:19
1,2,4-Trichlorobenzene	ND	0.50	2	06/20/2020 15:19
2,4,5-Trichlorophenol	ND	0.0050	2	06/20/2020 15:19
2,4,6-Trichlorophenol	ND	0.026	2	06/20/2020 15:19

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020-06/18/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-4-1.5	2006697-009A	Soil	06/11/2020 09:45	GC21 06202014.D	200232

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorophenol	91	60-130		06/20/2020 15:19
Phenol-d5	91	60-130		06/20/2020 15:19
Nitrobenzene-d5	79	60-130		06/20/2020 15:19
2-Fluorobiphenyl	75	60-130		06/20/2020 15:19
2,4,6-Tribromophenol	68	50-130		06/20/2020 15:19
4-Terphenyl-d14	75	50-130		06/20/2020 15:19

Analyst(s): HD



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020-06/18/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-4-3.0	2006697-010A	Soil	06/11/2020 09:50	GC21 06202015.D	200232

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.0013	1	06/20/2020 15:47
Acenaphthylene	ND	0.0013	1	06/20/2020 15:47
Acetochlor	ND	0.25	1	06/20/2020 15:47
Anthracene	ND	0.0013	1	06/20/2020 15:47
Benzidine	ND	1.2	1	06/20/2020 15:47
Benzo (a) anthracene	ND	0.013	1	06/20/2020 15:47
Benzo (a) pyrene	0.0077	0.0025	1	06/20/2020 15:47
Benzo (b) fluoranthene	0.0094	0.0063	1	06/20/2020 15:47
Benzo (g,h,i) perylene	0.011	0.0025	1	06/20/2020 15:47
Benzo (k) fluoranthene	0.0034	0.0013	1	06/20/2020 15:47
Benzyl Alcohol	ND	1.2	1	06/20/2020 15:47
1,1-Biphenyl	ND	0.013	1	06/20/2020 15:47
Bis (2-chloroethoxy) Methane	ND	0.25	1	06/20/2020 15:47
Bis (2-chloroethyl) Ether	ND	0.0025	1	06/20/2020 15:47
Bis (2-chloroisopropyl) Ether	ND	0.013	1	06/20/2020 15:47
Bis (2-ethylhexyl) Adipate	ND	0.25	1	06/20/2020 15:47
Bis (2-ethylhexyl) Phthalate	0.19	0.025	1	06/20/2020 15:47
4-Bromophenyl Phenyl Ether	ND	0.25	1	06/20/2020 15:47
Butylbenzyl Phthalate	ND	0.025	1	06/20/2020 15:47
4-Chloroaniline	ND	0.0025	1	06/20/2020 15:47
4-Chloro-3-methylphenol	ND	0.25	1	06/20/2020 15:47
2-Chloronaphthalene	ND	0.25	1	06/20/2020 15:47
2-Chlorophenol	ND	0.013	1	06/20/2020 15:47
4-Chlorophenyl Phenyl Ether	ND	0.25	1	06/20/2020 15:47
Chrysene	0.0046	0.0025	1	06/20/2020 15:47
Dibenzo (a,h) anthracene	0.0026	0.0025	1	06/20/2020 15:47
Dibenzofuran	ND	0.25	1	06/20/2020 15:47
Di-n-butyl Phthalate	ND	0.013	1	06/20/2020 15:47
1,2-Dichlorobenzene	ND	0.25	1	06/20/2020 15:47
1,3-Dichlorobenzene	ND	0.25	1	06/20/2020 15:47
1,4-Dichlorobenzene	ND	0.25	1	06/20/2020 15:47
3,3-Dichlorobenzidine	ND	0.0025	1	06/20/2020 15:47
2,4-Dichlorophenol	ND	0.013	1	06/20/2020 15:47
Diethyl Phthalate	ND	0.013	1	06/20/2020 15:47
2,4-Dimethylphenol	ND	0.25	1	06/20/2020 15:47
Dimethyl Phthalate	ND	0.0025	1	06/20/2020 15:47
4,6-Dinitro-2-methylphenol	ND	1.2	1	06/20/2020 15:47

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020-06/18/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-4-3.0	2006697-010A	Soil	06/11/2020 09:50	GC21 06202015.D	200232

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrophenol	ND	0.25	1	06/20/2020 15:47
2,4-Dinitrotoluene	ND	0.013	1	06/20/2020 15:47
2,6-Dinitrotoluene	ND	0.013	1	06/20/2020 15:47
Di-n-octyl Phthalate	ND	0.013	1	06/20/2020 15:47
1,2-Diphenylhydrazine	ND	0.25	1	06/20/2020 15:47
Fluoranthene	0.0076	0.0013	1	06/20/2020 15:47
Fluorene	ND	0.0025	1	06/20/2020 15:47
Hexachlorobenzene	ND	0.0013	1	06/20/2020 15:47
Hexachlorobutadiene	ND	0.0025	1	06/20/2020 15:47
Hexachlorocyclopentadiene	ND	2.0	1	06/20/2020 15:47
Hexachloroethane	ND	0.013	1	06/20/2020 15:47
Indeno (1,2,3-cd) pyrene	ND	0.013	1	06/20/2020 15:47
Isophorone	ND	0.25	1	06/20/2020 15:47
2-Methylnaphthalene	ND	0.0025	1	06/20/2020 15:47
2-Methylphenol (o-Cresol)	ND	0.25	1	06/20/2020 15:47
3 & 4-Methylphenol (m,p-Cresol)	ND	0.25	1	06/20/2020 15:47
Naphthalene	ND	0.0013	1	06/20/2020 15:47
2-Nitroaniline	ND	1.2	1	06/20/2020 15:47
3-Nitroaniline	ND	1.2	1	06/20/2020 15:47
4-Nitroaniline	ND	1.2	1	06/20/2020 15:47
Nitrobenzene	ND	0.25	1	06/20/2020 15:47
2-Nitrophenol	ND	1.2	1	06/20/2020 15:47
4-Nitrophenol	ND	1.2	1	06/20/2020 15:47
N-Nitrosodiphenylamine	ND	0.25	1	06/20/2020 15:47
N-Nitrosodi-n-propylamine	ND	0.25	1	06/20/2020 15:47
Pentachlorophenol	ND	0.062	1	06/20/2020 15:47
Phenanthrene	ND	0.0050	1	06/20/2020 15:47
Phenol	ND	0.050	1	06/20/2020 15:47
Pyrene	0.0069	0.0025	1	06/20/2020 15:47
Pyridine	ND	0.25	1	06/20/2020 15:47
1,2,4-Trichlorobenzene	ND	0.25	1	06/20/2020 15:47
2,4,5-Trichlorophenol	ND	0.0025	1	06/20/2020 15:47
2,4,6-Trichlorophenol	ND	0.013	1	06/20/2020 15:47

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020-06/18/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-4-3.0	2006697-010A	Soil	06/11/2020 09:50	GC21 06202015.D	200232

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorophenol	88	60-130		06/20/2020 15:47
Phenol-d5	87	60-130		06/20/2020 15:47
Nitrobenzene-d5	78	60-130		06/20/2020 15:47
2-Fluorobiphenyl	73	60-130		06/20/2020 15:47
2,4,6-Tribromophenol	75	50-130		06/20/2020 15:47
4-Terphenyl-d14	72	50-130		06/20/2020 15:47

Analyst(s): HD



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020-06/18/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-4-5.0	2006697-011A	Soil	06/11/2020 09:55	GC21 06202010.D	200232

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.0013	1	06/20/2020 13:31
Acenaphthylene	ND	0.0013	1	06/20/2020 13:31
Acetochlor	ND	0.25	1	06/20/2020 13:31
Anthracene	ND	0.0013	1	06/20/2020 13:31
Benzidine	ND	1.2	1	06/20/2020 13:31
Benzo (a) anthracene	ND	0.013	1	06/20/2020 13:31
Benzo (a) pyrene	ND	0.0025	1	06/20/2020 13:31
Benzo (b) fluoranthene	ND	0.0063	1	06/20/2020 13:31
Benzo (g,h,i) perylene	ND	0.0025	1	06/20/2020 13:31
Benzo (k) fluoranthene	ND	0.0013	1	06/20/2020 13:31
Benzyl Alcohol	ND	1.2	1	06/20/2020 13:31
1,1-Biphenyl	ND	0.013	1	06/20/2020 13:31
Bis (2-chloroethoxy) Methane	ND	0.25	1	06/20/2020 13:31
Bis (2-chloroethyl) Ether	ND	0.0025	1	06/20/2020 13:31
Bis (2-chloroisopropyl) Ether	ND	0.013	1	06/20/2020 13:31
Bis (2-ethylhexyl) Adipate	ND	0.25	1	06/20/2020 13:31
Bis (2-ethylhexyl) Phthalate	ND	0.025	1	06/20/2020 13:31
4-Bromophenyl Phenyl Ether	ND	0.25	1	06/20/2020 13:31
Butylbenzyl Phthalate	ND	0.025	1	06/20/2020 13:31
4-Chloroaniline	ND	0.0025	1	06/20/2020 13:31
4-Chloro-3-methylphenol	ND	0.25	1	06/20/2020 13:31
2-Chloronaphthalene	ND	0.25	1	06/20/2020 13:31
2-Chlorophenol	ND	0.013	1	06/20/2020 13:31
4-Chlorophenyl Phenyl Ether	ND	0.25	1	06/20/2020 13:31
Chrysene	ND	0.0025	1	06/20/2020 13:31
Dibenzo (a,h) anthracene	ND	0.0025	1	06/20/2020 13:31
Dibenzofuran	ND	0.25	1	06/20/2020 13:31
Di-n-butyl Phthalate	ND	0.013	1	06/20/2020 13:31
1,2-Dichlorobenzene	ND	0.25	1	06/20/2020 13:31
1,3-Dichlorobenzene	ND	0.25	1	06/20/2020 13:31
1,4-Dichlorobenzene	ND	0.25	1	06/20/2020 13:31
3,3-Dichlorobenzidine	ND	0.0025	1	06/20/2020 13:31
2,4-Dichlorophenol	ND	0.013	1	06/20/2020 13:31
Diethyl Phthalate	ND	0.013	1	06/20/2020 13:31
2,4-Dimethylphenol	ND	0.25	1	06/20/2020 13:31
Dimethyl Phthalate	ND	0.0025	1	06/20/2020 13:31
4,6-Dinitro-2-methylphenol	ND	1.2	1	06/20/2020 13:31

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020-06/18/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-4-5.0	2006697-011A	Soil	06/11/2020 09:55	GC21 06202010.D	200232

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrophenol	ND	0.25	1	06/20/2020 13:31
2,4-Dinitrotoluene	ND	0.013	1	06/20/2020 13:31
2,6-Dinitrotoluene	ND	0.013	1	06/20/2020 13:31
Di-n-octyl Phthalate	ND	0.013	1	06/20/2020 13:31
1,2-Diphenylhydrazine	ND	0.25	1	06/20/2020 13:31
Fluoranthene	ND	0.0013	1	06/20/2020 13:31
Fluorene	ND	0.0025	1	06/20/2020 13:31
Hexachlorobenzene	ND	0.0013	1	06/20/2020 13:31
Hexachlorobutadiene	ND	0.0025	1	06/20/2020 13:31
Hexachlorocyclopentadiene	ND	2.0	1	06/20/2020 13:31
Hexachloroethane	ND	0.013	1	06/20/2020 13:31
Indeno (1,2,3-cd) pyrene	ND	0.013	1	06/20/2020 13:31
Isophorone	ND	0.25	1	06/20/2020 13:31
2-Methylnaphthalene	ND	0.0025	1	06/20/2020 13:31
2-Methylphenol (o-Cresol)	ND	0.25	1	06/20/2020 13:31
3 & 4-Methylphenol (m,p-Cresol)	ND	0.25	1	06/20/2020 13:31
Naphthalene	ND	0.0013	1	06/20/2020 13:31
2-Nitroaniline	ND	1.2	1	06/20/2020 13:31
3-Nitroaniline	ND	1.2	1	06/20/2020 13:31
4-Nitroaniline	ND	1.2	1	06/20/2020 13:31
Nitrobenzene	ND	0.25	1	06/20/2020 13:31
2-Nitrophenol	ND	1.2	1	06/20/2020 13:31
4-Nitrophenol	ND	1.2	1	06/20/2020 13:31
N-Nitrosodiphenylamine	ND	0.25	1	06/20/2020 13:31
N-Nitrosodi-n-propylamine	ND	0.25	1	06/20/2020 13:31
Pentachlorophenol	ND	0.062	1	06/20/2020 13:31
Phenanthrene	ND	0.0050	1	06/20/2020 13:31
Phenol	ND	0.050	1	06/20/2020 13:31
Pyrene	ND	0.0025	1	06/20/2020 13:31
Pyridine	ND	0.25	1	06/20/2020 13:31
1,2,4-Trichlorobenzene	ND	0.25	1	06/20/2020 13:31
2,4,5-Trichlorophenol	ND	0.0025	1	06/20/2020 13:31
2,4,6-Trichlorophenol	ND	0.013	1	06/20/2020 13:31

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020-06/18/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-4-5.0	2006697-011A	Soil	06/11/2020 09:55	GC21 06202010.D	200232

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>	
2-Fluorophenol	93		60-130	06/20/2020 13:31
Phenol-d5	86		60-130	06/20/2020 13:31
Nitrobenzene-d5	70		60-130	06/20/2020 13:31
2-Fluorobiphenyl	73		60-130	06/20/2020 13:31
2,4,6-Tribromophenol	39	S	50-130	06/20/2020 13:31
4-Terphenyl-d14	69		50-130	06/20/2020 13:31

Analyst(s): HD

Analytical Comments: c2



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020-06/18/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-8-1.5	2006697-012A	Soil	06/11/2020 10:33	GC21 06202016.D	200232

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.0013	1	06/20/2020 16:14
Acenaphthylene	0.0059	0.0013	1	06/20/2020 16:14
Acetochlor	ND	0.25	1	06/20/2020 16:14
Anthracene	0.0038	0.0013	1	06/20/2020 16:14
Benzidine	ND	1.2	1	06/20/2020 16:14
Benzo (a) anthracene	0.020	0.013	1	06/20/2020 16:14
Benzo (a) pyrene	0.029	0.0025	1	06/20/2020 16:14
Benzo (b) fluoranthene	0.040	0.0063	1	06/20/2020 16:14
Benzo (g,h,i) perylene	0.038	0.0025	1	06/20/2020 16:14
Benzo (k) fluoranthene	0.011	0.0013	1	06/20/2020 16:14
Benzyl Alcohol	ND	1.2	1	06/20/2020 16:14
1,1-Biphenyl	ND	0.013	1	06/20/2020 16:14
Bis (2-chloroethoxy) Methane	ND	0.25	1	06/20/2020 16:14
Bis (2-chloroethyl) Ether	ND	0.0025	1	06/20/2020 16:14
Bis (2-chloroisopropyl) Ether	ND	0.013	1	06/20/2020 16:14
Bis (2-ethylhexyl) Adipate	ND	0.25	1	06/20/2020 16:14
Bis (2-ethylhexyl) Phthalate	0.034	0.025	1	06/20/2020 16:14
4-Bromophenyl Phenyl Ether	ND	0.25	1	06/20/2020 16:14
Butylbenzyl Phthalate	ND	0.025	1	06/20/2020 16:14
4-Chloroaniline	ND	0.0025	1	06/20/2020 16:14
4-Chloro-3-methylphenol	ND	0.25	1	06/20/2020 16:14
2-Chloronaphthalene	ND	0.25	1	06/20/2020 16:14
2-Chlorophenol	ND	0.013	1	06/20/2020 16:14
4-Chlorophenyl Phenyl Ether	ND	0.25	1	06/20/2020 16:14
Chrysene	0.022	0.0025	1	06/20/2020 16:14
Dibenzo (a,h) anthracene	0.0060	0.0025	1	06/20/2020 16:14
Dibenzofuran	ND	0.25	1	06/20/2020 16:14
Di-n-butyl Phthalate	ND	0.013	1	06/20/2020 16:14
1,2-Dichlorobenzene	ND	0.25	1	06/20/2020 16:14
1,3-Dichlorobenzene	ND	0.25	1	06/20/2020 16:14
1,4-Dichlorobenzene	ND	0.25	1	06/20/2020 16:14
3,3-Dichlorobenzidine	ND	0.0025	1	06/20/2020 16:14
2,4-Dichlorophenol	ND	0.013	1	06/20/2020 16:14
Diethyl Phthalate	ND	0.013	1	06/20/2020 16:14
2,4-Dimethylphenol	ND	0.25	1	06/20/2020 16:14
Dimethyl Phthalate	ND	0.0025	1	06/20/2020 16:14
4,6-Dinitro-2-methylphenol	ND	1.2	1	06/20/2020 16:14

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020-06/18/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-8-1.5	2006697-012A	Soil	06/11/2020 10:33	GC21 06202016.D	200232

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrophenol	ND	0.25	1	06/20/2020 16:14
2,4-Dinitrotoluene	ND	0.013	1	06/20/2020 16:14
2,6-Dinitrotoluene	ND	0.013	1	06/20/2020 16:14
Di-n-octyl Phthalate	ND	0.013	1	06/20/2020 16:14
1,2-Diphenylhydrazine	ND	0.25	1	06/20/2020 16:14
Fluoranthene	0.045	0.0013	1	06/20/2020 16:14
Fluorene	ND	0.0025	1	06/20/2020 16:14
Hexachlorobenzene	ND	0.0013	1	06/20/2020 16:14
Hexachlorobutadiene	ND	0.0025	1	06/20/2020 16:14
Hexachlorocyclopentadiene	ND	2.0	1	06/20/2020 16:14
Hexachloroethane	ND	0.013	1	06/20/2020 16:14
Indeno (1,2,3-cd) pyrene	0.026	0.013	1	06/20/2020 16:14
Isophorone	ND	0.25	1	06/20/2020 16:14
2-Methylnaphthalene	0.023	0.0025	1	06/20/2020 16:14
2-Methylphenol (o-Cresol)	ND	0.25	1	06/20/2020 16:14
3 & 4-Methylphenol (m,p-Cresol)	ND	0.25	1	06/20/2020 16:14
Naphthalene	0.020	0.0013	1	06/20/2020 16:14
2-Nitroaniline	ND	1.2	1	06/20/2020 16:14
3-Nitroaniline	ND	1.2	1	06/20/2020 16:14
4-Nitroaniline	ND	1.2	1	06/20/2020 16:14
Nitrobenzene	ND	0.25	1	06/20/2020 16:14
2-Nitrophenol	ND	1.2	1	06/20/2020 16:14
4-Nitrophenol	ND	1.2	1	06/20/2020 16:14
N-Nitrosodiphenylamine	ND	0.25	1	06/20/2020 16:14
N-Nitrosodi-n-propylamine	ND	0.25	1	06/20/2020 16:14
Pentachlorophenol	ND	0.062	1	06/20/2020 16:14
Phenanthrene	0.040	0.0050	1	06/20/2020 16:14
Phenol	ND	0.050	1	06/20/2020 16:14
Pyrene	0.045	0.0025	1	06/20/2020 16:14
Pyridine	ND	0.25	1	06/20/2020 16:14
1,2,4-Trichlorobenzene	ND	0.25	1	06/20/2020 16:14
2,4,5-Trichlorophenol	ND	0.0025	1	06/20/2020 16:14
2,4,6-Trichlorophenol	ND	0.013	1	06/20/2020 16:14

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020-06/18/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-8-1.5	2006697-012A	Soil	06/11/2020 10:33	GC21 06202016.D	200232

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorophenol	87	60-130		06/20/2020 16:14
Phenol-d5	92	60-130		06/20/2020 16:14
Nitrobenzene-d5	77	60-130		06/20/2020 16:14
2-Fluorobiphenyl	73	60-130		06/20/2020 16:14
2,4,6-Tribromophenol	68	50-130		06/20/2020 16:14
4-Terphenyl-d14	71	50-130		06/20/2020 16:14

Analyst(s): HD



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020-06/18/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected		Instrument	Batch ID
EB-8-3.0	2006697-013A	Soil	06/11/2020 10:35		GC21 06202009.D	200316
Analytes	Result	RL	DF	Date Analyzed		
Acenaphthene	ND	0.0013	1	06/20/2020 13:04		
Acenaphthylene	ND	0.0013	1	06/20/2020 13:04		
Acetochlor	ND	0.25	1	06/20/2020 13:04		
Anthracene	ND	0.0013	1	06/20/2020 13:04		
Benzidine	ND	1.2	1	06/20/2020 13:04		
Benzo (a) anthracene	ND	0.013	1	06/20/2020 13:04		
Benzo (a) pyrene	0.0034	0.0025	1	06/20/2020 13:04		
Benzo (b) fluoranthene	ND	0.0063	1	06/20/2020 13:04		
Benzo (g,h,i) perylene	0.0046	0.0025	1	06/20/2020 13:04		
Benzo (k) fluoranthene	0.0018	0.0013	1	06/20/2020 13:04		
Benzyl Alcohol	ND	1.2	1	06/20/2020 13:04		
1,1-Biphenyl	ND	0.013	1	06/20/2020 13:04		
Bis (2-chloroethoxy) Methane	ND	0.25	1	06/20/2020 13:04		
Bis (2-chloroethyl) Ether	ND	0.0025	1	06/20/2020 13:04		
Bis (2-chloroisopropyl) Ether	ND	0.013	1	06/20/2020 13:04		
Bis (2-ethylhexyl) Adipate	ND	0.25	1	06/20/2020 13:04		
Bis (2-ethylhexyl) Phthalate	ND	0.025	1	06/20/2020 13:04		
4-Bromophenyl Phenyl Ether	ND	0.25	1	06/20/2020 13:04		
Butylbenzyl Phthalate	ND	0.025	1	06/20/2020 13:04		
4-Chloroaniline	ND	0.0025	1	06/20/2020 13:04		
4-Chloro-3-methylphenol	ND	0.25	1	06/20/2020 13:04		
2-Chloronaphthalene	ND	0.25	1	06/20/2020 13:04		
2-Chlorophenol	ND	0.013	1	06/20/2020 13:04		
4-Chlorophenyl Phenyl Ether	ND	0.25	1	06/20/2020 13:04		
Chrysene	0.0028	0.0025	1	06/20/2020 13:04		
Dibenzo (a,h) anthracene	ND	0.0025	1	06/20/2020 13:04		
Dibenzofuran	ND	0.25	1	06/20/2020 13:04		
Di-n-butyl Phthalate	ND	0.013	1	06/20/2020 13:04		
1,2-Dichlorobenzene	ND	0.25	1	06/20/2020 13:04		
1,3-Dichlorobenzene	ND	0.25	1	06/20/2020 13:04		
1,4-Dichlorobenzene	ND	0.25	1	06/20/2020 13:04		
3,3-Dichlorobenzidine	ND	0.0025	1	06/20/2020 13:04		
2,4-Dichlorophenol	ND	0.013	1	06/20/2020 13:04		
Diethyl Phthalate	ND	0.013	1	06/20/2020 13:04		
2,4-Dimethylphenol	ND	0.25	1	06/20/2020 13:04		
Dimethyl Phthalate	ND	0.0025	1	06/20/2020 13:04		
4,6-Dinitro-2-methylphenol	ND	1.2	1	06/20/2020 13:04		

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020-06/18/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected		Instrument	Batch ID
EB-8-3.0	2006697-013A	Soil	06/11/2020 10:35		GC21 06202009.D	200316
Analytes	Result		RL	DF	Date Analyzed	
2,4-Dinitrophenol	ND		0.25	1	06/20/2020 13:04	
2,4-Dinitrotoluene	ND		0.013	1	06/20/2020 13:04	
2,6-Dinitrotoluene	ND		0.013	1	06/20/2020 13:04	
Di-n-octyl Phthalate	ND		0.013	1	06/20/2020 13:04	
1,2-Diphenylhydrazine	ND		0.25	1	06/20/2020 13:04	
Fluoranthene	0.0046		0.0013	1	06/20/2020 13:04	
Fluorene	ND		0.0025	1	06/20/2020 13:04	
Hexachlorobenzene	ND		0.0013	1	06/20/2020 13:04	
Hexachlorobutadiene	ND		0.0025	1	06/20/2020 13:04	
Hexachlorocyclopentadiene	ND		2.0	1	06/20/2020 13:04	
Hexachloroethane	ND		0.013	1	06/20/2020 13:04	
Indeno (1,2,3-cd) pyrene	ND		0.013	1	06/20/2020 13:04	
Isophorone	ND		0.25	1	06/20/2020 13:04	
2-Methylnaphthalene	0.0042		0.0025	1	06/20/2020 13:04	
2-Methylphenol (o-Cresol)	ND		0.25	1	06/20/2020 13:04	
3 & 4-Methylphenol (m,p-Cresol)	ND		0.25	1	06/20/2020 13:04	
Naphthalene	0.0039		0.0013	1	06/20/2020 13:04	
2-Nitroaniline	ND		1.2	1	06/20/2020 13:04	
3-Nitroaniline	ND		1.2	1	06/20/2020 13:04	
4-Nitroaniline	ND		1.2	1	06/20/2020 13:04	
Nitrobenzene	ND		0.25	1	06/20/2020 13:04	
2-Nitrophenol	ND		1.2	1	06/20/2020 13:04	
4-Nitrophenol	ND		1.2	1	06/20/2020 13:04	
N-Nitrosodiphenylamine	ND		0.25	1	06/20/2020 13:04	
N-Nitrosodi-n-propylamine	ND		0.25	1	06/20/2020 13:04	
Pentachlorophenol	ND		0.062	1	06/20/2020 13:04	
Phenanthrene	ND		0.0050	1	06/20/2020 13:04	
Phenol	ND		0.050	1	06/20/2020 13:04	
Pyrene	0.0051		0.0025	1	06/20/2020 13:04	
Pyridine	ND		0.25	1	06/20/2020 13:04	
1,2,4-Trichlorobenzene	ND		0.25	1	06/20/2020 13:04	
2,4,5-Trichlorophenol	ND		0.0025	1	06/20/2020 13:04	
2,4,6-Trichlorophenol	ND		0.013	1	06/20/2020 13:04	

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020-06/18/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-8-3.0	2006697-013A	Soil	06/11/2020 10:35	GC21 06202009.D	200316

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>	
2-Fluorophenol	112		60-130	06/20/2020 13:04
Phenol-d5	106		60-130	06/20/2020 13:04
Nitrobenzene-d5	86		60-130	06/20/2020 13:04
2-Fluorobiphenyl	82		60-130	06/20/2020 13:04
2,4,6-Tribromophenol	13	S	50-130	06/20/2020 13:04
4-Terphenyl-d14	79		50-130	06/20/2020 13:04

Analyst(s): HD

Analytical Comments: c2



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020-06/18/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-7-1.5	2006697-015A	Soil	06/11/2020 10:09	GC21 06192023.D	200232

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.0013	1	06/19/2020 17:30
Acenaphthylene	ND	0.0013	1	06/19/2020 17:30
Acetochlor	ND	0.25	1	06/19/2020 17:30
Anthracene	ND	0.0013	1	06/19/2020 17:30
Benzidine	ND	1.2	1	06/19/2020 17:30
Benzo (a) anthracene	ND	0.013	1	06/19/2020 17:30
Benzo (a) pyrene	ND	0.0025	1	06/19/2020 17:30
Benzo (b) fluoranthene	ND	0.0063	1	06/19/2020 17:30
Benzo (g,h,i) perylene	ND	0.0025	1	06/19/2020 17:30
Benzo (k) fluoranthene	ND	0.0013	1	06/19/2020 17:30
Benzyl Alcohol	ND	1.2	1	06/19/2020 17:30
1,1-Biphenyl	ND	0.013	1	06/19/2020 17:30
Bis (2-chloroethoxy) Methane	ND	0.25	1	06/19/2020 17:30
Bis (2-chloroethyl) Ether	ND	0.0025	1	06/19/2020 17:30
Bis (2-chloroisopropyl) Ether	ND	0.013	1	06/19/2020 17:30
Bis (2-ethylhexyl) Adipate	ND	0.25	1	06/19/2020 17:30
Bis (2-ethylhexyl) Phthalate	ND	0.025	1	06/19/2020 17:30
4-Bromophenyl Phenyl Ether	ND	0.25	1	06/19/2020 17:30
Butylbenzyl Phthalate	ND	0.025	1	06/19/2020 17:30
4-Chloroaniline	ND	0.0025	1	06/19/2020 17:30
4-Chloro-3-methylphenol	ND	0.25	1	06/19/2020 17:30
2-Chloronaphthalene	ND	0.25	1	06/19/2020 17:30
2-Chlorophenol	ND	0.013	1	06/19/2020 17:30
4-Chlorophenyl Phenyl Ether	ND	0.25	1	06/19/2020 17:30
Chrysene	ND	0.0025	1	06/19/2020 17:30
Dibenzo (a,h) anthracene	ND	0.0025	1	06/19/2020 17:30
Dibenzofuran	ND	0.25	1	06/19/2020 17:30
Di-n-butyl Phthalate	ND	0.013	1	06/19/2020 17:30
1,2-Dichlorobenzene	ND	0.25	1	06/19/2020 17:30
1,3-Dichlorobenzene	ND	0.25	1	06/19/2020 17:30
1,4-Dichlorobenzene	ND	0.25	1	06/19/2020 17:30
3,3-Dichlorobenzidine	ND	0.0025	1	06/19/2020 17:30
2,4-Dichlorophenol	ND	0.013	1	06/19/2020 17:30
Diethyl Phthalate	ND	0.013	1	06/19/2020 17:30
2,4-Dimethylphenol	ND	0.25	1	06/19/2020 17:30
Dimethyl Phthalate	ND	0.0025	1	06/19/2020 17:30
4,6-Dinitro-2-methylphenol	ND	1.2	1	06/19/2020 17:30

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020-06/18/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-7-1.5	2006697-015A	Soil	06/11/2020 10:09	GC21 06192023.D	200232

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrophenol	ND	0.25	1	06/19/2020 17:30
2,4-Dinitrotoluene	ND	0.013	1	06/19/2020 17:30
2,6-Dinitrotoluene	ND	0.013	1	06/19/2020 17:30
Di-n-octyl Phthalate	ND	0.013	1	06/19/2020 17:30
1,2-Diphenylhydrazine	ND	0.25	1	06/19/2020 17:30
Fluoranthene	ND	0.0013	1	06/19/2020 17:30
Fluorene	ND	0.0025	1	06/19/2020 17:30
Hexachlorobenzene	ND	0.0013	1	06/19/2020 17:30
Hexachlorobutadiene	ND	0.0025	1	06/19/2020 17:30
Hexachlorocyclopentadiene	ND	2.0	1	06/19/2020 17:30
Hexachloroethane	ND	0.013	1	06/19/2020 17:30
Indeno (1,2,3-cd) pyrene	ND	0.013	1	06/19/2020 17:30
Isophorone	ND	0.25	1	06/19/2020 17:30
2-Methylnaphthalene	ND	0.0025	1	06/19/2020 17:30
2-Methylphenol (o-Cresol)	ND	0.25	1	06/19/2020 17:30
3 & 4-Methylphenol (m,p-Cresol)	ND	0.25	1	06/19/2020 17:30
Naphthalene	ND	0.0013	1	06/19/2020 17:30
2-Nitroaniline	ND	1.2	1	06/19/2020 17:30
3-Nitroaniline	ND	1.2	1	06/19/2020 17:30
4-Nitroaniline	ND	1.2	1	06/19/2020 17:30
Nitrobenzene	ND	0.25	1	06/19/2020 17:30
2-Nitrophenol	ND	1.2	1	06/19/2020 17:30
4-Nitrophenol	ND	1.2	1	06/19/2020 17:30
N-Nitrosodiphenylamine	ND	0.25	1	06/19/2020 17:30
N-Nitrosodi-n-propylamine	ND	0.25	1	06/19/2020 17:30
Pentachlorophenol	ND	0.062	1	06/19/2020 17:30
Phenanthrene	ND	0.0050	1	06/19/2020 17:30
Phenol	ND	0.050	1	06/19/2020 17:30
Pyrene	ND	0.0025	1	06/19/2020 17:30
Pyridine	ND	0.25	1	06/19/2020 17:30
1,2,4-Trichlorobenzene	ND	0.25	1	06/19/2020 17:30
2,4,5-Trichlorophenol	ND	0.0025	1	06/19/2020 17:30
2,4,6-Trichlorophenol	ND	0.013	1	06/19/2020 17:30

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020-06/18/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-7-1.5	2006697-015A	Soil	06/11/2020 10:09	GC21 06192023.D	200232

Analytes	Result	RL	DF	Date Analyzed
----------	--------	----	----	---------------

Surrogates	REC (%)	Qualifiers	Limits	Date Analyzed
2-Fluorophenol	107		60-130	06/19/2020 17:30
Phenol-d5	95		60-130	06/19/2020 17:30
Nitrobenzene-d5	85		60-130	06/19/2020 17:30
2-Fluorobiphenyl	82		60-130	06/19/2020 17:30
2,4,6-Tribromophenol	43	S	50-130	06/19/2020 17:30
4-Terphenyl-d14	76		50-130	06/19/2020 17:30

Analyst(s): HD

Analytical Comments: c2



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020-06/18/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-7-3.0	2006697-016A	Soil	06/11/2020 10:12	GC21 06202017.D	200232

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.0013	1	06/20/2020 16:41
Acenaphthylene	ND	0.0013	1	06/20/2020 16:41
Acetochlor	ND	0.25	1	06/20/2020 16:41
Anthracene	ND	0.0013	1	06/20/2020 16:41
Benzidine	ND	1.2	1	06/20/2020 16:41
Benzo (a) anthracene	ND	0.013	1	06/20/2020 16:41
Benzo (a) pyrene	ND	0.0025	1	06/20/2020 16:41
Benzo (b) fluoranthene	ND	0.0063	1	06/20/2020 16:41
Benzo (g,h,i) perylene	ND	0.0025	1	06/20/2020 16:41
Benzo (k) fluoranthene	ND	0.0013	1	06/20/2020 16:41
Benzyl Alcohol	ND	1.2	1	06/20/2020 16:41
1,1-Biphenyl	ND	0.013	1	06/20/2020 16:41
Bis (2-chloroethoxy) Methane	ND	0.25	1	06/20/2020 16:41
Bis (2-chloroethyl) Ether	ND	0.0025	1	06/20/2020 16:41
Bis (2-chloroisopropyl) Ether	ND	0.013	1	06/20/2020 16:41
Bis (2-ethylhexyl) Adipate	ND	0.25	1	06/20/2020 16:41
Bis (2-ethylhexyl) Phthalate	ND	0.025	1	06/20/2020 16:41
4-Bromophenyl Phenyl Ether	ND	0.25	1	06/20/2020 16:41
Butylbenzyl Phthalate	ND	0.025	1	06/20/2020 16:41
4-Chloroaniline	ND	0.0025	1	06/20/2020 16:41
4-Chloro-3-methylphenol	ND	0.25	1	06/20/2020 16:41
2-Chloronaphthalene	ND	0.25	1	06/20/2020 16:41
2-Chlorophenol	ND	0.013	1	06/20/2020 16:41
4-Chlorophenyl Phenyl Ether	ND	0.25	1	06/20/2020 16:41
Chrysene	ND	0.0025	1	06/20/2020 16:41
Dibenzo (a,h) anthracene	ND	0.0025	1	06/20/2020 16:41
Dibenzofuran	ND	0.25	1	06/20/2020 16:41
Di-n-butyl Phthalate	ND	0.013	1	06/20/2020 16:41
1,2-Dichlorobenzene	ND	0.25	1	06/20/2020 16:41
1,3-Dichlorobenzene	ND	0.25	1	06/20/2020 16:41
1,4-Dichlorobenzene	ND	0.25	1	06/20/2020 16:41
3,3-Dichlorobenzidine	ND	0.0025	1	06/20/2020 16:41
2,4-Dichlorophenol	ND	0.013	1	06/20/2020 16:41
Diethyl Phthalate	ND	0.013	1	06/20/2020 16:41
2,4-Dimethylphenol	ND	0.25	1	06/20/2020 16:41
Dimethyl Phthalate	ND	0.0025	1	06/20/2020 16:41
4,6-Dinitro-2-methylphenol	ND	1.2	1	06/20/2020 16:41

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020-06/18/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-7-3.0	2006697-016A	Soil	06/11/2020 10:12	GC21 06202017.D	200232

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrophenol	ND	0.25	1	06/20/2020 16:41
2,4-Dinitrotoluene	ND	0.013	1	06/20/2020 16:41
2,6-Dinitrotoluene	ND	0.013	1	06/20/2020 16:41
Di-n-octyl Phthalate	ND	0.013	1	06/20/2020 16:41
1,2-Diphenylhydrazine	ND	0.25	1	06/20/2020 16:41
Fluoranthene	ND	0.0013	1	06/20/2020 16:41
Fluorene	ND	0.0025	1	06/20/2020 16:41
Hexachlorobenzene	ND	0.0013	1	06/20/2020 16:41
Hexachlorobutadiene	ND	0.0025	1	06/20/2020 16:41
Hexachlorocyclopentadiene	ND	2.0	1	06/20/2020 16:41
Hexachloroethane	ND	0.013	1	06/20/2020 16:41
Indeno (1,2,3-cd) pyrene	ND	0.013	1	06/20/2020 16:41
Isophorone	ND	0.25	1	06/20/2020 16:41
2-Methylnaphthalene	ND	0.0025	1	06/20/2020 16:41
2-Methylphenol (o-Cresol)	ND	0.25	1	06/20/2020 16:41
3 & 4-Methylphenol (m,p-Cresol)	ND	0.25	1	06/20/2020 16:41
Naphthalene	ND	0.0013	1	06/20/2020 16:41
2-Nitroaniline	ND	1.2	1	06/20/2020 16:41
3-Nitroaniline	ND	1.2	1	06/20/2020 16:41
4-Nitroaniline	ND	1.2	1	06/20/2020 16:41
Nitrobenzene	ND	0.25	1	06/20/2020 16:41
2-Nitrophenol	ND	1.2	1	06/20/2020 16:41
4-Nitrophenol	ND	1.2	1	06/20/2020 16:41
N-Nitrosodiphenylamine	ND	0.25	1	06/20/2020 16:41
N-Nitrosodi-n-propylamine	ND	0.25	1	06/20/2020 16:41
Pentachlorophenol	ND	0.062	1	06/20/2020 16:41
Phenanthrene	ND	0.0050	1	06/20/2020 16:41
Phenol	ND	0.050	1	06/20/2020 16:41
Pyrene	ND	0.0025	1	06/20/2020 16:41
Pyridine	ND	0.25	1	06/20/2020 16:41
1,2,4-Trichlorobenzene	ND	0.25	1	06/20/2020 16:41
2,4,5-Trichlorophenol	ND	0.0025	1	06/20/2020 16:41
2,4,6-Trichlorophenol	ND	0.013	1	06/20/2020 16:41

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020-06/18/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-7-3.0	2006697-016A	Soil	06/11/2020 10:12	GC21 06202017.D	200232

Analytes	Result	RL	DF	Date Analyzed
----------	--------	----	----	---------------

Surrogates	REC (%)	Qualifiers	Limits	Date Analyzed
2-Fluorophenol	110		60-130	06/20/2020 16:41
Phenol-d5	104		60-130	06/20/2020 16:41
Nitrobenzene-d5	86		60-130	06/20/2020 16:41
2-Fluorobiphenyl	82		60-130	06/20/2020 16:41
2,4,6-Tribromophenol	30	S	50-130	06/20/2020 16:41
4-Terphenyl-d14	79		50-130	06/20/2020 16:41

Analyst(s): HD

Analytical Comments: c2



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020-06/18/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-7-5.0	2006697-017A	Soil	06/11/2020 10:17	GC21 06192024.D	200316

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.0013	1	06/19/2020 17:58
Acenaphthylene	ND	0.0013	1	06/19/2020 17:58
Acetochlor	ND	0.25	1	06/19/2020 17:58
Anthracene	ND	0.0013	1	06/19/2020 17:58
Benzidine	ND	1.2	1	06/19/2020 17:58
Benzo (a) anthracene	ND	0.013	1	06/19/2020 17:58
Benzo (a) pyrene	ND	0.0025	1	06/19/2020 17:58
Benzo (b) fluoranthene	ND	0.0063	1	06/19/2020 17:58
Benzo (g,h,i) perylene	ND	0.0025	1	06/19/2020 17:58
Benzo (k) fluoranthene	ND	0.0013	1	06/19/2020 17:58
Benzyl Alcohol	ND	1.2	1	06/19/2020 17:58
1,1-Biphenyl	ND	0.013	1	06/19/2020 17:58
Bis (2-chloroethoxy) Methane	ND	0.25	1	06/19/2020 17:58
Bis (2-chloroethyl) Ether	ND	0.0025	1	06/19/2020 17:58
Bis (2-chloroisopropyl) Ether	ND	0.013	1	06/19/2020 17:58
Bis (2-ethylhexyl) Adipate	ND	0.25	1	06/19/2020 17:58
Bis (2-ethylhexyl) Phthalate	ND	0.025	1	06/19/2020 17:58
4-Bromophenyl Phenyl Ether	ND	0.25	1	06/19/2020 17:58
Butylbenzyl Phthalate	ND	0.025	1	06/19/2020 17:58
4-Chloroaniline	ND	0.0025	1	06/19/2020 17:58
4-Chloro-3-methylphenol	ND	0.25	1	06/19/2020 17:58
2-Chloronaphthalene	ND	0.25	1	06/19/2020 17:58
2-Chlorophenol	ND	0.013	1	06/19/2020 17:58
4-Chlorophenyl Phenyl Ether	ND	0.25	1	06/19/2020 17:58
Chrysene	ND	0.0025	1	06/19/2020 17:58
Dibenzo (a,h) anthracene	ND	0.0025	1	06/19/2020 17:58
Dibenzofuran	ND	0.25	1	06/19/2020 17:58
Di-n-butyl Phthalate	ND	0.013	1	06/19/2020 17:58
1,2-Dichlorobenzene	ND	0.25	1	06/19/2020 17:58
1,3-Dichlorobenzene	ND	0.25	1	06/19/2020 17:58
1,4-Dichlorobenzene	ND	0.25	1	06/19/2020 17:58
3,3-Dichlorobenzidine	ND	0.0025	1	06/19/2020 17:58
2,4-Dichlorophenol	ND	0.013	1	06/19/2020 17:58
Diethyl Phthalate	ND	0.013	1	06/19/2020 17:58
2,4-Dimethylphenol	ND	0.25	1	06/19/2020 17:58
Dimethyl Phthalate	ND	0.0025	1	06/19/2020 17:58
4,6-Dinitro-2-methylphenol	ND	1.2	1	06/19/2020 17:58

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020-06/18/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-7-5.0	2006697-017A	Soil	06/11/2020 10:17	GC21 06192024.D	200316

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrophenol	ND	0.25	1	06/19/2020 17:58
2,4-Dinitrotoluene	ND	0.013	1	06/19/2020 17:58
2,6-Dinitrotoluene	ND	0.013	1	06/19/2020 17:58
Di-n-octyl Phthalate	ND	0.013	1	06/19/2020 17:58
1,2-Diphenylhydrazine	ND	0.25	1	06/19/2020 17:58
Fluoranthene	ND	0.0013	1	06/19/2020 17:58
Fluorene	ND	0.0025	1	06/19/2020 17:58
Hexachlorobenzene	ND	0.0013	1	06/19/2020 17:58
Hexachlorobutadiene	ND	0.0025	1	06/19/2020 17:58
Hexachlorocyclopentadiene	ND	2.0	1	06/19/2020 17:58
Hexachloroethane	ND	0.013	1	06/19/2020 17:58
Indeno (1,2,3-cd) pyrene	ND	0.013	1	06/19/2020 17:58
Isophorone	ND	0.25	1	06/19/2020 17:58
2-Methylnaphthalene	ND	0.0025	1	06/19/2020 17:58
2-Methylphenol (o-Cresol)	ND	0.25	1	06/19/2020 17:58
3 & 4-Methylphenol (m,p-Cresol)	ND	0.25	1	06/19/2020 17:58
Naphthalene	ND	0.0013	1	06/19/2020 17:58
2-Nitroaniline	ND	1.2	1	06/19/2020 17:58
3-Nitroaniline	ND	1.2	1	06/19/2020 17:58
4-Nitroaniline	ND	1.2	1	06/19/2020 17:58
Nitrobenzene	ND	0.25	1	06/19/2020 17:58
2-Nitrophenol	ND	1.2	1	06/19/2020 17:58
4-Nitrophenol	ND	1.2	1	06/19/2020 17:58
N-Nitrosodiphenylamine	ND	0.25	1	06/19/2020 17:58
N-Nitrosodi-n-propylamine	ND	0.25	1	06/19/2020 17:58
Pentachlorophenol	ND	0.062	1	06/19/2020 17:58
Phenanthrene	ND	0.0050	1	06/19/2020 17:58
Phenol	ND	0.050	1	06/19/2020 17:58
Pyrene	ND	0.0025	1	06/19/2020 17:58
Pyridine	ND	0.25	1	06/19/2020 17:58
1,2,4-Trichlorobenzene	ND	0.25	1	06/19/2020 17:58
2,4,5-Trichlorophenol	ND	0.0025	1	06/19/2020 17:58
2,4,6-Trichlorophenol	ND	0.013	1	06/19/2020 17:58

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020-06/18/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-7-5.0	2006697-017A	Soil	06/11/2020 10:17	GC21 06192024.D	200316

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>	
2-Fluorophenol	123		60-130	06/19/2020 17:58
Phenol-d5	115		60-130	06/19/2020 17:58
Nitrobenzene-d5	97		60-130	06/19/2020 17:58
2-Fluorobiphenyl	94		60-130	06/19/2020 17:58
2,4,6-Tribromophenol	13	S	50-130	06/19/2020 17:58
4-Terphenyl-d14	91		50-130	06/19/2020 17:58

Analyst(s): HD

Analytical Comments: c2



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020-06/18/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-5-1.5	2006697-018A	Soil	06/11/2020 11:12	GC21 06192025.D	200316

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.0013	1	06/19/2020 18:25
Acenaphthylene	ND	0.0013	1	06/19/2020 18:25
Acetochlor	ND	0.25	1	06/19/2020 18:25
Anthracene	ND	0.0013	1	06/19/2020 18:25
Benzidine	ND	1.2	1	06/19/2020 18:25
Benzo (a) anthracene	ND	0.013	1	06/19/2020 18:25
Benzo (a) pyrene	0.0033	0.0025	1	06/19/2020 18:25
Benzo (b) fluoranthene	ND	0.0063	1	06/19/2020 18:25
Benzo (g,h,i) perylene	0.0031	0.0025	1	06/19/2020 18:25
Benzo (k) fluoranthene	0.0019	0.0013	1	06/19/2020 18:25
Benzyl Alcohol	ND	1.2	1	06/19/2020 18:25
1,1-Biphenyl	ND	0.013	1	06/19/2020 18:25
Bis (2-chloroethoxy) Methane	ND	0.25	1	06/19/2020 18:25
Bis (2-chloroethyl) Ether	ND	0.0025	1	06/19/2020 18:25
Bis (2-chloroisopropyl) Ether	ND	0.013	1	06/19/2020 18:25
Bis (2-ethylhexyl) Adipate	ND	0.25	1	06/19/2020 18:25
Bis (2-ethylhexyl) Phthalate	ND	0.025	1	06/19/2020 18:25
4-Bromophenyl Phenyl Ether	ND	0.25	1	06/19/2020 18:25
Butylbenzyl Phthalate	ND	0.025	1	06/19/2020 18:25
4-Chloroaniline	ND	0.0025	1	06/19/2020 18:25
4-Chloro-3-methylphenol	ND	0.25	1	06/19/2020 18:25
2-Chloronaphthalene	ND	0.25	1	06/19/2020 18:25
2-Chlorophenol	ND	0.013	1	06/19/2020 18:25
4-Chlorophenyl Phenyl Ether	ND	0.25	1	06/19/2020 18:25
Chrysene	0.0050	0.0025	1	06/19/2020 18:25
Dibenzo (a,h) anthracene	ND	0.0025	1	06/19/2020 18:25
Dibenzofuran	ND	0.25	1	06/19/2020 18:25
Di-n-butyl Phthalate	ND	0.013	1	06/19/2020 18:25
1,2-Dichlorobenzene	ND	0.25	1	06/19/2020 18:25
1,3-Dichlorobenzene	ND	0.25	1	06/19/2020 18:25
1,4-Dichlorobenzene	ND	0.25	1	06/19/2020 18:25
3,3-Dichlorobenzidine	ND	0.0025	1	06/19/2020 18:25
2,4-Dichlorophenol	ND	0.013	1	06/19/2020 18:25
Diethyl Phthalate	ND	0.013	1	06/19/2020 18:25
2,4-Dimethylphenol	ND	0.25	1	06/19/2020 18:25
Dimethyl Phthalate	ND	0.0025	1	06/19/2020 18:25
4,6-Dinitro-2-methylphenol	ND	1.2	1	06/19/2020 18:25

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020-06/18/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected		Instrument	Batch ID
EB-5-1.5	2006697-018A	Soil	06/11/2020 11:12		GC21 06192025.D	200316
Analytes	Result	RL	DF	Date Analyzed		
2,4-Dinitrophenol	ND	0.25	1	06/19/2020 18:25		
2,4-Dinitrotoluene	ND	0.013	1	06/19/2020 18:25		
2,6-Dinitrotoluene	ND	0.013	1	06/19/2020 18:25		
Di-n-octyl Phthalate	ND	0.013	1	06/19/2020 18:25		
1,2-Diphenylhydrazine	ND	0.25	1	06/19/2020 18:25		
Fluoranthene	0.0048	0.0013	1	06/19/2020 18:25		
Fluorene	ND	0.0025	1	06/19/2020 18:25		
Hexachlorobenzene	ND	0.0013	1	06/19/2020 18:25		
Hexachlorobutadiene	ND	0.0025	1	06/19/2020 18:25		
Hexachlorocyclopentadiene	ND	2.0	1	06/19/2020 18:25		
Hexachloroethane	ND	0.013	1	06/19/2020 18:25		
Indeno (1,2,3-cd) pyrene	ND	0.013	1	06/19/2020 18:25		
Isophorone	ND	0.25	1	06/19/2020 18:25		
2-Methylnaphthalene	0.0034	0.0025	1	06/19/2020 18:25		
2-Methylphenol (o-Cresol)	ND	0.25	1	06/19/2020 18:25		
3 & 4-Methylphenol (m,p-Cresol)	ND	0.25	1	06/19/2020 18:25		
Naphthalene	0.0023	0.0013	1	06/19/2020 18:25		
2-Nitroaniline	ND	1.2	1	06/19/2020 18:25		
3-Nitroaniline	ND	1.2	1	06/19/2020 18:25		
4-Nitroaniline	ND	1.2	1	06/19/2020 18:25		
Nitrobenzene	ND	0.25	1	06/19/2020 18:25		
2-Nitrophenol	ND	1.2	1	06/19/2020 18:25		
4-Nitrophenol	ND	1.2	1	06/19/2020 18:25		
N-Nitrosodiphenylamine	ND	0.25	1	06/19/2020 18:25		
N-Nitrosodi-n-propylamine	ND	0.25	1	06/19/2020 18:25		
Pentachlorophenol	ND	0.062	1	06/19/2020 18:25		
Phenanthrene	0.0068	0.0050	1	06/19/2020 18:25		
Phenol	ND	0.050	1	06/19/2020 18:25		
Pyrene	0.0044	0.0025	1	06/19/2020 18:25		
Pyridine	ND	0.25	1	06/19/2020 18:25		
1,2,4-Trichlorobenzene	ND	0.25	1	06/19/2020 18:25		
2,4,5-Trichlorophenol	ND	0.0025	1	06/19/2020 18:25		
2,4,6-Trichlorophenol	ND	0.013	1	06/19/2020 18:25		

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020-06/18/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-5-1.5	2006697-018A	Soil	06/11/2020 11:12	GC21 06192025.D	200316

Analytes	Result	RL	DF	Date Analyzed
----------	--------	----	----	---------------

Surrogates	REC (%)	Qualifiers	Limits	Date Analyzed
2-Fluorophenol	102		60-130	06/19/2020 18:25
Phenol-d5	96		60-130	06/19/2020 18:25
Nitrobenzene-d5	81		60-130	06/19/2020 18:25
2-Fluorobiphenyl	76		60-130	06/19/2020 18:25
2,4,6-Tribromophenol	45	S	50-130	06/19/2020 18:25
4-Terphenyl-d14	76		50-130	06/19/2020 18:25

Analyst(s): HD

Analytical Comments: c2



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020-06/18/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-5-3.0	2006697-019A	Soil	06/11/2020 11:15	GC21 06192026.D	200316

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.0013	1	06/19/2020 18:53
Acenaphthylene	ND	0.0013	1	06/19/2020 18:53
Acetochlor	ND	0.25	1	06/19/2020 18:53
Anthracene	ND	0.0013	1	06/19/2020 18:53
Benzidine	ND	1.2	1	06/19/2020 18:53
Benzo (a) anthracene	ND	0.013	1	06/19/2020 18:53
Benzo (a) pyrene	ND	0.0025	1	06/19/2020 18:53
Benzo (b) fluoranthene	ND	0.0063	1	06/19/2020 18:53
Benzo (g,h,i) perylene	ND	0.0025	1	06/19/2020 18:53
Benzo (k) fluoranthene	ND	0.0013	1	06/19/2020 18:53
Benzyl Alcohol	ND	1.2	1	06/19/2020 18:53
1,1-Biphenyl	ND	0.013	1	06/19/2020 18:53
Bis (2-chloroethoxy) Methane	ND	0.25	1	06/19/2020 18:53
Bis (2-chloroethyl) Ether	ND	0.0025	1	06/19/2020 18:53
Bis (2-chloroisopropyl) Ether	ND	0.013	1	06/19/2020 18:53
Bis (2-ethylhexyl) Adipate	ND	0.25	1	06/19/2020 18:53
Bis (2-ethylhexyl) Phthalate	ND	0.025	1	06/19/2020 18:53
4-Bromophenyl Phenyl Ether	ND	0.25	1	06/19/2020 18:53
Butylbenzyl Phthalate	ND	0.025	1	06/19/2020 18:53
4-Chloroaniline	ND	0.0025	1	06/19/2020 18:53
4-Chloro-3-methylphenol	ND	0.25	1	06/19/2020 18:53
2-Chloronaphthalene	ND	0.25	1	06/19/2020 18:53
2-Chlorophenol	ND	0.013	1	06/19/2020 18:53
4-Chlorophenyl Phenyl Ether	ND	0.25	1	06/19/2020 18:53
Chrysene	ND	0.0025	1	06/19/2020 18:53
Dibenzo (a,h) anthracene	ND	0.0025	1	06/19/2020 18:53
Dibenzofuran	ND	0.25	1	06/19/2020 18:53
Di-n-butyl Phthalate	ND	0.013	1	06/19/2020 18:53
1,2-Dichlorobenzene	ND	0.25	1	06/19/2020 18:53
1,3-Dichlorobenzene	ND	0.25	1	06/19/2020 18:53
1,4-Dichlorobenzene	ND	0.25	1	06/19/2020 18:53
3,3-Dichlorobenzidine	ND	0.0025	1	06/19/2020 18:53
2,4-Dichlorophenol	ND	0.013	1	06/19/2020 18:53
Diethyl Phthalate	ND	0.013	1	06/19/2020 18:53
2,4-Dimethylphenol	ND	0.25	1	06/19/2020 18:53
Dimethyl Phthalate	ND	0.0025	1	06/19/2020 18:53
4,6-Dinitro-2-methylphenol	ND	1.2	1	06/19/2020 18:53

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020-06/18/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-5-3.0	2006697-019A	Soil	06/11/2020 11:15	GC21 06192026.D	200316

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrophenol	ND	0.25	1	06/19/2020 18:53
2,4-Dinitrotoluene	ND	0.013	1	06/19/2020 18:53
2,6-Dinitrotoluene	ND	0.013	1	06/19/2020 18:53
Di-n-octyl Phthalate	ND	0.013	1	06/19/2020 18:53
1,2-Diphenylhydrazine	ND	0.25	1	06/19/2020 18:53
Fluoranthene	ND	0.0013	1	06/19/2020 18:53
Fluorene	ND	0.0025	1	06/19/2020 18:53
Hexachlorobenzene	ND	0.0013	1	06/19/2020 18:53
Hexachlorobutadiene	ND	0.0025	1	06/19/2020 18:53
Hexachlorocyclopentadiene	ND	2.0	1	06/19/2020 18:53
Hexachloroethane	ND	0.013	1	06/19/2020 18:53
Indeno (1,2,3-cd) pyrene	ND	0.013	1	06/19/2020 18:53
Isophorone	ND	0.25	1	06/19/2020 18:53
2-Methylnaphthalene	ND	0.0025	1	06/19/2020 18:53
2-Methylphenol (o-Cresol)	ND	0.25	1	06/19/2020 18:53
3 & 4-Methylphenol (m,p-Cresol)	ND	0.25	1	06/19/2020 18:53
Naphthalene	ND	0.0013	1	06/19/2020 18:53
2-Nitroaniline	ND	1.2	1	06/19/2020 18:53
3-Nitroaniline	ND	1.2	1	06/19/2020 18:53
4-Nitroaniline	ND	1.2	1	06/19/2020 18:53
Nitrobenzene	ND	0.25	1	06/19/2020 18:53
2-Nitrophenol	ND	1.2	1	06/19/2020 18:53
4-Nitrophenol	ND	1.2	1	06/19/2020 18:53
N-Nitrosodiphenylamine	ND	0.25	1	06/19/2020 18:53
N-Nitrosodi-n-propylamine	ND	0.25	1	06/19/2020 18:53
Pentachlorophenol	ND	0.062	1	06/19/2020 18:53
Phenanthrene	ND	0.0050	1	06/19/2020 18:53
Phenol	ND	0.050	1	06/19/2020 18:53
Pyrene	ND	0.0025	1	06/19/2020 18:53
Pyridine	ND	0.25	1	06/19/2020 18:53
1,2,4-Trichlorobenzene	ND	0.25	1	06/19/2020 18:53
2,4,5-Trichlorophenol	ND	0.0025	1	06/19/2020 18:53
2,4,6-Trichlorophenol	ND	0.013	1	06/19/2020 18:53

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/17/2020-06/18/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-5-3.0	2006697-019A	Soil	06/11/2020 11:15	GC21 06192026.D	200316

Analytes	Result	RL	DF	Date Analyzed
----------	--------	----	----	---------------

Surrogates	REC (%)	Qualifiers	Limits	Date Analyzed
2-Fluorophenol	98		60-130	06/19/2020 18:53
Phenol-d5	92		60-130	06/19/2020 18:53
Nitrobenzene-d5	77		60-130	06/19/2020 18:53
2-Fluorobiphenyl	74		60-130	06/19/2020 18:53
2,4,6-Tribromophenol	21	S	50-130	06/19/2020 18:53
4-Terphenyl-d14	76		50-130	06/19/2020 18:53

Analyst(s): HD

Analytical Comments: c2



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-2-1.5	2006697-001A	Soil	06/11/2020 08:47	ICP-MS5 173SMPL.d	200040

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	06/16/2020 14:08
Arsenic	2.6	0.50	1	06/16/2020 14:08
Barium	73	5.0	1	06/16/2020 14:08
Beryllium	ND	0.50	1	06/16/2020 14:08
Cadmium	ND	0.50	1	06/16/2020 14:08
Chromium	36	0.50	1	06/16/2020 14:08
Cobalt	4.0	0.50	1	06/16/2020 14:08
Copper	9.0	0.50	1	06/16/2020 14:08
Lead	44	0.50	1	06/16/2020 14:08
Mercury	0.075	0.050	1	06/16/2020 14:08
Molybdenum	ND	0.50	1	06/16/2020 14:08
Nickel	21	0.50	1	06/16/2020 14:08
Selenium	ND	0.50	1	06/16/2020 14:08
Silver	ND	0.50	1	06/16/2020 14:08
Thallium	ND	0.50	1	06/16/2020 14:08
Vanadium	26	0.50	1	06/16/2020 14:08
Zinc	62	5.0	1	06/16/2020 14:08

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	105	70-130	06/16/2020 14:08

Analyst(s): WV



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-2-3.0	2006697-002A	Soil	06/11/2020 08:50	ICP-MS5 174SMPL.d	200040

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	06/16/2020 14:11
Arsenic	2.0	0.50	1	06/16/2020 14:11
Barium	54	5.0	1	06/16/2020 14:11
Beryllium	ND	0.50	1	06/16/2020 14:11
Cadmium	ND	0.50	1	06/16/2020 14:11
Chromium	40	0.50	1	06/16/2020 14:11
Cobalt	3.6	0.50	1	06/16/2020 14:11
Copper	6.3	0.50	1	06/16/2020 14:11
Lead	2.4	0.50	1	06/16/2020 14:11
Mercury	ND	0.050	1	06/16/2020 14:11
Molybdenum	ND	0.50	1	06/16/2020 14:11
Nickel	23	0.50	1	06/16/2020 14:11
Selenium	ND	0.50	1	06/16/2020 14:11
Silver	ND	0.50	1	06/16/2020 14:11
Thallium	ND	0.50	1	06/16/2020 14:11
Vanadium	27	0.50	1	06/16/2020 14:11
Zinc	18	5.0	1	06/16/2020 14:11

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	104	70-130	06/16/2020 14:11

Analyst(s): WV



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-2-7.0	2006697-004A	Soil	06/11/2020 08:56	ICP-MS5 175SMPL.d	200040

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	06/16/2020 14:15
Arsenic	3.3	0.50	1	06/16/2020 14:15
Barium	54	5.0	1	06/16/2020 14:15
Beryllium	ND	0.50	1	06/16/2020 14:15
Cadmium	ND	0.50	1	06/16/2020 14:15
Chromium	42	0.50	1	06/16/2020 14:15
Cobalt	4.6	0.50	1	06/16/2020 14:15
Copper	7.5	0.50	1	06/16/2020 14:15
Lead	3.1	0.50	1	06/16/2020 14:15
Mercury	ND	0.050	1	06/16/2020 14:15
Molybdenum	ND	0.50	1	06/16/2020 14:15
Nickel	34	0.50	1	06/16/2020 14:15
Selenium	ND	0.50	1	06/16/2020 14:15
Silver	ND	0.50	1	06/16/2020 14:15
Thallium	ND	0.50	1	06/16/2020 14:15
Vanadium	35	0.50	1	06/16/2020 14:15
Zinc	23	5.0	1	06/16/2020 14:15

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	104	70-130	06/16/2020 14:15

Analyst(s): WV



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-3-1.5	2006697-005A	Soil	06/11/2020 09:24	ICP-MS5 176SMPL.d	200040

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
Antimony	1.2		0.50	1	06/16/2020 14:18
Arsenic	5.6		0.50	1	06/16/2020 14:18
Barium	210		5.0	1	06/16/2020 14:18
Beryllium	ND		0.50	1	06/16/2020 14:18
Cadmium	2.2	B	0.50	1	06/16/2020 14:18
Chromium	45		0.50	1	06/16/2020 14:18
Cobalt	6.7		0.50	1	06/16/2020 14:18
Copper	27		0.50	1	06/16/2020 14:18
Lead	390		0.50	1	06/16/2020 14:18
Mercury	1.3		0.050	1	06/16/2020 14:18
Molybdenum	ND		0.50	1	06/16/2020 14:18
Nickel	35		0.50	1	06/16/2020 14:18
Selenium	ND		0.50	1	06/16/2020 14:18
Silver	ND		0.50	1	06/16/2020 14:18
Thallium	ND		0.50	1	06/16/2020 14:18
Vanadium	34		0.50	1	06/16/2020 14:18
Zinc	270		5.0	1	06/16/2020 14:18

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	102	70-130	06/16/2020 14:18

Analyst(s): WV



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-3-3.0	2006697-007A	Soil	06/11/2020 09:26	ICP-MS5 177SMPL.d	200040

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	06/16/2020 14:21
Arsenic	3.1	0.50	1	06/16/2020 14:21
Barium	59	5.0	1	06/16/2020 14:21
Beryllium	ND	0.50	1	06/16/2020 14:21
Cadmium	ND	0.50	1	06/16/2020 14:21
Chromium	59	0.50	1	06/16/2020 14:21
Cobalt	8.2	0.50	1	06/16/2020 14:21
Copper	7.9	0.50	1	06/16/2020 14:21
Lead	3.5	0.50	1	06/16/2020 14:21
Mercury	ND	0.050	1	06/16/2020 14:21
Molybdenum	ND	0.50	1	06/16/2020 14:21
Nickel	44	0.50	1	06/16/2020 14:21
Selenium	ND	0.50	1	06/16/2020 14:21
Silver	ND	0.50	1	06/16/2020 14:21
Thallium	ND	0.50	1	06/16/2020 14:21
Vanadium	40	0.50	1	06/16/2020 14:21
Zinc	33	5.0	1	06/16/2020 14:21

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	103	70-130	06/16/2020 14:21

Analyst(s): WV



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-3-7.0	2006697-008A	Soil	06/11/2020 09:33	ICP-MS5 178SMPL.d	200040

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	06/16/2020 14:24
Arsenic	3.2	0.50	1	06/16/2020 14:24
Barium	74	5.0	1	06/16/2020 14:24
Beryllium	ND	0.50	1	06/16/2020 14:24
Cadmium	ND	0.50	1	06/16/2020 14:24
Chromium	44	0.50	1	06/16/2020 14:24
Cobalt	6.2	0.50	1	06/16/2020 14:24
Copper	8.8	0.50	1	06/16/2020 14:24
Lead	3.2	0.50	1	06/16/2020 14:24
Mercury	ND	0.050	1	06/16/2020 14:24
Molybdenum	ND	0.50	1	06/16/2020 14:24
Nickel	41	0.50	1	06/16/2020 14:24
Selenium	ND	0.50	1	06/16/2020 14:24
Silver	ND	0.50	1	06/16/2020 14:24
Thallium	ND	0.50	1	06/16/2020 14:24
Vanadium	33	0.50	1	06/16/2020 14:24
Zinc	25	5.0	1	06/16/2020 14:24

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	102	70-130	06/16/2020 14:24

Analyst(s): WV



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-4-1.5	2006697-009A	Soil	06/11/2020 09:45	ICP-MS5 179SMPL.d	200040

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
Antimony	1.3		0.50	1	06/16/2020 14:27
Arsenic	5.9		0.50	1	06/16/2020 14:27
Barium	240		5.0	1	06/16/2020 14:27
Beryllium	ND		0.50	1	06/16/2020 14:27
Cadmium	1.2	B	0.50	1	06/16/2020 14:27
Chromium	41		0.50	1	06/16/2020 14:27
Cobalt	7.5		0.50	1	06/16/2020 14:27
Copper	45		0.50	1	06/16/2020 14:27
Lead	370		0.50	1	06/16/2020 14:27
Mercury	0.29		0.050	1	06/16/2020 14:27
Molybdenum	0.54		0.50	1	06/16/2020 14:27
Nickel	30		0.50	1	06/16/2020 14:27
Selenium	ND		0.50	1	06/16/2020 14:27
Silver	ND		0.50	1	06/16/2020 14:27
Thallium	ND		0.50	1	06/16/2020 14:27
Vanadium	31		0.50	1	06/16/2020 14:27
Zinc	300		5.0	1	06/16/2020 14:27

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	101	70-130	06/16/2020 14:27

Analyst(s): WV



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-4-3.0	2006697-010A	Soil	06/11/2020 09:50	ICP-MS5 180SMPL.d	200069

Analytes	Result	RL	DF	Date Analyzed
Antimony	0.59	0.50	1	06/16/2020 14:31
Arsenic	2.2	0.50	1	06/16/2020 14:31
Barium	71	5.0	1	06/16/2020 14:31
Beryllium	ND	0.50	1	06/16/2020 14:31
Cadmium	ND	0.50	1	06/16/2020 14:31
Chromium	34	0.50	1	06/16/2020 14:31
Cobalt	5.4	0.50	1	06/16/2020 14:31
Copper	9.0	0.50	1	06/16/2020 14:31
Lead	51	0.50	1	06/16/2020 14:31
Mercury	0.064	0.050	1	06/16/2020 14:31
Molybdenum	ND	0.50	1	06/16/2020 14:31
Nickel	20	0.50	1	06/16/2020 14:31
Selenium	ND	0.50	1	06/16/2020 14:31
Silver	ND	0.50	1	06/16/2020 14:31
Thallium	ND	0.50	1	06/16/2020 14:31
Vanadium	26	0.50	1	06/16/2020 14:31
Zinc	82	5.0	1	06/16/2020 14:31

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	104	70-130	06/16/2020 14:31

Analyst(s): WV



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-4-5.0	2006697-011A	Soil	06/11/2020 09:55	ICP-MS5 181SMPL.d	200069

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	06/16/2020 14:34
Arsenic	2.8	0.50	1	06/16/2020 14:34
Barium	68	5.0	1	06/16/2020 14:34
Beryllium	ND	0.50	1	06/16/2020 14:34
Cadmium	ND	0.50	1	06/16/2020 14:34
Chromium	40	0.50	1	06/16/2020 14:34
Cobalt	12	0.50	1	06/16/2020 14:34
Copper	7.6	0.50	1	06/16/2020 14:34
Lead	7.2	0.50	1	06/16/2020 14:34
Mercury	ND	0.050	1	06/16/2020 14:34
Molybdenum	ND	0.50	1	06/16/2020 14:34
Nickel	33	0.50	1	06/16/2020 14:34
Selenium	ND	0.50	1	06/16/2020 14:34
Silver	ND	0.50	1	06/16/2020 14:34
Thallium	ND	0.50	1	06/16/2020 14:34
Vanadium	33	0.50	1	06/16/2020 14:34
Zinc	57	5.0	1	06/16/2020 14:34

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	103	70-130	06/16/2020 14:34

Analyst(s): WV



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-8-1.5	2006697-012A	Soil	06/11/2020 10:33	ICP-MS5 205SMPL.d	200069

Analytes	Result	RL	DF	Date Analyzed
Antimony	2.2	0.50	1	06/16/2020 15:52
Arsenic	5.2	0.50	1	06/16/2020 15:52
Barium	330	5.0	1	06/16/2020 15:52
Beryllium	ND	0.50	1	06/16/2020 15:52
Cadmium	3.8	0.50	1	06/16/2020 15:52
Chromium	57	0.50	1	06/16/2020 15:52
Cobalt	5.3	0.50	1	06/16/2020 15:52
Copper	150	0.50	1	06/16/2020 15:52
Lead	690	5.0	10	06/17/2020 19:43
Mercury	0.98	0.050	1	06/16/2020 15:52
Molybdenum	0.57	0.50	1	06/16/2020 15:52
Nickel	27	0.50	1	06/16/2020 15:52
Selenium	ND	0.50	1	06/16/2020 15:52
Silver	0.55	0.50	1	06/16/2020 15:52
Thallium	ND	0.50	1	06/16/2020 15:52
Vanadium	29	0.50	1	06/16/2020 15:52
Zinc	530	5.0	1	06/16/2020 15:52

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	101	70-130	06/16/2020 15:52

Analyst(s): JAG, MIG



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-8-3.0	2006697-013A	Soil	06/11/2020 10:35	ICP-MS5 188SMPL.d	200069

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	06/22/2020 14:19
Arsenic	2.3	0.50	1	06/22/2020 14:19
Barium	61	5.0	1	06/22/2020 14:19
Beryllium	ND	0.50	1	06/22/2020 14:19
Cadmium	ND	0.50	1	06/22/2020 14:19
Chromium	37	0.50	1	06/22/2020 14:19
Cobalt	3.7	0.50	1	06/22/2020 14:19
Copper	9.0	0.50	1	06/22/2020 14:19
Lead	24	0.50	1	06/22/2020 14:19
Mercury	0.072	0.050	1	06/22/2020 14:19
Molybdenum	ND	0.50	1	06/22/2020 14:19
Nickel	21	0.50	1	06/22/2020 14:19
Selenium	ND	0.50	1	06/22/2020 14:19
Silver	ND	0.50	1	06/22/2020 14:19
Thallium	ND	0.50	1	06/22/2020 14:19
Vanadium	28	0.50	1	06/22/2020 14:19
Zinc	43	5.0	1	06/22/2020 14:19

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	103	70-130	06/22/2020 14:19

Analyst(s): MIG



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-7-1.5	2006697-015A	Soil	06/11/2020 10:09	ICP-MS5 207SMPL.d	200069

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	06/16/2020 15:58
Arsenic	2.4	0.50	1	06/16/2020 15:58
Barium	55	5.0	1	06/16/2020 15:58
Beryllium	ND	0.50	1	06/16/2020 15:58
Cadmium	ND	0.50	1	06/16/2020 15:58
Chromium	38	0.50	1	06/16/2020 15:58
Cobalt	4.2	0.50	1	06/16/2020 15:58
Copper	7.2	0.50	1	06/16/2020 15:58
Lead	6.3	0.50	1	06/16/2020 15:58
Mercury	ND	0.050	1	06/16/2020 15:58
Molybdenum	ND	0.50	1	06/16/2020 15:58
Nickel	21	0.50	1	06/16/2020 15:58
Selenium	ND	0.50	1	06/16/2020 15:58
Silver	ND	0.50	1	06/16/2020 15:58
Thallium	ND	0.50	1	06/16/2020 15:58
Vanadium	27	0.50	1	06/16/2020 15:58
Zinc	25	5.0	1	06/16/2020 15:58

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	103	70-130	06/16/2020 15:58

Analyst(s): MIG



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-7-3.0	2006697-016A	Soil	06/11/2020 10:12	ICP-MS5 221SMPL.d	200069

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	06/16/2020 16:43
Arsenic	2.5	0.50	1	06/16/2020 16:43
Barium	50	5.0	1	06/16/2020 16:43
Beryllium	ND	0.50	1	06/16/2020 16:43
Cadmium	ND	0.50	1	06/16/2020 16:43
Chromium	42	0.50	1	06/16/2020 16:43
Cobalt	3.6	0.50	1	06/16/2020 16:43
Copper	7.1	0.50	1	06/16/2020 16:43
Lead	2.9	0.50	1	06/16/2020 16:43
Mercury	ND	0.050	1	06/16/2020 16:43
Molybdenum	ND	0.50	1	06/16/2020 16:43
Nickel	23	0.50	1	06/16/2020 16:43
Selenium	ND	0.50	1	06/16/2020 16:43
Silver	ND	0.50	1	06/16/2020 16:43
Thallium	ND	0.50	1	06/16/2020 16:43
Vanadium	32	0.50	1	06/16/2020 16:43
Zinc	20	5.0	1	06/16/2020 16:43

Surrogates	REC (%)	Limits	
Terbium	104	70-130	06/16/2020 16:43

Analyst(s): MIG



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-7-5.0	2006697-017A	Soil	06/11/2020 10:17	ICP-MS5 222SMPL.d	200069

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	06/16/2020 16:46
Arsenic	4.1	0.50	1	06/16/2020 16:46
Barium	53	5.0	1	06/16/2020 16:46
Beryllium	ND	0.50	1	06/16/2020 16:46
Cadmium	ND	0.50	1	06/16/2020 16:46
Chromium	53	0.50	1	06/16/2020 16:46
Cobalt	5.0	0.50	1	06/16/2020 16:46
Copper	8.9	0.50	1	06/16/2020 16:46
Lead	4.9	0.50	1	06/16/2020 16:46
Mercury	ND	0.050	1	06/16/2020 16:46
Molybdenum	ND	0.50	1	06/16/2020 16:46
Nickel	35	0.50	1	06/16/2020 16:46
Selenium	ND	0.50	1	06/16/2020 16:46
Silver	ND	0.50	1	06/16/2020 16:46
Thallium	ND	0.50	1	06/16/2020 16:46
Vanadium	41	0.50	1	06/16/2020 16:46
Zinc	23	5.0	1	06/16/2020 16:46

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	103	70-130	06/16/2020 16:46

Analyst(s): MIG



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-5-1.5	2006697-018A	Soil	06/11/2020 11:12	ICP-MS5 223SMPL.d	200069

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	06/16/2020 16:50
Arsenic	2.4	0.50	1	06/16/2020 16:50
Barium	91	5.0	1	06/16/2020 16:50
Beryllium	ND	0.50	1	06/16/2020 16:50
Cadmium	ND	0.50	1	06/16/2020 16:50
Chromium	38	0.50	1	06/16/2020 16:50
Cobalt	4.1	0.50	1	06/16/2020 16:50
Copper	9.8	0.50	1	06/16/2020 16:50
Lead	27	0.50	1	06/16/2020 16:50
Mercury	0.14	0.050	1	06/16/2020 16:50
Molybdenum	ND	0.50	1	06/16/2020 16:50
Nickel	20	0.50	1	06/16/2020 16:50
Selenium	ND	0.50	1	06/16/2020 16:50
Silver	ND	0.50	1	06/16/2020 16:50
Thallium	ND	0.50	1	06/16/2020 16:50
Vanadium	26	0.50	1	06/16/2020 16:50
Zinc	29	5.0	1	06/16/2020 16:50

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	101	70-130	06/16/2020 16:50

Analyst(s): MIG



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-5-3.0	2006697-019A	Soil	06/11/2020 11:15	ICP-MS5 224SMPL.d	200069

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	06/16/2020 16:53
Arsenic	2.2	0.50	1	06/16/2020 16:53
Barium	66	5.0	1	06/16/2020 16:53
Beryllium	ND	0.50	1	06/16/2020 16:53
Cadmium	ND	0.50	1	06/16/2020 16:53
Chromium	40	0.50	1	06/16/2020 16:53
Cobalt	4.5	0.50	1	06/16/2020 16:53
Copper	6.7	0.50	1	06/16/2020 16:53
Lead	2.5	0.50	1	06/16/2020 16:53
Mercury	ND	0.050	1	06/16/2020 16:53
Molybdenum	ND	0.50	1	06/16/2020 16:53
Nickel	22	0.50	1	06/16/2020 16:53
Selenium	ND	0.50	1	06/16/2020 16:53
Silver	ND	0.50	1	06/16/2020 16:53
Thallium	ND	0.50	1	06/16/2020 16:53
Vanadium	28	0.50	1	06/16/2020 16:53
Zinc	19	5.0	1	06/16/2020 16:53

Surrogates	REC (%)	Limits	
Terbium	105	70-130	06/16/2020 16:53

Analyst(s): MIG



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020-06/18/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW5035
Analytical Method: SW8021B/8015Bm
Unit: mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-2-1.5	2006697-001A	Soil	06/11/2020 08:47	GC3 06152034.D	200076

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	06/16/2020 05:50
MTBE	---	0.050	1	06/16/2020 05:50
Benzene	---	0.0050	1	06/16/2020 05:50
Toluene	---	0.0050	1	06/16/2020 05:50
Ethylbenzene	---	0.0050	1	06/16/2020 05:50
m,p-Xylene	---	0.010	1	06/16/2020 05:50
o-Xylene	---	0.0050	1	06/16/2020 05:50
Xylenes	---	0.0050	1	06/16/2020 05:50

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	87	62-126	06/16/2020 05:50

Analyst(s): IA

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-2-3.0	2006697-002A	Soil	06/11/2020 08:50	GC3 06162026.D	200076

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	06/17/2020 04:34
MTBE	---	0.050	1	06/17/2020 04:34
Benzene	---	0.0050	1	06/17/2020 04:34
Toluene	---	0.0050	1	06/17/2020 04:34
Ethylbenzene	---	0.0050	1	06/17/2020 04:34
m,p-Xylene	---	0.010	1	06/17/2020 04:34
o-Xylene	---	0.0050	1	06/17/2020 04:34
Xylenes	---	0.0050	1	06/17/2020 04:34

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	89	62-126	06/17/2020 04:34

Analyst(s): IA

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020-06/18/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW5035
Analytical Method: SW8021B/8015Bm
Unit: mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-2-7.0	2006697-004A	Soil	06/11/2020 08:56	GC3 06162027.D	200076

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	06/17/2020 05:04
MTBE	---	0.050	1	06/17/2020 05:04
Benzene	---	0.0050	1	06/17/2020 05:04
Toluene	---	0.0050	1	06/17/2020 05:04
Ethylbenzene	---	0.0050	1	06/17/2020 05:04
m,p-Xylene	---	0.010	1	06/17/2020 05:04
o-Xylene	---	0.0050	1	06/17/2020 05:04
Xylenes	---	0.0050	1	06/17/2020 05:04

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	82	62-126	06/17/2020 05:04

Analyst(s): IA

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-3-1.5	2006697-005A	Soil	06/11/2020 09:24	GC19 06172007.D	200076

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	06/17/2020 16:37
MTBE	---	0.050	1	06/17/2020 16:37
Benzene	---	0.0050	1	06/17/2020 16:37
Toluene	---	0.0050	1	06/17/2020 16:37
Ethylbenzene	---	0.0050	1	06/17/2020 16:37
m,p-Xylene	---	0.010	1	06/17/2020 16:37
o-Xylene	---	0.0050	1	06/17/2020 16:37
Xylenes	---	0.0050	1	06/17/2020 16:37

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	88	62-126	06/17/2020 16:37

Analyst(s): IA

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020-06/18/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW5035
Analytical Method: SW8021B/8015Bm
Unit: mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-3-3.0	2006697-007A	Soil	06/11/2020 09:26	GC3 06162030.D	200076

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	06/17/2020 06:35
MTBE	---	0.050	1	06/17/2020 06:35
Benzene	---	0.0050	1	06/17/2020 06:35
Toluene	---	0.0050	1	06/17/2020 06:35
Ethylbenzene	---	0.0050	1	06/17/2020 06:35
m,p-Xylene	---	0.010	1	06/17/2020 06:35
o-Xylene	---	0.0050	1	06/17/2020 06:35
Xylenes	---	0.0050	1	06/17/2020 06:35

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	82	62-126	06/17/2020 06:35

Analyst(s): IA

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-3-7.0	2006697-008A	Soil	06/11/2020 09:33	GC3 06162031.D	200076

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	06/17/2020 07:05
MTBE	---	0.050	1	06/17/2020 07:05
Benzene	---	0.0050	1	06/17/2020 07:05
Toluene	---	0.0050	1	06/17/2020 07:05
Ethylbenzene	---	0.0050	1	06/17/2020 07:05
m,p-Xylene	---	0.010	1	06/17/2020 07:05
o-Xylene	---	0.0050	1	06/17/2020 07:05
Xylenes	---	0.0050	1	06/17/2020 07:05

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	84	62-126	06/17/2020 07:05

Analyst(s): IA

(Cont.)



Analytical Report

Client: Langan	WorkOrder: 2006697
Date Received: 06/12/2020 13:30	Extraction Method: SW5035
Date Prepared: 06/15/2020-06/18/2020	Analytical Method: SW8021B/8015Bm
Project: 750664801; 1666 Seventh Street	Unit: mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-4-1.5	2006697-009A	Soil	06/11/2020 09:45	GC3 06162032.D	200076

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	06/17/2020 07:35
MTBE	---	0.050	1	06/17/2020 07:35
Benzene	---	0.0050	1	06/17/2020 07:35
Toluene	---	0.0050	1	06/17/2020 07:35
Ethylbenzene	---	0.0050	1	06/17/2020 07:35
m,p-Xylene	---	0.010	1	06/17/2020 07:35
o-Xylene	---	0.0050	1	06/17/2020 07:35
Xylenes	---	0.0050	1	06/17/2020 07:35

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	91	62-126	06/17/2020 07:35

Analyst(s): IA

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-4-3.0	2006697-010A	Soil	06/11/2020 09:50	GC19 06162030.D	200076

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	06/17/2020 02:30
MTBE	---	0.050	1	06/17/2020 02:30
Benzene	---	0.0050	1	06/17/2020 02:30
Toluene	---	0.0050	1	06/17/2020 02:30
Ethylbenzene	---	0.0050	1	06/17/2020 02:30
m,p-Xylene	---	0.010	1	06/17/2020 02:30
o-Xylene	---	0.0050	1	06/17/2020 02:30
Xylenes	---	0.0050	1	06/17/2020 02:30

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	93	62-126	06/17/2020 02:30

Analyst(s): IA

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020-06/18/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW5035
Analytical Method: SW8021B/8015Bm
Unit: mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-4-5.0	2006697-011A	Soil	06/11/2020 09:55	GC19 06162031.D	200076

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	06/17/2020 03:00
MTBE	---	0.050	1	06/17/2020 03:00
Benzene	---	0.0050	1	06/17/2020 03:00
Toluene	---	0.0050	1	06/17/2020 03:00
Ethylbenzene	---	0.0050	1	06/17/2020 03:00
m,p-Xylene	---	0.010	1	06/17/2020 03:00
o-Xylene	---	0.0050	1	06/17/2020 03:00
Xylenes	---	0.0050	1	06/17/2020 03:00

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	91	62-126	06/17/2020 03:00

Analyst(s): IA

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-8-1.5	2006697-012A	Soil	06/11/2020 10:33	GC19 06182012.D	200290

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	06/18/2020 19:06
MTBE	---	0.050	1	06/18/2020 19:06
Benzene	---	0.0050	1	06/18/2020 19:06
Toluene	---	0.0050	1	06/18/2020 19:06
Ethylbenzene	---	0.0050	1	06/18/2020 19:06
m,p-Xylene	---	0.010	1	06/18/2020 19:06
o-Xylene	---	0.0050	1	06/18/2020 19:06
Xylenes	---	0.0050	1	06/18/2020 19:06

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	87	62-126	06/18/2020 19:06

Analyst(s): IA

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020-06/18/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW5035
Analytical Method: SW8021B/8015Bm
Unit: mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-8-3.0	2006697-013A	Soil	06/11/2020 10:35	GC19 06162032.D	200076

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	06/17/2020 03:30
MTBE	---	0.050	1	06/17/2020 03:30
Benzene	---	0.0050	1	06/17/2020 03:30
Toluene	---	0.0050	1	06/17/2020 03:30
Ethylbenzene	---	0.0050	1	06/17/2020 03:30
m,p-Xylene	---	0.010	1	06/17/2020 03:30
o-Xylene	---	0.0050	1	06/17/2020 03:30
Xylenes	---	0.0050	1	06/17/2020 03:30

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	88	62-126	06/17/2020 03:30

Analyst(s): IA

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-7-1.5	2006697-015A	Soil	06/11/2020 10:09	GC19 06162033.D	200076

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	06/17/2020 04:00
MTBE	---	0.050	1	06/17/2020 04:00
Benzene	---	0.0050	1	06/17/2020 04:00
Toluene	---	0.0050	1	06/17/2020 04:00
Ethylbenzene	---	0.0050	1	06/17/2020 04:00
m,p-Xylene	---	0.010	1	06/17/2020 04:00
o-Xylene	---	0.0050	1	06/17/2020 04:00
Xylenes	---	0.0050	1	06/17/2020 04:00

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	97	62-126	06/17/2020 04:00

Analyst(s): IA

(Cont.)



Analytical Report

Client: Langan	WorkOrder: 2006697
Date Received: 06/12/2020 13:30	Extraction Method: SW5035
Date Prepared: 06/15/2020-06/18/2020	Analytical Method: SW8021B/8015Bm
Project: 750664801; 1666 Seventh Street	Unit: mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-7-3.0	2006697-016A	Soil	06/11/2020 10:12	GC19 06162035.D	200076

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	06/17/2020 05:00
MTBE	---	0.050	1	06/17/2020 05:00
Benzene	---	0.0050	1	06/17/2020 05:00
Toluene	---	0.0050	1	06/17/2020 05:00
Ethylbenzene	---	0.0050	1	06/17/2020 05:00
m,p-Xylene	---	0.010	1	06/17/2020 05:00
o-Xylene	---	0.0050	1	06/17/2020 05:00
Xylenes	---	0.0050	1	06/17/2020 05:00

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	90	62-126	06/17/2020 05:00

Analyst(s): IA

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-7-5.0	2006697-017A	Soil	06/11/2020 10:17	GC19 06162036.D	200076

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	06/17/2020 05:30
MTBE	---	0.050	1	06/17/2020 05:30
Benzene	---	0.0050	1	06/17/2020 05:30
Toluene	---	0.0050	1	06/17/2020 05:30
Ethylbenzene	---	0.0050	1	06/17/2020 05:30
m,p-Xylene	---	0.010	1	06/17/2020 05:30
o-Xylene	---	0.0050	1	06/17/2020 05:30
Xylenes	---	0.0050	1	06/17/2020 05:30

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	87	62-126	06/17/2020 05:30

Analyst(s): IA

(Cont.)



Analytical Report

Client: Langan	WorkOrder: 2006697
Date Received: 06/12/2020 13:30	Extraction Method: SW5035
Date Prepared: 06/15/2020-06/18/2020	Analytical Method: SW8021B/8015Bm
Project: 750664801; 1666 Seventh Street	Unit: mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-5-1.5	2006697-018A	Soil	06/11/2020 11:12	GC19 06162038.D	200076

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	06/17/2020 06:30
MTBE	---	0.050	1	06/17/2020 06:30
Benzene	---	0.0050	1	06/17/2020 06:30
Toluene	---	0.0050	1	06/17/2020 06:30
Ethylbenzene	---	0.0050	1	06/17/2020 06:30
m,p-Xylene	---	0.010	1	06/17/2020 06:30
o-Xylene	---	0.0050	1	06/17/2020 06:30
Xylenes	---	0.0050	1	06/17/2020 06:30

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	92	62-126	06/17/2020 06:30

Analyst(s): IA

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-5-3.0	2006697-019A	Soil	06/11/2020 11:15	GC19 06162039.D	200076

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	06/17/2020 07:00
MTBE	---	0.050	1	06/17/2020 07:00
Benzene	---	0.0050	1	06/17/2020 07:00
Toluene	---	0.0050	1	06/17/2020 07:00
Ethylbenzene	---	0.0050	1	06/17/2020 07:00
m,p-Xylene	---	0.010	1	06/17/2020 07:00
o-Xylene	---	0.0050	1	06/17/2020 07:00
Xylenes	---	0.0050	1	06/17/2020 07:00

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	91	62-126	06/17/2020 07:00

Analyst(s): IA



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B
Analytical Method: SW8015B
Unit: mg/Kg

Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-2-1.5	2006697-001A	Soil	06/11/2020 08:47	GC6A 06152066.D	200075

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	06/16/2020 06:06
TPH-Motor Oil (C18-C36)	6.7	5.0	1	06/16/2020 06:06

Surrogates	REC (%)	Limits	Date Analyzed
C9	89	70-130	06/16/2020 06:06

Analyst(s): JIS Analytical Comments: e7

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-2-3.0	2006697-002A	Soil	06/11/2020 08:50	GC6A 06152058.D	200075

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	1.5	1.0	1	06/16/2020 03:30
TPH-Motor Oil (C18-C36)	ND	5.0	1	06/16/2020 03:30

Surrogates	REC (%)	Limits	Date Analyzed
C9	89	70-130	06/16/2020 03:30

Analyst(s): JIS Analytical Comments: e2

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-2-7.0	2006697-004A	Soil	06/11/2020 08:56	GC39B 06152045.D	200075

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	06/16/2020 00:08
TPH-Motor Oil (C18-C36)	ND	5.0	1	06/16/2020 00:08

Surrogates	REC (%)	Limits	Date Analyzed
C9	99	70-130	06/16/2020 00:08

Analyst(s): JIS

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B
Analytical Method: SW8015B
Unit: mg/Kg

Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-3-1.5	2006697-005A	Soil	06/11/2020 09:24	GC39A 06152056.D	200075

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	21	10	10	06/16/2020 03:23
TPH-Motor Oil (C18-C36)	300	50	10	06/16/2020 03:23

Surrogates	REC (%)	Limits	Date Analyzed
C9	105	70-130	06/16/2020 03:23

Analyst(s): JIS **Analytical Comments:** e2,e7,e8

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-3-3.0	2006697-007A	Soil	06/11/2020 09:26	GC39B 06152049.D	200075

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	06/16/2020 01:26
TPH-Motor Oil (C18-C36)	5.2	5.0	1	06/16/2020 01:26

Surrogates	REC (%)	Limits	Date Analyzed
C9	99	70-130	06/16/2020 01:26

Analyst(s): JIS **Analytical Comments:** e7

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-3-7.0	2006697-008A	Soil	06/11/2020 09:33	GC31B 06162015.D	200075

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	06/16/2020 14:03
TPH-Motor Oil (C18-C36)	ND	5.0	1	06/16/2020 14:03

Surrogates	REC (%)	Limits	Date Analyzed
C9	107	70-130	06/16/2020 14:03

Analyst(s): JIS

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B
Analytical Method: SW8015B
Unit: mg/Kg

Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-4-1.5	2006697-009A	Soil	06/11/2020 09:45	GC39A 06152024.D	200075

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	1.6	1.0	1	06/15/2020 16:58
TPH-Motor Oil (C18-C36)	38	5.0	1	06/15/2020 16:58

Surrogates	REC (%)	Limits	Date Analyzed
C9	90	70-130	06/15/2020 16:58

Analyst(s): JIS **Analytical Comments:** e2,e7

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-4-3.0	2006697-010A	Soil	06/11/2020 09:50	GC39B 06162015.D	200075

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	1.2	1.0	1	06/16/2020 13:47
TPH-Motor Oil (C18-C36)	15	5.0	1	06/16/2020 13:47

Surrogates	REC (%)	Limits	Date Analyzed
C9	104	70-130	06/16/2020 13:47

Analyst(s): JIS **Analytical Comments:** e2,e7

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-4-5.0	2006697-011A	Soil	06/11/2020 09:55	GC39B 06162019.D	200075

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	06/16/2020 15:05
TPH-Motor Oil (C18-C36)	ND	5.0	1	06/16/2020 15:05

Surrogates	REC (%)	Limits	Date Analyzed
C9	105	70-130	06/16/2020 15:05

Analyst(s): JIS

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B
Analytical Method: SW8015B
Unit: mg/Kg

Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-8-1.5	2006697-012A	Soil	06/11/2020 10:33	GC39B 06162017.D	200075

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	1.5	1.0	1	06/16/2020 14:26
TPH-Motor Oil (C18-C36)	21	5.0	1	06/16/2020 14:26

Surrogates	REC (%)	Limits	Date Analyzed
C9	105	70-130	06/16/2020 14:26

Analyst(s): JIS

Analytical Comments: e2,e7

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-8-3.0	2006697-013A	Soil	06/11/2020 10:35	GC39A 06162018.D	200075

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	06/16/2020 14:26
TPH-Motor Oil (C18-C36)	ND	5.0	1	06/16/2020 14:26

Surrogates	REC (%)	Limits	Date Analyzed
C9	92	70-130	06/16/2020 14:26

Analyst(s): JIS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-7-1.5	2006697-015A	Soil	06/11/2020 10:09	GC39A 06162014.D	200075

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	06/16/2020 13:08
TPH-Motor Oil (C18-C36)	ND	5.0	1	06/16/2020 13:08

Surrogates	REC (%)	Limits	Date Analyzed
C9	95	70-130	06/16/2020 13:08

Analyst(s): JIS

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B
Analytical Method: SW8015B
Unit: mg/Kg

Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-7-3.0	2006697-016A	Soil	06/11/2020 10:12	GC39A 06162016.D	200075

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	06/16/2020 13:47
TPH-Motor Oil (C18-C36)	ND	5.0	1	06/16/2020 13:47

Surrogates	REC (%)	Limits	Date Analyzed
C9	90	70-130	06/16/2020 13:47

Analyst(s): JIS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-7-5.0	2006697-017A	Soil	06/11/2020 10:17	GC39B 06162013.D	200075

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	06/16/2020 13:08
TPH-Motor Oil (C18-C36)	ND	5.0	1	06/16/2020 13:08

Surrogates	REC (%)	Limits	Date Analyzed
C9	104	70-130	06/16/2020 13:08

Analyst(s): JIS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-5-1.5	2006697-018A	Soil	06/11/2020 11:12	GC39A 06162020.D	200075

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	06/16/2020 15:05
TPH-Motor Oil (C18-C36)	ND	5.0	1	06/16/2020 15:05

Surrogates	REC (%)	Limits	Date Analyzed
C9	95	70-130	06/16/2020 15:05

Analyst(s): JIS

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/15/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW3550B
Analytical Method: SW8015B
Unit: mg/Kg

Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-5-3.0	2006697-019A	Soil	06/11/2020 11:15	GC39B 06152047.D	200075

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	06/16/2020 00:47
TPH-Motor Oil (C18-C36)	ND	5.0	1	06/16/2020 00:47

Surrogates	REC (%)	Limits	Date Analyzed
C9	99	70-130	06/16/2020 00:47

Analyst(s): JIS



Quality Control Report

Client: Langan	WorkOrder: 2006697
Date Prepared: 06/16/2020	BatchID: 200152
Date Analyzed: 06/16/2020 - 06/17/2020	Extraction Method: SW3550B/3640Am/3630Cm
Instrument: GC23	Analytical Method: SW8081A/8082
Matrix: Soil	Unit: mg/kg
Project: 750664801; 1666 Seventh Street	Sample ID: MB/LCS/LCSD-200152

QC Summary Report for SW8081A/8082

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Aldrin	ND	0.0000360	0.000100	-	-	-
a-BHC	ND	0.0000250	0.000100	-	-	-
b-BHC	ND	0.000250	0.000300	-	-	-
d-BHC	ND	0.000130	0.000200	-	-	-
g-BHC	ND	0.0000660	0.000100	-	-	-
Chlordane (Technical)	ND	0.000430	0.00250	-	-	-
a-Chlordane	ND	0.0000950	0.000100	-	-	-
g-Chlordane	ND	0.0000470	0.000100	-	-	-
p,p-DDD	ND	0.0000430	0.000100	-	-	-
p,p-DDE	ND	0.0000940	0.000100	-	-	-
p,p-DDT	ND	0.0000920	0.000100	-	-	-
Dieldrin	ND	0.0000610	0.000100	-	-	-
Endosulfan I	ND	0.0000480	0.000100	-	-	-
Endosulfan II	ND	0.0000760	0.000100	-	-	-
Endosulfan sulfate	ND	0.0000780	0.000100	-	-	-
Endrin	ND	0.0000350	0.000100	-	-	-
Endrin aldehyde	ND	0.0000670	0.000100	-	-	-
Endrin ketone	ND	0.0000840	0.000100	-	-	-
Heptachlor	ND	0.0000400	0.000100	-	-	-
Heptachlor epoxide	ND	0.0000540	0.000100	-	-	-
Hexachlorobenzene	ND	0.000110	0.00100	-	-	-
Hexachlorocyclopentadiene	ND	0.000340	0.00200	-	-	-
Methoxychlor	ND	0.000130	0.000200	-	-	-
Toxaphene	ND	0.00340	0.00500	-	-	-
Aroclor1016	ND	0.00200	0.00500	-	-	-
Aroclor1221	ND	0.00220	0.00500	-	-	-
Aroclor1232	ND	0.00220	0.00500	-	-	-
Aroclor1242	ND	0.00220	0.00500	-	-	-
Aroclor1248	ND	0.00220	0.00500	-	-	-
Aroclor1254	ND	0.00220	0.00500	-	-	-
Aroclor1260	ND	0.00220	0.00500	-	-	-
Surrogate Recovery						
Decachlorobiphenyl	0.00520			0.005	104	28-170

(Cont.)



Quality Control Report

Client: Langan
Date Prepared: 06/16/2020
Date Analyzed: 06/16/2020 - 06/17/2020
Instrument: GC23
Matrix: Soil
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
BatchID: 200152
Extraction Method: SW3550B/3640Am/3630Cm
Analytical Method: SW8081A/8082
Unit: mg/kg
Sample ID: MB/LCS/LCSD-200152

QC Summary Report for SW8081A/8082

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Aldrin	0.00393	0.00401	0.0050	79	80	31-155	2.04	20
a-BHC	0.00450	0.00455	0.0050	90	91	32-160	1.05	20
b-BHC	0.00401	0.00419	0.0050	80	84	44-149	4.40	20
d-BHC	0.00457	0.00470	0.0050	91	94	37-157	2.71	20
g-BHC	0.00440	0.00455	0.0050	88	91	43-154	3.27	20
a-Chlordane	0.00363	0.00373	0.0050	73	75	39-150	2.54	20
g-Chlordane	0.00409	0.00419	0.0050	82	84	39-151	2.32	20
p,p-DDD	0.00426	0.00440	0.0050	85	88	30-158	3.34	20
p,p-DDE	0.00392	0.00400	0.0050	78	80	47-149	2.09	20
p,p-DDT	0.00422	0.00438	0.0050	84	88	56-166	3.80	20
Dieldrin	0.00444	0.00456	0.0050	89	91	50-163	2.81	20
Endosulfan I	0.00393	0.00402	0.0050	79	80	45-159	2.21	20
Endosulfan II	0.00393	0.00403	0.0050	79	81	41-155	2.53	20
Endosulfan sulfate	0.00404	0.00426	0.0050	81	85	45-156	5.33	20
Endrin	0.00424	0.00435	0.0050	85	87	54-154	2.64	20
Endrin aldehyde	0.00376	0.00390	0.0050	75	78	27-159	3.84	20
Endrin ketone	0.00374	0.00390	0.0050	75	78	40-147	4.34	20
Heptachlor	0.00438	0.00448	0.0050	88	90	52-165	2.37	20
Heptachlor epoxide	0.00384	0.00395	0.0050	77	79	46-145	2.67	20
Hexachlorobenzene	0.00369	0.00377	0.0050	74	75	22-156	2.01	20
Hexachlorocyclopentadiene	0.00295	0.00289	0.0050	59	58	43-173	2.16	20
Methoxychlor	0.00436	0.00458	0.0050	87	92	49-150	4.77	20
Aroclor1016	0.0112	0.0108	0.015	75	72	49-120	3.51	20
Aroclor1260	0.0121	0.0117	0.015	81	78	48-160	3.83	20
Surrogate Recovery								
Decachlorobiphenyl	0.00534	0.00535	0.0050	107	107	28-170	0.171	20

(Cont.)



Quality Control Report

Client:	Langan	WorkOrder:	2006697
Date Prepared:	06/17/2020	BatchID:	200259
Date Analyzed:	06/17/2020	Extraction Method:	SW3550B/3640Am/3630Cm
Instrument:	GC23	Analytical Method:	SW8081A/8082
Matrix:	Soil	Unit:	mg/kg
Project:	750664801; 1666 Seventh Street	Sample ID:	MB/LCS/LCSD-200259

QC Summary Report for SW8081A/8082

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Aldrin	ND	0.0000360	0.000100	-	-	-
a-BHC	ND	0.0000250	0.000100	-	-	-
b-BHC	ND	0.000250	0.000300	-	-	-
d-BHC	ND	0.000130	0.000200	-	-	-
g-BHC	ND	0.0000660	0.000100	-	-	-
Chlordane (Technical)	ND	0.000430	0.00250	-	-	-
a-Chlordane	ND	0.0000950	0.000100	-	-	-
g-Chlordane	ND	0.0000470	0.000100	-	-	-
p,p-DDD	ND	0.0000430	0.000100	-	-	-
p,p-DDE	ND	0.0000940	0.000100	-	-	-
p,p-DDT	ND	0.0000920	0.000100	-	-	-
Dieldrin	ND	0.0000610	0.000100	-	-	-
Endosulfan I	ND	0.0000480	0.000100	-	-	-
Endosulfan II	ND	0.0000760	0.000100	-	-	-
Endosulfan sulfate	ND	0.0000780	0.000100	-	-	-
Endrin	ND	0.0000350	0.000100	-	-	-
Endrin aldehyde	ND	0.0000670	0.000100	-	-	-
Endrin ketone	ND	0.0000840	0.000100	-	-	-
Heptachlor	ND	0.0000400	0.000100	-	-	-
Heptachlor epoxide	ND	0.0000540	0.000100	-	-	-
Hexachlorobenzene	ND	0.000110	0.00100	-	-	-
Hexachlorocyclopentadiene	ND	0.000340	0.00200	-	-	-
Methoxychlor	ND	0.000130	0.000200	-	-	-
Toxaphene	ND	0.00340	0.00500	-	-	-
Aroclor1016	ND	0.00200	0.00500	-	-	-
Aroclor1221	ND	0.00220	0.00500	-	-	-
Aroclor1232	ND	0.00220	0.00500	-	-	-
Aroclor1242	ND	0.00220	0.00500	-	-	-
Aroclor1248	ND	0.00220	0.00500	-	-	-
Aroclor1254	ND	0.00220	0.00500	-	-	-
Aroclor1260	ND	0.00220	0.00500	-	-	-
Surrogate Recovery						
Decachlorobiphenyl	0.00462			0.005	92	28-170

(Cont.)



Quality Control Report

Client:	Langan	WorkOrder:	2006697
Date Prepared:	06/17/2020	BatchID:	200259
Date Analyzed:	06/17/2020	Extraction Method:	SW3550B/3640Am/3630Cm
Instrument:	GC23	Analytical Method:	SW8081A/8082
Matrix:	Soil	Unit:	mg/kg
Project:	750664801; 1666 Seventh Street	Sample ID:	MB/LCS/LCSD-200259

QC Summary Report for SW8081A/8082

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Aldrin	0.00545	0.00531	0.0050	109	106	31-155	2.72	20
a-BHC	0.00638	0.00617	0.0050	128	123	32-160	3.33	20
b-BHC	0.00551	0.00536	0.0050	110	107	44-149	2.84	20
d-BHC	0.00626	0.00604	0.0050	125	121	37-157	3.60	20
g-BHC	0.00611	0.00595	0.0050	122	119	43-154	2.64	20
a-Chlordane	0.00500	0.00490	0.0050	100	98	39-150	2.07	20
g-Chlordane	0.00559	0.00546	0.0050	112	109	39-151	2.32	20
p,p-DDD	0.00559	0.00548	0.0050	112	110	30-158	2.09	20
p,p-DDE	0.00531	0.00520	0.0050	106	104	47-149	2.17	20
p,p-DDT	0.00532	0.00517	0.0050	106	103	56-166	2.90	20
Dieldrin	0.00559	0.00549	0.0050	112	110	50-163	1.79	20
Endosulfan I	0.00497	0.00488	0.0050	99	98	45-159	1.93	20
Endosulfan II	0.00476	0.00468	0.0050	95	94	41-155	1.76	20
Endosulfan sulfate	0.00487	0.00480	0.0050	97	96	45-156	1.58	20
Endrin	0.00530	0.00515	0.0050	106	103	54-154	2.90	20
Endrin aldehyde	0.00494	0.00488	0.0050	99	98	27-159	1.36	20
Endrin ketone	0.00460	0.00453	0.0050	92	91	40-147	1.60	20
Heptachlor	0.00594	0.00583	0.0050	119	117	52-165	1.83	20
Heptachlor epoxide	0.00484	0.00474	0.0050	97	95	46-145	2.14	20
Hexachlorobenzene	0.00515	0.00499	0.0050	103	100	22-156	3.25	20
Hexachlorocyclopentadiene	0.00429	0.00415	0.0050	86	83	43-173	3.40	20
Methoxychlor	0.00515	0.00503	0.0050	103	101	49-150	2.25	20
Aroclor1016	0.0105	0.0108	0.015	70	72	49-120	3.08	20
Aroclor1260	0.00912	0.0100	0.015	61	67	48-160	9.17	20
Surrogate Recovery								
Decachlorobiphenyl	0.00511	0.00502	0.0050	102	100	28-170	1.84	20



Quality Control Report

Client: Langan
Date Prepared: 06/16/2020
Date Analyzed: 06/16/2020 - 06/17/2020
Instrument: GC25
Matrix: Soil
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
BatchID: 200142
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/kg
Sample ID: MB/LCS/LCSD-200142

QC Summary Report for SW8270C (ON/P Pesticides)

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Alachlor	ND	0.0420	0.100	-	-	-
Atrazine	ND	0.0230	0.100	-	-	-
Azinphos methyl (Guthion)	ND	0.0730	0.100	-	-	-
Bolstar (Sulprofos)	ND	0.0530	0.100	-	-	-
Chloropyrifos	ND	0.0550	0.100	-	-	-
Coumaphos	ND	0.0700	0.100	-	-	-
Demeton	ND	0.0430	0.100	-	-	-
Diazinon	ND	0.0420	0.100	-	-	-
Dichlorvos (DDVP)	ND	0.0360	0.100	-	-	-
Dimethoate	ND	0.0360	0.100	-	-	-
Disulfoton (Di-Syston)	ND	0.0510	0.100	-	-	-
EPN	ND	0.0560	0.100	-	-	-
EPTC	ND	0.0260	0.100	-	-	-
Ethion	ND	0.0360	0.100	-	-	-
Ethoprop	ND	0.0350	0.100	-	-	-
Ethyl parathion	ND	0.0250	0.100	-	-	-
Fensulfothion	ND	0.0540	0.100	-	-	-
Fenthion	ND	0.0440	0.100	-	-	-
Fonofos	ND	0.0380	0.100	-	-	-
Malathion	ND	0.0460	0.100	-	-	-
Mevinphos (Phosdrin)	ND	0.0780	0.100	-	-	-
Molinate	ND	0.0340	0.100	-	-	-
Methyl parathion	ND	0.0400	0.100	-	-	-
Phorate (Thimet)	ND	0.0440	0.100	-	-	-
Prometon	ND	0.0370	0.100	-	-	-
Ronnel	ND	0.0460	0.100	-	-	-
Simazine	ND	0.0660	0.100	-	-	-
Stirofos (Tetrachlorvinphos)	ND	0.0440	0.100	-	-	-
Terbacil	ND	0.0330	0.100	-	-	-
Terbufos (Terbuphos)	ND	0.0520	0.100	-	-	-
Thiobencarb	ND	0.0330	0.100	-	-	-
Tokuthion (Prothiofos)	ND	0.0410	0.100	-	-	-
Trichloronate (Agritox)	ND	0.0570	0.100	-	-	-

Surrogate Recovery

Triphenyl phosphate	0.164			0.2	82	60-140
---------------------	-------	--	--	-----	----	--------

(Cont.)



Quality Control Report

Client: Langan
Date Prepared: 06/16/2020
Date Analyzed: 06/16/2020 - 06/17/2020
Instrument: GC25
Matrix: Soil
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
BatchID: 200142
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/kg
Sample ID: MB/LCS/LCSD-200142

QC Summary Report for SW8270C (ON/P Pesticides)

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Alachlor	0.526	0.545	0.60	88	91	50-160	3.68	20
Atrazine	0.501	0.516	0.60	83	86	50-160	3.05	20
Azinphos methyl (Guthion)	0.535	0.562	0.60	89	94	60-140	4.82	20
Bolstar (Sulprofos)	0.520	0.544	0.60	87	91	60-140	4.48	20
Chloropyrifos	0.541	0.555	0.60	90	92	60-140	2.51	20
Coumaphos	0.538	0.575	0.60	90	96	60-140	6.77	20
Demeton	0.574	0.602	0.60	96	100	60-140	4.72	20
Diazinon	0.538	0.555	0.60	90	92	60-140	3.16	20
Dichlorvos (DDVP)	0.471	0.508	0.60	79	85	60-140	7.50	20
Dimethoate	0.583	0.562	0.60	97	94	60-140	3.60	20
Disulfoton (Di-Syston)	0.513	0.534	0.60	85	89	50-160	3.95	20
EPN	0.530	0.544	0.60	88	91	60-140	2.61	20
EPTC	0.490	0.506	0.60	82	84	60-140	3.19	20
Ethion	0.556	0.579	0.60	93	97	60-140	3.99	20
Ethoprop	0.545	0.589	0.60	91	98	60-140	7.78	20
Ethyl parathion	0.501	0.505	0.60	84	84	60-140	0.839	20
Fensulfothion	0.663	0.698	0.60	111	116	60-140	5.01	20
Fenthion	0.532	0.559	0.60	89	93	50-160	4.85	20
Fonofos	0.482	0.502	0.60	80	84	60-140	3.97	20
Malathion	0.559	0.593	0.60	93	99	60-140	5.89	20
Mevinphos (Phosdrin)	0.585	0.604	0.60	98	101	60-140	3.08	20
Molinate	0.485	0.516	0.60	81	86	60-140	6.25	20
Methyl parathion	0.520	0.536	0.60	87	89	50-160	3.13	20
Phorate (Thimet)	0.520	0.540	0.60	87	90	60-140	3.75	20
Prometon	0.526	0.554	0.60	88	92	60-140	5.05	20
Ronnel	0.486	0.513	0.60	81	86	60-140	5.34	20
Simazine	0.505	0.524	0.60	84	87	60-140	3.70	20
Stirofos (Tetrachlorvinphos)	0.549	0.555	0.60	92	93	60-140	1.14	20
Terbacil	0.568	0.582	0.60	95	97	60-140	2.55	20
Terbufos (Terbuphos)	0.502	0.510	0.60	84	85	60-140	1.44	20
Thiobencarb	0.498	0.523	0.60	83	87	60-140	4.91	20
Tokuthion (Prothiofos)	0.551	0.570	0.60	92	95	60-140	3.36	20
Trichloronate (Agritox)	0.494	0.524	0.60	82	87	60-140	5.96	20
Surrogate Recovery								
Triphenyl phosphate	0.172	0.180	0.20	86	90	60-140	4.73	20

(Cont.)



Quality Control Report

Client: Langan	WorkOrder: 2006697
Date Prepared: 06/17/2020	BatchID: 200229
Date Analyzed: 06/17/2020	Extraction Method: SW3550B
Instrument: GC25	Analytical Method: SW8270C
Matrix: Soil	Unit: mg/kg
Project: 750664801; 1666 Seventh Street	Sample ID: MB/LCS/LCSD-200229 2006697-019AMS/MSD

QC Summary Report for SW8270C (ON/P Pesticides)

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Alachlor	ND	0.0420	0.100	-	-	-
Atrazine	ND	0.0230	0.100	-	-	-
Azinphos methyl (Guthion)	ND	0.0730	0.100	-	-	-
Bolstar (Sulprofos)	ND	0.0530	0.100	-	-	-
Chloropyrifos	ND	0.0550	0.100	-	-	-
Coumaphos	ND	0.0700	0.100	-	-	-
Demeton	ND	0.0430	0.100	-	-	-
Diazinon	ND	0.0420	0.100	-	-	-
Dichlorvos (DDVP)	ND	0.0360	0.100	-	-	-
Dimethoate	ND	0.0360	0.100	-	-	-
Disulfoton (Di-Syston)	ND	0.0510	0.100	-	-	-
EPN	ND	0.0560	0.100	-	-	-
EPTC	ND	0.0260	0.100	-	-	-
Ethion	ND	0.0360	0.100	-	-	-
Ethoprop	ND	0.0350	0.100	-	-	-
Ethyl parathion	ND	0.0250	0.100	-	-	-
Fensulfothion	ND	0.0540	0.100	-	-	-
Fenthion	ND	0.0440	0.100	-	-	-
Fonofos	ND	0.0380	0.100	-	-	-
Malathion	ND	0.0460	0.100	-	-	-
Mevinphos (Phosdrin)	ND	0.0780	0.100	-	-	-
Molinate	ND	0.0340	0.100	-	-	-
Methyl parathion	ND	0.0400	0.100	-	-	-
Phorate (Thimet)	ND	0.0440	0.100	-	-	-
Prometon	ND	0.0370	0.100	-	-	-
Ronnel	ND	0.0460	0.100	-	-	-
Simazine	ND	0.0660	0.100	-	-	-
Stirofos (Tetrachlorvinphos)	ND	0.0440	0.100	-	-	-
Terbacil	ND	0.0330	0.100	-	-	-
Terbufos (Terbuphos)	ND	0.0520	0.100	-	-	-
Thiobencarb	ND	0.0330	0.100	-	-	-
Tokuthion (Prothiofos)	ND	0.0410	0.100	-	-	-
Trichloronate (Agritox)	ND	0.0570	0.100	-	-	-

Surrogate Recovery

1-Bromo-2-Nitrobenzene	0.159	0.2	79	60-140
------------------------	-------	-----	----	--------

(Cont.)



Quality Control Report

Client:	Langan	WorkOrder:	2006697
Date Prepared:	06/17/2020	BatchID:	200229
Date Analyzed:	06/17/2020	Extraction Method:	SW3550B
Instrument:	GC25	Analytical Method:	SW8270C
Matrix:	Soil	Unit:	mg/kg
Project:	750664801; 1666 Seventh Street	Sample ID:	MB/LCS/LCSD-200229 2006697-019AMS/MSD

QC Summary Report for SW8270C (ON/P Pesticides)

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Alachlor	0.575	0.562	0.60	96	94	50-160	2.42	20
Atrazine	0.564	0.520	0.60	94	87	50-160	7.98	20
Azinphos methyl (Guthion)	0.544	0.546	0.60	91	91	60-140	0.394	20
Bolstar (Sulprofos)	0.562	0.549	0.60	94	92	60-140	2.36	20
Chloropyrifos	0.590	0.575	0.60	98	96	60-140	2.53	20
Coumaphos	0.540	0.528	0.60	90	88	60-140	2.26	20
Demeton	0.624	0.596	0.60	104	99	60-140	4.60	20
Diazinon	0.564	0.532	0.60	94	89	60-140	5.91	20
Dichlorvos (DDVP)	0.507	0.482	0.60	85	80	60-140	5.03	20
Dimethoate	0.559	0.546	0.60	93	91	60-140	2.37	20
Disulfoton (Di-Syston)	0.578	0.557	0.60	96	93	50-160	3.79	20
EPN	0.510	0.520	0.60	85	87	60-140	2.07	20
EPTC	0.541	0.510	0.60	90	85	60-140	6.05	20
Ethion	0.599	0.563	0.60	100	94	60-140	6.17	20
Ethoprop	0.585	0.588	0.60	98	98	60-140	0.556	20
Ethyl parathion	0.514	0.490	0.60	86	82	60-140	4.75	20
Fensulfothion	0.610	0.657	0.60	102	110	60-140	7.55	20
Fenthion	0.590	0.585	0.60	98	98	50-160	0.917	20
Fonofos	0.530	0.501	0.60	88	84	60-140	5.60	20
Malathion	0.626	0.596	0.60	104	99	60-140	4.93	20
Mevinphos (Phosdrin)	0.583	0.555	0.60	97	93	60-140	4.92	20
Molinate	0.556	0.530	0.60	93	88	60-140	4.81	20
Methyl parathion	0.497	0.516	0.60	83	86	50-160	3.73	20
Phorate (Thimet)	0.566	0.534	0.60	94	89	60-140	5.74	20
Prometon	0.592	0.560	0.60	99	93	60-140	5.55	20
Ronnel	0.567	0.526	0.60	95	88	60-140	7.67	20
Simazine	0.528	0.520	0.60	88	87	60-140	1.52	20
Stirofos (Tetrachlorvinphos)	0.549	0.549	0.60	91	91	60-140	0.00984	20
Terbacil	0.577	0.584	0.60	96	97	60-140	1.12	20
Terbufos (Terbuphos)	0.580	0.535	0.60	97	89	60-140	8.23	20
Thiobencarb	0.557	0.527	0.60	93	88	60-140	5.46	20
Tokuthion (Prothiofos)	0.585	0.555	0.60	97	93	60-140	5.16	20
Trichloronate (Agritox)	0.559	0.509	0.60	93	85	60-140	9.41	20
Surrogate Recovery								
1-Bromo-2-Nitrobenzene	0.169	0.168	0.20	84	84	60-140	0.468	20

(Cont.)



Quality Control Report

Client:	Langan	WorkOrder:	2006697
Date Prepared:	06/17/2020	BatchID:	200229
Date Analyzed:	06/17/2020	Extraction Method:	SW3550B
Instrument:	GC25	Analytical Method:	SW8270C
Matrix:	Soil	Unit:	mg/kg
Project:	750664801; 1666 Seventh Street	Sample ID:	MB/LCS/LCSD-200229 2006697-019AMS/MSD

QC Summary Report for SW8270C (ON/P Pesticides)

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Alachlor	1	0.536	0.539	0.60	ND	89	90	60-140	0.593	20
Atrazine	1	0.505	0.510	0.60	ND	84	85	60-140	0.953	20
Azinphos methyl (Guthion)	1	0.533	0.540	0.60	ND	89	90	60-140	1.41	20
Bolstar (Sulprofos)	1	0.545	0.562	0.60	ND	91	94	60-140	3.11	20
Chloropyrifos	1	0.573	0.541	0.60	ND	96	90	60-140	5.76	20
Coumaphos	1	0.521	0.574	0.60	ND	87	96	60-140	9.67	20
Demeton	1	0.578	0.595	0.60	ND	96	99	60-140	2.96	20
Diazinon	1	0.534	0.525	0.60	ND	89	88	60-140	1.65	20
Dichlorvos (DDVP)	1	0.468	0.471	0.60	ND	78	79	60-140	0.585	20
Dimethoate	1	0.532	0.603	0.60	ND	89	101	60-140	12.6	20
Disulfoton (Di-Syston)	1	0.558	0.540	0.60	ND	93	90	60-140	3.26	20
EPN	1	0.520	0.531	0.60	ND	87	89	60-140	2.22	20
EPTC	1	0.512	0.497	0.60	ND	85	83	60-140	2.99	20
Ethion	1	0.581	0.561	0.60	ND	97	94	60-140	3.49	20
Ethoprop	1	0.581	0.572	0.60	ND	97	95	60-140	1.55	20
Ethyl parathion	1	0.498	0.509	0.60	ND	83	85	60-140	2.23	20
Fensulfothion	1	0.629	0.689	0.60	ND	105	115	60-140	9.12	20
Fenthion	1	0.575	0.571	0.60	ND	96	95	60-140	0.800	20
Fonofos	1	0.503	0.512	0.60	ND	84	85	60-140	1.90	20
Malathion	1	0.581	0.570	0.60	ND	97	95	60-140	1.93	20
Mevinphos (Phosdrin)	1	0.602	0.613	0.60	ND	100	102	60-140	1.75	20
Molinate	1	0.532	0.524	0.60	ND	89	87	60-140	1.41	20
Methyl parathion	1	0.521	0.505	0.60	ND	87	84	60-140	3.02	20
Phorate (Thimet)	1	0.559	0.548	0.60	ND	93	91	60-140	1.88	20
Prometon	1	0.576	0.551	0.60	ND	96	92	60-140	4.49	20
Ronnel	1	0.522	0.533	0.60	ND	87	89	60-140	1.99	20
Simazine	1	0.512	0.518	0.60	ND	85	86	60-140	1.16	20
Stirofos (Tetrachlorvinphos)	1	0.526	0.517	0.60	ND	88	86	60-140	1.71	20
Terbacil	1	0.583	0.578	0.60	ND	97	96	60-140	0.943	20
Terbufos (Terbuphos)	1	0.537	0.525	0.60	ND	89	88	60-140	2.21	20
Thiobencarb	1	0.522	0.524	0.60	ND	87	87	60-140	0.458	20
Tokuthion (Prothiofos)	1	0.557	0.550	0.60	ND	93	92	60-140	1.28	20
Trichloronate (Agritox)	1	0.534	0.538	0.60	ND	89	90	60-140	0.715	20
Surrogate Recovery										
1-Bromo-2-Nitrobenzene	1	0.170	0.175	0.20		85	87	60-140	2.68	20



Quality Control Report

Client:	Langan	WorkOrder:	2006697
Date Prepared:	06/16/2020	BatchID:	200134
Date Analyzed:	06/17/2020	Extraction Method:	SW8151A
Instrument:	GC15A	Analytical Method:	SW8151A
Matrix:	Soil	Unit:	mg/kg
Project:	750664801; 1666 Seventh Street	Sample ID:	MB/LCS/LCSD-200134

QC Summary Report for SW8151A

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Acifluorfen	ND	0.0260	0.0500	-	-	-
Bentazon	ND	0.0110	0.0500	-	-	-
Chloramben	ND	0.0200	0.0500	-	-	-
2,4-D (Dichlorophenoxyacetic acid)	ND	0.0110	0.0500	-	-	-
2,4-DB	ND	0.0130	0.0500	-	-	-
Dalapon	ND	0.0150	0.100	-	-	-
DCPA (mono & diacid)	ND	0.0100	0.0500	-	-	-
Dicamba	ND	0.0110	0.0500	-	-	-
3,5-Dichlorobenzoic Acid	ND	0.00800	0.0500	-	-	-
Dichloroprop	ND	0.0110	0.0500	-	-	-
Dinoseb (DNBP)	ND	0.0130	0.0500	-	-	-
MCPA	ND	0.910	5.00	-	-	-
MCPP	ND	0.850	5.00	-	-	-
4-Nitrophenol	ND	0.0240	0.0500	-	-	-
Pentachlorophenol (PCP)	ND	0.0110	0.0500	-	-	-
Picloram	ND	0.00940	0.0500	-	-	-
2,4,5-T (Trichlorophenoxy acetic acid)	ND	0.00970	0.0500	-	-	-
2,4,5-TP (Silvex)	ND	0.00690	0.0500	-	-	-
Surrogate Recovery						
DCAA	0.0992			0.1	99	63-129

(Cont.)



Quality Control Report

Client: Langan	WorkOrder: 2006697
Date Prepared: 06/16/2020	BatchID: 200134
Date Analyzed: 06/17/2020	Extraction Method: SW8151A
Instrument: GC15A	Analytical Method: SW8151A
Matrix: Soil	Unit: mg/kg
Project: 750664801; 1666 Seventh Street	Sample ID: MB/LCS/LCSD-200134

QC Summary Report for SW8151A

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Acifluorfen	0.0805	0.0862	0.10	81	86	60-140	6.77	30
Bentazon	0.0872	0.0885	0.10	87	88	60-140	1.47	30
Chloramben	0.0849	0.0862	0.10	85	86	60-140	1.50	30
2,4-D (Dichlorophenoxyacetic acid)	0.0921	0.0916	0.10	92	92	67-147	0.566	30
2,4-DB	0.0928	0.0963	0.10	93	96	61-152	3.72	30
Dalapon	0.101	0.0915	0.10	101	92	54-153	10.1	30
DCPA (mono & diacid)	0.0792	0.0801	0.10	79	80	60-140	1.03	30
Dicamba	0.0990	0.0979	0.10	99	98	60-146	1.17	30
3,5-Dichlorobenzoic Acid	0.0960	0.0948	0.10	96	95	60-140	1.29	30
Dichloroprop	0.0879	0.0874	0.10	88	87	60-140	0.533	30
Dinoseb (DNBP)	0.0879	0.0878	0.10	88	88	60-140	0.0377	30
MCPA	11.3	11.6	10	113	116	60-140	2.51	30
MCPP	8.27	8.29	10	83	83	60-140	0.244	30
4-Nitrophenol	0.0829	0.0818	0.10	83	82	60-140	1.40	30
Pentachlorophenol (PCP)	0.0962	0.0954	0.10	96	95	60-140	0.861	30
Picloram	0.0806	0.0843	0.10	81	84	60-140	4.48	30
2,4,5-T (Trichlorophenoxy acetic acid)	0.0866	0.0867	0.10	87	87	60-140	0.00842	30
2,4,5-TP (Silvex)	0.0927	0.0923	0.10	93	92	63-145	0.410	30
Surrogate Recovery								
DCAA	0.107	0.109	0.10	107	109	63-129	1.37	30

(Cont.)



Quality Control Report

Client: Langan
Date Prepared: 06/17/2020
Date Analyzed: 06/17/2020 - 06/18/2020
Instrument: GC15A
Matrix: Soil
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
BatchID: 200227
Extraction Method: SW8151A
Analytical Method: SW8151A
Unit: mg/kg
Sample ID: MB/LCS/LCSD-200227
 2006697-019AMS/MSD

QC Summary Report for SW8151A

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Acifluorfen	ND	0.0260	0.0500	-	-	-
Bentazon	ND	0.0110	0.0500	-	-	-
Chloramben	ND	0.0200	0.0500	-	-	-
2,4-D (Dichlorophenoxyacetic acid)	ND	0.0110	0.0500	-	-	-
2,4-DB	ND	0.0130	0.0500	-	-	-
Dalapon	ND	0.0150	0.100	-	-	-
DCPA (mono & diacid)	ND	0.0100	0.0500	-	-	-
Dicamba	ND	0.0110	0.0500	-	-	-
3,5-Dichlorobenzoic Acid	ND	0.00800	0.0500	-	-	-
Dichloroprop	ND	0.0110	0.0500	-	-	-
Dinoseb (DNBP)	ND	0.0130	0.0500	-	-	-
MCPA	ND	0.910	5.00	-	-	-
MCPP	ND	0.850	5.00	-	-	-
4-Nitrophenol	ND	0.0240	0.0500	-	-	-
Pentachlorophenol (PCP)	ND	0.0110	0.0500	-	-	-
Picloram	ND	0.00940	0.0500	-	-	-
2,4,5-T (Trichlorophenoxy acetic acid)	ND	0.00970	0.0500	-	-	-
2,4,5-TP (Silvex)	ND	0.00690	0.0500	-	-	-
Surrogate Recovery						
DCAA	0.102			0.1	102	63-129

(Cont.)



Quality Control Report

Client: Langan
Date Prepared: 06/17/2020
Date Analyzed: 06/17/2020 - 06/18/2020
Instrument: GC15A
Matrix: Soil
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
BatchID: 200227
Extraction Method: SW8151A
Analytical Method: SW8151A
Unit: mg/kg
Sample ID: MB/LCS/LCSD-200227
 2006697-019AMS/MSD

QC Summary Report for SW8151A

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Acifluorfen	0.0701	0.0705	0.10	70	71	60-140	0.562	30
Bentazon	0.0880	0.0897	0.10	88	90	60-140	1.96	30
Chloramben	0.0729	0.0724	0.10	73	72	60-140	0.698	30
2,4-D (Dichlorophenoxyacetic acid)	0.0967	0.0982	0.10	97	98	67-147	1.56	30
2,4-DB	0.0933	0.0939	0.10	93	94	61-152	0.600	30
Dalapon	0.106	0.109	0.10	106	109	54-153	2.79	30
DCPA (mono & diacid)	0.0790	0.0814	0.10	79	81	60-140	3.00	30
Dicamba	0.101	0.102	0.10	101	102	60-146	0.490	30
3,5-Dichlorobenzoic Acid	0.0978	0.0996	0.10	98	100	60-140	1.89	30
Dichloroprop	0.0892	0.0911	0.10	89	91	60-140	2.13	30
Dinoseb (DNBP)	0.0950	0.0862	0.10	95	86	60-140	9.71	30
MCPA	7.85	7.73	10	79	77	60-140	1.60	30
MCPP	8.73	8.40	10	87	84	60-140	3.79	30
4-Nitrophenol	0.102	0.104	0.10	102	104	60-140	1.70	30
Pentachlorophenol (PCP)	0.0966	0.0978	0.10	97	98	60-140	1.23	30
Picloram	0.0764	0.0759	0.10	76	76	60-140	0.709	30
2,4,5-T (Trichlorophenoxy acetic acid)	0.0855	0.0870	0.10	86	87	60-140	1.71	30
2,4,5-TP (Silvex)	0.0943	0.0960	0.10	94	96	63-145	1.86	30
Surrogate Recovery								
DCAA	0.104	0.106	0.10	104	106	63-129	2.05	30

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Acifluorfen	1	0.0704	0.0739	0.10	ND	70	74	60-140	4.83	30
Bentazon	1	0.0846	0.0893	0.10	ND	85	89	60-140	5.36	30
Chloramben	1	0.0742	0.0741	0.10	ND	74	74	60-140	0.148	30
2,4-D (Dichlorophenoxyacetic acid)	1	0.0957	0.100	0.10	ND	96	100	68-142	4.89	30
2,4-DB	1	0.0842	0.0882	0.10	ND	84	88	60-140	4.58	30
Dalapon	1	0.0928	0.100	0.10	ND	93	100	59-136	7.51	30
DCPA (mono & diacid)	1	0.0813	0.0847	0.10	ND	81	85	60-140	4.16	30
Dicamba	1	0.0905	0.0934	0.10	ND	91	93	57-139	3.11	30
3,5-Dichlorobenzoic Acid	1	0.0915	0.0965	0.10	ND	92	97	60-140	5.33	30
Dichloroprop	1	0.0896	0.0931	0.10	ND	90	93	60-140	3.80	30
Dinoseb (DNBP)	1	0.0806	0.0857	0.10	ND	81	86	60-140	6.14	30
MCPA	1	7.42	7.24	10	ND	74	72	60-140	2.59	30
MCPP	1	8.30	7.83	10	ND	83	78	60-140	5.92	30

(Cont.)



Quality Control Report

Client: Langan
Date Prepared: 06/17/2020
Date Analyzed: 06/17/2020 - 06/18/2020
Instrument: GC15A
Matrix: Soil
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
BatchID: 200227
Extraction Method: SW8151A
Analytical Method: SW8151A
Unit: mg/kg
Sample ID: MB/LCS/LCSD-200227
 2006697-019AMS/MSD

QC Summary Report for SW8151A

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
4-Nitrophenol	1	0.0860	0.0830	0.10	ND	86	83	60-140	3.49	30
Pentachlorophenol (PCP)	1	0.0884	0.0930	0.10	ND	88	93	60-140	5.01	30
Picloram	1	0.0791	0.0834	0.10	ND	79	83	60-140	5.23	30
2,4,5-T (Trichlorophenoxy acetic acid)	1	0.0836	0.0815	0.10	ND	84	82	60-140	2.51	30
2,4,5-TP (Silvex)	1	0.0906	0.0948	0.10	ND	91	95	61-139	4.60	30
Surrogate Recovery										
DCAA	1	0.0989	0.105	0.10		99	105	60-140	6.26	20



Quality Control Report

Client:	Langan	WorkOrder:	2006697
Date Prepared:	06/15/2020	BatchID:	200074
Date Analyzed:	06/17/2020	Extraction Method:	SW5030B
Instrument:	GC16	Analytical Method:	SW8260B
Matrix:	Soil	Unit:	mg/kg
Project:	750664801; 1666 Seventh Street	Sample ID:	MB/LCS/LCSD-200074

QC Summary Report for SW8260B

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Acetone	ND	0.0670	0.100	-	-	-
tert-Amyl methyl ether (TAME)	ND	0.000780	0.00500	-	-	-
Benzene	ND	0.000980	0.00500	-	-	-
Bromobenzene	ND	0.00120	0.00500	-	-	-
Bromochloromethane	ND	0.00110	0.00500	-	-	-
Bromodichloromethane	ND	0.000280	0.00100	-	-	-
Bromoform	ND	0.00170	0.00500	-	-	-
Bromomethane	ND	0.00180	0.00500	-	-	-
2-Butanone (MEK)	ND	0.0110	0.0200	-	-	-
t-Butyl alcohol (TBA)	ND	0.0320	0.0500	-	-	-
n-Butyl benzene	ND	0.00210	0.00500	-	-	-
sec-Butyl benzene	ND	0.00170	0.00500	-	-	-
tert-Butyl benzene	ND	0.00130	0.00500	-	-	-
Carbon Disulfide	ND	0.00300	0.00500	-	-	-
Carbon Tetrachloride	ND	0.000900	0.00500	-	-	-
Chlorobenzene	ND	0.000860	0.00500	-	-	-
Chloroethane	ND	0.00200	0.00500	-	-	-
Chloroform	ND	0.000110	0.00500	-	-	-
Chloromethane	ND	0.00260	0.00500	-	-	-
2-Chlorotoluene	ND	0.00160	0.00500	-	-	-
4-Chlorotoluene	ND	0.00120	0.00500	-	-	-
Dibromochloromethane	ND	0.000190	0.00500	-	-	-
1,2-Dibromo-3-chloropropane	0.000213,J	0.000160	0.000250	-	-	-
1,2-Dibromoethane (EDB)	0.0000571,J	0.0000340	0.000100	-	-	-
Dibromomethane	ND	0.000810	0.00500	-	-	-
1,2-Dichlorobenzene	ND	0.00110	0.00500	-	-	-
1,3-Dichlorobenzene	ND	0.00100	0.00500	-	-	-
1,4-Dichlorobenzene	ND	0.000850	0.00500	-	-	-
Dichlorodifluoromethane	ND	0.00130	0.00500	-	-	-
1,1-Dichloroethane	ND	0.000880	0.00500	-	-	-
1,2-Dichloroethane (1,2-DCA)	0.0000519,J	0.0000430	0.000250	-	-	-
1,1-Dichloroethene	0.0000375,J	0.0000280	0.000250	-	-	-
cis-1,2-Dichloroethene	ND	0.000840	0.00500	-	-	-
trans-1,2-Dichloroethene	ND	0.00110	0.00500	-	-	-
1,2-Dichloropropane	ND	0.000800	0.00500	-	-	-
1,3-Dichloropropane	ND	0.000700	0.00500	-	-	-
2,2-Dichloropropane	ND	0.00190	0.00500	-	-	-
1,1-Dichloropropene	ND	0.000830	0.00500	-	-	-

(Cont.)



Quality Control Report

Client:	Langan	WorkOrder:	2006697
Date Prepared:	06/15/2020	BatchID:	200074
Date Analyzed:	06/17/2020	Extraction Method:	SW5030B
Instrument:	GC16	Analytical Method:	SW8260B
Matrix:	Soil	Unit:	mg/kg
Project:	750664801; 1666 Seventh Street	Sample ID:	MB/LCS/LCSD-200074

QC Summary Report for SW8260B

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
cis-1,3-Dichloropropene	ND	0.00170	0.00500	-	-	-
trans-1,3-Dichloropropene	ND	0.00200	0.00500	-	-	-
Diisopropyl ether (DIPE)	ND	0.00110	0.00500	-	-	-
Ethylbenzene	ND	0.000950	0.00500	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	0.00110	0.00500	-	-	-
Freon 113	ND	0.00110	0.00500	-	-	-
Hexachlorobutadiene	ND	0.00230	0.00500	-	-	-
Hexachloroethane	ND	0.00140	0.00500	-	-	-
2-Hexanone	ND	0.00310	0.00500	-	-	-
Isopropylbenzene	ND	0.00170	0.00500	-	-	-
4-Isopropyl toluene	ND	0.00150	0.00500	-	-	-
Methyl-t-butyl ether (MTBE)	ND	0.00170	0.00500	-	-	-
Methylene chloride	ND	0.00800	0.0100	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	0.00290	0.00500	-	-	-
Naphthalene	ND	0.00360	0.00500	-	-	-
n-Propyl benzene	ND	0.00160	0.00500	-	-	-
Styrene	ND	0.00270	0.00500	-	-	-
1,1,1,2-Tetrachloroethane	ND	0.000890	0.00500	-	-	-
1,1,2,2-Tetrachloroethane	0.000181,J	0.0000870	0.000250	-	-	-
Tetrachloroethene	ND	0.000200	0.00100	-	-	-
Toluene	ND	0.00160	0.00500	-	-	-
1,2,3-Trichlorobenzene	ND	0.00370	0.00500	-	-	-
1,2,4-Trichlorobenzene	ND	0.00180	0.00500	-	-	-
1,1,1-Trichloroethane	ND	0.000840	0.00500	-	-	-
1,1,2-Trichloroethane	ND	0.000670	0.00500	-	-	-
Trichloroethene	ND	0.00160	0.00500	-	-	-
Trichlorofluoromethane	ND	0.00140	0.00500	-	-	-
1,2,3-Trichloropropane	0.0000946,J	0.0000420	0.000100	-	-	-
1,2,4-Trimethylbenzene	ND	0.00150	0.00500	-	-	-
1,3,5-Trimethylbenzene	ND	0.00160	0.00500	-	-	-
Vinyl Chloride	ND	0.0000530	0.000250	-	-	-
m,p-Xylene	ND	0.00230	0.00500	-	-	-
o-Xylene	ND	0.000740	0.00500	-	-	-

(Cont.)



Quality Control Report

Client:	Langan	WorkOrder:	2006697
Date Prepared:	06/15/2020	BatchID:	200074
Date Analyzed:	06/17/2020	Extraction Method:	SW5030B
Instrument:	GC16	Analytical Method:	SW8260B
Matrix:	Soil	Unit:	mg/kg
Project:	750664801; 1666 Seventh Street	Sample ID:	MB/LCS/LCSD-200074

QC Summary Report for SW8260B

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Surrogate Recovery						
Dibromofluoromethane	0.125			0.125	100	87-127
Toluene-d8	0.144			0.125	115	93-141
4-BFB	0.0137			0.0125	110	84-137
Benzene-d6	0.112			0.1	112	67-131
Ethylbenzene-d10	0.123			0.1	123	78-153
1,2-DCB-d4	0.0778			0.1	78	63-109

(Cont.)



Quality Control Report

Client:	Langan	WorkOrder:	2006697
Date Prepared:	06/15/2020	BatchID:	200074
Date Analyzed:	06/17/2020	Extraction Method:	SW5030B
Instrument:	GC16	Analytical Method:	SW8260B
Matrix:	Soil	Unit:	mg/kg
Project:	750664801; 1666 Seventh Street	Sample ID:	MB/LCS/LCSD-200074

QC Summary Report for SW8260B

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Acetone	0.214	0.209	0.20	107	105	48-156	2.21	30
tert-Amyl methyl ether (TAME)	0.0142	0.0152	0.020	71	76	56-115	6.91	30
Benzene	0.0191	0.0191	0.020	95	95	63-131	0.173	30
Bromobenzene	0.0181	0.0176	0.020	91	88	66-127	3.22	30
Bromochloromethane	0.0172	0.0175	0.020	86	88	64-124	1.65	30
Bromodichloromethane	0.0169	0.0169	0.020	84	84	64-120	0.0391	30
Bromoform	0.0122	0.0145	0.020	61	73	48-92	17.0	30
Bromomethane	0.0237	0.0229	0.020	118	115	25-163	3.30	30
2-Butanone (MEK)	0.0687	0.0712	0.080	86	89	51-133	3.56	30
t-Butyl alcohol (TBA)	0.0778	0.0656	0.080	97	82	52-129	17.1	30
n-Butyl benzene	0.0254	0.0254	0.020	127	127	83-200	0.112	30
sec-Butyl benzene	0.0244	0.0240	0.020	122	120	81-199	1.64	30
tert-Butyl benzene	0.0222	0.0228	0.020	111	114	79-178	2.84	30
Carbon Disulfide	0.0193	0.0193	0.020	96	97	64-136	0.364	30
Carbon Tetrachloride	0.0175	0.0175	0.020	87	88	66-140	0.264	30
Chlorobenzene	0.0186	0.0188	0.020	93	94	73-116	1.23	30
Chloroethane	0.0224	0.0214	0.020	112	107	35-147	4.67	30
Chloroform	0.0188	0.0189	0.020	94	95	65-130	0.489	30
Chloromethane	0.0220	0.0210	0.020	110	105	30-137	4.78	30
2-Chlorotoluene	0.0213	0.0208	0.020	106	104	75-152	2.19	30
4-Chlorotoluene	0.0206	0.0200	0.020	103	100	71-148	2.86	30
Dibromochloromethane	0.0164	0.0168	0.020	82	84	61-106	2.44	30
1,2-Dibromo-3-chloropropane	0.00730	0.00726	0.010	73	73	36-120	0.540	30
1,2-Dibromoethane (EDB)	0.00846	0.00871	0.010	85	87	67-118	2.94	30
Dibromomethane	0.0167	0.0168	0.020	84	84	61-116	0.238	30
1,2-Dichlorobenzene	0.0151	0.0148	0.020	75	74	59-106	1.75	30
1,3-Dichlorobenzene	0.0186	0.0185	0.020	93	93	75-129	0.662	30
1,4-Dichlorobenzene	0.0182	0.0181	0.020	91	90	66-127	0.822	30
Dichlorodifluoromethane	0.0112	0.0109	0.020	56	55	13-74	2.35	30
1,1-Dichloroethane	0.0192	0.0193	0.020	96	97	65-134	0.699	30
1,2-Dichloroethane (1,2-DCA)	0.0163	0.0164	0.020	82	82	57-131	0.492	30
1,1-Dichloroethene	0.0170	0.0171	0.020	85	85	62-127	0.236	30
cis-1,2-Dichloroethene	0.0189	0.0188	0.020	94	94	66-130	0.0448	30
trans-1,2-Dichloroethene	0.0188	0.0190	0.020	94	95	60-131	0.745	30
1,2-Dichloropropane	0.0179	0.0179	0.020	89	90	63-127	0.363	30
1,3-Dichloropropane	0.0174	0.0180	0.020	87	90	68-124	2.99	30
2,2-Dichloropropane	0.0201	0.0200	0.020	100	100	63-150	0.516	30
1,1-Dichloropropene	0.0184	0.0186	0.020	92	93	67-134	1.48	30

(Cont.)



Quality Control Report

Client:	Langan	WorkOrder:	2006697
Date Prepared:	06/15/2020	BatchID:	200074
Date Analyzed:	06/17/2020	Extraction Method:	SW5030B
Instrument:	GC16	Analytical Method:	SW8260B
Matrix:	Soil	Unit:	mg/kg
Project:	750664801; 1666 Seventh Street	Sample ID:	MB/LCS/LCSD-200074

QC Summary Report for SW8260B

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
cis-1,3-Dichloropropene	0.0189	0.0193	0.020	94	96	65-138	2.17	30
trans-1,3-Dichloropropene	0.0178	0.0182	0.020	89	91	66-124	2.32	30
Diisopropyl ether (DIPE)	0.0179	0.0183	0.020	90	91	58-129	1.83	30
Ethylbenzene	0.0199	0.0201	0.020	100	100	73-145	0.602	30
Ethyl tert-butyl ether (ETBE)	0.0155	0.0168	0.020	78	84	62-125	7.81	30
Freon 113	0.0163	0.0161	0.020	81	81	55-116	0.964	30
Hexachlorobutadiene	0.0201	0.0206	0.020	100	103	75-178	2.65	30
Hexachloroethane	0.0235	0.0233	0.020	117	116	75-152	0.832	30
2-Hexanone	0.0128	0.0131	0.020	64	66	41-113	2.83	30
Isopropylbenzene	0.0247	0.0241	0.020	124	121	67-172	2.34	30
4-Isopropyl toluene	0.0240	0.0237	0.020	120	119	88-171	1.32	30
Methyl-t-butyl ether (MTBE)	0.0141	0.0161	0.020	70	81	58-122	13.4	30
Methylene chloride	0.0198	0.0200	0.020	99	100	57-140	1.08	30
4-Methyl-2-pentanone (MIBK)	0.0138	0.0128	0.020	69	64	42-117	7.22	30
Naphthalene	0.00961	0.0100	0.020	48	50	29-65	3.96	30
n-Propyl benzene	0.0237	0.0235	0.020	119	117	85-174	1.05	30
Styrene	0.0164	0.0166	0.020	82	83	63-126	0.988	30
1,1,1,2-Tetrachloroethane	0.0171	0.0178	0.020	86	89	68-131	4.07	30
1,1,2,2-Tetrachloroethane	0.0163	0.0161	0.020	81	80	45-121	1.07	30
Tetrachloroethene	0.0188	0.0189	0.020	94	95	65-150	0.288	30
Toluene	0.0201	0.0197	0.020	100	99	72-135	1.69	30
1,2,3-Trichlorobenzene	0.00975	0.0105	0.020	49	52	35-80	7.05	30
1,2,4-Trichlorobenzene	0.0131	0.0133	0.020	66	66	45-103	1.32	30
1,1,1-Trichloroethane	0.0180	0.0181	0.020	90	91	67-137	0.947	30
1,1,2-Trichloroethane	0.0168	0.0169	0.020	84	85	67-117	0.455	30
Trichloroethene	0.0180	0.0183	0.020	90	91	62-135	1.73	30
Trichlorofluoromethane	0.0166	0.0165	0.020	83	83	56-124	0.421	30
1,2,3-Trichloropropane	0.00854	0.00861	0.010	85	86	58-133	0.866	30
1,2,4-Trimethylbenzene	0.0216	0.0215	0.020	108	107	78-161	0.834	30
1,3,5-Trimethylbenzene	0.0232	0.0231	0.020	116	115	85-170	0.657	30
Vinyl Chloride	0.0108	0.0105	0.010	107	105	32-142	2.75	30
m,p-Xylene	0.0378	0.0382	0.040	95	96	70-138	0.957	30
o-Xylene	0.0183	0.0185	0.020	91	92	69-135	1.22	30

(Cont.)



Quality Control Report

Client:	Langan	WorkOrder:	2006697
Date Prepared:	06/15/2020	BatchID:	200074
Date Analyzed:	06/17/2020	Extraction Method:	SW5030B
Instrument:	GC16	Analytical Method:	SW8260B
Matrix:	Soil	Unit:	mg/kg
Project:	750664801; 1666 Seventh Street	Sample ID:	MB/LCS/LCSD-200074

QC Summary Report for SW8260B

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Surrogate Recovery								
Dibromofluoromethane	0.123	0.124	0.12	98	99	87-127	0.867	30
Toluene-d8	0.139	0.139	0.12	111	112	93-141	0.153	30
4-BFB	0.0138	0.0133	0.012	111	107	84-137	3.60	30
Benzene-d6	0.0998	0.0997	0.10	100	100	67-131	0.153	30
Ethylbenzene-d10	0.114	0.116	0.10	114	116	78-153	1.80	30
1,2-DCB-d4	0.0788	0.0791	0.10	79	79	63-109	0.363	30



Quality Control Report

Client: Langan
Date Prepared: 06/17/2020
Date Analyzed: 06/17/2020 - 06/18/2020
Instrument: GC21
Matrix: Soil
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
BatchID: 200232
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg
Sample ID: MB/LCS/LCSD-200232

QC Summary Report for SW8270C (Low Level) w/ GPC

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Benzoic Acid	ND	0.370	1.20	-	-	-
Acenaphthene	ND	0.000510	0.00130	-	-	-
Acenaphthylene	ND	0.000300	0.00130	-	-	-
Acetochlor	ND	0.0320	0.250	-	-	-
Anthracene	ND	0.000850	0.00130	-	-	-
Benzidine	ND	0.120	1.20	-	-	-
Benzo (a) anthracene	ND	0.00400	0.0130	-	-	-
Benzo (a) pyrene	ND	0.00120	0.00250	-	-	-
Benzo (b) fluoranthene	ND	0.00110	0.00630	-	-	-
Benzo (g,h,i) perylene	ND	0.00160	0.00250	-	-	-
Benzo (k) fluoranthene	ND	0.00120	0.00130	-	-	-
Benzyl Alcohol	ND	0.630	1.20	-	-	-
1,1-Biphenyl	ND	0.00280	0.0130	-	-	-
Bis (2-chloroethoxy) Methane	ND	0.0280	0.250	-	-	-
Bis (2-chloroethyl) Ether	ND	0.00150	0.00250	-	-	-
Bis (2-chloroisopropyl) Ether	ND	0.00350	0.0130	-	-	-
Bis (2-ethylhexyl) Adipate	ND	0.0440	0.250	-	-	-
Bis (2-ethylhexyl) Phthalate	ND	0.0110	0.0250	-	-	-
4-Bromophenyl Phenyl Ether	ND	0.0330	0.250	-	-	-
Butylbenzyl Phthalate	ND	0.00550	0.0250	-	-	-
4-Chloroaniline	ND	0.000660	0.00250	-	-	-
4-Chloro-3-methylphenol	ND	0.0320	0.250	-	-	-
2-Chloronaphthalene	ND	0.0200	0.250	-	-	-
2-Chlorophenol	ND	0.00190	0.0130	-	-	-
4-Chlorophenyl Phenyl Ether	ND	0.0290	0.250	-	-	-
Chrysene	ND	0.00140	0.00250	-	-	-
Dibenzo (a,h) anthracene	ND	0.00140	0.00250	-	-	-
Dibenzofuran	ND	0.0150	0.250	-	-	-
Di-n-butyl Phthalate	ND	0.00520	0.0130	-	-	-
1,2-Dichlorobenzene	ND	0.0170	0.250	-	-	-
1,3-Dichlorobenzene	ND	0.0210	0.250	-	-	-
1,4-Dichlorobenzene	ND	0.0270	0.250	-	-	-
3,3-Dichlorobenzidine	ND	0.00100	0.00250	-	-	-
2,4-Dichlorophenol	ND	0.000500	0.0130	-	-	-
Diethyl Phthalate	ND	0.00350	0.0130	-	-	-
2,4-Dimethylphenol	ND	0.0310	0.250	-	-	-
Dimethyl Phthalate	ND	0.00120	0.00250	-	-	-
4,6-Dinitro-2-methylphenol	ND	0.180	1.20	-	-	-

(Cont.)



Quality Control Report

Client: Langan
Date Prepared: 06/17/2020
Date Analyzed: 06/17/2020 - 06/18/2020
Instrument: GC21
Matrix: Soil
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
BatchID: 200232
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg
Sample ID: MB/LCS/LCSD-200232

QC Summary Report for SW8270C (Low Level) w/ GPC

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
2,4-Dinitrophenol	ND	0.160	0.250	-	-	-
2,4-Dinitrotoluene	ND	0.00240	0.0130	-	-	-
2,6-Dinitrotoluene	ND	0.00150	0.0130	-	-	-
Di-n-octyl Phthalate	ND	0.00490	0.0130	-	-	-
1,2-Diphenylhydrazine	ND	0.0300	0.250	-	-	-
Fluoranthene	ND	0.00120	0.00130	-	-	-
Fluorene	ND	0.00110	0.00250	-	-	-
Hexachlorobenzene	ND	0.000380	0.00130	-	-	-
Hexachlorobutadiene	ND	0.000170	0.00250	-	-	-
Hexachlorocyclopentadiene	ND	0.150	2.00	-	-	-
Hexachloroethane	ND	0.00160	0.0130	-	-	-
Indeno (1,2,3-cd) pyrene	ND	0.00240	0.0130	-	-	-
Isophorone	ND	0.0460	0.250	-	-	-
2-Methylnaphthalene	ND	0.000540	0.00250	-	-	-
2-Methylphenol (o-Cresol)	ND	0.0570	0.250	-	-	-
3 & 4-Methylphenol (m,p-Cresol)	ND	0.0720	0.250	-	-	-
Naphthalene	ND	0.000550	0.00130	-	-	-
2-Nitroaniline	ND	0.0870	1.20	-	-	-
3-Nitroaniline	ND	0.0910	1.20	-	-	-
4-Nitroaniline	ND	0.130	1.20	-	-	-
Nitrobenzene	ND	0.0250	0.250	-	-	-
2-Nitrophenol	ND	0.150	1.20	-	-	-
4-Nitrophenol	ND	0.380	1.20	-	-	-
N-Nitrosodimethylamine	ND	0.140	1.20	-	-	-
N-Nitrosodiphenylamine	ND	0.0260	0.250	-	-	-
N-Nitrosodi-n-propylamine	ND	0.0770	0.250	-	-	-
Pentachlorophenol	ND	0.00990	0.0620	-	-	-
Phenanthrene	ND	0.00120	0.00500	-	-	-
Phenol	ND	0.00500	0.0500	-	-	-
Pyrene	ND	0.000930	0.00250	-	-	-
Pyridine	ND	0.0480	0.250	-	-	-
1,2,4-Trichlorobenzene	ND	0.0250	0.250	-	-	-
2,4,5-Trichlorophenol	ND	0.000740	0.00250	-	-	-
2,4,6-Trichlorophenol	ND	0.000840	0.0130	-	-	-

(Cont.)



Quality Control Report

Client: Langan	WorkOrder: 2006697
Date Prepared: 06/17/2020	BatchID: 200232
Date Analyzed: 06/17/2020 - 06/18/2020	Extraction Method: SW3550B/3640A
Instrument: GC21	Analytical Method: SW8270C
Matrix: Soil	Unit: mg/Kg
Project: 750664801; 1666 Seventh Street	Sample ID: MB/LCS/LCSD-200232

QC Summary Report for SW8270C (Low Level) w/ GPC

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Surrogate Recovery						
2-Fluorophenol	1.32			1.25	105	60-130
Phenol-d5	1.26			1.25	101	60-130
Nitrobenzene-d5	1.09			1.25	87	60-130
2-Fluorobiphenyl	1.05			1.25	84	60-130
2,4,6-Tribromophenol	0.992			1.25	79	50-130
4-Terphenyl-d14	0.925			1.25	74	50-130



Quality Control Report

Client: Langan
Date Prepared: 06/17/2020
Date Analyzed: 06/17/2020 - 06/18/2020
Instrument: GC21
Matrix: Soil
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
BatchID: 200232
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg
Sample ID: MB/LCS/LCSD-200232

QC Summary Report for SW8270C (Low Level) w/ GPC

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Acenaphthene	0.0960	0.0922	0.12	77	74	60-130	4.02	30
Acenaphthylene	0.0998	0.0944	0.12	80	76	60-130	5.52	30
Anthracene	0.102	0.0965	0.12	81	77	60-130	5.08	30
Benzidine	4.66	4.33	12.5	37	35	30-130	7.45	30
Benzo (a) anthracene	0.108	0.0989	0.12	86	79	60-130	8.63	30
Benzo (a) pyrene	0.116	0.107	0.12	93	86	60-130	7.82	30
Benzo (b) fluoranthene	0.114	0.106	0.12	91	85	40-130	6.61	30
Benzo (g,h,i) perylene	0.108	0.0987	0.12	87	79	60-130	9.20	30
Benzo (k) fluoranthene	0.117	0.107	0.12	94	85	60-130	9.14	30
Benzyl Alcohol	10.4	9.45	12.5	83	76	60-130	9.59	30
Bis (2-chloroethoxy) Methane	1.84	1.72	2.5	74	69	60-130	7.15	30
Bis (2-chloroethyl) Ether	0.109	0.0967	0.12	87	77	60-130	12.2	30
Bis (2-chloroisopropyl) Ether	0.0953	0.0852	0.12	76	68	60-130	11.2	30
Bis (2-ethylhexyl) Adipate	2.15	2.03	2.5	86	81	40-130	5.79	30
Bis (2-ethylhexyl) Phthalate	0.118	0.109	0.12	94	88	60-130	7.18	30
4-Bromophenyl Phenyl Ether	1.86	1.65	2.5	74	66	60-130	11.7	30
Butylbenzyl Phthalate	0.121	0.115	0.12	97	92	60-130	5.10	30
4-Chloroaniline	0.0812	0.0761	0.12	65	61	40-130	6.45	30
4-Chloro-3-methylphenol	2.32	2.12	2.5	93	85	60-130	9.27	30
2-Chloronaphthalene	1.87	1.81	2.5	75	72	60-130	3.31	30
2-Chlorophenol	0.121	0.110	0.12	97	88	60-130	9.71	30
4-Chlorophenyl Phenyl Ether	1.80	1.72	2.5	72	69	60-130	4.65	30
Chrysene	0.104	0.0951	0.12	84	76	60-130	9.42	30
Dibenzo (a,h) anthracene	0.106	0.0983	0.12	85	79	60-130	7.59	30
Dibenzofuran	1.89	1.80	2.5	76	72	60-130	5.03	30
Di-n-butyl Phthalate	0.114	0.108	0.12	91	87	60-130	5.40	30
1,2-Dichlorobenzene	2.00	1.80	2.5	80	72	60-130	10.5	30
1,3-Dichlorobenzene	1.98	1.75	2.5	79	70	60-130	12.6	30
1,4-Dichlorobenzene	1.81	1.65	2.5	73	66	60-130	9.19	30
3,3-Dichlorobenzidine	0.0775	0.0717	0.12	62	57	40-130	7.75	30
2,4-Dichlorophenol	0.109	0.101	0.12	87	81	60-130	7.16	30
Diethyl Phthalate	0.102	0.0969	0.12	82	78	60-130	5.14	30
2,4-Dimethylphenol	2.34	2.15	2.5	93	86	60-130	8.44	30
Dimethyl Phthalate	0.0991	0.0942	0.12	79	75	60-130	5.01	30
4,6-Dinitro-2-methylphenol	9.12	8.54	12.5	73	68	30-130	6.49	30
2,4-Dinitrophenol	1.83	1.76	2.5	73	71	15-130	3.62	30
2,4-Dinitrotoluene	0.106	0.102	0.12	85	81	60-130	4.12	30
2,6-Dinitrotoluene	0.102	0.0982	0.12	81	79	60-130	3.52	30

(Cont.)



Quality Control Report

Client: Langan
Date Prepared: 06/17/2020
Date Analyzed: 06/17/2020 - 06/18/2020
Instrument: GC21
Matrix: Soil
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
BatchID: 200232
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg
Sample ID: MB/LCS/LCSD-200232

QC Summary Report for SW8270C (Low Level) w/ GPC

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Di-n-octyl Phthalate	0.128	0.122	0.12	103	97	60-130	5.23	30
1,2-Diphenylhydrazine	1.93	1.77	2.5	77	71	60-130	8.58	30
Fluoranthene	0.105	0.0991	0.12	84	79	60-130	5.99	30
Fluorene	0.101	0.0959	0.12	81	77	60-130	5.31	30
Hexachlorobenzene	0.0862	0.0807	0.12	69	65	60-130	6.63	30
Hexachlorobutadiene	0.0972	0.0893	0.12	78	71	60-130	8.52	30
Hexachlorocyclopentadiene	8.78	8.31	12.5	70	66	40-130	5.54	30
Hexachloroethane	0.116	0.103	0.12	93	82	60-130	12.5	30
Indeno (1,2,3-cd) pyrene	0.105	0.0950	0.12	84	76	60-130	10.1	30
Isophorone	2.16	1.96	2.5	86	79	60-130	9.27	30
2-Methylnaphthalene	0.107	0.0971	0.12	86	78	60-130	9.76	30
2-Methylphenol (o-Cresol)	2.03	1.85	2.5	81	74	60-130	9.13	30
3 & 4-Methylphenol (m,p-Cresol)	2.18	1.94	2.5	87	78	60-130	11.4	30
Naphthalene	0.100	0.0920	0.12	80	74	60-130	8.62	30
2-Nitroaniline	10.2	9.66	12.5	82	77	60-130	5.62	30
3-Nitroaniline	8.54	8.30	12.5	68	66	30-130	2.78	30
4-Nitroaniline	8.38	8.04	12.5	67	64	60-130	4.22	30
Nitrobenzene	1.98	1.84	2.5	79	74	60-130	7.17	30
2-Nitrophenol	11.0	10.1	12.5	88	81	60-130	8.76	30
4-Nitrophenol	10.7	10.3	12.5	86	82	60-130	4.07	30
N-Nitrosodiphenylamine	1.83	1.73	2.5	73	69	60-130	5.50	30
N-Nitrosodi-n-propylamine	2.00	1.77	2.5	80	71	60-130	12.1	30
Pentachlorophenol	0.448	0.421	0.62	72	67	40-130	6.08	30
Phenanthrene	0.0933	0.0882	0.12	75	71	60-130	5.61	30
Phenol	0.447	0.399	0.50	89	80	60-130	11.4	30
Pyrene	0.108	0.102	0.12	86	82	60-130	5.13	30
Pyridine	1.75	1.50	2.5	70	60	30-130	15.1	30
1,2,4-Trichlorobenzene	1.82	1.70	2.5	73	68	60-130	6.89	30
2,4,5-Trichlorophenol	0.108	0.104	0.12	87	83	60-130	4.01	30
2,4,6-Trichlorophenol	0.104	0.100	0.12	83	80	60-130	3.56	30

(Cont.)



Quality Control Report

Client:	Langan	WorkOrder:	2006697
Date Prepared:	06/17/2020	BatchID:	200232
Date Analyzed:	06/17/2020 - 06/18/2020	Extraction Method:	SW3550B/3640A
Instrument:	GC21	Analytical Method:	SW8270C
Matrix:	Soil	Unit:	mg/Kg
Project:	750664801; 1666 Seventh Street	Sample ID:	MB/LCS/LCSD-200232

QC Summary Report for SW8270C (Low Level) w/ GPC

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Surrogate Recovery								
2-Fluorophenol	1.21	1.15	1.25	96	92	60-130	4.81	30
Phenol-d5	1.18	1.11	1.25	94	89	60-130	5.91	30
Nitrobenzene-d5	1.04	1.07	1.25	83	86	60-130	2.85	30
2-Fluorobiphenyl	0.988	1.01	1.25	79	81	60-130	1.98	30
2,4,6-Tribromophenol	0.977	0.984	1.25	78	79	50-130	0.704	30
4-Terphenyl-d14	0.946	0.982	1.25	76	79	50-130	3.65	30



Quality Control Report

Client:	Langan	WorkOrder:	2006697
Date Prepared:	06/18/2020	BatchID:	200316
Date Analyzed:	06/20/2020	Extraction Method:	SW3550B/3640A
Instrument:	GC21	Analytical Method:	SW8270C
Matrix:	Soil	Unit:	mg/Kg
Project:	750664801; 1666 Seventh Street	Sample ID:	MB/LCS/LCSD-200316 2006697-013AMS/MSD

QC Summary Report for SW8270C (Low Level) w/ GPC

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Benzoic Acid	ND	0.370	1.20	-	-	-
Acenaphthene	ND	0.000510	0.00130	-	-	-
Acenaphthylene	ND	0.000300	0.00130	-	-	-
Acetochlor	ND	0.0320	0.250	-	-	-
Anthracene	ND	0.000850	0.00130	-	-	-
Benzidine	ND	0.120	1.20	-	-	-
Benzo (a) anthracene	ND	0.00400	0.0130	-	-	-
Benzo (a) pyrene	ND	0.00120	0.00250	-	-	-
Benzo (b) fluoranthene	ND	0.00110	0.00630	-	-	-
Benzo (g,h,i) perylene	ND	0.00160	0.00250	-	-	-
Benzo (k) fluoranthene	ND	0.00120	0.00130	-	-	-
Benzyl Alcohol	ND	0.630	1.20	-	-	-
1,1-Biphenyl	ND	0.00280	0.0130	-	-	-
Bis (2-chloroethoxy) Methane	ND	0.0280	0.250	-	-	-
Bis (2-chloroethyl) Ether	ND	0.00150	0.00250	-	-	-
Bis (2-chloroisopropyl) Ether	ND	0.00350	0.0130	-	-	-
Bis (2-ethylhexyl) Adipate	ND	0.0440	0.250	-	-	-
Bis (2-ethylhexyl) Phthalate	ND	0.0110	0.0250	-	-	-
4-Bromophenyl Phenyl Ether	ND	0.0330	0.250	-	-	-
Butylbenzyl Phthalate	ND	0.00550	0.0250	-	-	-
4-Chloroaniline	ND	0.000660	0.00250	-	-	-
4-Chloro-3-methylphenol	ND	0.0320	0.250	-	-	-
2-Chloronaphthalene	ND	0.0200	0.250	-	-	-
2-Chlorophenol	ND	0.00190	0.0130	-	-	-
4-Chlorophenyl Phenyl Ether	ND	0.0290	0.250	-	-	-
Chrysene	ND	0.00140	0.00250	-	-	-
Dibenzo (a,h) anthracene	ND	0.00140	0.00250	-	-	-
Dibenzofuran	ND	0.0150	0.250	-	-	-
Di-n-butyl Phthalate	ND	0.00520	0.0130	-	-	-
1,2-Dichlorobenzene	ND	0.0170	0.250	-	-	-
1,3-Dichlorobenzene	ND	0.0210	0.250	-	-	-
1,4-Dichlorobenzene	ND	0.0270	0.250	-	-	-
3,3-Dichlorobenzidine	ND	0.00100	0.00250	-	-	-
2,4-Dichlorophenol	ND	0.000500	0.0130	-	-	-
Diethyl Phthalate	ND	0.00350	0.0130	-	-	-
2,4-Dimethylphenol	ND	0.0310	0.250	-	-	-
Dimethyl Phthalate	ND	0.00120	0.00250	-	-	-
4,6-Dinitro-2-methylphenol	ND	0.180	1.20	-	-	-

(Cont.)



Quality Control Report

Client: Langan	WorkOrder: 2006697
Date Prepared: 06/18/2020	BatchID: 200316
Date Analyzed: 06/20/2020	Extraction Method: SW3550B/3640A
Instrument: GC21	Analytical Method: SW8270C
Matrix: Soil	Unit: mg/Kg
Project: 750664801; 1666 Seventh Street	Sample ID: MB/LCS/LCSD-200316 2006697-013AMS/MSD

QC Summary Report for SW8270C (Low Level) w/ GPC

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
2,4-Dinitrophenol	ND	0.160	0.250	-	-	-
2,4-Dinitrotoluene	ND	0.00240	0.0130	-	-	-
2,6-Dinitrotoluene	ND	0.00150	0.0130	-	-	-
Di-n-octyl Phthalate	ND	0.00490	0.0130	-	-	-
1,2-Diphenylhydrazine	ND	0.0300	0.250	-	-	-
Fluoranthene	ND	0.00120	0.00130	-	-	-
Fluorene	ND	0.00110	0.00250	-	-	-
Hexachlorobenzene	ND	0.000380	0.00130	-	-	-
Hexachlorobutadiene	ND	0.000170	0.00250	-	-	-
Hexachlorocyclopentadiene	ND	0.150	2.00	-	-	-
Hexachloroethane	ND	0.00160	0.0130	-	-	-
Indeno (1,2,3-cd) pyrene	ND	0.00240	0.0130	-	-	-
Isophorone	ND	0.0460	0.250	-	-	-
2-Methylnaphthalene	ND	0.000540	0.00250	-	-	-
2-Methylphenol (o-Cresol)	ND	0.0570	0.250	-	-	-
3 & 4-Methylphenol (m,p-Cresol)	ND	0.0720	0.250	-	-	-
Naphthalene	ND	0.000550	0.00130	-	-	-
2-Nitroaniline	ND	0.0870	1.20	-	-	-
3-Nitroaniline	ND	0.0910	1.20	-	-	-
4-Nitroaniline	ND	0.130	1.20	-	-	-
Nitrobenzene	ND	0.0250	0.250	-	-	-
2-Nitrophenol	ND	0.150	1.20	-	-	-
4-Nitrophenol	ND	0.380	1.20	-	-	-
N-Nitrosodimethylamine	ND	0.140	1.20	-	-	-
N-Nitrosodiphenylamine	ND	0.0260	0.250	-	-	-
N-Nitrosodi-n-propylamine	ND	0.0770	0.250	-	-	-
Pentachlorophenol	ND	0.00990	0.0620	-	-	-
Phenanthrene	ND	0.00120	0.00500	-	-	-
Phenol	ND	0.00500	0.0500	-	-	-
Pyrene	ND	0.000930	0.00250	-	-	-
Pyridine	ND	0.0480	0.250	-	-	-
1,2,4-Trichlorobenzene	ND	0.0250	0.250	-	-	-
2,4,5-Trichlorophenol	ND	0.000740	0.00250	-	-	-
2,4,6-Trichlorophenol	ND	0.000840	0.0130	-	-	-

(Cont.)



Quality Control Report

Client:	Langan	WorkOrder:	2006697
Date Prepared:	06/18/2020	BatchID:	200316
Date Analyzed:	06/20/2020	Extraction Method:	SW3550B/3640A
Instrument:	GC21	Analytical Method:	SW8270C
Matrix:	Soil	Unit:	mg/Kg
Project:	750664801; 1666 Seventh Street	Sample ID:	MB/LCS/LCSD-200316 2006697-013AMS/MSD

QC Summary Report for SW8270C (Low Level) w/ GPC

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Surrogate Recovery						
2-Fluorophenol	1.36			1.25	108	60-130
Phenol-d5	1.26			1.25	101	60-130
Nitrobenzene-d5	1.09			1.25	87	60-130
2-Fluorobiphenyl	1.12			1.25	90	60-130
2,4,6-Tribromophenol	0.879			1.25	70	50-130
4-Terphenyl-d14	1.04			1.25	83	50-130



Quality Control Report

Client:	Langan	WorkOrder:	2006697
Date Prepared:	06/18/2020	BatchID:	200316
Date Analyzed:	06/20/2020	Extraction Method:	SW3550B/3640A
Instrument:	GC21	Analytical Method:	SW8270C
Matrix:	Soil	Unit:	mg/Kg
Project:	750664801; 1666 Seventh Street	Sample ID:	MB/LCS/LCSD-200316 2006697-013AMS/MSD

QC Summary Report for SW8270C (Low Level) w/ GPC

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Acenaphthene	0.119	0.108	0.12	95	86	60-130	9.74	30
Acenaphthylene	0.119	0.108	0.12	95	86	60-130	9.48	30
Anthracene	0.125	0.110	0.12	100	88	60-130	13.4	30
Benzidine	4.78	4.29	12.5	38	34	30-130	11.0	30
Benzo (a) anthracene	0.125	0.115	0.12	100	92	60-130	8.42	30
Benzo (a) pyrene	0.134	0.125	0.12	107	100	60-130	7.22	30
Benzo (b) fluoranthene	0.126	0.119	0.12	101	95	40-130	5.71	30
Benzo (g,h,i) perylene	0.134	0.130	0.12	108	104	60-130	3.58	30
Benzo (k) fluoranthene	0.155	0.140	0.12	124	112	60-130	10.3	30
Benzyl Alcohol	11.9	10.8	12.5	95	86	60-130	9.95	30
Bis (2-chloroethoxy) Methane	2.32	2.04	2.5	93	82	60-130	12.5	30
Bis (2-chloroethyl) Ether	0.129	0.115	0.12	103	92	60-130	12.0	30
Bis (2-chloroisopropyl) Ether	0.132	0.105	0.12	106	84	60-130	23.4	30
Bis (2-ethylhexyl) Adipate	2.74	2.38	2.5	110	95	40-130	14.2	30
Bis (2-ethylhexyl) Phthalate	0.125	0.113	0.12	100	90	60-130	10.1	30
4-Bromophenyl Phenyl Ether	2.35	2.12	2.5	94	85	60-130	10.2	30
Butylbenzyl Phthalate	0.141	0.128	0.12	113	103	60-130	9.41	30
4-Chloroaniline	0.0960	0.0853	0.12	77	68	40-130	11.8	30
4-Chloro-3-methylphenol	2.70	2.37	2.5	108	95	60-130	13.1	30
2-Chloronaphthalene	2.37	2.09	2.5	95	84	60-130	12.5	30
2-Chlorophenol	0.135	0.125	0.12	108	100	60-130	7.76	30
4-Chlorophenyl Phenyl Ether	2.23	1.98	2.5	89	79	60-130	12.0	30
Chrysene	0.126	0.118	0.12	101	95	60-130	6.20	30
Dibenzo (a,h) anthracene	0.116	0.121	0.12	93	97	60-130	4.02	30
Dibenzofuran	2.28	2.08	2.5	91	83	60-130	9.08	30
Di-n-butyl Phthalate	0.135	0.116	0.12	108	93	60-130	15.1	30
1,2-Dichlorobenzene	2.39	2.12	2.5	96	85	60-130	12.2	30
1,3-Dichlorobenzene	2.36	2.12	2.5	94	85	60-130	10.8	30
1,4-Dichlorobenzene	2.19	1.97	2.5	88	79	60-130	10.8	30
3,3-Dichlorobenzidine	0.0817	0.0766	0.12	65	61	40-130	6.44	30
2,4-Dichlorophenol	0.128	0.115	0.12	103	92	60-130	11.4	30
Diethyl Phthalate	0.124	0.111	0.12	99	89	60-130	10.8	30
2,4-Dimethylphenol	2.81	2.40	2.5	112	96	60-130	15.6	30
Dimethyl Phthalate	0.120	0.110	0.12	96	88	60-130	9.55	30
4,6-Dinitro-2-methylphenol	10.8	9.78	12.5	86	78	30-130	9.73	30
2,4-Dinitrophenol	2.00	1.84	2.5	80	73	15-130	8.54	30
2,4-Dinitrotoluene	0.123	0.111	0.12	99	89	60-130	10.5	30
2,6-Dinitrotoluene	0.118	0.107	0.12	95	86	60-130	9.78	30

(Cont.)



Quality Control Report

Client:	Langan	WorkOrder:	2006697
Date Prepared:	06/18/2020	BatchID:	200316
Date Analyzed:	06/20/2020	Extraction Method:	SW3550B/3640A
Instrument:	GC21	Analytical Method:	SW8270C
Matrix:	Soil	Unit:	mg/Kg
Project:	750664801; 1666 Seventh Street	Sample ID:	MB/LCS/LCSD-200316 2006697-013AMS/MSD

QC Summary Report for SW8270C (Low Level) w/ GPC

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Di-n-octyl Phthalate	0.131	0.120	0.12	105	96	60-130	8.87	30
1,2-Diphenylhydrazine	2.48	2.17	2.5	99	87	60-130	13.5	30
Fluoranthene	0.126	0.110	0.12	101	88	60-130	13.8	30
Fluorene	0.126	0.114	0.12	100	91	60-130	9.83	30
Hexachlorobenzene	0.110	0.0962	0.12	88	77	60-130	13.5	30
Hexachlorobutadiene	0.120	0.106	0.12	96	85	60-130	12.6	30
Hexachlorocyclopentadiene	11.4	10.2	12.5	92	81	40-130	11.7	30
Hexachloroethane	0.140	0.123	0.12	112	99	60-130	12.2	30
Indeno (1,2,3-cd) pyrene	0.123	0.119	0.12	99	95	60-130	3.68	30
Isophorone	2.64	2.31	2.5	105	92	60-130	13.1	30
2-Methylnaphthalene	0.132	0.116	0.12	106	92	60-130	13.4	30
2-Methylphenol (o-Cresol)	2.38	2.19	2.5	95	88	60-130	8.38	30
3 & 4-Methylphenol (m,p-Cresol)	2.62	2.32	2.5	105	93	60-130	12.1	30
Naphthalene	0.123	0.109	0.12	99	87	60-130	12.3	30
2-Nitroaniline	12.2	11.0	12.5	97	88	60-130	10.2	30
3-Nitroaniline	9.76	9.19	12.5	78	74	30-130	5.99	30
4-Nitroaniline	9.86	8.81	12.5	79	70	60-130	11.2	30
Nitrobenzene	2.42	2.19	2.5	97	87	60-130	10.3	30
2-Nitrophenol	12.9	11.9	12.5	103	95	60-130	8.50	30
4-Nitrophenol	12.6	11.5	12.5	101	92	60-130	9.23	30
N-Nitrosodiphenylamine	2.32	2.06	2.5	93	82	60-130	12.0	30
N-Nitrosodi-n-propylamine	2.46	2.22	2.5	98	89	60-130	10.1	30
Pentachlorophenol	0.434	0.392	0.62	69	63	40-130	10.2	30
Phenanthrene	0.118	0.103	0.12	94	82	60-130	13.3	30
Phenol	0.504	0.459	0.50	101	92	60-130	9.23	30
Pyrene	0.136	0.123	0.12	108	98	60-130	9.75	30
Pyridine	1.89	1.68	2.5	76	67	30-130	11.9	30
1,2,4-Trichlorobenzene	2.20	2.02	2.5	88	81	60-130	8.94	30
2,4,5-Trichlorophenol	0.124	0.115	0.12	99	92	60-130	7.18	30
2,4,6-Trichlorophenol	0.120	0.110	0.12	96	88	60-130	8.96	30

(Cont.)



Quality Control Report

Client:	Langan	WorkOrder:	2006697
Date Prepared:	06/18/2020	BatchID:	200316
Date Analyzed:	06/20/2020	Extraction Method:	SW3550B/3640A
Instrument:	GC21	Analytical Method:	SW8270C
Matrix:	Soil	Unit:	mg/Kg
Project:	750664801; 1666 Seventh Street	Sample ID:	MB/LCS/LCSD-200316 2006697-013AMS/MSD

QC Summary Report for SW8270C (Low Level) w/ GPC

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Surrogate Recovery								
2-Fluorophenol	1.30	1.21	1.25	104	96	60-130	7.59	30
Phenol-d5	1.22	1.17	1.25	98	94	60-130	4.06	30
Nitrobenzene-d5	1.17	1.14	1.25	94	91	60-130	2.23	30
2-Fluorobiphenyl	1.12	1.12	1.25	90	90	60-130	0.216	30
2,4,6-Tribromophenol	1.11	1.04	1.25	88	83	50-130	6.32	30
4-Terphenyl-d14	1.13	1.10	1.25	90	88	50-130	3.19	30

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Acenaphthene	1	0.107	0.131	0.12	ND	86	105	60-130	20.0	30
Acenaphthylene	1	0.111	0.137	0.12	ND	88	109	60-130	21.0	30
Anthracene	1	0.117	0.146	0.12	ND	94	117	60-130	22.0	30
Benzidine	1	5.57	7.46	12.5	ND	45	60	30-130	29.0	30
Benzo (a) anthracene	1	0.125	0.150	0.12	ND	100	120	60-130	18.1	30
Benzo (a) pyrene	1	0.139	0.175	0.12	0.003382	109	137,F1	60-130	22.8	30
Benzo (b) fluoranthene	1	0.130	0.163	0.62	ND	20,F1	25,F1	40-130	22.8	30
Benzo (g,h,i) perylene	1	0.142	0.178	0.12	0.004614	110	139,F1	60-130	22.6	30
Benzo (k) fluoranthene	1	0.145	0.172	0.12	0.001796	115	136,F1	60-130	17.0	30
Benzyl Alcohol	1	11.0	12.9	12.5	ND	88	103	60-130	15.6	30
Bis (2-chloroethoxy) Methane	1	2.08	2.49	2.5	ND	83	100	60-130	17.9	30
Bis (2-chloroethyl) Ether	1	0.122	0.143	0.12	ND	97	115	60-130	16.5	30
Bis (2-chloroisopropyl) Ether	1	0.126	0.142	0.12	ND	101	114	60-130	12.5	30
Bis (2-ethylhexyl) Adipate	1	2.49	3.10	2.5	ND	100	124	40-130	21.9	30
Bis (2-ethylhexyl) Phthalate	1	0.132	0.172	0.12	ND	105	138,F1	60-130	26.8	30
4-Bromophenyl Phenyl Ether	1	2.12	2.60	2.5	ND	85	104	60-130	20.3	30
Butylbenzyl Phthalate	1	0.135	0.165	0.12	ND	108	132,F1	60-130	20.2	30
4-Chloroaniline	1	0.115	0.147	0.12	ND	92	117	40-130	24.4	30
4-Chloro-3-methylphenol	1	2.48	3.16	2.5	ND	99	127	60-130	24.1	30
2-Chloronaphthalene	1	2.12	2.58	2.5	ND	85	103	60-130	19.2	30
2-Chlorophenol	1	0.132	0.155	0.12	ND	106	124	60-130	16.1	30
4-Chlorophenyl Phenyl Ether	1	1.94	2.48	2.5	ND	77	99	60-130	24.7	30
Chrysene	1	0.121	0.142	0.12	0.002768	95	112	60-130	16.1	30
Dibenzo (a,h) anthracene	1	0.122	0.154	0.12	ND	97	122	60-130	22.9	30
Dibenzofuran	1	2.11	2.57	2.5	ND	84	103	60-130	19.8	30
Di-n-butyl Phthalate	1	0.136	0.170	0.12	ND	105	132,F1	60-130	22.5	30

(Cont.)



Quality Control Report

Client:	Langan	WorkOrder:	2006697
Date Prepared:	06/18/2020	BatchID:	200316
Date Analyzed:	06/20/2020	Extraction Method:	SW3550B/3640A
Instrument:	GC21	Analytical Method:	SW8270C
Matrix:	Soil	Unit:	mg/Kg
Project:	750664801; 1666 Seventh Street	Sample ID:	MB/LCS/LCSD-200316 2006697-013AMS/MSD

QC Summary Report for SW8270C (Low Level) w/ GPC

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
1,2-Dichlorobenzene	1	2.19	2.52	2.5	ND	87	101	60-130	14.2	30
1,3-Dichlorobenzene	1	2.18	2.45	2.5	ND	87	98	60-130	11.3	30
1,4-Dichlorobenzene	1	2.01	2.32	2.5	ND	80	93	60-130	14.3	30
3,3-Dichlorobenzidine	1	0.111	0.142	0.12	ND	89	114	40-130	24.5	30
2,4-Dichlorophenol	1	0.118	0.147	2.5	ND	5,F1	6,F1	60-130	21.9	30
Diethyl Phthalate	1	0.110	0.136	0.12	ND	88	108	60-130	20.8	30
2,4-Dimethylphenol	1	2.54	3.16	2.5	ND	102	126	60-130	21.7	30
Dimethyl Phthalate	1	0.109	0.134	0.12	ND	87	107	60-130	20.4	30
4,6-Dinitro-2-methylphenol	1	9.26	11.7	12.5	ND	74	93	30-130	23.0	30
2,4-Dinitrophenol	1	1.36	1.71	2.5	ND	54	68	15-130	22.9	30
2,4-Dinitrotoluene	1	0.111	0.136	0.12	ND	89	109	60-130	20.5	30
2,6-Dinitrotoluene	1	0.110	0.137	0.12	ND	88	110	60-130	21.7	30
Di-n-octyl Phthalate	1	0.136	0.170	0.12	ND	109	136,F1	60-130	22.8	30
1,2-Diphenylhydrazine	1	2.33	2.76	2.5	ND	93	110	60-130	16.8	30
Fluoranthene	1	0.126	0.153	0.12	0.004561	97	119	60-130	18.9	30
Fluorene	1	0.111	0.136	0.12	ND	89	109	60-130	19.7	30
Hexachlorobenzene	1	0.100	0.123	0.12	ND	80	98	60-130	20.4	30
Hexachlorobutadiene	1	0.107	0.132	0.12	ND	86	105	60-130	20.5	30
Hexachlorocyclopentadiene	1	9.81	12.2	12.5	ND	78	98	40-130	22.0	30
Hexachloroethane	1	0.128	0.145	0.12	ND	102	116	60-130	12.5	30
Indeno (1,2,3-cd) pyrene	1	0.127	0.158	0.12	ND	99	124	60-130	22.2	30
Isophorone	1	2.36	2.95	2.5	ND	94	118	60-130	22.5	30
2-Methylnaphthalene	1	0.123	0.152	0.12	0.004181	95	118	60-130	20.7	30
2-Methylphenol (o-Cresol)	1	2.32	2.64	2.5	ND	93	105	60-130	12.7	30
3 & 4-Methylphenol (m,p-Cresol)	1	2.41	2.94	2.5	ND	96	117	60-130	19.6	30
Naphthalene	1	0.115	0.141	0.12	0.003893	89	110	60-130	20.1	30
2-Nitroaniline	1	11.3	13.6	12.5	ND	90	109	60-130	18.4	30
3-Nitroaniline	1	11.3	13.4	12.5	ND	91	107	30-130	16.6	30
4-Nitroaniline	1	9.57	11.6	12.5	ND	77	92	60-130	18.9	30
Nitrobenzene	1	2.29	2.72	2.5	ND	92	109	60-130	17.4	30
2-Nitrophenol	1	12.0	14.9	12.5	ND	96	119	60-130	21.4	30
4-Nitrophenol	1	11.5	14.1	12.5	ND	92	113	60-130	20.7	30
N-Nitrosodiphenylamine	1	2.15	2.63	2.5	ND	86	105	60-130	20.0	30
N-Nitrosodi-n-propylamine	1	2.17	2.63	2.5	ND	87	105	60-130	18.9	30
Pentachlorophenol	1	0.375	0.511	0.62	ND	60	82	40-130	30.7,F1	30
Phenanthrene	1	0.112	0.136	0.12	ND	87	106	60-130	19.3	30
Phenol	1	0.481	0.567	0.50	ND	96	113	60-130	16.4	30
Pyrene	1	0.135	0.158	0.12	0.005085	104	123	60-130	16.3	30

(Cont.)



Quality Control Report

Client:	Langan	WorkOrder:	2006697
Date Prepared:	06/18/2020	BatchID:	200316
Date Analyzed:	06/20/2020	Extraction Method:	SW3550B/3640A
Instrument:	GC21	Analytical Method:	SW8270C
Matrix:	Soil	Unit:	mg/Kg
Project:	750664801; 1666 Seventh Street	Sample ID:	MB/LCS/LCSD-200316 2006697-013AMS/MSD

QC Summary Report for SW8270C (Low Level) w/ GPC

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Pyridine	1	1.81	2.05	2.5	ND	73	82	30-130	12.2	30
1,2,4-Trichlorobenzene	1	2.07	2.52	2.5	ND	83	101	60-130	19.6	30
2,4,5-Trichlorophenol	1	0.116	0.144	0.12	ND	93	115	60-130	21.8	30
2,4,6-Trichlorophenol	1	0.112	0.142	0.12	ND	90	113	60-130	23.3	30
Surrogate Recovery										
2-Fluorophenol	1	1.26	1.48	1.25		101	118	60-130	15.8	30
Phenol-d5	1	1.20	1.40	1.25		96	112	60-130	15.4	30
Nitrobenzene-d5	1	1.16	1.38	1.25		93	110	60-130	17.5	30
2-Fluorobiphenyl	1	1.09	1.28	1.25		87	103	60-130	16.4	30
2,4,6-Tribromophenol	1	1.07	1.31	1.25		85	105	50-130	20.7	30
4-Terphenyl-d14	1	1.09	1.29	1.25		87	103	50-130	16.6	30



Quality Control Report

Client: Langan	WorkOrder: 2006697
Date Prepared: 06/15/2020	BatchID: 200040
Date Analyzed: 06/16/2020	Extraction Method: SW3050B
Instrument: ICP-MS5	Analytical Method: SW6020
Matrix: Soil	Unit: mg/kg
Project: 750664801; 1666 Seventh Street	Sample ID: MB/LCS/LCSD-200040

QC Summary Report for Metals

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Antimony	ND	0.160	0.500	-	-	-
Arsenic	ND	0.150	0.500	-	-	-
Barium	ND	0.570	5.00	-	-	-
Beryllium	ND	0.0730	0.500	-	-	-
Cadmium	0.0690,J	0.0610	0.500	-	-	-
Chromium	ND	0.130	0.500	-	-	-
Cobalt	ND	0.0520	0.500	-	-	-
Copper	ND	0.180	0.500	-	-	-
Lead	ND	0.140	0.500	-	-	-
Mercury	ND	0.0320	0.0500	-	-	-
Molybdenum	ND	0.160	0.500	-	-	-
Nickel	ND	0.170	0.500	-	-	-
Selenium	ND	0.150	0.500	-	-	-
Silver	ND	0.120	0.500	-	-	-
Thallium	ND	0.0670	0.500	-	-	-
Vanadium	ND	0.130	0.500	-	-	-
Zinc	ND	3.00	5.00	-	-	-
Surrogate Recovery						
Terbium	517			500	103	70-130



Quality Control Report

Client: Langan	WorkOrder: 2006697
Date Prepared: 06/15/2020	BatchID: 200040
Date Analyzed: 06/16/2020	Extraction Method: SW3050B
Instrument: ICP-MS5	Analytical Method: SW6020
Matrix: Soil	Unit: mg/kg
Project: 750664801; 1666 Seventh Street	Sample ID: MB/LCS/LCSD-200040

QC Summary Report for Metals

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Antimony	52.4	51.2	50	105	102	75-125	2.39	20
Arsenic	49.1	48.7	50	98	97	75-125	0.793	20
Barium	481	475	500	96	95	75-125	1.24	20
Beryllium	49.0	48.2	50	98	96	75-125	1.64	20
Cadmium	47.9	48.4	50	96	97	75-125	0.945	20
Chromium	48.0	48.0	50	96	96	75-125	0.115	20
Cobalt	49.0	48.2	50	98	96	75-125	1.55	20
Copper	48.8	48.7	50	98	97	75-125	0.0308	20
Lead	48.5	48.3	50	97	97	75-125	0.504	20
Mercury	1.18	1.24	1.25	94	99	75-125	4.63	20
Molybdenum	51.6	50.6	50	103	101	75-125	1.98	20
Nickel	48.9	48.6	50	98	97	75-125	0.644	20
Selenium	48.5	48.2	50	97	96	75-125	0.733	20
Silver	48.9	48.0	50	98	96	75-125	1.84	20
Thallium	48.9	48.2	50	98	96	75-125	1.48	20
Vanadium	48.1	48.2	50	96	96	75-125	0.264	20
Zinc	489	488	500	98	98	75-125	0.103	20
Surrogate Recovery								
Terbium	524	512	500	105	102	70-130	2.44	20



Quality Control Report

Client:	Langan	WorkOrder:	2006697
Date Prepared:	06/15/2020	BatchID:	200069
Date Analyzed:	06/16/2020	Extraction Method:	SW3050B
Instrument:	ICP-MS5	Analytical Method:	SW6020
Matrix:	Soil	Unit:	mg/kg
Project:	750664801; 1666 Seventh Street	Sample ID:	MB/LCS/LCSD-200069

QC Summary Report for Metals

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Antimony	ND	0.160	0.500	-	-	-
Arsenic	ND	0.150	0.500	-	-	-
Barium	ND	0.570	5.00	-	-	-
Beryllium	ND	0.0730	0.500	-	-	-
Cadmium	ND	0.0610	0.500	-	-	-
Chromium	ND	0.130	0.500	-	-	-
Cobalt	ND	0.0520	0.500	-	-	-
Copper	ND	0.180	0.500	-	-	-
Lead	ND	0.140	0.500	-	-	-
Mercury	ND	0.0320	0.0500	-	-	-
Molybdenum	ND	0.160	0.500	-	-	-
Nickel	ND	0.170	0.500	-	-	-
Selenium	ND	0.150	0.500	-	-	-
Silver	ND	0.120	0.500	-	-	-
Thallium	ND	0.0670	0.500	-	-	-
Vanadium	ND	0.130	0.500	-	-	-
Zinc	ND	3.00	5.00	-	-	-
Surrogate Recovery						
Terbium	512			500	103	70-130



Quality Control Report

Client: Langan	WorkOrder: 2006697
Date Prepared: 06/15/2020	BatchID: 200069
Date Analyzed: 06/16/2020	Extraction Method: SW3050B
Instrument: ICP-MS5	Analytical Method: SW6020
Matrix: Soil	Unit: mg/kg
Project: 750664801; 1666 Seventh Street	Sample ID: MB/LCS/LCSD-200069

QC Summary Report for Metals

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Antimony	52.1	52.3	50	104	105	75-125	0.441	20
Arsenic	49.5	48.2	50	99	96	75-125	2.61	20
Barium	495	486	500	99	97	75-125	1.82	20
Beryllium	49.3	48.2	50	99	96	75-125	2.29	20
Cadmium	48.8	47.6	50	98	95	75-125	2.57	20
Chromium	49.3	47.7	50	99	95	75-125	3.37	20
Cobalt	49.8	48.9	50	100	98	75-125	2.02	20
Copper	49.6	48.0	50	99	96	75-125	3.36	20
Lead	49.8	49.0	50	100	98	75-125	1.51	20
Mercury	1.18	1.18	1.25	95	94	75-125	0.677	20
Molybdenum	50.6	50.7	50	101	101	75-125	0.0257	20
Nickel	49.2	47.5	50	98	95	75-125	3.55	20
Selenium	49.4	47.7	50	99	95	75-125	3.44	20
Silver	49.6	48.8	50	99	98	75-125	1.69	20
Thallium	50.1	48.9	50	100	98	75-125	2.48	20
Vanadium	49.3	47.8	50	99	96	75-125	3.09	20
Zinc	499	483	500	100	97	75-125	3.15	20
Surrogate Recovery								
Terbium	519	522	500	104	104	70-130	0.477	20



Quality Control Report

Client: Langan	WorkOrder: 2006697
Date Prepared: 06/15/2020	BatchID: 200076
Date Analyzed: 06/15/2020 - 06/16/2020	Extraction Method: SW5035
Instrument: GC19, GC3, GC7	Analytical Method: SW8021B/8015Bm
Matrix: Soil	Unit: mg/Kg
Project: 750664801; 1666 Seventh Street	Sample ID: MB/LCS/LCSD-200076 2006697-001AMS/MSD

QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
TPH(g) (C6-C12)	ND	0.700	1.00	-	-	-
MTBE	ND	0.00400	0.0500	-	-	-
Benzene	ND	0.00300	0.00500	-	-	-
Toluene	ND	0.00200	0.00500	-	-	-
Ethylbenzene	ND	0.00220	0.00500	-	-	-
m,p-Xylene	ND	0.00300	0.0100	-	-	-
o-Xylene	ND	0.00100	0.00500	-	-	-

Surrogate Recovery

2-Fluorotoluene	0.101		0.1	101	75-134
-----------------	-------	--	-----	-----	--------



Quality Control Report

Client: Langan
Date Prepared: 06/15/2020
Date Analyzed: 06/15/2020 - 06/16/2020
Instrument: GC19, GC3, GC7
Matrix: Soil
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
BatchID: 200076
Extraction Method: SW5035
Analytical Method: SW8021B/8015Bm
Unit: mg/Kg
Sample ID: MB/LCS/LCSD-200076
 2006697-001AMS/MSD

QC Summary Report for SW8021B/8015Bm

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
TPH(btex)	0.604	0.589	0.60	101	98	82-118	2.54	20
MTBE	0.0872	0.0873	0.10	87	87	61-119	0.149	20
Benzene	0.0985	0.0967	0.10	98	97	77-128	1.81	20
Toluene	0.102	0.0998	0.10	102	100	74-132	2.07	20
Ethylbenzene	0.0998	0.0976	0.10	100	98	84-127	2.17	20
m,p-Xylene	0.204	0.199	0.20	102	100	80-120	2.28	20
o-Xylene	0.0974	0.0951	0.10	97	95	80-120	2.39	20

Surrogate Recovery

2-Fluorotoluene	0.0917	0.0905	0.10	92	91	75-134	1.30	20
-----------------	--------	--------	------	----	----	--------	------	----

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	1	0.570	0.589	0.60	ND	95	98	58-129	3.13	20
MTBE	1	0.0844	0.0835	0.10	ND	67	66	47-118	1.07	20
Benzene	1	0.0972	0.0998	0.10	ND	97	100	55-129	2.68	20
Toluene	1	0.102	0.106	0.10	ND	99	103	56-130	4.08	20
Ethylbenzene	1	0.102	0.106	0.10	ND	102	106	63-129	3.12	20
m,p-Xylene	1	0.222	0.236	0.20	ND	108	115	80-120	6.07	20
o-Xylene	1	0.104	0.110	0.10	ND	102	107	80-120	5.07	20

Surrogate Recovery

2-Fluorotoluene	1	0.0937	0.0963	0.10		94	96	62-126	2.76	20
-----------------	---	--------	--------	------	--	----	----	--------	------	----

(Cont.)



Quality Control Report

Client: Langan	WorkOrder: 2006697
Date Prepared: 06/17/2020	BatchID: 200290
Date Analyzed: 06/17/2020 - 06/18/2020	Extraction Method: SW5035
Instrument: GC19, GC7	Analytical Method: SW8021B/8015Bm
Matrix: Soil	Unit: mg/Kg
Project: 750664801; 1666 Seventh Street	Sample ID: MB/LCS/LCSD-200290

QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
TPH(g) (C6-C12)	ND	0.700	1.00	-	-	-
MTBE	ND	0.00400	0.0500	-	-	-
Benzene	ND	0.00300	0.00500	-	-	-
Toluene	ND	0.00200	0.00500	-	-	-
Ethylbenzene	ND	0.00220	0.00500	-	-	-
m,p-Xylene	ND	0.00300	0.0100	-	-	-
o-Xylene	ND	0.00100	0.00500	-	-	-

Surrogate Recovery

2-Fluorotoluene	0.0952		0.1	95	75-134
-----------------	--------	--	-----	----	--------

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
TPH(btex)	0.581	0.580	0.60	97	97	82-118	0.148	20
MTBE	0.0855	0.0885	0.10	86	89	61-119	3.47	20
Benzene	0.0972	0.0971	0.10	97	97	77-128	0.117	20
Toluene	0.0991	0.0986	0.10	99	99	74-132	0.549	20
Ethylbenzene	0.101	0.100	0.10	101	100	84-127	0.819	20
m,p-Xylene	0.210	0.208	0.20	105	104	80-120	0.469	20
o-Xylene	0.102	0.101	0.10	102	101	80-120	0.703	20

Surrogate Recovery

2-Fluorotoluene	0.0948	0.0942	0.10	95	94	75-134	0.602	20
-----------------	--------	--------	------	----	----	--------	-------	----



Quality Control Report

Client:	Langan	WorkOrder:	2006697
Date Prepared:	06/15/2020	BatchID:	200075
Date Analyzed:	06/16/2020	Extraction Method:	SW3550B
Instrument:	GC6A	Analytical Method:	SW8015B
Matrix:	Soil	Unit:	mg/Kg
Project:	750664801; 1666 Seventh Street	Sample ID:	MB/LCS/LCSD-200075 2006697-002AMS/MSD

QC Report for SW8015B w/out SG Clean-Up

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
TPH-Diesel (C10-C23)	ND	0.830	1.00	-	-	-
TPH-Motor Oil (C18-C36)	ND	3.80	5.00	-	-	-
Surrogate Recovery						
C9	22.1			25	88	70-130

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	43.2	44.0	40	108	110	70-130	1.87	20
Surrogate Recovery								
C9	22.0	22.0	25	88	88	70-130	0.209	20

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	1	52.1	54.2	40	1.533	126	132,F1	70-130	3.99	20
Surrogate Recovery										
C9	1	21.9	22.1	25		88	88	70-130	0.738	20



1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 2006697

ClientCode: TWRK

- WaterTrax
 WriteOn
 EDF
 Excel
 EQulS
 Email
 HardCopy
 ThirdParty
 J-flag
 Detection Summary
 Dry-Weight

Report to:

Adam Brown
Langan
501 14th Street, 3rd Floor
Oakland, CA 94612
(415) 955-9040 FAX: (415) 955-9041

Email: abrown@langan.com
cc/3rd Party: bhayward@langan.com; Mfromstein@lang
PO:
Project: 750664801; 1666 Seventh Street

Bill to:

Accounts Payable
Langan
135 Main St, Suite 1500
San Francisco, CA 94105
Langan_InvoiceCapture@concurolutio

Requested TAT: 5 days;

Date Received: 06/12/2020

Date Logged: 06/12/2020

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
2006697-001	EB-2-1.5	Soil	6/11/2020 08:47	<input type="checkbox"/>	A	A	A	A	A	A	A	A	A	A		A	
2006697-002	EB-2-3.0	Soil	6/11/2020 08:50	<input type="checkbox"/>	A	A	A	A	A	A	A	A	A	A		A	
2006697-003	EB-2-5.0	Soil	6/11/2020 08:53	<input checked="" type="checkbox"/>										A	A		
2006697-004	EB-2-7.0	Soil	6/11/2020 08:56	<input type="checkbox"/>	A	A	A	A	A	A	A	A	A	A		A	
2006697-005	EB-3-1.5	Soil	6/11/2020 09:24	<input type="checkbox"/>	A	A	A	A	A	A	A	A	A	A		A	
2006697-006	EB-3-5.0	Soil	6/11/2020 09:29	<input checked="" type="checkbox"/>										A	A		
2006697-007	EB-3-3.0	Soil	6/11/2020 09:26	<input type="checkbox"/>	A	A	A	A	A	A	A	A	A	A		A	
2006697-008	EB-3-7.0	Soil	6/11/2020 09:33	<input type="checkbox"/>	A	A	A	A	A	A	A	A	A	A		A	
2006697-009	EB-4-1.5	Soil	6/11/2020 09:45	<input type="checkbox"/>	A	A	A	A	A	A	A	A	A	A		A	
2006697-010	EB-4-3.0	Soil	6/11/2020 09:50	<input type="checkbox"/>	A	A	A	A	A	A	A	A	A	A		A	
2006697-011	EB-4-5.0	Soil	6/11/2020 09:55	<input type="checkbox"/>	A	A	A	A	A	A	A	A	A	A		A	
2006697-012	EB-8-1.5	Soil	6/11/2020 10:33	<input type="checkbox"/>	A	A	A	A	A	A	A	A	A	A		A	
2006697-013	EB-8-3.0	Soil	6/11/2020 10:35	<input type="checkbox"/>	A	A	A	A	A	A	A	A	A	A		A	
2006697-014	EB-8-5.0	Soil	6/11/2020 10:40	<input checked="" type="checkbox"/>											A	A	
2006697-015	EB-7-1.5	Soil	6/11/2020 10:09	<input type="checkbox"/>	A	A	A	A	A	A	A	A	A	A		A	

Test Legend:

1	8081pcB_ESL_LL_S	2	8141_S	3	8151_S	4	8260B_Scan-SIM_S
5	8270_SCSM_GPC_S	6	ASBEST400 (435 CARB)_S	7	CAM17MS_TTLC_S	8	G-MBTX_S
9	PRDisposal Fee	10	PRHOLD	11	TPH(DMO)_S	12	

Project Manager: Angela Rydelius

Prepared by: Agustina Venegas

The following SamplIDs: 001A, 002A, 004A, 005A, 007A, 008A, 009A, 010A, 011A, 012A, 013A, 015A, 016A, 017A, 018A, 019A contain testgroup Multi Range_S.

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.



1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 2006697

ClientCode: TWRK

- WaterTrax
 WriteOn
 EDF
 Excel
 EQulS
 Email
 HardCopy
 ThirdParty
 J-flag
 Detection Summary
 Dry-Weight

Report to:

Adam Brown
Langan
501 14th Street, 3rd Floor
Oakland, CA 94612
(415) 955-9040 FAX: (415) 955-9041

Email: abrown@langan.com
cc/3rd Party: bhayward@langan.com; Mfromstein@lang
PO:
Project: 750664801; 1666 Seventh Street

Bill to:

Accounts Payable
Langan
135 Main St, Suite 1500
San Francisco, CA 94105
Langan_InvoiceCapture@concur.solutio

Requested TAT: 5 days;

Date Received: 06/12/2020

Date Logged: 06/12/2020

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
2006697-016	EB-7-3.0	Soil	6/11/2020 10:12	<input type="checkbox"/>	A	A	A	A	A	A	A	A	A	A		A	
2006697-017	EB-7-5.0	Soil	6/11/2020 10:17	<input type="checkbox"/>	A	A	A	A	A	A	A	A	A	A		A	
2006697-018	EB-5-1.5	Soil	6/11/2020 11:12	<input type="checkbox"/>	A	A	A	A	A	A	A	A	A	A		A	
2006697-019	EB-5-3.0	Soil	6/11/2020 11:15	<input type="checkbox"/>	A	A	A	A	A	A	A	A	A	A		A	
2006697-020	EB-5-5.0	Soil	6/11/2020 11:20	<input checked="" type="checkbox"/>											A	A	

Test Legend:

1	8081pcB_ESL_LL_S	2	8141_S	3	8151_S	4	8260B_Scan-SIM_S
5	8270_SCSM_GPC_S	6	ASBEST400 (435 CARB)_S	7	CAM17MS_TTLC_S	8	G-MBTX_S
9	PRDisposal Fee	10	PRHOLD	11	TPH(DMO)_S	12	

Project Manager: Angela Rydelius

Prepared by: Agustina Venegas

The following SamplIDs: 001A, 002A, 004A, 005A, 007A, 008A, 009A, 010A, 011A, 012A, 013A, 015A, 016A, 017A, 018A, 019A contain testgroup Multi Range_S.

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days). Hazardous samples will be returned to client or disposed of at client expense.



WORK ORDER SUMMARY

Client Name: LANGAN
Client Contact: Adam Brown
Contact's Email: abrown@langan.com

Project: 750664801; 1666 Seventh Street

Work Order: 2006697
QC Level: LEVEL 2
Date Logged: 6/12/2020

Comments:

WaterTrax WriteOn EDF Excel EQUIS Email HardCopy ThirdParty J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut	
2006697-001A	EB-2-1.5	Soil	Multi-Range TPH	1	Acetate Liner	<input type="checkbox"/>	6/11/2020 8:47	5 days		<input type="checkbox"/>		
			SW6020 (CAM 17)			<input type="checkbox"/>		5 days		<input type="checkbox"/>		
			Asbestos, 435 CARB 400 Forensics			<input type="checkbox"/>		5 days		<input type="checkbox"/>		SubOut
			SW8270C (Low Level SVOCs) with GPC Cleanup			<input type="checkbox"/>		5 days		<input type="checkbox"/>		
			SW8260B (VOCs, Scan- SIM)			<input type="checkbox"/>		5 days		<input type="checkbox"/>		
			SW8151A (Chlorinated Herbicides)			<input type="checkbox"/>		5 days		<input type="checkbox"/>		
			SW8270C (ON/P Pesticides)			<input type="checkbox"/>		5 days		<input type="checkbox"/>		
2006697-002A	EB-2-3.0	Soil	Multi-Range TPH	1	Acetate Liner	<input type="checkbox"/>	6/11/2020 8:50	5 days		<input type="checkbox"/>		
			SW6020 (CAM 17)			<input type="checkbox"/>		5 days		<input type="checkbox"/>		
			Asbestos, 435 CARB 400 Forensics			<input type="checkbox"/>		5 days		<input type="checkbox"/>		SubOut
			SW8270C (Low Level SVOCs) with GPC Cleanup			<input type="checkbox"/>		5 days		<input type="checkbox"/>		
			SW8260B (VOCs, Scan- SIM)			<input type="checkbox"/>		5 days		<input type="checkbox"/>		
			SW8151A (Chlorinated Herbicides)			<input type="checkbox"/>		5 days		<input type="checkbox"/>		
			SW8270C (ON/P Pesticides)			<input type="checkbox"/>		5 days		<input type="checkbox"/>		

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).
- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



WORK ORDER SUMMARY

Client Name: LANGAN
Client Contact: Adam Brown
Contact's Email: abrown@langan.com

Project: 750664801; 1666 Seventh Street

Work Order: 2006697
QC Level: LEVEL 2
Date Logged: 6/12/2020

Comments:

WaterTrax WriteOn EDF Excel EQUIS Email HardCopy ThirdParty J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
2006697-002A	EB-2-3.0	Soil	SW8081A/8082 (OC Pesticides+PCBs) ESLs	1	Acetate Liner	<input type="checkbox"/>	6/11/2020 8:50	5 days		<input type="checkbox"/>	
2006697-004A	EB-2-7.0	Soil	Multi-Range TPH	1	Acetate Liner	<input type="checkbox"/>	6/11/2020 8:56	5 days		<input type="checkbox"/>	
			SW6020 (CAM 17)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			Asbestos, 435 CARB 400 Forensics			<input type="checkbox"/>		5 days		<input type="checkbox"/>	SubOut
			SW8270C (Low Level SVOCs) with GPC Cleanup			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8260B (VOCs, Scan- SIM)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8151A (Chlorinated Herbicides)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8270C (ON/P Pesticides)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8081A/8082 (OC Pesticides+PCBs) ESLs			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
2006697-005A	EB-3-1.5	Soil	Multi-Range TPH	1	Acetate Liner	<input type="checkbox"/>	6/11/2020 9:24	5 days		<input type="checkbox"/>	
			SW6020 (CAM 17)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			Asbestos, 435 CARB 400 Forensics			<input type="checkbox"/>		5 days		<input type="checkbox"/>	SubOut
			SW8270C (Low Level SVOCs) with GPC Cleanup			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8260B (VOCs, Scan- SIM)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8151A (Chlorinated Herbicides)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).
- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



WORK ORDER SUMMARY

Client Name: LANGAN
Client Contact: Adam Brown
Contact's Email: abrown@langan.com

Project: 750664801; 1666 Seventh Street

Comments:

Work Order: 2006697
QC Level: LEVEL 2
Date Logged: 6/12/2020

WaterTrax WriteOn EDF Excel EQUIS Email HardCopy ThirdParty J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut		
2006697-005A	EB-3-1.5	Soil	SW8270C (ON/P Pesticides)	1	Acetate Liner	<input type="checkbox"/>	6/11/2020 9:24	5 days		<input type="checkbox"/>			
			SW8081A/8082 (OC Pesticides+PCBs) ESLs			<input type="checkbox"/>		5 days					
2006697-007A	EB-3-3.0	Soil	Multi-Range TPH	1	Acetate Liner	<input type="checkbox"/>	6/11/2020 9:26	5 days		<input type="checkbox"/>			
			SW6020 (CAM 17)			<input type="checkbox"/>		5 days					
			Asbestos, 435 CARB 400 Forensics			<input type="checkbox"/>		5 days				<input type="checkbox"/>	SubOut
			SW8270C (Low Level SVOCs) with GPC Cleanup			<input type="checkbox"/>		5 days				<input type="checkbox"/>	
			SW8260B (VOCs, Scan- SIM)			<input type="checkbox"/>		5 days				<input type="checkbox"/>	
			SW8151A (Chlorinated Herbicides)			<input type="checkbox"/>		5 days				<input type="checkbox"/>	
			SW8270C (ON/P Pesticides)			<input type="checkbox"/>		5 days				<input type="checkbox"/>	
2006697-008A	EB-3-7.0	Soil	Multi-Range TPH	1	Acetate Liner	<input type="checkbox"/>	6/11/2020 9:33	5 days		<input type="checkbox"/>			
			SW6020 (CAM 17)			<input type="checkbox"/>		5 days					
			Asbestos, 435 CARB 400 Forensics			<input type="checkbox"/>		5 days				<input type="checkbox"/>	SubOut
			SW8270C (Low Level SVOCs) with GPC Cleanup			<input type="checkbox"/>		5 days				<input type="checkbox"/>	
			SW8260B (VOCs, Scan- SIM)			<input type="checkbox"/>		5 days				<input type="checkbox"/>	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



WORK ORDER SUMMARY

Client Name: LANGAN
Client Contact: Adam Brown
Contact's Email: abrown@langan.com

Project: 750664801; 1666 Seventh Street

Work Order: 2006697
QC Level: LEVEL 2
Date Logged: 6/12/2020

Comments:

WaterTrax WriteOn EDF Excel EQUIS Email HardCopy ThirdParty J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut			
2006697-008A	EB-3-7.0	Soil	SW8151A (Chlorinated Herbicides)	1	Acetate Liner	<input type="checkbox"/>	6/11/2020 9:33	5 days		<input type="checkbox"/>				
			SW8270C (ON/P Pesticides)			<input type="checkbox"/>						5 days	<input type="checkbox"/>	
			SW8081A/8082 (OC Pesticides+PCBs) ESLs			<input type="checkbox"/>						5 days	<input type="checkbox"/>	
2006697-009A	EB-4-1.5	Soil	Multi-Range TPH	1	Acetate Liner	<input type="checkbox"/>	6/11/2020 9:45	5 days		<input type="checkbox"/>				
			SW6020 (CAM 17)			<input type="checkbox"/>						5 days	<input type="checkbox"/>	
			Asbestos, 435 CARB 400 Forensics			<input type="checkbox"/>						5 days	<input type="checkbox"/>	SubOut
			SW8270C (Low Level SVOCs) with GPC Cleanup			<input type="checkbox"/>						5 days	<input type="checkbox"/>	
			SW8260B (VOCs, Scan- SIM)			<input type="checkbox"/>						5 days	<input type="checkbox"/>	
			SW8151A (Chlorinated Herbicides)			<input type="checkbox"/>						5 days	<input type="checkbox"/>	
			SW8270C (ON/P Pesticides)			<input type="checkbox"/>						5 days	<input type="checkbox"/>	
SW8081A/8082 (OC Pesticides+PCBs) ESLs	<input type="checkbox"/>	5 days	<input type="checkbox"/>											
2006697-010A	EB-4-3.0	Soil	Multi-Range TPH	1	Acetate Liner	<input type="checkbox"/>	6/11/2020 9:50	5 days		<input type="checkbox"/>				
			SW6020 (CAM 17)			<input type="checkbox"/>						5 days	<input type="checkbox"/>	
			Asbestos, 435 CARB 400 Forensics			<input type="checkbox"/>						5 days	<input type="checkbox"/>	SubOut
			SW8270C (Low Level SVOCs) with GPC Cleanup			<input type="checkbox"/>						5 days	<input type="checkbox"/>	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).
- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



WORK ORDER SUMMARY

Client Name: LANGAN
Client Contact: Adam Brown
Contact's Email: abrown@langan.com

Project: 750664801; 1666 Seventh Street

Work Order: 2006697
QC Level: LEVEL 2
Date Logged: 6/12/2020

Comments:

WaterTrax WriteOn EDF Excel EQUIS Email HardCopy ThirdParty J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut			
2006697-010A	EB-4-3.0	Soil	SW8260B (VOCs, Scan- SIM)	1	Acetate Liner	<input type="checkbox"/>	6/11/2020 9:50	5 days		<input type="checkbox"/>				
			SW8151A (Chlorinated Herbicides)			<input type="checkbox"/>						5 days	<input type="checkbox"/>	
			SW8270C (ON/P Pesticides)			<input type="checkbox"/>						5 days	<input type="checkbox"/>	
			SW8081A/8082 (OC Pesticides+PCBs) ESLs			<input type="checkbox"/>						5 days	<input type="checkbox"/>	
2006697-011A	EB-4-5.0	Soil	Multi-Range TPH	1	Acetate Liner	<input type="checkbox"/>	6/11/2020 9:55	5 days		<input type="checkbox"/>				
			SW6020 (CAM 17)			<input type="checkbox"/>						5 days	<input type="checkbox"/>	
			Asbestos, 435 CARB 400 Forensics			<input type="checkbox"/>						5 days	<input type="checkbox"/>	SubOut
			SW8270C (Low Level SVOCs) with GPC Cleanup			<input type="checkbox"/>						5 days	<input type="checkbox"/>	
			SW8260B (VOCs, Scan- SIM)			<input type="checkbox"/>						5 days	<input type="checkbox"/>	
			SW8151A (Chlorinated Herbicides)			<input type="checkbox"/>						5 days	<input type="checkbox"/>	
			SW8270C (ON/P Pesticides)			<input type="checkbox"/>						5 days	<input type="checkbox"/>	
SW8081A/8082 (OC Pesticides+PCBs) ESLs	<input type="checkbox"/>	5 days	<input type="checkbox"/>											
2006697-012A	EB-8-1.5	Soil	Multi-Range TPH	1	Acetate Liner	<input type="checkbox"/>	6/11/2020 10:33	5 days		<input type="checkbox"/>				
			SW6020 (CAM 17)			<input type="checkbox"/>						5 days	<input type="checkbox"/>	
			Asbestos, 435 CARB 400 Forensics			<input type="checkbox"/>						5 days	<input type="checkbox"/>	SubOut

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).
- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



WORK ORDER SUMMARY

Client Name: LANGAN
Client Contact: Adam Brown
Contact's Email: abrown@langan.com

Project: 750664801; 1666 Seventh Street

Comments:

Work Order: 2006697
QC Level: LEVEL 2
Date Logged: 6/12/2020

WaterTrax WriteOn EDF Excel EQUIS Email HardCopy ThirdParty J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut	
2006697-012A	EB-8-1.5	Soil	SW8270C (Low Level SVOCs) with GPC Cleanup	1	Acetate Liner	<input type="checkbox"/>	6/11/2020 10:33	5 days		<input type="checkbox"/>		
			SW8260B (VOCs, Scan- SIM)			<input type="checkbox"/>		5 days				
			SW8151A (Chlorinated Herbicides)			<input type="checkbox"/>		5 days				
			SW8270C (ON/P Pesticides)			<input type="checkbox"/>		5 days				
			SW8081A/8082 (OC Pesticides+PCBs) ESLs			<input type="checkbox"/>		5 days				
2006697-013A	EB-8-3.0	Soil	Multi-Range TPH	1	Acetate Liner	<input type="checkbox"/>	6/11/2020 10:35	5 days		<input type="checkbox"/>		
			SW6020 (CAM 17)			<input type="checkbox"/>		5 days				
			Asbestos, 435 CARB 400 Forensics			<input type="checkbox"/>		5 days				<input type="checkbox"/> SubOut
			SW8270C (Low Level SVOCs) with GPC Cleanup			<input type="checkbox"/>		5 days				
			SW8260B (VOCs, Scan- SIM)			<input type="checkbox"/>		5 days				
			SW8151A (Chlorinated Herbicides)			<input type="checkbox"/>		5 days				
			SW8270C (ON/P Pesticides)			<input type="checkbox"/>		5 days				
SW8081A/8082 (OC Pesticides+PCBs) ESLs	<input type="checkbox"/>	5 days										
2006697-015A	EB-7-1.5	Soil	Multi-Range TPH	1	Acetate Liner	<input type="checkbox"/>	6/11/2020 10:09	5 days		<input type="checkbox"/>		
			SW6020 (CAM 17)			<input type="checkbox"/>		5 days				

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).
- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



WORK ORDER SUMMARY

Client Name: LANGAN
Client Contact: Adam Brown
Contact's Email: abrown@langan.com

Project: 750664801; 1666 Seventh Street

Comments:

Work Order: 2006697
QC Level: LEVEL 2
Date Logged: 6/12/2020

WaterTrax WriteOn EDF Excel EQUIS Email HardCopy ThirdParty J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut			
2006697-015A	EB-7-1.5	Soil	Asbestos, 435 CARB 400 Forensics	1	Acetate Liner	<input type="checkbox"/>	6/11/2020 10:09	5 days		<input type="checkbox"/>	SubOut			
			SW8270C (Low Level SVOCs) with GPC Cleanup			<input type="checkbox"/>						5 days	<input type="checkbox"/>	
			SW8260B (VOCs, Scan- SIM)			<input type="checkbox"/>						5 days	<input type="checkbox"/>	
			SW8151A (Chlorinated Herbicides)			<input type="checkbox"/>						5 days	<input type="checkbox"/>	
			SW8270C (ON/P Pesticides)			<input type="checkbox"/>						5 days	<input type="checkbox"/>	
			SW8081A/8082 (OC Pesticides+PCBs) ESLs			<input type="checkbox"/>						5 days	<input type="checkbox"/>	
2006697-016A	EB-7-3.0	Soil	Multi-Range TPH	1	Acetate Liner	<input type="checkbox"/>	6/11/2020 10:12	5 days		<input type="checkbox"/>				
			SW6020 (CAM 17)			<input type="checkbox"/>						5 days	<input type="checkbox"/>	
			Asbestos, 435 CARB 400 Forensics			<input type="checkbox"/>						5 days	<input type="checkbox"/>	SubOut
			SW8270C (Low Level SVOCs) with GPC Cleanup			<input type="checkbox"/>						5 days	<input type="checkbox"/>	
			SW8260B (VOCs, Scan- SIM)			<input type="checkbox"/>						5 days	<input type="checkbox"/>	
			SW8151A (Chlorinated Herbicides)			<input type="checkbox"/>						5 days	<input type="checkbox"/>	
			SW8270C (ON/P Pesticides)			<input type="checkbox"/>						5 days	<input type="checkbox"/>	
			SW8081A/8082 (OC Pesticides+PCBs) ESLs			<input type="checkbox"/>						5 days	<input type="checkbox"/>	
2006697-017A	EB-7-5.0	Soil	Multi-Range TPH	1	Acetate Liner	<input type="checkbox"/>	6/11/2020 10:17	5 days		<input type="checkbox"/>				

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).
- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



WORK ORDER SUMMARY

Client Name: LANGAN
Client Contact: Adam Brown
Contact's Email: abrown@langan.com

Project: 750664801; 1666 Seventh Street

Work Order: 2006697
QC Level: LEVEL 2
Date Logged: 6/12/2020

Comments:

WaterTrax WriteOn EDF Excel EQUIS Email HardCopy ThirdParty J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut	
2006697-017A	EB-7-5.0	Soil	SW6020 (CAM 17)	1	Acetate Liner	<input type="checkbox"/>	6/11/2020 10:17	5 days		<input type="checkbox"/>		
			Asbestos, 435 CARB 400 Forensics			<input type="checkbox"/>		5 days		<input type="checkbox"/>		SubOut
			SW8270C (Low Level SVOCs) with GPC Cleanup			<input type="checkbox"/>		5 days		<input type="checkbox"/>		
			SW8260B (VOCs, Scan- SIM)			<input type="checkbox"/>		5 days		<input type="checkbox"/>		
			SW8151A (Chlorinated Herbicides)			<input type="checkbox"/>		5 days		<input type="checkbox"/>		
			SW8270C (ON/P Pesticides)			<input type="checkbox"/>		5 days		<input type="checkbox"/>		
			SW8081A/8082 (OC Pesticides+PCBs) ESLs			<input type="checkbox"/>		5 days		<input type="checkbox"/>		
2006697-018A	EB-5-1.5	Soil	Multi-Range TPH	1	Acetate Liner	<input type="checkbox"/>	6/11/2020 11:12	5 days		<input type="checkbox"/>		
			SW6020 (CAM 17)			<input type="checkbox"/>		5 days		<input type="checkbox"/>		
			Asbestos, 435 CARB 400 Forensics			<input type="checkbox"/>		5 days		<input type="checkbox"/>		SubOut
			SW8270C (Low Level SVOCs) with GPC Cleanup			<input type="checkbox"/>		5 days		<input type="checkbox"/>		
			SW8260B (VOCs, Scan- SIM)			<input type="checkbox"/>		5 days		<input type="checkbox"/>		
			SW8151A (Chlorinated Herbicides)			<input type="checkbox"/>		5 days		<input type="checkbox"/>		
			SW8270C (ON/P Pesticides)			<input type="checkbox"/>		5 days		<input type="checkbox"/>		
SW8081A/8082 (OC Pesticides+PCBs) ESLs	<input type="checkbox"/>	5 days	<input type="checkbox"/>									

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).
- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



WORK ORDER SUMMARY

Client Name: LANGAN
Client Contact: Adam Brown
Contact's Email: abrown@langan.com

Project: 750664801; 1666 Seventh Street

Work Order: 2006697
QC Level: LEVEL 2
Date Logged: 6/12/2020

Comments:

WaterTrax WriteOn EDF Excel EQUIS Email HardCopy ThirdParty J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
2006697-019A	EB-5-3.0	Soil	Multi-Range TPH	1	Acetate Liner	<input type="checkbox"/>	6/11/2020 11:15	5 days		<input type="checkbox"/>	
			SW6020 (CAM 17)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			Asbestos, 435 CARB 400 Forensics			<input type="checkbox"/>		5 days		<input type="checkbox"/>	SubOut
			SW8270C (Low Level SVOCs) with GPC Cleanup			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8260B (VOCs, Scan- SIM)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8151A (Chlorinated Herbicides)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8270C (ON/P Pesticides)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8081A/8082 (OC Pesticides+PCBs) ESLs			<input type="checkbox"/>		5 days		<input type="checkbox"/>	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).
- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

*cc: bhayward@langan.com
mfromstein@langan.com

2006697
14527

LANGAN

CHAIN OF CUSTODY RECORD

- 135 Main Street, Suite 1500, San Francisco, CA 94105
- 501 14th Street, Third Floor, Oakland, CA 94612
- 3320 Data Drive, Suite 350, Rancho Cordova, CA 95670-7982
- 1 Almaden Boulevard, Suite 590, San Jose, CA 95113

Site Name: 1666 Seventh Street

Job Number: 750664801

Project Manager/Contact: Adam Brown abrown@langan.com

Samplers: BWH+MF

Recorder (Signature Required): _____

Turnaround Time
Standard

Field Sample Identification No.	Date	Time	Lab Sample No.	Matrix				No. Containers & Preservative				Analysis Requested										Silica gel clean-up	Hold	Remarks				
				Soil	Water	Air	Other	HCL	H ₂ SO ₄	HNO ₃	Ice	Fluoride (gpd, msp)	VOCs (8260B)	SVOCs (8270)	OC/PCB (808/8082)	8141A/8151A	CAM 17 (6026)	CARB 135 (asbestos)										
EB-2-1.5	6/11/20	0847		X									X	X	X	X	X	X										
EB-2-3.0		0850		X									X	X	X	X	X	X										
EB-2-5.0		0853		X									X	X	X	X	X	X							X			
EB-2-7.0		0856		X									X	X	X	X	X	X										
EB-3-1.5		0924		X									X	X	X	X	X	X										
EB-3-5.0		0929											X	X	X	X	X	X							X			
EB-3-3.0		0926		X									X	X	X	X	X	X										
EB-3-7.0		0933		X									X	X	X	X	X	X										
EB-4-1.5		0945		X									X	X	X	X	X	X										
EB-4-3.0		0950		X									X	X	X	X	X	X										
EB-4-5.0		0955		X									X	X	X	X	X	X										
EB-8-1.5		1033		X									X	X	X	X	X	X										
EB-8-3.0		1035		X									X	X	X	X	X	X										
EB-8-5.0		1040		X									X	X	X	X	X	X							X			

Relinquished by: (Signature) <u>Brenda Brown</u>	Date: <u>6/11/2020</u>	Time: <u>17:34</u>	Received by: (Signature) <u>JAP</u>	Date: <u>6/12/20</u>	Time: <u>1050</u>
Relinquished by: (Signature) <u>JAP</u>	Date: <u>6/12/20</u>	Time: <u>1330</u>	Received by: (Signature) <u>[Signature]</u>	Date: <u>6/12/2020</u>	Time: <u>1330</u>
Relinquished by: (Signature) _____	Date: _____	Time: _____	Received by Lab: (Signature) _____	Date: _____	Time: _____

Sent to Laboratory (Name): _____
 Laboratory Comments/Notes: _____

Method of Shipment: Lab courier Fed Ex Airborne UPS
 Hand Carried Private Courier (Co. Name)

* cc: bhayward@langan.com
mfromstein@langan.com

14526

LANGAN

CHAIN OF CUSTODY RECORD

Page 2 of 2

- 135 Main Street, Suite 1500, San Francisco, CA 94105
- 501 14th Street, Third Floor, Oakland, CA 94612
- 3320 Data Drive, Suite 350, Rancho Cordova, CA 95670-7982
- 1 Almaden Boulevard, Suite 590, San Jose, CA 95113

Site Name: 1666 Seventh Street

Job Number: 750664801

Project Manager/Contact: Adam Brown abrown@langan.com

Samplers: BWH+MF

Recorder (Signature Required): _____

Turnaround Time
Standard

Field Sample Identification No.	Date	Time	Lab Sample No.	Matrix				No. Containers & Preservative				Analysis Requested						Silica gel clean-up	Hold	Remarks				
				Soil	Water	Air	Other	HCL	H ₂ SO ₄	HNO ₃	Ice	Full TPH (g,d,m)	VOCs (8260B)	SVOCs (8270)	OCF/PCB (8061/8062)	8141/8151A	CAM17 (6020)				CARB 435 (8160/8165)			
EB-7-1.5	6/11/2020	1009		X									X	X	X	X	X	X						
EB-7-3.0	↓	1012		X									X	X	X	X	X	X						
EB-7-5.0	↓	1017		X									X	X	X	X	X	X						
EB-5-1.5	↓	1112		X									X	X	X	X	X	X						
EB-5-3.0	↓	1115		X									X	X	X	X	X	X						
EB-5-5.0	↓	1120		X									X	X	X	X	X	X			X			

Relinquished by: (Signature) <u>[Signature]</u>	Date: <u>6/11/2020</u>	Time: <u>17:34</u>	Received by: (Signature) <u>[Signature]</u>	Date: <u>6/12/20</u>	Time: <u>1050</u>
Relinquished by: (Signature) <u>[Signature]</u>	Date: <u>6/12/20</u>	Time: <u>1330</u>	Received by: (Signature) <u>[Signature]</u>	Date: <u>6/12/2020</u>	Time: <u>1530</u>
Relinquished by: (Signature) _____	Date: _____	Time: _____	Received by Lab: (Signature) _____	Date: _____	Time: _____

Sent to Laboratory (Name): _____

Laboratory Comments/Notes: _____

Method of Shipment: Lab courier Fed Ex Airborne UPS
 Hand Carried Private Courier (Co. Name)



Sample Receipt Checklist

Client Name: **Langan**
 Project: **750664801; 1666 Seventh Street**
 WorkOrder No: **2006697** Matrix: Soil
 Carrier: Lorenzo Perez (MAI Courier)

Date and Time Received: **6/12/2020 13:30**
 Date Logged: **6/12/2020**
 Received by: **Agustina Venegas**
 Logged by: **Agustina Venegas**

Chain of Custody (COC) Information

Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample IDs noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Date and Time of collection noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sampler's name noted on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
COC agrees with Quote?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper containers/bottles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Samples Received on Ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

(Ice Type: WET ICE)

Sample/Temp Blank temperature	Temp: 2.7°C	NA <input type="checkbox"/>	
Water - VOA vials have zero headspace / no bubbles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Sample labels checked for correct preservation?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
pH acceptable upon receipt (Metal: <2; Nitrate 353.2/4500NO3: <2; 522: <4; 218.7: >8)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

UCMR Samples:

pH tested and acceptable upon receipt (200.8: ≤2; 525.3: ≤4; 530: ≤7; 541: <3; 544: <6.5 & 7.5)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Free Chlorine tested and acceptable upon receipt (<0.1mg/L)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

Comments:



McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 2006697 A

Report Created for: Langan

501 14th Street, 3rd Floor
Oakland, CA 94612

Project Contact: Adam Brown

Project P.O.:

Project: 750664801; 1666 Seventh Street

Project Received: 06/12/2020

Analytical Report reviewed & approved for release on 06/30/2020 by:

Jennifer Lagerbom
Project Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.





Glossary of Terms & Qualifier Definitions

Client: Langan
Project: 750664801; 1666 Seventh Street
WorkOrder: 2006697 A

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
CPT	Consumer Product Testing not NELAP Accredited
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
LQL	Lowest Quantitation Level
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
TZA	TimeZone Net Adjustment for sample collected outside of MAI's UTC.
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)



Glossary of Terms & Qualifier Definitions

Client: Langan
Project: 750664801; 1666 Seventh Street
WorkOrder: 2006697 A

Quality Control Qualifiers

F1 MS/MSD recovery and/or RPD is out of acceptance criteria; LCS validates the prep batch.



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/24/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: CA Title 22
Analytical Method: SW6020
Unit: mg/L

Metals (STLC)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-3-3.0	2006697-007A	Soil	06/11/2020 09:26	ICP-MS5 268SMPL.d	200676

Analytes	Result	RL	DF	Date Analyzed
Chromium	ND	0.10	1	06/26/2020 20:25

Analyst(s): WV

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-7-5.0	2006697-017A	Soil	06/11/2020 10:17	ICP-MS5 276SMPL.d	200676

Analytes	Result	RL	DF	Date Analyzed
Chromium	ND	0.10	1	06/26/2020 20:50

Analyst(s): WV



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/27/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: CA Title 22
Analytical Method: SW6020
Unit: mg/L

Metals (STLC)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-8-1.5	2006697-012A	Soil	06/11/2020 10:33	ICP-MS4 282SMPL.d	200859

Analytes	Result	RL	DF	Date Analyzed
Chromium	0.79	0.10	1	06/29/2020 23:46
Lead	25	0.10	1	06/29/2020 23:46

Analyst(s): WV



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/24/2020-06/27/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: CA Title 22
Analytical Method: SW6020
Unit: mg/L

Metals (STLC)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-3-1.5	2006697-005A	Soil	06/11/2020 09:24	ICP-MS5 1167SMPL.d	200676

Analytes	Result	RL	DF	Date Analyzed
Lead	160	0.20	2	06/29/2020 13:57

Analyst(s): WV

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-4-1.5	2006697-009A	Soil	06/11/2020 09:45	ICP-MS4 281SMPL.d	200861

Analytes	Result	RL	DF	Date Analyzed
Lead	8.4	0.10	1	06/29/2020 23:42

Analyst(s): WV

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-4-3.0	2006697-010A	Soil	06/11/2020 09:50	ICP-MS5 275SMPL.d	200676

Analytes	Result	RL	DF	Date Analyzed
Lead	3.6	0.10	1	06/26/2020 20:47

Analyst(s): WV



Analytical Report

Client: Langan
Date Received: 06/12/2020 13:30
Date Prepared: 06/24/2020
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
Extraction Method: SW1311/SW3010
Analytical Method: SW6020
Unit: mg/L

Metals (TCLP)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-3-1.5	2006697-005A	Soil	06/11/2020 09:24	ICP-MS4 324SMPL.d	200675

Analytes	Result	RL	DF	Date Analyzed
Lead	0.69	0.10	1	06/25/2020 19:14

Analyst(s): JAG

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-4-1.5	2006697-009A	Soil	06/11/2020 09:45	ICP-MS4 334SMPL.d	200675

Analytes	Result	RL	DF	Date Analyzed
Lead	0.10	0.10	1	06/25/2020 19:51

Analyst(s): JAG

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EB-8-1.5	2006697-012A	Soil	06/11/2020 10:33	ICP-MS4 335SMPL.d	200675

Analytes	Result	RL	DF	Date Analyzed
Lead	ND	0.10	1	06/25/2020 19:55

Analyst(s): JAG



Quality Control Report

Client: Langan
Date Prepared: 06/24/2020
Date Analyzed: 06/26/2020 - 06/29/2020
Instrument: ICP-MS5
Matrix: Soil
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
BatchID: 200676
Extraction Method: CA Title 22
Analytical Method: SW6020
Unit: mg/L
Sample ID: MB/LCS/LCSD-200676
 2006697-005AMS/MSD

QC Summary Report for Metals (STLC)

Analyte	MB Result	MDL	RL			
Chromium	ND	0.100	0.100	-	-	-

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Chromium	9.47	9.72	10	95	97	75-125	2.57	20

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Chromium	2	10.1	10.0	10	0.374	97	96	75-125	0.890	20

Analyte	DLT Result	DLTRef Val	%D	%D Limit
Chromium	ND<1.00	0.374	-	-

%D Control Limit applied to analytes with concentrations greater than 25 times the reporting limits.



Quality Control Report

Client: Langan	WorkOrder: 2006697
Date Prepared: 06/27/2020	BatchID: 200859
Date Analyzed: 06/29/2020	Extraction Method: CA Title 22
Instrument: ICP-MS4	Analytical Method: SW6020
Matrix: Soil	Unit: mg/L
Project: 750664801; 1666 Seventh Street	Sample ID: MB/LCS/LCSD-200859

QC Summary Report for Metals (STLC)

Analyte	MB Result	MDL	RL			
Chromium	ND	0.100	0.100	-	-	-
Lead	ND	0.100	0.100	-	-	-

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Chromium	10.0	10.1	10	100	101	75-125	1.23	20
Lead	9.96	10.1	10	100	101	75-125	0.961	20



Quality Control Report

Client: Langan
Date Prepared: 06/24/2020
Date Analyzed: 06/26/2020 - 06/29/2020
Instrument: ICP-MS5
Matrix: Soil
Project: 750664801; 1666 Seventh Street

WorkOrder: 2006697
BatchID: 200676
Extraction Method: CA Title 22
Analytical Method: SW6020
Unit: mg/L
Sample ID: MB/LCS/LCSD-200676
 2006697-005AMS/MSD

QC Summary Report for Metals (STLC)

Analyte	MB Result	MDL	RL			
Lead	ND	0.100	0.100	-	-	-

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Lead	9.66	9.88	10	97	99	75-125	2.34	20

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Lead	2	166	172	10	159.2	69,F1	126,F1	75-125	3.34	20

Analyte	DLT Result	DLTRef Val	%D	%D Limit
Lead	140	159.2	12.1	20

%D Control Limit applied to analytes with concentrations greater than 25 times the reporting limits.



Quality Control Report

Client: Langan	WorkOrder: 2006697
Date Prepared: 06/27/2020	BatchID: 200861
Date Analyzed: 06/29/2020	Extraction Method: CA Title 22
Instrument: ICP-MS4	Analytical Method: SW6020
Matrix: Soil	Unit: mg/L
Project: 750664801; 1666 Seventh Street	Sample ID: MB/LCS/LCSD-200861

QC Summary Report for Metals (STLC)

Analyte	MB Result	MDL	RL			
Lead	ND	0.100	0.100	-	-	-

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Lead	9.90	9.93	10	99	99	75-125	0.331	20



Quality Control Report

Client: Langan	WorkOrder: 2006697
Date Prepared: 06/24/2020	BatchID: 200675
Date Analyzed: 06/25/2020 - 06/26/2020	Extraction Method: SW1311/SW3010
Instrument: ICP-MS4	Analytical Method: SW6020
Matrix: Soil	Unit: mg/L
Project: 750664801; 1666 Seventh Street	Sample ID: MB/LCS/LCSD-200675 2006697-005AMS/MSD

QC Summary Report for Metals (TCLP)

Analyte	MB Result	MDL	RL			
Lead	ND	0.100	0.100	-	-	-

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Lead	9.39	10.2	10	94	102	75-125	8.02	20

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Lead	1	10.1	10.2	10	0.6890	94	95	75-125	0.565	20

Analyte	DLT Result	DLTRef Val	%D	%D Limit
Lead	0.643	0.6890	6.68	-

%D Control Limit applied to analytes with concentrations greater than 25 times the reporting limits.



1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 2006697 **A** ClientCode: TWRK

- WaterTrax WriteOn EDF Excel EQulS Email HardCopy ThirdParty J-flag
 Detection Summary Dry-Weight

Report to:
Adam Brown
Langan
501 14th Street, 3rd Floor
Oakland, CA 94612
(415) 955-9040 FAX: (415) 955-9041

Email: abrown@langan.com
cc/3rd Party: bhayward@langan.com; Mfromstein@lang
PO:
Project: 750664801; 1666 Seventh Street

Bill to:
Accounts Payable
Langan
135 Main St, Suite 1500
San Francisco, CA 94105
Langan_InvoiceCapture@concur.solutio

Requested TAT: 5 days;

Date Received: 06/12/2020
Date Logged: 06/12/2020
Date Add-On: 06/24/2020

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
2006697-005	EB-3-1.5	Soil	6/11/2020 09:24	<input type="checkbox"/>			A	A									
2006697-007	EB-3-3.0	Soil	6/11/2020 09:26	<input type="checkbox"/>	A												
2006697-009	EB-4-1.5	Soil	6/11/2020 09:45	<input type="checkbox"/>			A	A									
2006697-010	EB-4-3.0	Soil	6/11/2020 09:50	<input type="checkbox"/>			A										
2006697-012	EB-8-1.5	Soil	6/11/2020 10:33	<input type="checkbox"/>		A		A									
2006697-017	EB-7-5.0	Soil	6/11/2020 10:17	<input type="checkbox"/>	A												

Test Legend:

1	CRMS_STLC_S	2	PBCRMS_STLC_S	3	PBMS_STLC_S	4	PBMS_TCLP_S
5		6		7		8	
9		10		11		12	

Project Manager: Angela Rydelius

Prepared by: Agustina Venegas
Add-On Prepared By: Maria Venegas

Comments: STLCs & TCLPs added 6/24/2020 STAT.

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.



WORK ORDER SUMMARY

Client Name: LANGAN
Client Contact: Adam Brown
Contact's Email abrown@langan.com

Project: 750664801; 1666 Seventh Street

Comments: STLCs & TCLPs added 6/24/2020 STAT.

Work Order: 2006697
QC Level: LEVEL 2
Date Logged: 6/12/2020
Date Add-On: 6/24/2020

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
2006697-005A	EB-3-1.5	Soil	SW6020 (Lead) (TCLP)	1	Acetate Liner	6/11/2020 9:24	5 days*		<input type="checkbox"/>	
			SW6020 (Lead) (STLC)				5 days*			
2006697-007A	EB-3-3.0	Soil	SW6020 (Chromium) (STLC)	1	Acetate Liner	6/11/2020 9:26	5 days*		<input type="checkbox"/>	
2006697-009A	EB-4-1.5	Soil	SW6020 (Lead) (TCLP)	1	Acetate Liner	6/11/2020 9:45	5 days*		<input type="checkbox"/>	
			SW6020 (Lead) (STLC)				5 days*			
2006697-010A	EB-4-3.0	Soil	SW6020 (Lead) (STLC)	1	Acetate Liner	6/11/2020 9:50	5 days*		<input type="checkbox"/>	
2006697-012A	EB-8-1.5	Soil	SW6020 (Lead) (TCLP)	1	Acetate Liner	6/11/2020 10:33	5 days*		<input type="checkbox"/>	
			SW6020 (Chromium & Lead) (STLC)				5 days*			
2006697-017A	EB-7-5.0	Soil	SW6020 (Chromium) (STLC)	1	Acetate Liner	6/11/2020 10:17	5 days*		<input type="checkbox"/>	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

*cc: bhayward@langan.com
mfromstein@langan.com

2006697
14527

LANGAN

CHAIN OF CUSTODY RECORD

- 135 Main Street, Suite 1500, San Francisco, CA 94105
- 501 14th Street, Third Floor, Oakland, CA 94612
- 3320 Data Drive, Suite 350, Rancho Cordova, CA 95670-7982
- 1 Almaden Boulevard, Suite 590, San Jose, CA 95113

Site Name: 1666 Seventh Street

Job Number: 750664801

Project Manager/Contact: Adam Brown abrown@langan.com

Samplers: BWH+MF

Recorder (Signature Required): _____

Turnaround
Time
Standard

Field Sample Identification No.	Date	Time	Lab Sample No.	Matrix			No. Containers & Preservative				Analysis Requested							Silica gel clean-up	Hold	Remarks				
				Soil	Water	Air	Other	HCL	H ₂ SO ₄	HNO ₃	Ice	Full TPH (g/d, max)	VOCs (826DB)	SVOCs (8270)	OCF/PCB (8081/8082)	8141A/8151A	CM 17 (6026)				CARB 435 (8868B)	STLCPb	STLCCr	TCLPPb
EB-2-1.5	6/11/20	0847		X								X	X	X	X	X	X							
EB-2-3.0		0850		X								X	X	X	X	X	X							
EB-2-5.0		0853		X								X	X	X	X	X	X							
EB-2-7.0		0856		X								X	X	X	X	X	X							
EB-3-1.5		0924		X								X	X	X	X	X	X	X						
EB-3-5.0		0929		X								X	X	X	X	X	X	X						
EB-3-3.0		0926		X								X	X	X	X	X	X	X						
EB-3-7.0		0933		X								X	X	X	X	X	X	X						
EB-4-1.5		0945		X								X	X	X	X	X	X	X						
EB-4-3.0		0950		X								X	X	X	X	X	X	X						
EB-4-5.0		0955		X								X	X	X	X	X	X	X						
EB-8-1.5		1033		X								X	X	X	X	X	X	X						
EB-8-3.0		1035		X								X	X	X	X	X	X	X						
EB-8-5.0		1040		X								X	X	X	X	X	X	X						
Relinquished by: (Signature) <u>Brent Brown</u>				Date: <u>6/11/2020</u>		Time: <u>17:34</u>		Received by: (Signature) <u>LAP</u>				Date: <u>6/12/20</u>		Time: <u>1050</u>										
Relinquished by: (Signature) <u>LAP</u>				Date: <u>6/12/20</u>		Time: <u>1330</u>		Received by: (Signature) <u>[Signature]</u>				Date: <u>6/12/2020</u>		Time: <u>1330</u>										
Relinquished by: (Signature) _____				Date: _____		Time: _____		Received by Lab: (Signature) _____				Date: _____		Time: _____										
Sent to Laboratory (Name): _____												Method of Shipment <input type="checkbox"/> Lab courier <input type="checkbox"/> Fed Ex <input type="checkbox"/> Airborne <input type="checkbox"/> UPS												
Laboratory Comments/Notes: <u>Added 6/24/2020 STAT</u>												<input type="checkbox"/> Hand Carried <input type="checkbox"/> Private Courier (Co. Name) _____												

*ES/LS Added
6/12/2020 PERAB

White Copy - Original Yellow Copy - Laboratory Pink Copy - Field COC Number:

2 FC
WFA

* cc: bhayward@langan.com
mfromstein@langan.com

14526

LANGAN

CHAIN OF CUSTODY RECORD

- 135 Main Street, Suite 1500, San Francisco, CA 94105
- 501 14th Street, Third Floor, Oakland, CA 94612
- 3320 Data Drive, Suite 350, Rancho Cordova, CA 95670-7982
- 1 Almaden Boulevard, Suite 590, San Jose, CA 95113

Site Name: 1666 Seventh Street

Job Number: 750664801

Project Manager/Contact: Adam Brown abrown@langan.com

Samplers: BWH+MF

Recorder (Signature Required): _____

Turnaround Time <u>Standard</u>

Field Sample Identification No.	Date	Time	Lab Sample No.	Matrix				No. Containers & Preservative				Analysis Requested										Silica gel clean-up	Hold	Remarks				
				Soil	Water	Air	Other	HCL	H ₂ SO ₄	HNO ₃	Ice	Full TPH (g.d.m)	VOCs (8260B)	SVOCs (8270)	OCF/PCB (8081/8082)	SI-41A/8151A	CAM17 (6020)	CARB 435 (as per 105)	STC									
EB-7-1.5	6/11/2020	1009		X								X	X	X	X	X	X	X	X	X	X	X	X	X				
EB-7-3.0		1012		X								X	X	X	X	X	X	X	X	X	X	X	X	X				
EB-7-5.0	↓	1017		X								X	X	X	X	X	X	X	X	X	X	X	X	X				
EB-5-1.5		1112		X								X	X	X	X	X	X	X	X	X	X	X	X	X				
EB-5-3.0		1115		X								X	X	X	X	X	X	X	X	X	X	X	X	X				
EB-5-5.0	↓	1120		X								X	X	X	X	X	X	X	X	X	X	X	X	X	X			
Relinquished by: (Signature)			Date:	Time	Received by: (Signature)			Date	Time																			
<u>Brenda Hayward</u>			6/11/2020	17:34	<u>LAP</u>			6/12/20	1050																			
Relinquished by: (Signature)			Date:	Time	Received by: (Signature)			Date	Time																			
<u>LAP</u>			6/12/20	1330	<u>CAUSTIN RYAN</u>			6/12/2020	1530																			
Relinquished by: (Signature)			Date:	Time	Received by Lab: (Signature)			Date	Time																			
_____			_____	_____	_____			_____	_____																			
Sent to Laboratory (Name): _____					Method of Shipment					<input type="checkbox"/> Lab courier	<input type="checkbox"/> Fed Ex	<input type="checkbox"/> Airborne	<input type="checkbox"/> UPS															
Laboratory Comments/Notes: _____					<input type="checkbox"/> Hand Carried					<input type="checkbox"/> Private Courier (Co. Name) _____																		

White Copy - Original

Yellow Copy - Laboratory

Pink Copy - Field

COC Number:

Bulk Asbestos Material Analysis

(Air Resources Board Method 435, June 6, 1991)

McC Campbell Analytical, Inc.
Account Payable
1534 Willow Pass Rd

Pittsburg, CA 94565

Client ID: A31409
Report Number: N013091
Date Received: 06/17/20
Date Analyzed: 06/23/20
Date Printed: 06/23/20

Job ID/Site: 2006697 - 1666 Seventh St.

SGSFL Job ID: A31409

PLM Report Number: N/A

Total Samples Submitted: 16

Total Samples Analyzed: 16

Sample Preparation and Analysis:

Samples were analyzed by the Air Resources Board's Method 435, Determination of Asbestos Content of Serpentine Aggregate. Samples were ground to 200 particle size in the laboratory. Approximately 1 pint was retained for analysis. Samples were prepared for observation according to the guidelines of Exception I and Exception II as defined by the 435 Method. Samples which contained less than 10% asbestos were prepared for observation according to the point count technique as defined by the 435 Method. This analysis was performed with a standard cross-hair reticle.

Sample ID	Lab Number	Layer Description
-----------	------------	-------------------

EB-2-1.5	12314387	Brown Soil
-----------------	----------	-------------------

Visual Estimation Results:

Matrix percentage of entire 100

Visual estimation percentage: None Detected

Asbestos type(s) detected: None Detected

Comment: This result meets the requirements of Exception I as defined by the 435 Method.

EB-2-3.0	12314388	Brown Soil
-----------------	----------	-------------------

Visual Estimation Results:

Matrix percentage of entire 100

Visual estimation percentage: None Detected

Asbestos type(s) detected: None Detected

Comment: This result meets the requirements of Exception I as defined by the 435 Method.

EB-2-7.0	12314389	Brown Soil
-----------------	----------	-------------------

Visual Estimation Results:

Matrix percentage of entire 100

Visual estimation percentage: None Detected

Asbestos type(s) detected: None Detected

Comment: This result meets the requirements of Exception I as defined by the 435 Method.

EB-3-1.5	12314390	Brown Soil
-----------------	----------	-------------------

Visual Estimation Results:

Matrix percentage of entire 100

Visual estimation percentage: None Detected

Asbestos type(s) detected: None Detected

Comment: This result meets the requirements of Exception I as defined by the 435 Method.

Bulk Asbestos Material Analysis

(Air Resources Board Method 435, June 6, 1991)

McC Campbell Analytical, Inc.
Account Payable
1534 Willow Pass Rd

Pittsburg, CA 94565

Client ID: A31409
Report Number: N013091
Date Received: 06/17/20
Date Analyzed: 06/23/20
Date Printed: 06/23/20

Job ID/Site: 2006697 - 1666 Seventh St.

SGSFL Job ID: A31409

PLM Report Number: N/A

Total Samples Submitted: 16

Total Samples Analyzed: 16

Sample Preparation and Analysis:

Samples were analyzed by the Air Resources Board's Method 435, Determination of Asbestos Content of Serpentine Aggregate. Samples were ground to 200 particle size in the laboratory. Approximately 1 pint was retained for analysis. Samples were prepared for observation according to the guidelines of Exception I and Exception II as defined by the 435 Method. Samples which contained less than 10% asbestos were prepared for observation according to the point count technique as defined by the 435 Method. This analysis was performed with a standard cross-hair reticle.

Sample ID	Lab Number	Layer Description
-----------	------------	-------------------

EB-3-3.0	12314391	Brown Soil
-----------------	----------	-------------------

Visual Estimation Results:

Matrix percentage of entire 100

Visual estimation percentage: None Detected

Asbestos type(s) detected: None Detected

Comment: This result meets the requirements of Exception I as defined by the 435 Method.

EB-3-7.0	12314392	Brown Soil
-----------------	----------	-------------------

Visual Estimation Results:

Matrix percentage of entire 100

Visual estimation percentage: None Detected

Asbestos type(s) detected: None Detected

Comment: This result meets the requirements of Exception I as defined by the 435 Method.

EB-4-1.5	12314393	Brown Soil
-----------------	----------	-------------------

Visual Estimation Results:

Matrix percentage of entire 100

Visual estimation percentage: None Detected

Asbestos type(s) detected: None Detected

Comment: This result meets the requirements of Exception I as defined by the 435 Method.

EB-4-3.0	12314394	Brown Soil
-----------------	----------	-------------------

Visual Estimation Results:

Matrix percentage of entire 100

Visual estimation percentage: None Detected

Asbestos type(s) detected: None Detected

Comment: This result meets the requirements of Exception I as defined by the 435 Method.

Bulk Asbestos Material Analysis

(Air Resources Board Method 435, June 6, 1991)

McC Campbell Analytical, Inc.
Account Payable
1534 Willow Pass Rd

Pittsburg, CA 94565

Client ID: A31409
Report Number: N013091
Date Received: 06/17/20
Date Analyzed: 06/23/20
Date Printed: 06/23/20

Job ID/Site: 2006697 - 1666 Seventh St.

SGSFL Job ID: A31409

PLM Report Number: N/A

Total Samples Submitted: 16
Total Samples Analyzed: 16

Sample Preparation and Analysis:

Samples were analyzed by the Air Resources Board's Method 435, Determination of Asbestos Content of Serpentine Aggregate. Samples were ground to 200 particle size in the laboratory. Approximately 1 pint was retained for analysis. Samples were prepared for observation according to the guidelines of Exception I and Exception II as defined by the 435 Method. Samples which contained less than 10% asbestos were prepared for observation according to the point count technique as defined by the 435 Method. This analysis was performed with a standard cross-hair reticle.

Sample ID	Lab Number	Layer Description
-----------	------------	-------------------

EB-4-5.0	12314395	Brown Soil
-----------------	----------	-------------------

Visual Estimation Results:

Matrix percentage of entire 100

Visual estimation percentage: None Detected

Asbestos type(s) detected: None Detected

Comment: This result meets the requirements of Exception I as defined by the 435 Method.

EB-8-1.5	12314396	Brown Soil
-----------------	----------	-------------------

Visual Estimation Results:

Matrix percentage of entire 100

Visual estimation percentage: None Detected

Asbestos type(s) detected: None Detected

Comment: This result meets the requirements of Exception I as defined by the 435 Method.

EB-8-3.0	12314397	Brown Soil
-----------------	----------	-------------------

Visual Estimation Results:

Matrix percentage of entire 100

Visual estimation percentage: None Detected

Asbestos type(s) detected: None Detected

Comment: This result meets the requirements of Exception I as defined by the 435 Method.

EB-7-1.5	12314398	Brown Soil
-----------------	----------	-------------------

Visual Estimation Results:

Matrix percentage of entire 100

Visual estimation percentage: None Detected

Asbestos type(s) detected: None Detected

Comment: This result meets the requirements of Exception I as defined by the 435 Method.

Bulk Asbestos Material Analysis

(Air Resources Board Method 435, June 6, 1991)

McC Campbell Analytical, Inc.
Account Payable
1534 Willow Pass Rd

Pittsburg, CA 94565

Client ID: A31409
Report Number: N013091
Date Received: 06/17/20
Date Analyzed: 06/23/20
Date Printed: 06/23/20

Job ID/Site: 2006697 - 1666 Seventh St.

SGSFL Job ID: A31409

PLM Report Number: N/A

Total Samples Submitted: 16

Total Samples Analyzed: 16

Sample Preparation and Analysis:

Samples were analyzed by the Air Resources Board's Method 435, Determination of Asbestos Content of Serpentine Aggregate. Samples were ground to 200 particle size in the laboratory. Approximately 1 pint was retained for analysis. Samples were prepared for observation according to the guidelines of Exception I and Exception II as defined by the 435 Method. Samples which contained less than 10% asbestos were prepared for observation according to the point count technique as defined by the 435 Method. This analysis was performed with a standard cross-hair reticle.

Sample ID	Lab Number	Layer Description
-----------	------------	-------------------

EB-7-3.0	12314399	Brown Soil
-----------------	----------	-------------------

Visual Estimation Results:

Matrix percentage of entire 100

Visual estimation percentage: None Detected

Asbestos type(s) detected: None Detected

Comment: This result meets the requirements of Exception I as defined by the 435 Method.

EB-7-5.0	12314400	Brown Soil
-----------------	----------	-------------------

Visual Estimation Results:

Matrix percentage of entire 100

Visual estimation percentage: None Detected

Asbestos type(s) detected: None Detected

Comment: This result meets the requirements of Exception I as defined by the 435 Method.

EB-5-1.5	12314401	Brown Soil
-----------------	----------	-------------------

Visual Estimation Results:

Matrix percentage of entire 100

Visual estimation percentage: None Detected

Asbestos type(s) detected: None Detected

Comment: This result meets the requirements of Exception I as defined by the 435 Method.

EB-5-3.0	12314402	Brown Soil
-----------------	----------	-------------------

Visual Estimation Results:

Matrix percentage of entire 100

Visual estimation percentage: None Detected

Asbestos type(s) detected: None Detected

Comment: This result meets the requirements of Exception I as defined by the 435 Method.

Bulk Asbestos Material Analysis

(Air Resources Board Method 435, June 6, 1991)

McC Campbell Analytical, Inc.
Account Payable
1534 Willow Pass Rd

Pittsburg, CA 94565

Client ID: A31409
Report Number: N013091
Date Received: 06/17/20
Date Analyzed: 06/23/20
Date Printed: 06/23/20

Job ID/Site: 2006697 - 1666 Seventh St.

SGSFL Job ID: A31409

PLM Report Number: N/A

Total Samples Submitted: 16

Total Samples Analyzed: 16

Sample Preparation and Analysis:

Samples were analyzed by the Air Resources Board's Method 435, Determination of Asbestos Content of Serpentine Aggregate. Samples were ground to 200 particle size in the laboratory. Approximately 1 pint was retained for analysis. Samples were prepared for observation according to the guidelines of Exception I and Exception II as defined by the 435 Method. Samples which contained less than 10% asbestos were prepared for observation according to the point count technique as defined by the 435 Method. This analysis was performed with a standard cross-hair reticle.

Sample ID	Lab Number	Layer Description
-----------	------------	-------------------



Tad Thrower, Laboratory Supervisor, Hayward Laboratory

Note: Limit of Quantification (LOQ) = 0.25%. Trace denotes the presence of asbestos below the LOQ. ND = None Detected.

Analytical results and reports are generated by SGS Forensic Laboratories (SGSFL) at the request of and for the exclusive use of the person or entity (client) named on such report. Results, reports or copies of same will not be released by SGSFL to any third party without prior written request from client. This report applies only to the sample(s) tested. Supporting laboratory documentation is available upon request. This report must not be reproduced except in full, unless approved by SGSFL. The client is solely responsible for the use and interpretation of test results and reports requested from SGSFL. SGSFL is not able to assess the degree of hazard resulting from materials analyzed. SGS Forensic Laboratories reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified. All samples were received in acceptable condition unless otherwise noted.



McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 2006778

Report Created for: Langan

135 Main St, Suite 1500
San Francisco, CA 94105

Project Contact: Adam Brown

Project P.O.:

Project: 750664801; 1666 7th Street

Project Received: 06/16/2000

Analytical Report reviewed & approved for release on 06/23/2020 by:

Jennifer Lagerbom

Project Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.





Glossary of Terms & Qualifier Definitions

Client: Langan
Project: 750664801; 1666 7th Street
WorkOrder: 2006778

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
CPT	Consumer Product Testing not NELAP Accredited
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
LQL	Lowest Quantitation Level
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
TZA	TimeZone Net Adjustment for sample collected outside of MAI's UTC.
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)



Glossary of Terms & Qualifier Definitions

Client: Langan
Project: 750664801; 1666 7th Street
WorkOrder: 2006778

Analytical Qualifiers

F Sample was filtered upon arrival to the lab
J Result is less than the RL/ML but greater than the MDL. The reported concentration is an estimated value.
a3 Sample diluted due to high organic content.

Quality Control Qualifiers

F2 LCS/LCSD recovery and/or RPD/RSD is out of acceptance criteria.
F3 The surrogate standard recovery and/or RPD is outside of acceptance limits.



Analytical Report

Client: Langan
Date Received: 06/16/2000 13:15
Date Prepared: 06/20/2020
Project: 750664801; 1666 7th Street

WorkOrder: 2006778
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-2	2006778-001B	Water	06/15/2020 10:35	GC16 06192033.D	200412

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	40	1	06/20/2020 05:17
tert-Amyl methyl ether (TAME)	ND	0.50	1	06/20/2020 05:17
Benzene	ND	0.20	1	06/20/2020 05:17
Bromobenzene	ND	0.50	1	06/20/2020 05:17
Bromochloromethane	ND	0.50	1	06/20/2020 05:17
Bromodichloromethane	ND	0.050	1	06/20/2020 05:17
Bromoform	ND	0.50	1	06/20/2020 05:17
Bromomethane	ND	0.50	1	06/20/2020 05:17
2-Butanone (MEK)	ND	5.0	1	06/20/2020 05:17
t-Butyl alcohol (TBA)	ND	5.0	1	06/20/2020 05:17
n-Butyl benzene	ND	0.50	1	06/20/2020 05:17
sec-Butyl benzene	ND	0.50	1	06/20/2020 05:17
tert-Butyl benzene	ND	0.50	1	06/20/2020 05:17
Carbon Disulfide	ND	0.50	1	06/20/2020 05:17
Carbon Tetrachloride	ND	0.050	1	06/20/2020 05:17
Chlorobenzene	ND	0.50	1	06/20/2020 05:17
Chloroethane	ND	0.50	1	06/20/2020 05:17
Chloroform	ND	0.10	1	06/20/2020 05:17
Chloromethane	ND	0.50	1	06/20/2020 05:17
2-Chlorotoluene	ND	0.50	1	06/20/2020 05:17
4-Chlorotoluene	ND	0.50	1	06/20/2020 05:17
Dibromochloromethane	ND	0.15	1	06/20/2020 05:17
1,2-Dibromo-3-chloropropane	ND	0.0050	1	06/20/2020 05:17
1,2-Dibromoethane (EDB)	ND	0.0050	1	06/20/2020 05:17
Dibromomethane	ND	0.50	1	06/20/2020 05:17
1,2-Dichlorobenzene	ND	0.50	1	06/20/2020 05:17
1,3-Dichlorobenzene	ND	0.50	1	06/20/2020 05:17
1,4-Dichlorobenzene	ND	0.50	1	06/20/2020 05:17
Dichlorodifluoromethane	ND	0.50	1	06/20/2020 05:17
1,1-Dichloroethane	ND	0.50	1	06/20/2020 05:17
1,2-Dichloroethane (1,2-DCA)	ND	0.010	1	06/20/2020 05:17
1,1-Dichloroethene	ND	0.010	1	06/20/2020 05:17
cis-1,2-Dichloroethene	ND	0.50	1	06/20/2020 05:17
trans-1,2-Dichloroethene	ND	0.50	1	06/20/2020 05:17
1,2-Dichloropropane	ND	0.20	1	06/20/2020 05:17
1,3-Dichloropropane	ND	0.50	1	06/20/2020 05:17
2,2-Dichloropropane	ND	0.50	1	06/20/2020 05:17

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/16/2000 13:15
Date Prepared: 06/20/2020
Project: 750664801; 1666 7th Street

WorkOrder: 2006778
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-2	2006778-001B	Water	06/15/2020 10:35	GC16 06192033.D	200412

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.50	1	06/20/2020 05:17
cis-1,3-Dichloropropene	ND	0.50	1	06/20/2020 05:17
trans-1,3-Dichloropropene	ND	0.50	1	06/20/2020 05:17
Diisopropyl ether (DIPE)	ND	0.50	1	06/20/2020 05:17
Ethylbenzene	ND	0.50	1	06/20/2020 05:17
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	06/20/2020 05:17
Freon 113	ND	0.50	1	06/20/2020 05:17
Hexachlorobutadiene	ND	0.10	1	06/20/2020 05:17
Hexachloroethane	ND	0.20	1	06/20/2020 05:17
2-Hexanone	ND	0.50	1	06/20/2020 05:17
Isopropylbenzene	ND	0.50	1	06/20/2020 05:17
4-Isopropyl toluene	ND	0.50	1	06/20/2020 05:17
Methyl-t-butyl ether (MTBE)	ND	0.50	1	06/20/2020 05:17
Methylene chloride	ND	2.0	1	06/20/2020 05:17
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	06/20/2020 05:17
Naphthalene	ND	0.10	1	06/20/2020 05:17
n-Propyl benzene	ND	0.50	1	06/20/2020 05:17
Styrene	ND	2.0	1	06/20/2020 05:17
1,1,1,2-Tetrachloroethane	ND	0.50	1	06/20/2020 05:17
1,1,2,2-Tetrachloroethane	ND	0.020	1	06/20/2020 05:17
Tetrachloroethene	ND	0.20	1	06/20/2020 05:17
Toluene	ND	0.50	1	06/20/2020 05:17
1,2,3-Trichlorobenzene	ND	0.50	1	06/20/2020 05:17
1,2,4-Trichlorobenzene	ND	0.50	1	06/20/2020 05:17
1,1,1-Trichloroethane	ND	0.50	1	06/20/2020 05:17
1,1,2-Trichloroethane	ND	0.20	1	06/20/2020 05:17
Trichloroethene	ND	0.20	1	06/20/2020 05:17
Trichlorofluoromethane	ND	0.50	1	06/20/2020 05:17
1,2,3-Trichloropropane	ND	0.0050	1	06/20/2020 05:17
1,2,4-Trimethylbenzene	ND	0.50	1	06/20/2020 05:17
1,3,5-Trimethylbenzene	ND	0.50	1	06/20/2020 05:17
Vinyl Chloride	ND	0.0050	1	06/20/2020 05:17
m,p-Xylene	ND	0.50	1	06/20/2020 05:17
o-Xylene	ND	0.50	1	06/20/2020 05:17
Xylenes, Total	ND	0.50	1	06/20/2020 05:17

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/16/2000 13:15
Date Prepared: 06/20/2020
Project: 750664801; 1666 7th Street

WorkOrder: 2006778
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-2	2006778-001B	Water	06/15/2020 10:35	GC16 06192033.D	200412

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	102	78-112		06/20/2020 05:17
Toluene-d8	100	82-109		06/20/2020 05:17
4-BFB	95	63-121		06/20/2020 05:17

Analyst(s): KF



Analytical Report

Client: Langan
Date Received: 06/16/2000 13:15
Date Prepared: 06/20/2020
Project: 750664801; 1666 7th Street

WorkOrder: 2006778
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-1	2006778-002B	Water	06/15/2020 12:25	GC16 06192034.D	200412

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	40	1	06/20/2020 05:57
tert-Amyl methyl ether (TAME)	ND	0.50	1	06/20/2020 05:57
Benzene	ND	0.20	1	06/20/2020 05:57
Bromobenzene	ND	0.50	1	06/20/2020 05:57
Bromochloromethane	ND	0.50	1	06/20/2020 05:57
Bromodichloromethane	ND	0.050	1	06/20/2020 05:57
Bromoform	ND	0.50	1	06/20/2020 05:57
Bromomethane	ND	0.50	1	06/20/2020 05:57
2-Butanone (MEK)	ND	5.0	1	06/20/2020 05:57
t-Butyl alcohol (TBA)	ND	5.0	1	06/20/2020 05:57
n-Butyl benzene	ND	0.50	1	06/20/2020 05:57
sec-Butyl benzene	ND	0.50	1	06/20/2020 05:57
tert-Butyl benzene	ND	0.50	1	06/20/2020 05:57
Carbon Disulfide	ND	0.50	1	06/20/2020 05:57
Carbon Tetrachloride	ND	0.050	1	06/20/2020 05:57
Chlorobenzene	ND	0.50	1	06/20/2020 05:57
Chloroethane	ND	0.50	1	06/20/2020 05:57
Chloroform	ND	0.10	1	06/20/2020 05:57
Chloromethane	ND	0.50	1	06/20/2020 05:57
2-Chlorotoluene	ND	0.50	1	06/20/2020 05:57
4-Chlorotoluene	ND	0.50	1	06/20/2020 05:57
Dibromochloromethane	ND	0.15	1	06/20/2020 05:57
1,2-Dibromo-3-chloropropane	ND	0.0050	1	06/20/2020 05:57
1,2-Dibromoethane (EDB)	ND	0.0050	1	06/20/2020 05:57
Dibromomethane	ND	0.50	1	06/20/2020 05:57
1,2-Dichlorobenzene	ND	0.50	1	06/20/2020 05:57
1,3-Dichlorobenzene	ND	0.50	1	06/20/2020 05:57
1,4-Dichlorobenzene	ND	0.50	1	06/20/2020 05:57
Dichlorodifluoromethane	ND	0.50	1	06/20/2020 05:57
1,1-Dichloroethane	ND	0.50	1	06/20/2020 05:57
1,2-Dichloroethane (1,2-DCA)	ND	0.010	1	06/20/2020 05:57
1,1-Dichloroethene	ND	0.010	1	06/20/2020 05:57
cis-1,2-Dichloroethene	ND	0.50	1	06/20/2020 05:57
trans-1,2-Dichloroethene	ND	0.50	1	06/20/2020 05:57
1,2-Dichloropropane	ND	0.20	1	06/20/2020 05:57
1,3-Dichloropropane	ND	0.50	1	06/20/2020 05:57
2,2-Dichloropropane	ND	0.50	1	06/20/2020 05:57

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/16/2000 13:15
Date Prepared: 06/20/2020
Project: 750664801; 1666 7th Street

WorkOrder: 2006778
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-1	2006778-002B	Water	06/15/2020 12:25	GC16 06192034.D	200412

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.50	1	06/20/2020 05:57
cis-1,3-Dichloropropene	ND	0.50	1	06/20/2020 05:57
trans-1,3-Dichloropropene	ND	0.50	1	06/20/2020 05:57
Diisopropyl ether (DIPE)	ND	0.50	1	06/20/2020 05:57
Ethylbenzene	ND	0.50	1	06/20/2020 05:57
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	06/20/2020 05:57
Freon 113	ND	0.50	1	06/20/2020 05:57
Hexachlorobutadiene	ND	0.10	1	06/20/2020 05:57
Hexachloroethane	ND	0.20	1	06/20/2020 05:57
2-Hexanone	ND	0.50	1	06/20/2020 05:57
Isopropylbenzene	ND	0.50	1	06/20/2020 05:57
4-Isopropyl toluene	ND	0.50	1	06/20/2020 05:57
Methyl-t-butyl ether (MTBE)	ND	0.50	1	06/20/2020 05:57
Methylene chloride	ND	2.0	1	06/20/2020 05:57
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	06/20/2020 05:57
Naphthalene	ND	0.10	1	06/20/2020 05:57
n-Propyl benzene	ND	0.50	1	06/20/2020 05:57
Styrene	ND	2.0	1	06/20/2020 05:57
1,1,1,2-Tetrachloroethane	ND	0.50	1	06/20/2020 05:57
1,1,2,2-Tetrachloroethane	ND	0.020	1	06/20/2020 05:57
Tetrachloroethene	ND	0.20	1	06/20/2020 05:57
Toluene	ND	0.50	1	06/20/2020 05:57
1,2,3-Trichlorobenzene	ND	0.50	1	06/20/2020 05:57
1,2,4-Trichlorobenzene	ND	0.50	1	06/20/2020 05:57
1,1,1-Trichloroethane	ND	0.50	1	06/20/2020 05:57
1,1,2-Trichloroethane	ND	0.20	1	06/20/2020 05:57
Trichloroethene	ND	0.20	1	06/20/2020 05:57
Trichlorofluoromethane	ND	0.50	1	06/20/2020 05:57
1,2,3-Trichloropropane	ND	0.0050	1	06/20/2020 05:57
1,2,4-Trimethylbenzene	ND	0.50	1	06/20/2020 05:57
1,3,5-Trimethylbenzene	ND	0.50	1	06/20/2020 05:57
Vinyl Chloride	ND	0.0050	1	06/20/2020 05:57
m,p-Xylene	ND	0.50	1	06/20/2020 05:57
o-Xylene	ND	0.50	1	06/20/2020 05:57
Xylenes, Total	ND	0.50	1	06/20/2020 05:57

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/16/2000 13:15
Date Prepared: 06/20/2020
Project: 750664801; 1666 7th Street

WorkOrder: 2006778
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-1	2006778-002B	Water	06/15/2020 12:25	GC16 06192034.D	200412

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	104	78-112		06/20/2020 05:57
Toluene-d8	100	82-109		06/20/2020 05:57
4-BFB	94	63-121		06/20/2020 05:57

Analyst(s): KF



Analytical Report

Client: Langan
Date Received: 06/16/2000 13:15
Date Prepared: 06/17/2020
Project: 750664801; 1666 7th Street

WorkOrder: 2006778
Extraction Method: SW3640Am
Analytical Method: SW8270C
Unit: µg/L

Semi-Volatile Organics

Client ID	Lab ID	Matrix	Date Collected		Instrument	Batch ID
MW-2	2006778-001C	Water	06/15/2020 10:35		GC17 06222006.D	200264
Analytes	Result	RL	DF	Date Analyzed		
Acenaphthene	ND	0.0048	1	06/22/2020 11:11		
Acenaphthylene	ND	0.0048	1	06/22/2020 11:11		
Acetochlor	ND	0.96	1	06/22/2020 11:11		
Anthracene	ND	0.0096	1	06/22/2020 11:11		
Benzidine	ND	4.8	1	06/22/2020 11:11		
Benzo (a) anthracene	ND	0.048	1	06/22/2020 11:11		
Benzo (a) pyrene	ND	0.0096	1	06/22/2020 11:11		
Benzo (b) fluoranthene	ND	0.019	1	06/22/2020 11:11		
Benzo (g,h,i) perylene	ND	0.019	1	06/22/2020 11:11		
Benzo (k) fluoranthene	ND	0.0096	1	06/22/2020 11:11		
Benzyl Alcohol	ND	4.8	1	06/22/2020 11:11		
1,1-Biphenyl	ND	0.048	1	06/22/2020 11:11		
Bis (2-chloroethoxy) Methane	ND	0.96	1	06/22/2020 11:11		
Bis (2-chloroethyl) Ether	ND	0.0096	1	06/22/2020 11:11		
Bis (2-chloroisopropyl) Ether	ND	0.048	1	06/22/2020 11:11		
Bis (2-ethylhexyl) Adipate	ND	0.96	1	06/22/2020 11:11		
Bis (2-ethylhexyl) Phthalate	ND	0.19	1	06/22/2020 11:11		
4-Bromophenyl Phenyl Ether	ND	0.96	1	06/22/2020 11:11		
Butylbenzyl Phthalate	ND	0.19	1	06/22/2020 11:11		
4-Chloroaniline	ND	0.0048	1	06/22/2020 11:11		
4-Chloro-3-methylphenol	ND	0.96	1	06/22/2020 11:11		
2-Chloronaphthalene	ND	0.96	1	06/22/2020 11:11		
2-Chlorophenol	ND	0.048	1	06/22/2020 11:11		
4-Chlorophenyl Phenyl Ether	ND	0.96	1	06/22/2020 11:11		
Chrysene	ND	0.0096	1	06/22/2020 11:11		
Dibenzo (a,h) anthracene	ND	0.0096	1	06/22/2020 11:11		
Dibenzofuran	ND	0.96	1	06/22/2020 11:11		
Di-n-butyl Phthalate	0.050	0.048	1	06/22/2020 11:11		
1,2-Dichlorobenzene	ND	1.9	1	06/22/2020 11:11		
1,3-Dichlorobenzene	ND	0.96	1	06/22/2020 11:11		
1,4-Dichlorobenzene	ND	0.96	1	06/22/2020 11:11		
3,3-Dichlorobenzidine	ND	0.019	1	06/22/2020 11:11		
2,4-Dichlorophenol	ND	0.0096	1	06/22/2020 11:11		
Diethyl Phthalate	0.081	0.048	1	06/22/2020 11:11		
2,4-Dimethylphenol	ND	0.96	1	06/22/2020 11:11		
Dimethyl Phthalate	0.012	0.0096	1	06/22/2020 11:11		
4,6-Dinitro-2-methylphenol	ND	4.8	1	06/22/2020 11:11		

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/16/2000 13:15
Date Prepared: 06/17/2020
Project: 750664801; 1666 7th Street

WorkOrder: 2006778
Extraction Method: SW3640Am
Analytical Method: SW8270C
Unit: µg/L

Semi-Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-2	2006778-001C	Water	06/15/2020 10:35	GC17 06222006.D	200264

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrophenol	ND	1.9	1	06/22/2020 11:11
2,4-Dinitrotoluene	ND	0.048	1	06/22/2020 11:11
2,6-Dinitrotoluene	ND	0.048	1	06/22/2020 11:11
Di-n-octyl Phthalate	ND	0.048	1	06/22/2020 11:11
1,2-Diphenylhydrazine	ND	0.96	1	06/22/2020 11:11
Fluoranthene	ND	0.0096	1	06/22/2020 11:11
Fluorene	ND	0.0096	1	06/22/2020 11:11
Hexachlorobenzene	ND	0.0048	1	06/22/2020 11:11
Hexachlorobutadiene	ND	0.0096	1	06/22/2020 11:11
Hexachlorocyclopentadiene	ND	4.8	1	06/22/2020 11:11
Hexachloroethane	ND	0.048	1	06/22/2020 11:11
Indeno (1,2,3-cd) pyrene	ND	0.019	1	06/22/2020 11:11
Isophorone	ND	0.96	1	06/22/2020 11:11
2-Methylnaphthalene	ND	0.0096	1	06/22/2020 11:11
2-Methylphenol (o-Cresol)	ND	0.96	1	06/22/2020 11:11
3 & 4-Methylphenol (m,p-Cresol)	ND	0.96	1	06/22/2020 11:11
Naphthalene	ND	0.048	1	06/22/2020 11:11
2-Nitroaniline	ND	4.8	1	06/22/2020 11:11
3-Nitroaniline	ND	4.8	1	06/22/2020 11:11
4-Nitroaniline	ND	4.8	1	06/22/2020 11:11
Nitrobenzene	ND	0.96	1	06/22/2020 11:11
2-Nitrophenol	ND	4.8	1	06/22/2020 11:11
4-Nitrophenol	ND	4.8	1	06/22/2020 11:11
N-Nitrosodiphenylamine	ND	0.96	1	06/22/2020 11:11
N-Nitrosodi-n-propylamine	ND	0.96	1	06/22/2020 11:11
Pentachlorophenol	ND	0.24	1	06/22/2020 11:11
Phenanthrene	ND	0.019	1	06/22/2020 11:11
Phenol	ND	0.19	1	06/22/2020 11:11
Pyrene	ND	0.0096	1	06/22/2020 11:11
Pyridine	ND	0.96	1	06/22/2020 11:11
1,2,4-Trichlorobenzene	ND	0.96	1	06/22/2020 11:11
2,4,5-Trichlorophenol	ND	0.0096	1	06/22/2020 11:11
2,4,6-Trichlorophenol	ND	0.0096	1	06/22/2020 11:11
1-Methylnaphthalene	ND	0.0048	1	06/22/2020 11:11

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/16/2000 13:15
Date Prepared: 06/17/2020
Project: 750664801; 1666 7th Street

WorkOrder: 2006778
Extraction Method: SW3640Am
Analytical Method: SW8270C
Unit: µg/L

Semi-Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-2	2006778-001C	Water	06/15/2020 10:35	GC17 06222006.D	200264

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorophenol	45	8-130		06/22/2020 11:11
Phenol-d5	33	5-130		06/22/2020 11:11
Nitrobenzene-d5	84	20-140		06/22/2020 11:11
2-Fluorobiphenyl	76	40-140		06/22/2020 11:11
2,4,6-Tribromophenol	81	16-180		06/22/2020 11:11
4-Terphenyl-d14	84	40-170		06/22/2020 11:11

Analyst(s): HD



Analytical Report

Client: Langan
Date Received: 06/16/2000 13:15
Date Prepared: 06/17/2020
Project: 750664801; 1666 7th Street

WorkOrder: 2006778
Extraction Method: SW3640Am
Analytical Method: SW8270C
Unit: µg/L

Semi-Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-1	2006778-002C	Water	06/15/2020 12:25	GC21 06232015.D	200264

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.024	5	06/23/2020 14:57
Acenaphthylene	ND	0.024	5	06/23/2020 14:57
Acetochlor	ND	4.9	5	06/23/2020 14:57
Anthracene	ND	0.049	5	06/23/2020 14:57
Benzidine	ND	24	5	06/23/2020 14:57
Benzo (a) anthracene	ND	0.24	5	06/23/2020 14:57
Benzo (a) pyrene	ND	0.049	5	06/23/2020 14:57
Benzo (b) fluoranthene	ND	0.098	5	06/23/2020 14:57
Benzo (g,h,i) perylene	ND	0.098	5	06/23/2020 14:57
Benzo (k) fluoranthene	ND	0.049	5	06/23/2020 14:57
Benzyl Alcohol	ND	24	5	06/23/2020 14:57
1,1-Biphenyl	ND	0.24	5	06/23/2020 14:57
Bis (2-chloroethoxy) Methane	ND	4.9	5	06/23/2020 14:57
Bis (2-chloroethyl) Ether	ND	0.049	5	06/23/2020 14:57
Bis (2-chloroisopropyl) Ether	ND	0.24	5	06/23/2020 14:57
Bis (2-ethylhexyl) Adipate	ND	4.9	5	06/23/2020 14:57
Bis (2-ethylhexyl) Phthalate	ND	0.98	5	06/23/2020 14:57
4-Bromophenyl Phenyl Ether	ND	4.9	5	06/23/2020 14:57
Butylbenzyl Phthalate	ND	0.98	5	06/23/2020 14:57
4-Chloroaniline	ND	0.024	5	06/23/2020 14:57
4-Chloro-3-methylphenol	ND	4.9	5	06/23/2020 14:57
2-Chloronaphthalene	ND	4.9	5	06/23/2020 14:57
2-Chlorophenol	ND	0.24	5	06/23/2020 14:57
4-Chlorophenyl Phenyl Ether	ND	4.9	5	06/23/2020 14:57
Chrysene	ND	0.049	5	06/23/2020 14:57
Dibenzo (a,h) anthracene	ND	0.049	5	06/23/2020 14:57
Dibenzofuran	ND	4.9	5	06/23/2020 14:57
Di-n-butyl Phthalate	ND	0.24	5	06/23/2020 14:57
1,2-Dichlorobenzene	ND	9.8	5	06/23/2020 14:57
1,3-Dichlorobenzene	ND	4.9	5	06/23/2020 14:57
1,4-Dichlorobenzene	ND	4.9	5	06/23/2020 14:57
3,3-Dichlorobenzidine	ND	0.098	5	06/23/2020 14:57
2,4-Dichlorophenol	ND	0.049	5	06/23/2020 14:57
Diethyl Phthalate	ND	0.24	5	06/23/2020 14:57
2,4-Dimethylphenol	ND	4.9	5	06/23/2020 14:57
Dimethyl Phthalate	ND	0.049	5	06/23/2020 14:57
4,6-Dinitro-2-methylphenol	ND	24	5	06/23/2020 14:57

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/16/2000 13:15
Date Prepared: 06/17/2020
Project: 750664801; 1666 7th Street

WorkOrder: 2006778
Extraction Method: SW3640Am
Analytical Method: SW8270C
Unit: µg/L

Semi-Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-1	2006778-002C	Water	06/15/2020 12:25	GC21 06232015.D	200264

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrophenol	ND	9.8	5	06/23/2020 14:57
2,4-Dinitrotoluene	ND	0.24	5	06/23/2020 14:57
2,6-Dinitrotoluene	ND	0.24	5	06/23/2020 14:57
Di-n-octyl Phthalate	ND	0.24	5	06/23/2020 14:57
1,2-Diphenylhydrazine	ND	4.9	5	06/23/2020 14:57
Fluoranthene	ND	0.049	5	06/23/2020 14:57
Fluorene	ND	0.049	5	06/23/2020 14:57
Hexachlorobenzene	ND	0.024	5	06/23/2020 14:57
Hexachlorobutadiene	ND	0.049	5	06/23/2020 14:57
Hexachlorocyclopentadiene	ND	24	5	06/23/2020 14:57
Hexachloroethane	ND	0.24	5	06/23/2020 14:57
Indeno (1,2,3-cd) pyrene	ND	0.098	5	06/23/2020 14:57
Isophorone	ND	4.9	5	06/23/2020 14:57
2-Methylnaphthalene	ND	0.049	5	06/23/2020 14:57
2-Methylphenol (o-Cresol)	ND	4.9	5	06/23/2020 14:57
3 & 4-Methylphenol (m,p-Cresol)	ND	4.9	5	06/23/2020 14:57
Naphthalene	ND	0.24	5	06/23/2020 14:57
2-Nitroaniline	ND	24	5	06/23/2020 14:57
3-Nitroaniline	ND	24	5	06/23/2020 14:57
4-Nitroaniline	ND	24	5	06/23/2020 14:57
Nitrobenzene	ND	4.9	5	06/23/2020 14:57
2-Nitrophenol	ND	24	5	06/23/2020 14:57
4-Nitrophenol	ND	24	5	06/23/2020 14:57
N-Nitrosodiphenylamine	ND	4.9	5	06/23/2020 14:57
N-Nitrosodi-n-propylamine	ND	4.9	5	06/23/2020 14:57
Pentachlorophenol	ND	1.2	5	06/23/2020 14:57
Phenanthrene	ND	0.098	5	06/23/2020 14:57
Phenol	ND	0.98	5	06/23/2020 14:57
Pyrene	ND	0.049	5	06/23/2020 14:57
Pyridine	ND	4.9	5	06/23/2020 14:57
1,2,4-Trichlorobenzene	ND	4.9	5	06/23/2020 14:57
2,4,5-Trichlorophenol	ND	0.049	5	06/23/2020 14:57
2,4,6-Trichlorophenol	ND	0.049	5	06/23/2020 14:57
1-Methylnaphthalene	ND	0.024	5	06/23/2020 14:57

(Cont.)



Analytical Report

Client: Langan
Date Received: 06/16/2000 13:15
Date Prepared: 06/17/2020
Project: 750664801; 1666 7th Street

WorkOrder: 2006778
Extraction Method: SW3640Am
Analytical Method: SW8270C
Unit: µg/L

Semi-Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-1	2006778-002C	Water	06/15/2020 12:25	GC21 06232015.D	200264

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorophenol	76	8-130		06/23/2020 14:57
Phenol-d5	67	5-130		06/23/2020 14:57
Nitrobenzene-d5	109	20-140		06/23/2020 14:57
2-Fluorobiphenyl	110	40-140		06/23/2020 14:57
2,4,6-Tribromophenol	138	16-180		06/23/2020 14:57
4-Terphenyl-d14	142	40-170		06/23/2020 14:57

Analyst(s): HD

Analytical Comments: a3



Analytical Report

Client: Langan
Date Received: 06/16/2000 13:15
Date Prepared: 06/16/2020
Project: 750664801; 1666 7th Street

WorkOrder: 2006778
Extraction Method: SW3005
Analytical Method: SW6020
Unit: µg/L

Dissolved CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-2	2006778-001E	Water	06/15/2020 10:35	ICP-MS5 360SMPL.d	200179

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
Antimony	ND	F	0.50	1	06/17/2020 13:26
Arsenic	1.1	F	0.50	1	06/17/2020 13:26
Barium	33	F	5.0	1	06/17/2020 13:26
Beryllium	ND	F	0.50	1	06/17/2020 13:26
Cadmium	ND	F	0.25	1	06/17/2020 13:26
Chromium	1.5	F	0.50	1	06/17/2020 13:26
Cobalt	ND	F	0.50	1	06/17/2020 13:26
Copper	ND	F	0.50	1	06/17/2020 13:26
Lead	ND	F	0.50	1	06/17/2020 13:26
Mercury	ND	F	0.050	1	06/17/2020 13:26
Molybdenum	3.8	F	0.50	1	06/17/2020 13:26
Nickel	4.6	F	0.50	1	06/17/2020 13:26
Selenium	1.9	F	0.50	1	06/17/2020 13:26
Silver	ND	F	0.19	1	06/17/2020 13:26
Thallium	ND	F	0.50	1	06/17/2020 13:26
Vanadium	1.4	F	0.50	1	06/17/2020 13:26
Zinc	ND	F	15	1	06/17/2020 13:26

Analyst(s): JAG



Analytical Report

Client: Langan
Date Received: 06/16/2000 13:15
Date Prepared: 06/16/2020
Project: 750664801; 1666 7th Street

WorkOrder: 2006778
Extraction Method: SW3005
Analytical Method: SW6020
Unit: µg/L

Dissolved CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-1	2006778-002E	Water	06/15/2020 12:25	ICP-MS5 363SMPL.d	200179

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
Antimony	ND	F	0.50	1	06/17/2020 13:36
Arsenic	1.1	F	0.50	1	06/17/2020 13:36
Barium	38	F	5.0	1	06/17/2020 13:36
Beryllium	ND	F	0.50	1	06/17/2020 13:36
Cadmium	ND	F	0.25	1	06/17/2020 13:36
Chromium	ND	F	0.50	1	06/17/2020 13:36
Cobalt	ND	F	0.50	1	06/17/2020 13:36
Copper	ND	F	0.50	1	06/17/2020 13:36
Lead	ND	F	0.50	1	06/17/2020 13:36
Mercury	ND	F	0.050	1	06/17/2020 13:36
Molybdenum	0.75	F	0.50	1	06/17/2020 13:36
Nickel	2.8	F	0.50	1	06/17/2020 13:36
Selenium	ND	F	0.50	1	06/17/2020 13:36
Silver	ND	F	0.19	1	06/17/2020 13:36
Thallium	ND	F	0.50	1	06/17/2020 13:36
Vanadium	1.8	F	0.50	1	06/17/2020 13:36
Zinc	ND	F	15	1	06/17/2020 13:36

Analyst(s): JAG



Analytical Report

Client: Langan
Date Received: 06/16/2000 13:15
Date Prepared: 06/16/2020
Project: 750664801; 1666 7th Street

WorkOrder: 2006778
Extraction Method: SW3005
Analytical Method: SW6020
Unit: µg/L

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-2	2006778-001D	Water	06/15/2020 10:35	ICP-MS5 329SMPL.d	200065

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	06/17/2020 11:46
Arsenic	1.2	0.50	1	06/17/2020 11:46
Barium	36	5.0	1	06/17/2020 11:46
Beryllium	ND	0.50	1	06/17/2020 11:46
Cadmium	ND	0.50	1	06/17/2020 11:46
Chromium	2.3	0.50	1	06/17/2020 11:46
Cobalt	ND	0.50	1	06/17/2020 11:46
Copper	0.70	0.50	1	06/17/2020 11:46
Lead	0.52	0.50	1	06/17/2020 11:46
Mercury	ND	0.050	1	06/17/2020 11:46
Molybdenum	3.6	0.50	1	06/17/2020 11:46
Nickel	5.4	1.0	1	06/17/2020 11:46
Selenium	1.7	0.50	1	06/17/2020 11:46
Silver	ND	0.50	1	06/17/2020 11:46
Thallium	ND	0.50	1	06/17/2020 11:46
Vanadium	2.0	0.50	1	06/17/2020 11:46
Zinc	ND	20	1	06/17/2020 11:46

Surrogates	REC (%)	Limits	Date Analyzed
	110	70-130	06/17/2020 11:46

Analyst(s): JAG



Analytical Report

Client: Langan
Date Received: 06/16/2000 13:15
Date Prepared: 06/16/2020
Project: 750664801; 1666 7th Street

WorkOrder: 2006778
Extraction Method: SW3005
Analytical Method: SW6020
Unit: µg/L

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-1	2006778-002D	Water	06/15/2020 12:25	ICP-MS5 375SMPL.d	200065

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	06/17/2020 14:14
Arsenic	1.2	0.50	1	06/17/2020 14:14
Barium	40	5.0	1	06/17/2020 14:14
Beryllium	ND	0.50	1	06/17/2020 14:14
Cadmium	ND	0.50	1	06/17/2020 14:14
Chromium	0.58	0.50	1	06/17/2020 14:14
Cobalt	ND	0.50	1	06/17/2020 14:14
Copper	ND	0.50	1	06/17/2020 14:14
Lead	ND	0.50	1	06/17/2020 14:14
Mercury	ND	0.050	1	06/17/2020 14:14
Molybdenum	0.80	0.50	1	06/17/2020 14:14
Nickel	2.9	1.0	1	06/17/2020 14:14
Selenium	ND	0.50	1	06/17/2020 14:14
Silver	ND	0.50	1	06/17/2020 14:14
Thallium	ND	0.50	1	06/17/2020 14:14
Vanadium	1.9	0.50	1	06/17/2020 14:14
Zinc	ND	20	1	06/17/2020 14:14

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	107	70-130	06/17/2020 14:14

Analyst(s): JAG



Analytical Report

Client: Langan
Date Received: 06/16/2000 13:15
Date Prepared: 06/18/2020
Project: 750664801; 1666 7th Street

WorkOrder: 2006778
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: µg/L

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-2	2006778-001A	Water	06/15/2020 10:35	GC3 06172026.D	200145

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	50	1	06/18/2020 00:29
MTBE	---	1.0	1	06/18/2020 00:29
Benzene	---	0.50	1	06/18/2020 00:29
Toluene	---	0.50	1	06/18/2020 00:29
Ethylbenzene	---	0.50	1	06/18/2020 00:29
m,p-Xylene	---	1.0	1	06/18/2020 00:29
o-Xylene	---	0.50	1	06/18/2020 00:29
Xylenes	---	0.50	1	06/18/2020 00:29

Surrogates	REC (%)	Limits	Date Analyzed
aaa-TFT	88	76-115	06/18/2020 00:29

Analyst(s): IA

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-1	2006778-002A	Water	06/15/2020 12:25	GC3 06172027.D	200145

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	50	1	06/18/2020 01:00
MTBE	---	1.0	1	06/18/2020 01:00
Benzene	---	0.50	1	06/18/2020 01:00
Toluene	---	0.50	1	06/18/2020 01:00
Ethylbenzene	---	0.50	1	06/18/2020 01:00
m,p-Xylene	---	1.0	1	06/18/2020 01:00
o-Xylene	---	0.50	1	06/18/2020 01:00
Xylenes	---	0.50	1	06/18/2020 01:00

Surrogates	REC (%)	Limits	Date Analyzed
aaa-TFT	87	76-115	06/18/2020 01:00

Analyst(s): IA



Analytical Report

Client: Langan
Date Received: 06/16/2000 13:15
Date Prepared: 06/16/2020
Project: 750664801; 1666 7th Street

WorkOrder: 2006778
Extraction Method: SW3510C
Analytical Method: SW8015B
Unit: µg/L

Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-2	2006778-001A	Water	06/15/2020 10:35	GC6B 06162065.D	200154

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	50	1	06/17/2020 06:13
TPH-Motor Oil (C18-C36)	ND	250	1	06/17/2020 06:13

Surrogates	REC (%)	Limits	Date Analyzed
C9	98	70-130	06/17/2020 06:13

Analyst(s): JIS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-1	2006778-002A	Water	06/15/2020 12:25	GC39B 06172009.D	200154

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	50	1	06/17/2020 12:02
TPH-Motor Oil (C18-C36)	ND	250	1	06/17/2020 12:02

Surrogates	REC (%)	Limits	Date Analyzed
C9	104	70-130	06/17/2020 12:02

Analyst(s): JIS



Quality Control Report

Client: Langan
Date Prepared: 06/19/2020
Date Analyzed: 06/19/2020
Instrument: GC16
Matrix: Water
Project: 750664801; 1666 7th Street

WorkOrder: 2006778
BatchID: 200412
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L
Sample ID: MB/LCS/LCSD-200412

QC Summary Report for SW8260B

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Acetone	ND	30.0	40.0	-	-	-
tert-Amyl methyl ether (TAME)	ND	0.120	0.500	-	-	-
Benzene	ND	0.0290	0.200	-	-	-
Bromobenzene	ND	0.120	0.500	-	-	-
Bromochloromethane	ND	0.100	0.500	-	-	-
Bromodichloromethane	ND	0.0250	0.0500	-	-	-
Bromoform	ND	0.270	0.500	-	-	-
Bromomethane	ND	0.190	0.500	-	-	-
2-Butanone (MEK)	ND	1.90	5.00	-	-	-
t-Butyl alcohol (TBA)	ND	1.70	5.00	-	-	-
n-Butyl benzene	ND	0.220	0.500	-	-	-
sec-Butyl benzene	ND	0.170	0.500	-	-	-
tert-Butyl benzene	ND	0.130	0.500	-	-	-
Carbon Disulfide	ND	0.260	0.500	-	-	-
Carbon Tetrachloride	ND	0.0280	0.0500	-	-	-
Chlorobenzene	ND	0.100	0.500	-	-	-
Chloroethane	ND	0.220	0.500	-	-	-
Chloroform	ND	0.0520	0.100	-	-	-
Chloromethane	ND	0.290	0.500	-	-	-
2-Chlorotoluene	ND	0.140	0.500	-	-	-
4-Chlorotoluene	ND	0.120	0.500	-	-	-
Dibromochloromethane	ND	0.0590	0.150	-	-	-
1,2-Dibromo-3-chloropropane	ND	0.00290	0.00500	-	-	-
1,2-Dibromoethane (EDB)	0.00473,J	0.00340	0.00500	-	-	-
Dibromomethane	ND	0.120	0.500	-	-	-
1,2-Dichlorobenzene	ND	0.140	0.500	-	-	-
1,3-Dichlorobenzene	ND	0.120	0.500	-	-	-
1,4-Dichlorobenzene	ND	0.0890	0.500	-	-	-
Dichlorodifluoromethane	ND	0.290	0.500	-	-	-
1,1-Dichloroethane	ND	0.150	0.500	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	0.00750	0.0100	-	-	-
1,1-Dichloroethene	ND	0.00840	0.0100	-	-	-
cis-1,2-Dichloroethene	ND	0.0930	0.500	-	-	-
trans-1,2-Dichloroethene	ND	0.110	0.500	-	-	-
1,2-Dichloropropane	ND	0.0170	0.200	-	-	-
1,3-Dichloropropane	ND	0.180	0.500	-	-	-
2,2-Dichloropropane	ND	0.230	0.500	-	-	-
1,1-Dichloropropene	ND	0.0950	0.500	-	-	-

(Cont.)



Quality Control Report

Client: Langan
Date Prepared: 06/19/2020
Date Analyzed: 06/19/2020
Instrument: GC16
Matrix: Water
Project: 750664801; 1666 7th Street

WorkOrder: 2006778
BatchID: 200412
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L
Sample ID: MB/LCS/LCSD-200412

QC Summary Report for SW8260B

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
cis-1,3-Dichloropropene	ND	0.200	0.500	-	-	-
trans-1,3-Dichloropropene	ND	0.260	0.500	-	-	-
Diisopropyl ether (DIPE)	ND	0.120	0.500	-	-	-
Ethylbenzene	ND	0.130	0.500	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	0.200	0.500	-	-	-
Freon 113	ND	0.150	0.500	-	-	-
Hexachlorobutadiene	ND	0.0520	0.100	-	-	-
Hexachloroethane	ND	0.0580	0.200	-	-	-
2-Hexanone	ND	0.420	0.500	-	-	-
Isopropylbenzene	ND	0.160	0.500	-	-	-
4-Isopropyl toluene	ND	0.150	0.500	-	-	-
Methyl-t-butyl ether (MTBE)	ND	0.150	0.500	-	-	-
Methylene chloride	ND	1.10	2.00	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	0.390	0.500	-	-	-
Naphthalene	ND	0.0880	0.100	-	-	-
n-Propyl benzene	ND	0.120	0.500	-	-	-
Styrene	ND	0.340	2.00	-	-	-
1,1,1,2-Tetrachloroethane	ND	0.140	0.500	-	-	-
1,1,2,2-Tetrachloroethane	ND	0.00830	0.0200	-	-	-
Tetrachloroethene	ND	0.170	0.200	-	-	-
Toluene	ND	0.160	0.500	-	-	-
1,2,3-Trichlorobenzene	ND	0.220	0.500	-	-	-
1,2,4-Trichlorobenzene	ND	0.200	0.500	-	-	-
1,1,1-Trichloroethane	ND	0.130	0.500	-	-	-
1,1,2-Trichloroethane	ND	0.0540	0.200	-	-	-
Trichloroethene	ND	0.0510	0.200	-	-	-
Trichlorofluoromethane	ND	0.180	0.500	-	-	-
1,2,3-Trichloropropane	ND	0.00470	0.00500	-	-	-
1,2,4-Trimethylbenzene	ND	0.180	0.500	-	-	-
1,3,5-Trimethylbenzene	ND	0.160	0.500	-	-	-
Vinyl Chloride	ND	0.00430	0.00500	-	-	-
m,p-Xylene	ND	0.240	0.500	-	-	-
o-Xylene	ND	0.120	0.500	-	-	-

(Cont.)



Quality Control Report

Client:	Langan	WorkOrder:	2006778
Date Prepared:	06/19/2020	BatchID:	200412
Date Analyzed:	06/19/2020	Extraction Method:	SW5030B
Instrument:	GC16	Analytical Method:	SW8260B
Matrix:	Water	Unit:	µg/L
Project:	750664801; 1666 7th Street	Sample ID:	MB/LCS/LCSD-200412

QC Summary Report for SW8260B

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Surrogate Recovery						
Dibromofluoromethane	25.9			25	104	76-110
Toluene-d8	25.0			25	100	84-111
4-BFB	2.41			2.5	96	64-121



Quality Control Report

Client: Langan
Date Prepared: 06/19/2020
Date Analyzed: 06/19/2020
Instrument: GC16
Matrix: Water
Project: 750664801; 1666 7th Street

WorkOrder: 2006778
BatchID: 200412
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L
Sample ID: MB/LCS/LCSD-200412

QC Summary Report for SW8260B

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Acetone	37.3	38.5	40	93	96	32-138	3.12	20
tert-Amyl methyl ether (TAME)	3.72	3.87	4	93	97	62-119	3.88	20
Benzene	4.20	4.31	4	105	108	71-126	2.44	20
Bromobenzene	3.42	3.56	4	86	89	66-117	3.95	20
Bromochloromethane	3.75	3.75	4	94	94	67-124	0.122	20
Bromodichloromethane	3.93	4.02	4	98	101	63-119	2.29	20
Bromoform	3.32	3.48	4	83	87	46-117	4.55	20
Bromomethane	4.45	4.43	4	111	111	32-171	0.419	20
2-Butanone (MEK)	14.9	15.5	16	93	97	48-136	4.01	20
t-Butyl alcohol (TBA)	13.6	15.0	16	85	93	40-131	9.53	20
n-Butyl benzene	4.23	4.18	4	106	104	75-125	1.27	20
sec-Butyl benzene	3.90	3.91	4	98	98	72-120	0.0998	20
tert-Butyl benzene	3.58	3.65	4	89	91	63-118	2.12	20
Carbon Disulfide	3.82	3.91	4	95	98	64-126	2.46	20
Carbon Tetrachloride	3.64	3.73	4	91	93	67-122	2.58	20
Chlorobenzene	3.86	3.85	4	97	96	71-117	0.310	20
Chloroethane	4.10	4.18	4	102	105	53-136	2.06	20
Chloroform	4.12	4.21	4	103	105	67-126	2.29	20
Chloromethane	3.86	3.81	4	96	95	42-148	1.21	20
2-Chlorotoluene	3.70	3.83	4	93	96	70-117	3.43	20
4-Chlorotoluene	3.68	3.74	4	92	93	67-117	1.59	20
Dibromochloromethane	3.87	3.77	4	97	94	52-120	2.71	20
1,2-Dibromo-3-chloropropane	1.75	1.68	2	87	84	38-128	3.69	20
1,2-Dibromoethane (EDB)	1.89	1.85	2	95	93	58-117	2.09	20
Dibromomethane	3.82	3.91	4	95	98	66-120	2.33	20
1,2-Dichlorobenzene	3.91	3.89	4	98	97	71-117	0.504	20
1,3-Dichlorobenzene	3.88	3.83	4	97	96	74-116	1.27	20
1,4-Dichlorobenzene	3.91	3.82	4	98	96	71-115	2.22	20
Dichlorodifluoromethane	2.50	2.55	4	62	64	29-145	1.89	20
1,1-Dichloroethane	3.97	4.05	4	99	101	68-128	1.93	20
1,2-Dichloroethane (1,2-DCA)	3.64	3.72	4	91	93	61-123	2.29	20
1,1-Dichloroethene	3.57	3.66	4	89	91	65-126	2.31	20
cis-1,2-Dichloroethene	3.92	4.05	4	98	101	71-122	3.16	20
trans-1,2-Dichloroethene	3.78	3.92	4	94	98	70-126	3.68	20
1,2-Dichloropropane	3.96	4.04	4	99	101	67-124	2.05	20
1,3-Dichloropropane	3.78	3.67	4	95	92	65-120	3.17	20
2,2-Dichloropropane	4.01	4.02	4	100	101	71-127	0.251	20
1,1-Dichloropropene	3.76	3.85	4	94	96	69-122	2.15	20

(Cont.)



Quality Control Report

Client: Langan
Date Prepared: 06/19/2020
Date Analyzed: 06/19/2020
Instrument: GC16
Matrix: Water
Project: 750664801; 1666 7th Street

WorkOrder: 2006778
BatchID: 200412
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L
Sample ID: MB/LCS/LCSD-200412

QC Summary Report for SW8260B

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
cis-1,3-Dichloropropene	3.93	3.83	4	98	96	63-119	2.53	20
trans-1,3-Dichloropropene	3.84	3.76	4	96	94	63-116	2.07	20
Diisopropyl ether (DIPE)	4.04	4.14	4	101	104	64-128	2.63	20
Ethylbenzene	3.77	3.85	4	94	96	69-120	2.08	20
Ethyl tert-butyl ether (ETBE)	3.88	4.00	4	97	100	63-120	3.10	20
Freon 113	3.59	3.69	4	90	92	67-126	2.96	20
Hexachlorobutadiene	3.66	3.54	4	91	88	50-140	3.38	20
Hexachloroethane	3.83	3.96	4	96	99	52-122	3.27	20
2-Hexanone	3.32	3.18	4	83	79	39-121	4.29	20
Isopropylbenzene	3.77	3.93	4	94	98	69-120	4.07	20
4-Isopropyl toluene	3.93	3.91	4	98	98	72-122	0.562	20
Methyl-t-butyl ether (MTBE)	3.68	3.78	4	92	95	60-121	2.80	20
Methylene chloride	3.74	3.81	4	93	95	40-148	2.07	20
4-Methyl-2-pentanone (MIBK)	3.26	3.30	4	81	83	48-115	1.25	20
Naphthalene	4.17	3.85	4	104	96	62-124	7.91	20
n-Propyl benzene	3.73	3.88	4	93	97	70-118	3.88	20
Styrene	3.53	3.55	4	88	89	57-118	0.636	20
1,1,1,2-Tetrachloroethane	3.67	3.70	4	92	92	63-117	0.796	20
1,1,2,2-Tetrachloroethane	3.59	3.64	4	90	91	60-116	1.41	20
Tetrachloroethene	3.70	3.57	4	92	89	60-131	3.52	20
Toluene	3.83	3.78	4	96	95	67-115	1.11	20
1,2,3-Trichlorobenzene	3.87	3.55	4	97	89	60-128	8.61	20
1,2,4-Trichlorobenzene	3.82	3.71	4	95	93	61-133	2.72	20
1,1,1-Trichloroethane	3.70	3.81	4	93	95	67-124	2.83	20
1,1,2-Trichloroethane	3.74	3.60	4	94	90	62-117	3.96	20
Trichloroethene	3.69	3.80	4	92	95	69-120	2.85	20
Trichlorofluoromethane	3.47	3.56	4	87	89	60-134	2.33	20
1,2,3-Trichloropropane	1.70	1.72	2	85	86	56-120	0.811	20
1,2,4-Trimethylbenzene	3.97	3.90	4	99	97	67-124	1.84	20
1,3,5-Trimethylbenzene	3.97	3.92	4	99	98	69-122	1.27	20
Vinyl Chloride	2.07	2.09	2	103	104	52-145	0.972	20
m,p-Xylene	7.25	7.38	8	91	92	67-119	1.82	20
o-Xylene	3.74	3.78	4	94	95	68-120	1.06	20

(Cont.)



Quality Control Report

Client: Langan
Date Prepared: 06/19/2020
Date Analyzed: 06/19/2020
Instrument: GC16
Matrix: Water
Project: 750664801; 1666 7th Street

WorkOrder: 2006778
BatchID: 200412
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L
Sample ID: MB/LCS/LCSD-200412

QC Summary Report for SW8260B

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Surrogate Recovery								
Dibromofluoromethane	25.2	25.1	25	101	101	76-110	0.104	20
Toluene-d8	26.2	25.6	25	105	102	84-111	2.19	20
4-BFB	2.27	2.32	2.5	91	93	64-121	1.94	20



Quality Control Report

Client: Langan
Date Prepared: 06/17/2020
Date Analyzed: 06/19/2020
Instrument: GC17
Matrix: Water
Project: 750664801; 1666 7th Street

WorkOrder: 2006778
BatchID: 200264
Extraction Method: SW3640Am
Analytical Method: SW8270C
Unit: µg/L
Sample ID: MB/LCS/LCSD-200264

QC Summary Report for SW8270C

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Acenaphthene	ND	0.00200	0.00500	-	-	-
Acenaphthylene	ND	0.00120	0.00500	-	-	-
Acetochlor	ND	0.240	1.00	-	-	-
Anthracene	ND	0.00290	0.0100	-	-	-
Benzidine	ND	0.690	5.00	-	-	-
Benzo (a) anthracene	ND	0.0220	0.0500	-	-	-
Benzo (a) pyrene	ND	0.00330	0.0100	-	-	-
Benzo (b) fluoranthene	ND	0.00790	0.0200	-	-	-
Benzo (g,h,i) perylene	ND	0.00300	0.0200	-	-	-
Benzo (k) fluoranthene	ND	0.00450	0.0100	-	-	-
Benzyl Alcohol	ND	2.90	5.00	-	-	-
1,1-Biphenyl	ND	0.0130	0.0500	-	-	-
Bis (2-chloroethoxy) Methane	ND	0.170	1.00	-	-	-
Bis (2-chloroethyl) Ether	ND	0.00290	0.0100	-	-	-
Bis (2-chloroisopropyl) Ether	ND	0.0150	0.0500	-	-	-
Bis (2-ethylhexyl) Adipate	ND	0.570	1.00	-	-	-
Bis (2-ethylhexyl) Phthalate	ND	0.0980	0.200	-	-	-
4-Bromophenyl Phenyl Ether	ND	0.180	1.00	-	-	-
Butylbenzyl Phthalate	ND	0.120	0.200	-	-	-
4-Chloroaniline	ND	0.00130	0.00500	-	-	-
4-Chloro-3-methylphenol	ND	0.150	1.00	-	-	-
2-Chloronaphthalene	ND	0.190	1.00	-	-	-
2-Chlorophenol	ND	0.0110	0.0500	-	-	-
4-Chlorophenyl Phenyl Ether	ND	0.240	1.00	-	-	-
Chrysene	ND	0.00460	0.0100	-	-	-
Dibenzo (a,h) anthracene	ND	0.00450	0.0100	-	-	-
Dibenzofuran	ND	0.190	1.00	-	-	-
Di-n-butyl Phthalate	ND	0.0180	0.0500	-	-	-
1,2-Dichlorobenzene	ND	0.170	2.00	-	-	-
1,3-Dichlorobenzene	ND	0.140	1.00	-	-	-
1,4-Dichlorobenzene	ND	0.170	1.00	-	-	-
3,3-Dichlorobenzidine	ND	0.00330	0.0200	-	-	-
2,4-Dichlorophenol	ND	0.00160	0.0100	-	-	-
Diethyl Phthalate	ND	0.0170	0.0500	-	-	-
2,4-Dimethylphenol	ND	0.190	1.00	-	-	-
Dimethyl Phthalate	ND	0.00360	0.0100	-	-	-
4,6-Dinitro-2-methylphenol	ND	1.10	5.00	-	-	-
2,4-Dinitrophenol	ND	0.490	2.00	-	-	-

(Cont.)



Quality Control Report

Client: Langan
Date Prepared: 06/17/2020
Date Analyzed: 06/19/2020
Instrument: GC17
Matrix: Water
Project: 750664801; 1666 7th Street

WorkOrder: 2006778
BatchID: 200264
Extraction Method: SW3640Am
Analytical Method: SW8270C
Unit: µg/L
Sample ID: MB/LCS/LCSD-200264

QC Summary Report for SW8270C

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
2,4-Dinitrotoluene	ND	0.0140	0.0500	-	-	-
2,6-Dinitrotoluene	ND	0.0110	0.0500	-	-	-
Di-n-octyl Phthalate	ND	0.0220	0.0500	-	-	-
1,2-Diphenylhydrazine	ND	0.200	1.00	-	-	-
Fluoranthene	ND	0.00210	0.0100	-	-	-
Fluorene	ND	0.00310	0.0100	-	-	-
Hexachlorobenzene	ND	0.00200	0.00500	-	-	-
Hexachlorobutadiene	ND	0.00110	0.0100	-	-	-
Hexachlorocyclopentadiene	ND	0.560	5.00	-	-	-
Hexachloroethane	ND	0.00940	0.0500	-	-	-
Indeno (1,2,3-cd) pyrene	ND	0.00390	0.0200	-	-	-
Isophorone	ND	0.130	1.00	-	-	-
2-Methylnaphthalene	ND	0.00310	0.0100	-	-	-
2-Methylphenol (o-Cresol)	ND	0.340	1.00	-	-	-
3 & 4-Methylphenol (m,p-Cresol)	ND	0.160	1.00	-	-	-
Naphthalene	ND	0.00820	0.0500	-	-	-
2-Nitroaniline	ND	0.940	5.00	-	-	-
3-Nitroaniline	ND	1.00	5.00	-	-	-
4-Nitroaniline	ND	1.60	5.00	-	-	-
Nitrobenzene	ND	0.180	1.00	-	-	-
2-Nitrophenol	ND	0.680	5.00	-	-	-
4-Nitrophenol	ND	2.00	5.00	-	-	-
N-Nitrosodiphenylamine	ND	0.190	1.00	-	-	-
N-Nitrosodi-n-propylamine	ND	0.350	1.00	-	-	-
Pentachlorophenol	ND	0.110	0.250	-	-	-
Phenanthrene	ND	0.00280	0.0200	-	-	-
Phenol	ND	0.0540	0.200	-	-	-
Pyrene	ND	0.00220	0.0100	-	-	-
Pyridine	ND	0.160	1.00	-	-	-
1,2,4-Trichlorobenzene	ND	0.260	1.00	-	-	-
2,4,5-Trichlorophenol	ND	0.00470	0.0100	-	-	-
2,4,6-Trichlorophenol	ND	0.00260	0.0100	-	-	-
1-Methylnaphthalene	ND	0.00280	0.00500	-	-	-

(Cont.)



Quality Control Report

Client: Langan	WorkOrder: 2006778
Date Prepared: 06/17/2020	BatchID: 200264
Date Analyzed: 06/19/2020	Extraction Method: SW3640Am
Instrument: GC17	Analytical Method: SW8270C
Matrix: Water	Unit: µg/L
Project: 750664801; 1666 7th Street	Sample ID: MB/LCS/LCSD-200264

QC Summary Report for SW8270C

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Surrogate Recovery						
2-Fluorophenol	4.70			5	94	23-101
Phenol-d5	4.79			5	96	27-116
Nitrobenzene-d5	4.27			5	85	29-116
2-Fluorobiphenyl	3.96			5	79	29-112
2,4,6-Tribromophenol	6.40			5	128,F3	34-125
4-Terphenyl-d14	2.41			5	48	23-136



Quality Control Report

Client: Langan
Date Prepared: 06/17/2020
Date Analyzed: 06/19/2020
Instrument: GC17
Matrix: Water
Project: 750664801; 1666 7th Street

WorkOrder: 2006778
BatchID: 200264
Extraction Method: SW3640Am
Analytical Method: SW8270C
Unit: µg/L
Sample ID: MB/LCS/LCSD-200264

QC Summary Report for SW8270C

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Acenaphthene	0.553	0.523	0.50	111	105	27-117	5.60	25
Acenaphthylene	0.396	0.367	0.50	79	73	18-128	7.69	25
Acetochlor	9.51	9.51	10	95	95	30-130	0.0252	25
Anthracene	0.600	0.560	0.50	120	112	31-126	7.01	25
Benzidine	38.7	35.7	50	77	71	14-115	8.11	25
Benzo (a) anthracene	0.472	0.435	0.50	94	87	27-129	8.09	25
Benzo (a) pyrene	0.492	0.457	0.50	98	91	10-161	7.36	25
Benzo (b) fluoranthene	0.441	0.404	0.50	88	81	24-140	8.57	25
Benzo (g,h,i) perylene	0.591	0.497	0.50	118	99	2-155	17.4	25
Benzo (k) fluoranthene	0.504	0.466	0.50	101	93	2-168	7.98	25
Benzyl Alcohol	53.7	54.4	50	107	109	22-114	1.27	25
1,1-Biphenyl	0.462	0.418	0.50	92	84	30-130	9.92	25
Bis (2-chloroethoxy) Methane	9.80	9.44	10	98	94	28-109	3.68	25
Bis (2-chloroethyl) Ether	0.451	0.428	0.50	90	86	24-105	5.21	25
Bis (2-chloroisopropyl) Ether	0.508	0.493	0.50	102	99	21-106	2.98	25
Bis (2-ethylhexyl) Adipate	10.6	9.78	10	106	98	13-143	8.40	25
Bis (2-ethylhexyl) Phthalate	0.541	0.507	0.50	108	101	7-156	6.46	25
4-Bromophenyl Phenyl Ether	9.70	8.84	10	97	88	31-121	9.30	25
Butylbenzyl Phthalate	0.503	0.467	10	5,F2	5,F2	20-146	7.39	25
4-Chloroaniline	0.475	0.475	0.50	95	95	15-122	0.0102	25
4-Chloro-3-methylphenol	10.1	10.8	10	101	108	29-125	6.89	25
2-Chloronaphthalene	10.2	9.00	10	102	90	27-113	12.4	25
2-Chlorophenol	0.466	0.438	0.50	93	88	24-108	6.18	25
4-Chlorophenyl Phenyl Ether	9.30	8.98	10	93	90	24-127	3.51	25
Chrysene	0.472	0.436	0.50	94	87	31-131	7.87	25
Dibenzo (a,h) anthracene	0.555	0.466	0.50	111	93	12-157	17.3	25
Dibenzofuran	9.62	9.27	10	96	93	21-124	3.72	25
Di-n-butyl Phthalate	0.468	0.453	0.50	94	91	18-147	3.25	25
1,2-Dichlorobenzene	7.77	7.10	10	78	71	22-101	8.96	25
1,3-Dichlorobenzene	7.80	6.86	10	78	69	20-99	12.8	25
1,4-Dichlorobenzene	7.90	7.07	10	79	71	21-99	11.0	25
3,3-Dichlorobenzidine	0.533	0.516	0.50	107	103	29-139	3.27	25
2,4-Dichlorophenol	0.475	0.464	0.50	95	93	28-115	2.51	25
Diethyl Phthalate	0.542	0.551	0.50	108	110	19-139	1.81	25
2,4-Dimethylphenol	10.8	10.0	10	108	100	23-108	7.20	25
Dimethyl Phthalate	0.496	0.490	0.50	99	98	22-132	1.20	25
4,6-Dinitro-2-methylphenol	48.0	46.2	50	96	92	27-129	3.77	25
2,4-Dinitrophenol	8.68	9.37	10	87	94	12-141	7.64	25

(Cont.)



Quality Control Report

Client: Langan
Date Prepared: 06/17/2020
Date Analyzed: 06/19/2020
Instrument: GC17
Matrix: Water
Project: 750664801; 1666 7th Street

WorkOrder: 2006778
BatchID: 200264
Extraction Method: SW3640Am
Analytical Method: SW8270C
Unit: µg/L
Sample ID: MB/LCS/LCSD-200264

QC Summary Report for SW8270C

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
2,4-Dinitrotoluene	0.559	0.577	0.50	112	115	22-141	3.25	25
2,6-Dinitrotoluene	0.492	0.493	0.50	98	99	24-136	0.306	25
Di-n-octyl Phthalate	0.500	0.470	0.50	100	94	18-153	6.28	25
1,2-Diphenylhydrazine	11.3	10.2	10	113	102	31-121	9.63	25
Fluoranthene	0.479	0.470	0.50	96	94	30-138	1.97	25
Fluorene	0.532	0.520	0.50	106	104	24-127	2.34	25
Hexachlorobenzene	0.470	0.419	0.50	94	84	32-117	11.4	25
Hexachlorobutadiene	0.382	0.331	0.50	76	66	22-107	14.3	25
Hexachlorocyclopentadiene	37.8	31.4	50	76	63	14-102	18.5	25
Hexachloroethane	0.401	0.356	0.50	80	71	22-101	12.1	25
Indeno (1,2,3-cd) pyrene	0.526	0.468	0.50	105	94	10-160	11.7	25
Isophorone	10.8	10.7	10	108	107	27-117	0.429	25
2-Methylnaphthalene	0.390	0.376	0.50	78	75	46-120	3.80	25
2-Methylphenol (o-Cresol)	10.1	10.0	10	101	100	30-109	1.22	25
3 & 4-Methylphenol (m,p-Cresol)	10.1	10.3	10	101	103	28-112	1.98	25
Naphthalene	0.361	0.334	0.50	72	67	16-120	7.64	25
2-Nitroaniline	57.1	56.2	50	114	112	18-137	1.59	25
3-Nitroaniline	45.8	46.3	50	92	93	15-144	1.08	25
4-Nitroaniline	47.0	49.5	50	94	99	11-152	5.10	25
Nitrobenzene	10.1	9.46	10	101	95	22-115	6.93	25
2-Nitrophenol	46.3	43.3	50	93	87	29-114	6.61	25
4-Nitrophenol	51.8	54.9	50	103	110	13-150	5.94	25
N-Nitrosodiphenylamine	9.92	8.91	10	99	89	33-121	10.6	25
N-Nitrosodi-n-propylamine	11.4	11.9	10	114,F2	119,F2	26-112	4.51	25
Pentachlorophenol	2.36	2.27	2.5	94	91	37-140	3.78	25
Phenanthrene	0.480	0.447	0.50	96	89	32-122	7.08	25
Phenol	2.06	2.01	0.50	412,F2	403,F2	22-111	2.34	25
Pyrene	0.495	0.432	0.50	99	86	33-130	13.6	25
Pyridine	7.21	6.89	10	72	69	30-130	4.62	25
1,2,4-Trichlorobenzene	8.67	7.68	10	87	77	24-107	12.2	25
2,4,5-Trichlorophenol	0.518	0.483	0.50	104	97	26-124	6.82	25
2,4,6-Trichlorophenol	0.547	0.522	0.50	109	104	28-121	4.74	25
1-Methylnaphthalene	0.439	0.416	0.50	88	83	46-120	5.40	25

(Cont.)



Quality Control Report

Client: Langan
Date Prepared: 06/17/2020
Date Analyzed: 06/19/2020
Instrument: GC17
Matrix: Water
Project: 750664801; 1666 7th Street

WorkOrder: 2006778
BatchID: 200264
Extraction Method: SW3640Am
Analytical Method: SW8270C
Unit: µg/L
Sample ID: MB/LCS/LCSD-200264

QC Summary Report for SW8270C

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Surrogate Recovery								
2-Fluorophenol	3.65	3.75	5	73	75	23-101	2.64	25
Phenol-d5	4.39	4.48	5	88	90	27-116	1.91	25
Nitrobenzene-d5	4.49	4.50	5	90	90	29-116	0.180	25
2-Fluorobiphenyl	4.07	3.87	5	81	77	29-112	4.89	25
2,4,6-Tribromophenol	5.61	5.53	5	112	111	34-125	1.46	25
4-Terphenyl-d14	2.96	2.62	5	59	52	23-136	12.5	25



Quality Control Report

Client: Langan
Date Prepared: 06/16/2020
Date Analyzed: 06/17/2020
Instrument: ICP-MS5
Matrix: Water
Project: 750664801; 1666 7th Street

WorkOrder: 2006778
BatchID: 200179
Extraction Method: SW3005
Analytical Method: SW6020
Unit: µg/L
Sample ID: MB/LCS/LCSD-200179
 2006778-001EMS/MSD

QC Summary Report for Dissolved Metals

Analyte	MB Result	MDL	RL			
Antimony	ND	0.0600	0.500	-	-	-
Arsenic	ND	0.190	0.500	-	-	-
Barium	ND	1.00	5.00	-	-	-
Beryllium	ND	0.0500	0.500	-	-	-
Cadmium	ND	0.0400	0.250	-	-	-
Chromium	ND	0.140	0.500	-	-	-
Cobalt	ND	0.0500	0.500	-	-	-
Copper	ND	0.100	0.500	-	-	-
Lead	ND	0.0800	0.500	-	-	-
Mercury	ND	0.0100	0.0500	-	-	-
Molybdenum	ND	0.260	0.500	-	-	-
Nickel	ND	0.180	0.500	-	-	-
Selenium	ND	0.150	0.500	-	-	-
Silver	ND	0.0250	0.190	-	-	-
Thallium	ND	0.0260	0.500	-	-	-
Vanadium	ND	0.0600	0.500	-	-	-
Zinc	ND	5.00	15.0	-	-	-



Quality Control Report

Client: Langan
Date Prepared: 06/16/2020
Date Analyzed: 06/17/2020
Instrument: ICP-MS5
Matrix: Water
Project: 750664801; 1666 7th Street

WorkOrder: 2006778
BatchID: 200179
Extraction Method: SW3005
Analytical Method: SW6020
Unit: µg/L
Sample ID: MB/LCS/LCSD-200179
 2006778-001EMS/MSD

QC Summary Report for Dissolved Metals

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Antimony	51.9	51.6	50	104	103	85-115	0.514	20
Arsenic	51.0	51.0	50	102	102	85-115	0.00196	20
Barium	504	507	500	101	101	85-115	0.588	20
Beryllium	51.2	50.7	50	102	101	85-115	1.08	20
Cadmium	50.1	49.7	50	100	99	85-115	0.699	20
Chromium	50.4	49.7	50	101	99	85-115	1.41	20
Cobalt	51.4	51.5	50	103	103	85-115	0.146	20
Copper	50.2	50.2	50	100	100	85-115	0.0120	20
Lead	50.9	51.0	50	102	102	85-115	0.0569	20
Mercury	1.16	1.18	1.25	93	94	85-115	1.11	20
Molybdenum	50.4	50.6	50	101	101	85-115	0.238	20
Nickel	50.6	49.9	50	101	100	85-115	1.51	20
Selenium	51.5	51.2	50	103	102	85-115	0.514	20
Silver	51.0	50.6	50	102	101	85-115	0.789	20
Thallium	50.8	50.6	50	102	101	85-115	0.363	20
Vanadium	50.6	49.9	50	101	100	85-115	1.43	20
Zinc	517	514	500	103	103	85-115	0.528	20

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Antimony	1	57.4	53.6	50	ND	114	106	70-130	7.02	20
Arsenic	1	58.2	59.8	50	1.092	114	117	70-130	2.63	20
Barium	1	588	552	500	33.46	111	104	70-130	6.32	20
Beryllium	1	53.7	49.7	50	ND	107	99	70-130	7.75	20
Cadmium	1	52.3	53.9	50	ND	105	108	70-130	3.10	20
Chromium	1	53.9	56.0	50	1.468	105	109	70-130	3.81	20
Cobalt	1	52.2	49.2	50	ND	104	98	70-130	5.95	20
Copper	1	51.6	52.9	50	ND	103	105	70-130	2.63	20
Lead	1	55.4	51.8	50	ND	111	104	70-130	6.77	20
Mercury	1	1.26	1.35	1.25	ND	100	107	70-130	6.65	20
Molybdenum	1	59.0	55.6	50	3.796	110	104	70-130	5.96	20
Nickel	1	55.7	57.8	50	4.592	102	106	70-130	3.75	20
Selenium	1	61.6	63.6	50	1.942	119	123	70-130	3.10	20
Silver	1	52.5	49.4	50	ND	105	99	70-130	6.12	20

(Cont.)



Quality Control Report

Client: Langan
Date Prepared: 06/16/2020
Date Analyzed: 06/17/2020
Instrument: ICP-MS5
Matrix: Water
Project: 750664801; 1666 7th Street

WorkOrder: 2006778
BatchID: 200179
Extraction Method: SW3005
Analytical Method: SW6020
Unit: µg/L
Sample ID: MB/LCS/LCSD-200179
 2006778-001EMS/MSD

QC Summary Report for Dissolved Metals

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Thallium	1	55.5	52.2	50	ND	111	104	70-130	6.00	20
Vanadium	1	55.1	56.9	50	1.442	107	111	70-130	3.30	20
Zinc	1	530	544	500	ND	106	109	70-130	2.57	20

Analyte	DLT Result	DLTRef Val	%D	%D Limit
Antimony	ND<2.50	ND	-	-
Arsenic	ND<2.50	1.092	-	-
Barium	33.0	33.46	1.37	-
Beryllium	ND<2.50	ND	-	-
Cadmium	ND<1.20	ND	-	-
Chromium	ND<2.50	1.468	-	-
Cobalt	ND<2.50	ND	-	-
Copper	ND<2.50	ND	-	-
Lead	ND<2.50	ND	-	-
Mercury	ND<0.250	ND	-	-
Molybdenum	3.60	3.796	5.16	-
Nickel	4.40	4.592	4.18	-
Selenium	ND<2.50	1.942	-	-
Silver	ND<0.950	ND	-	-
Thallium	ND<2.50	ND	-	-
Vanadium	ND<2.50	1.442	-	-
Zinc	ND<75.0	ND	-	-

%D Control Limit applied to analytes with concentrations greater than 25 times the reporting limits.



Quality Control Report

Client: Langan
Date Prepared: 06/16/2020
Date Analyzed: 06/16/2020
Instrument: ICP-MS4
Matrix: Water
Project: 750664801; 1666 7th Street

WorkOrder: 2006778
BatchID: 200065
Extraction Method: SW3005
Analytical Method: SW6020
Unit: µg/L
Sample ID: MB/LCS/LCSD-200065

QC Summary Report for Metals

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Antimony	ND	0.200	0.500	-	-	-
Arsenic	ND	0.120	0.500	-	-	-
Barium	ND	0.360	5.00	-	-	-
Beryllium	ND	0.0560	0.500	-	-	-
Cadmium	ND	0.0600	0.500	-	-	-
Chromium	ND	0.360	0.500	-	-	-
Cobalt	ND	0.0480	0.500	-	-	-
Copper	ND	0.430	0.500	-	-	-
Lead	ND	0.320	0.500	-	-	-
Mercury	ND	0.0330	0.0500	-	-	-
Molybdenum	ND	0.210	0.500	-	-	-
Nickel	ND	0.580	1.00	-	-	-
Selenium	ND	0.180	0.500	-	-	-
Silver	ND	0.0420	0.500	-	-	-
Thallium	ND	0.0470	0.500	-	-	-
Vanadium	ND	0.0910	0.500	-	-	-
Zinc	ND	11.0	20.0	-	-	-
Surrogate Recovery						
Terbium	531			500	106	70-130



Quality Control Report

Client: Langan
Date Prepared: 06/16/2020
Date Analyzed: 06/16/2020
Instrument: ICP-MS4
Matrix: Water
Project: 750664801; 1666 7th Street

WorkOrder: 2006778
BatchID: 200065
Extraction Method: SW3005
Analytical Method: SW6020
Unit: µg/L
Sample ID: MB/LCS/LCSD-200065

QC Summary Report for Metals

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Antimony	49.5	49.8	50	99	100	85-115	0.475	20
Arsenic	53.9	53.9	50	108	108	85-115	0.0538	20
Barium	534	530	500	107	106	85-115	0.723	20
Beryllium	54.0	53.8	50	108	108	85-115	0.340	20
Cadmium	53.1	54.2	50	106	108	85-115	2.03	20
Chromium	54.3	53.8	50	109	108	85-115	0.931	20
Cobalt	54.2	53.8	50	108	108	85-115	0.567	20
Copper	55.2	55.1	50	110	110	85-115	0.134	20
Lead	52.9	54.7	50	106	109	85-115	3.29	20
Mercury	1.19	1.17	1.25	96	93	85-115	2.20	20
Molybdenum	48.3	48.6	50	97	97	85-115	0.498	20
Nickel	55.1	54.4	50	110	109	85-115	1.36	20
Selenium	56.0	56.2	50	112	112	85-115	0.412	20
Silver	51.5	52.0	50	103	104	85-115	1.09	20
Thallium	53.4	54.8	50	107	110	85-115	2.63	20
Vanadium	53.9	53.3	50	108	107	85-115	0.985	20
Zinc	549	552	500	110	110	85-115	0.643	20
Surrogate Recovery								
Terbium	531	539	500	106	108	70-130	1.63	20



Quality Control Report

Client: Langan	WorkOrder: 2006778
Date Prepared: 06/17/2020	BatchID: 200145
Date Analyzed: 06/17/2020	Extraction Method: SW5030B
Instrument: GC3	Analytical Method: SW8021B/8015Bm
Matrix: Water	Unit: µg/L
Project: 750664801; 1666 7th Street	Sample ID: MB/LCS/LCSD-200145

QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
TPH(g) (C6-C12)	ND	20.0	50.0	-	-	-
MTBE	ND	0.530	1.00	-	-	-
Benzene	ND	0.200	0.500	-	-	-
Toluene	ND	0.190	0.500	-	-	-
Ethylbenzene	ND	0.230	0.500	-	-	-
m,p-Xylene	ND	0.400	1.00	-	-	-
o-Xylene	ND	0.130	0.500	-	-	-

Surrogate Recovery

aaa-TFT	8.77	10	88	74-117
---------	------	----	----	--------

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
TPH(btex)	57.5	59.5	60	96	99	78-116	3.49	20
MTBE	9.29	9.64	10	93	96	72-122	3.76	20
Benzene	9.41	9.55	10	94	95	81-123	1.47	20
Toluene	9.76	10.0	10	98	100	83-129	2.55	20
Ethylbenzene	9.95	10.0	10	100	100	88-126	0.633	20
m,p-Xylene	20.0	20.2	20	100	101	80-120	1.01	20
o-Xylene	9.76	9.75	10	98	97	80-120	0.118	20

Surrogate Recovery

aaa-TFT	8.84	8.85	10	88	88	74-117	0.0787	20
---------	------	------	----	----	----	--------	--------	----



Quality Control Report

Client:	Langan	WorkOrder:	2006778
Date Prepared:	06/16/2020	BatchID:	200154
Date Analyzed:	06/17/2020	Extraction Method:	SW3510C
Instrument:	GC6B	Analytical Method:	SW8015B
Matrix:	Water	Unit:	µg/L
Project:	750664801; 1666 7th Street	Sample ID:	MB/LCS/LCSD-200154

QC Report for SW8015B w/out SG Clean-Up

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
TPH-Diesel (C10-C23)	ND	29.0	50.0	-	-	-
TPH-Motor Oil (C18-C36)	ND	130	250	-	-	-
Surrogate Recovery						
C9	612			625	98	70-130

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	1060	1060	1000	106	106	70-130	0.192	20
Surrogate Recovery								
C9	599	593	625	96	95	70-130	0.917	20



1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 2006778

ClientCode: TWRF

- WaterTrax
 WriteOn
 EDF
 Excel
 EQulS
 Email
 HardCopy
 ThirdParty
 J-flag
 Detection Summary
 Dry-Weight

Report to:

Adam Brown
Langan
135 Main St, Suite 1500
San Francisco, CA 94105
(415) 955-5244 FAX: (415) 955-9041

Email: abrown@langan.com
cc/3rd Party: Mfromstein@langan.com; bhayward@lang
PO:
Project: 750664801; 1666 7th Street

Bill to:

Accounts Payable
Langan
135 Main St, Suite 1500
San Francisco, CA 94105
Langan_InvoiceCapture@concur.solutio

Requested TAT: 5 days;

Date Received: 06/16/2000

Date Logged: 06/16/2020

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
2006778-001	MW-2	Water	6/15/2020 10:35	<input type="checkbox"/>	B	C	E	D	A	A	E	A				
2006778-002	MW-1	Water	6/15/2020 12:25	<input type="checkbox"/>	B	C	E	D	A	A	E	A				

Test Legend:

1	8260B_Scan-SIM_W	2	8270_SCSM_GPC_W	3	CAM17MS_DISS	4	CAM17MS_TTLC_W
5	G-MBTEX_W	6	PRDisposal Fee	7	PRDISSOLVED	8	TPH(DMO)_W
9		10		11		12	

Prepared by: Kena Ponce

The following SampIDs: 001A, 002A contain testgroup Multi Range_W.

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days). Hazardous samples will be returned to client or disposed of at client expense.



WORK ORDER SUMMARY

Client Name: LANGAN
Client Contact: Adam Brown
Contact's Email: abrown@langan.com

Project: 750664801; 1666 7th Street

Comments:

Work Order: 2006778
QC Level: LEVEL 2
Date Logged: 6/16/2020

WaterTrax WriteOn EDF Excel EQulS Email HardCopy ThirdParty J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
2006778-001A	MW-2	Water	Multi-Range TPH	4	2 VOAs w/HCL + 2-aVOAs (multi-range)	<input type="checkbox"/>	6/15/2020 10:35	5 days	Trace	<input type="checkbox"/>	
2006778-001B	MW-2	Water	SW8260B (VOCs, Scan SIM)	2	VOA w/ HCl	<input type="checkbox"/>	6/15/2020 10:35	5 days	Trace	<input type="checkbox"/>	
2006778-001C	MW-2	Water	SW8270C (Low Level SVOCs) with GPC Cleanup	1	1LA Narrow Mouth, Unpres	<input type="checkbox"/>	6/15/2020 10:35	5 days	Trace	<input type="checkbox"/>	
2006778-001D	MW-2	Water	E200.8 (CAM 17)	1	250mL HDPE w/ HNO3	<input type="checkbox"/>	6/15/2020 10:35	5 days	Trace	<input type="checkbox"/>	
2006778-001E	MW-2	Water	E200.8 (CAM 17) (Dissolved-Lab Filtered)	1	250mL HDPE, unprsv.	<input type="checkbox"/>	6/15/2020 10:35	5 days	Trace	<input type="checkbox"/>	
2006778-002A	MW-1	Water	Multi-Range TPH	4	2 VOAs w/HCL + 2-aVOAs (multi-range)	<input type="checkbox"/>	6/15/2020 12:25	5 days	Trace	<input type="checkbox"/>	
2006778-002B	MW-1	Water	SW8260B (VOCs, Scan SIM)	2	VOA w/ HCl	<input type="checkbox"/>	6/15/2020 12:25	5 days	Trace	<input type="checkbox"/>	
2006778-002C	MW-1	Water	SW8270C (Low Level SVOCs) with GPC Cleanup	1	1LA Narrow Mouth, Unpres	<input type="checkbox"/>	6/15/2020 12:25	5 days	Trace	<input type="checkbox"/>	
2006778-002D	MW-1	Water	E200.8 (CAM 17)	1	250mL HDPE w/ HNO3	<input type="checkbox"/>	6/15/2020 12:25	5 days	Trace	<input type="checkbox"/>	
2006778-002E	MW-1	Water	E200.8 (CAM 17) (Dissolved-Lab Filtered)	1	250mL HDPE, unprsv.	<input type="checkbox"/>	6/15/2020 12:25	5 days	Trace	<input type="checkbox"/>	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



Sample Receipt Checklist

Client Name: **Langan**
 Project: **750664801; 1666 7th Street**

Date and Time Received: **6/16/2000 13:15**

Date Logged: **6/16/2020**

Received by: **Kena Ponce**

Logged by: **Kena Ponce**

WorkOrder No: **2006778** Matrix: Water
 Carrier: Lorenzo Perez (MAI Courier)

Chain of Custody (COC) Information

Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample IDs noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Date and Time of collection noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sampler's name noted on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
COC agrees with Quote?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper containers/bottles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Samples Received on Ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

(Ice Type: WET ICE)

Sample/Temp Blank temperature	Temp: 3.1°C		NA <input type="checkbox"/>
Water - VOA vials have zero headspace / no bubbles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Sample labels checked for correct preservation?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
pH acceptable upon receipt (Metal: <2; Nitrate 353.2/4500NO3: <2; 522: <4; 218.7: >8)?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>

UCMR Samples:

pH tested and acceptable upon receipt (200.8: ≤2; 525.3: ≤4; 530: ≤7; 541: <3; 544: <6.5 & 7.5)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Free Chlorine tested and acceptable upon receipt (<0.1mg/L)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

 Comments:

K PRIME, Inc.

CONSULTING ANALYTICAL CHEMISTS

3621 Westwind Blvd.
Santa Rosa CA 95403
Phone: 707 527 7574
FAX: 707 527 7879

TRANSMITTAL

DATE: 06/23/2020

TO: MR. ADAM BROWN
135 MAIN STREET, SUITE 1500
SAN FRANCISCO CA. 94105

ACCT: 4841
PROJ: 750664801

Phone: 415-238-6149
Email: abrown@langan.com

CC: MR. BRENDAN HAYWARD
MS. MARI FROMSTEIN
Email: bhayward@langan.com
mfromstein@langan.com

FROM: Richard A. Kegel, Ph.D. *RAK*
Laboratory Director *by AB*
6/23/20

SUBJECT: LABORATORY RESULTS FOR YOUR PROJECT 750664801

Enclosed please find K Prime's laboratory reports for the following samples:

SAMPLE ID	TYPE	DATE	TIME	KPI LAB #
SV-1	AIR	06/10/2020	12:18	197470
SV-2	AIR	06/10/2020	13:05	197471
SV-3	AIR	06/10/2020	13:41	197472
SV-4	AIR	06/10/2020	14:17	197473
DUP-1	AIR	06/10/2020	12:17	197474

The above listed sample group was received on 06/12/2020 and tested as requested on the chain of custody document.

Please call me if you have any questions or need further information.
Thank you for this opportunity to be of service.

K PRIME, INC.
LABORATORY REPORT

K PRIME PROJECT: 4841
CLIENT PROJECT: 750664801

METHOD: VOC'S IN AIR
REFERENCE: EPA METHOD TO 15 (GC-MS-SIM)

SAMPLE ID: SV-1
LAB NO: 197470
SAMPLE TYPE: AIR
DATE SAMPLED: 06/10/2020
TIME SAMPLED: 12:18
BATCH ID: 061920A1
DATE ANALYZED: 06/22/2020

COMPOUND NAME	CAS NO.	PPB (V/V)		µg/cu. m	
		RL	SAMPLE CONC	RL	SAMPLE CONC
DICHLORODIFLUOROMETHANE	75-71-8	0.100	0.280	0.495	1.38
CHLOROMETHANE	74-87-3	0.100	0.896	0.207	1.85
DICHLOROTETRAFLUOROETHANE	76-14-2	0.100	ND	0.699	ND
VINYL CHLORIDE	75-01-4	0.0350	ND	0.0895	ND
BROMOMETHANE	74-83-9	0.100	ND	0.388	ND
CHLOROETHANE	75-00-3	0.100	ND	0.264	ND
TRICHLOROFLUOROMETHANE	75-69-4	0.200	0.262	1.12	1.47
1,1-DICHLOROETHENE	75-35-4	0.100	ND	0.397	ND
TRICHLOROTRIFLUOROETHANE	76-13-1	0.500	ND	3.83	ND
METHYLENE CHLORIDE	75-09-2	3.00	ND	10.4	ND
T-1,2-DICHLOROETHENE	156-60-5	0.100	ND	0.396	ND
1,1-DICHLOROETHANE	75-34-3	0.100	ND	0.405	ND
C-1,2-DICHLOROETHENE	156-59-2	0.100	ND	0.397	ND
CHLOROFORM	67-66-3	0.100	0.290	0.488	1.42
1,1,1-TRICHLOROETHANE	71-55-6	0.100	ND	0.546	ND
1,2-DICHLOROETHANE	107-06-2	0.100	ND	0.405	ND
BENZENE	71-43-2	0.500	12.6	1.80	40.2
CARBON TETRACHLORIDE	56-23-5	0.100	ND	0.629	ND
1,2-DICHLOROPROPANE	78-87-5	0.100	ND	0.462	ND
TRICHLOROETHENE	79-01-6	0.100	ND	0.537	ND
C-1,3-DICHLOROPROPENE	10061-01-5	0.100	ND	0.454	ND
T-1,3-DICHLOROPROPENE	10061-02-6	0.100	ND	0.454	ND
TOLUENE	108-88-3	0.500	11.6	1.88	43.6
1,1,2-TRICHLOROETHANE	79-00-5	0.100	ND	0.546	ND
1,2-DIBROMOETHANE	106-93-4	0.100	ND	0.768	ND
TETRACHLOROETHENE	127-18-4	0.100	3.81	0.878	25.8
CHLOROBENZENE	108-90-7	0.100	ND	0.460	ND
ETHYLBENZENE	100-41-4	0.100	3.61	0.434	15.7
XYLENE (M+P)	179601-23-1	0.200	5.79	0.868	25.2
STYRENE	100-42-5	0.100	5.65	0.426	24.1
XYLENE (O)	95-47-6	0.100	3.47	0.434	15.1
1,1,2,2-TETRACHLOROETHANE	79-34-5	0.100	ND	0.887	ND
1,3,5-TRIMETHYLBENZENE	108-67-8	0.100	0.304	0.492	1.49
1,2,4-TRIMETHYLBENZENE	95-63-6	0.100	0.819	0.492	4.02
1,3-DICHLOROBENZENE	541-73-1	0.100	ND	0.601	ND
1,4-DICHLOROBENZENE	106-46-7	0.100	ND	0.601	ND
1,2-DICHLOROBENZENE	95-50-1	0.100	ND	0.601	ND
1,2,4-TRICHLOROBENZENE	120-82-1	0.100	ND	0.742	ND
HEXACHLOROBUTADIENE	87-68-3	0.100	ND	1.07	ND
NAPHTHALENE	91-20-3	0.150	ND	0.786	ND
XYLENE (M+P+O)	1330-20-7	0.200	9.26	0.868	40.2

NOTES:

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT

RL - REPORTING LIMIT

NA - NOT APPLICABLE OR AVAILABLE

µg/cu. m VALUES ARE CALCULATED FROM PPB RESULTS USING NORMAL TEMPERATURE AND PRESSURE (NPT).

APPROVED BY: 

DATE: 6/23/20

K PRIME, INC.
LABORATORY REPORT

K PRIME PROJECT: 4841
CLIENT PROJECT: 750664801

METHOD: VOC'S IN AIR
REFERENCE: EPA METHOD TO 15 (GC-MS-SIM)

SAMPLE ID: SV-2
LAB NO: 197471
SAMPLE TYPE: AIR
DATE SAMPLED: 06/10/2020
TIME SAMPLED: 13:05
BATCH ID: 061920A1
DATE ANALYZED: 06/20/2020

COMPOUND NAME	CAS NO.	PPB (V/V)		µg/cu. m	
		RL	SAMPLE CONC	RL	SAMPLE CONC
DICHLORODIFLUOROMETHANE	75-71-8	0.100	0.495	0.495	2.45
CHLOROMETHANE	74-87-3	0.100	ND	0.207	ND
DICHLOROTETRAFLUOROETHANE	76-14-2	0.100	ND	0.699	ND
VINYL CHLORIDE	75-01-4	0.0350	ND	0.0895	ND
BROMOMETHANE	74-83-9	0.100	ND	0.388	ND
CHLOROETHANE	75-00-3	0.100	ND	0.264	ND
TRICHLOROFLUOROMETHANE	75-69-4	0.200	0.358	1.12	2.01
1,1-DICHLOROETHENE	75-35-4	0.100	ND	0.397	ND
TRICHLOROTRIFLUOROETHANE	76-13-1	0.500	ND	3.83	ND
METHYLENE CHLORIDE	75-09-2	3.00	ND	10.4	ND
T-1,2-DICHLOROETHENE	156-60-5	0.100	ND	0.396	ND
1,1-DICHLOROETHANE	75-34-3	0.100	ND	0.405	ND
C-1,2-DICHLOROETHENE	156-59-2	0.100	ND	0.397	ND
CHLOROFORM	67-66-3	0.100	0.144	0.488	0.703
1,1,1-TRICHLOROETHANE	71-55-6	0.100	ND	0.546	ND
1,2-DICHLOROETHANE	107-06-2	0.100	ND	0.405	ND
BENZENE	71-43-2	0.500	2.58	1.60	8.24
CARBON TETRACHLORIDE	56-23-5	0.100	ND	0.629	ND
1,2-DICHLOROPROPANE	78-87-5	0.100	ND	0.462	ND
TRICHLOROETHENE	79-01-6	0.100	ND	0.537	ND
C-1,3-DICHLOROPROPENE	10061-01-5	0.100	ND	0.454	ND
T-1,3-DICHLOROPROPENE	10061-02-6	0.100	ND	0.454	ND
TOLUENE	108-88-3	0.500	47.4	1.88	179
1,1,2-TRICHLOROETHANE	79-00-5	0.100	ND	0.546	ND
1,2-DIBROMOETHANE	106-93-4	0.100	ND	0.768	ND
TETRACHLOROETHENE	127-18-4	0.100	2.53	0.678	17.2
CHLOROBENZENE	108-90-7	0.100	ND	0.460	ND
ETHYLBENZENE	100-41-4	0.100	0.713	0.434	3.09
XYLENE (M+P)	179601-23-1	0.200	1.89	0.868	8.23
STYRENE	100-42-5	0.100	0.193	0.426	0.822
XYLENE (O)	95-47-6	0.100	0.664	0.434	2.88
1,1,2,2-TETRACHLOROETHANE	79-34-5	0.100	ND	0.687	ND
1,3,5-TRIMETHYLBENZENE	108-67-8	0.100	ND	0.492	ND
1,2,4-TRIMETHYLBENZENE	95-63-6	0.100	0.244	0.492	1.20
1,3-DICHLOROBENZENE	541-73-1	0.100	ND	0.601	ND
1,4-DICHLOROBENZENE	106-46-7	0.100	ND	0.601	ND
1,2-DICHLOROBENZENE	95-50-1	0.100	ND	0.601	ND
1,2,4-TRICHLOROBENZENE	120-82-1	0.100	ND	0.742	ND
HEXACHLOROBUTADIENE	87-68-3	0.100	ND	1.07	ND
NAPHTHALENE	91-20-3	0.150	0.176	0.786	0.924
XYLENE (M+P+O)	1330-20-7	0.200	2.56	0.868	11.1

NOTES:

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT

RL - REPORTING LIMIT

NA - NOT APPLICABLE OR AVAILABLE

µg/cu. m VALUES ARE CALCULATED FROM PPB RESULTS USING NORMAL TEMPERATURE AND PRESSURE (NPT).

APPROVED BY: 

DATE: 6/23/20

K PRIME, INC.
LABORATORY REPORT

K PRIME PROJECT: 4841
CLIENT PROJECT: 750664801

METHOD: VOC'S IN AIR
REFERENCE: EPA METHOD TO 15 (GC-MS-SIM)

SAMPLE ID: SV-3
LAB NO: 197472
SAMPLE TYPE: AIR
DATE SAMPLED: 06/10/2020
TIME SAMPLED: 13:41
BATCH ID: 061920A1
DATE ANALYZED: 06/22/2020

COMPOUND NAME	CAS NO.	PPB (V/V)		µg/cu. m	
		RL	SAMPLE CONC	RL	SAMPLE CONC
DICHLORODIFLUOROMETHANE	75-71-8	0.100	0.447	0.495	2.21
CHLOROMETHANE	74-87-3	0.100	0.541	0.207	1.12
DICHLOROTETRAFLUROETHANE	76-14-2	0.100	ND	0.699	ND
VINYL CHLORIDE	75-01-4	0.0350	ND	0.0895	ND
BROMOMETHANE	74-83-9	0.100	ND	0.388	ND
CHLOROETHANE	75-00-3	0.100	ND	0.264	ND
TRICHLOROFLUOROMETHANE	75-69-4	0.200	0.395	1.12	2.22
1,1-DICHLOROETHENE	75-35-4	0.100	ND	0.397	ND
TRICHLOROTRIFLUOROETHANE	76-13-1	0.500	ND	3.83	ND
METHYLENE CHLORIDE	75-09-2	3.00	10.2	10.4	35.6
T-1,2-DICHLOROETHENE	156-60-5	0.100	ND	0.396	ND
1,1-DICHLOROETHANE	75-34-3	0.100	ND	0.405	ND
C-1,2-DICHLOROETHENE	156-59-2	0.100	ND	0.397	ND
CHLOROFORM	67-66-3	0.100	0.264	0.488	1.29
1,1,1-TRICHLOROETHANE	71-55-6	0.100	ND	0.546	ND
1,2-DICHLOROETHANE	107-06-2	0.100	ND	0.405	ND
BENZENE	71-43-2	0.500	1.52	1.60	4.86
CARBON TETRACHLORIDE	56-23-5	0.100	ND	0.629	ND
1,2-DICHLOROPROPANE	78-87-5	0.100	ND	0.462	ND
TRICHLOROETHENE	79-01-6	0.100	ND	0.537	ND
C-1,3-DICHLOROPROPENE	10061-01-5	0.100	ND	0.454	ND
T-1,3-DICHLOROPROPENE	10061-02-6	0.100	ND	0.454	ND
TOLUENE	108-88-3	0.500	10.0	1.88	37.7
1,1,2-TRICHLOROETHANE	79-00-5	0.100	ND	0.546	ND
1,2-DIBROMOETHANE	106-93-4	0.100	ND	0.768	ND
TETRACHLOROETHENE	127-18-4	0.100	0.145	0.678	0.983
CHLOROBENZENE	108-90-7	0.100	ND	0.460	ND
ETHYLBENZENE	100-41-4	0.100	0.251	0.434	1.09
XYLENE (M+P)	179601-23-1	0.200	0.373	0.868	1.62
STYRENE	100-42-5	0.100	ND	0.426	ND
XYLENE (O)	95-47-6	0.100	0.203	0.434	0.882
1,1,2,2-TETRACHLOROETHANE	79-34-5	0.100	ND	0.687	ND
1,3,5-TRIMETHYLBENZENE	108-67-8	0.100	ND	0.492	ND
1,2,4-TRIMETHYLBENZENE	95-63-6	0.100	ND	0.492	ND
1,3-DICHLOROBENZENE	541-73-1	0.100	ND	0.601	ND
1,4-DICHLOROBENZENE	106-46-7	0.100	ND	0.601	ND
1,2-DICHLOROBENZENE	95-50-1	0.100	ND	0.601	ND
1,2,4-TRICHLOROBENZENE	120-82-1	0.100	ND	0.742	ND
HEXACHLOROBUTADIENE	87-66-3	0.100	ND	1.07	ND
NAPHTHALENE	91-20-3	0.150	ND	0.786	ND
XYLENE (M+P+O)	1330-20-7	0.200	0.577	0.868	2.50

NOTES:

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT

RL - REPORTING LIMIT

NA - NOT APPLICABLE OR AVAILABLE

µg/cu. m VALUES ARE CALCULATED FROM PPB RESULTS USING NORMAL TEMPERATURE AND PRESSURE (NPT).

APPROVED BY: 

DATE: 6/23/20

K PRIME, INC.
LABORATORY REPORT

K PRIME PROJECT: 4841
CLIENT PROJECT: 750664801

METHOD: VOC'S IN AIR
REFERENCE: EPA METHOD TO 15 (GC-MS-SIM)

SAMPLE ID: SV-4
LAB NO: 197473
SAMPLE TYPE: AIR
DATE SAMPLED: 06/10/2020
TIME SAMPLED: 14:17
BATCH ID: 061920A1
DATE ANALYZED: 06/22/2020

COMPOUND NAME	CAS NO.	PPB (V/V)		µg/cu. m	
		RL	SAMPLE CONC	RL	SAMPLE CONC
DICHLORODIFLUOROMETHANE	75-71-8	0.100	0.411	0.495	2.03
CHLOROMETHANE	74-87-3	0.100	2.08	0.207	4.30
DICHLOROTETRAFLUOROETHANE	76-14-2	0.100	ND	0.699	ND
VINYL CHLORIDE	75-01-4	0.0350	0.167	0.0895	0.427
BROMOMETHANE	74-83-9	0.100	0.212	0.386	0.824
CHLOROETHANE	75-00-3	0.100	0.299	0.264	0.790
TRICHLOROFLUOROMETHANE	75-69-4	0.200	0.444	1.12	2.49
1,1-DICHLOROETHENE	75-35-4	0.100	0.150	0.397	0.594
TRICHLOROTRIFLUOROETHANE	76-13-1	0.500	ND	3.83	ND
METHYLENE CHLORIDE	75-09-2	3.00	ND	10.4	ND
T-1,2-DICHLOROETHENE	156-60-5	0.100	ND	0.396	ND
1,1-DICHLOROETHANE	75-34-3	0.100	ND	0.405	ND
C-1,2-DICHLOROETHENE	156-59-2	0.100	ND	0.397	ND
CHLOROFORM	67-66-3	0.100	0.277	0.488	1.35
1,1,1-TRICHLOROETHANE	71-55-6	0.100	ND	0.546	ND
1,2-DICHLOROETHANE	107-06-2	0.100	ND	0.405	ND
BENZENE	71-43-2	0.500	45.6	1.60	146
CARBON TETRACHLORIDE	56-23-5	0.100	ND	0.629	ND
1,2-DICHLOROPROPANE	78-87-5	0.100	ND	0.462	ND
TRICHLOROETHENE	79-01-6	0.100	ND	0.537	ND
C-1,3-DICHLOROPROPENE	10061-01-5	0.100	ND	0.454	ND
T-1,3-DICHLOROPROPENE	10061-02-6	0.100	ND	0.454	ND
TOLUENE	108-88-3	0.500	25.7	1.88	96.7
1,1,2-TRICHLOROETHANE	79-00-5	0.100	ND	0.546	ND
1,2-DIBROMOETHANE	106-93-4	0.100	ND	0.768	ND
TETRACHLOROETHENE	127-18-4	0.100	6.62	0.678	44.9
CHLOROBENZENE	108-90-7	0.100	ND	0.460	ND
ETHYLBENZENE	100-41-4	0.100	3.28	0.434	14.3
XYLENE (M+P)	179601-23-1	0.200	7.65	0.868	33.2
STYRENE	100-42-5	0.100	1.38	0.426	5.89
XYLENE (O)	95-47-6	0.100	3.95	0.434	17.2
1,1,2,2-TETRACHLOROETHANE	79-34-5	0.100	ND	0.687	ND
1,3,5-TRIMETHYLBENZENE	108-67-8	0.100	0.276	0.492	1.35
1,2,4-TRIMETHYLBENZENE	95-63-6	0.100	0.530	0.492	2.61
1,3-DICHLOROBENZENE	541-73-1	0.100	ND	0.601	ND
1,4-DICHLOROBENZENE	106-46-7	0.100	ND	0.601	ND
1,2-DICHLOROBENZENE	95-50-1	0.100	ND	0.601	ND
1,2,4-TRICHLOROBENZENE	120-82-1	0.100	ND	0.742	ND
HEXACHLOROBUTADIENE	87-68-3	0.100	ND	1.07	ND
NAPHTHALENE	91-20-3	0.150	ND	0.786	ND
XYLENE (M+P+O)	1330-20-7	0.200	11.6	0.868	50.4

NOTES:

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT

RL - REPORTING LIMIT

NA - NOT APPLICABLE OR AVAILABLE

µg/cu. m VALUES ARE CALCULATED FROM PPB RESULTS USING NORMAL TEMPERATURE AND PRESSURE (NPT).

APPROVED BY: 

DATE: 6/23/20

K PRIME, INC.
LABORATORY REPORT

K PRIME PROJECT: 4841
CLIENT PROJECT: 750664801

METHOD: VOC'S IN AIR
REFERENCE: EPA METHOD TO 15 (GC-MS-SIM)

SAMPLE ID: DUP-1
LAB NO: 197474
SAMPLE TYPE: AIR
DATE SAMPLED: 06/10/2020
TIME SAMPLED: 12:17
BATCH ID: 061920A1
DATE ANALYZED: 06/23/2020

COMPOUND NAME	CAS NO.	PPB (V/V)		µg/cu. m	
		RL	SAMPLE CONC	RL	SAMPLE CONC
DICHLORODIFLUOROMETHANE	75-71-8	0.100	0.293	0.495	1.45
CHLOROMETHANE	74-87-3	0.100	1.03	0.207	2.12
DICHLOROTETRAFLUROETHANE	76-14-2	0.100	ND	0.699	ND
VINYL CHLORIDE	75-01-4	0.0350	ND	0.0895	ND
BROMOMETHANE	74-83-9	0.100	ND	0.388	ND
CHLOROETHANE	75-00-3	0.100	ND	0.264	ND
TRICHLOROFLUOROMETHANE	75-69-4	0.200	0.244	1.12	1.37
1,1-DICHLOROETHENE	75-35-4	0.100	ND	0.397	ND
TRICHLOROTRIFLUOROETHANE	76-13-1	0.500	ND	3.83	ND
METHYLENE CHLORIDE	75-09-2	3.00	ND	10.4	ND
1,1,2-DICHLOROETHENE	156-60-5	0.100	ND	0.396	ND
1,1-DICHLOROETHANE	75-34-3	0.100	ND	0.405	ND
C-1,2-DICHLOROETHENE	156-59-2	0.100	ND	0.397	ND
CHLOROFORM	67-66-3	0.100	0.281	0.488	1.37
1,1,1-TRICHLOROETHANE	71-55-6	0.100	ND	0.546	ND
1,2-DICHLOROETHANE	107-06-2	0.100	ND	0.405	ND
BENZENE	71-43-2	0.500	12.8	1.60	41.1
CARBON TETRACHLORIDE	56-23-5	0.100	ND	0.629	ND
1,2-DICHLOROPROPANE	78-87-5	0.100	ND	0.462	ND
TRICHLOROETHENE	79-01-6	0.100	ND	0.537	ND
C-1,3-DICHLOROPROPENE	10061-01-5	0.100	ND	0.454	ND
T-1,3-DICHLOROPROPENE	10061-02-6	0.100	ND	0.454	ND
TOLUENE	108-88-3	0.500	10.9	1.88	41.2
1,1,2-TRICHLOROETHANE	79-00-5	0.100	ND	0.546	ND
1,2-DIBROMOETHANE	106-93-4	0.100	ND	0.768	ND
TETRACHLOROETHENE	127-18-4	0.100	3.55	0.678	24.1
CHLOROBENZENE	108-90-7	0.100	ND	0.460	ND
ETHYLBENZENE	100-41-4	0.100	3.45	0.434	15.0
XYLENE (M+P)	179601-23-1	0.200	5.56	0.868	24.2
STYRENE	100-42-5	0.100	5.32	0.426	22.7
XYLENE (O)	95-47-6	0.100	3.31	0.434	14.4
1,1,2,2-TETRACHLOROETHANE	79-34-5	0.100	ND	0.887	ND
1,3,5-TRIMETHYLBENZENE	108-67-8	0.100	0.429	0.492	2.11
1,2,4-TRIMETHYLBENZENE	95-63-6	0.100	0.841	0.492	4.13
1,3-DICHLOROBENZENE	541-73-1	0.100	ND	0.601	ND
1,4-DICHLOROBENZENE	106-46-7	0.100	ND	0.601	ND
1,2-DICHLOROBENZENE	95-50-1	0.100	ND	0.601	ND
1,2,4-TRICHLOROBENZENE	120-82-1	0.100	ND	0.742	ND
HEXACHLOROBUTADIENE	87-68-3	0.100	ND	1.07	ND
NAPHTHALENE	91-20-3	0.150	ND	0.786	ND
XYLENE (M+P+O)	1330-20-7	0.200	8.87	0.868	38.5

NOTES:

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT

RL - REPORTING LIMIT

NA - NOT APPLICABLE OR AVAILABLE

µg/cu. m VALUES ARE CALCULATED FROM PPB RESULTS USING NORMAL TEMPERATURE AND PRESSURE (NPT).

APPROVED BY: 

DATE: 6/23/20

K PRIME, INC.
LABORATORY REPORT

K PRIME PROJECT: 4841
CLIENT PROJECT: 750664801

METHOD: OXYGEN
REFERENCE: ASTM D 1946

SAMPLE TYPE: AIR
UNITS: %-V

SAMPLE ID	LAB NO.	DATE SAMPLED	TIME SAMPLED	BATCH NO	DATE ANALYZED	MRL	SAMPLE CONC
SV-1	197470	06/10/2020	12:18	061520A2	06/15/2020	1.00	18.1
SV-2	197471	06/10/2020	13:05	061520A2	06/15/2020	1.00	18.9
SV-3	197472	06/10/2020	13:41	061520A2	06/15/2020	1.00	16.4
SV-4	197473	06/10/2020	14:17	061520A2	06/15/2020	1.00	16.1
DUP-1	197474	06/10/2020	12:17	061520A2	06/15/2020	1.00	17.2

NOTES:

ND - NOT DETECTED AT OR ABOVE THE STATED METHOD REPORTING LIMIT
NA - NOT APPLICABLE OR AVAILABLE
MRL - METHOD REPORTING LIMIT

APPROVED BY: 
DATE: 6/15/20

K PRIME, INC.
LABORATORY REPORT

K PRIME PROJECT: 4841
CLIENT PROJECT: 750664801

METHOD: CARBON DIOXIDE
REFERENCE: ASTM D 1946

SAMPLE TYPE: AIR
UNITS: %-V

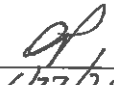
SAMPLE ID	LAB NO.	DATE SAMPLED	TIME SAMPLED	BATCH NO	DATE ANALYZED	MRL	SAMPLE CONC
SV-1	197470	06/10/2020	12:18	061520A4	06/15/2020	0.100	1.68
SV-2	197471	06/10/2020	13:05	061520A4	06/15/2020	0.100	0.693
SV-3	197472	06/10/2020	13:41	061520A4	06/15/2020	0.100	4.74
SV-4	197473	06/10/2020	14:17	061520A4	06/15/2020	0.100	0.195
DUP-1	197474	06/10/2020	12:17	061520A4	06/15/2020	0.100	1.73

NOTES:

ND - NOT DETECTED AT OR ABOVE THE STATED METHOD REPORTING LIMIT

NA - NOT APPLICABLE OR AVAILABLE

MRL - METHOD REPORTING LIMIT

APPROVED BY: 
DATE: 6/22/20

K PRIME, INC.
LABORATORY REPORT

K PRIME PROJECT: 4841
CLIENT PROJECT: 750664801

METHOD: METHANE
REFERENCE: EPA METHOD 18

SAMPLE TYPE: AIR
UNITS: PPMV

SAMPLE ID	LAB NO.	DATE SAMPLED	TIME SAMPLED	BATCH ID	DATE ANALYZED	MRL	SAMPLE CONC
SV-1	197470	06/10/2020	12:18	061520A1	06/15/2020	10.0	ND
SV-2	197471	06/10/2020	13:05	061520A1	06/15/2020	10.0	ND
SV-3	197472	06/10/2020	13:41	061520A1	06/15/2020	10.0	ND
SV-4	197473	06/10/2020	14:17	061520A1	06/15/2020	10.0	101
DUP-1	197474	06/10/2020	12:17	061520A1	06/15/2020	10.0	ND

NOTES:

ND - NOT DETECTED AT OR ABOVE THE STATED METHOD REPORTING LIMIT
NA - NOT APPLICABLE OR AVAILABLE
MRL - METHOD REPORTING LIMIT

APPROVED BY: _____

DATE: 6/5/20

K PRIME, INC.
LABORATORY REPORT

K PRIME PROJECT: 4841
CLIENT PROJECT: 750664801

METHOD: HELIUM
REFERENCE: ASTM D 1946

SAMPLE TYPE: AIR
UNITS: %-V

SAMPLE ID	LAB NO	BATCH NO	DATE SAMPLED	TIME SAMPLED	DATE ANALYZED	MRL	SAMPLE CONC
SV-1	197470	061120A1	06/10/2020	12:18	06/12/2020	0.100	ND
SV-2	197471	061120A1	06/10/2020	13:05	06/12/2020	0.100	ND
SV-3	197472	061120A1	06/10/2020	13:41	06/12/2020	0.100	ND
SV-4	197473	061120A1	06/10/2020	14:17	06/12/2020	0.100	ND
DUP-1	197474	061120A1	06/10/2020	12:17	06/12/2020	0.100	ND

NOTES:

ND - NOT DETECTED AT OR ABOVE THE STATED METHOD REPORTING LIMIT
NA - NOT APPLICABLE OR AVAILABLE
MRL - METHOD REPORTING LIMIT

APPROVED BY: 
DATE: 6/12/20

K PRIME, INC.
LABORATORY METHOD BLANK REPORT

METHOD BLANK ID: B061920A1
SAMPLE TYPE: AIR

METHOD: VOC'S IN AIR
REFERENCE: EPA METHOD TO 15 (GC-MS-SIM)

BATCH ID: 061920A1
DATE ANALYZED: 06/19/2020

COMPOUND NAME	CAS NO.	PPB (V/V)		µg/cu. m	
		RL	SAMPLE CONC	RL	SAMPLE CONC
DICHLORODIFLUOROMETHANE	75-71-8	0.0100	ND	0.0495	ND
CHLOROMETHANE	74-87-3	0.0100	ND	0.0207	ND
DICHLOROTETRAFLUROETHANE	76-14-2	0.0100	ND	0.0699	ND
VINYL CHLORIDE	75-01-4	0.00350	ND	0.00895	ND
BROMOMETHANE	74-83-9	0.0100	ND	0.0388	ND
CHLOROETHANE	75-00-3	0.0100	ND	0.0264	ND
TRICHLOROFLUOROMETHANE	75-69-4	0.0200	ND	0.112	ND
1,1-DICHLOROETHENE	75-35-4	0.0100	ND	0.0397	ND
TRICHLOROTRIFLUOROETHANE	76-13-1	0.0500	ND	0.383	ND
METHYLENE CHLORIDE	75-09-2	0.300	ND	1.04	ND
T-1,2-DICHLOROETHENE	156-60-5	0.0100	ND	0.0396	ND
1,1-DICHLOROETHANE	75-34-3	0.0100	ND	0.0405	ND
C-1,2-DICHLOROETHENE	156-59-2	0.0100	ND	0.0397	ND
CHLOROFORM	67-66-3	0.0100	ND	0.0488	ND
1,1,1-TRICHLOROETHANE	71-55-6	0.0100	ND	0.0546	ND
1,2-DICHLOROETHANE	107-06-2	0.0100	ND	0.0405	ND
BENZENE	71-43-2	0.0500	ND	0.180	ND
CARBON TETRACHLORIDE	56-23-5	0.0100	ND	0.0629	ND
1,2-DICHLOROPROPANE	78-67-5	0.0100	ND	0.0462	ND
TRICHLOROETHENE	79-01-6	0.0100	ND	0.0537	ND
C-1,3-DICHLOROPROPENE	10061-01-5	0.0100	ND	0.0454	ND
T-1,3-DICHLOROPROPENE	10061-02-6	0.0100	ND	0.0454	ND
TOLUENE	108-88-3	0.0500	ND	0.188	ND
1,1,2-TRICHLOROETHANE	79-00-5	0.0100	ND	0.0546	ND
1,2-DIBROMOETHANE	106-93-4	0.0100	ND	0.0768	ND
TETRACHLOROETHENE	127-18-4	0.0100	ND	0.0678	ND
CHLOROBENZENE	108-90-7	0.0100	ND	0.0480	ND
ETHYLBENZENE	100-41-4	0.0100	ND	0.0434	ND
XYLENE (M+P)	179601-23-1	0.0200	ND	0.0868	ND
STYRENE	100-42-5	0.0100	ND	0.0426	ND
XYLENE (O)	95-47-6	0.0100	ND	0.0434	ND
1,1,2,2-TETRACHLOROETHANE	79-34-5	0.0100	ND	0.0687	ND
1,3,5-TRIMETHYLBENZENE	108-67-8	0.0100	ND	0.0492	ND
1,2,4-TRIMETHYLBENZENE	95-63-6	0.0100	ND	0.0492	ND
1,3-DICHLOROBENZENE	541-73-1	0.0100	ND	0.0601	ND
1,4-DICHLOROBENZENE	106-46-7	0.0100	ND	0.0601	ND
1,2-DICHLOROBENZENE	95-50-1	0.0100	ND	0.0601	ND
1,2,4-TRICHLOROBENZENE	120-82-1	0.0100	ND	0.0742	ND
HEXACHLOROBUTADIENE	87-68-3	0.0100	ND	0.107	ND
NAPHTHALENE	91-20-3	0.0150	ND	0.0786	ND
XYLENE (M+P+O)	1330-20-7	0.0200	ND	0.0868	ND

NOTES:

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT

MRL - METHOD REPORTING LIMIT

NA - NOT APPLICABLE OR AVAILABLE

µg/cu. m VALUES ARE CALCULATED FROM PPB RESULTS USING NORMAL TEMPERATURE AND PRESSURE (NPT).

K PRIME, INC.
LABORATORY QUALITY CONTROL REPORT

LAB CONTROL ID: L061920A1
LAB CONTROL DUPLICATE ID: D061920A1

SAMPLE TYPE: AIR
BATCH ID: 061920A1
DATE ANALYZED: 06/19/2020

METHOD: VOC'S IN AIR
REFERENCE: EPA METHOD TO 15 (GC-MS-SIM)

COMPOUND NAME	SPIKE ADDED (PPB)	REPORTING LIMIT (PPB)	SAMPLE CONC (PPB)	SPIKE CONC (PPB)	SPIKE REC (%)	REC LIMITS (%)
1,1-DICHLOROETHENE	0.500	0.010	ND	0.615	123	60 - 140
BENZENE	0.500	0.050	ND	0.615	123	60 - 140
TRICHLOROETHENE	0.500	0.010	ND	0.490	98	60 - 140
TOLUENE	0.500	0.050	ND	0.508	102	60 - 140
TETRACHLOROETHENE	0.500	0.010	ND	0.442	88	60 - 140

COMPOUND NAME	SPIKE ADDED (PPB)	SPIKE DUP CONC (PPB)	SPIKE DUP REC (%)	RPD (%)	QC LIMITS RPD (%)	REC (%)
1,1-DICHLOROETHENE	0.500	0.609	122	1.0	25	60 - 140
BENZENE	0.500	0.605	121	1.6	25	60 - 140
TRICHLOROETHENE	0.500	0.487	97	0.8	25	60 - 140
TOLUENE	0.500	0.499	100	1.8	25	60 - 140
TETRACHLOROETHENE	0.500	0.434	87	1.7	25	60 - 140

NOTES:
 NA - NOT APPLICABLE OR AVAILABLE
 ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT

K PRIME, INC.
LABORATORY BATCH QC REPORT

SAMPLE ID: B061520A2
SPIKE ID: L061520A2
DUPLICATE ID: D061520A2
BATCH NO: 061520A2
DATE ANALYZED: 06/15/2020

METHOD: OXYGEN
REFERENCE: ASTM D 1946

SAMPLE TYPE: AIR
UNITS: %-V

METHOD BLANK

COMPOUND NAME	REPORTING LIMIT	SAMPLE RESULT
OXYGEN	0.500	ND

ACCURACY (MATRIX SPIKE)

COMPOUND NAME	SPIKE ADDED	SAMPLE RESULT	SPIKE RESULT	RECOVERY (%)	LIMITS (%)
OXYGEN	10.0	ND	9.61	96	85-115

PRECISION (SPIKE DUPLICATE)

COMPOUND NAME	REPORTING LIMIT	SPIKE RESULT	DUPLICATE RESULT	RPD (%)	LIMITS (%)
OXYGEN	0.500	9.61	10.5	8.5	±20

NOTES:

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT
NA - NOT AVAILABLE OR APPLICABLE

K PRIME, INC.
LABORATORY BATCH QC REPORT

SAMPLE ID: B061520A4
SPIKE ID: L061520A4
DUPLICATE ID: D061520A4
BATCH NO: 061520A4
DATE ANALYZED: 06/15/2020

METHOD: CARBON DIOXIDE
REFERENCE: ASTM D 1946

SAMPLE TYPE: AIR
UNITS: %-V

METHOD BLANK

COMPOUND NAME	REPORTING LIMIT	SAMPLE RESULT
CARBON DIOXIDE	0.100	ND

ACCURACY (MATRIX SPIKE)

COMPOUND NAME	SPIKE ADDED	SAMPLE RESULT	SPIKE RESULT	RECOVERY (%)	LIMITS (%)
CARBON DIOXIDE	1.00	ND	1.09	109	70-130

PRECISION (SPIKE DUPLICATE)

COMPOUND NAME	REPORTING LIMIT	SPIKE RESULT	DUPLICATE RESULT	RPD (%)	LIMITS (%)
CARBON DIOXIDE	0.100	1.09	1.05	3.1	±20

NOTES:

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT
NA - NOT AVAILABLE OR APPLICABLE

K PRIME, INC.
LABORATORY QC REPORT

METHOD BLANK ID: B061520A1
LAB CONTROL SAMPLE ID: L061520A1
LAB CONTROL DUPLICATE ID: D061520A1
BATCH ID: 061520A1

METHOD: METHANE
REFERENCE: EPA METHOD 18

SAMPLE TYPE: AIR
UNITS: PPM -V/V

METHOD BLANK

COMPOUND NAME	REPORTING LIMIT	SAMPLE CONC
METHANE	10.0	ND

ACCURACY (LAB CONTROL SAMPLE)

COMPOUND NAME	EXPECTED CONC	MEASURED CONC	PERCENT RECOVERY	LIMITS (PERCENT)
METHANE	1000	1100	110	60-140

PRECISION (LAB CONTROL DUPLICATE)

COMPOUND NAME	SAMPLE RESULT	DUPLICATE RESULT	RPD (PERCENT)	LIMITS (PERCENT)
METHANE	1100	1110	0.9	±30

NOTES:

ND - NOT DETECTED AT OR ABOVE THE STATED METHOD REPORTING LIMIT
NA - NOT APPLICABLE OR AVAILABLE

K PRIME, INC.
LABORATORY BATCH QC REPORT

SAMPLE ID: B061120A1
SPIKE ID: L061120A1
DUPLICATE ID: D061120A1
BATCH NO: 061120A1
DATE ANALYZED: 06/11/2020

METHOD: HELIUM
REFERENCE: ASTM D 1946

SAMPLE TYPE: AIR
UNITS: %-V

METHOD BLANK

COMPOUND NAME	REPORTING LIMIT	SAMPLE RESULT
HELIUM	0.100	ND

ACCURACY (MATRIX SPIKE)

COMPOUND NAME	SPIKE ADDED	SAMPLE RESULT	SPIKE RESULT	RECOVERY (%)	LIMITS (%)
HELIUM	10.0	ND	8.59	86	70-130

PRECISION (SPIKE DUPLICATE)

COMPOUND NAME	REPORTING LIMIT	SPIKE RESULT	DUPLICATE RESULT	RPD (%)	LIMITS (%)
HELIUM	0.100	8.59	8.83	2.8	±20

NOTES:

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT
NA - NOT AVAILABLE OR APPLICABLE

CHAIN OF CUSTODY RECORD

- 135 Main Street, Suite 1500, San Francisco, CA 94105
- 501 14th Street, Third Floor, Oakland, CA 94612
- 3320 Data Drive, Suite 350, Rancho Cordova, CA 95670-7982
- 1 Almaden Boulevard, Suite 590, San Jose, CA 95113

Site Name: 1666 7th St Oakland, CA
 Job Number: 75061481
 Project Manager/Contact: Adam Brown
 Samplers: BH+MF
 Recorder (Signature Required): _____

blayton@langan.com
mfromstein@langan.com

4841

Turnaround Time
 * Std. _____

Field Sample Identification No.	Date	Time	Lab Sample No.	No. Containers & Preservative							Analysis Requested	Hold	Remarks	
				Soil	Water	Air	Other	HCL	H ₂ SO ₄	HNO ₃				Ice
SN-1	6/10/20	12:18	197470		X								GC	Alto
SN-2			197471		X								5214	743
SN-3			197472		X								5938	733
SN-4			197473		X								5430	724
DUP-1		12:17	197474		X								5205	669
													5434	746
														* Methane, CO ₂ , O ₂
														per Adam Brown 8/6/20
Relinquished by: (Signature)														
Date: <u>8/12/20</u>														Time: <u>11:20</u>
Relinquished by: (Signature)														
Date: <u>8/12/20</u>														Time: <u>13:10</u>
Relinquished by: (Signature)														
Date: _____														Time: _____

Sent to Laboratory (Name): _____
 Laboratory Comments/Notes: _____

Method of Shipment: Lab courier Fed Ex Airborne UPS
 Hand Carried Private Courier (Co. Name)

DRAFT

**APPENDIX C
PROPOSED SCHEDULE**

Appendix I

ACDEH

Conditional Letter of Approval of Corrective Action, December 23, 2020



December 23, 2020

Adhi Nagraj (Sent via E-mail to: Adhi.Nagraj@McCormackBaron.com)
7th & Campbell, LP
2625 Alcatraz Avenue #501
Berkeley, California, 94705

Shola Olatoye (Sent via E-mail to: solatoye@oaklandca.gov)
City of Oakland
250 Frank Ogawa Plaza, Suite 5313
Oakland, California, 94612

Subject: Conditional Approval of *Draft Corrective Action Plan*
Site Cleanup Program Case No. R00003462 and GeoTracker Global ID T10000016250
7th & Campbell Redevelopment
1666 7th Street, Oakland, CA 94612
Assessor's Parcel Numbers: 6-17-19, 6-17-22, 6-17-20, 6-17-21, 6-17-17, and 6-17-18

Dear Responsible Parties:

Alameda County Department of Environmental Health (ACDEH) has reviewed the *Draft Corrective Action Plan* (the "*Draft CAP*"), dated December 23, 2020 and prepared on your behalf by Langan Engineering and Environmental Services, Inc (Langan) in conjunction with documents in the case file. The *Draft CAP* proposes the following:

- Remedial excavation of shallow soil in select areas to facilitate constriction of foundational features and utility alignments, where elevated concentrations of metals including lead and semi-volatile organic compounds (SVOCs) including benzo(a)pyrene have been detected, for off-Site disposal at a permitted disposal facility or consolidation and capping on-Site beneath proposed foundations and hardscape areas.
- Installation of a demarcation layer in the bottom of excavations and backfill with clean imported fill in accordance with ACDEH's *Soil Import/Export Characterization Requirements*, dated August 1, 2018 and revised August 9, 2019.
- Removal of a limited volume of groundwater (if encountered) and discharge to the sanitary sewer or off-Site disposal at a permitted facility.
- Installation of vapor mitigation engineering controls to control potential vapor intrusion to indoor air of the proposed residential structures and migration along new utility corridors.

Based on our review, ACDEH concurs that the proposed approach will address environmental concerns for on- and off-site receptors.

During a December 21, 2020 conference call on with you, the City of Oakland, and your development team, ACDEH reviewed, provided comment, and approved the *Draft CAP Fact Sheet*, dated December 21, 2020 and prepared by your *Public Outreach Specialist*. Therefore, at this time ACDEH requests you distribute the *Draft CAP Fact Sheet* to the surrounding community and any sensitive receptors within a 2,000-foot radius of the Site. Examples of sensitive receptors include but are not limited to hospitals, schools, senior living centers, and daycare centers. A list of agencies contacts will be provided to your *Public Outreach Specialist* by ACDEH. You will be required to submit a letter to ACDEH certifying that you distributed the *Draft CAP Fact Sheet* to the list of requisite recipients.

If written comments are received by ACDEH from the public during the 30-day comment period, you and your *Public Outreach Specialist* will be required to prepare a response to comments document for submittal to ACDEH for approval. The *Draft CAP* must be finalized after the end of the public comment period and incorporate all public comments received, and submitted to ACDEH for review and final approval of the CAP. Upon receipt of the final CAP, ACDEH will issue a directive letter with all deliverables required to be submitted to facilitate site redevelopment.

The *Draft CAP* must be submitted to the State Water Resources Control Board's GeoTracker website in accordance with the *Responsible Party (ies) Legal Requirement/Obligations Instructions* included as **Attachment 2** prior to the distribution of the *CAP Fact Sheet*.

LIST OF DELIVERABLES AND COMPLIANCE DATES

ACDEH's approval of the *Draft CAP* is conditioned upon submittal of the deliverables listed below. ACDEH requests that you prepare the deliverables in accordance with the requirements provided in **Attachment 1 – Deliverable Requirements** and submit them to the State Water Resources Control Board's GeoTracker website in compliance with the requirements identified in ACDEH's *Responsible Party(ies) Legal Requirement/Obligations Instructions* included as **Attachment 2**. ACDEH also requests email notification verifying upload of the requested deliverables to the Case file on GeoTracker be provided to the primary caseworker, Drew York (andrew.york@acgov.org).

PUBLIC PARTICAPTION

- a. **Deliverable:** Fact Sheet Distribution Certification
Submittal Compliance Date: Monday, December 28, 2020
File Name: RO3462_FACTSHEET_CERT_2020-12-28
- b. **Deliverable:** Community Meeting PowerPoint Presentation
Submittal Compliance Date: Wednesday, January 20, 2021
File Name: RO3462_COMMUNITY_PRES_2021-01-20
- c. **Deliverable:** Community Meeting
Submittal Compliance Date: Thursday, January 21, 2021
File Name: RO3462_COMMUNITY_MEETING_2021-12-28
- d. **Deliverable:** Response to Public Comment Document (if warranted)
Submittal Compliance Date: Thursday, February 4, 2021
File Name: RO3462_PP_RTC_2021-02-04

FINAL CORRECTIVE ACTION PLAN

- e. **Deliverable:** Final CAP
Submittal Compliance Date: Thursday, February 11, 2021
File Name: RO3462_FINAL_CAP_2021-02-11

CLOSING

Thank you for your cooperation. ACDEH looks forward to working with 7th & Campbell, LP to implement appropriate corrective actions in conjunction with Site redevelopment activities and advance the case toward closure. If you have any questions, please call me at (510) 639-1276 or send me an email message at andrew.york@acgov.org.

Sincerely,



Drew J. York
Senior Hazardous Materials Specialist



Dilan Roe, PE, C73703
Chief - Land Water Division

- Encl.: Attachment 1 – Deliverable Requirements
Attachment 2 – Responsible Party (ies) Legal Requirement/Obligations Instructions
- cc: Ali Kashani, MPI Homes (Sent via E-mail to: akashani@mpihomes.com)
Clinton Werden, Slosky & Company, Inc. (Sent via E-mail to: CWerden@slosky.com)
Adam Brown, Langan (Sent via E-mail to: abrown@langan.com)
Brendan Hayward, Langan (Sent via E-mail to: bhayward@langan.com)
Peter Cusack, Langan (Sent via E-mail to: pcusack@Langan.com)
Bill Gilchrist, City of Oakland (Sent via E-mail to: WGilchrist@oaklandca.gov)
Vanessa Kennedy, City of Oakland (Sent via E-mail to: VKennedy@oaklandca.gov)
Christia Mulvey, City of Oakland (Sent via E-mail to: cmulvey@oaklandnet.com)
Ed Manasse, City of Oakland (Sent via E-mail to: EManasse@oaklandca.gov)
Heather Klein, City of Oakland (Sent via E-mail to: HKlein@oaklandca.gov)
Mark Arniola, City of Oakland (Sent via E-mail to: MArniola@oaklandca.gov)
Dilan Roe, ACDEH, Chief Land and Water Division (Sent via E-mail to: dilan.roe@acgov.org)
Paresh Khatri, ACDEH (Sent via E-mail to: paresh.khatri@acgov.org)
Drew York, ACDEH (Sent via E-mail to: andrew.york@acgov.org)
Electronic File, GeoTracker

ATTACHMENT 1

Alameda County Department of
Environmental Health Local
Oversight Program

Case No.: R00003462
Global ID: T10000016250
Case Name: 7th & Campbell Redevelopment
Case Address: 1666 7th Street, Oakland, CA
94612
Directive Letter December 23, 2020
Issue Date:

Attachment 1 – Technical Comments & Deliverable Requirements

PURPOSE

The purpose of this document is to identify requisite elements for each of the deliverables requested by Alameda County Department of Environmental Health's (ACDEH) directives regarding the path forward for the Site.

ACDEH requests that you prepare the deliverables listed in *directive letter dated December 23, 2020* in accordance with the corresponding Deliverable Requirements provided below and submit the deliverables to the State Water Resources Control Board's GeoTracker website in compliance with the requirements identified in *Attachment 2*.

TECHNICAL COMMENTS AND DELIVERABLE REQUIREMENTS

PUBLIC PARTICIPATION

- a. **Draft CAP Fact Sheet Distribution Certification** Letter – A certification letter from your *Public Outreach Specialist* that the *Draft CAP Fact Sheet* has been distributed to the surrounding community and any sensitive receptors within a 2,000-foot radius of the Site. The letter must include a figure showing the 2,000-foot radius of public recipients and a list (in excel format) of all stakeholders including public and agency recipients whom have received the *Draft CAP Fact Sheet*.
- b. **Community Meeting PowerPoint Presentation** - ACDEH requires your *Public Participation Specialist* to prepare PowerPoint slides with associated figures that convey the known chemicals of concern, proposed control and mitigation measures to protect the community surrounding the Site during the proposed remedial and corrective actions activities. The slides must also present the path forward of the Site (e.g. additional site investigation activities, potential soil excavation, etc.) and contact information (e.g. website, phone number) for the Site prior all environmental related activities overseen by ACDEH.
- c. **Community Meeting** – Public participation is required to convey information to the community about subsurface contamination at and in the vicinity of the Site. All community meetings will be scheduled and moderated by your *Public Participation Specialist*. During the presentation your *Public Participation Specialist* and ACDEH will be the lead presenter with support by the Environmental Consultants as necessary
- d. **Response to Public Comment Memorandum** – A memorandum prepared by your *Public Participation Specialist* ensuring response to questions and concerns from the public are answered in a responsive and timely fashion to facilitate the communication of information in a manner comprehensible to the layperson. Submittal of the *Response to Public Comment Memorandum* must be submitted to ACDEH for review and approval prior to distribution to the public.

Attachment 1 – Technical Comments & Deliverable Requirements

FINAL CORRECTIVE ACTION PLAN

- e. **Final Corrective Action Plan (CAP)** – Subsequent to distribution of the *Response to Public Comment Memorandum*, the *Draft CAP* must be finalized after the end of the public comment period and incorporate all public comments received, and submitted to ACDEH for review and final approval of the *CAP*. Upon receipt of the final *CAP*, ACDEH will issue a directive letter with all deliverables required to be submitted to facilitate site redevelopment. The *Final CAP* will incorporate public concerns and consider the community's concerns regarding the environmental investigation and cleanup of the Site.

ATTACHMENT 2

Alameda County Environmental Cleanup Oversight Programs (LOP and SCP)	REVISION DATE: May 19, 2020
	ISSUE DATE: July 25, 2012
	PREVIOUS REVISIONS: September 17, 2013, May 15, 2014, December 12, 2016, December 14, 2017
SECTION: ACDEH Procedures	SUBJECT: Responsible Party(ies) Legal Requirements / Obligations

REPORT & DELIVERABLE REQUESTS

Alameda County Department of Environmental Health (ACDEH) Cleanup Oversight Programs, Local Oversight Program (LOP) and Site Cleanup Program (SCP) require submission of all reports in electronic form to the State Water Board's (SWB) GeoTracker website in accordance with California Code of Regulations, Title 23, Chapter 30, Division 3, Article 2, Section 3892 and Chapter 16, Article 11, Division 3.

Leaking Underground Fuel Tank (LUFT) Cases

Reports and deliverable requests are pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party (RP) in conjunction with an unauthorized release from a petroleum underground storage tank (UST) system.

Site Cleanup Program (SCP) Cases

For non-petroleum UST cases, reports and deliverables requests are pursuant to California Health and Safety Code Section 101480.

ELECTRONIC SUBMITTAL OF REPORTS

A complete report submittal includes the PDF report and all associated electronic data files, including but not limited to GEO_MAP, GEO_XY, GEO_Z, GEO_BORE, GEO_WELL, and laboratory analytical data in Electronic Deliverable Format™ (EDF). Additional information on these requirements is available on the State Water Board's website (http://www.waterboards.ca.gov/water_issues/programs/ust/electronic_submittal/)

- Do not upload draft reports to GeoTracker
- Rotate each page in the PDF document in the direction that will make it easiest to read on a computer monitor.

GEOTRACKER UPLOAD CERTIFICATION

Each report submittal is to include a GeoTracker Upload Summary Table with GeoTracker valid values¹ as illustrated in the example below to facilitate ACDEH review and verify compliance with GeoTracker requirements.

GeoTracker Upload Table Example

Report Title	Sample Period	PDF Report	GEO_MAPS	Sample ID	Matrix	GEO_Z	GEO_XY	GEO_BORE	GEO_WELL	EDF
2016 Subsurface Investigation Report	2016 S1	✓	✓	Effluent	SO	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✓
2012 Site Assessment Work Plan	2012	✓	✓			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2010 GW Investigation Report	2008 Q4	✓	✓	SB-10	W	✓	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✓
				SB-10-6	SO	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✓
				MW-1	WG	✓	✓	✓	✓	✓
				SW-1	W	✓	✓	✓	✓	✓

¹ GeoTracker Survey XYZ, Well Data, and Site Map Guidelines & Restrictions, CA State Water Resources Control Board, April 2005

Alameda County Environmental Cleanup Oversight Programs (LOP and SCP)	REVISION DATE: NA
	ISSUE DATE: December 14, 2017
	PREVIOUS REVISIONS: September 17, 2013, May 15, 2014, December 12, 2016
SECTION: ACDEH Procedures	SUBJECT: Responsible Party(ies) Legal Requirements / Obligations

ACKNOWLEDGEMENT STATEMENT

All work plans, technical reports, or technical documents submitted to ACDEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I have read and acknowledge the content, recommendations and/or conclusions contained in the attached document or report submitted on my behalf to the State Water Board's GeoTracker website." This letter must be signed by the Responsible Party, or legally authorized representative of the Responsible Party.

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6731, 6735, and 7835) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately licensed or certified professional and include the professional registration stamp, signature, and statement of professional certification. Additional information is available on the Board of Professional Engineers, Land Surveyors, and Geologists website at: <http://www.bpelsg.ca.gov/laws/index.shtml>.

UNDERGROUND STORAGE TANK CLEANUP FUND

For LUFT cases, RP's non-compliance with these regulations may result in ineligibility to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse the cost of cleanup. Additional information is available on the internet at: https://www.waterboards.ca.gov/water_issues/programs/ustcf/

AGENCY OVERSIGHT

Significant delays in conducting site assessment/cleanup or report submittals may result in referral of the case to the Regional Water Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to \$10,000 per day for each day of violation.

Appendix J

ACDEH

Notice of Draft Corrective Action Plan (“Fact Sheet”) Available for Review, December 21, 2020



December 21, 2020

DRAFT CORRECTIVE ACTION PLAN AVAILABLE FOR REVIEW

7th and Campbell Redevelopment

1666 7th Street in Oakland

Site Cleanup Program Case No. RO0003462

Summary – Alameda County Department of Environmental Health (ACDEH) provides regulatory oversight of environmental investigation and cleanup activities at the 7th and Campbell redevelopment project located at 1666 7th Street in Oakland (Site). The agency invites you to review and comment on the draft Corrective Action Plan to address historical environmental impacts. This fact sheet contains an overview of the Site, environmental investigations, and the corrective actions proposed along with contact information.



Site Background – The roughly 0.66-acre Site (APN #s 006-0017-017, 006-0017-018, 006-0017-019, 006-0017-020, 006-0017-021 and 006-0017-022) is located in a mixed commercial and residential area of the Prescott neighborhood in West Oakland. The Site is owned by the City of Oakland and consists of six parcels that include three modular buildings with a concrete pavement slab between the buildings and a community garden/urban farm with raised planter beds. Previously, the Site was used for various residential and commercial uses including wood/coal storage and burning, and several urban farming operations. Adjacent historical operations of concern included a fire station, pharmaceuticals manufacturing, iron works, and shoe polish manufacturing.

Beginning in the 1970s the various commercial and residential buildings on-Site were demolished with the last of the former buildings, a warehouse, demolished in 2012-2014.

Site Redevelopment – The City of Oakland oversees redevelopment activities. Plans include removing the modular buildings and constructing a five-story mixed-use building that would include 79 affordable residential units, commercial areas and parking on the ground floor as well as open space for raised-bed urban farming.

Public Comment Period December 28, 2020 – February 2, 2021

ACDEH invites you to review and comment on the draft CAP for the 7th and Campbell Redevelopment project. All comments must be received by 5 p.m. on February 2, 2021. Comments can be sent to:

Drew York
ACDEH Case Manager
1131 Harbor Bay Parkway
Alameda, CA 94502
andrew.york@acgov.org

Public Meeting

Interested community members are invited to attend a virtual public meeting to learn more about Site conditions and the proposed corrective actions. There will be time at the end of the meeting to answer questions and accept comments.

When: Thursday, January 21, 2021

Time: 6:30 to 7:30 p.m.

Join via Zoom: <https://tinyurl.com/7thCampbell>

Join by Phone: Dial 1-669-900-9128 and enter meeting ID 889 2798 9816#

Please contact Tracy Craig at 510-334-4866 or tracy@craig-communications.com if you need assistance accessing the meeting.

Environmental Investigations – Environmental investigations conducted at the Site found the presence of elevated levels of lead and semi-volatile organic compounds (SVOCs) in soil primarily from existing fill material beneath the Site and volatile organic compounds (VOCs) in soil vapor (the air spaces in between soil particles).

Proposed Corrective Actions – ACDEH is requiring corrective actions to reduce the human health risk to construction workers, the adjacent community, and future Site occupants from the potential for exposure to chemicals of concern in soil and soil vapor at the Site. The draft *Corrective Action Plan (CAP)*, dated December 23, 2020, proposes the following actions:

- Excavating soil beneath portions of the ground surface to facilitate construction of foundations, utility corridors and landscaping and remove most of the historically contaminated soil
- Consolidating contaminated soil on-Site beneath the future building or a clean imported fill layer, and/or transporting soil to a licensed, off-Site disposal facility
- Backfilling excavations in utility corridors with clean, imported fill
- Installing a sub-slab vapor barrier and venting system beneath the planned building to prevent VOCs from entering indoor air

Crews will conduct sampling to characterize excavated soil for off-Site disposal or on-Site consolidation. Institutional controls including recording a land use covenant for the Site and developing a risk management plan will be required for long-term management of the vapor mitigation system and residual contaminants.

Next Steps – ACDEH will review and consider all public comments before making a final decision on the draft CAP. ACDEH will send a Response to Comments document to all those who commented and provided contact information.

Should the draft CAP be approved, environmental work at the Site is anticipated to begin in September 2021. Environmental work will be performed primarily at the same time as redevelopment construction.

Community Protection Measures – Environmental work is like heavy construction and includes construction equipment, trucks entering and exiting the Site, and related noise. Measures will be taken to protect the surrounding community including:

- Controlling dust during soil disturbing activities by using water and covering soil stockpiles
- Performing real-time and perimeter air monitoring during soil disturbing work
- Monitoring noise levels during work hours and reducing equipment speeds or using mufflers, as needed
- Cleaning truck tires and undercarriages to prevent dust track out
- Adhering to the City of Oakland approved truck route
- Using flaggers and traffic signage to safely manage construction-related traffic
- Installing Site fencing with signage that includes a phone number for more information
- Conducting work in accordance with all guidelines to limit risks associated with COVID-19

For More Information – The draft CAP, investigation results, public comments and responses, and additional documents can be viewed over the internet at the State Water Resources Control Board (Water Board) GeoTracker website at: https://geotracker.waterboards.ca.gov/profile_report?global_id=T10000016250.

For more information about the corrective action process or related documents, how to access the virtual community meeting, or general Site questions, please contact:

Drew York, ACDEH Case Manager
510-639-1276
andrew.york@acgov.org

Tracy Craig, Community Relations Consultant
510-334-4866 (24/7)
tracy@craig-communications.com