

August 24, 2020

Jennifer Dorman
Wisconsin Department of Natural Resources
2300 N. Dr. Martin Luther King Dr.
Milwaukee, WI 53212-3128

Project #40405

Subject: Environmental Investigation Memorandum for Community Within the Corridor,
Located at 2748 N 32nd Street, 3212 West Center Street, 2727 N 32nd Street, 2758 N 33rd
Street, 2784 N 32nd Street, Milwaukee, Milwaukee County, Wisconsin

Dear Mrs. Dorman:

On behalf of Community Within the Corridor Limited Partnership, K. Singh & Associates (KSingh) is pleased to report the results of Per- and Polyfluoroalkyl Substances (PFAS) soil sampling for the referenced facility.

We appreciate the opportunity to provide environmental services for the project. If we can be of further assistance in discussing this report with you, please contact us.

Sincerely,

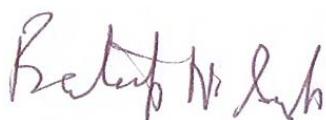
K. SINGH & ASSOCIATES, INC.



Kyle Vander Heiden
Staff Geologist



Robert Reineke, PE
Project Manager



Pratap N. Singh, PE
Principal Engineer

cc: Que El-Amin / Scott Crawford, Inc
Shane LaFave / Roers Companies

Project Identification

KSingh was retained by Community Within the Corridor Limited Partnership to perform an environmental investigation at the subject properties of 2748 N 32nd Street, 3212 West Center Street, 2727 N 32nd Street, 2758 N 33rd Street, and 2784 N 32nd Street in the City of Milwaukee, Wisconsin. As part of the environmental investigation, PFAS sampling was recommended to determine its presence around the subject properties and to determine the possibility of adverse health effects from current and proposed land uses.

Historically, the building complex at 2748 N 32nd Street served various industrial purposes for over 100 years. The building complex was recently used as storage and is currently vacant, but plans for redevelopment are underway, estimated to commence in November of 2020. Current plans for redevelopment include affordable housing, commercial space, and other amenities in the former industrial complex.

Environmental Investigation

As a part of the redevelopment of the site, the following environmental investigations have been completed and submitted to WDNR.

- Phase I ESA Report completed by KSingh for Community Within the Corridor, March 11, 2019
- Phase II ESA Report completed by KSingh for Community Within the Corridor, May 24, 2020
- Request for Post Closure Modification /Technical Guidance Request to WDNR on behalf of Community Within the Corridor by KSingh, July 8, 2020
- Lead and Asbestos Inspection Report by KSingh, August 20,2020.

KSingh conducted field investigations to confirm the presence or absence of PFAS at the site because of its use as an industrial facility in the past.

Subsurface Exploration and Soil Conditions

On June 25th, 2020, four (4) soil borings (B-13, B-14, B-15, and B-16) were advanced to depths of two (2) feet below ground surface (bgs). The soil boring locations are shown on Figure 1.

A 3-inch hand auger was advanced for soil collection to the proposed boring depth. Recovered soil samples were brought to the surface, examined by the field crew, and placed in sealed containers to prevent further changes in the condition of the sample.

At each boring location soil conditions were generally dry, either overlain by fill or topsoil. Underlying soils were generally moist clays and silts. Saturation was not encountered at any boring location to the proposed depth.

Field logs were completed for each boring by the on-site field staff during site operations to record field occurrences and sampling intervals and are included in Appendix A.

A photoionization detector (PID) was used to screen collected soils for contaminants and to assist with determining sampling intervals. No detections were recorded from screening. Sampling intervals were determined based on field examination and screening. Grab samples were collected to be analyzed for PFAS.

Upon completion of soil sampling at each designated well location, the borings were abandoned in accordance with Wisconsin Administrative Code NR 141.25.

Soil samples were stored in a laboratory-issued container and kept on ice to preserve overall sample condition, then delivered to Eurofins TestAmerica for analysis.

Analytical Results

The test results from the PFAS sampling of soils are summarized in Table 1 and the analytical report obtained from Eurofins TestAmerica is included in Appendix B.

The following compounds were detected from collected grab samples:

- Perfluorobutanoic acid (PFBA) was detected in borings B-13, B-14, B-15, and B-16 at concentrations of 0.040, 0.041, 0.21, and 0.16 micrograms per kilogram (ug/Kg), respectively.
- Perfluorooctanesulfonic acid (PFOS) was detected in boring B-16 at a concentration of 0.51 ug/Kg.

The non-industrial direct contact residual contaminant limit (RCL) for both PFOA and PFOS is 1.26 mg/kg. The industrial direct contact RCL for both PFOA and PFOS is 16.4 mg/kg. There is no predetermined, groundwater protective soil RCL for these compounds. Therefore, no PFAs contamination was detected exceeding any RCLs.

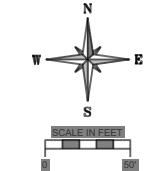
Conclusions and Recommendations

- PFBA and PFOS were detected at concentrations less than Wisconsin Department of Natural Resources (WDNR) established RCLs for soils. No direct contact or groundwater quality risks exist based on these current limits.
- KSingh recommends no further action regarding the determination or monitoring for PFAS or associated compounds.

Attachments: Figure 1 – PFAS Boring Locations – June 2020
 Table 1 – PFAS Soil Analytical Test Results
 Appendix A – Soil Boring Logs
 Appendix B – Eurofins TestAmerica Analytical Report

FIGURES

CONSULTANT



CONSULTANT

CONSULTANT

LEGEND

- FORMER BORING LOCATIONS
- PFAS BORING LOCATIONS

ABBREVIATIONS:

- AC = ACRES
- ARC = ARC OF CURVE
- ASPH = ASPHALT
- BM = BENCHMARK
- CH = CHORD LENGTH
- COR = CORNER
- CSM = CERTIFIED SURVEY MAP OR MAPPING
- C.T.H. = COUNTY TRUNK HIGHWAY
- D = DELTA
- DEG = DEGREE OF CURVE
- E = EAST
- EL = ELEVATION
- EX = EXISTING
- EXC = EXCAVATION
- FFE = FINISH FLOOR EL.
- FND = FOUND
- GFE = GARAGE FLOOR EL.
- GND = GROUND
- INV = IMPORT
- IP = IRON PIPE
- IRD = IRON ROD
- MED = MEASURED
- NAD = NORTH AMERICAN DATUM
- N = NORTH
- NE = NORTHEAST
- NO = NUMBER
- NW = NORTHWEST
- PG = PLATE
- QTR = QUARTER
- REC = RECORDED AS RIM = RIM OR TOP POINT
- RW = RIGHT OF WAY
- S = SOUTH
- SE = SOUTHEAST
- SEWRPC = SOUTHEAST WISCONSIN REGIONAL PLANNING COMMISSION
- C.T.H. = STATE TRUNK HIGHWAY
- SW = SOUTHWEST
- SUR = SURVEYED
- U.S.H. = UNITED STATES HIGHWAY
- U.S.G.S. = UNITED STATES GEOLOGICAL SURVEY
- VAR = VARIES
- VPI = VERTICAL POINT OF INTERSECTION
- W = WEST
- SECTION CORNER MONUMENT
- EX. CHISELED CROSS FOUND
- EX. IRON ROD FOUND
- EX. IRON PIPE FOUND
- EX. STORM MANHOLE
- EX. CATCH BASIN ROUND
- EX. CATCH BASIN SQUARE
- EX. SIAMESE HYDRANT
- EX. GAS VALVE
- EX. AIR CONDITIONER
- EX. ELECTRIC METER
- EX. GAS METER
- EX. ELECTRIC PEDESTAL
- EX. TELEPHONE PEDESTAL
- EX. CLEANOUT
- EX. POWER POLE
- EX. MONITORING WELL OR CORING
- EX. MAILBOX
- EX. SANITARY MANHOLE
- EX. UNKNOWN MANHOLE
- EX. COMBINED SEWER MANHOLE
- EX. ELECTRIC MANHOLE
- EX. ELECTRIC TRANSFORMER
- EX. TELEPHONE MANHOLE
- EX. GUY WIRE
- EX. LIGHT POLE
- EX. SIGN
- EX. BOLLARD (BOL)
- EX. WATER VALVE
- EX. OVERHEAD WIRES
- BES
- EX. FENCE LINE
- COM
- EX. COMMUNICATIONS
- T
- EX. TELEPHONE LINE
- G
- EX. FIBER LINE
- FIB
- SS
- EX. SANITARY SEWER (SAN)
- ST
- EX. STORM SEWER (STO)
- W
- EX. WATER MAIN
- EX. TREE LINE

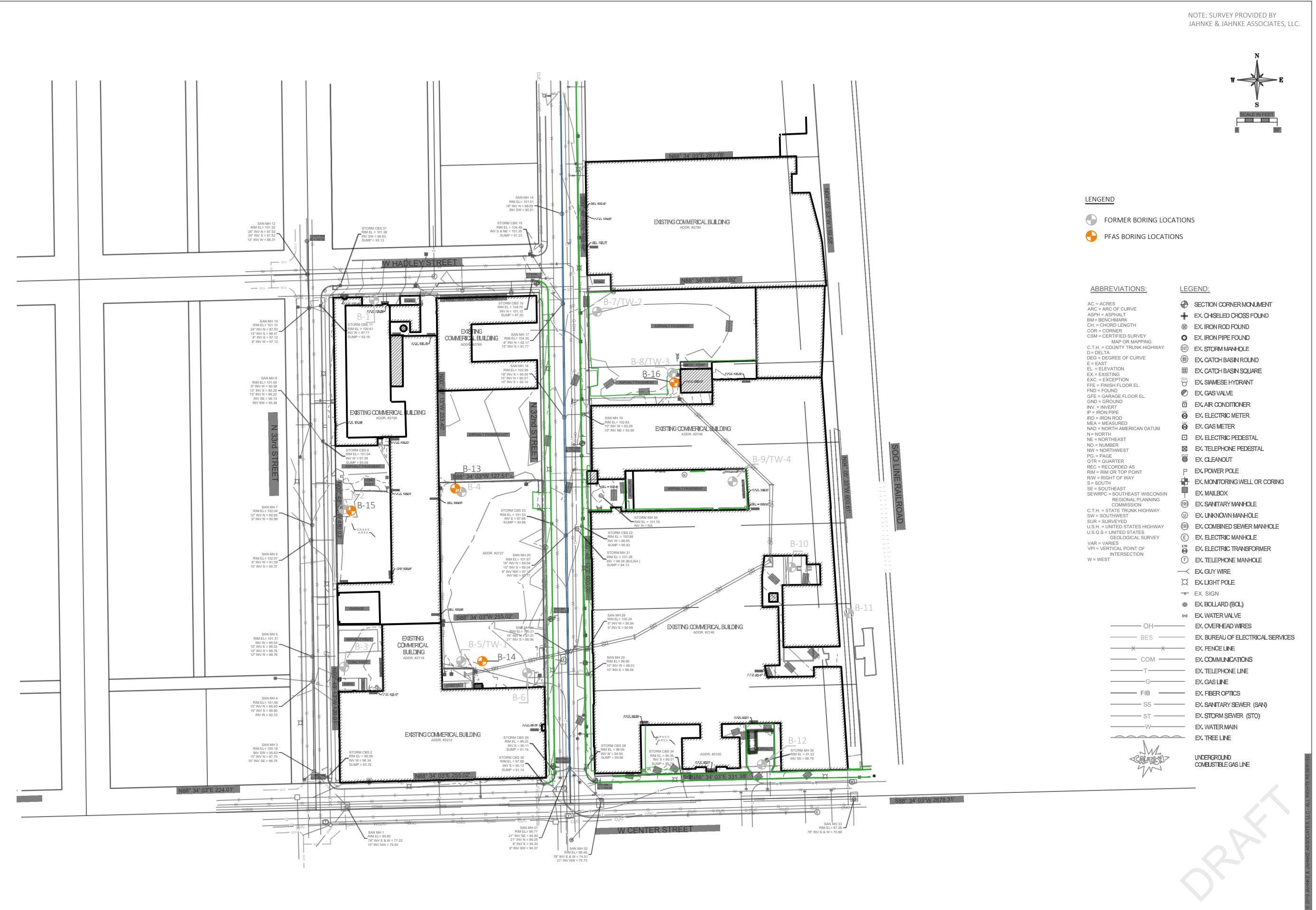
LEGEND:

- SECTION CORNER MONUMENT
- EX. CHISELED CROSS FOUND
- EX. IRON ROD FOUND
- EX. IRON PIPE FOUND
- EX. STORM MANHOLE
- EX. CATCH BASIN ROUND
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- EX. COMMUNICATIONS
- T
- EX. TELEPHONE LINE
- G
- EX. FIBER LINE
- FIB
- SS
- EX. SANITARY SEWER (SAN)
- ST
- EX. STORM SEWER (STO)
- W
- EX. WATER MAIN
- EX. TREE LINE

PROJECT TITLE: COMMUNITY WITHIN THE CORRIDOR
MILWAUKEE, WI
PROJECT NUMBER: 40405
PARTNERSHIP

CLIENT:
COMMUNITY WITHIN THE CORRIDOR LIMITED

REVISIONS	DATE	DESCRIPTION
DRAWN BY	DATE	
AMZ	07/17/2020	
CHECKED BY	DATE	
KVH	07/17/2020	
SHEET TITLE		
PFAS BORING LOCATIONS - JUNE 2020		



TABLES

**Table 1. PFAS Soil Analytical Test Results
Community Within the Corridor - Milwaukee**

Sample	Units	NR 720 Non-Industrial Direct Contact RCL	NR 720 Industrial Direct Contact RCL	B-13	B-14	B-15	B-16
Depth (feet)				5-6	8.5-9.5	8.5-9.5	7-8
Soil Type				Clayey SAND	Clayey SAND	Clayey SAND	Gravelly CLAY
Soil Conditions				Unsaturated	Unsaturated	Unsaturated	Unsaturated
Sampling Date				4/7/2020	4/7/2020	4/7/2020	4/7/2020
Physical Characteristics							
Percent Moisture	%	---	---	12.2	17.7	13.5	18.0
Percent Solids	%	---	---	87.8	82.3	86.5	82.0
Method 537 (modified) - Fluorinated Alkyl Substances							
Perfluorobutanoic acid (PFBA)	ug/Kg	---	---	0.040 JB	0.041 JB	0.21 JB	0.16 JB
Perfluoropentanoic acid (PFPeA)	ug/Kg	---	---	<0.087	<0.093	<0.088	<0.094
Perfluorohexanoic acid (PFhxA)	ug/Kg	---	---	<0.047	<0.051	<0.048	<0.051
Perfluoroheptanoic acid (PFHpA)	ug/Kg	---	---	<0.033	<0.035	<0.033	<0.035
Perfluorooctanoic acid (PFOA)	ug/Kg	1260	16,400	<0.097	<0.10	<0.098	<0.10
Perfluorononanoic acid (PFNA)	ug/Kg	---	---	<0.041	<0.043	<0.041	<0.044
Perfluorodecanoic acid (PFDA)	ug/Kg	---	---	<0.025	<0.027	<0.025	<0.027
Perfluoroundecanoic acid (PFUnA)	ug/Kg	---	---	<0.041	<0.043	<0.041	<0.044
Perfluorododecanoic acid (PFDoA)	ug/Kg	---	---	<0.076	<0.081	<0.076	<0.082
Perfluorotridecanoic acid (PFTriA)	ug/Kg	---	---	<0.057	<0.062	<0.058	<0.062
Perfluorotetradecanoic acid (PFTeA)	ug/Kg	---	---	<0.061	<0.065	<0.062	<0.066
Perfluoro-n-hexadecanoic acid (PFHxDA)	ug/Kg	---	---	<0.050	<0.053	<0.050	<0.054
Perfluoro-n-octadecanoic acid (PFODA)	ug/Kg	---	---	<0.032	<0.034	<0.032	<0.034
Perfluorobutanesulfonic acid (PFBS)	ug/Kg	---	---	<0.028	<0.030	<0.029	<0.031
Perfluoropentanesulfonic acid (PFPeS)	ug/Kg	---	---	<0.023	<0.024	<0.023	<0.024
Perfluorohexanesulfonic acid (PFHxS)	ug/Kg	---	---	<0.035	<0.037	<0.035	<0.038
Perfluoroheptanesulfonic Acid (PFHpS)	ug/Kg	---	---	<0.039	<0.042	<0.040	<0.043
Perfluorooctanesulfonic acid (PFOS)	ug/Kg	1260	16,400	<0.23	<0.24	<0.23	0.51 JB
Perfluoronanesulfonic acid (PFNS)	ug/Kg	---	---	<0.023	<0.024	<0.023	<0.024
Perfluorodecanesulfonic acid (PFDS)	ug/Kg	---	---	<0.044	<0.047	<0.044	<0.048
Perfluorododecanesulfonic acid (PFDoS)	ug/Kg	---	---	<0.068	<0.072	<0.068	<0.073
Perfluorooctanesulfonamide (FOSA)	ug/Kg	---	---	<0.092	<0.099	<0.094	<0.10
NEtFOSA	ug/Kg	---	---	<0.027	<0.029	<0.027	<0.029
NMeFOSA	ug/Kg	---	---	<0.046	<0.050	<0.047	<0.050
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ug/Kg	---	---	<0.44	<0.47	<0.44	<0.48
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/Kg	---	---	<0.42	<0.45	<0.42	<0.45
NMeFOSE	ug/Kg	---	---	<0.080	<0.086	<0.081	<0.087
NEtFOSE	ug/Kg	---	---	<0.041	<0.043	<0.041	<0.044
4:2 FTS	ug/Kg	---	---	<0.42	<0.45	<0.42	<0.45
6:2 FTS	ug/Kg	---	---	<0.17	<0.18	<0.17	<0.18
8:2 FTS	ug/Kg	---	---	<0.28	<0.30	<0.29	<0.31
10:2 FTS	ug/Kg	---	---	<0.056	<0.060	<0.057	<0.061
DONA	ug/Kg	---	---	<0.020	<0.022	<0.021	<0.022
HFPo-DA (GenX)	ug/Kg	---	---	<0.12	<0.13	<0.13	<0.13
F-53B Major	ug/Kg	---	---	<0.030	<0.033	<0.031	<0.033
F-53B Minor	ug/Kg	---	---	<0.25	<0.027	<0.025	<0.027

NOTES:

All results in micrograms per kilogram (ug/Kg)

B = Compound was found in the blank and sample

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value

RL = Reporting Limit or Requested Limit (Radiochemistry)

MDL = Method Detection Limit

APPENDICES

APPENDIX A

Soil Boring Logs

SOIL BORING LOG

PROJECT NAME: Community within the Corridor

GROUND SURFACE ELEVATION: ---

DATE BEGAN: 06/25/2020

DRILL EQUIP: Hand Auger

NORTH: ---

DATE FINISHED: 06/25/2020

DRILLER: Daniel Trekas

EAST: ---

PROJECT NO: 40405

DRILLING METHOD: Hand Auger

CHECKED BY: Robert Reineke, P.E.

BORING NO: B-13

CONTRACTOR: K. Singh & Associates

FIELD ENGINEER: Kyle Vander Heiden (K. Singh)

Elevation (FT)	Depth (FT)	Description	Graphic Profile	Graphic Well Profile	USCS	SPT Blows Per 6"	N-Value	Sample Number	Recovered (Inches)	Moisture Content %	Liquid Limit (LL)	Plastic Limit (PL)	Percent Passing Sieve 200	Remarks/ Qp (Unconfined Compressive Strength, tsf)	Qp (penetrometer, tsf)
0.0	0.0	FILL (F) Dark Greyish Brown, Dry.													
		SANDY CLAY (CL) Light Brown, Dry.			CL			B-13							
		End of boring at 2 ft. below ground surface, abandoned in accordance with NR 141.25.													

SOIL BORING LOG

PROJECT NAME: Community within the Corridor

GROUND SURFACE ELEVATION: ---

DATE BEGAN: 06/25/2020

DRILL EQUIP: Hand Auger

NORTH: ---

DATE FINISHED: 06/25/2020

DRILLER: Daniel Trekas

EAST: ---

PROJECT NO: 40405

DRILLING METHOD: Hand Auger

CHECKED BY: Robert Reineke, P.E.

BORING NO: B-14

CONTRACTOR: K. Singh & Associates

FIELD ENGINEER: Kyle Vander Heiden (K. Singh)

Elevation (FT)	Depth (FT)	Description	Graphic Profile	Graphic Well Profile	USCS	SPT Blows Per 6"	N-Value	Sample Number	Recovered (Inches)	Moisture Content %	Liquid Limit (LL)	Plastic Limit (PL)	Percent Passing Sieve 200	Remarks/ Qp (Unconfined Compressive Strength, tsf)	Qp (penetrometer, tsf)
0.0	0.0	Topsoil													
		FILL (FI) Tan to Light Brown, Sand and Gravel, Dry.													
		GRAVELLY CLAY (CL) Light Brown, Dry.			CL										
		End of boring at 2 ft. below ground surface, abandoned in accordance with NR 141.25.						B-14							

SOIL BORING LOG

PROJECT NAME: Community within the Corridor

GROUND SURFACE ELEVATION: ---

DATE BEGAN: 06/25/2020

DRILL EQUIP: Hand Auger

NORTH: ---

DATE FINISHED: 06/25/2020

DRILLER: Daniel Trekas

EAST: ---

PROJECT NO: 40405

DRILLING METHOD: Hand Auger

CHECKED BY: Robert Reineke, P.E.

BORING NO: B-15

CONTRACTOR: K. Singh & Associates

FIELD ENGINEER: Kyle Vander Heiden (K. Singh)

Elevation (FT)	Depth (FT)	Description	Graphic Profile	Graphic Well Profile	USCS	SPT Blows Per 6"	N-Value	Sample Number	Recovered (Inches)	Moisture Content %	Liquid Limit (LL)	Plastic Limit (PL)	Percent Passing Sieve 200	Remarks/ Qp (Unconfined Compressive Strength, tsf)	Qp (penetrometer, tsf)
0.0	0.0	FILL (F) Brown, Sand and Gravel, Dry. CLAYEY SILT (ML) Dark Brown, With Sand and Some Gravel, Dry.			ML			B-15							
		End of boring at 2 ft. below ground surface, abandoned in accordance with NR 141.25.													

SOIL BORING LOG

PROJECT NAME: Community within the Corridor

GROUND SURFACE ELEVATION: ---

DATE BEGAN: 06/25/2020

DRILL EQUIP: Hand Auger

NORTH: ---

DATE FINISHED: 06/25/2020

DRILLER: Daniel Trekas

EAST: ---

PROJECT NO: 40405

DRILLING METHOD: Hand Auger

CHECKED BY: Robert Reineke, P.E.

BORING NO: B-16

CONTRACTOR: K. Singh & Associates

FIELD ENGINEER: Kyle Vander Heiden (K. Singh)

Elevation (FT)	Depth (FT)	Description	Graphic Profile	Graphic Well Profile	USCS	SPT Blows Per 6"	N-Value	Sample Number	Recovered (Inches)	Moisture Content %	Liquid Limit (LL)	Plastic Limit (PL)	Percent Passing Sieve 200	Remarks/ Qp (Unconfined Compressive Strength, tsf)	Qp (penetrometer, tsf)
0.0	0.0	Topsoil													
		SANDY CLAY (CL) Dark Greyish Brown, Dry.													
		SILTY CLAY (CL), Light Brown, Dry to Moist.													
		SANDY CLAY (CL), Dark Greyish Brown, Moist.			CL										
		End of boring at 2 ft. below ground surface, abandoned in accordance with NR 141.25.						B-16							

APPENDIX B

Eurofins TestAmerica Analytical Report



Environment Testing America



ANALYTICAL REPORT

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Tel: (916)373-5600

Laboratory Job ID: 320-62194-1

Client Project/Site: Community Within the Corridor - 40405

For:

K. Singh & Associates, Inc
3636 N. 124th Street
Wauwatosa, Wisconsin 53222

Attn: Mr. Robert Reineke

Authorized for release by:

7/8/2020 2:50:37 PM

Sandie Fredrick, Project Manager II
(920)261-1660
sandie.fredrick@testamericainc.com

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The
Expert

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: K. Singh & Associates, Inc
Project/Site: Community Within the Corridor - 40405

Job ID: 320-62194-1

Qualifiers

LCMS	Qualifier	Qualifier Description
*5		Isotope dilution analyte is outside acceptance limits.
B		Compound was found in the blank and sample.
J		Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Case Narrative

Client: K. Singh & Associates, Inc
Project/Site: Community Within the Corridor - 40405

Job ID: 320-62194-1

Job ID: 320-62194-1

Laboratory: Eurofins TestAmerica, Sacramento

Narrative

Job Narrative 320-62194-1

Comments

No additional comments.

Receipt

The samples were received on 6/26/2020 9:30 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.7° C.

Receipt Exceptions

The container label for the following sample did not match the information listed on the Chain-of-Custody (COC): B-13 (1'-2') (320-62194-1). The container labels list 9:30 am, while the COC lists 9:15 am. Samples were labeled according to the COC.

LCMS

Method 537 (modified): The Isotope Dilution Analyte (IDA) recovery associated with the following samples are below the method recommended limits for d7-N-MeFOSE-M and d9-N-EtFOSE-M: B-13 (1'-2') (320-62194-1), B-14 (1'-2') (320-62194-2), B-15 (1'-2') (320-62194-3), B-16 (1'-2') (320-62194-4), (320-62194-A-1-B MS) and (320-62194-A-1-C MSD). Generally, data quality is not considered affected if the IDA signal-to-noise ratio is greater than 10:1, which is achieved for all IDA in the samples.

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

General Chemistry

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

Organic Prep

Method SHAKE: The following sample was light yellow after extraction: B-16 (1'-2') (320-62194-4). 320-390751 Solid PFC_IDA

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

Detection Summary

Client: K. Singh & Associates, Inc

Project/Site: Community Within the Corridor - 40405

Job ID: 320-62194-1

Client Sample ID: B-13 (1'-2')

Lab Sample ID: 320-62194-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	0.040	J B	0.23	0.032	ug/Kg	1	⊗	537 (modified)	Total/NA

Client Sample ID: B-14 (1'-2')

Lab Sample ID: 320-62194-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	0.041	J B	0.24	0.034	ug/Kg	1	⊗	537 (modified)	Total/NA

Client Sample ID: B-15 (1'-2')

Lab Sample ID: 320-62194-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	0.21	J B	0.23	0.032	ug/Kg	1	⊗	537 (modified)	Total/NA

Client Sample ID: B-16 (1'-2')

Lab Sample ID: 320-62194-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	0.16	J B	0.24	0.034	ug/Kg	1	⊗	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.51	J B	0.61	0.24	ug/Kg	1	⊗	537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Sacramento

Client Sample Results

Client: K. Singh & Associates, Inc

Project/Site: Community Within the Corridor - 40405

Job ID: 320-62194-1

Client Sample ID: B-13 (1'-2')

Date Collected: 06/25/20 09:15

Date Received: 06/26/20 09:30

Lab Sample ID: 320-62194-1

Matrix: Solid

Percent Solids: 87.8

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	0.040	J B	0.23	0.032	ug/Kg	⌚	06/30/20 04:43	07/02/20 03:49	1
Perfluoropentanoic acid (PFPeA)	<0.087		0.23	0.087	ug/Kg	⌚	06/30/20 04:43	07/02/20 03:49	1
Perfluorohexanoic acid (PFHxA)	<0.047		0.23	0.047	ug/Kg	⌚	06/30/20 04:43	07/02/20 03:49	1
Perfluoroheptanoic acid (PFHpA)	<0.033		0.23	0.033	ug/Kg	⌚	06/30/20 04:43	07/02/20 03:49	1
Perfluorooctanoic acid (PFOA)	<0.097		0.23	0.097	ug/Kg	⌚	06/30/20 04:43	07/02/20 03:49	1
Perfluorononanoic acid (PFNA)	<0.041		0.23	0.041	ug/Kg	⌚	06/30/20 04:43	07/02/20 03:49	1
Perfluorodecanoic acid (PFDA)	<0.025		0.23	0.025	ug/Kg	⌚	06/30/20 04:43	07/02/20 03:49	1
Perfluoroundecanoic acid (PFUnA)	<0.041		0.23	0.041	ug/Kg	⌚	06/30/20 04:43	07/02/20 03:49	1
Perfluorododecanoic acid (PFDoA)	<0.076		0.23	0.076	ug/Kg	⌚	06/30/20 04:43	07/02/20 03:49	1
Perfluorotridecanoic acid (PFTriA)	<0.057		0.23	0.057	ug/Kg	⌚	06/30/20 04:43	07/02/20 03:49	1
Perfluorotetradecanoic acid (PFTeA)	<0.061		0.23	0.061	ug/Kg	⌚	06/30/20 04:43	07/02/20 03:49	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.050		0.23	0.050	ug/Kg	⌚	06/30/20 04:43	07/02/20 03:49	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.032		0.23	0.032	ug/Kg	⌚	06/30/20 04:43	07/02/20 03:49	1
Perfluorobutanesulfonic acid (PFBS)	<0.028		0.23	0.028	ug/Kg	⌚	06/30/20 04:43	07/02/20 03:49	1
Perfluoropentanesulfonic acid (PFPeS)	<0.023		0.23	0.023	ug/Kg	⌚	06/30/20 04:43	07/02/20 03:49	1
Perfluorohexanesulfonic acid (PFHxS)	<0.035		0.23	0.035	ug/Kg	⌚	06/30/20 04:43	07/02/20 03:49	1
Perfluoroheptanesulfonic Acid (PFHxP)	<0.039		0.23	0.039	ug/Kg	⌚	06/30/20 04:43	07/02/20 03:49	1
Perfluorooctanesulfonic acid (PFOS)	<0.23		0.56	0.23	ug/Kg	⌚	06/30/20 04:43	07/02/20 03:49	1
Perfluorononanesulfonic acid (PFNS)	<0.023		0.23	0.023	ug/Kg	⌚	06/30/20 04:43	07/02/20 03:49	1
Perfluorodecanesulfonic acid (PFDS)	<0.044		0.23	0.044	ug/Kg	⌚	06/30/20 04:43	07/02/20 03:49	1
Perfluorododecanesulfonic acid (PFDoS)	<0.068		0.23	0.068	ug/Kg	⌚	06/30/20 04:43	07/02/20 03:49	1
Perfluorooctanesulfonamide (FOSA)	<0.092		0.23	0.092	ug/Kg	⌚	06/30/20 04:43	07/02/20 03:49	1
N <i>Et</i> FOSA	<0.027		0.23	0.027	ug/Kg	⌚	06/30/20 04:43	07/02/20 03:49	1
N <i>Me</i> FOSA	<0.046		0.23	0.046	ug/Kg	⌚	06/30/20 04:43	07/02/20 03:49	1
N-methylperfluorooctanesulfonamidoacetic acid (N <i>Me</i> FOSAA)	<0.44		2.3	0.44	ug/Kg	⌚	06/30/20 04:43	07/02/20 03:49	1
N-ethylperfluorooctanesulfonamidoacetic acid (N <i>Et</i> FOSAA)	<0.42		2.3	0.42	ug/Kg	⌚	06/30/20 04:43	07/02/20 03:49	1
N <i>Me</i> FOSE	<0.080		0.23	0.080	ug/Kg	⌚	06/30/20 04:43	07/02/20 03:49	1
N <i>Et</i> FOSE	<0.041		0.23	0.041	ug/Kg	⌚	06/30/20 04:43	07/02/20 03:49	1
4:2 FTS	<0.42		2.3	0.42	ug/Kg	⌚	06/30/20 04:43	07/02/20 03:49	1
6:2 FTS	<0.17		2.3	0.17	ug/Kg	⌚	06/30/20 04:43	07/02/20 03:49	1
8:2 FTS	<0.28		2.3	0.28	ug/Kg	⌚	06/30/20 04:43	07/02/20 03:49	1
10:2 FTS	<0.056		0.23	0.056	ug/Kg	⌚	06/30/20 04:43	07/02/20 03:49	1
DONA	<0.020		0.23	0.020	ug/Kg	⌚	06/30/20 04:43	07/02/20 03:49	1
HFPO-DA (GenX)	<0.12		0.28	0.12	ug/Kg	⌚	06/30/20 04:43	07/02/20 03:49	1
F-53B Major	<0.030		0.23	0.030	ug/Kg	⌚	06/30/20 04:43	07/02/20 03:49	1
F-53B Minor	<0.025		0.23	0.025	ug/Kg	⌚	06/30/20 04:43	07/02/20 03:49	1
Isotope Dilution	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
13C4 PFBA	88		25 - 150			06/30/20 04:43	07/02/20 03:49	1	
13C5 PFPeA	95		25 - 150			06/30/20 04:43	07/02/20 03:49	1	
13C2 PFHxA	94		25 - 150			06/30/20 04:43	07/02/20 03:49	1	
13C4 PFHpA	92		25 - 150			06/30/20 04:43	07/02/20 03:49	1	
13C4 PFOA	92		25 - 150			06/30/20 04:43	07/02/20 03:49	1	
13C5 PFNA	93		25 - 150			06/30/20 04:43	07/02/20 03:49	1	
13C2 PFDA	92		25 - 150			06/30/20 04:43	07/02/20 03:49	1	

Eurofins TestAmerica, Sacramento

Client Sample Results

Client: K. Singh & Associates, Inc
 Project/Site: Community Within the Corridor - 40405

Job ID: 320-62194-1

Client Sample ID: B-13 (1'-2')

Date Collected: 06/25/20 09:15

Date Received: 06/26/20 09:30

Lab Sample ID: 320-62194-1

Matrix: Solid

Percent Solids: 87.8

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFUnA	91		25 - 150	06/30/20 04:43	07/02/20 03:49	1
13C2 PFDaA	94		25 - 150	06/30/20 04:43	07/02/20 03:49	1
13C2 PFTeDA	90		25 - 150	06/30/20 04:43	07/02/20 03:49	1
13C2 PFHxDA	95		25 - 150	06/30/20 04:43	07/02/20 03:49	1
13C3 PFBS	87		25 - 150	06/30/20 04:43	07/02/20 03:49	1
18O2 PFHxS	87		25 - 150	06/30/20 04:43	07/02/20 03:49	1
13C4 PFOS	82		25 - 150	06/30/20 04:43	07/02/20 03:49	1
13C8 FOSA	80		25 - 150	06/30/20 04:43	07/02/20 03:49	1
d3-NMeFOSAA	76		25 - 150	06/30/20 04:43	07/02/20 03:49	1
d5-NEtFOSAA	84		25 - 150	06/30/20 04:43	07/02/20 03:49	1
d-N-MeFOSA-M	43		25 - 150	06/30/20 04:43	07/02/20 03:49	1
d-N-EtFOSA-M	43		25 - 150	06/30/20 04:43	07/02/20 03:49	1
d7-N-MeFOSE-M	7 *5		10 - 120	06/30/20 04:43	07/02/20 03:49	1
d9-N-EtFOSE-M	8 *5		10 - 120	06/30/20 04:43	07/02/20 03:49	1
M2-4:2 FTS	76		25 - 150	06/30/20 04:43	07/02/20 03:49	1
M2-6:2 FTS	84		25 - 150	06/30/20 04:43	07/02/20 03:49	1
M2-8:2 FTS	76		25 - 150	06/30/20 04:43	07/02/20 03:49	1
13C3 HFPO-DA	92		25 - 150	06/30/20 04:43	07/02/20 03:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	12.2		0.1	0.1	%			07/02/20 14:29	1
Percent Solids	87.8		0.1	0.1	%			07/02/20 14:29	1

Eurofins TestAmerica, Sacramento

Client Sample Results

Client: K. Singh & Associates, Inc

Project/Site: Community Within the Corridor - 40405

Job ID: 320-62194-1

Client Sample ID: B-14 (1'-2')

Date Collected: 06/25/20 10:05

Date Received: 06/26/20 09:30

Lab Sample ID: 320-62194-2

Matrix: Solid

Percent Solids: 82.3

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	0.041	J B	0.24	0.034	ug/Kg	⌚	06/30/20 04:43	07/02/20 04:17	1
Perfluoropentanoic acid (PFPeA)	<0.093		0.24	0.093	ug/Kg	⌚	06/30/20 04:43	07/02/20 04:17	1
Perfluorohexanoic acid (PFHxA)	<0.051		0.24	0.051	ug/Kg	⌚	06/30/20 04:43	07/02/20 04:17	1
Perfluoroheptanoic acid (PFHpA)	<0.035		0.24	0.035	ug/Kg	⌚	06/30/20 04:43	07/02/20 04:17	1
Perfluorooctanoic acid (PFOA)	<0.10		0.24	0.10	ug/Kg	⌚	06/30/20 04:43	07/02/20 04:17	1
Perfluorononanoic acid (PFNA)	<0.043		0.24	0.043	ug/Kg	⌚	06/30/20 04:43	07/02/20 04:17	1
Perfluorodecanoic acid (PFDA)	<0.027		0.24	0.027	ug/Kg	⌚	06/30/20 04:43	07/02/20 04:17	1
Perfluoroundecanoic acid (PFUnA)	<0.043		0.24	0.043	ug/Kg	⌚	06/30/20 04:43	07/02/20 04:17	1
Perfluorododecanoic acid (PFDoA)	<0.081		0.24	0.081	ug/Kg	⌚	06/30/20 04:43	07/02/20 04:17	1
Perfluorotridecanoic acid (PFTriA)	<0.062		0.24	0.062	ug/Kg	⌚	06/30/20 04:43	07/02/20 04:17	1
Perfluorotetradecanoic acid (PFTeA)	<0.065		0.24	0.065	ug/Kg	⌚	06/30/20 04:43	07/02/20 04:17	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.053		0.24	0.053	ug/Kg	⌚	06/30/20 04:43	07/02/20 04:17	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.034		0.24	0.034	ug/Kg	⌚	06/30/20 04:43	07/02/20 04:17	1
Perfluorobutanesulfonic acid (PFBS)	<0.030		0.24	0.030	ug/Kg	⌚	06/30/20 04:43	07/02/20 04:17	1
Perfluoropentanesulfonic acid (PFPeS)	<0.024		0.24	0.024	ug/Kg	⌚	06/30/20 04:43	07/02/20 04:17	1
Perfluorohexanesulfonic acid (PFHxS)	<0.037		0.24	0.037	ug/Kg	⌚	06/30/20 04:43	07/02/20 04:17	1
Perfluoroheptanesulfonic Acid (PFHxP)	<0.042		0.24	0.042	ug/Kg	⌚	06/30/20 04:43	07/02/20 04:17	1
Perfluoroctanesulfonic acid (PFOS)	<0.24		0.60	0.24	ug/Kg	⌚	06/30/20 04:43	07/02/20 04:17	1
Perfluorononanesulfonic acid (PFNS)	<0.024		0.24	0.024	ug/Kg	⌚	06/30/20 04:43	07/02/20 04:17	1
Perfluorodecanesulfonic acid (PFDS)	<0.047		0.24	0.047	ug/Kg	⌚	06/30/20 04:43	07/02/20 04:17	1
Perfluorododecanesulfonic acid (PFDoS)	<0.072		0.24	0.072	ug/Kg	⌚	06/30/20 04:43	07/02/20 04:17	1
Perfluorooctanesulfonamide (FOSA)	<0.099		0.24	0.099	ug/Kg	⌚	06/30/20 04:43	07/02/20 04:17	1
N <i>Et</i> FOSA	<0.029		0.24	0.029	ug/Kg	⌚	06/30/20 04:43	07/02/20 04:17	1
N <i>Me</i> FOSA	<0.050		0.24	0.050	ug/Kg	⌚	06/30/20 04:43	07/02/20 04:17	1
N-methylperfluoroctanesulfonamidoacetic acid (N <i>Me</i> FOSAA)	<0.47		2.4	0.47	ug/Kg	⌚	06/30/20 04:43	07/02/20 04:17	1
N-ethylperfluoroctanesulfonamidoacetic acid (N <i>Et</i> FOSAA)	<0.45		2.4	0.45	ug/Kg	⌚	06/30/20 04:43	07/02/20 04:17	1
N <i>Me</i> FOSE	<0.086		0.24	0.086	ug/Kg	⌚	06/30/20 04:43	07/02/20 04:17	1
N <i>Et</i> FOSE	<0.043		0.24	0.043	ug/Kg	⌚	06/30/20 04:43	07/02/20 04:17	1
4:2 FTS	<0.45		2.4	0.45	ug/Kg	⌚	06/30/20 04:43	07/02/20 04:17	1
6:2 FTS	<0.18		2.4	0.18	ug/Kg	⌚	06/30/20 04:43	07/02/20 04:17	1
8:2 FTS	<0.30		2.4	0.30	ug/Kg	⌚	06/30/20 04:43	07/02/20 04:17	1
10:2 FTS	<0.060		0.24	0.060	ug/Kg	⌚	06/30/20 04:43	07/02/20 04:17	1
DONA	<0.022		0.24	0.022	ug/Kg	⌚	06/30/20 04:43	07/02/20 04:17	1
HFPO-DA (GenX)	<0.13		0.30	0.13	ug/Kg	⌚	06/30/20 04:43	07/02/20 04:17	1
F-53B Major	<0.033		0.24	0.033	ug/Kg	⌚	06/30/20 04:43	07/02/20 04:17	1
F-53B Minor	<0.027		0.24	0.027	ug/Kg	⌚	06/30/20 04:43	07/02/20 04:17	1
Isotope Dilution	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
13C4 PFBA	87		25 - 150			06/30/20 04:43	07/02/20 04:17	1	
13C5 PFPeA	89		25 - 150			06/30/20 04:43	07/02/20 04:17	1	
13C2 PFHxA	92		25 - 150			06/30/20 04:43	07/02/20 04:17	1	
13C4 PFHpA	92		25 - 150			06/30/20 04:43	07/02/20 04:17	1	
13C4 PFOA	88		25 - 150			06/30/20 04:43	07/02/20 04:17	1	
13C5 PFNA	91		25 - 150			06/30/20 04:43	07/02/20 04:17	1	
13C2 PFDA	89		25 - 150			06/30/20 04:43	07/02/20 04:17	1	

Eurofins TestAmerica, Sacramento

Client Sample Results

Client: K. Singh & Associates, Inc
 Project/Site: Community Within the Corridor - 40405

Job ID: 320-62194-1

Client Sample ID: B-14 (1'-2')

Date Collected: 06/25/20 10:05

Date Received: 06/26/20 09:30

Lab Sample ID: 320-62194-2

Matrix: Solid

Percent Solids: 82.3

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFUnA	85		25 - 150	06/30/20 04:43	07/02/20 04:17	1
13C2 PFDaA	89		25 - 150	06/30/20 04:43	07/02/20 04:17	1
13C2 PFTeDA	88		25 - 150	06/30/20 04:43	07/02/20 04:17	1
13C2 PFHxDA	90		25 - 150	06/30/20 04:43	07/02/20 04:17	1
13C3 PFBS	81		25 - 150	06/30/20 04:43	07/02/20 04:17	1
18O2 PFHxS	83		25 - 150	06/30/20 04:43	07/02/20 04:17	1
13C4 PFOS	80		25 - 150	06/30/20 04:43	07/02/20 04:17	1
13C8 FOSA	78		25 - 150	06/30/20 04:43	07/02/20 04:17	1
d3-NMeFOSAA	70		25 - 150	06/30/20 04:43	07/02/20 04:17	1
d5-NEtFOSAA	79		25 - 150	06/30/20 04:43	07/02/20 04:17	1
d-N-MeFOSA-M	51		25 - 150	06/30/20 04:43	07/02/20 04:17	1
d-N-EtFOSA-M	46		25 - 150	06/30/20 04:43	07/02/20 04:17	1
d7-N-MeFOSE-M	6 *5		10 - 120	06/30/20 04:43	07/02/20 04:17	1
d9-N-EtFOSE-M	6 *5		10 - 120	06/30/20 04:43	07/02/20 04:17	1
M2-4:2 FTS	75		25 - 150	06/30/20 04:43	07/02/20 04:17	1
M2-6:2 FTS	79		25 - 150	06/30/20 04:43	07/02/20 04:17	1
M2-8:2 FTS	74		25 - 150	06/30/20 04:43	07/02/20 04:17	1
13C3 HFPO-DA	90		25 - 150	06/30/20 04:43	07/02/20 04:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	17.7		0.1	0.1	%			07/02/20 14:29	1
Percent Solids	82.3		0.1	0.1	%			07/02/20 14:29	1

Client Sample Results

Client: K. Singh & Associates, Inc

Project/Site: Community Within the Corridor - 40405

Job ID: 320-62194-1

Client Sample ID: B-15 (1'-2')

Date Collected: 06/25/20 10:30

Date Received: 06/26/20 09:30

Lab Sample ID: 320-62194-3

Matrix: Solid

Percent Solids: 86.5

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	0.21	J B	0.23	0.032	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:27	1
Perfluoropentanoic acid (PFPeA)	<0.088		0.23	0.088	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:27	1
Perfluorohexanoic acid (PFHxA)	<0.048		0.23	0.048	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:27	1
Perfluoroheptanoic acid (PFHpA)	<0.033		0.23	0.033	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:27	1
Perfluorooctanoic acid (PFOA)	<0.098		0.23	0.098	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:27	1
Perfluorononanoic acid (PFNA)	<0.041		0.23	0.041	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:27	1
Perfluorodecanoic acid (PFDA)	<0.025		0.23	0.025	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:27	1
Perfluoroundecanoic acid (PFUnA)	<0.041		0.23	0.041	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:27	1
Perfluorododecanoic acid (PFDoA)	<0.076		0.23	0.076	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:27	1
Perfluorotridecanoic acid (PFTriA)	<0.058		0.23	0.058	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:27	1
Perfluorotetradecanoic acid (PFTeA)	<0.062		0.23	0.062	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:27	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.050		0.23	0.050	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:27	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.032		0.23	0.032	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:27	1
Perfluorobutanesulfonic acid (PFBS)	<0.029		0.23	0.029	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:27	1
Perfluoropentanesulfonic acid (PFPeS)	<0.023		0.23	0.023	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:27	1
Perfluorohexanesulfonic acid (PFHxS)	<0.035		0.23	0.035	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:27	1
Perfluoroheptanesulfonic Acid (PFHxP)	<0.040		0.23	0.040	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:27	1
Perfluorooctanesulfonic acid (PFOS)	<0.23		0.57	0.23	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:27	1
Perfluorononanesulfonic acid (PFNS)	<0.023		0.23	0.023	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:27	1
Perfluorodecanesulfonic acid (PFDS)	<0.044		0.23	0.044	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:27	1
Perfluorododecanesulfonic acid (PFDoS)	<0.068		0.23	0.068	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:27	1
Perfluorooctanesulfonamide (FOSA)	<0.094		0.23	0.094	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:27	1
N <i>Et</i> FOSA	<0.027		0.23	0.027	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:27	1
N <i>Me</i> FOSA	<0.047		0.23	0.047	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:27	1
N-methylperfluorooctanesulfonamidoacetic acid (N <i>Me</i> FOSAA)	<0.44		2.3	0.44	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:27	1
N-ethylperfluorooctanesulfonamidoacetic acid (N <i>Et</i> FOSAA)	<0.42		2.3	0.42	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:27	1
N <i>Me</i> FOSE	<0.081		0.23	0.081	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:27	1
N <i>Et</i> FOSE	<0.041		0.23	0.041	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:27	1
4:2 FTS	<0.42		2.3	0.42	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:27	1
6:2 FTS	<0.17		2.3	0.17	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:27	1
8:2 FTS	<0.29		2.3	0.29	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:27	1
10:2 FTS	<0.057		0.23	0.057	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:27	1
DONA	<0.021		0.23	0.021	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:27	1
HFPO-DA (GenX)	<0.13		0.29	0.13	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:27	1
F-53B Major	<0.031		0.23	0.031	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:27	1
F-53B Minor	<0.025		0.23	0.025	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:27	1
Isotope Dilution	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
13C4 PFBA	92		25 - 150			06/30/20 04:43	07/02/20 04:27	1	
13C5 PFPeA	92		25 - 150			06/30/20 04:43	07/02/20 04:27	1	
13C2 PFHxA	96		25 - 150			06/30/20 04:43	07/02/20 04:27	1	
13C4 PFHpA	94		25 - 150			06/30/20 04:43	07/02/20 04:27	1	
13C4 PFOA	95		25 - 150			06/30/20 04:43	07/02/20 04:27	1	
13C5 PFNA	96		25 - 150			06/30/20 04:43	07/02/20 04:27	1	
13C2 PFDA	94		25 - 150			06/30/20 04:43	07/02/20 04:27	1	

Eurofins TestAmerica, Sacramento

Client Sample Results

Client: K. Singh & Associates, Inc
 Project/Site: Community Within the Corridor - 40405

Job ID: 320-62194-1

Client Sample ID: B-15 (1'-2')

Date Collected: 06/25/20 10:30

Date Received: 06/26/20 09:30

Lab Sample ID: 320-62194-3

Matrix: Solid

Percent Solids: 86.5

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFUnA	96		25 - 150	06/30/20 04:43	07/02/20 04:27	1
13C2 PFDaA	100		25 - 150	06/30/20 04:43	07/02/20 04:27	1
13C2 PFTeDA	89		25 - 150	06/30/20 04:43	07/02/20 04:27	1
13C2 PFHxDA	96		25 - 150	06/30/20 04:43	07/02/20 04:27	1
13C3 PFBS	75		25 - 150	06/30/20 04:43	07/02/20 04:27	1
18O2 PFHxS	79		25 - 150	06/30/20 04:43	07/02/20 04:27	1
13C4 PFOS	77		25 - 150	06/30/20 04:43	07/02/20 04:27	1
13C8 FOSA	79		25 - 150	06/30/20 04:43	07/02/20 04:27	1
d3-NMeFOSAA	77		25 - 150	06/30/20 04:43	07/02/20 04:27	1
d5-NEtFOSAA	86		25 - 150	06/30/20 04:43	07/02/20 04:27	1
d-N-MeFOSA-M	45		25 - 150	06/30/20 04:43	07/02/20 04:27	1
d-N-EtFOSA-M	43		25 - 150	06/30/20 04:43	07/02/20 04:27	1
d7-N-MeFOSE-M	6 *5		10 - 120	06/30/20 04:43	07/02/20 04:27	1
d9-N-EtFOSE-M	7 *5		10 - 120	06/30/20 04:43	07/02/20 04:27	1
M2-4:2 FTS	93		25 - 150	06/30/20 04:43	07/02/20 04:27	1
M2-6:2 FTS	81		25 - 150	06/30/20 04:43	07/02/20 04:27	1
M2-8:2 FTS	73		25 - 150	06/30/20 04:43	07/02/20 04:27	1
13C3 HFPO-DA	94		25 - 150	06/30/20 04:43	07/02/20 04:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	13.5		0.1	0.1	%			07/02/20 14:29	1
Percent Solids	86.5		0.1	0.1	%			07/02/20 14:29	1

Eurofins TestAmerica, Sacramento

Client Sample Results

Client: K. Singh & Associates, Inc

Project/Site: Community Within the Corridor - 40405

Job ID: 320-62194-1

Client Sample ID: B-16 (1'-2')

Date Collected: 06/25/20 11:10

Date Received: 06/26/20 09:30

Lab Sample ID: 320-62194-4

Matrix: Solid

Percent Solids: 82.0

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	0.16	J B	0.24	0.034	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:36	1
Perfluoropentanoic acid (PFPeA)	<0.094		0.24	0.094	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:36	1
Perfluorohexanoic acid (PFHxA)	<0.051		0.24	0.051	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:36	1
Perfluoroheptanoic acid (PFHpA)	<0.035		0.24	0.035	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:36	1
Perfluorooctanoic acid (PFOA)	<0.10		0.24	0.10	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:36	1
Perfluorononanoic acid (PFNA)	<0.044		0.24	0.044	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:36	1
Perfluorodecanoic acid (PFDA)	<0.027		0.24	0.027	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:36	1
Perfluoroundecanoic acid (PFUnA)	<0.044		0.24	0.044	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:36	1
Perfluorododecanoic acid (PFDoA)	<0.082		0.24	0.082	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:36	1
Perfluorotridecanoic acid (PFTriA)	<0.062		0.24	0.062	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:36	1
Perfluorotetradecanoic acid (PFTeA)	<0.066		0.24	0.066	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:36	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.054		0.24	0.054	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:36	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.034		0.24	0.034	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:36	1
Perfluorobutanesulfonic acid (PFBS)	<0.031		0.24	0.031	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:36	1
Perfluoropentanesulfonic acid (PFPeS)	<0.024		0.24	0.024	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:36	1
Perfluorohexanesulfonic acid (PFHxS)	<0.038		0.24	0.038	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:36	1
Perfluoroheptanesulfonic Acid (PFHxS)	<0.043		0.24	0.043	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:36	1
Perfluorooctanesulfonic acid (PFOS)	0.51	J B	0.61	0.24	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:36	1
Perfluorononanesulfonic acid (PFNS)	<0.024		0.24	0.024	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:36	1
Perfluorodecanesulfonic acid (PFDS)	<0.048		0.24	0.048	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:36	1
Perfluorododecanesulfonic acid (PFDoS)	<0.073		0.24	0.073	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:36	1
Perfluorooctanesulfonamide (FOSA)	<0.10		0.24	0.10	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:36	1
NEtFOSA	<0.029		0.24	0.029	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:36	1
NMeFOSA	<0.050		0.24	0.050	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:36	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<0.48		2.4	0.48	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:36	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<0.45		2.4	0.45	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:36	1
NMeFOSE	<0.087		0.24	0.087	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:36	1
NEtFOSE	<0.044		0.24	0.044	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:36	1
4:2 FTS	<0.45		2.4	0.45	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:36	1
6:2 FTS	<0.18		2.4	0.18	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:36	1
8:2 FTS	<0.31		2.4	0.31	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:36	1
10:2 FTS	<0.061		0.24	0.061	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:36	1
DONA	<0.022		0.24	0.022	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:36	1
HFPO-DA (GenX)	<0.13		0.31	0.13	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:36	1
F-53B Major	<0.033		0.24	0.033	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:36	1
F-53B Minor	<0.027		0.24	0.027	ug/Kg	⊗	06/30/20 04:43	07/02/20 04:36	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	88		25 - 150				06/30/20 04:43	07/02/20 04:36	1
13C5 PFPeA	89		25 - 150				06/30/20 04:43	07/02/20 04:36	1
13C2 PFHxA	91		25 - 150				06/30/20 04:43	07/02/20 04:36	1
13C4 PFHpA	89		25 - 150				06/30/20 04:43	07/02/20 04:36	1
13C4 PFOA	90		25 - 150				06/30/20 04:43	07/02/20 04:36	1
13C5 PFNA	92		25 - 150				06/30/20 04:43	07/02/20 04:36	1

Eurofins TestAmerica, Sacramento

Client Sample Results

Client: K. Singh & Associates, Inc
 Project/Site: Community Within the Corridor - 40405

Job ID: 320-62194-1

Client Sample ID: B-16 (1'-2')

Date Collected: 06/25/20 11:10

Date Received: 06/26/20 09:30

Lab Sample ID: 320-62194-4

Matrix: Solid

Percent Solids: 82.0

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFDA	89		25 - 150	06/30/20 04:43	07/02/20 04:36	1
13C2 PFUnA	89		25 - 150	06/30/20 04:43	07/02/20 04:36	1
13C2 PFDaA	89		25 - 150	06/30/20 04:43	07/02/20 04:36	1
13C2 PFTeDA	83		25 - 150	06/30/20 04:43	07/02/20 04:36	1
13C2 PFHxDA	89		25 - 150	06/30/20 04:43	07/02/20 04:36	1
13C3 PFBS	75		25 - 150	06/30/20 04:43	07/02/20 04:36	1
18O2 PFHxS	80		25 - 150	06/30/20 04:43	07/02/20 04:36	1
13C4 PFOS	71		25 - 150	06/30/20 04:43	07/02/20 04:36	1
13C8 FOSA	71		25 - 150	06/30/20 04:43	07/02/20 04:36	1
d3-NMeFOSAA	84		25 - 150	06/30/20 04:43	07/02/20 04:36	1
d5-NEtFOSAA	78		25 - 150	06/30/20 04:43	07/02/20 04:36	1
d-N-MeFOSA-M	50		25 - 150	06/30/20 04:43	07/02/20 04:36	1
d-N-EtFOSA-M	48		25 - 150	06/30/20 04:43	07/02/20 04:36	1
d7-N-MeFOSE-M	7 *5		10 - 120	06/30/20 04:43	07/02/20 04:36	1
d9-N-EtFOSE-M	7 *5		10 - 120	06/30/20 04:43	07/02/20 04:36	1
M2-4:2 FTS	109		25 - 150	06/30/20 04:43	07/02/20 04:36	1
M2-6:2 FTS	124		25 - 150	06/30/20 04:43	07/02/20 04:36	1
M2-8:2 FTS	102		25 - 150	06/30/20 04:43	07/02/20 04:36	1
13C3 HFPO-DA	90		25 - 150	06/30/20 04:43	07/02/20 04:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	18.0		0.1	0.1	%			07/02/20 14:29	1
Percent Solids	82.0		0.1	0.1	%			07/02/20 14:29	1

Isotope Dilution Summary

Client: K. Singh & Associates, Inc

Project/Site: Community Within the Corridor - 40405

Job ID: 320-62194-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Solid

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	PFBA (25-150)	PFPeA (25-150)	PFHxA (25-150)	C4PFHA (25-150)	PFOA (25-150)	PFNA (25-150)	PFDA (25-150)	PFUnA (25-150)
320-62194-1	B-13 (1'-2')	88	95	94	92	92	93	92	91
320-62194-1 MS	B-13 (1'-2')	95	100	98	98	95	95	93	95
320-62194-1 MSD	B-13 (1'-2')	95	99	93	96	93	97	94	93
320-62194-2	B-14 (1'-2')	87	89	92	92	88	91	89	85
320-62194-3	B-15 (1'-2')	92	92	96	94	95	96	94	96
320-62194-4	B-16 (1'-2')	88	89	91	89	90	92	89	89
LCS 320-390751/2-A	Lab Control Sample	100	102	101	100	101	102	99	95
MB 320-390751/1-A	Method Blank	90	95	92	95	94	93	93	96
Percent Isotope Dilution Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	PFDoA (25-150)	PFTDA (25-150)	PFHxDA (25-150)	C3PFBS (25-150)	PFHxS (25-150)	PFOS (25-150)	PFOSA (25-150)	d3NMFOS (25-150)
320-62194-1	B-13 (1'-2')	94	90	95	87	87	82	80	76
320-62194-1 MS	B-13 (1'-2')	103	90	98	87	92	89	88	82
320-62194-1 MSD	B-13 (1'-2')	101	89	91	86	89	85	82	77
320-62194-2	B-14 (1'-2')	89	88	90	81	83	80	78	70
320-62194-3	B-15 (1'-2')	100	89	96	75	79	77	79	77
320-62194-4	B-16 (1'-2')	89	83	89	75	80	71	71	84
LCS 320-390751/2-A	Lab Control Sample	101	96	97	101	110	101	89	79
MB 320-390751/1-A	Method Blank	90	88	97	101	103	95	85	66
Percent Isotope Dilution Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	d5NEFOS (25-150)	dMeFOSA (25-150)	dEtFOSA (25-150)	NMFM (10-120)	NEFM (10-120)	M242FTS (25-150)	M262FTS (25-150)	M282FTS (25-150)
320-62194-1	B-13 (1'-2')	84	43	43	7 *5	8 *5	76	84	76
320-62194-1 MS	B-13 (1'-2')	82	63	56	9 *5	9 *5	79	87	75
320-62194-1 MSD	B-13 (1'-2')	79	51	48	7 *5	7 *5	83	78	70
320-62194-2	B-14 (1'-2')	79	51	46	6 *5	6 *5	75	79	74
320-62194-3	B-15 (1'-2')	86	45	43	6 *5	7 *5	93	81	73
320-62194-4	B-16 (1'-2')	78	50	48	7 *5	7 *5	109	124	102
LCS 320-390751/2-A	Lab Control Sample	82	38	40	11	10	97	100	88
MB 320-390751/1-A	Method Blank	72	36	37	10	10	93	101	92
Percent Isotope Dilution Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	HFPODA (25-150)							
320-62194-1	B-13 (1'-2')	92							
320-62194-1 MS	B-13 (1'-2')	96							
320-62194-1 MSD	B-13 (1'-2')	96							
320-62194-2	B-14 (1'-2')	90							
320-62194-3	B-15 (1'-2')	94							
320-62194-4	B-16 (1'-2')	90							
LCS 320-390751/2-A	Lab Control Sample	98							
MB 320-390751/1-A	Method Blank	93							

Surrogate Legend

PFBA = 13C4 PFBA

PFPeA = 13C5 PFPeA

PFHxA = 13C2 PFHxA

C4PFHA = 13C4 PFHpA

PFOA = 13C4 PFOA

PFNA = 13C5 PFNA

Eurofins TestAmerica, Sacramento

Isotope Dilution Summary

Client: K. Singh & Associates, Inc

Project/Site: Community Within the Corridor - 40405

Job ID: 320-62194-1

PFDA = 13C2 PFDA

PFUnA = 13C2 PFUnA

PFDoA = 13C2 PFDoA

PFTDA = 13C2 PFTeDA

PFHxDA = 13C2 PFHxDA

C3PFBS = 13C3 PFBS

PFHxS = 18O2 PFHxS

PFOS = 13C4 PFOS

PFOSA = 13C8 FOSA

d3NMFOS = d3-NMeFOSAA

d5NEFOS = d5-NEtFOSAA

dMeFOSA = d-N-MeFOSA-M

dEtFOSA = d-N-EtFOSA-M

NMFM = d7-N-MeFOSE-M

NEFM = d9-N-EtFOSE-M

M242FTS = M2-4:2 FTS

M262FTS = M2-6:2 FTS

M282FTS = M2-8:2 FTS

HFPODA = 13C3 HFPO-DA

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QC Sample Results

Client: K. Singh & Associates, Inc

Project/Site: Community Within the Corridor - 40405

Job ID: 320-62194-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 320-390751/1-A

Matrix: Solid

Analysis Batch: 391493

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 390751

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	0.0326	J	0.20	0.028	ug/Kg	06/30/20	04:43	07/02/20	03:30
Perfluoropentanoic acid (PFPeA)	<0.077		0.20	0.077	ug/Kg	06/30/20	04:43	07/02/20	03:30
Perfluorohexanoic acid (PFHxA)	<0.042		0.20	0.042	ug/Kg	06/30/20	04:43	07/02/20	03:30
Perfluoroheptanoic acid (PFHpA)	<0.029		0.20	0.029	ug/Kg	06/30/20	04:43	07/02/20	03:30
Perfluorooctanoic acid (PFOA)	<0.086		0.20	0.086	ug/Kg	06/30/20	04:43	07/02/20	03:30
Perfluorononanoic acid (PFNA)	<0.036		0.20	0.036	ug/Kg	06/30/20	04:43	07/02/20	03:30
Perfluorodecanoic acid (PFDA)	<0.022		0.20	0.022	ug/Kg	06/30/20	04:43	07/02/20	03:30
Perfluoroundecanoic acid (PFUnA)	<0.036		0.20	0.036	ug/Kg	06/30/20	04:43	07/02/20	03:30
Perfluorododecanoic acid (PFDaO)	<0.067		0.20	0.067	ug/Kg	06/30/20	04:43	07/02/20	03:30
Perfluorotridecanoic acid (PFTriA)	<0.051		0.20	0.051	ug/Kg	06/30/20	04:43	07/02/20	03:30
Perfluorotetradecanoic acid (PFTeA)	<0.054		0.20	0.054	ug/Kg	06/30/20	04:43	07/02/20	03:30
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.044		0.20	0.044	ug/Kg	06/30/20	04:43	07/02/20	03:30
Perfluoro-n-octadecanoic acid (PFODA)	<0.028		0.20	0.028	ug/Kg	06/30/20	04:43	07/02/20	03:30
Perfluorobutanesulfonic acid (PFBS)	<0.025		0.20	0.025	ug/Kg	06/30/20	04:43	07/02/20	03:30
Perfluoropentanesulfonic acid (PFPeS)	<0.020		0.20	0.020	ug/Kg	06/30/20	04:43	07/02/20	03:30
Perfluorohexanesulfonic acid (PFHxS)	<0.031		0.20	0.031	ug/Kg	06/30/20	04:43	07/02/20	03:30
Perfluoroheptanesulfonic Acid (PFHpS)	<0.035		0.20	0.035	ug/Kg	06/30/20	04:43	07/02/20	03:30
Perfluoroctanesulfonic acid (PFOS)	0.337	J	0.50	0.20	ug/Kg	06/30/20	04:43	07/02/20	03:30
Perfluoronananesulfonic acid (PFNS)	<0.020		0.20	0.020	ug/Kg	06/30/20	04:43	07/02/20	03:30
Perfluorodecanesulfonic acid (PFDS)	<0.039		0.20	0.039	ug/Kg	06/30/20	04:43	07/02/20	03:30
Perfluorododecanesulfonic acid (PFDaS)	<0.060		0.20	0.060	ug/Kg	06/30/20	04:43	07/02/20	03:30
Perfluorooctanesulfonamide (FOSA)	<0.082		0.20	0.082	ug/Kg	06/30/20	04:43	07/02/20	03:30
NEtFOSA	<0.024		0.20	0.024	ug/Kg	06/30/20	04:43	07/02/20	03:30
NMeFOSA	<0.041		0.20	0.041	ug/Kg	06/30/20	04:43	07/02/20	03:30
N-methylperfluoroctanesulfonamidoacetic acid (NMeFOSAA)	<0.39		2.0	0.39	ug/Kg	06/30/20	04:43	07/02/20	03:30
N-ethylperfluoroctanesulfonamidoacetic acid (NEtFOSAA)	<0.37		2.0	0.37	ug/Kg	06/30/20	04:43	07/02/20	03:30
NMeFOSE	<0.071		0.20	0.071	ug/Kg	06/30/20	04:43	07/02/20	03:30
NEtFOSE	<0.036		0.20	0.036	ug/Kg	06/30/20	04:43	07/02/20	03:30
4:2 FTS	<0.37		2.0	0.37	ug/Kg	06/30/20	04:43	07/02/20	03:30
6:2 FTS	<0.15		2.0	0.15	ug/Kg	06/30/20	04:43	07/02/20	03:30
8:2 FTS	<0.25		2.0	0.25	ug/Kg	06/30/20	04:43	07/02/20	03:30
10:2 FTS	<0.050		0.20	0.050	ug/Kg	06/30/20	04:43	07/02/20	03:30
DONA	<0.018		0.20	0.018	ug/Kg	06/30/20	04:43	07/02/20	03:30
HFPO-DA (GenX)	<0.11		0.25	0.11	ug/Kg	06/30/20	04:43	07/02/20	03:30
F-53B Major	<0.027		0.20	0.027	ug/Kg	06/30/20	04:43	07/02/20	03:30
F-53B Minor	<0.022		0.20	0.022	ug/Kg	06/30/20	04:43	07/02/20	03:30

Isotope Dilution	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	90		25 - 150	06/30/20	04:43	07/02/20
13C5 PFPeA	95		25 - 150	06/30/20	04:43	07/02/20
13C2 PFHxA	92		25 - 150	06/30/20	04:43	07/02/20
13C4 PFHpA	95		25 - 150	06/30/20	04:43	07/02/20
13C4 PFOA	94		25 - 150	06/30/20	04:43	07/02/20

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QC Sample Results

Client: K. Singh & Associates, Inc

Project/Site: Community Within the Corridor - 40405

Job ID: 320-62194-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: MB 320-390751/1-A

Matrix: Solid

Analysis Batch: 391493

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 390751

Isotope Dilution	MB	MB	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier			
13C5 PFNA	93		25 - 150	06/30/20 04:43	07/02/20 03:30
13C2 PFDA	93		25 - 150	06/30/20 04:43	07/02/20 03:30
13C2 PFUnA	96		25 - 150	06/30/20 04:43	07/02/20 03:30
13C2 PFDa	90		25 - 150	06/30/20 04:43	07/02/20 03:30
13C2 PFTeDA	88		25 - 150	06/30/20 04:43	07/02/20 03:30
13C2 PFHxDa	97		25 - 150	06/30/20 04:43	07/02/20 03:30
13C3 PFBS	101		25 - 150	06/30/20 04:43	07/02/20 03:30
18O2 PFHxS	103		25 - 150	06/30/20 04:43	07/02/20 03:30
13C4 PFOS	95		25 - 150	06/30/20 04:43	07/02/20 03:30
13C8 FOSA	85		25 - 150	06/30/20 04:43	07/02/20 03:30
d3-NMeFOSAA	66		25 - 150	06/30/20 04:43	07/02/20 03:30
d5-NEtFOSAA	72		25 - 150	06/30/20 04:43	07/02/20 03:30
d-N-MeFOSA-M	36		25 - 150	06/30/20 04:43	07/02/20 03:30
d-N-EtFOSA-M	37		25 - 150	06/30/20 04:43	07/02/20 03:30
d7-N-MeFOSE-M	10		10 - 120	06/30/20 04:43	07/02/20 03:30
d9-N-EtFOSE-M	10		10 - 120	06/30/20 04:43	07/02/20 03:30
M2-4:2 FTS	93		25 - 150	06/30/20 04:43	07/02/20 03:30
M2-6:2 FTS	101		25 - 150	06/30/20 04:43	07/02/20 03:30
M2-8:2 FTS	92		25 - 150	06/30/20 04:43	07/02/20 03:30
13C3 HFPO-DA	93		25 - 150	06/30/20 04:43	07/02/20 03:30

Lab Sample ID: LCS 320-390751/2-A

Matrix: Solid

Analysis Batch: 391493

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 390751

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits	%Rec.
	Added	Result	Qualifier					
Perfluorobutanoic acid (PFBA)	2.00	2.18		ug/Kg		109	76 - 136	
Perfluoropentanoic acid (PFPeA)	2.00	1.74		ug/Kg		87	69 - 129	
Perfluorohexanoic acid (PFHxA)	2.00	1.91		ug/Kg		96	71 - 131	
Perfluoroheptanoic acid (PFHpA)	2.00	1.91		ug/Kg		96	71 - 131	
Perfluoroctanoic acid (PFOA)	2.00	1.77		ug/Kg		88	72 - 132	
Perfluorononanoic acid (PFNA)	2.00	1.85		ug/Kg		93	73 - 133	
Perfluorodecanoic acid (PFDA)	2.00	1.96		ug/Kg		98	72 - 132	
Perfluoroundecanoic acid (PFUnA)	2.00	2.07		ug/Kg		104	66 - 126	
Perfluorododecanoic acid (PFDa)	2.00	1.67		ug/Kg		83	71 - 131	
Perfluorotridecanoic acid (PFTriA)	2.00	1.82		ug/Kg		91	71 - 131	
Perfluorotetradecanoic acid (PFTeA)	2.00	1.88		ug/Kg		94	67 - 127	
Perfluoro-n-hexadecanoic acid (PFHxDa)	2.00	1.81		ug/Kg		90	75 - 135	
Perfluoro-n-octadecanoic acid (PFODA)	2.00	1.93		ug/Kg		97	53 - 130	
Perfluorobutanesulfonic acid (PFBS)	1.77	1.81		ug/Kg		102	69 - 129	
Perfluoropentanesulfonic acid (PFPeS)	1.88	1.96		ug/Kg		104	66 - 126	
Perfluorohexamersulfonic acid (PFHxS)	1.82	1.60		ug/Kg		88	62 - 122	

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QC Sample Results

Client: K. Singh & Associates, Inc

Project/Site: Community Within the Corridor - 40405

Job ID: 320-62194-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-390751/2-A

Matrix: Solid

Analysis Batch: 391493

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 390751

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Perfluoroheptanesulfonic Acid (PFHpS)	1.90	1.92		ug/Kg		101	76 - 136
Perfluorooctanesulfonic acid (PFOS)	1.86	2.06		ug/Kg		111	68 - 141
Perfluorononanesulfonic acid (PFNS)	1.92	1.89		ug/Kg		99	72 - 132
Perfluorodecanesulfonic acid (PFDS)	1.93	1.97		ug/Kg		102	71 - 131
Perfluorododecanesulfonic acid (PFDoS)	1.94	1.82		ug/Kg		94	70 - 130
Perfluorooctanesulfonamide (FOSA)	2.00	1.98		ug/Kg		99	77 - 137
NMeFOSA	2.00	1.98		ug/Kg		99	63 - 148
N-methylperfluorooctanesulfonic acid (NMeFOSAA)	2.00	2.25		ug/Kg		112	72 - 132
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2.00	2.17		ug/Kg		108	72 - 132
NMeFOSE	2.00	2.14		ug/Kg		107	43 - 153
NEtFOSE	2.00	2.10		ug/Kg		105	44 - 155
4:2 FTS	1.87	1.90	J	ug/Kg		102	68 - 143
6:2 FTS	1.90	1.90	J	ug/Kg		100	73 - 139
8:2 FTS	1.92	2.09		ug/Kg		109	75 - 135
10:2 FTS	1.93	2.18		ug/Kg		113	69 - 145
DONA	1.88	1.97		ug/Kg		105	79 - 139
HFPO-DA (GenX)	2.00	1.97		ug/Kg		98	53 - 158
F-53B Major	1.86	1.85		ug/Kg		99	74 - 134
F-53B Minor	1.88	1.93		ug/Kg		102	66 - 136

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
13C4 PFBA	100		25 - 150
13C5 PFPeA	102		25 - 150
13C2 PFHxA	101		25 - 150
13C4 PFHpA	100		25 - 150
13C4 PFOA	101		25 - 150
13C5 PFNA	102		25 - 150
13C2 PFDA	99		25 - 150
13C2 PFUnA	95		25 - 150
13C2 PFDoA	101		25 - 150
13C2 PFTeDA	96		25 - 150
13C2 PFHxDA	97		25 - 150
13C3 PFBS	101		25 - 150
18O2 PFHxS	110		25 - 150
13C4 PFOS	101		25 - 150
13C8 FOSA	89		25 - 150
d3-NMeFOSAA	79		25 - 150
d5-NEtFOSAA	82		25 - 150
d-N-MeFOSA-M	38		25 - 150
d-N-EtFOSA-M	40		25 - 150
d7-N-MeFOSE-M	11		10 - 120
d9-N-EtFOSE-M	10		10 - 120
M2-4:2 FTS	97		25 - 150

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QC Sample Results

Client: K. Singh & Associates, Inc

Project/Site: Community Within the Corridor - 40405

Job ID: 320-62194-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-390751/2-A

Matrix: Solid

Analysis Batch: 391493

Isotope Dilution	LCS	LCS	
	%Recovery	Qualifier	Limits
M2-6:2 FTS	100		25 - 150
M2-8:2 FTS	88		25 - 150
13C3 HFPO-DA	98		25 - 150

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 390751

Lab Sample ID: 320-62194-1 MS

Matrix: Solid

Analysis Batch: 391493

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	Limits
	Result	Qualifier	Added	Result	Qualifier					
Perfluorobutanoic acid (PFBA)	0.040	J B	2.24	2.56		ug/Kg	⊗	113	76 - 136	
Perfluoropentanoic acid (PFPeA)	<0.087		2.24	1.86		ug/Kg	⊗	83	69 - 129	
Perfluorohexanoic acid (PFHxA)	<0.047		2.24	2.17		ug/Kg	⊗	97	71 - 131	
Perfluoroheptanoic acid (PFHpA)	<0.033		2.24	2.17		ug/Kg	⊗	97	71 - 131	
Perfluoroctanoic acid (PFOA)	<0.097		2.24	2.13		ug/Kg	⊗	95	72 - 132	
Perfluorononanoic acid (PFNA)	<0.041		2.24	2.23		ug/Kg	⊗	100	73 - 133	
Perfluorodecanoic acid (PFDA)	<0.025		2.24	2.24		ug/Kg	⊗	100	72 - 132	
Perfluoroundecanoic acid (PFUnA)	<0.041		2.24	2.35		ug/Kg	⊗	105	66 - 126	
Perfluorododecanoic acid (PFDoA)	<0.076		2.24	1.96		ug/Kg	⊗	88	71 - 131	
Perfluorotridecanoic acid (PFTriA)	<0.057		2.24	2.13		ug/Kg	⊗	95	71 - 131	
Perfluorotetradecanoic acid (PFTeA)	<0.061		2.24	2.29		ug/Kg	⊗	102	67 - 127	
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.050		2.24	2.28		ug/Kg	⊗	102	75 - 135	
Perfluoro-n-octadecanoic acid (PFODA)	<0.032		2.24	2.43		ug/Kg	⊗	109	53 - 130	
Perfluorobutanesulfonic acid (PFBS)	<0.028		1.98	2.12		ug/Kg	⊗	107	69 - 129	
Perfluoropentanesulfonic acid (PFPeS)	<0.023		2.10	2.07		ug/Kg	⊗	99	66 - 126	
Perfluorohexanesulfonic acid (PFHxS)	<0.035		2.04	1.82		ug/Kg	⊗	89	62 - 122	
Perfluoroheptanesulfonic Acid (PFHpS)	<0.039		2.13	2.13		ug/Kg	⊗	100	76 - 136	
Perfluoroctanesulfonic acid (PFOS)	<0.23		2.08	2.22		ug/Kg	⊗	107	68 - 141	
Perfluorononanesulfonic acid (PFNS)	<0.023		2.15	1.99		ug/Kg	⊗	93	72 - 132	
Perfluorodecanesulfonic acid (PFDS)	<0.044		2.16	1.97		ug/Kg	⊗	91	71 - 131	
Perfluorododecanesulfonic acid (PFDoS)	<0.068		2.17	2.01		ug/Kg	⊗	93	70 - 130	
Perfluoroctanesulfonamide (FOSA)	<0.092		2.24	2.20		ug/Kg	⊗	98	77 - 137	
NMeFOSA	<0.046		2.24	2.14		ug/Kg	⊗	96	63 - 148	
N-methylperfluorooctanesulfona midoacetic acid (NMeFOSAA)	<0.44		2.24	2.54		ug/Kg	⊗	114	72 - 132	
N-ethylperfluorooctanesulfonami doacetic acid (NEtFOSAA)	<0.42		2.24	2.56		ug/Kg	⊗	114	72 - 132	
NMeFOSE	<0.080		2.24	2.24		ug/Kg	⊗	100	43 - 153	
NEtFOSE	<0.041		2.24	2.06		ug/Kg	⊗	92	44 - 155	

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QC Sample Results

Client: K. Singh & Associates, Inc

Project/Site: Community Within the Corridor - 40405

Job ID: 320-62194-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: 320-62194-1 MS

Matrix: Solid

Analysis Batch: 391493

Client Sample ID: B-13 (1'-2')

Prep Type: Total/NA

Prep Batch: 390751

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
4:2 FTS	<0.42		2.09	2.19	J	ug/Kg	⊗	105	68 - 143
6:2 FTS	<0.17		2.12	2.12	J	ug/Kg	⊗	100	73 - 139
8:2 FTS	<0.28		2.14	2.22		ug/Kg	⊗	104	75 - 135
10:2 FTS	<0.056		2.16	2.53		ug/Kg	⊗	117	69 - 145
DONA	<0.020		2.11	2.44		ug/Kg	⊗	116	79 - 139
HFPO-DA (GenX)	<0.12		2.24	2.22		ug/Kg	⊗	99	53 - 158
F-53B Major	<0.030		2.08	2.12		ug/Kg	⊗	102	74 - 134
F-53B Minor	<0.025		2.11	2.08		ug/Kg	⊗	99	66 - 136
Isotope Dilution	MS %Recovery	MS Qualifier	MS Limits						
13C4 PFBA	95		25 - 150						
13C5 PFPeA	100		25 - 150						
13C2 PFHxA	98		25 - 150						
13C4 PFHpA	98		25 - 150						
13C4 PFOA	95		25 - 150						
13C5 PFNA	95		25 - 150						
13C2 PFDA	93		25 - 150						
13C2 PFUnA	95		25 - 150						
13C2 PFDoA	103		25 - 150						
13C2 PFTeDA	90		25 - 150						
13C2 PFHxDA	98		25 - 150						
13C3 PFBS	87		25 - 150						
18O2 PFHxS	92		25 - 150						
13C4 PFOS	89		25 - 150						
13C8 FOSA	88		25 - 150						
d3-NMeFOSAA	82		25 - 150						
d5-NEtFOSAA	82		25 - 150						
d-N-MeFOSA-M	63		25 - 150						
d-N-EtFOSA-M	56		25 - 150						
d7-N-MeFOSE-M	9 *5		10 - 120						
d9-N-EtFOSE-M	9 *5		10 - 120						
M2-4:2 FTS	79		25 - 150						
M2-6:2 FTS	87		25 - 150						
M2-8:2 FTS	75		25 - 150						
13C3 HFPO-DA	96		25 - 150						

Lab Sample ID: 320-62194-1 MSD

Matrix: Solid

Analysis Batch: 391493

Client Sample ID: B-13 (1'-2')

Prep Type: Total/NA

Prep Batch: 390751

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Perfluorobutanoic acid (PFBA)	0.040	J B	2.26	2.51		ug/Kg	⊗	109	76 - 136	2	30
Perfluoropentanoic acid (PFPeA)	<0.087		2.26	1.85		ug/Kg	⊗	82	69 - 129	1	30
Perfluorohexanoic acid (PFHxA)	<0.047		2.26	2.31		ug/Kg	⊗	102	71 - 131	6	30
Perfluoroheptanoic acid (PFHpA)	<0.033		2.26	2.25		ug/Kg	⊗	99	71 - 131	4	30
Perfluorooctanoic acid (PFOA)	<0.097		2.26	2.13		ug/Kg	⊗	94	72 - 132	0	30
Perfluorononanoic acid (PFNA)	<0.041		2.26	2.16		ug/Kg	⊗	96	73 - 133	3	30
Perfluorodecanoic acid (PFDA)	<0.025		2.26	2.18		ug/Kg	⊗	96	72 - 132	3	30

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QC Sample Results

Client: K. Singh & Associates, Inc

Project/Site: Community Within the Corridor - 40405

Job ID: 320-62194-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: 320-62194-1 MSD

Matrix: Solid

Analysis Batch: 391493

Client Sample ID: B-13 (1'-2')

Prep Type: Total/NA

Prep Batch: 390751

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.	Limits	RPD	RPD Limit
Perfluoroundecanoic acid (PFUnA)	<0.041		2.26	2.27		ug/Kg	⊗	100	66 - 126	4	30
Perfluorododecanoic acid (PFDaA)	<0.076		2.26	2.09		ug/Kg	⊗	92	71 - 131	6	30
Perfluorotridecanoic acid (PFTriA)	<0.057		2.26	2.08		ug/Kg	⊗	92	71 - 131	2	30
Perfluorotetradecanoic acid (PFTeA)	<0.061		2.26	2.27		ug/Kg	⊗	100	67 - 127	1	30
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.050		2.26	2.23		ug/Kg	⊗	99	75 - 135	2	30
Perfluoro-n-octadecanoic acid (PFODA)	<0.032		2.26	2.42		ug/Kg	⊗	107	53 - 130	0	30
Perfluorobutanesulfonic acid (PFBS)	<0.028		2.00	2.14		ug/Kg	⊗	107	69 - 129	1	30
Perfluoropentanesulfonic acid (PFPeS)	<0.023		2.12	2.22		ug/Kg	⊗	104	66 - 126	7	30
Perfluorohexanesulfonic acid (PFHxS)	<0.035		2.06	1.83		ug/Kg	⊗	89	62 - 122	1	30
Perfluoroheptanesulfonic Acid (PFHpS)	<0.039		2.15	2.03		ug/Kg	⊗	94	76 - 136	5	30
Perfluoroctanesulfonic acid (PFOS)	<0.23		2.10	2.23		ug/Kg	⊗	106	68 - 141	0	30
Perfluorononanesulfonic acid (PFNS)	<0.023		2.17	1.98		ug/Kg	⊗	91	72 - 132	1	30
Perfluorodecanesulfonic acid (PFDS)	<0.044		2.18	2.13		ug/Kg	⊗	98	71 - 131	8	30
Perfluorododecanesulfonic acid (PFDs)	<0.068		2.19	2.03		ug/Kg	⊗	93	70 - 130	1	30
Perfluoroctanesulfonamide (FOSA)	<0.092		2.26	2.34		ug/Kg	⊗	103	77 - 137	6	30
NMeFOSA	<0.046		2.26	2.24		ug/Kg	⊗	99	63 - 148	4	30
N-methylperfluorooctanesulfona midoacetic acid (NMeFOSAA)	<0.44		2.26	2.62		ug/Kg	⊗	116	72 - 132	3	30
N-ethylperfluorooctanesulfonami doacetic acid (NEtFOSAA)	<0.42		2.26	2.59		ug/Kg	⊗	114	72 - 132	1	30
NMeFOSE	<0.080		2.26	2.10		ug/Kg	⊗	93	43 - 153	6	30
NEtFOSE	<0.041		2.26	2.27		ug/Kg	⊗	100	44 - 155	9	30
4:2 FTS	<0.42		2.11	2.12 J		ug/Kg	⊗	100	68 - 143	3	30
6:2 FTS	<0.17		2.15	2.22 J		ug/Kg	⊗	104	73 - 139	5	30
8:2 FTS	<0.28		2.17	2.29 J		ug/Kg	⊗	106	75 - 135	3	30
10:2 FTS	<0.056		2.18	2.71		ug/Kg	⊗	124	69 - 145	7	30
DONA	<0.020		2.13	2.59		ug/Kg	⊗	121	79 - 139	6	30
HFPO-DA (GenX)	<0.12		2.26	2.31		ug/Kg	⊗	102	53 - 158	4	30
F-53B Major	<0.030		2.11	2.22		ug/Kg	⊗	105	74 - 134	4	30
F-53B Minor	<0.025		2.13	2.26		ug/Kg	⊗	106	66 - 136	8	30

Isotope Dilution	MSD %Recovery	MSD Qualifier	Limits
13C4 PFBA	95		25 - 150
13C5 PFPeA	99		25 - 150
13C2 PFHxA	93		25 - 150
13C4 PFHpA	96		25 - 150
13C4 PFOA	93		25 - 150
13C5 PFNA	97		25 - 150

Eurofins TestAmerica, Sacramento

QC Sample Results

Client: K. Singh & Associates, Inc
 Project/Site: Community Within the Corridor - 40405

Job ID: 320-62194-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: 320-62194-1 MSD

Matrix: Solid

Analysis Batch: 391493

Client Sample ID: B-13 (1'-2')

Prep Type: Total/NA

Prep Batch: 390751

Isotope Dilution	MSD	MSD	
	%Recovery	Qualifier	Limits
13C2 PFDA	94		25 - 150
13C2 PFUnA	93		25 - 150
13C2 PFDaA	101		25 - 150
13C2 PFTeDA	89		25 - 150
13C2 PFHxDA	91		25 - 150
13C3 PFBS	86		25 - 150
18O2 PFHxS	89		25 - 150
13C4 PFOS	85		25 - 150
13C8 FOSA	82		25 - 150
d3-NMeFOSAA	77		25 - 150
d5-NEtFOSAA	79		25 - 150
d-N-MeFOSA-M	51		25 - 150
d-N-EtFOSA-M	48		25 - 150
d7-N-MeFOSE-M	7 *5		10 - 120
d9-N-EtFOSE-M	7 *5		10 - 120
M2-4:2 FTS	83		25 - 150
M2-6:2 FTS	78		25 - 150
M2-8:2 FTS	70		25 - 150
13C3 HFPO-DA	96		25 - 150

Method: D 2216 - Percent Moisture

Lab Sample ID: 320-62194-1 DU

Matrix: Solid

Analysis Batch: 391734

Client Sample ID: B-13 (1'-2')

Prep Type: Total/NA

Analyte	Sample	Sample	DU	DU	D	RPD	Limit
	Result	Qualifier	Result	Qualifier			
Percent Moisture	12.2		11.9		%	2	20
Percent Solids	87.8		88.1		%	0.3	20

QC Association Summary

Client: K. Singh & Associates, Inc

Project/Site: Community Within the Corridor - 40405

Job ID: 320-62194-1

LCMS

Prep Batch: 390751

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-62194-1	B-13 (1'-2')	Total/NA	Solid	SHAKE	5
320-62194-2	B-14 (1'-2')	Total/NA	Solid	SHAKE	6
320-62194-3	B-15 (1'-2')	Total/NA	Solid	SHAKE	7
320-62194-4	B-16 (1'-2')	Total/NA	Solid	SHAKE	8
MB 320-390751/1-A	Method Blank	Total/NA	Solid	SHAKE	9
LCS 320-390751/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	10
320-62194-1 MS	B-13 (1'-2')	Total/NA	Solid	SHAKE	11
320-62194-1 MSD	B-13 (1'-2')	Total/NA	Solid	SHAKE	12

Analysis Batch: 391493

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-62194-1	B-13 (1'-2')	Total/NA	Solid	537 (modified)	390751
320-62194-2	B-14 (1'-2')	Total/NA	Solid	537 (modified)	390751
320-62194-3	B-15 (1'-2')	Total/NA	Solid	537 (modified)	390751
320-62194-4	B-16 (1'-2')	Total/NA	Solid	537 (modified)	390751
MB 320-390751/1-A	Method Blank	Total/NA	Solid	537 (modified)	390751
LCS 320-390751/2-A	Lab Control Sample	Total/NA	Solid	537 (modified)	390751
320-62194-1 MS	B-13 (1'-2')	Total/NA	Solid	537 (modified)	390751
320-62194-1 MSD	B-13 (1'-2')	Total/NA	Solid	537 (modified)	390751

General Chemistry

Analysis Batch: 391734

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-62194-1	B-13 (1'-2')	Total/NA	Solid	D 2216	14
320-62194-2	B-14 (1'-2')	Total/NA	Solid	D 2216	15
320-62194-3	B-15 (1'-2')	Total/NA	Solid	D 2216	1
320-62194-4	B-16 (1'-2')	Total/NA	Solid	D 2216	2
320-62194-1 DU	B-13 (1'-2')	Total/NA	Solid	D 2216	3

Lab Chronicle

Client: K. Singh & Associates, Inc
 Project/Site: Community Within the Corridor - 40405

Job ID: 320-62194-1

Client Sample ID: B-13 (1'-2')

Date Collected: 06/25/20 09:15

Date Received: 06/26/20 09:30

Lab Sample ID: 320-62194-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1			391734	07/02/20 14:29	TCS	TAL SAC

Client Sample ID: B-13 (1'-2')

Date Collected: 06/25/20 09:15

Date Received: 06/26/20 09:30

Lab Sample ID: 320-62194-1

Matrix: Solid

Percent Solids: 87.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			5.05 g	10.00 mL	390751	06/30/20 04:43	MA	TAL SAC
Total/NA	Analysis	537 (modified)		1			391493	07/02/20 03:49	MNV	TAL SAC

Client Sample ID: B-14 (1'-2')

Date Collected: 06/25/20 10:05

Date Received: 06/26/20 09:30

Lab Sample ID: 320-62194-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1			391734	07/02/20 14:29	TCS	TAL SAC

Client Sample ID: B-14 (1'-2')

Date Collected: 06/25/20 10:05

Date Received: 06/26/20 09:30

Lab Sample ID: 320-62194-2

Matrix: Solid

Percent Solids: 82.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			5.03 g	10.00 mL	390751	06/30/20 04:43	MA	TAL SAC
Total/NA	Analysis	537 (modified)		1			391493	07/02/20 04:17	MNV	TAL SAC

Client Sample ID: B-15 (1'-2')

Date Collected: 06/25/20 10:30

Date Received: 06/26/20 09:30

Lab Sample ID: 320-62194-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1			391734	07/02/20 14:29	TCS	TAL SAC

Client Sample ID: B-15 (1'-2')

Date Collected: 06/25/20 10:30

Date Received: 06/26/20 09:30

Lab Sample ID: 320-62194-3

Matrix: Solid

Percent Solids: 86.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			5.07 g	10.00 mL	390751	06/30/20 04:43	MA	TAL SAC
Total/NA	Analysis	537 (modified)		1			391493	07/02/20 04:27	MNV	TAL SAC

Client Sample ID: B-16 (1'-2')

Date Collected: 06/25/20 11:10

Date Received: 06/26/20 09:30

Lab Sample ID: 320-62194-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216		1			391734	07/02/20 14:29	TCS	TAL SAC

Eurofins TestAmerica, Sacramento

Lab Chronicle

Client: K. Singh & Associates, Inc
Project/Site: Community Within the Corridor - 40405

Job ID: 320-62194-1

Client Sample ID: B-16 (1'-2')

Date Collected: 06/25/20 11:10

Date Received: 06/26/20 09:30

Lab Sample ID: 320-62194-4

Matrix: Solid

Percent Solids: 82.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			5.00 g	10.00 mL	390751	06/30/20 04:43	MA	TAL SAC
Total/NA	Analysis	537 (modified)		1			391493	07/02/20 04:36	MNV	TAL SAC

Laboratory References:

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Accreditation/Certification Summary

Client: K. Singh & Associates, Inc

Project/Site: Community Within the Corridor - 40405

Job ID: 320-62194-1

Laboratory: Eurofins TestAmerica, Sacramento

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	17-020	01-20-21
ANAB	Dept. of Defense ELAP	L2468	01-20-21
ANAB	Dept. of Energy	L2468.01	01-20-21
ANAB	ISO/IEC 17025	L2468	01-20-21
Arizona	State	AZ0708	08-11-20
California	State	2897	01-31-22
Colorado	State	CA0004	08-31-20
Connecticut	State	PH-0691	06-30-21
Florida	NELAP	E87570	07-01-21
Georgia	State	4040	01-30-21
Hawaii	State	<cert No.>	01-29-21
Illinois	NELAP	200060	03-17-21
Kansas	NELAP	E-10375	10-31-20
Maine	State	2018009	04-14-22
Michigan	State	9947	01-31-22
Nevada	State	CA000442020-1	07-31-20
New Hampshire	NELAP	2997	04-18-21
New Jersey	NELAP	CA005	06-30-21
New York	NELAP	11666	04-01-21
Oregon	NELAP	4040	01-29-21
Pennsylvania	NELAP	68-01272	03-31-21
Texas	NELAP	T104704399-19-13	06-01-21
US Fish & Wildlife	US Federal Programs	58448	07-31-20
USDA	US Federal Programs	P330-18-00239	07-31-21
Utah	NELAP	CA000442019-01	02-28-21
Vermont	State	VT-4040	04-16-21
Virginia	NELAP	460278	03-14-21
Washington	State	C581	05-05-21
West Virginia (DW)	State	9930C	12-31-20
Wyoming	State Program	8TMS-L	01-28-19 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins TestAmerica, Sacramento

Method Summary

Client: K. Singh & Associates, Inc

Project/Site: Community Within the Corridor - 40405

Job ID: 320-62194-1

Method	Method Description	Protocol	Laboratory
537 (modified)	Fluorinated Alkyl Substances	EPA	TAL SAC
D 2216	Percent Moisture	ASTM	TAL SAC
SHAKE	Shake Extraction with Ultrasonic Bath Extraction	SW846	TAL SAC

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

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Sample Summary

Client: K. Singh & Associates, Inc

Project/Site: Community Within the Corridor - 40405

Job ID: 320-62194-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
320-62194-1	B-13 (1'-2')	Solid	06/25/20 09:15	06/26/20 09:30	
320-62194-2	B-14 (1'-2')	Solid	06/25/20 10:05	06/26/20 09:30	
320-62194-3	B-15 (1'-2')	Solid	06/25/20 10:30	06/26/20 09:30	
320-62194-4	B-16 (1'-2')	Solid	06/25/20 11:10	06/26/20 09:30	

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Sample Collector(s) Kyle Vander Heiden & Daniel Trekas	Title Staff Geologist	Telephone # (incl. area code) (262) 821-1171	Report To Kyle Vander Heiden & Robert Reineke
Property Owner Community Within the Corridor	Property Address 2748 N. 32nd St Milwaukee, WI	Telephone # (incl. area code)	KSingh Project # #40405
I hereby certify that I received, properly, and disposed of the samples as noted below: Relinquished By (Signature) <i>Jerry Wren</i>	Laboratory Name TestAmerica	Received By (Signature) <i>Jerry Wren</i>	Received By (Signature) <i>ETX - SAC</i> June 26, 2019
1 Specify groundwater (GW), soil (S), air (A), sludge (SL), surface water (SW), etc. 2 Sample description must clearly correlate the sample I.D. to the sampling location	Date/Time 06/25/2020 12:25	Date/Time 6-25-20 17:00	# / Type of Container HNO3 HCl H2SO4 Unpres. Other Comment ---
PFAS - 36			
Date Collected	Time Collected	Samples	Location/Description (2)
6/25/2020	9:15	Type (1) Device Soil Hand Auger	B-13 (1'-2')
6/25/2020	10:05	Soil Hand Auger	B-14 (1'-2')
6/25/2020	10:30	Soil Hand Auger	B-15 (1'-2')
6/25/2020	11:10	Soil Hand Auger	B-16 (1'-2')
320-62194 Chain of Custody			
NOTE(S):			
DEPARTMENT USE / OPTIONAL FOR SOIL SAMPLES		DEPARTMENT USE ONLY	
Disposition of unused portion of sample Laboratory should check: <input checked="" type="checkbox"/> Dispose <input type="checkbox"/> Return <input type="checkbox"/> Retain for _____ (days)		Offered <input type="checkbox"/> Y <input type="checkbox"/> N	Accepted <input type="checkbox"/> Y <input type="checkbox"/> N
Accepted By _____ Signature _____ Date _____			

The container's ID lists 9:30 for time. PK 6/26/20 O.1c

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Sample Collector(s) Kyle Vander Heiden & Daniel Trekas	Title Staff Geologist	Telephone # (Incl. area code) (262) 821-1171	Report To Kyle Vander Heiden & Robert Reineke																																																																																																				
Property Owner Community Within the Corridor	Property Address 2748 N. 32nd St Milwaukee, WI	Telephone # (Incl. area code)	KSingh Project # #40405																																																																																																				
I hereby certify that I received, properly, and disposed of the samples as noted below: Relinquished By (Signature) <i>Daniel Trekas</i>																																																																																																							
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Login Sample Receipt Checklist

Client: K. Singh & Associates, Inc

Job Number: 320-62194-1

Login Number: 62194

List Source: Eurofins TestAmerica, Sacramento

List Number: 1

Creator: Oropeza, Salvador

Question	Answer	Comment	
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True		1
The cooler's custody seal, if present, is intact.	True	1022883	2
Sample custody seals, if present, are intact.	N/A		3
The cooler or samples do not appear to have been compromised or tampered with.	True		4
Samples were received on ice.	True		5
Cooler Temperature is acceptable.	True		6
Cooler Temperature is recorded.	True		7
COC is present.	True		8
COC is filled out in ink and legible.	True		9
COC is filled out with all pertinent information.	True		10
Is the Field Sampler's name present on COC?	True		11
There are no discrepancies between the containers received and the COC.	True		12
Samples are received within Holding Time (excluding tests with immediate HTs)	True		13
Sample containers have legible labels.	True		14
Containers are not broken or leaking.	True		15
Sample collection date/times are provided.	True		
Appropriate sample containers are used.	True		
Sample bottles are completely filled.	True		
Sample Preservation Verified.	N/A		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True		
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True		
Multiphasic samples are not present.	True		
Samples do not require splitting or compositing.	True		
Residual Chlorine Checked.	N/A		