

From: Brand, Jeff <Jeff.Brand@stantec.com>
Sent: Wednesday, July 3, 2019 1:53 PM
To: Krueger, Sarah E - DNR
Subject: Project Status Update - Tynan Property, W998 STH 23, Town of Forest, WI; BRRTS# 02-20-554881
Attachments: 2019.06.20_Figure 1 SB and TW locations.pdf; Table 1 Water Quality.pdf; Soil Boring Logs.pdf; Well Construction Forms.pdf; J165419-1 UDS Level 2 Report Final Report.pdf

Good afternoon Sarah-

Stantec is providing a project status update for the Tynan Property Site, W998 STH 23, town of Forest, Wisconsin (the Site). This email presents the results of the additional investigation activities completed at the Site in June 2019.

Soil Sampling Overview

On June 18, 2019, Stantec observed the advancement of three soil borings (B100 – B300) on the Site by Geiss Soil and Samples, LLC (Geiss) of Merrill, Wisconsin using a truck-mounted Geoprobe®. Stantec personnel collected soil samples continuously at each boring location in two-foot intervals from the ground surface to a maximum depth of 20 feet below grade (fbg). Soil boring locations are illustrated on Figure 1. Each two-foot soil sampling interval was divided into two aliquots; one used for field screening purposes and one used to supply materials for potential submittal to the laboratory for chemical analysis. The laboratory aliquot for each soil sample was immediately placed into laboratory provided containers, sealed, and placed in a cooler with ice. The other portion of each sample was placed into plastic Ziploc® bags and used to field screen for the presence of VOCs using a photoionization detector (PID). An unsaturated soil sample from the top four feet of each boring exhibiting the highest field PID was submitted for laboratory analysis of lead and/or volatile organic compounds (VOCs). Soil field screening results are summarized on the attached soil boring logs.

Monitoring Well Installation and Groundwater Sampling Overview

Groundwater monitoring wells were installed in soil borings B100, B200, and B300 and designated as TW100, TW200, and TW300, respectively. The monitoring wells were constructed using 1-inch inner diameter, schedule 40 polyvinyl chloride (PVC) casing with 15-foot lengths of factory-slotted PVC screen (0.010-inch slot) that were positioned to intersect the water table. Temporary monitoring well locations are shown on Figure 1. Monitoring well construction forms have also been attached.

On the same day, Stantec personnel collected water levels, pH and conductivity readings, and groundwater samples from each monitoring well. As part of the groundwater sample collection process, observations were specifically made for the presence of unusual odors, oil droplets, or a petroleum sheen, which could indicate the presence on the water table of a floating layer of Light Non-Aqueous Phase Liquids (LNAPLs). No evidence of unusual odors or LNAPL were observed by Stantec personnel in any of the wells installed on the Site. Water quality readings are summarized in Table 1.

Groundwater samples were collected via low flow method and poured directly into pre-cleaned sample bottles provided by Test America's (TA) Chicago, Illinois area laboratory. The bottles were prepared with pre-measured chemical preservatives by the analytical laboratory (i.e., hydrochloric acid for VOC samples). The sample bottles were packed into a cooler with ice immediately after collection and delivered under chain-of-custody procedures to TA for analysis of volatile organic compounds (VOCs).

Soil Analytical Results

Lead and/or styrene was detected in each of the soil samples collected. However, neither was found to exceed the Wisconsin Administrative Code (WAC) Natural Resources (NR720) Residual Contaminant Levels (RCLs) for non-industrial direct or for protection of groundwater. Soil sample results can be found on the attached laboratory analytical report.

Groundwater Analytical Results

Various petroleum compounds were found in groundwater samples collected from temporary monitoring wells TW100 and TW300. However, none of the compounds were found in excess of the NR140 Preventive Action Limit (PAL) or NR140 Enforcement Standard (ES). Groundwater analytical results can be found on the attached laboratory analytical report.

Please feel free to call me if you would have any questions or if you would like to discuss any of the results. Thank you.

Jeff Brand

Engineer in Training

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Stantec



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SCALE IN FEET
25 0 25 50

LEGEND

- APPROXIMATE PROPERTY LINE
- B-2 RMT SOIL BORING LOCATION
- B-1 RMT SOIL BORING AND TEMPORARY MONITORING WELL LOCATION
- ☒ B100/TW100 STANTEC SOIL BORING AND TEMPORARY MONITORING WELL LOCATION
- ▲ TYNAN PRIVATE WELL LOCATION (ABANDONED)



1165 Scheuring Road, Green Bay, Wisconsin 54115
Phone: 920-592-8400 Fax: 920-592-8444

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SITE LAYOUT WITH SOIL BORING AND TEMPORARY MONITORING WELL LOCATIONS

TYNAN PROPERTY
W998 STH 23

(PARCELS #T10-15-19-15-01-003-00, #T10-15-19-15-03-002-00)
TOWN OF FOREST, WISCONSIN

DATE: 06/20/19 DRAWN BY: JRB PROJECT MANAGER: JRB PROJECT NUMBER: 193706841 FIGURE 1



Environment Testing TestAmerica



ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-165419-1
Client Project/Site: Tynan Property - 193706841

For:
Stantec Consulting Corp.
1165 Scheuring Road
De Pere, Wisconsin 54115

Attn: Mr. Jeff Brand

Authorized for release by:
7/3/2019 8:10:19 AM
Eric Lang, Manager of Project Management
(708)534-5200
eric.lang@testamericainc.com

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

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The test results in this report meet all 2003 NELAC and 2009 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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Case Narrative

Client: Stantec Consulting Corp.
Project/Site: Tynan Property - 193706841

Job ID: 500-165419-1

Job ID: 500-165419-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative 500-165419-1

Comments

No additional comments.

Receipt

The samples were received on 6/20/2019 9:40 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.8° C.

GC/MS VOA

The method blank for 492693 contained Styrene above the method detection limit and below the Reporting limit (RL). This target analyte concentration was greater than the reporting limit (RL) in the associated samples; therefore, re-analysis of samples was not performed. Styrene results have been flagged in the associated samples with a "B" flag denote the presence in the blank; therefore the results were reported.

The method blank for 492693 contained Styrene above the method detection limit and below the Reporting limit (RL). This target analyte concentration was not detected in the associated samples therefore: the data was reported.

The laboratory control sample (LCS) for 492693 recovered outside control limits for the following analyte: Methyl tert-butyl ether. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

The laboratory control sample (LCS) for 492694 recovered outside control limits for the following analyte: Methyl tert-butyl ether. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

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

Metals

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

Detection Summary

Client: Stantec Consulting Corp.
Project/Site: Tynan Property - 193706841

Job ID: 500-165419-1

Client Sample ID: S102

Lab Sample ID: 500-165419-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Styrene	41	J B	55	21	ug/Kg	50	⊗	8260B	Total/NA

Client Sample ID: S202

Lab Sample ID: 500-165419-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Styrene	31	J B	50	19	ug/Kg	50	⊗	8260B	Total/NA
Lead	3.0		0.57	0.26	mg/Kg	1	⊗	6010C	Total/NA

Client Sample ID: S302

Lab Sample ID: 500-165419-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Styrene	26	J B	49	19	ug/Kg	50	⊗	8260B	Total/NA
Lead	9.6		0.55	0.25	mg/Kg	1	⊗	6010C	Total/NA

Client Sample ID: TW100

Lab Sample ID: 500-165419-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.21	J	0.50	0.15	ug/L	1		8260B	Total/NA

Client Sample ID: TW200

Lab Sample ID: 500-165419-5

No Detections.

Client Sample ID: TW300

Lab Sample ID: 500-165419-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.26	J	0.50	0.15	ug/L	1		8260B	Total/NA
Toluene	0.50		0.50	0.15	ug/L	1		8260B	Total/NA
Xylenes, Total	0.26	J	1.0	0.22	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Method Summary

Client: Stantec Consulting Corp.
Project/Site: Tynan Property - 193706841

Job ID: 500-165419-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
6010C	Metals (ICP)	SW846	TAL CHI
Moisture	Percent Moisture	EPA	TAL CHI
3050B	Preparation, Metals	SW846	TAL CHI
5030B	Purge and Trap	SW846	TAL CHI
5035	Closed System Purge and Trap	SW846	TAL CHI

Protocol References:

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 CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

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Sample Summary

Client: Stantec Consulting Corp.
Project/Site: Tynan Property - 193706841

Job ID: 500-165419-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID	
500-165419-1	S102	Solid	06/18/19 09:32	06/20/19 09:40		1
500-165419-2	S202	Solid	06/18/19 10:10	06/20/19 09:40		2
500-165419-3	S302	Solid	06/18/19 10:50	06/20/19 09:40		3
500-165419-4	TW100	Water	06/18/19 12:41	06/20/19 09:40		4
500-165419-5	TW200	Water	06/18/19 12:16	06/20/19 09:40		5
500-165419-6	TW300	Water	06/18/19 11:37	06/20/19 09:40		6

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: Tynan Property - 193706841

Job ID: 500-165419-1

Client Sample ID: S102

Date Collected: 06/18/19 09:32
Date Received: 06/20/19 09:40

Lab Sample ID: 500-165419-1

Matrix: Solid

Percent Solids: 81.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<25		55	25	ug/Kg	⊗	06/18/19 09:32	06/29/19 13:02	50
1,1,1-Trichloroethane	<21		55	21	ug/Kg	⊗	06/18/19 09:32	06/29/19 13:02	50
1,1,2,2-Tetrachloroethane	<22		55	22	ug/Kg	⊗	06/18/19 09:32	06/29/19 13:02	50
1,1,2-Trichloroethane	<19		55	19	ug/Kg	⊗	06/18/19 09:32	06/29/19 13:02	50
1,1-Dichloroethane	<22		55	22	ug/Kg	⊗	06/18/19 09:32	06/29/19 13:02	50
1,1-Dichloroethene	<21		55	21	ug/Kg	⊗	06/18/19 09:32	06/29/19 13:02	50
1,1-Dichloropropene	<16		55	16	ug/Kg	⊗	06/18/19 09:32	06/29/19 13:02	50
1,2,3-Trichlorobenzene	<25		55	25	ug/Kg	⊗	06/18/19 09:32	06/29/19 13:02	50
1,2,3-Trichloropropane	<23		110	23	ug/Kg	⊗	06/18/19 09:32	06/29/19 13:02	50
1,2,4-Trichlorobenzene	<19		55	19	ug/Kg	⊗	06/18/19 09:32	06/29/19 13:02	50
1,2,4-Trimethylbenzene	<20		55	20	ug/Kg	⊗	06/18/19 09:32	06/29/19 13:02	50
1,2-Dibromo-3-Chloropropane	<110		270	110	ug/Kg	⊗	06/18/19 09:32	06/29/19 13:02	50
1,2-Dibromoethane	<21		55	21	ug/Kg	⊗	06/18/19 09:32	06/29/19 13:02	50
1,2-Dichlorobenzene	<18		55	18	ug/Kg	⊗	06/18/19 09:32	06/29/19 13:02	50
1,2-Dichloroethane	<21		55	21	ug/Kg	⊗	06/18/19 09:32	06/29/19 13:02	50
1,2-Dichloropropene	<23		55	23	ug/Kg	⊗	06/18/19 09:32	06/29/19 13:02	50
1,3,5-Trimethylbenzene	<21		55	21	ug/Kg	⊗	06/18/19 09:32	06/29/19 13:02	50
1,3-Dichlorobenzene	<22		55	22	ug/Kg	⊗	06/18/19 09:32	06/29/19 13:02	50
1,3-Dichloropropane	<20		55	20	ug/Kg	⊗	06/18/19 09:32	06/29/19 13:02	50
1,4-Dichlorobenzene	<20		55	20	ug/Kg	⊗	06/18/19 09:32	06/29/19 13:02	50
2,2-Dichloropropane	<24		55	24	ug/Kg	⊗	06/18/19 09:32	06/29/19 13:02	50
2-Chlorotoluene	<17		55	17	ug/Kg	⊗	06/18/19 09:32	06/29/19 13:02	50
4-Chlorotoluene	<19		55	19	ug/Kg	⊗	06/18/19 09:32	06/29/19 13:02	50
Benzene	<8.0		14	8.0	ug/Kg	⊗	06/18/19 09:32	06/29/19 13:02	50
Bromobenzene	<19		55	19	ug/Kg	⊗	06/18/19 09:32	06/29/19 13:02	50
Bromochloromethane	<23		55	23	ug/Kg	⊗	06/18/19 09:32	06/29/19 13:02	50
Bromodichloromethane	<20		55	20	ug/Kg	⊗	06/18/19 09:32	06/29/19 13:02	50
Bromoform	<26		55	26	ug/Kg	⊗	06/18/19 09:32	06/29/19 13:02	50
Bromomethane	<43		160	43	ug/Kg	⊗	06/18/19 09:32	06/29/19 13:02	50
Carbon tetrachloride	<21		55	21	ug/Kg	⊗	06/18/19 09:32	06/29/19 13:02	50
Chlorobenzene	<21		55	21	ug/Kg	⊗	06/18/19 09:32	06/29/19 13:02	50
Chloroethane	<27		55	27	ug/Kg	⊗	06/18/19 09:32	06/29/19 13:02	50
Chloroform	<20		110	20	ug/Kg	⊗	06/18/19 09:32	06/29/19 13:02	50
Chloromethane	<17		55	17	ug/Kg	⊗	06/18/19 09:32	06/29/19 13:02	50
cis-1,2-Dichloroethene	<22		55	22	ug/Kg	⊗	06/18/19 09:32	06/29/19 13:02	50
cis-1,3-Dichloropropene	<23		55	23	ug/Kg	⊗	06/18/19 09:32	06/29/19 13:02	50
Dibromochloromethane	<27		55	27	ug/Kg	⊗	06/18/19 09:32	06/29/19 13:02	50
Dibromomethane	<15		55	15	ug/Kg	⊗	06/18/19 09:32	06/29/19 13:02	50
Dichlorodifluoromethane	<37		160	37	ug/Kg	⊗	06/18/19 09:32	06/29/19 13:02	50
Ethylbenzene	<10		14	10	ug/Kg	⊗	06/18/19 09:32	06/29/19 13:02	50
Hexachlorobutadiene	<24		55	24	ug/Kg	⊗	06/18/19 09:32	06/29/19 13:02	50
Isopropyl ether	<15		55	15	ug/Kg	⊗	06/18/19 09:32	06/29/19 13:02	50
Isopropylbenzene	<21		55	21	ug/Kg	⊗	06/18/19 09:32	06/29/19 13:02	50
Methyl tert-butyl ether	<21 *		55	21	ug/Kg	⊗	06/18/19 09:32	06/29/19 13:02	50
Methylene Chloride	<89		270	89	ug/Kg	⊗	06/18/19 09:32	06/29/19 13:02	50
Naphthalene	<18		55	18	ug/Kg	⊗	06/18/19 09:32	06/29/19 13:02	50
n-Butylbenzene	<21		55	21	ug/Kg	⊗	06/18/19 09:32	06/29/19 13:02	50
N-Propylbenzene	<23		55	23	ug/Kg	⊗	06/18/19 09:32	06/29/19 13:02	50
p-Isopropyltoluene	<20		55	20	ug/Kg	⊗	06/18/19 09:32	06/29/19 13:02	50

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: Tynan Property - 193706841

Job ID: 500-165419-1

Client Sample ID: S102

Date Collected: 06/18/19 09:32
Date Received: 06/20/19 09:40

Lab Sample ID: 500-165419-1

Matrix: Solid

Percent Solids: 81.5

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<22		55	22	ug/Kg	⊗	06/18/19 09:32	06/29/19 13:02	50
Styrene	41	J B	55	21	ug/Kg	⊗	06/18/19 09:32	06/29/19 13:02	50
tert-Butylbenzene	<22		55	22	ug/Kg	⊗	06/18/19 09:32	06/29/19 13:02	50
Tetrachloroethene	<20		55	20	ug/Kg	⊗	06/18/19 09:32	06/29/19 13:02	50
Toluene	<8.0		14	8.0	ug/Kg	⊗	06/18/19 09:32	06/29/19 13:02	50
trans-1,2-Dichloroethene	<19		55	19	ug/Kg	⊗	06/18/19 09:32	06/29/19 13:02	50
trans-1,3-Dichloropropene	<20		55	20	ug/Kg	⊗	06/18/19 09:32	06/29/19 13:02	50
Trichloroethene	<8.9		27	8.9	ug/Kg	⊗	06/18/19 09:32	06/29/19 13:02	50
Trichlorofluoromethane	<23		55	23	ug/Kg	⊗	06/18/19 09:32	06/29/19 13:02	50
Vinyl chloride	<14		55	14	ug/Kg	⊗	06/18/19 09:32	06/29/19 13:02	50
Xylenes, Total	<12		27	12	ug/Kg	⊗	06/18/19 09:32	06/29/19 13:02	50
Surrogate		%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102			75 - 126			06/18/19 09:32	06/29/19 13:02	50
4-Bromofluorobenzene (Surr)	107			72 - 124			06/18/19 09:32	06/29/19 13:02	50
Dibromofluoromethane	104			75 - 120			06/18/19 09:32	06/29/19 13:02	50
Toluene-d8 (Surr)	90			75 - 120			06/18/19 09:32	06/29/19 13:02	50

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: Tynan Property - 193706841

Job ID: 500-165419-1

Client Sample ID: S202

Date Collected: 06/18/19 10:10

Date Received: 06/20/19 09:40

Lab Sample ID: 500-165419-2

Matrix: Solid

Percent Solids: 85.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<23		50	23	ug/Kg	⊗	06/18/19 10:10	06/29/19 13:30	50
1,1,1-Trichloroethane	<19		50	19	ug/Kg	⊗	06/18/19 10:10	06/29/19 13:30	50
1,1,2,2-Tetrachloroethane	<20		50	20	ug/Kg	⊗	06/18/19 10:10	06/29/19 13:30	50
1,1,2-Trichloroethane	<18		50	18	ug/Kg	⊗	06/18/19 10:10	06/29/19 13:30	50
1,1-Dichloroethane	<20		50	20	ug/Kg	⊗	06/18/19 10:10	06/29/19 13:30	50
1,1-Dichloroethene	<19		50	19	ug/Kg	⊗	06/18/19 10:10	06/29/19 13:30	50
1,1-Dichloropropene	<15		50	15	ug/Kg	⊗	06/18/19 10:10	06/29/19 13:30	50
1,2,3-Trichlorobenzene	<23		50	23	ug/Kg	⊗	06/18/19 10:10	06/29/19 13:30	50
1,2,3-Trichloropropane	<21		100	21	ug/Kg	⊗	06/18/19 10:10	06/29/19 13:30	50
1,2,4-Trichlorobenzene	<17		50	17	ug/Kg	⊗	06/18/19 10:10	06/29/19 13:30	50
1,2,4-Trimethylbenzene	<18		50	18	ug/Kg	⊗	06/18/19 10:10	06/29/19 13:30	50
1,2-Dibromo-3-Chloropropane	<99		250	99	ug/Kg	⊗	06/18/19 10:10	06/29/19 13:30	50
1,2-Dibromoethane	<19		50	19	ug/Kg	⊗	06/18/19 10:10	06/29/19 13:30	50
1,2-Dichlorobenzene	<17		50	17	ug/Kg	⊗	06/18/19 10:10	06/29/19 13:30	50
1,2-Dichloroethane	<20		50	20	ug/Kg	⊗	06/18/19 10:10	06/29/19 13:30	50
1,2-Dichloropropene	<21		50	21	ug/Kg	⊗	06/18/19 10:10	06/29/19 13:30	50
1,3,5-Trimethylbenzene	<19		50	19	ug/Kg	⊗	06/18/19 10:10	06/29/19 13:30	50
1,3-Dichlorobenzene	<20		50	20	ug/Kg	⊗	06/18/19 10:10	06/29/19 13:30	50
1,3-Dichloropropane	<18		50	18	ug/Kg	⊗	06/18/19 10:10	06/29/19 13:30	50
1,4-Dichlorobenzene	<18		50	18	ug/Kg	⊗	06/18/19 10:10	06/29/19 13:30	50
2,2-Dichloropropane	<22		50	22	ug/Kg	⊗	06/18/19 10:10	06/29/19 13:30	50
2-Chlorotoluene	<16		50	16	ug/Kg	⊗	06/18/19 10:10	06/29/19 13:30	50
4-Chlorotoluene	<17		50	17	ug/Kg	⊗	06/18/19 10:10	06/29/19 13:30	50
Benzene	<7.3		12	7.3	ug/Kg	⊗	06/18/19 10:10	06/29/19 13:30	50
Bromobenzene	<18		50	18	ug/Kg	⊗	06/18/19 10:10	06/29/19 13:30	50
Bromochloromethane	<21		50	21	ug/Kg	⊗	06/18/19 10:10	06/29/19 13:30	50
Bromodichloromethane	<19		50	19	ug/Kg	⊗	06/18/19 10:10	06/29/19 13:30	50
Bromoform	<24		50	24	ug/Kg	⊗	06/18/19 10:10	06/29/19 13:30	50
Bromomethane	<40		150	40	ug/Kg	⊗	06/18/19 10:10	06/29/19 13:30	50
Carbon tetrachloride	<19		50	19	ug/Kg	⊗	06/18/19 10:10	06/29/19 13:30	50
Chlorobenzene	<19		50	19	ug/Kg	⊗	06/18/19 10:10	06/29/19 13:30	50
Chloroethane	<25		50	25	ug/Kg	⊗	06/18/19 10:10	06/29/19 13:30	50
Chloroform	<18		100	18	ug/Kg	⊗	06/18/19 10:10	06/29/19 13:30	50
Chloromethane	<16		50	16	ug/Kg	⊗	06/18/19 10:10	06/29/19 13:30	50
cis-1,2-Dichloroethene	<20		50	20	ug/Kg	⊗	06/18/19 10:10	06/29/19 13:30	50
cis-1,3-Dichloropropene	<21		50	21	ug/Kg	⊗	06/18/19 10:10	06/29/19 13:30	50
Dibromochloromethane	<24		50	24	ug/Kg	⊗	06/18/19 10:10	06/29/19 13:30	50
Dibromomethane	<13		50	13	ug/Kg	⊗	06/18/19 10:10	06/29/19 13:30	50
Dichlorodifluoromethane	<34		150	34	ug/Kg	⊗	06/18/19 10:10	06/29/19 13:30	50
Ethylbenzene	<9.1		12	9.1	ug/Kg	⊗	06/18/19 10:10	06/29/19 13:30	50
Hexachlorobutadiene	<22		50	22	ug/Kg	⊗	06/18/19 10:10	06/29/19 13:30	50
Isopropyl ether	<14		50	14	ug/Kg	⊗	06/18/19 10:10	06/29/19 13:30	50
Isopropylbenzene	<19		50	19	ug/Kg	⊗	06/18/19 10:10	06/29/19 13:30	50
Methyl tert-butyl ether	<20 *		50	20	ug/Kg	⊗	06/18/19 10:10	06/29/19 13:30	50
Methylene Chloride	<81		250	81	ug/Kg	⊗	06/18/19 10:10	06/29/19 13:30	50
Naphthalene	<17		50	17	ug/Kg	⊗	06/18/19 10:10	06/29/19 13:30	50
n-Butylbenzene	<19		50	19	ug/Kg	⊗	06/18/19 10:10	06/29/19 13:30	50
N-Propylbenzene	<21		50	21	ug/Kg	⊗	06/18/19 10:10	06/29/19 13:30	50
p-Isopropyltoluene	<18		50	18	ug/Kg	⊗	06/18/19 10:10	06/29/19 13:30	50

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: Tynan Property - 193706841

Job ID: 500-165419-1

Client Sample ID: S202

Lab Sample ID: 500-165419-2

Date Collected: 06/18/19 10:10
Date Received: 06/20/19 09:40

Matrix: Solid

Percent Solids: 85.7

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<20		50	20	ug/Kg	⊗	06/18/19 10:10	06/29/19 13:30	50
Styrene	31	J B	50	19	ug/Kg	⊗	06/18/19 10:10	06/29/19 13:30	50
tert-Butylbenzene	<20		50	20	ug/Kg	⊗	06/18/19 10:10	06/29/19 13:30	50
Tetrachloroethene	<18		50	18	ug/Kg	⊗	06/18/19 10:10	06/29/19 13:30	50
Toluene	<7.3		12	7.3	ug/Kg	⊗	06/18/19 10:10	06/29/19 13:30	50
trans-1,2-Dichloroethene	<17		50	17	ug/Kg	⊗	06/18/19 10:10	06/29/19 13:30	50
trans-1,3-Dichloropropene	<18		50	18	ug/Kg	⊗	06/18/19 10:10	06/29/19 13:30	50
Trichloroethene	<8.2		25	8.2	ug/Kg	⊗	06/18/19 10:10	06/29/19 13:30	50
Trichlorofluoromethane	<21		50	21	ug/Kg	⊗	06/18/19 10:10	06/29/19 13:30	50
Vinyl chloride	<13		50	13	ug/Kg	⊗	06/18/19 10:10	06/29/19 13:30	50
Xylenes, Total	<11		25	11	ug/Kg	⊗	06/18/19 10:10	06/29/19 13:30	50
Surrogate	%Recovery	Qualifier		Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102			75 - 126			06/18/19 10:10	06/29/19 13:30	50
4-Bromofluorobenzene (Surr)	107			72 - 124			06/18/19 10:10	06/29/19 13:30	50
Dibromofluoromethane	103			75 - 120			06/18/19 10:10	06/29/19 13:30	50
Toluene-d8 (Surr)	89			75 - 120			06/18/19 10:10	06/29/19 13:30	50

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	3.0		0.57	0.26	mg/Kg	⊗	06/25/19 07:43	06/26/19 09:44	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: Tynan Property - 193706841

Job ID: 500-165419-1

Client Sample ID: S302

Date Collected: 06/18/19 10:50

Date Received: 06/20/19 09:40

Lab Sample ID: 500-165419-3

Matrix: Solid

Percent Solids: 84.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<23		49	23	ug/Kg	⊗	06/18/19 10:50	06/29/19 13:57	50
1,1,1-Trichloroethane	<19		49	19	ug/Kg	⊗	06/18/19 10:50	06/29/19 13:57	50
1,1,2,2-Tetrachloroethane	<19		49	19	ug/Kg	⊗	06/18/19 10:50	06/29/19 13:57	50
1,1,2-Trichloroethane	<17		49	17	ug/Kg	⊗	06/18/19 10:50	06/29/19 13:57	50
1,1-Dichloroethane	<20		49	20	ug/Kg	⊗	06/18/19 10:50	06/29/19 13:57	50
1,1-Dichloroethene	<19		49	19	ug/Kg	⊗	06/18/19 10:50	06/29/19 13:57	50
1,1-Dichloropropene	<15		49	15	ug/Kg	⊗	06/18/19 10:50	06/29/19 13:57	50
1,2,3-Trichlorobenzene	<22		49	22	ug/Kg	⊗	06/18/19 10:50	06/29/19 13:57	50
1,2,3-Trichloropropane	<20		98	20	ug/Kg	⊗	06/18/19 10:50	06/29/19 13:57	50
1,2,4-Trichlorobenzene	<17		49	17	ug/Kg	⊗	06/18/19 10:50	06/29/19 13:57	50
1,2,4-Trimethylbenzene	<18		49	18	ug/Kg	⊗	06/18/19 10:50	06/29/19 13:57	50
1,2-Dibromo-3-Chloropropane	<97		240	97	ug/Kg	⊗	06/18/19 10:50	06/29/19 13:57	50
1,2-Dibromoethane	<19		49	19	ug/Kg	⊗	06/18/19 10:50	06/29/19 13:57	50
1,2-Dichlorobenzene	<16		49	16	ug/Kg	⊗	06/18/19 10:50	06/29/19 13:57	50
1,2-Dichloroethane	<19		49	19	ug/Kg	⊗	06/18/19 10:50	06/29/19 13:57	50
1,2-Dichloropropene	<21		49	21	ug/Kg	⊗	06/18/19 10:50	06/29/19 13:57	50
1,3,5-Trimethylbenzene	<19		49	19	ug/Kg	⊗	06/18/19 10:50	06/29/19 13:57	50
1,3-Dichlorobenzene	<20		49	20	ug/Kg	⊗	06/18/19 10:50	06/29/19 13:57	50
1,3-Dichloropropane	<18		49	18	ug/Kg	⊗	06/18/19 10:50	06/29/19 13:57	50
1,4-Dichlorobenzene	<18		49	18	ug/Kg	⊗	06/18/19 10:50	06/29/19 13:57	50
2,2-Dichloropropane	<22		49	22	ug/Kg	⊗	06/18/19 10:50	06/29/19 13:57	50
2-Chlorotoluene	<15		49	15	ug/Kg	⊗	06/18/19 10:50	06/29/19 13:57	50
4-Chlorotoluene	<17		49	17	ug/Kg	⊗	06/18/19 10:50	06/29/19 13:57	50
Benzene	<7.1		12	7.1	ug/Kg	⊗	06/18/19 10:50	06/29/19 13:57	50
Bromobenzene	<17		49	17	ug/Kg	⊗	06/18/19 10:50	06/29/19 13:57	50
Bromochloromethane	<21		49	21	ug/Kg	⊗	06/18/19 10:50	06/29/19 13:57	50
Bromodichloromethane	<18		49	18	ug/Kg	⊗	06/18/19 10:50	06/29/19 13:57	50
Bromoform	<24		49	24	ug/Kg	⊗	06/18/19 10:50	06/29/19 13:57	50
Bromomethane	<39		150	39	ug/Kg	⊗	06/18/19 10:50	06/29/19 13:57	50
Carbon tetrachloride	<19		49	19	ug/Kg	⊗	06/18/19 10:50	06/29/19 13:57	50
Chlorobenzene	<19		49	19	ug/Kg	⊗	06/18/19 10:50	06/29/19 13:57	50
Chloroethane	<25		49	25	ug/Kg	⊗	06/18/19 10:50	06/29/19 13:57	50
Chloroform	<18		98	18	ug/Kg	⊗	06/18/19 10:50	06/29/19 13:57	50
Chloromethane	<16		49	16	ug/Kg	⊗	06/18/19 10:50	06/29/19 13:57	50
cis-1,2-Dichloroethene	<20		49	20	ug/Kg	⊗	06/18/19 10:50	06/29/19 13:57	50
cis-1,3-Dichloropropene	<20		49	20	ug/Kg	⊗	06/18/19 10:50	06/29/19 13:57	50
Dibromochloromethane	<24		49	24	ug/Kg	⊗	06/18/19 10:50	06/29/19 13:57	50
Dibromomethane	<13		49	13	ug/Kg	⊗	06/18/19 10:50	06/29/19 13:57	50
Dichlorodifluoromethane	<33		150	33	ug/Kg	⊗	06/18/19 10:50	06/29/19 13:57	50
Ethylbenzene	<8.9		12	8.9	ug/Kg	⊗	06/18/19 10:50	06/29/19 13:57	50
Hexachlorobutadiene	<22		49	22	ug/Kg	⊗	06/18/19 10:50	06/29/19 13:57	50
Isopropyl ether	<13		49	13	ug/Kg	⊗	06/18/19 10:50	06/29/19 13:57	50
Isopropylbenzene	<19		49	19	ug/Kg	⊗	06/18/19 10:50	06/29/19 13:57	50
Methyl tert-butyl ether	<19 *		49	19	ug/Kg	⊗	06/18/19 10:50	06/29/19 13:57	50
Methylene Chloride	<80		240	80	ug/Kg	⊗	06/18/19 10:50	06/29/19 13:57	50
Naphthalene	<16		49	16	ug/Kg	⊗	06/18/19 10:50	06/29/19 13:57	50
n-Butylbenzene	<19		49	19	ug/Kg	⊗	06/18/19 10:50	06/29/19 13:57	50
N-Propylbenzene	<20		49	20	ug/Kg	⊗	06/18/19 10:50	06/29/19 13:57	50
p-Isopropyltoluene	<18		49	18	ug/Kg	⊗	06/18/19 10:50	06/29/19 13:57	50

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: Tynan Property - 193706841

Job ID: 500-165419-1

Client Sample ID: S302

Date Collected: 06/18/19 10:50

Date Received: 06/20/19 09:40

Lab Sample ID: 500-165419-3

Matrix: Solid

Percent Solids: 84.7

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<19		49	19	ug/Kg	⊗	06/18/19 10:50	06/29/19 13:57	50
Styrene	26	J B	49	19	ug/Kg	⊗	06/18/19 10:50	06/29/19 13:57	50
tert-Butylbenzene	<19		49	19	ug/Kg	⊗	06/18/19 10:50	06/29/19 13:57	50
Tetrachloroethene	<18		49	18	ug/Kg	⊗	06/18/19 10:50	06/29/19 13:57	50
Toluene	<7.2		12	7.2	ug/Kg	⊗	06/18/19 10:50	06/29/19 13:57	50
trans-1,2-Dichloroethene	<17		49	17	ug/Kg	⊗	06/18/19 10:50	06/29/19 13:57	50
trans-1,3-Dichloropropene	<18		49	18	ug/Kg	⊗	06/18/19 10:50	06/29/19 13:57	50
Trichloroethene	<8.0		24	8.0	ug/Kg	⊗	06/18/19 10:50	06/29/19 13:57	50
Trichlorofluoromethane	<21		49	21	ug/Kg	⊗	06/18/19 10:50	06/29/19 13:57	50
Vinyl chloride	<13		49	13	ug/Kg	⊗	06/18/19 10:50	06/29/19 13:57	50
Xylenes, Total	<11		24	11	ug/Kg	⊗	06/18/19 10:50	06/29/19 13:57	50
Surrogate	%Recovery	Qualifier		Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101			75 - 126			06/18/19 10:50	06/29/19 13:57	50
4-Bromofluorobenzene (Surr)	106			72 - 124			06/18/19 10:50	06/29/19 13:57	50
Dibromofluoromethane	104			75 - 120			06/18/19 10:50	06/29/19 13:57	50
Toluene-d8 (Surr)	89			75 - 120			06/18/19 10:50	06/29/19 13:57	50

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	9.6		0.55	0.25	mg/Kg	⊗	06/25/19 07:43	06/26/19 09:48	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: Tynan Property - 193706841

Job ID: 500-165419-1

Client Sample ID: TW100

Date Collected: 06/18/19 12:41

Date Received: 06/20/19 09:40

Lab Sample ID: 500-165419-4

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L		06/29/19 14:24		1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L		06/29/19 14:24		1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L		06/29/19 14:24		1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L		06/29/19 14:24		1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L		06/29/19 14:24		1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L		06/29/19 14:24		1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L		06/29/19 14:24		1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L		06/29/19 14:24		1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L		06/29/19 14:24		1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L		06/29/19 14:24		1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L		06/29/19 14:24		1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L		06/29/19 14:24		1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L		06/29/19 14:24		1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L		06/29/19 14:24		1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L		06/29/19 14:24		1
1,2-Dichloropropene	<0.43		1.0	0.43	ug/L		06/29/19 14:24		1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L		06/29/19 14:24		1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L		06/29/19 14:24		1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L		06/29/19 14:24		1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L		06/29/19 14:24		1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L		06/29/19 14:24		1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L		06/29/19 14:24		1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L		06/29/19 14:24		1
Benzene	<0.15		0.50	0.15	ug/L		06/29/19 14:24		1
Bromobenzene	<0.36		1.0	0.36	ug/L		06/29/19 14:24		1
Bromochloromethane	<0.43		1.0	0.43	ug/L		06/29/19 14:24		1
Bromodichloromethane	<0.37		1.0	0.37	ug/L		06/29/19 14:24		1
Bromoform	<0.48		1.0	0.48	ug/L		06/29/19 14:24		1
Bromomethane	<0.80		3.0	0.80	ug/L		06/29/19 14:24		1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L		06/29/19 14:24		1
Chlorobenzene	<0.39		1.0	0.39	ug/L		06/29/19 14:24		1
Chloroethane	<0.51		1.0	0.51	ug/L		06/29/19 14:24		1
Chloroform	<0.37		2.0	0.37	ug/L		06/29/19 14:24		1
Chloromethane	<0.32		1.0	0.32	ug/L		06/29/19 14:24		1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L		06/29/19 14:24		1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L		06/29/19 14:24		1
Dibromochloromethane	<0.49		1.0	0.49	ug/L		06/29/19 14:24		1
Dibromomethane	<0.27		1.0	0.27	ug/L		06/29/19 14:24		1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L		06/29/19 14:24		1
Ethylbenzene	<0.18		0.50	0.18	ug/L		06/29/19 14:24		1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L		06/29/19 14:24		1
Isopropyl ether	<0.28		1.0	0.28	ug/L		06/29/19 14:24		1
Isopropylbenzene	<0.39		1.0	0.39	ug/L		06/29/19 14:24		1
Methyl tert-butyl ether	<0.39 *		1.0	0.39	ug/L		06/29/19 14:24		1
Methylene Chloride	<1.6		5.0	1.6	ug/L		06/29/19 14:24		1
Naphthalene	<0.34		1.0	0.34	ug/L		06/29/19 14:24		1
n-Butylbenzene	<0.39		1.0	0.39	ug/L		06/29/19 14:24		1
N-Propylbenzene	<0.41		1.0	0.41	ug/L		06/29/19 14:24		1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L		06/29/19 14:24		1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: Tynan Property - 193706841

Job ID: 500-165419-1

Client Sample ID: TW100

Lab Sample ID: 500-165419-4

Date Collected: 06/18/19 12:41

Matrix: Water

Date Received: 06/20/19 09:40

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			06/29/19 14:24	1
Styrene	<0.39		1.0	0.39	ug/L			06/29/19 14:24	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			06/29/19 14:24	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			06/29/19 14:24	1
Toluene	0.21	J	0.50	0.15	ug/L			06/29/19 14:24	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			06/29/19 14:24	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			06/29/19 14:24	1
Trichloroethene	<0.16		0.50	0.16	ug/L			06/29/19 14:24	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			06/29/19 14:24	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			06/29/19 14:24	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			06/29/19 14:24	1
Surrogate		%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)		103		75 - 126				06/29/19 14:24	1
4-Bromofluorobenzene (Surr)		110		72 - 124				06/29/19 14:24	1
Dibromofluoromethane		104		75 - 120				06/29/19 14:24	1
Toluene-d8 (Surr)		90		75 - 120				06/29/19 14:24	1

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: Tynan Property - 193706841

Job ID: 500-165419-1

Client Sample ID: TW200

Date Collected: 06/18/19 12:16

Date Received: 06/20/19 09:40

Lab Sample ID: 500-165419-5

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			06/29/19 14:51	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			06/29/19 14:51	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			06/29/19 14:51	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			06/29/19 14:51	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			06/29/19 14:51	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			06/29/19 14:51	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			06/29/19 14:51	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			06/29/19 14:51	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			06/29/19 14:51	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			06/29/19 14:51	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			06/29/19 14:51	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			06/29/19 14:51	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			06/29/19 14:51	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			06/29/19 14:51	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			06/29/19 14:51	1
1,2-Dichloropropene	<0.43		1.0	0.43	ug/L			06/29/19 14:51	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			06/29/19 14:51	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			06/29/19 14:51	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			06/29/19 14:51	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			06/29/19 14:51	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			06/29/19 14:51	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			06/29/19 14:51	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			06/29/19 14:51	1
Benzene	<0.15		0.50	0.15	ug/L			06/29/19 14:51	1
Bromobenzene	<0.36		1.0	0.36	ug/L			06/29/19 14:51	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			06/29/19 14:51	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			06/29/19 14:51	1
Bromoform	<0.48		1.0	0.48	ug/L			06/29/19 14:51	1
Bromomethane	<0.80		3.0	0.80	ug/L			06/29/19 14:51	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			06/29/19 14:51	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			06/29/19 14:51	1
Chloroethane	<0.51		1.0	0.51	ug/L			06/29/19 14:51	1
Chloroform	<0.37		2.0	0.37	ug/L			06/29/19 14:51	1
Chloromethane	<0.32		1.0	0.32	ug/L			06/29/19 14:51	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			06/29/19 14:51	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			06/29/19 14:51	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			06/29/19 14:51	1
Dibromomethane	<0.27		1.0	0.27	ug/L			06/29/19 14:51	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			06/29/19 14:51	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			06/29/19 14:51	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			06/29/19 14:51	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			06/29/19 14:51	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			06/29/19 14:51	1
Methyl tert-butyl ether	<0.39 *		1.0	0.39	ug/L			06/29/19 14:51	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			06/29/19 14:51	1
Naphthalene	<0.34		1.0	0.34	ug/L			06/29/19 14:51	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			06/29/19 14:51	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			06/29/19 14:51	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			06/29/19 14:51	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: Tynan Property - 193706841

Job ID: 500-165419-1

Client Sample ID: TW200

Lab Sample ID: 500-165419-5

Matrix: Water

Date Collected: 06/18/19 12:16

Date Received: 06/20/19 09:40

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			06/29/19 14:51	1
Styrene	<0.39		1.0	0.39	ug/L			06/29/19 14:51	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			06/29/19 14:51	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			06/29/19 14:51	1
Toluene	<0.15		0.50	0.15	ug/L			06/29/19 14:51	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			06/29/19 14:51	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			06/29/19 14:51	1
Trichloroethene	<0.16		0.50	0.16	ug/L			06/29/19 14:51	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			06/29/19 14:51	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			06/29/19 14:51	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			06/29/19 14:51	1
Surrogate		%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)		104		75 - 126				06/29/19 14:51	1
4-Bromofluorobenzene (Surr)		110		72 - 124				06/29/19 14:51	1
Dibromofluoromethane		106		75 - 120				06/29/19 14:51	1
Toluene-d8 (Surr)		90		75 - 120				06/29/19 14:51	1

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: Tynan Property - 193706841

Job ID: 500-165419-1

Client Sample ID: TW300

Date Collected: 06/18/19 11:37

Date Received: 06/20/19 09:40

Lab Sample ID: 500-165419-6

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			06/29/19 15:19	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			06/29/19 15:19	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			06/29/19 15:19	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			06/29/19 15:19	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			06/29/19 15:19	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			06/29/19 15:19	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			06/29/19 15:19	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			06/29/19 15:19	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			06/29/19 15:19	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			06/29/19 15:19	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			06/29/19 15:19	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			06/29/19 15:19	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			06/29/19 15:19	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			06/29/19 15:19	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			06/29/19 15:19	1
1,2-Dichloropropene	<0.43		1.0	0.43	ug/L			06/29/19 15:19	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			06/29/19 15:19	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			06/29/19 15:19	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			06/29/19 15:19	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			06/29/19 15:19	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			06/29/19 15:19	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			06/29/19 15:19	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			06/29/19 15:19	1
Benzene	0.26 J		0.50	0.15	ug/L			06/29/19 15:19	1
Bromobenzene	<0.36		1.0	0.36	ug/L			06/29/19 15:19	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			06/29/19 15:19	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			06/29/19 15:19	1
Bromoform	<0.48		1.0	0.48	ug/L			06/29/19 15:19	1
Bromomethane	<0.80		3.0	0.80	ug/L			06/29/19 15:19	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			06/29/19 15:19	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			06/29/19 15:19	1
Chloroethane	<0.51		1.0	0.51	ug/L			06/29/19 15:19	1
Chloroform	<0.37		2.0	0.37	ug/L			06/29/19 15:19	1
Chloromethane	<0.32		1.0	0.32	ug/L			06/29/19 15:19	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			06/29/19 15:19	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			06/29/19 15:19	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			06/29/19 15:19	1
Dibromomethane	<0.27		1.0	0.27	ug/L			06/29/19 15:19	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			06/29/19 15:19	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			06/29/19 15:19	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			06/29/19 15:19	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			06/29/19 15:19	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			06/29/19 15:19	1
Methyl tert-butyl ether	<0.39 *		1.0	0.39	ug/L			06/29/19 15:19	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			06/29/19 15:19	1
Naphthalene	<0.34		1.0	0.34	ug/L			06/29/19 15:19	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			06/29/19 15:19	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			06/29/19 15:19	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			06/29/19 15:19	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: Stantec Consulting Corp.
Project/Site: Tynan Property - 193706841

Job ID: 500-165419-1

Client Sample ID: TW300

Lab Sample ID: 500-165419-6

Date Collected: 06/18/19 11:37

Matrix: Water

Date Received: 06/20/19 09:40

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			06/29/19 15:19	1
Styrene	<0.39		1.0	0.39	ug/L			06/29/19 15:19	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			06/29/19 15:19	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			06/29/19 15:19	1
Toluene	0.50		0.50	0.15	ug/L			06/29/19 15:19	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			06/29/19 15:19	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			06/29/19 15:19	1
Trichloroethene	<0.16		0.50	0.16	ug/L			06/29/19 15:19	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			06/29/19 15:19	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			06/29/19 15:19	1
Xylenes, Total	0.26 J		1.0	0.22	ug/L			06/29/19 15:19	1
Surrogate	%Recovery	Qualifier		Limits			Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105			75 - 126				06/29/19 15:19	1
4-Bromofluorobenzene (Surr)	110			72 - 124				06/29/19 15:19	1
Dibromofluoromethane	107			75 - 120				06/29/19 15:19	1
Toluene-d8 (Surr)	89			75 - 120				06/29/19 15:19	1

Definitions/Glossary

Client: Stantec Consulting Corp.
Project/Site: Tynan Property - 193706841

Job ID: 500-165419-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD 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.

D	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

QC Association Summary

Client: Stantec Consulting Corp.
Project/Site: Tynan Property - 193706841

Job ID: 500-165419-1

GC/MS VOA

Prep Batch: 491402

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165419-1	S102	Total/NA	Solid	5035	
500-165419-2	S202	Total/NA	Solid	5035	
500-165419-3	S302	Total/NA	Solid	5035	

Analysis Batch: 492693

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165419-1	S102	Total/NA	Solid	8260B	491402
500-165419-2	S202	Total/NA	Solid	8260B	491402
500-165419-3	S302	Total/NA	Solid	8260B	491402
MB 500-492693/6	Method Blank	Total/NA	Solid	8260B	
LCS 500-492693/4	Lab Control Sample	Total/NA	Solid	8260B	

Analysis Batch: 492694

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165419-4	TW100	Total/NA	Water	8260B	
500-165419-5	TW200	Total/NA	Water	8260B	
500-165419-6	TW300	Total/NA	Water	8260B	
MB 500-492694/6	Method Blank	Total/NA	Water	8260B	
LCS 500-492694/4	Lab Control Sample	Total/NA	Water	8260B	

Metals

Prep Batch: 491831

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165419-2	S202	Total/NA	Solid	3050B	
500-165419-3	S302	Total/NA	Solid	3050B	
MB 500-491831/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 500-491831/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Analysis Batch: 492159

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165419-2	S202	Total/NA	Solid	6010C	491831
500-165419-3	S302	Total/NA	Solid	6010C	491831
MB 500-491831/1-A	Method Blank	Total/NA	Solid	6010C	491831
LCS 500-491831/2-A	Lab Control Sample	Total/NA	Solid	6010C	491831

General Chemistry

Analysis Batch: 492121

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-165419-1	S102	Total/NA	Solid	Moisture	
500-165419-2	S202	Total/NA	Solid	Moisture	
500-165419-3	S302	Total/NA	Solid	Moisture	

Surrogate Summary

Client: Stantec Consulting Corp.
Project/Site: Tynan Property - 193706841

Job ID: 500-165419-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (75-126)	BFB (72-124)	DBFM (75-120)	TOL (75-120)
500-165419-1	S102	102	107	104	90
500-165419-2	S202	102	107	103	89
500-165419-3	S302	101	106	104	89
LCS 500-492693/4	Lab Control Sample	101	105	109	90
MB 500-492693/6	Method Blank	103	107	104	89

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane

TOL = Toluene-d8 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (75-126)	BFB (72-124)	DBFM (75-120)	TOL (75-120)
500-165419-4	TW100	103	110	104	90
500-165419-5	TW200	104	110	106	90
500-165419-6	TW300	105	110	107	89
LCS 500-492694/4	Lab Control Sample	101	105	109	90
MB 500-492694/6	Method Blank	103	107	104	89

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane

TOL = Toluene-d8 (Surr)

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Stantec Consulting Corp.
Project/Site: Tynan Property - 193706841

Job ID: 500-165419-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-492693/6

Matrix: Solid

Analysis Batch: 492693

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

Analyte	MB	MB	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier				
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/Kg	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/Kg	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/Kg	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/Kg	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/Kg	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/Kg	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/Kg	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/Kg	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/Kg	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/Kg	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/Kg	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/Kg	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/Kg	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/Kg	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/Kg	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/Kg	1
1,3,5-Trimethylbenzene	<0.38		1.0	0.38	ug/Kg	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/Kg	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/Kg	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/Kg	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/Kg	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/Kg	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/Kg	1
Benzene	<0.15		0.25	0.15	ug/Kg	1
Bromobenzene	<0.36		1.0	0.36	ug/Kg	1
Bromochloromethane	<0.43		1.0	0.43	ug/Kg	1
Bromodichloromethane	<0.37		1.0	0.37	ug/Kg	1
Bromoform	<0.48		1.0	0.48	ug/Kg	1
Bromomethane	<0.80		3.0	0.80	ug/Kg	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/Kg	1
Chlorobenzene	<0.39		1.0	0.39	ug/Kg	1
Chloroethane	<0.50		1.0	0.50	ug/Kg	1
Chloroform	<0.37		2.0	0.37	ug/Kg	1
Chloromethane	<0.32		1.0	0.32	ug/Kg	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/Kg	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/Kg	1
Dibromochloromethane	<0.49		1.0	0.49	ug/Kg	1
Dibromomethane	<0.27		1.0	0.27	ug/Kg	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/Kg	1
Ethylbenzene	<0.18		0.25	0.18	ug/Kg	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/Kg	1
Isopropyl ether	<0.28		1.0	0.28	ug/Kg	1
Isopropylbenzene	<0.38		1.0	0.38	ug/Kg	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/Kg	1
Methylene Chloride	<1.6		5.0	1.6	ug/Kg	1
Naphthalene	<0.33		1.0	0.33	ug/Kg	1
n-Butylbenzene	<0.39		1.0	0.39	ug/Kg	1
N-Propylbenzene	<0.41		1.0	0.41	ug/Kg	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Stantec Consulting Corp.
Project/Site: Tynan Property - 193706841

Job ID: 500-165419-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-492693/6

Matrix: Solid

Analysis Batch: 492693

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	<0.36		1.0	0.36	ug/Kg			06/29/19 12:08	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/Kg			06/29/19 12:08	1
Styrene	0.679	J	1.0	0.39	ug/Kg			06/29/19 12:08	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/Kg			06/29/19 12:08	1
Tetrachloroethene	<0.37		1.0	0.37	ug/Kg			06/29/19 12:08	1
Toluene	<0.15		0.25	0.15	ug/Kg			06/29/19 12:08	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/Kg			06/29/19 12:08	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/Kg			06/29/19 12:08	1
Trichloroethene	<0.16		0.50	0.16	ug/Kg			06/29/19 12:08	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/Kg			06/29/19 12:08	1
Vinyl chloride	<0.26		1.0	0.26	ug/Kg			06/29/19 12:08	1
Xylenes, Total	<0.22		0.50	0.22	ug/Kg			06/29/19 12:08	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		75 - 126		06/29/19 12:08	1
4-Bromofluorobenzene (Surr)	107		72 - 124		06/29/19 12:08	1
Dibromofluoromethane	104		75 - 120		06/29/19 12:08	1
Toluene-d8 (Surr)	89		75 - 120		06/29/19 12:08	1

Lab Sample ID: LCS 500-492693/4

Matrix: Solid

Analysis Batch: 492693

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
1,1,1,2-Tetrachloroethane	50.0	47.5		ug/Kg		95	70 - 125
1,1,1-Trichloroethane	50.0	50.4		ug/Kg		101	70 - 125
1,1,2,2-Tetrachloroethane	50.0	35.3		ug/Kg		71	62 - 140
1,1,2-Trichloroethane	50.0	39.4		ug/Kg		79	71 - 130
1,1-Dichloroethane	50.0	44.8		ug/Kg		90	70 - 125
1,1-Dichloroethene	50.0	44.6		ug/Kg		89	67 - 122
1,1-Dichloropropene	50.0	48.8		ug/Kg		98	70 - 121
1,2,3-Trichlorobenzene	50.0	51.4		ug/Kg		103	51 - 145
1,2,3-Trichloropropane	50.0	42.0		ug/Kg		84	50 - 133
1,2,4-Trichlorobenzene	50.0	52.4		ug/Kg		105	57 - 137
1,2,4-Trimethylbenzene	50.0	47.7		ug/Kg		95	70 - 123
1,2-Dibromo-3-Chloropropane	50.0	37.6		ug/Kg		75	56 - 123
1,2-Dibromoethane	50.0	43.2		ug/Kg		86	70 - 125
1,2-Dichlorobenzene	50.0	46.9		ug/Kg		94	70 - 125
1,2-Dichloroethane	50.0	47.3		ug/Kg		95	68 - 127
1,2-Dichloropropane	50.0	43.9		ug/Kg		88	67 - 130
1,3,5-Trimethylbenzene	50.0	47.4		ug/Kg		95	70 - 123
1,3-Dichlorobenzene	50.0	46.8		ug/Kg		94	70 - 125
1,3-Dichloropropane	50.0	40.9		ug/Kg		82	62 - 136
1,4-Dichlorobenzene	50.0	46.1		ug/Kg		92	70 - 120
2,2-Dichloropropane	50.0	45.5		ug/Kg		91	58 - 139
2-Chlorotoluene	50.0	44.4		ug/Kg		89	70 - 125
4-Chlorotoluene	50.0	43.4		ug/Kg		87	68 - 124
Benzene	50.0	44.6		ug/Kg		89	70 - 120

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Stantec Consulting Corp.
Project/Site: Tynan Property - 193706841

Job ID: 500-165419-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-492693/4

Matrix: Solid

Analysis Batch: 492693

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromobenzene	50.0	48.9		ug/Kg		98	70 - 122
Bromochloromethane	50.0	50.5		ug/Kg		101	65 - 122
Bromodichloromethane	50.0	47.2		ug/Kg		94	69 - 120
Bromoform	50.0	45.1		ug/Kg		90	56 - 132
Bromomethane	50.0	32.7		ug/Kg		65	40 - 152
Carbon tetrachloride	50.0	53.6		ug/Kg		107	59 - 133
Chlorobenzene	50.0	45.7		ug/Kg		91	70 - 120
Chloroethane	50.0	38.6		ug/Kg		77	48 - 136
Chloroform	50.0	46.9		ug/Kg		94	70 - 120
Chloromethane	50.0	35.3		ug/Kg		71	56 - 152
cis-1,2-Dichloroethene	50.0	46.1		ug/Kg		92	70 - 125
cis-1,3-Dichloropropene	50.0	40.5		ug/Kg		81	64 - 127
Dibromochloromethane	50.0	45.6		ug/Kg		91	68 - 125
Dibromomethane	50.0	44.0		ug/Kg		88	70 - 120
Dichlorodifluoromethane	50.0	38.8		ug/Kg		78	40 - 159
Ethylbenzene	50.0	44.6		ug/Kg		89	70 - 123
Hexachlorobutadiene	50.0	60.4		ug/Kg		121	51 - 150
Isopropylbenzene	50.0	46.3		ug/Kg		93	70 - 126
Methyl tert-butyl ether	50.0	65.7 *		ug/Kg		131	55 - 123
Methylene Chloride	50.0	42.7		ug/Kg		85	69 - 125
Naphthalene	50.0	48.1		ug/Kg		96	53 - 144
n-Butylbenzene	50.0	44.9		ug/Kg		90	68 - 125
N-Propylbenzene	50.0	44.1		ug/Kg		88	69 - 127
p-Isopropyltoluene	50.0	49.4		ug/Kg		99	70 - 125
sec-Butylbenzene	50.0	46.7		ug/Kg		93	70 - 123
Styrene	50.0	47.6		ug/Kg		95	70 - 120
tert-Butylbenzene	50.0	49.9		ug/Kg		100	70 - 121
Tetrachloroethene	50.0	52.3		ug/Kg		105	70 - 128
Toluene	50.0	39.0		ug/Kg		78	70 - 125
trans-1,2-Dichloroethene	50.0	45.4		ug/Kg		91	70 - 125
trans-1,3-Dichloropropene	50.0	40.1		ug/Kg		80	62 - 128
Trichloroethene	50.0	51.5		ug/Kg		103	70 - 125
Trichlorofluoromethane	50.0	50.5		ug/Kg		101	55 - 128
Vinyl chloride	50.0	38.8		ug/Kg		78	64 - 126
Xylenes, Total	100	88.6		ug/Kg		89	70 - 125

Surrogate	LCS Result	LCS Qualifier	Limits
	%Recovery		
1,2-Dichloroethane-d4 (Surr)	101		75 - 126
4-Bromofluorobenzene (Surr)	105		72 - 124
Dibromofluoromethane	109		75 - 120
Toluene-d8 (Surr)	90		75 - 120

Lab Sample ID: MB 500-492694/6

Matrix: Water

Analysis Batch: 492694

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			06/29/19 12:08	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Stantec Consulting Corp.
Project/Site: Tynan Property - 193706841

Job ID: 500-165419-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-492694/6

Matrix: Water

Analysis Batch: 492694

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			06/29/19 12:08	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			06/29/19 12:08	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			06/29/19 12:08	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			06/29/19 12:08	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			06/29/19 12:08	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			06/29/19 12:08	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			06/29/19 12:08	1
1,2,3-Trichloropropane	<0.41		2.0	0.41	ug/L			06/29/19 12:08	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			06/29/19 12:08	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			06/29/19 12:08	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			06/29/19 12:08	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			06/29/19 12:08	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			06/29/19 12:08	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			06/29/19 12:08	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			06/29/19 12:08	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			06/29/19 12:08	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			06/29/19 12:08	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			06/29/19 12:08	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			06/29/19 12:08	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			06/29/19 12:08	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			06/29/19 12:08	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			06/29/19 12:08	1
Benzene	<0.15		0.50	0.15	ug/L			06/29/19 12:08	1
Bromobenzene	<0.36		1.0	0.36	ug/L			06/29/19 12:08	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			06/29/19 12:08	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			06/29/19 12:08	1
Bromoform	<0.48		1.0	0.48	ug/L			06/29/19 12:08	1
Bromomethane	<0.80		3.0	0.80	ug/L			06/29/19 12:08	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			06/29/19 12:08	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			06/29/19 12:08	1
Chloroethane	<0.51		1.0	0.51	ug/L			06/29/19 12:08	1
Chloroform	<0.37		2.0	0.37	ug/L			06/29/19 12:08	1
Chloromethane	<0.32		1.0	0.32	ug/L			06/29/19 12:08	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			06/29/19 12:08	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			06/29/19 12:08	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			06/29/19 12:08	1
Dibromomethane	<0.27		1.0	0.27	ug/L			06/29/19 12:08	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			06/29/19 12:08	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			06/29/19 12:08	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			06/29/19 12:08	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			06/29/19 12:08	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			06/29/19 12:08	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			06/29/19 12:08	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			06/29/19 12:08	1
Naphthalene	<0.34		1.0	0.34	ug/L			06/29/19 12:08	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			06/29/19 12:08	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			06/29/19 12:08	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			06/29/19 12:08	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			06/29/19 12:08	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Stantec Consulting Corp.
Project/Site: Tynan Property - 193706841

Job ID: 500-165419-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-492694/6

Matrix: Water

Analysis Batch: 492694

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

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Styrene	0.679	J	1.0	0.39	ug/L			06/29/19 12:08	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			06/29/19 12:08	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			06/29/19 12:08	1
Toluene	<0.15		0.50	0.15	ug/L			06/29/19 12:08	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			06/29/19 12:08	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			06/29/19 12:08	1
Trichloroethene	<0.16		0.50	0.16	ug/L			06/29/19 12:08	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			06/29/19 12:08	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			06/29/19 12:08	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			06/29/19 12:08	1

Surrogate	MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	103		75 - 126		06/29/19 12:08	1
4-Bromofluorobenzene (Surr)	107		72 - 124		06/29/19 12:08	1
Dibromofluoromethane	104		75 - 120		06/29/19 12:08	1
Toluene-d8 (Surr)	89		75 - 120		06/29/19 12:08	1

Lab Sample ID: LCS 500-492694/4

Matrix: Water

Analysis Batch: 492694

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

Analyte	Spike Added	LCS		Unit	D	%Rec	Limits
		Result	Qualifier				
1,1,1,2-Tetrachloroethane	50.0	47.5		ug/L		95	70 - 125
1,1,1-Trichloroethane	50.0	50.4		ug/L		101	70 - 125
1,1,2,2-Tetrachloroethane	50.0	35.3		ug/L		71	62 - 140
1,1,2-Trichloroethane	50.0	39.4		ug/L		79	71 - 130
1,1-Dichloroethane	50.0	44.8		ug/L		90	70 - 125
1,1-Dichloroethene	50.0	44.6		ug/L		89	67 - 122
1,1-Dichloropropene	50.0	48.8		ug/L		98	70 - 121
1,2,3-Trichlorobenzene	50.0	51.4		ug/L		103	51 - 145
1,2,3-Trichloropropane	50.0	42.0		ug/L		84	50 - 133
1,2,4-Trichlorobenzene	50.0	52.4		ug/L		105	57 - 137
1,2,4-Trimethylbenzene	50.0	47.7		ug/L		95	70 - 123
1,2-Dibromo-3-Chloropropane	50.0	37.6		ug/L		75	56 - 123
1,2-Dibromoethane	50.0	43.2		ug/L		86	70 - 125
1,2-Dichlorobenzene	50.0	46.9		ug/L		94	70 - 125
1,2-Dichloroethane	50.0	47.3		ug/L		95	68 - 127
1,2-Dichloropropane	50.0	43.9		ug/L		88	67 - 130
1,3,5-Trimethylbenzene	50.0	47.4		ug/L		95	70 - 123
1,3-Dichlorobenzene	50.0	46.8		ug/L		94	70 - 125
1,3-Dichloropropane	50.0	40.9		ug/L		82	62 - 136
1,4-Dichlorobenzene	50.0	46.1		ug/L		92	70 - 120
2,2-Dichloropropane	50.0	45.5		ug/L		91	58 - 139
2-Chlorotoluene	50.0	44.4		ug/L		89	70 - 125
4-Chlorotoluene	50.0	43.4		ug/L		87	68 - 124
Benzene	50.0	44.6		ug/L		89	70 - 120
Bromobenzene	50.0	48.9		ug/L		98	70 - 122
Bromochloromethane	50.0	50.5		ug/L		101	65 - 122

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Stantec Consulting Corp.
Project/Site: Tynan Property - 193706841

Job ID: 500-165419-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-492694/4

Matrix: Water

Analysis Batch: 492694

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromodichloromethane	50.0	47.2		ug/L	94	69 - 120	
Bromoform	50.0	45.1		ug/L	90	56 - 132	
Bromomethane	50.0	32.7		ug/L	65	40 - 152	
Carbon tetrachloride	50.0	53.6		ug/L	107	59 - 133	
Chlorobenzene	50.0	45.7		ug/L	91	70 - 120	
Chloroethane	50.0	38.6		ug/L	77	48 - 136	
Chloroform	50.0	46.9		ug/L	94	70 - 120	
Chloromethane	50.0	35.3		ug/L	71	56 - 152	
cis-1,2-Dichloroethene	50.0	46.1		ug/L	92	70 - 125	
cis-1,3-Dichloropropene	50.0	40.5		ug/L	81	64 - 127	
Dibromochloromethane	50.0	45.6		ug/L	91	68 - 125	
Dibromomethane	50.0	44.0		ug/L	88	70 - 120	
Dichlorodifluoromethane	50.0	38.8		ug/L	78	40 - 159	
Ethylbenzene	50.0	44.6		ug/L	89	70 - 123	
Hexachlorobutadiene	50.0	60.4		ug/L	121	51 - 150	
Isopropylbenzene	50.0	46.3		ug/L	93	70 - 126	
Methyl tert-butyl ether	50.0	65.7 *		ug/L	131	55 - 123	
Methylene Chloride	50.0	42.7		ug/L	85	69 - 125	
Naphthalene	50.0	48.1		ug/L	96	53 - 144	
n-Butylbenzene	50.0	44.9		ug/L	90	68 - 125	
N-Propylbenzene	50.0	44.1		ug/L	88	69 - 127	
p-Isopropyltoluene	50.0	49.4		ug/L	99	70 - 125	
sec-Butylbenzene	50.0	46.7		ug/L	93	70 - 123	
Styrene	50.0	47.6		ug/L	95	70 - 120	
tert-Butylbenzene	50.0	49.9		ug/L	100	70 - 121	
Tetrachloroethene	50.0	52.3		ug/L	105	70 - 128	
Toluene	50.0	39.0		ug/L	78	70 - 125	
trans-1,2-Dichloroethene	50.0	45.4		ug/L	91	70 - 125	
trans-1,3-Dichloropropene	50.0	40.1		ug/L	80	62 - 128	
Trichloroethene	50.0	51.5		ug/L	103	70 - 125	
Trichlorofluoromethane	50.0	50.5		ug/L	101	55 - 128	
Vinyl chloride	50.0	38.8		ug/L	78	64 - 126	
Xylenes, Total	100	88.6		ug/L	89	70 - 125	

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101		75 - 126
4-Bromofluorobenzene (Surr)	105		72 - 124
Dibromofluoromethane	109		75 - 120
Toluene-d8 (Surr)	90		75 - 120

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 500-491831/1-A

Matrix: Solid

Analysis Batch: 492159

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 491831

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.23		0.50	0.23	mg/Kg	D	06/25/19 07:43	06/26/19 09:36	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: Stantec Consulting Corp.
Project/Site: Tynan Property - 193706841

Job ID: 500-165419-1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 500-491831/2-A

Matrix: Solid

Analysis Batch: 492159

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 491831

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits
Lead	10.0	9.57		mg/Kg	96	80 - 120		

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Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: Tynan Property - 193706841

Job ID: 500-165419-1

Client Sample ID: S102

Date Collected: 06/18/19 09:32
Date Received: 06/20/19 09:40

Lab Sample ID: 500-165419-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	492121	06/26/19 10:24	LWN	TAL CHI

Client Sample ID: S102

Date Collected: 06/18/19 09:32
Date Received: 06/20/19 09:40

Lab Sample ID: 500-165419-1

Matrix: Solid
Percent Solids: 81.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			491402	06/18/19 09:32	WRE	TAL CHI
Total/NA	Analysis	8260B		50	492693	06/29/19 13:02	JMP	TAL CHI

Client Sample ID: S202

Date Collected: 06/18/19 10:10
Date Received: 06/20/19 09:40

Lab Sample ID: 500-165419-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	492121	06/26/19 10:24	LWN	TAL CHI

Client Sample ID: S202

Date Collected: 06/18/19 10:10
Date Received: 06/20/19 09:40

Lab Sample ID: 500-165419-2

Matrix: Solid
Percent Solids: 85.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			491402	06/18/19 10:10	WRE	TAL CHI
Total/NA	Analysis	8260B		50	492693	06/29/19 13:30	JMP	TAL CHI
Total/NA	Prep	3050B			491831	06/25/19 07:43	SAH	TAL CHI
Total/NA	Analysis	6010C		1	492159	06/26/19 09:44	JEF	TAL CHI

Client Sample ID: S302

Date Collected: 06/18/19 10:50
Date Received: 06/20/19 09:40

Lab Sample ID: 500-165419-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	492121	06/26/19 10:24	LWN	TAL CHI

Client Sample ID: S302

Date Collected: 06/18/19 10:50
Date Received: 06/20/19 09:40

Lab Sample ID: 500-165419-3

Matrix: Solid
Percent Solids: 84.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			491402	06/18/19 10:50	WRE	TAL CHI
Total/NA	Analysis	8260B		50	492693	06/29/19 13:57	JMP	TAL CHI
Total/NA	Prep	3050B			491831	06/25/19 07:43	SAH	TAL CHI
Total/NA	Analysis	6010C		1	492159	06/26/19 09:48	JEF	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: Tynan Property - 193706841

Job ID: 500-165419-1

Client Sample ID: TW100

Date Collected: 06/18/19 12:41

Date Received: 06/20/19 09:40

Lab Sample ID: 500-165419-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	492694	06/29/19 14:24	JDD	TAL CHI

Client Sample ID: TW200

Date Collected: 06/18/19 12:16

Date Received: 06/20/19 09:40

Lab Sample ID: 500-165419-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	492694	06/29/19 14:51	JDD	TAL CHI

Client Sample ID: TW300

Date Collected: 06/18/19 11:37

Date Received: 06/20/19 09:40

Lab Sample ID: 500-165419-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	492694	06/29/19 15:19	JDD	TAL CHI

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: Stantec Consulting Corp.

Project/Site: Tynan Property - 193706841

Job ID: 500-165419-1

Laboratory: Eurofins TestAmerica, Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Wisconsin	State Program	5	999580010	08-31-19 *

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

Eurofins TestAmerica, Chicago

Login Sample Receipt Checklist

Client: Stantec Consulting Corp.

Job Number: 500-165419-1

Login Number: 165419

List Source: Eurofins TestAmerica, Chicago

List Number: 1

Creator: Fioravanti, Ariel M

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

BORING LOG



PROJECT NUMBER: 193706841

BORING NUMBER: B100

LOGGED BY: JRB

LOCATION: Forest

ELEVATION:		DRILLER:	Geiss Soil and Samples, LLC			DATE:	6-18-19
BORING DEPTH:	20'	EQUIPMENT:	Geoprobe			START TIME:	917
BORING DIAMETER:	2"	GROUND SURFACE:	Soil			END TIME:	
SCREEN INTERVAL:	5-20	FLUID:	V	N	TYPE:	COMPLETED AS:	TW100
DEPTH	SAMPLE	BLOWS	RECOVERY	TT	TA	PID	SOIL DESCRIPTION & COMMENTS
0-2							Silt, clay, med plastic, brown 7.5YR 2 1/3, moist, no odor
	S101	Dir.	24	918	932	3.0	
		Push					
2-4							SAA, trace fine sand @ 4' brown 7.5YR 2 1/4, moist, no odor
	S102		24	918	932	4.2	
4-6							Silty sand w/ med to large gravel Yellowish brown 10TR 5 1/4, moist, no odor
	S103		17	921	936	3.6	
6-8							Sand fg. P. g. light yellowish brown 10YR 6 1/4, moist, no odor
	S104		17	921	936	3.1	
8-10							Silt w/ large gravel, trace fine sand 1/3 clay, yellowish brown 10YR 5 1/4, sat @ 8', no odor
	S105		13	924	940	5.7	
10-12							Silt, change @ 11.5' to Sand 1/3 gravel, Sat, no odor
	S106		13	924	940	2.7	
12-14							Sand 1/3 gravel, change @ 12.5' to Sand, well graded, light yellowish brown 10YR 6 1/4, sat. no odor
	S107		15	928	945	4.2	
14-16							Sand, well graded, light yellowish brown 10YR 6 1/4, Sat, No odor
	S108		15	928	945	3.4	
16-18							SAA, Pale brown 10TR 6 1/3, sat no odor
	S109		24	934	950	3.6	
18-20							SAA, change @ 19.5' to Sand, fg. P. g. yellowish brown 10YR 5 1/4, sat, no odor
	S110		24	934	950	3.4	
		↓					

EoB @ 20' (Screen 5-20')

BORING LOG



PROJECT NUMBER: 193706841

BORING NUMBER: B200

LOCATION: Forest

LOGGED BY: JRB

ELEVATION:		DRILLER:	Geiss Soil and Samples, LLC			DATE: 6-18-19	
BORING DEPTH:	20'	EQUIPMENT:	Geoprobe			START TIME: 954	
BORING DIAMETER:	2"	GROUND SURFACE:	Soil			END TIME:	
SCREEN INTERVAL:	5-20'	FLUID:	Y	N	TYPE:	COMPLETED AS: TW 200	
DEPTH	SAMPLE	BLOWS	RECOVERY	TT	TA	PID	SOIL DESCRIPTION & COMMENTS
0-2	S201	Dir	20	956	1010	2.3	10" Silty clay, med plast., dark brown 7.5YR 2/1, moist, no odor
		Push					10" silty clay, med plast. brown 7.5YR 4/4 moist, no odor
2-4	S202		20	956	1010	3.6	4" SAA, change to 6" silt, light yellowish brown, moist, no odor
4-6	S203		15	958	1013	3.7	4" Silty clay, low plast., dark brown 7.5YR 2/1, moist, change to Silty sand w/ med to large gravel, yellowish brown 10YR 5/4, sat @ 6' No odor
6-8	S204		15	958	1013	3.7	Silty sand w/ gravel, well graded, Yellowish. 10mm 10YR 5/4, sat No odor
8-10	S205		14	1000	1015	5.4	SAA
10-12	S206		14	1000	1015	4.0	SAA
12-14	S207		8	1004	1020	5.3	Sand f.g. P.g. w/ med gravel Pale brown 10YR 6/3, sat No odor
14-16	S208		8	1004	1020	4.6	SAA
16-18	S209		22	1008	1024	2.8	Sand. f.g. P.g. Yellowish brown 10YR 5/6, sat, no odor
18-20	S210		22	1008	1024	2.3	SAA

EOR @ 20' (Screen S-20')

BORING LOG



PROJECT NUMBER: 193706841

BORING NUMBER: B300

LOCATION: Forest

LOGGED BY: JRB

ELEVATION:		DRILLER:	Geiss Soil and Samples, LLC			DATE: 6-18-19	
BORING DEPTH:	20'	EQUIPMENT:	Geoprobe			START TIME: 1035	
BORING DIAMETER:	2"	GROUND SURFACE:	Soil			END TIME:	
SCREEN INTERVAL:	5-20	FLUID:	Y	N	TYPE:	COMPLETED AS: T2300	
DEPTH	SAMPLE	BLOWS	RECOVERY	TT	TA	PID	SOIL DESCRIPTION & COMMENTS
0-2							
	S301	Dis	15	1036	1050	1.0	Silty clay, med plast. dk brown 7.5YR 2 1/2, moist, no odor
		Push					
2-4							
	S302		15	1036	1050	1.7	Silty clay med plast. brown 7.5YR 4 1/4, moist, no odor
4-6							
	S303		15	1039	1055	2.1	Silty sand w/ med to large gravel 10YR 2 1/3, moist, N = odor
6-8							
	S304		15	1039	1055	2.2	Silty sand, some med gravel yellowish brown 10YR 5 1/4, sat no odor
8-10							SAA
	S305		18	1041	1056	3.2	
10-12							SAA
	S306		18	1041	1056	3.1	
12-14							Change @ 11.5' to silt, Pale brown 10YR 6 1/3 sat, no odor
	S307		12	1044	1100	2.0	
14-16							SAA
	S308		12	1044	1100	2.0	
16-18							SAA
	S309		24	1048	1104	3.3	
18-20							SAA
	S310		24	1048	1104	2.8	

EOB @ 20' (Screen 5-20')

Table 1 - Water Quality Readings, Tynan Property, W998 STH 23, Town of Forest, Wisconsin

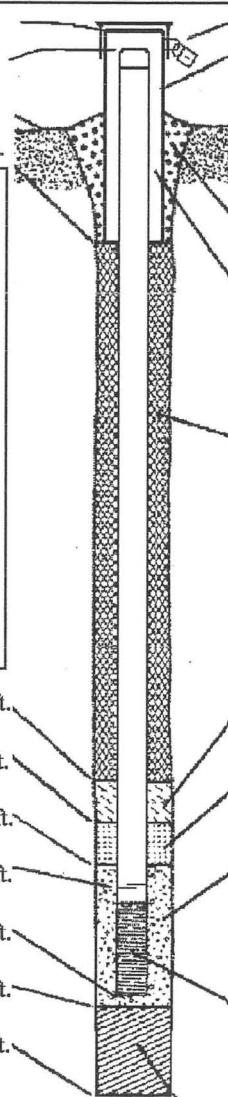
Well I.D.	Date	Depth to Water (feet below grade)	pH	Conductivity (ms/cm)
TW100	6/18/2019	12.74	7.03	1.27
TW200	6/18/2019	12.62	6.98	1.16
TW300	6/18/2019	11.15	7.1	0.67

Facility/Project Name <i>Tynan Property</i>	Local Grid Location of Well ft. N. _____ ft. E. _____ ft. S. _____ ft. W. _____	Well Name TW100
Facility License, Permit or Monitoring No.	Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Well Location <input type="checkbox"/> Lat. _____ " Long. _____ " or St. Plane _____ ft. N., _____ ft. E. S/C/N	Wis. Unique Well No. _____ DNR Well ID No. _____
Facility ID	Section Location of Waste/Source NW 1/4 of NE 1/4 of Sec. 15, T. 15 N, R. 19 <input checked="" type="checkbox"/> E W	Date Well Installed m m d d y y y y
Type of Well Well Code 11 / MW	Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known	Well Installed By: Name (first, last) and Firm <i>Daccin Prentice</i>
Distance from Waste/ Source ft.	Enf. Stds. Apply <input type="checkbox"/>	Gov. Lot Number
<p>A. Protective pipe, top elevation - - - - - ft. MSL</p> <p>B. Well casing, top elevation - - - - - ft. MSL</p> <p>C. Land surface elevation - - - - - ft. MSL</p> <p>D. Surface seal, bottom - - - - - ft. MSL or - - - - - ft.</p> <p>12. USCS classification of soil near screen: GP <input type="checkbox"/> GM <input type="checkbox"/> GC <input type="checkbox"/> GW <input type="checkbox"/> SW <input type="checkbox"/> SP <input type="checkbox"/> SM <input type="checkbox"/> SC <input type="checkbox"/> ML <input type="checkbox"/> MH <input type="checkbox"/> CL <input type="checkbox"/> CH <input type="checkbox"/> Bedrock <input type="checkbox"/></p> <p>13. Sieve analysis performed? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>14. Drilling method used: Rotary <input type="checkbox"/> 50 Hollow Stem Auger <input type="checkbox"/> 41 <u>Geeprobe</u> <input type="checkbox"/> Other <input checked="" type="checkbox"/></p> <p>15. Drilling fluid used: Water <input type="checkbox"/> 02 Air <input type="checkbox"/> 01 Drilling Mud <input type="checkbox"/> 03 None <input checked="" type="checkbox"/> 99</p> <p>16. Drilling additives used? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Describe _____</p> <p>17. Source of water (attach analysis, if required): _____</p>		
E. Bentonite seal, top - - - - - ft. MSL or - - - - - <input checked="" type="checkbox"/> ft.		
F. Fine sand, top - - - - - ft. MSL or - - - - - <input checked="" type="checkbox"/> ft.	<p>1. Cap and lock? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>2. Protective cover pipe: a. Inside diameter: - - - - - in. b. Length: - - - - - ft. c. Material: Steel <input type="checkbox"/> 04 Other <input type="checkbox"/> <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>3. Surface seal: Bentonite <input checked="" type="checkbox"/> 30 Concrete <input type="checkbox"/> 01 Other <input type="checkbox"/> </p> <p>4. Material between well casing and protective pipe: Bentonite <input type="checkbox"/> 30 Other <input type="checkbox"/> </p> <p>5. Annular space seal: a. Granular/Chipped Bentonite <input checked="" type="checkbox"/> 33 b. ____ Lbs/gal mud weight ... Bentonite-sand slurry <input type="checkbox"/> 35 c. ____ Lbs/gal mud weight Bentonite slurry <input type="checkbox"/> 31 d. ____ % Bentonite Bentonite-cement grout <input type="checkbox"/> 50 e. ____ Ft³ volume added for any of the above f. How installed: Tremie <input type="checkbox"/> 01 Tremie pumped <input type="checkbox"/> 02 Gravity <input checked="" type="checkbox"/> 08</p> <p>6. Bentonite seal: a. Bentonite granules <input checked="" type="checkbox"/> 33 b. <input type="checkbox"/> 1/4 in. <input type="checkbox"/> 3/8 in. <input type="checkbox"/> 1/2 in. Bentonite chips <input type="checkbox"/> 32 c. Other <input type="checkbox"/> </p> <p>7. Fine sand material: Manufacturer, product name & mesh size a. #20 Red Flint</p> <p>8. Filter pack material: Manufacturer, product name & mesh size a. #40 Red Flint</p> <p>9. Well casing: Flush threaded PVC schedule 40 <input checked="" type="checkbox"/> 23 Flush threaded PVC schedule 80 <input type="checkbox"/> 24 Other <input type="checkbox"/> </p> <p>10. Screen material: PVC a. Screen type: Factory cut <input checked="" type="checkbox"/> 11 Continuous slot <input type="checkbox"/> 01 Other <input type="checkbox"/> b. Manufacturer Johnson c. Slot size: 0.01 in. d. Slotted length: 15 ft.</p> <p>11. Backfill material (below filter pack): None <input checked="" type="checkbox"/> 14 Other <input type="checkbox"/> </p>	
G. Filter pack, top - - - - - ft. MSL or - - - - - <input checked="" type="checkbox"/> ft.		
H. Screen joint, top - - - - - ft. MSL or - - - - - <input checked="" type="checkbox"/> ft.		
I. Well bottom - - - - - ft. MSL or - - - - - <input checked="" type="checkbox"/> ft.		
J. Filter pack, bottom - - - - - ft. MSL or - - - - - <input checked="" type="checkbox"/> ft.		
K. Borehole, bottom - - - - - ft. MSL or - - - - - <input checked="" type="checkbox"/> ft.		
L. Borehole, diameter - - - - - <input checked="" type="checkbox"/> in.		
M. O.D. well casing - - - - - <input checked="" type="checkbox"/> in.		
N. I.D. well casing - - - - - <input checked="" type="checkbox"/> in.		

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature

Firm *Stantec Consulting Services Inc.*

Facility/Project Name <i>Tynan Property</i>	Local Grid Location of Well ft. N. _____ ft. E. _____ ft. S. _____ ft. W. _____	Well Name <i>TW 200</i>
Facility License, Permit or Monitoring No.	Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Well Location <input type="checkbox"/> Lat. _____ " Long. _____ " or St. Plane _____ ft. N., _____ ft. E. S/C/N	Wis. Unique Well No. _____ DNR Well ID No. _____
Facility ID	Section Location of Waste/Source	Date Well Installed <i>06/18/2019</i> m m d d y y y y
Type of Well Well Code <i>11 / MW</i>	Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known	Well Installed By: Name (first, last) and Firm <i>Daccin Peant: ce</i> <i>Geiss Soil & Samples, LLC</i>
Distance from Waste/ Source ft.	Enf. Stds. Apply <input type="checkbox"/>	
<p>A. Protective pipe, top elevation - - - - - ft. MSL</p> <p>B. Well casing, top elevation - - - - - ft. MSL</p> <p>C. Land surface elevation - - - - - ft. MSL</p> <p>D. Surface seal, bottom - - - - - ft. MSL or - - - - - ft.</p> <p>12. USCS classification of soil near screen: <input type="checkbox"/> GP <input type="checkbox"/> GM <input type="checkbox"/> GC <input type="checkbox"/> GW <input type="checkbox"/> SW <input type="checkbox"/> SP <input type="checkbox"/> SM <input type="checkbox"/> SC <input type="checkbox"/> ML <input type="checkbox"/> MH <input type="checkbox"/> CL <input type="checkbox"/> CH <input type="checkbox"/> Bedrock </p> <p>13. Sieve analysis performed? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>14. Drilling method used: Rotary <input type="checkbox"/> 50 <input type="checkbox"/> Hollow Stem Auger <input type="checkbox"/> 41 <u>Geoprobe</u> <input type="checkbox"/> Other </p> <p>15. Drilling fluid used: Water <input type="checkbox"/> 02 Air <input type="checkbox"/> 01 <input type="checkbox"/> Drilling Mud <input type="checkbox"/> 03 None <input checked="" type="checkbox"/> 99 </p> <p>16. Drilling additives used? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Describe _____</p> <p>17. Source of water (attach analysis, if required): _____</p>		
E. Bentonite seal, top - - - - - ft. MSL or - - - - - ft.	 <p>1. Cap and lock? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>2. Protective cover pipe: a. Inside diameter: _____ in. b. Length: _____ ft. c. Material: Steel <input type="checkbox"/> 0.4 Other <input type="checkbox"/>  <input type="checkbox"/> Yes <input type="checkbox"/> No </p> <p>3. Surface seal: Bentonite <input checked="" type="checkbox"/> 30 Concrete <input type="checkbox"/> 01 Other <input type="checkbox"/> </p> <p>4. Material between well casing and protective pipe: Bentonite <input type="checkbox"/> 30 Other <input type="checkbox"/> </p> <p>5. Annular space seal: a. Granular/Chipped Bentonite <input checked="" type="checkbox"/> 33 b. _____ Lbs/gal mud weight ... Bentonite-sand slurry <input type="checkbox"/> 35 c. _____ Lbs/gal mud weight Bentonite slurry <input type="checkbox"/> 31 d. _____ % Bentonite Bentonite-cement grout <input type="checkbox"/> 50 e. _____ ft³ volume added for any of the above </p> <p>f. How installed: Tremie <input type="checkbox"/> 0.1 Tremie pumped <input type="checkbox"/> 0.2 Gravity <input checked="" type="checkbox"/> 0.8 </p> <p>6. Bentonite seal: a. Bentonite granules <input checked="" type="checkbox"/> 33 b. <input type="checkbox"/> 1/4 in. <input type="checkbox"/> 3/8 in. <input type="checkbox"/> 1/2 in. Bentonite chips <input type="checkbox"/> 32 c. Other <input type="checkbox"/> </p> <p>7. Fine sand material: Manufacturer, product name & mesh size a. #20 Red Flint </p> <p>8. Filter pack material: Manufacturer, product name & mesh size a. #40 Red Flint </p> <p>9. Well casing: Flush threaded PVC schedule 40 <input checked="" type="checkbox"/> 23 Flush threaded PVC schedule 80 <input type="checkbox"/> 24 Other <input type="checkbox"/> </p> <p>10. Screen material: PVC a. Screen type: Factory cut <input checked="" type="checkbox"/> 11 Continuous slot <input type="checkbox"/> 0.1 Other <input type="checkbox"/>  b. Manufacturer Johnson c. Slot size: 0.01 in. d. Slotted length: 15 ft. </p> <p>11. Backfill material (below filter pack): None <input checked="" type="checkbox"/> 14 Other <input type="checkbox"/> </p>	

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature *[Signature]* Firm *Stantec Consulting Services Inc.*

Facility/Project Name <i>Tynan Property</i>	Local Grid Location of Well ft. N. <input type="checkbox"/> S. <input type="checkbox"/> ft. E. <input type="checkbox"/> W.	Well Name <i>TW 300</i>
Facility License, Permit or Monitoring No.	Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Well Location <input type="checkbox"/> Lat. _____ Long. _____ or St. Plane _____ ft. N. _____ ft. E. S/C/N	Wis. Unique Well No. _____ DNR Well ID No. _____ Date Well Installed <i>06/18/2019</i> m m d d y y y y
Facility ID	Section Location of Waste/Source NW 1/4 of NE 1/4 of Sec. 15 T. 15 N, R. 19 <input checked="" type="checkbox"/> E W	Well Installed By: Name (first, last) and Firm <i>Daccin Peat:ce</i>
Type of Well Well Code 11 / MW	Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known	Gov. Lot Number _____
Distance from Waste/ Source ft.	Enf. Stds. Apply <input type="checkbox"/>	
A. Protective pipe, top elevation	ft. MSL	1. Cap and lock? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
B. Well casing, top elevation	ft. MSL	2. Protective cover pipe: a. Inside diameter: _____ in. b. Length: _____ ft. c. Material: Steel <input type="checkbox"/> 0.4 Other <input type="checkbox"/> <input type="checkbox"/> Yes <input type="checkbox"/> No
C. Land surface elevation	ft. MSL	d. Additional protection? If yes, describe: _____
D. Surface seal, bottom	ft. MSL or _____ ft.	3. Surface seal: Bentonite <input checked="" type="checkbox"/> 3.0 Concrete <input type="checkbox"/> 0.1 Other <input type="checkbox"/>
12. USCS classification of soil near screen:	GP <input type="checkbox"/> GM <input type="checkbox"/> GC <input type="checkbox"/> GW <input type="checkbox"/> SW <input type="checkbox"/> SP <input type="checkbox"/> SM <input type="checkbox"/> SC <input type="checkbox"/> ML <input type="checkbox"/> MH <input type="checkbox"/> CL <input type="checkbox"/> CH <input type="checkbox"/> Bedrock <input type="checkbox"/>	4. Material between well casing and protective pipe: Bentonite <input type="checkbox"/> 3.0 Other <input type="checkbox"/>
13. Sieve analysis performed?	<input type="checkbox"/> Yes <input type="checkbox"/> No	5. Annular space seal: a. Granular/Chipped Bentonite <input checked="" type="checkbox"/> 3.3 b. _____ Lbs/gal mud weight ... Bentonite-sand slurry <input type="checkbox"/> 3.5 c. _____ Lbs/gal mud weight Bentonite slurry <input type="checkbox"/> 3.1 d. _____ % Bentonite Bentonite-cement grout <input type="checkbox"/> 5.0 e. _____ ft ³ volume added for any of the above
14. Drilling method used:	Rotary <input type="checkbox"/> 50 Hollow Stem Auger <input type="checkbox"/> 41 <i>Geoprobe</i> <input checked="" type="checkbox"/> Other	f. How installed: Tremie <input type="checkbox"/> 0.1 Tremie pumped <input type="checkbox"/> 0.2 Gravity <input checked="" type="checkbox"/> 0.8
15. Drilling fluid used: Water <input type="checkbox"/> 0.2 Air <input type="checkbox"/> 0.1 Drilling Mud <input type="checkbox"/> 0.3 None <input checked="" type="checkbox"/> 9.9	6. Bentonite seal: a. Bentonite granules <input checked="" type="checkbox"/> 3.3 b. <input type="checkbox"/> 1/4 in. <input type="checkbox"/> 3/8 in. <input type="checkbox"/> 1/2 in. Bentonite chips <input type="checkbox"/> 3.2 c. _____ Other <input type="checkbox"/>	
16. Drilling additives used?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Describe _____	7. Fine sand material: Manufacturer, product name & mesh size a. #20 Red Flint
17. Source of water (attach analysis, if required):		b. Volume added _____ ft ³
E. Bentonite seal, top	ft. MSL or _____ ft.	8. Filter pack material: Manufacturer, product name & mesh size a. #40 Red Flint
F. Fine sand, top	ft. MSL or _____ ft.	b. Volume added _____ ft ³
G. Filter pack, top	ft. MSL or _____ ft.	9. Well casing: Flush threaded PVC schedule 40 <input checked="" type="checkbox"/> 2.3 Flush threaded PVC schedule 80 <input type="checkbox"/> 2.4 Other <input type="checkbox"/>
H. Screen joint, top	ft. MSL or _____ ft.	
I. Well bottom	ft. MSL or _____ ft.	
J. Filter pack, bottom	ft. MSL or _____ ft.	
K. Borehole, bottom	ft. MSL or _____ ft.	
L. Borehole, diameter	in.	
M. O.D. well casing	in.	
N. I.D. well casing	in.	

The diagram illustrates a vertical monitoring well borehole. It shows concentric layers of different materials. From the outside in, the layers are: 1. Borehole, bottom (labeled K); 2. Filter pack, bottom (labeled J); 3. Well bottom (labeled I); 4. Screen joint, top (labeled H); 5. Filter pack, top (labeled G); 6. Fine sand, top (labeled F); 7. Bentonite seal, top (labeled E); 8. Well casing (labeled D); 9. Protective cover pipe (labeled C); 10. Cap and lock (labeled B); and 11. Backfill material (below filter pack) (labeled N).

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature

Firm

Stantec Consulting Services Inc.