

File No.: 04-1000-20-2017-097

March 24, 2017

s.22(1)

Dear s.22(1)

Re: Request for Access to Records under the Freedom of Information and Protection of Privacy Act (the "Act")

I am responding to your request of March 10, 2017 for:

Any documents related to an oil tank removal project at 4238 Pine Crescent, Vancouver, BC from January 1, 2000 to March 10, 2017.

All responsive records are attached. Some information in the records has been severed, (blacked out), under s.22(1) of the Act. You can read or download this section here: http://www.bclaws.ca/EPLibraries/bclaws_new/document/ID/freeside/96165_00

Under section 52 of the Act you may ask the Information & Privacy Commissioner to review any matter related to the City's response to your request. The Act allows you 30 business days from the date you receive this notice to request a review by writing to: Office of the Information & Privacy Commissioner, info@oipc.bc.ca or by phoning 250-387-5629.

If you request a review, please provide the Commissioner's office with: 1) the request number assigned to your request (#04-1000-20-2017-097); 2) a copy of this letter; 3) a copy of your original request for information sent to the City of Vancouver; and 4) detailed reasons or grounds on which you are seeking the review.

Please do not hesitate to contact the Freedom of Information Office at foi@vancouver.ca if you have any questions.

Yours truly,

Cobi Falconer, FOI Case Manager, for

A handwritten signature in black ink, appearing to read 'Barbara J. Van Fraassen', written over a faint circular stamp.

Barbara J. Van Fraassen, BA
Director, Access to Information

Barbara.vanfraassen@vancouver.ca
453 W. 12th Avenue Vancouver BC V5Y 1V4
Phone: 604.873.7999
Fax: 604.873.7419

Encl.

:jb

CITY OF VANCOUVER

DATE ISSUED MAY 07, 2015		PERMIT TYPE FIRE PREVENTION DIVISION PERMIT				PERMIT NUMBER P FI 412247	
LEGAL DESCRIPTION Lot 12 Blk 667 Plan VAP6011 DL 526 LD NW					ADDRESS 4238 PINE CRESCENT		
ADDITIONAL ADDRESS INFORMATION					SPECIFICS		
APPLICATION DATE MAY 07, 2015	PURPOSE REMOVAL	PROJECT VALUE	ASSESSED VALUE	PLANS	METRIC NO	PLACE NAME	
TEMPORARY PERMIT DATES		TEMPORARY USE DATES				SUBTYPE	
APPLICANT CONTRACTOR SNR SALVAGE AND RECOVERY					CONTACT 2 AGENT FOR OWNER GARY GENG		
6179 DAWSON ST BURNABY BC V5B 2W5		VANCOUVER BC		CONTACT 3			
TEL 604-313-8998	BUS LICENSE 295066	TEL 604-649-6955	BUS LICENSE	TEL	BUS LICENSE		
FAX	CERTIFICATE 24410	FAX	CERTIFICATE	FAX	CERTIFICATE		

PURSUANT TO THE FIRE BY-LAW, THE FOLLOWING WORK IS HEREBY AUTHORIZED:

TO REMOVE 1 TANK ON SITE. CAPACITY IS 2800 L. SETBACK IS 8' S. BOTTOM OF TANK AT 86". TYPE OF LIQUID IS PETROLEUM.

PERMIT CONDITIONS AND NOTES:

- 001 THE WORK UNDER THIS PERMIT IS AUTHORIZED PURSUANT TO THE FIRE BY-LAW.
- 020 Clearance is required from the Engineering Department, Streets Division, for work affecting
- 030 For removal: the tanks, together with connected piping and dispensing equipment, shall have all combustible or flammable liquids removed. The tanks and piping must be removed from the ground and purged of vapours. The pipe ends must be permanently sealed by capping or plugging.
- 035 For abandonment: pump out remaining content, steam clean interior, and fill with sand/concrete slurry.
- 040 Tank removal must comply with subsection 4.10.3 of the Vancouver Fire By-law.
- 910 Construction must be carried out in compliance with the provisions of Noise Control By-law No. 6555
- 995 1. This permit will become incomplete if any of the following conditions are not met:
 - (a) Work authorized by the permit has not commenced within 90 days from the date of issuance.
 - (b) Work has been substantially discontinued for a period of 90 days.
- 2. Inspection is required by Vancouver Fire and Rescue Services.
- 3. The premises shall be kept in safe manner with guards, shoring, etc. as required by the Occupational Health, Work Safe and City By-laws.
- 4. Contractor or homeowner must be on site for the inspection by the Vancouver Fire and Rescue Services.
- 5. If the soil surrounding the storage tank is contaminated, the soil shall be replaced with clean fill.
- 6. Backfill with clean soil required.
- 7. Underground storage tank removal shall be done in accordance with good engineering practices.
- 8. Environmental Final Closure Report and clearance required.

GENERAL USE	SPECIFICS/LOCATION	AREA (SF)	OCC	GENERAL USE	SPECIFICS/LOCATION	AREA (SF)	OCC
D30 ONE-FAM DWELLING			C				
ITEM	SPECIFICS/REFERENCE	QTY/AMT		ITEM	SPECIFICS/REFERENCE	QTY/AMT	
2010 OIL TANK		1	GU				

APPROVALS REQD BEFORE PERMIT IS COMPLETED INCLUDE : ENV CONTAMINATION
F101 FIRE INSPECTION BRETT COOKE 604-873-7544

PROCESSED BY: APPLICATION TAKEN BY C BAWN. PERMIT AUTHORIZED BY M TWEEDIE
 PERMIT ISSUED BY C BAWN.

ADDITIONAL NOTES:

915 To book an inspection call 3-1-1 from within Vancouver or 604-873-7000 from outside Vancouver. The 3-1-1 Centre is open 7 days a week from 7AM to 10PM, 365 days a year. Also, our 24 hour Building Inspections booking request message line is 604-873-7058. For information on how to use it, please contact the 3-1-1 Centre.

May 12 / 2015
6747
SAH - Final

COMMENTS:

FEE	AMOUNT	FEE	AMOUNT	DEPARTMENT	FIRE DEPARTMENT
656 TANK - SFD	300.00			ATTENTION	
				REASON	REFERENCE COPY NOW
INVOICE : 779843		TOTAL			
		\$300.00			

P5D202.01



Underground/Above Ground Storage Tank Inspection

Date of Inspection: May 12 2015 Contact: GRANT Permit Number: FI 412247

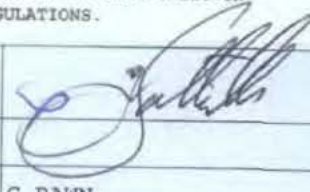
Address: 4238 Pine Crescent Phone: 604 313-8998 Appt time: AM/PM

<p>T51 Contractor on Site Name: <u>GRANT</u> <input checked="" type="checkbox"/> 95 Yes <input type="checkbox"/> 96 No</p>	<p>Contractor: Could mean representative of home owner if home owner is doing the work, or representative of the contractor. → If 96 is selected, an inspection will not be completed. (Re-inspection required)</p>
<p>T55 Home Owner Name: _____ <input type="checkbox"/> 95 Yes <input type="checkbox"/> 96 No</p>	<p>Home Owner: Could mean representative of home owner. → If 96 is selected, an inspection will not be completed. (Re-inspection required)</p>
<p>T43 Backfill Prior <input type="checkbox"/> 95 Yes</p>	<p>→ If 95 is selected, an inspection will not be completed. (Re-inspection required)</p>
<p>T40 Fencing <input checked="" type="checkbox"/> 90 Accepted <input type="checkbox"/> 01 Not Accepted</p>	<p>Select "accepted" if: → openings have temp. guards to secure excavation site, or hole is covered appropriately. → Select "not accepted" if does not meet above criteria.</p>
<p>T41 Shoring Installed – (greater than 4 ft. deep) <input checked="" type="checkbox"/> 90 Accepted <input type="checkbox"/> 51 No one entering <input type="checkbox"/> 01 Not Accepted <input type="checkbox"/> 66 Not Required – Slope 1 to 1</p>	<p>Shoring required - over 4 ft. deep. Select "accepted" if: → openings deeper than 4 ft. are shored. → contractor informs no person will be entering hole. Select "Not Accepted" if: → no shoring – re-inspection required.</p>
<p>T30 Tank – In Ground <input checked="" type="checkbox"/> 53 Onsite for view <input type="checkbox"/> 54 Not Found <input type="checkbox"/> 55 In Ground, Not Pulled <input type="checkbox"/> 56 Abandoned in place <input type="checkbox"/> 57 Removed from site (prior to inspection)</p>	<p>→ If 55 is selected, this requires a re-inspection. (See new form). → If 56 is selected, ensure permit is for abandonment. If not, a permit change to tank abandonment is required.</p>
<p>T31 Tank – Above Ground <input type="checkbox"/> 57 Removed from site <input type="checkbox"/> 54 Not found <input type="checkbox"/> 55 Abandoned in place</p>	<p>To be used for above ground tanks only. → If 55 applies, ensure permit is for abandonment. If not, a permit change to tank abandonment is required.</p>
<p>T42 Piping Capped <input checked="" type="checkbox"/> 90 Accepted <input type="checkbox"/> 01 Not Accepted <input type="checkbox"/> 54 Not Found (reserved for future use) <input type="checkbox"/> 58 Removed out of ground (reserved for future use)</p>	<p>Inspect to ensure pipe has been removed. Ensure feeder pipe into building has been capped, and fill pipe is removed. If Yes to above, it's accepted.</p>

Note: Any item NOT accepted will require a re-inspection (fees may apply). Contractors are to schedule through 311 when rectified.

Fire Inspector's Name: Sean Harvey Checked By Office Capt.: [Signature]

CITY OF VANCOUVER

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TEL 604-313-8998	BUS.LICENSE 295066	TEL 604-649-6955	BUS.LICENSE	TEL	BUS.LICENSE						
FAX	CERTIFICATE 24410	FAX	CERTIFICATE	FAX	CERTIFICATE						
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8. Environmental Final Closure Report and clearance required.											
GENERAL USE D30 ONE-FAM DWELLING		SPECIFICS/LOCATION	AREA (SF)	OCC C	GENERAL USE						
ITEM 2010 OIL TANK		SPECIFICS/REFERENCE	QTY/AMT 1 GU		SPECIFICS/REFERENCE						
APPROVALS REQD BEFORE PERMIT IS COMPLETED INCLUDE :				ENV CONTAMINATION FI01 FIRE INSPECTION BRETT COOKE 604-873-7544							
ADDITIONAL NOTES:											
915 To book an inspection call 3-1-1 from within Vancouver or 604-873-7000 from outside Vancouver. The 3-1-1 Centre is open 7 days a week from 7AM to 10PM, 365 days a year. Also, our 24 hour Building Inspections booking request message line is 604-873-7058. For information on how to use it, please contact the 3-1-1 Centre.											
AS OWNER OR OWNERS' AGENT, I HAVE VERIFIED THAT THE INFORMATION CONTAINED WITHIN THIS DOCUMENT AND ASSOCIATED PLANS IS CORRECT, AND DESCRIBES A USE, A BUILDING OR A WORK WHICH COMPLIES WITH ALL RELEVANT BY-LAWS AND STATUTES. I ACKNOWLEDGE THAT RESPONSIBILITY FOR BY-LAW COMPLIANCE RESTS WITH THE OWNER AND THE OWNER'S EMPLOYEES, AGENTS AND CONTRACTORS. I WILL INDEMNIFY AND SAVE HARMLESS THE CITY OF VANCOUVER, ITS OFFICIALS, EMPLOYEES AND AGENTS AGAINST ALL CLAIMS, LIABILITIES AND EXPENSES OF EVERY KIND, IN RESPECT OF ANYTHING DONE OR NOT DONE PURSUANT TO THIS APPLICATION OR FACT SHEET OR ENSUING PERMIT, INCLUDING NEGLIGENCE AND/OR THE FAILURE TO OBSERVE ALL BY-LAWS, ACTS OR REGULATIONS.											
FEE	AMOUNT	FEE	AMOUNT	SIGNATURE							
656 TANK - SFD	300.00										
								DATE			
								ISSUED BY C BAWN.			
								FOR THE FIRE CHIEF			
INVOICE: 779843			TOTAL	\$300.00							

P5D20001 REVISED FEB/08

AUDIT COPY



NOTICE TO PROPERTY OWNER

May 8, 2015

s.22(1)

1175 50TH AVE W
VANCOUVER BC V6P 1B1

Dear Property Owner,

RE: 4238 PINE CRESCENT

Our office has received an application for a Fire Permit to remove an Underground Storage Tank (UST), at the above noted address. The City of Vancouver Fire By-Law (section 4.10.3) requires underground storage tanks that have been abandoned or have been out of service for two (2) years, be removed. It also requires that contaminated soil be removed and backfilled with clean fill.

It is our intention to inform all property owners of the correct process to ensure that all work is completed as outlined in the current City Bylaws, and that property owners are aware of their duties, responsibilities, and benefits under the Fire Permit system. If the work is incomplete and/or fails to meet the conditions of the Fire Permit, the permit will remain open which could prevent issuance of future permits from the City, until all Fire Permit conditions are met. Property owners applying for a rezoning, development or building permit will be asked to disclose the presence or absence of an underground storage tank on the subject property, and home owners may be required to provide documentation that an underground storage tank was removed correctly. It is important to note that a Fire Permit for tank removal issued by the Fire Prevention Division must be obtained **prior** to any work starting. All conditions noted on the Fire Permit must be adhered to and completed within 90 days. Any permits not completed within this time frame will expire and a new application and additional fees may be required. A Closure Report must be submitted to the Environmental Contamination Team upon removal of the tank and soil testing for contamination. Once this report has been received and confirmation is provided that all contaminated soil was removed as per the by-law and backfill has been completed, the Fire Permit will be closed.

The City recommends that a qualified environmental consultant be contracted to oversee the tank removal process and to confirm that any contaminated soils are properly removed. The consultant can assist in preparing the final Closure Report. We cannot recommend specific contractors or consultants; however, you should ensure they have a license to operate in the City of Vancouver, have Worksafe BC coverage, and appropriate insurance. Please ensure that the tank removal company you have contracted completes all appropriate documentation.

As a home owner, it is in your best interest to ensure that the company you have contracted to remove your tank completes all the necessary steps in this process. If you have any questions please refer to the City of Vancouver Fire & Rescue Services Website: <http://vancouver.ca/home-property-development/tank-removal-or-abandonment-permit.aspx>, or contact 311 for more information.



**UNDERGROUND STORAGE TANK
REMOVAL REPORT**

For

**4238 Pine Crescent
Vancouver, B.C.
V6J 4K7**

REPORT PREPARED FOR:

**Gary Geng
4238 Pine Crescent
Vancouver, B.C.
V6J 4K7**

REPORT PREPARED BY:

**VENTUS CONSULTING INC.
Suite 406 - 2490 West 2nd Avenue
Vancouver, B.C.
V6K 1J6**

June, 2015

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1.0 EXECUTIVE SUMMARY

Ventus Consulting Inc. has been retained by Gary Geng of 4238 Pine Crescent, Vancouver, B.C., V6J 4K7 to supervise, sample and document the removal of one underground storage tank (UST) located at 4238 Pine Crescent, Vancouver, B.C., V6J 4K7. One underground storage tank is present onsite; the UST was located south of the southwest corner of the house.

The UST has been out of use since natural gas was supplied to the house. The project will follow the Ministry of Environment (MOE) guidelines and regulations. Contaminants of concern for the site are extractable petroleum hydrocarbons (EPHs) and polycyclic aromatic hydrocarbons (PAHs).

The closest watercourse to the subject site is English Bay located about 2650 meters north of the subject site. Since this watercourse is greater than 500 meters from the subject site aquatic life standards do not apply to the subject site.

The area is within residential Vancouver and has water supplied to it by the Greater Vancouver Regional District (GVRD). A water well search was not completed for the local area; water well searches, groundwater gradient and hydraulic conductivity measurements must now be completed to ascertain if drinking water standard would apply to the site. Since the application of drinking water standards to the site does not change the soils concentration requirements for this project these measurements were not completed and the drinking water standards are assumed to apply to the site. Zoning onsite is "RS-5", a residential zoning. Overall applicable Contaminated Sites Regulation (CSR) standards for the subject site would be residential with drinking water standards or RL standards.

SNR Environmental Ltd. (SNR) initially obtained a permit to remove an underground storage tank (UST) May 7, 2015. SNR personnel attended the site May 11, 2015. SNR used their excavator to perform the required work. The UST was exposed to its top. Soils were placed south of the excavation.

Two large square holes were cut in the top of the UST. SNR pumped the UST with a portable pump into three 1100 liter plastic storage tanks. About 2500 litres was pumped from the UST. The fluid was mostly water with some emulsified heating oil. SNR trucked this oily water to Sumas Environmental Services Inc. on 4623 Byrne Road in Burnaby, B.C. on May 12, 2015.

The excavator was then used to pull the UST from the tank nest. It was placed on top of the soils pile to the south of the excavation and was inspected and photographed. Holes were visible in the tank. The UST was then cleaned. The fire department inspector attended the site to inspect the excavation and tank May 21, 2015 at about 10 a.m.; the fire permit is appended.

The tank was further cut into pieces with an abrasive saw onsite. The steel pieces were taken to ABC recycling in Burnaby, B.C. for recycling May 21, 2015.

Ventus Consulting Inc. (Ventus) personnel attended the site May 11, 2015. The tank had been removed from the ground. The hydrogeologist from Ventus sampled the base of the excavation from a 7 ft. (2.13m) depth. The soil sample was placed in lab provided sample jars. The sample was put into a cooler with ice packs and transported to the certified lab the same day under chain of custody protocol. The sample was analyzed for extractable petroleum hydrocarbons (EPHs). The RL standards are 1000 ppm for EPHC10-19 and 1000 ppm for EPHC19-32. Results of analysis show the base of the excavation had a concentration of 4220 ppm for EPHC10-19 ppm and 640 ppm for EPHC19-32, the EPHC10-19 is above and the EPHC19-32 is below the RL standards. The north sidewall had a concentration of 228 ppm for EPHC10-19 ppm and 100 ppm for EPHC19-32, both below the RL standards. The south sidewall had a concentration of 55 ppm for EPHC10-19 ppm and 22 ppm for EPHC19-32, both below the RL standards. The east sidewall had a concentration of 162 ppm for EPHC10-19 ppm and 34 ppm for EPHC19-32, EPHC10-19 both below the RL standards. The west sidewall had a concentration of 84 ppm for EPHC10-19 ppm and 24 ppm for EPHC19-32, both below the RL standards. The north sidewall was also analyzed for PAHs since it had the greatest EPH concentrations of the closure samples, all PAH concentrations were below the RL standards.

The stockpile of excavated soil was analyzed for metals. All metals tested were well within RL standards.

The contaminated soils were excavated and trucked from the site on May 21, 2015 to the Ecowaste Industries located at 10991 Shellbridge Way #200, Richmond, BC and were placed in a biocell. The truck was weighed at Sumas, in total 12.01 tonnes of contaminated soils were taken from the subject site.

Ventus Consulting Inc. (Ventus) personnel re-attended the site May 20, 2015 to obtain closure samples. The hydrogeologist from Ventus sampled the base of the excavation from a 10 ft. (3.05m) depth. The soil sample was placed in lab provided sample jars. The sample was put into a cooler with ice packs and transported to the certified lab the same day under chain of custody protocol. The sample was analyzed for extractable petroleum hydrocarbons (EPHs). The RL standards are 1000 ppm for EPHC10-19 and 1000 ppm for EPHC19-32. Results of analysis show the base of the excavation had a concentration of <20 ppm for EPHC10-19 ppm and <20 ppm for EPHC19-32, both below the RL standards. The site requires no further work to meet RL standards.

The excavation was fully backfilled June 5, 2015 with onsite clean soils, two truckloads of 20mm "roadbase" gravel and one truckload of topsoil.

The hydrogeologist from Ventus attended the site June 5, 2015 and photographed the finished project.

Further environmental work is not required the Independent Remediation Plan form has already been completed and submitted to the MOE. It is appended to this report. A copy of this entire report will be emailed to the City of Vancouver Environmental Protection Branch. The City of Vancouver UST Removal Form will also be emailed to the City of Vancouver Environmental Protection Branch.

2.0 INTRODUCTION

Ventus Consulting Inc. has been retained by Gary Geng of 4238 Pine Crescent, Vancouver, B.C., V6J 4K7 to supervise, sample, and document the removal of one underground storage tank (UST) located at 4238 Pine Crescent, Vancouver, B.C. V6J 4K7. The legal description of the site is as follows:

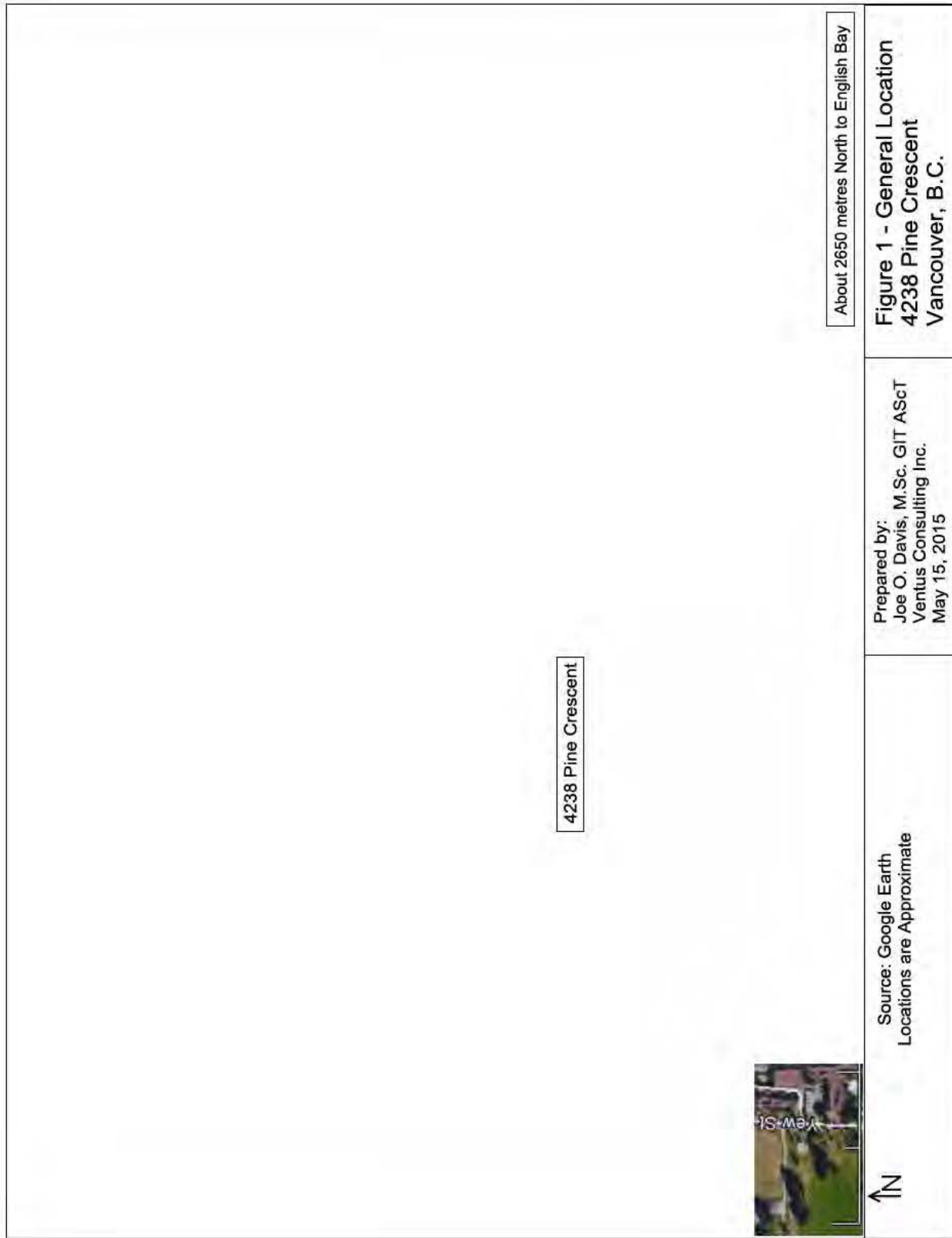
Lot	Block	District Lot	District	Plan	Parcel Identifier Number
12	667	526	New Westminster	6011	011-032-341

A legal title was obtained for the site, it is the last two pages of the independent remediation form submitted to the Ministry of Environment (MOE), see pages 65. The geographic coordinates of the centre of the subject site is about latitude N 49 degrees, 14 minutes and 53.42 seconds, and longitude W 123 degrees, 8 minutes, 52.54 seconds.

One UST was removed from site; the UST was located about 16.8 meters north and 9.5 meters east of the southwest property corner. The UST was located south of the southwest corner of the house onsite approximately.

A General Location Map for the subject site is shown on Figure 1, page 7. The closest watercourse to the subject site is English Bay about 2650 meters north from the subject site. Since this watercourse is greater than 500 metres from the subject site aquatic life standards do not apply to the site.

The subject site is presently a residential home. One underground storage tank (UST) is present onsite. The capacity of the UST was 600 gallons or about 2800 liters. Environmental fieldwork began on May 11, 2015. The excavation was backfilled and the project completed by 26, 2015. Final site photos were completed June 5, 2015.



3.0 FIELD PROCEDURES

SNR Environmental Ltd. (SNR) initially obtained a permit to remove an underground storage tank (UST) May 7, 2015. It is attached, see Appendix D, page 45. SNR personnel attended the site May 11, 2015. SNR used their excavator to perform the required work. The UST was exposed to its top. Soils were placed south of the excavation.

Two large square holes were cut in the top of the UST. SNR pumped the UST with a portable pump into three 1100 liter plastic storage tanks. About 2500 liters was pumped from the UST. The fluid was mostly water with some emulsified heating oil. SNR trucked this oily water to Sumas Environmental Services Inc. on 4623 Byrne Road in Burnaby, B.C. on May 12, 2015. The Bill of Lading for this oily water is given in Appendix E, page 47.

The excavator was then used to pull the UST from the tank nest. It was placed on top of the soils pile to the south of the excavation and was inspected and photographed. Holes were visible in the tank. The UST was then cleaned. The fire department inspector attended the site to inspect the excavation and tank May 21, 2015 at about 10 a.m.; the fire permit is given in Appendix D, page 45.

The tank was further cut into pieces with an abrasive saw onsite. The steel pieces were taken to ABC recycling in Burnaby, B.C. for recycling May 21, 2015. Appendix F, page 49 shows the receipt for this tank.

Ventus Consulting Inc. (Ventus) personnel attended the site May 11, 2015. The tank had been removed from the ground. The hydrogeologist from Ventus sampled the base of the excavation from a 7 ft. (2.13m) depth. The soil sample was placed in lab provided sample jars. The sample was put into a cooler with ice packs and transported to the certified lab the same day under chain of custody protocol. The sample was analyzed for extractable petroleum hydrocarbons (EPHs). The RL standards are 1000 ppm for EPHC10-19 and 1000 ppm for EPHC19-32. Results of analysis show the base of the excavation had a concentration of 4220 ppm for EPHC10-19 ppm and 640 ppm for EPHC19-32, the EPHC10-19 is above and the EPHC19-32 is below the RL standards. The north sidewall had a concentration of 228 ppm for EPHC10-19 ppm and 100 ppm for EPHC19-32, both below the RL standards. The south sidewall had a concentration of 55 ppm for EPHC10-19 ppm and 22 ppm for EPHC19-32, both below the RL standards. The east sidewall had a concentration of 162 ppm for EPHC10-19 ppm and 34 ppm for EPHC19-32, EPHC10-19 both below the RL standards. The west sidewall had a concentration of 84 ppm for EPHC10-19 ppm and 24 ppm for EPHC19-32, both below the RL standards. The north sidewall was also analyzed for PAHs since it had the greatest EPH concentrations of the closure samples, all PAH concentrations were below the RL standards.

The stockpile of excavated soil was analyzed for metals. All metals tested were well within RL standards.

The contaminated soils were excavated and trucked from the site on May 21, 2015 to the Ecowaste Industries located at 10991 Shellbridge Way #200, Richmond, BC and were placed in a biocell. The truck was weighed at Sumas, in total 12.01 tonnes of contaminated soils were taken from the subject site. Appendix H, page 53 shows the receipt for the soil removal.

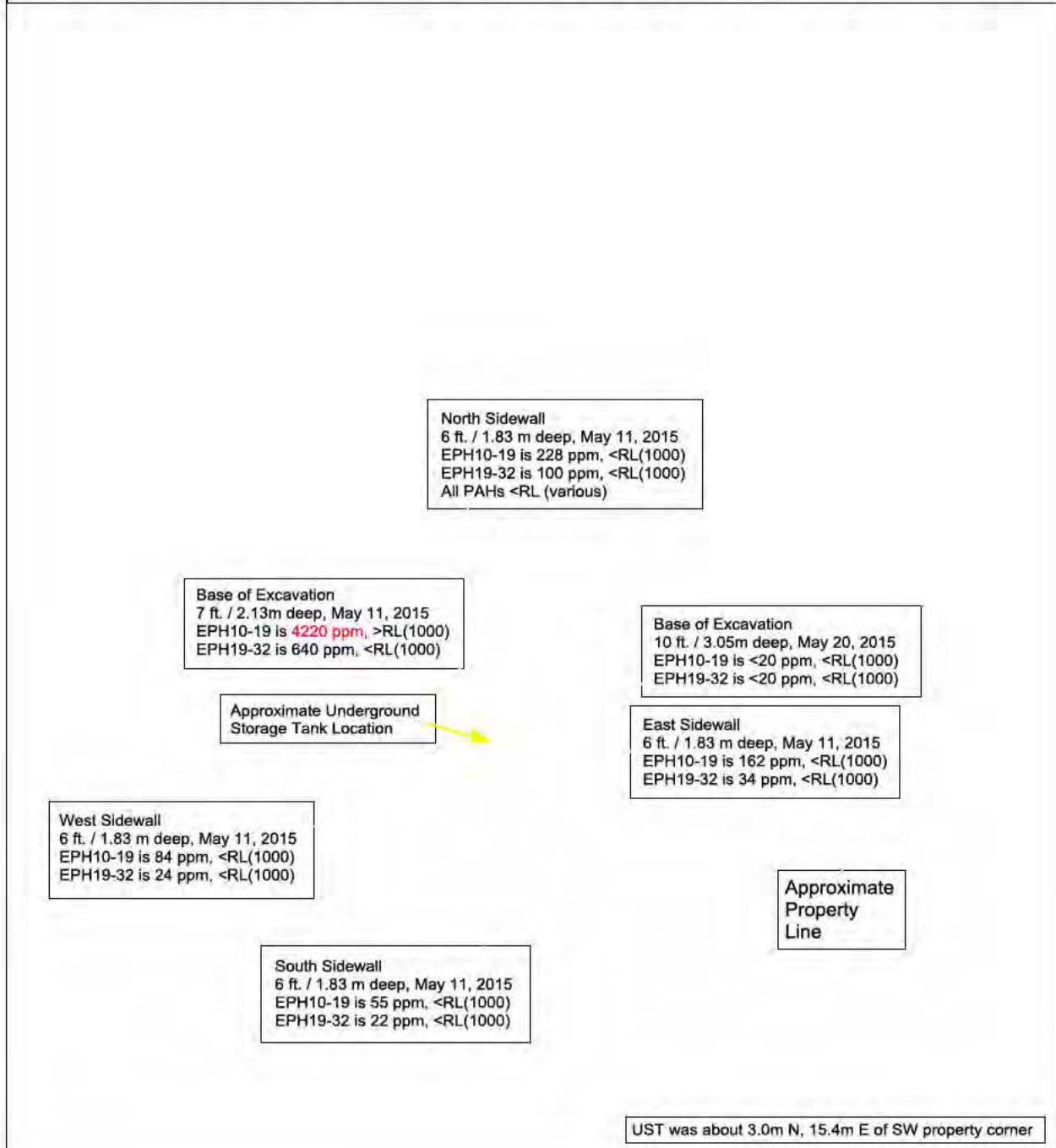
Ventus Consulting Inc. (Ventus) personnel re-attended the site May 20, 2015 to obtain closure samples. The hydrogeologist from Ventus sampled the base of the excavation from a 10 ft. (3.05m) depth. The soil sample was placed in lab provided sample jars. The sample was put into a cooler with ice packs and transported to the certified lab the same day under chain of custody protocol. The sample was analyzed for extractable petroleum hydrocarbons (EPHs). The RL standards are 1000 ppm for EPHC10-19 and 1000 ppm for EPHC19-32. Results of analysis show the base of the excavation had a concentration of <20 ppm for EPHC10-19 ppm and <20 ppm for EPHC19-32, both below the RL standards. The site requires no further work to meet RL standards.

Table 1 and Table 2, of Appendix B, page 19 gives the EPH and PAH concentrations respectively. Figure 2, page 10 shows the approximate location of the samples and the concentrations obtained from these samples. Laboratory originals are given in Appendix C, page 22. Quality Assurance and Quality Control information from the laboratory is also shown in Appendix C.

The excavation was fully backfilled June 5, 2015 with onsite clean soils, two truckloads of topsoil. Appendix G, page 51 shows the receipt for the fill materials. The fill soils were packed in one meter lifts. The hydrogeologist from Ventus attended the site June 5, 2015 and photographed the finished project.

Further environmental work is not required the Independent Remediation Plan form has already been completed and submitted to the MOE. It is given in Appendix I, page 55. A copy of this entire report will be provided by Ventus to the City of Vancouver Environmental Protection Branch. The City of Vancouver UST Removal Form will also be emailed to the City of Vancouver Environmental Protection Branch.

Figure 2: UST Location and Soils Concentrations for 4238 Pine Crescent, Vancouver, B.C.



<p>Sample # Depth Sample Date</p> <p>↓ ↓ ↓</p> <p>South Sidewall 8 ft. / 2.43 m deep, June 28, 2014</p> <p>EPH10-19 is 47 ppm, <RL(1000) ← CSR Residential Standard</p> <p>EPH19-32 is 31 ppm, <RL(1000) ← CSR Residential Standard</p> <p>Constituent Concentration CSR Result</p> <p>Areas outlined or values in red are above the RL standard. These areas have been excavated.</p>	<p>Legend</p> <p>Source: City of Vancouver</p>	<p>Drawn By: Joe O. Davis, M.Sc. GIT May 20, 2015 Locations are Approximate</p> <p>Ventus Consulting Inc. Suite 406 - 2490 West 2nd Ave. Vancouver, B.C. V6K 1J6 604 730-0771</p>
---	---	---

0m 3m 6m 9m 12m 15m 18m

4.0 SUMMARY

This project has successfully removed one UST found in place at 4238 Pine Crescent in Vancouver, B.C., V6J 4K7. Soils encountered during excavation had concentrations greater than RL standards requiring the excavation and removal of 12.01 tonnes of contaminated soils from the site.

The closest watercourse to the subject site is English Bay located about 2650 meters northwest of the subject site. Since this watercourse is greater than 500 meters from the subject site aquatic life standards do not apply to the subject site. The area is within residential Vancouver and has water supplied to it by the Greater Vancouver Regional District (GVRD). A water well search was not completed for the local area; water well searches, groundwater gradient and hydraulic conductivity measurements must now be completed to ascertain if drinking water standards would apply to the site. Since the application of drinking water standards to the site does not change the soils concentration requirements for this project these measurements were not completed and the drinking water standards are assumed to apply to the site. Zoning onsite is "RS-5", a residential zoning. Overall applicable Contaminated Sites Regulation (CSR) standards for the subject site would be residential with drinking water standards or RL standards.

Six EPH soil samples and one PAH sample were obtained from the site, transported to the laboratory under chain of custody protocol and analyzed at the laboratory. Figure 2, page 10 shows the concentrations of soil samples and approximate locations of samples.

Further environmental work is not required, the Independent Remediation Plan form has already been completed and submitted to the MOE. A copy of this entire report will be provided by Ventus to the City of Vancouver Environmental Protection Branch by email. The City of Vancouver UST Removal Form will also be emailed to the City of Vancouver Environmental Protection Branch.

5.0 CONCLUSION

This project has successfully removed one UST. Soils encountered during excavation had concentrations greater than RL standards requiring the excavation and removal of 12.01 tonnes of contaminated soils from the site.

Contaminants of concern for the site, namely EPHs and PAHs have been tested for onsite with closure samples and they have concentrations less than the residential with drinking water standards or RL standards.

No further environmental work is required at the site. The Independent Remediation Plan form has already completed and submitted to the MOE. A copy of this entire report will be provided by Ventus to the City of Vancouver Environmental Protection Branch via email. The City of Vancouver UST Removal Form will also be emailed to the City of Vancouver Environmental Protection Branch.

6.0 DISCLAIMER

This project was conducted and reported using generally accepted hydrogeologic and environmental engineering practices and in accordance with MOE regulations. Ventus Consulting Inc. has made all reasonable attempts to complete this project in a professional manner but cannot be held responsible for errors and omissions resulting from unknown field conditions or unavailable data. Data was collected from site specific locations and hence June vary from actual site conditions, although the reported information is believed to provide a reasonable representation of the environmental conditions within the areas of investigation. This report is subject to copy write law and is the sole property of Gary Geng of 4238 Pine Crescent, Vancouver, B.C., V6J 4K7. Any third party use of this report is at the sole risk of this party or person, Ventus Consulting Inc. and the author of this report assume no liability whatsoever. The Ministry of Environment (MOE) and the City of Vancouver June rely on this report.

I have a bachelor's degree in Geophysics obtained from the University of Calgary in 1987 and a masters degree in Hydrogeology received from the University of British Columbia in 1995. I have practiced environmental consulting in the province of British Columbia since 1989.



Joe O. Davis, M.Sc. GIT
Senior Hydrogeologist

APPENDIX A – SITE PHOTOGRAPHS



The UST was located south of the southwest corner of the house onsite.



Ventus personnel obtained soils samples May 11, 2015. The base of excavation failed RL standards and all four sidewall samples passed RL standards.



Looking into the excavation after excavation of the contaminated soils May 20, 2015.



A base of excavation closure soil sample was obtained May 20, 2015, it passed RL standards.



12.01 tonnes of contaminated soils was trucked to Ecowaste Industries located at 10991 Shellbridge Way #200, Richmond on May 21, 2015.



The excavation was backfilled with the onsite clean soils and 2 truckloads of topsoil.



Looking east at the former UST area, the project is completed.



The completed project June 5, 2015.

APPENDIX B – ANALYTICAL DATA

Table 1: EPHs in Soils for 4238 Pine Crescent, Vancouver

	Detection Limit	Base of Excavation	North Sidewall	South Sidewall	East Sidewall	RL
Date		May 11, 2015	May 11, 2015	May 11, 2015	May 11, 2015	
Depth		2.13m (7 ft.)	1.83m (6 ft.)	1.83m (6 ft.)	1.83m (6 ft.)	
EPHC10-19	20	4220	228	55	162	1000
EPH C19-32	20	640	100	22	34	1000

Notes:

Values are in ug/g dry (ppm).

RL means applicable Residential with Drinking Water standards from the Contaminated Sites Regulations.

Bold values are above the RL standard.

None means no RL standard for compound.

Table 1 continued: EPHs in Soils for 4238 Pine Crescent, Vancouver

	Detection Limit	West Sidewall	Final Base of Excavation			RL
Date		May 11, 2015	May 20, 2015			
Depth		1.83m (6 ft.)	3.05m (10 ft.)			
EPHC10-19	20	84	<20			1000
EPH C19-32	20	24	<20			1000

Notes:

Values are in ug/g dry (ppm).

RL means applicable Residential with Drinking Water standards from the Contaminated Sites Regulations.

Bold values are above the RL standard.

None means no RL standard for compound.

Table 2: Polycyclic Aromatic Hydrocarbons (PAHs) in Soils for 4238 Pine Crescent, Vancouver					
	Detection Limit	North Sidewall			RL
Date		May 11, 2015			
Depth of Sample		1.83m (6 ft.)			
Acenaphthene	0.01	<0.01			none
Acenaphthylene	0.01	<0.01			none
Anthracene	0.02	<0.02			none
Benzo(a)anthracene	0.02	<0.02			1
Benzo(a)pyrene	0.05	<0.05			1
Benzo(b)fluoranthene	0.02	<0.02			1
Benzo(g,h,i)perylene	0.05	<0.05			none
Benzo(k)fluoranthene	0.02	<0.02			1
Chrysene	0.05	<0.05			none
Dibenzo(a,h)anthracene	0.02	<0.02			1
Fluoranthene	0.05	<0.05			none
Fluorene	0.02	<0.02			none
Indeno(1,2,3-c,d)pyrene	0.02	<0.02			1
Naphthalene	0.01	<0.01			none
Phenanthrene	0.02	<0.02			5
Pyrene	0.02	<0.02			10
Notes:					
Values are in ug/g dry (ppm)					
RL means applicable Residential standards with drinking water standards from the Contaminated Sites Regulations.					
Bold values are above the RL standard.					
None means no RL standard for compound.					

APPENDIX C – ORIGINAL LABORATORY DATA



Unit 120, 8600 Glenlyon Parkway
Burnaby, British Columbia
CANADA V5J 0B6
TEL (778)452-4000
FAX (778)452-4074
<http://www.agatlabs.com>

CLIENT NAME: VENTUS CONSULTING INC
406-2490 WEST 2ND AVE
VANCOUVER, BC V6K1J6
(604) 730-0771

ATTENTION TO: Joe Davis

PROJECT: 4238 Pine Crescent, Vancouver BC

AGAT WORK ORDER: 15V972481

TRACE ORGANICS REVIEWED BY: Angela Bond, Technical Reviewer

DATE REPORTED: May 25, 2015

PAGES (INCLUDING COVER): 8

VERSION*: 3

Should you require any information regarding this analysis please contact your client services representative at (778) 452-4000

***NOTES**

VERSION 3: Sample receipt temperature 4°C.

Version 3 of this report was issued to report LEPH/HEPH results for sample (6532528), as requested by Joe Davis from Ventus Consulting. New report issued May 25, 2015. Version 3 is an amendment of Version 2.

All samples will be disposed of within 30 days following analysis. Please contact the lab if you require additional sample storage time.

AGAT Laboratories (V3)

Member of: Association of Professional Engineers, Geologists and Geophysicists
of Alberta (APEGGA)
Western Enviro-Agricultural Laboratory Association (WEALA)
Environmental Services Association of Alberta (ESAA)

Page 1 of 8

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Results relate only to the items tested and to all the items tested



AGAT Laboratories

Certificate of Analysis

AGAT WORK ORDER: 15V972481

PROJECT: 4238 Pine Crescent, Vancouver BC

Unit 120, 8600 Glenlyon Parkway
Burnaby, British Columbia
CANADA V5J 0B6
TEL (778)452-4000
FAX (778)452-4074
http://www.agatlabs.com

CLIENT NAME: VENTUS CONSULTING INC

ATTENTION TO: Joe Davis

SAMPLING SITE:

SAMPLED BY:

EPH Soil									
DATE RECEIVED: 2015-05-12					DATE REPORTED: 2015-05-25				
		Base of							
		Excavation 7		North Sidewall 6		South Sidewall 6		East Sidewall 6	
		feet deep		feet deep		6 feet deep		feet deep	
		Soil		Soil		Soil		Soil	
		5/11/2015		5/11/2015		5/11/2015		5/11/2015	
Parameter	Unit	G / S	RDL	6532526	6532528	6532529	6532531	6532532	
EPH C10-C19	µg/g	20	4220	228	55	162	84		
EPH C19-C32	µg/g	20	640	100	22	34	24		

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard; Refers to BC CSR (RL-G) (Van)
6532526-6532532 Results are based on dry weight of sample.
EPH results are not corrected for potential PAH contributions.

Certified By:



AGAT Laboratories

Certificate of Analysis

AGAT WORK ORDER: 15V972481

PROJECT: 4238 Pine Crescent, Vancouver BC

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 http://www.agatlabs.com

CLIENT NAME: VENTUS CONSULTING INC

ATTENTION TO: Joe Davis

SAMPLING SITE:

SAMPLED BY:

LEPH/HEPH Soil				
DATE RECEIVED: 2015-05-12			DATE REPORTED: 2015-05-25	
North Sidewall 6				
SAMPLE DESCRIPTION:		feet deep		
SAMPLE TYPE:		Soil		
DATE SAMPLED:		5/11/2015		
Parameter	Unit	G / S	RDL	6532528
Naphthalene	µg/g		0.01	<0.01
2-Methylnaphthalene	µg/g		0.01	<0.01
1-Methylnaphthalene	µg/g		0.01	<0.01
Acenaphthylene	µg/g		0.01	<0.01
Acenaphthene	µg/g		0.01	<0.01
Fluorene	µg/g		0.02	<0.02
Phenanthrene	µg/g	5	0.02	<0.02
Anthracene	µg/g		0.02	<0.02
Fluoranthene	µg/g		0.05	<0.05
Pyrene	µg/g	10	0.02	<0.02
Benzo(a)anthracene	µg/g	1	0.02	<0.02
Chrysene	µg/g		0.05	<0.05
Benzo(b)fluoranthene	µg/g	1	0.02	<0.02
Benzo(j)fluoranthene	µg/g		0.02	<0.02
Benzo(k)fluoranthene	µg/g	1	0.02	<0.02
Benzo(a)pyrene	µg/g		0.05	<0.05
Indeno(1,2,3-c,d)pyrene	µg/g		0.02	<0.02
Dibenzo(a,h)anthracene	µg/g	1	0.02	<0.02
Benzo(g,h,i)perylene	µg/g		0.05	<0.05
LEPH C10-C19	µg/g	1000	20	228
HEPH C19-C32	µg/g	1000	20	100
Benzo(b+j)fluoranthene	µg/g		0.03	<0.03
Surrogate	Unit	Acceptable Limits		
Naphthalene - d8	%	50-130		76
2-Fluorobiphenyl	%	50-130		78
P-Terphenyl - d14	%	60-130		78

Certified By:

Angela Bond



AGAT Laboratories

Certificate of Analysis

AGAT WORK ORDER: 15V972481

PROJECT: 4238 Pine Crescent, Vancouver BC

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Burnaby, British Columbia
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TEL (778)452-4000
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http://www.agatlabs.com

CLIENT NAME: VENTUS CONSULTING INC

ATTENTION TO: Joe Davis

SAMPLING SITE:

SAMPLED BY:

LEPH/HEPH Soil	
DATE RECEIVED: 2015-05-12	DATE REPORTED: 2015-05-25

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to BC CSR (RL-G) (Van)
 6532528 Results are based on dry weight of sample.
 LEPH & HEPH results have been corrected for PAH contributions.

Certified By:



Unit 120, 8600 Glenlyon Parkway
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CANADA V5J 0B6
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FAX (778)452-4074
http://www.agatlabs.com

Quality Assurance

CLIENT NAME: VENTUS CONSULTING INC
PROJECT: 4238 Pine Crescent, Vancouver BC
SAMPLING SITE:

AGAT WORK ORDER: 15V972481
ATTENTION TO: Joe Davis
SAMPLED BY:

Trace Organics Analysis																
RPT Date: May 25, 2015				DUPLICATE			Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Measured Value		Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits		
								Lower	Upper		Lower	Upper		Lower	Upper	

EPH Soil														
EPH C10-C19	64049	6529416	809	774	4.0%	< 20	97%	70%	130%			79%	65%	120%
EPH C19-C32	64049	6529416	1010	966	4.0%	< 20	97%	70%	130%			85%	80%	120%

Comments: RPDs are calculated using raw analytical data and not the rounded duplicate values reported.

EPH Soil														
EPH C10-C19	64060	6532808	<20	<20	0.0%	< 20	100%	70%	130%			97%	65%	120%
EPH C19-C32	64060	6532808	<20	<20	0.0%	< 20	96%	70%	130%			85%	80%	120%

Comments: RPDs are calculated using raw analytical data and not the rounded duplicate values reported.

LEPH/HEPH Soil														
Naphthalene	64096	6554700	0.11	0.07	44.4%	< 0.01	102%	80%	120%			86%	50%	130%
2-Methylnaphthalene	64096	6554700	0.02	0.02	0.0%	< 0.01	102%	80%	120%			83%	50%	130%
1-Methylnaphthalene	64096	6554700	0.03	0.02	40.0%	< 0.01	101%	80%	120%			85%	50%	130%
Acenaphthylene	64096	6554700	<0.01	<0.01	0.0%	< 0.01	102%	80%	120%			80%	50%	130%
Acenaphthene	64096	6554700	<0.01	<0.01	0.0%	< 0.01	102%	80%	120%			87%	50%	130%
Fluorene	64096	6554700	<0.02	<0.02	0.0%	< 0.02	101%	80%	120%			83%	50%	130%
Phenanthrene	64096	6554700	<0.02	<0.02	0.0%	< 0.02	101%	80%	120%			80%	60%	130%
Anthracene	64096	6554700	<0.02	<0.02	0.0%	< 0.02	101%	80%	120%			87%	60%	130%
Fluoranthene	64096	6554700	<0.05	<0.05	0.0%	< 0.05	100%	80%	120%			81%	60%	130%
Pyrene	64096	6554700	<0.02	<0.02	0.0%	< 0.02	100%	80%	120%			83%	60%	130%
Benzo(a)anthracene	64096	6554700	<0.02	<0.02	0.0%	< 0.02	100%	80%	120%			73%	60%	130%
Chrysene	64096	6554700	<0.05	<0.05	0.0%	< 0.05	101%	80%	120%			82%	60%	130%
Benzo(b)fluoranthene	64096	6554700	<0.02	<0.02	0.0%	< 0.02	96%	80%	120%			68%	60%	130%
Benzo(j)fluoranthene	64096	6554700	<0.02	<0.02	0.0%	< 0.02	101%	80%	120%			83%	60%	130%
Benzo(k)fluoranthene	64096	6554700	<0.02	<0.02	0.0%	< 0.02	108%	80%	120%			79%	60%	130%
Benzo(a)pyrene	64096	6554700	<0.05	<0.05	0.0%	< 0.05	101%	80%	120%			73%	60%	130%
Indeno(1,2,3-c,d)pyrene	64096	6554700	<0.02	<0.02	0.0%	< 0.02	101%	80%	120%			72%	60%	130%
Dibenzo(a,h)anthracene	64096	6554700	<0.02	<0.02	0.0%	< 0.02	101%	80%	130%			70%	60%	130%
Benzo(g,h,i)perylene	64096	6554700	<0.05	<0.05	0.0%	< 0.05	101%	80%	120%			78%	60%	130%
Naphthalene - d8	64096	6554700	50	50	0.0%		100%	80%	120%			87%	50%	130%
2-Fluorobiphenyl	64096	6554700	62	55	12.0%		100%	80%	120%			88%	50%	130%
P-Terphenyl - d14	64096	6554700	NA	NA	0.0%		98%	80%	120%			87%	60%	130%

Comments: RPDs are calculated using raw analytical data and not the rounded duplicate values reported.

Certified By:

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Results relate only to the items tested and to all the items tested




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TEL (778)452-4000
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<http://www.agatlabs.com>

Method Summary

CLIENT NAME: VENTUS CONSULTING INC
PROJECT: 4238 Pine Crescent, Vancouver BC
SAMPLING SITE:

AGAT WORK ORDER: 15V972481
ATTENTION TO: Joe Davis
SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Trace Organics Analysis			
EPH C10-C19	ORG-180-5101	Modified from BCMOE Lab Manual Section D (EPH)	GC/FID
EPH C19-C32	ORG-180-5101	Modified from BCMOE Lab Manual Section D (EPH)	GC/FID
Naphthalene	ORG-180-5102	Modified from BC MOE Lab Manual Section D (PAH)	GC/MS
2-Methylnaphthalene	ORG-180-5102	Modified from BC MOE Lab Manual Section D (PAH)	GC/MS
1-Methylnaphthalene	ORG-180-5102	Modified from BC MOE Lab Manual Section D (PAH)	GC/MS
Acenaphthylene	ORG-180-5102	Modified from BC MOE Lab Manual Section D (PAH)	GC/MS
Acenaphthene	ORG-180-5102	Modified from BC MOE Lab Manual Section D (PAH)	GC/MS
Fluorene	ORG-180-5102	Modified from BC MOE Lab Manual Section D (PAH)	GC/MS
Phenanthrene	ORG-180-5102	Modified from BC MOE Lab Manual Section D (PAH)	GC/MS
Anthracene	ORG-180-5102	Modified from BC MOE Lab Manual Section D (PAH)	GC/MS
Fluoranthene	ORG-180-5102	Modified from BC MOE Lab Manual Section D (PAH)	GC/MS
Pyrene	ORG-180-5102	Modified from BC MOE Lab Manual Section D (PAH)	GC/MS
Benzo(a)anthracene	ORG-180-5102	Modified from BC MOE Lab Manual Section D (PAH)	GC/MS
Chrysene	ORG-180-5102	Modified from BC MOE Lab Manual Section D (PAH)	GC/MS
Benzo(b)fluoranthene	ORG-180-5102	Modified from BC MOE Lab Manual Section D (PAH)	GC/MS
Benzo(j)fluoranthene	ORG-180-5102	Modified from BC MOE Lab Manual Section D (PAH)	GC/MS
Benzo(k)fluoranthene	ORG-180-5102	Modified from BC MOE Lab Manual Section D (PAH)	GC/MS
Benzo(a)pyrene	ORG-180-5102	Modified from BC MOE Lab Manual Section D (PAH)	GC/MS
Indeno(1,2,3-c,d)pyrene	ORG-180-5102	Modified from BC MOE Lab Manual Section D (PAH)	GC/MS
Dibenzo(a,h)anthracene	ORG-180-5102	Modified from BC MOE Lab Manual Section D (PAH)	GC/MS
Benzo(g,h,i)perylene	ORG-180-5102	Modified from BC MOE Lab Manual Section D (PAH)	GC/MS
Naphthalene - d8	ORG-180-5102	Modified from BC MOE Lab Manual Section D (PAH)	GC/MS
2-Fluorobiphenyl	ORG-180-5102	modified from BC MOE Lab Manual Section D (PAH)	GC/MS
P-Terphenyl - d14	ORG-180-5102	modified from BC MOE Lab Manual Section D (PAH)	GC/MS
LEPH C10-C19	ORG-180-5101	Modified from BCMOE Lab Manual Section D (EPH)	GC/FID
HEPH C19-C32	ORG-180-5101	Modified from BCMOE Lab Manual Section D (EPH)	GC/FID



AGAT Laboratories

120 - 8600 Glenlyon Parkway
Burnaby, BC V5J 0B6
778.452.4006
webearth@agatlabs.com

Chain of Custody Record

Report Information

Company: Ventus Consulting Inc
 Contact: Jim Davis
 Address: 406-2490 Westland Ave
Vancouver BC
 Phone: 604 730-0771 Fax: Same
 LSD: _____
 Client Project #: 4238 Pine Crescent

Laboratory Use Only

Arrival Temperature: 4°C
 AGAT Job Number: 15V972481

Notes: May 12/15 12:43

Turnaround Time Required (TAT)
 Regular TAT 5 to 7 working days
 Rush TAT Day 2 - 100%
 Day 3 - 50%
 Day 4 - 25%

Date Required: _____

PLEASE CONTACT LABORATORY IF RUSH REQUIRED SAMPLE
 SUBMISSION CUT OFF FOR EFFECTIVE DATE BY 3 PM

Requirements (Please Check)

BC CSR Soil BC CSR - Water

IL DLW AW

PL IW LW

CL RL

RL

Schedule 11 (Please Specify) _____
 CCME (Please Specify) _____
 Other (Please Specify) _____

LABORATORY USE (LAB ID #)	SAMPLE IDENTIFICATION	SAMPLE MATRIX	DATE/TIME SAMPLED	COMMENTS - SITE SAMPLE INFO, SAMPLE CONTAINMENT	NUMBER OF CONTAINERS PRESERVED (Y/N)	HAZARDOUS (Y/N)	Hold for: <input type="checkbox"/> 60 DAYS
6532526							
S28	<u>North of Errol</u>						
S29	<u>South</u>						
S31	<u>East</u>						
S32	<u>West</u>						
				<u>Sampled May 11/2015. Joe</u>			
				<u>May 12, 2015 submitted lab.</u>			

Report Format

Single Sample per page
 Multiple Samples per page

Excel Format Included

Notes: FPHs only regular
FPHs only 24 hr/7 days

Signatures

Samples Relinquished By (Print Name and Sign): _____ Date/Time: _____

Samples Relinquished By (Print Name and Sign): Jim Davis Date/Time: May 12/15

Samples Relinquished By (Print Name and Sign): _____ Date/Time: _____

Page 7 of 7

№: 012848



AGAT Laboratories

SAMPLE INTEGRITY RECEIPT FORM - BURNABY

Work Order # 15V972481

RECEIVING BASICS:
Received From: Joe Waybill #: _____
SAMPLE QUANTITIES:
Coolers: 1 Containers: 5

TIME SENSITIVE ISSUES:
Earliest Date Sampled: 11 May 2015 ALREADY EXCEEDED? Yes No

NON-CONFORMANCES:
3 temperatures of samples* and average of each cooler: (record differing temperatures on the CoC next to sample ID's) *use jars when available
(1) 4 + 4 + 4 = 4 °C (2) _____ + _____ = _____ °C (3) _____ + _____ = _____ °C (4) _____ + _____ = _____ °C
Was ice or ice pack present: Yes No
Integrity Issues:

Account Project Manager: _____ have they been notified of the above issues: Yes No
Whom spoken to: _____ Date and Time: _____

ADDITIONAL NOTES:



Unit 120, 8600 Glenlyon Parkway
Burnaby, British Columbia
CANADA V5J 0B6
TEL (778)452-4000
FAX (778)452-4074
<http://www.agatlabs.com>

CLIENT NAME: VENTUS CONSULTING INC
406-2490 WEST 2ND AVE
VANCOUVER, BC V6K1J6
(604) 730-0771

ATTENTION TO: Joe Davis

PROJECT: 4238 Pine Crescent, Vancouver, B.C.

AGAT WORK ORDER: 15V975865

TRACE ORGANICS REVIEWED BY: Angela Bond, Technical Reviewer

DATE REPORTED: May 27, 2015

PAGES (INCLUDING COVER): 6

VERSION*: 1

Should you require any information regarding this analysis please contact your client services representative at (778) 452-4000

***NOTES**

VERSION 1: Sample receipt temperature 5°C.

All samples will be disposed of within 30 days following analysis. Please contact the lab if you require additional sample storage time.

AGAT Laboratories (V1)

Member of: Association of Professional Engineers, Geologists and Geophysicists
of Alberta (APEGGA)
Western Enviro-Agricultural Laboratory Association (WEALA)
Environmental Services Association of Alberta (ESAA)

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Results relate only to the items tested and to all the items tested

Page 1 of 6

Unit 120, 8600 Glenlyon Parkway
Burnaby, British Columbia
CANADA V5J 0B6
TEL (778)452-4000
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http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 15V975865

PROJECT: 4238 Pine Crescent, Vancouver, B.C.

ATTENTION TO: Joe Davis

SAMPLED BY:



CLIENT NAME: VENTUS CONSULTING INC

SAMPLING SITE:

DATE RECEIVED: 2015-05-21		DATE REPORTED: 2015-05-27	
EPH Soil			
Base of Excavation 10 feet deep SAMPLE DESCRIPTION: Soil SAMPLE TYPE: Soil DATE SAMPLED: 5/20/2015 RDL: 6563421			
Parameter	Unit	G / S	RDL
EPH C-10-C19	µg/g	20	<20
EPH C-19-C32	µg/g	20	<20

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard; Refers to BC CSR (RL-G) (Van)
 6563421
 Results are based on dry weight of sample.
 EPH results are not corrected for potential PAH contributions.

Certified By:

AGAT CERTIFICATE OF ANALYSIS (V1)

Results relate only to the items tested and to all the items tested



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CANADA V5J 0B6
TEL (778)452-4000
FAX (778)452-4074
http://www.agatlabs.com

Quality Assurance

CLIENT NAME: VENTUS CONSULTING INC
PROJECT: 4238 Pine Crescent, Vancouver, B.C.
SAMPLING SITE:

AGAT WORK ORDER: 15V975865
ATTENTION TO: Joe Davis
SAMPLED BY:

Trace Organics Analysis

RPT Date: May 27, 2015			DUPLICATE			Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD		Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
EPH Soil															
EPH C10-C19	64104	6548764	<20	<20	0.0%	< 20	100%	70%	130%				97%	65%	120%
EPH C19-C32	64104	6548764	<20	<20	0.0%	< 20	106%	70%	130%				86%	80%	120%

Comments: RPDs are calculated using raw analytical data and not the rounded duplicate values reported.

Certified By:

AGAT QUALITY ASSURANCE REPORT (V1)

Page 3 of 6

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Results relate only to the items tested and to all the items tested



Unit 120, 8600 Glenlyon Parkway
Burnaby, British Columbia
CANADA V5J 0B6
TEL (778)452-4000
FAX (778)452-4074
<http://www.agatlabs.com>

Method Summary

CLIENT NAME: VENTUS CONSULTING INC
PROJECT: 4238 Pine Crescent, Vancouver, B.C.
SAMPLING SITE:

AGAT WORK ORDER: 15V975865
ATTENTION TO: Joe Davis
SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Trace Organics Analysis			
EPH C10-C19	ORG-180-5101	Modified from BCMOE Lab Manual Section D (EPH)	GC/FID
EPH C19-C32	ORG-180-5101	Modified from BCMOE Lab Manual Section D (EPH)	GC/FID



AGAT Laboratories

SAMPLE INTEGRITY RECEIPT FORM - BURNABY

Work Order # 15V975865

RECEIVING BASICS:

Received From: Joe Waybill #: _____

SAMPLE QUANTITIES:

Coolers: 0 Containers: 1

TIME SENSITIVE ISSUES:

Earliest Date Sampled: 20 May 2015 ALREADY EXCEEDED? Yes No

NON-CONFORMANCES:

3 temperatures of samples* and average of each cooler: (record differing temperatures on the CoC next to sample ID's) *use jars when available

(1) 5 + + = 5 °C (2) + + = °C (3) + + = °C (4) + + = °C

Was ice or ice pack present: Yes No

Integrity Issues:

Account Project Manager: _____ have they been notified of the above issues: Yes No

Whom spoken to: _____ Date and Time: _____

ADDITIONAL NOTES:



Unit 120, 8600 Glenlyon Parkway
Burnaby, British Columbia
CANADA V5J 0B6
TEL (778)452-4000
FAX (778)452-4074
<http://www.agatlabs.com>

CLIENT NAME: VENTUS CONSULTING INC
406-2490 WEST 2ND AVE
VANCOUVER, BC V6K1J6
(604) 730-0771

ATTENTION TO: JOE DAVIS

PROJECT: 4238 Pine Crescent, Vancouver BC

AGAT WORK ORDER: 15V973056

SOIL ANALYSIS REVIEWED BY: Angela Bond, Technical Reviewer

TRACE ORGANICS REVIEWED BY: Angela Bond, Technical Reviewer

DATE REPORTED: May 19, 2015

PAGES (INCLUDING COVER): 8

VERSION*: 1

Should you require any information regarding this analysis please contact your client services representative at (778) 452-4000

***NOTES**

VERSION 1: Sample receipt temperature 7°C.

All samples will be disposed of within 30 days following analysis. Please contact the lab if you require additional sample storage time.

AGAT Laboratories (V1)

Member of: Association of Professional Engineers, Geologists and Geophysicists
of Alberta (APEGGA)
Western Enviro-Agricultural Laboratory Association (WEALA)
Environmental Services Association of Alberta (ESAA)

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Results relate only to the items tested and to all the items tested

Page 1 of 8

Unit 120, 8600 Glenlyon Parkway
Burnaby, British Columbia
CANADA V5J 0B6
TEL (778)452-4000
FAX (778)452-4074
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 15V973056

PROJECT: 4238 Pine Crescent, Vancouver BC

ATTENTION TO: JOE DAVIS

SAMPLED BY:



CLIENT NAME: VENTUS CONSULTING INC

SAMPLING SITE:

DATE RECEIVED: 2015-05-13		DATE REPORTED: 2015-05-19	
British Columbia Metals Schedule 4 and 5			
Parameter	Unit	G / S	RDL
Antimony	µg/g	20	0.1
Arsenic	µg/g	15	0.1
Barium	µg/g	400	0.5
Beryllium	µg/g	4	0.1
Cadmium	µg/g	60	0.01
Chromium	µg/g	50	0.1
Cobalt	µg/g		0.2
Copper	µg/g		0.1
Lead	µg/g		0.01
Mercury	µg/g	10	0.2
Molybdenum	µg/g	100	0.5
Nickel	µg/g	3	0.1
Selenium	µg/g	20	0.5
Silver	µg/g		0.1
Thallium	µg/g	50	0.2
Tin	µg/g	200	1
Vanadium	µg/g		1
Zinc	µg/g		89
pH 1:2	pH units		0.1

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard; Refers to BC CSR (RL-G) (Van)
6537064 Results are based on the dry weight of the sample

Angela Bond

Certified By:

Unit 120, 8600 Glenlyon Parkway
Burnaby, British Columbia
CANADA V5J 0B6
TEL (778)452-4000
FAX (778)452-4074
http://www.agatllabs.com

Certificate of Analysis

AGAT WORK ORDER: 15V973056
PROJECT: 4238 Pine Crescent, Vancouver BC

ATTENTION TO: JOE DAVIS
SAMPLED BY:



CLIENT NAME: VENTUS CONSULTING INC
SAMPLING SITE:

DATE RECEIVED: 2015-05-13		DATE REPORTED: 2015-05-19	
EPH Soil			
Parameter	Unit	G / S	RDL
EPH C10-C19	µg/g	20	1310
EPH C19-C32	µg/g	20	268

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard; Refers to BC CSR (RL-G) (Van)
6537062 Results are based on dry weight of sample.
EPH results are not corrected for potential PAH contributions.

Certified By:

Results relate only to the items tested and to all the items tested

AGAT CERTIFICATE OF ANALYSIS (V1)



Unit 120, 8600 Glenlyon Parkway
Burnaby, British Columbia
CANADA V5J 0B6
TEL (778)452-4000
FAX (778)452-4074
http://www.agatlabs.com

Quality Assurance

CLIENT NAME: VENTUS CONSULTING INC
PROJECT: 4238 Pine Crescent, Vancouver BC
SAMPLING SITE:

AGAT WORK ORDER: 15V973056
ATTENTION TO: JOE DAVIS
SAMPLED BY:

Soil Analysis														
RPT Date: May 19, 2015			DUPLICATE			Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE	
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD		Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits
						Lower		Upper	Lower		Upper	Lower		Upper
British Columbia Metals Schedule 4 and 5														
Antimony	6536625		0.3	0.3	NA	< 0.1	109%	70%	130%	102%	85%	115%		
Arsenic	6536625		6.2	6.1	1.8%	< 0.1	104%	70%	130%	100%	90%	110%		
Barium	6536625		104	102	1.8%	< 0.5	83%	70%	130%	93%	90%	110%		
Beryllium	6536625		0.4	0.4	NA	< 0.1	96%	70%	130%	93%	90%	110%		
Cadmium	6536625		0.07	0.09	14.1%	< 0.01	75%	70%	130%	99%	90%	110%		
Chromium	6536625		53	50	5.4%	< 1	109%	70%	130%	101%	90%	110%		
Cobalt	6536625		12.6	12.5	0.9%	< 0.1	110%	70%	130%	105%	90%	110%		
Copper	6536625		20.5	24.2	16.6%	< 0.2	104%	70%	130%	99%	90%	110%		
Lead	6536625		4.8	4.7	1.7%	< 0.1	94%	70%	130%	103%	90%	110%		
Mercury	6536625		0.05	0.04	NA	< 0.01	93%	70%	130%	103%	90%	110%		
Molybdenum	6536625		1.4	1.4	0.3%	< 0.2	100%	70%	130%	96%	90%	110%		
Nickel	6536625		37.4	37.5	0.2%	< 0.5	113%	70%	130%	101%	90%	110%		
Selenium	6536625		0.5	0.6	12.2%	< 0.1				102%	85%	115%		
Silver	6536625		<0.5	<0.5	NA	< 0.5	80%	70%	130%	99%	90%	110%		
Thallium	6536625		0.1	0.1	NA	< 0.1	119%	70%	130%	94%	90%	110%		
Tin	6536625		0.5	0.5	NA	< 0.2				95%	90%	110%		
Vanadium	6536625		80	80	1.1%	< 1	109%	70%	130%	99%	90%	110%		
Zinc	6536625		57	57	0.4%	< 1	115%	70%	130%	100%	90%	110%		
pH 1:2	6536625		6.7	6.7	0.3%	< 0.1	100%	90%	110%	100%	95%	105%		

Comments: RPDs are calculated using raw analytical data and not the rounded duplicate values reported.

Certified By:

AGAT QUALITY ASSURANCE REPORT (V1)

Page 4 of 8

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Burnaby, British Columbia
CANADA V5J 0B6
TEL (778)452-4000
FAX (778)452-4074
http://www.agatlabs.com

Quality Assurance

CLIENT NAME: VENTUS CONSULTING INC
PROJECT: 4238 Pine Crescent, Vancouver BC
SAMPLING SITE:

AGAT WORK ORDER: 15V973056
ATTENTION TO: JOE DAVIS
SAMPLED BY:

Trace Organics Analysis

RPT Date: May 19, 2015			DUPLICATE			Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD		Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
						Lower		Upper	Lower		Upper	Lower		Upper	
EPH Soil															
EPH C10-C19	64060	6532808	<20	<20	0.0%	< 20	100%	70%	130%				97%	65%	120%
EPH C19-C32	64060	6532808	<20	<20	0.0%	< 20	96%	70%	130%				85%	80%	120%

Comments: RPDs are calculated using raw analytical data and not the rounded duplicate values reported.

Certified By:

AGAT QUALITY ASSURANCE REPORT (V1)

Page 5 of 8

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Burnaby, British Columbia
CANADA V5J 0B6
TEL (778)452-4000
FAX (778)452-4074
http://www.agatlabs.com

Method Summary

CLIENT NAME: VENTUS CONSULTING INC
PROJECT: 4238 Pine Crescent, Vancouver BC
SAMPLING SITE:

AGAT WORK ORDER: 15V973056
ATTENTION TO: JOE DAVIS
SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Soil Analysis			
Antimony	MET-181-6102, LAB-181-4008	BC MOE Lab Manual C (SALM) and EPA 6020A	ICP-MS
Arsenic	MET-181-6102, LAB-181-4008	BC MOE Lab Manual C (SALM) and EPA 6020A	ICP-MS
Barium	MET-181-6102, LAB-181-4008	BC MOE Lab Manual C (SALM) and EPA 6020A	ICP-MS
Beryllium	MET-181-6102, LAB-181-4008	BC MOE Lab Manual C (SALM) and EPA 6020A	ICP-MS
Cadmium	MET-181-6102, LAB-181-4008	BC MOE Lab Manual C (SALM) and EPA 6020A	ICP-MS
Chromium	MET-181-6102, LAB-181-4008	BC MOE Lab Manual C (SALM) and EPA 6020A	ICP-MS
Cobalt	MET-181-6102, LAB-181-4008	BC MOE Lab Manual C (SALM) and EPA 6020A	ICP-MS
Copper	MET-181-6102, LAB-181-4008	BC MOE Lab Manual C (SALM) and EPA 6020A	ICP-MS
Lead	MET-181-6102, LAB-181-4008	BC MOE Lab Manual C (SALM) and EPA 6020A	ICP-MS
Mercury	MET-181-6102, LAB-181-4008	BC MOE Lab Manual C (SALM) and EPA 6020A	ICP-MS
Molybdenum	MET-181-6102, LAB-181-4008	BC MOE Lab Manual C (SALM) and EPA 6020A	ICP-MS
Nickel	MET-181-6102, LAB-181-4008	BC MOE Lab Manual C (SALM) and EPA 6020A	ICP-MS
Selenium	MET-181-6102, LAB-181-4008	BC MOE Lab Manual C (SALM) and EPA 6020A	ICP-MS
Silver	MET-181-6102, LAB-181-4008	BC MOE Lab Manual C (SALM) and EPA 6020A	ICP-MS
Thallium	MET-181-6102, LAB-181-4008	BC MOE Lab Manual C (SALM) and EPA 6020A	ICP-MS
Tin	MET-181-6102, LAB-181-4008	BC MOE Lab Manual C (SALM) and EPA 6020A	ICP-MS
Vanadium	MET-181-6102, LAB-181-4008	BC MOE Lab Manual C (SALM) and EPA 6020A	ICP-MS
Zinc	MET-181-6102, LAB-181-4008	BC MOE Lab Manual C (SALM) and EPA 6020A	ICP-MS
pH 1:2	INOR-181-6031	BC MOE Lab Manual B (pH, Electrometric, Soil)	PH METER
Trace Organics Analysis			
EPH C10-C19	ORG-180-5101	Modified from BCMOE Lab Manual Section D (EPH)	GC/FID
EPH C19-C32	ORG-180-5101	Modified from BCMOE Lab Manual Section D (EPH)	GC/FID



AGAT Laboratories

SAMPLE INTEGRITY RECEIPT FORM - BURNABY

Work Order # 15 V 973056

RECEIVING BASICS:
Received From: Joe Waybill #: _____
SAMPLE QUANTITIES:
Coolers: 1 Containers: 2

TIME SENSITIVE ISSUES:
Earliest Date Sampled: 13 May 15 ALREADY EXCEEDED? Yes No

NON-CONFORMANCES:
3 temperatures of samples* and average of each cooler: (record differing temperatures on the CoC next to sample ID's) *use jars when available
(1) 7 + 7 = 7 °C (2) + = °C (3) + = °C (4) + = °C
Was Ice or ice pack present: Yes No
Integrity Issues:

Account Project Manager: _____ have they been notified of the above issues: Yes No
Whom spoken to: _____ Date and Time: _____

ADDITIONAL NOTES:

APPENDIX D – FIRE DEPARTMENT PERMIT

CITY OF VANCOUVER

453 WEST 12TH
VANCOUVER, B.C. V5Y 1V4
TEL : 604-873-7595 FAX : 604-873-7100

DATE ISSUED MAY 07, 2015		PERMIT TYPE FIRE PREVENTION DIVISION PERMIT				PERMIT NUMBER P FI 412247	
LEGAL DESCRIPTION Lot 12 Blk 667 Plan VAP6011 DL 526 LD NW					ADDRESS 4238 PINE CRESCENT		
ADDITIONAL ADDRESS INFORMATION					SPECIFICS		
APPLICATION DATE MAY 07, 2015	PURPOSE REMOVAL	PROJECT VALUE	ASSESSED VALUE	PLANS	METRIC NO	PLACE NAME	
TEMPORARY PERMIT DATES				TEMPORARY USE DATES			
APPLICANT CONTRACTOR SNR SALVAGE AND RECOVERY			CONTACT 2 AGENT FOR OWNER GARY GENG		CONTACT 3		
6179 DAWSON ST BURNABY BC V5B 2W5			VANCOUVER BC				
TEL 604-313-8998	BUS.LICENSE 295066	TEL 604-649-6955	BUS.LICENSE	TEL	BUS.LICENSE		
FAX	CERTIFICATE 24410	FAX	CERTIFICATE	FAX	CERTIFICATE		
PURSUANT TO THE FIRE BY-LAW, THE FOLLOWING WORK IS HEREBY AUTHORIZED:							
TO REMOVE 1 TANK ON SITE. CAPACITY IS 2800 L. SETBACK IS 8' S. BOTTOM OF TANK AT 86". TYPE OF LIQUID IS PETROLEUM.							
PERMIT CONDITIONS AND NOTES:							
001 THE WORK UNDER THIS PERMIT IS AUTHORIZED PURSUANT TO THE FIRE BY-LAW.							
020 Clearance is required from the Engineering Department, Streets Division, for work affecting							
030 For removal: the tanks, together with connected piping and dispensing equipment, shall have all combustible or flammable liquids removed. The tanks and piping must be removed from the ground and purged of vapours. The pipe ends must be permanently sealed by capping or plugging.							
035 For abandonment: pump out remaining content, steam clean interior, and fill with sand/concrete slurry.							
040 Tank removal must comply with subsection 4.10.3 of the Vancouver Fire By-law.							
910 Construction must be carried out in compliance with the provisions of Noise Control By-law No. 6555							
995 1. This permit will become incomplete if any of the following conditions are not met:							
(a) Work authorized by the permit has not commenced within 90 days from the date of issuance.							
(b) Work has been substantially discontinued for a period of 90 days.							
2. Inspection is required by Vancouver Fire and Rescue Services.							
3. The premises shall be kept in safe manner with guards, shoring, etc. as required by the Occupational Health, Work Safe and City By-laws.							
4. Contractor or homeowner must be on site for the inspection by the Vancouver Fire and Rescue Services.							
5. If the soil surrounding the storage tank is contaminated, the soil shall be replaced with clean fill.							
6. Backfill with clean soil required.							
7. Underground storage tank removal shall be done in accordance with good engineering practices.							
8. Environmental Final Closure Report and clearance required.							
GENERAL USE	SPECIFICS/LOCATION	AREA (SF)	OCC C	GENERAL USE	SPECIFICS/LOCATION	AREA (SF)	OCC
D30 ONE-FAM DWELLING							
ITEM	SPECIFICS/REFERENCE	QTY/AMT	GU	ITEM	SPECIFICS/REFERENCE	QTY/AMT	
OIL TANK		1					
APPROVALS REQD BEFORE PERMIT IS COMPLETED INCLUDE :				FI01	ENV CONTAMINATION FIRE INSPECTION	BRETT COOKE	604-873-7544
ADDITIONAL NOTES:							
915 To book an inspection call 3-1-1 from within Vancouver or 604-873-7000 from outside Vancouver. The 3-1-1 Centre is open 7 days a week from 7AM to 10PM, 365 days a year. Also, our 24 hour Building Inspections booking request message line is 604-873-7058. For information on how to use it, please contact the 3-1-1 Centre.							
1. TO ARRANGE FOR REQUIRED INSPECTIONS, CALL THE 3-1-1 CENTRE OR 604-873-7000.							
2. THE PERMIT HOLDER SHALL BE RESPONSIBLE FOR ARRANGING ACCESS TO THE PREMISES FOR THE INSPECTOR.							
3. FOR INFORMATION ON LIMITATION OF TIMES OF WORK IN WHICH NOISE IS CREATED, SEE THE NOISE CONTROL BY-LAW NO.6555 OR CALL THE 3-1-1 CENTRE OR 604-873-7000.							
FEE	AMOUNT	FEE	AMOUNT	SIGNED BY	SNR SALVAGE AND RECOVERY		
				DATE	SEE PERMIT		
				ISSUED BY	C BAWN.		
				FOR THE	FIRE CHIEF		
INVOICE:			TOTAL				

2015/05/07 13:41:52

JOB COPY

APPENDIX E – MANIFEST FOR OILY WATER

APPENDIX F - TANK DESTRUCTION CERTIFICATE



SCALE TICKET

Page: 1

ABC Recycling Ltd.
8081 Meadow Avenue
Burnaby, BC V3N 2V9
604-522-9727

Ticket: **226564-01**

Date In: 05/21/2015 Date Out: 05/21/2015
Time In: 07:42 Time Out: 07:47
Buyer: MARUST Manager: MARLO
Hauler: A VALUED CUSTOMER

Customer: SNR TANK REMOVAL SERVICE
6179 DAWSON STREET
BURNABY BC V5B 2W5

MATERIAL	GROSS	TARE	DED	WT	NET	PRICE	DED \$	TOTAL \$
Steel Oversize	12060	10460	0	1600	75.000/NT		0.00	
TOTALS FOR:								
Steel Oversize	12060	10460	0	1600			0.00	

Ticket Total	12060	10460	0	1600
Truck Weights	12060	10460		1600

Ticket Sub-Total

Ticket Total

CIL TANK DISPOSAL RE 4238 PINE CR, VANCOUVER

Received By

*.ALL WEIGHTS ARE REPORTED IN POUNDS UNLESS OTHERWISE INDICATED.

APPENDIX G – BACKFILL SOILS RECEIPT

Carrera Demolition & Excavation Ltd

PO Box 31020 Sunshine Village
Delta BC V4E 3M9
Canada
Cell: 604-653-8120
E-mail: info@carrerademo.com

Invoice

Date: 31/05/2015
Invoice No: 1129

Bill to
SNR Tank Removal Service

Item	Qty	Unit	Description	Unit Rate	Amount	Tax
			Job Site:-4238 Pine Crescent, Vancouver BC			
SDT-100	2	Boxes	Date:-May 21, 2015			
RTD-200	1	Boxes	Supply and delivery of double screen topsoil	395.00	790.00	G
			Rental of dump truck to haul spoil to remediation facility	250.00	250.00	G
			GST on sales	5.00%	52.00	
Terms net 15 days. Overdue balance will be subject to interest 2% per month, 24% per annum				Subtotal		\$1,040.00
				Sales Tax Total		\$52.00
GST/HST No.805376837 RT0001				Total		\$1,092.00

APPENDIX H – SUMMARY OF SOILS REMOVED

Jun 05,15
08:39:58

RL Ecowaste Industries Ltd.
Listing of Tickets
For May 21,15
All Tickets
Both Posted & Unposted
Customer ID=5035 Ventus Consulting Inc

Page 1

Ticket #	Date	Tr In License	Vehicle Desc	Yds	GW(kg)	Tare kg	Net wgt
Customer: 5035		Ventus Consulting Inc					
Material: T150411			(5035)				
1364441	May 21	13:40 HX3476	Deol Trucking/Pup	28	29440	17430	12010
SubSubTotal:				28			12010
SubTotal:				28			12010
TOTAL:				28			12010

APPENDIX I – NOTICE OF INDEPENDENT REMEDIATION

Section IV Environmental Consultant / Contractor / Agent Contact

Name of Firm: Ventus Consulting Inc.

Contact Name: Joe O. Davis

Address Street 406-2490 West 2nd Avenue

City Vancouver

Province/State B.C,

Country Canada

Postal /Zip Code V6K 1J6

Phone 604-730-0771

Fax 604-730-0771

Section V Primary Land Use

Contaminated Sites Regulation land use classification at the site surface (check one)

Industrial Commercial Residential Urban park Agricultural Wildlands

Description of current operation (e.g. service station)

Residential House

Is a change in zoning or land use expected?

Change in zoning Change in land use No zoning change expected.

From To

Section VI Confirmed or Suspected Source of Contamination (e.g. leaking underground storage tank)

Underground storage tank (UST)

Oil and gas industry operations

Offsite source

Other (describe):

Was a Notification of Offsite Migration also submitted for this site?

No

Yes

If Yes, date of submission:

YYYY-MM-DD

Section VII Soil Investigations and Remediation

The following contaminants Were found Are suspected

Please see attached soils data.

Was the soil investigated following requirements and guidance under the Act? Yes No

Soil remediation strategy

Excavation and offsite disposal Other (describe):
Remediation standards used: Numerical Risk-based Both

12.01 tonnes of contaminated were trucked off to Ecowaste a licensed landfill located at 200 – 10991 Shellbridge Way in Richmond, B.C. on May 21, 2015

Section VIII Groundwater and Surface Water Investigations and Remediation

The following contaminants Were found Are suspected

List contaminants (and maximum concentrations if known). Attach additional information if not enough space.

Was the water investigated following requirements and guidance under the Act? Yes No

Water remediation strategy

Pumping and offsite disposal Other (describe):
The tanks contents 2500 litres of <3% oily water was pumped from the tank and trucked to Sumas Environmental Services at 4623 Byrne Road, Burnaby BC on May 12, 2015.

Section IX Sediment Investigations and Remediation

The following contaminants Were found Are suspected

List contaminants (and maximum concentrations if known). Attach additional information if not enough space.

Was the sediment investigated following requirements and guidance under the Act? Yes No

Sediment remediation strategy

Excavation and offsite disposal Other (describe):
(include volume and intended treatment and/or disposal location for contaminated sediments if managed offsite)

Remediation standards used: Numerical Risk-based Both

Section X Vapour Investigations and Remediation

The following volatile contaminants Were found Are suspected

List contaminants (and maximum concentrations if known). Attach additional information if not enough space.

Was the vapour investigated following requirements and guidance under the Act? Yes No

Vapour remediation strategy

Remediation standards used: Numerical Risk-based Both

Section XI Reason for Remediation:

Construction Demolition Upgrade

Other: Proactive removal.

Section XII Authorizations for Discharges to the Environment from the Site

Provide the authorization numbers under the *Environmental Management Act* for any air, effluent and soil discharges to the environment for treatment works located at the site.

Section XIII Additional Comments

Section XIV Signature

I confirm that the above information is true based on my knowledge as of the date this notification form was completed.



Joe O. Davis

2015-05-26

Signature of person completing form

Printed name

Date completed (YYYY-MM-DD)

Sign your completed Notification of Independent Remediation form and include the following:

Site plan Land Title record

Send the package to:

Site Information Advisor
Ministry of Environment
PO Box 9342 Stn Prov Govt
Victoria B.C. V8W 9M1
Fax (250) 387-9935
E-mail: Advisor.SiteInformation@gov.bc.ca

For further information, please refer to the information under our [key topic website on independent remediation](#) or e-mail us at site@gov.bc.ca.

Table 1: EPHs in Soils for 4238 Pine Crescent, Vancouver

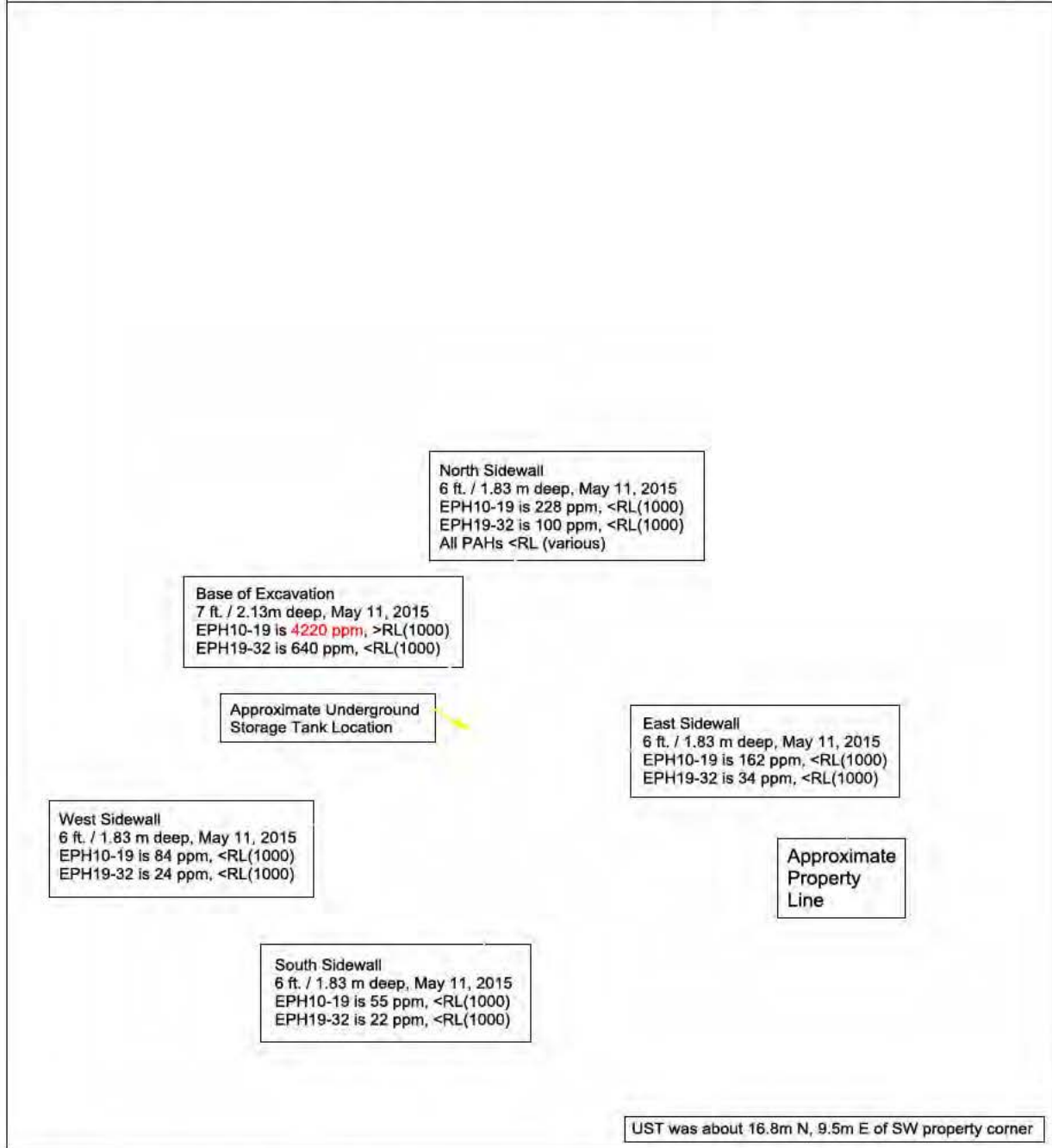
	Detection Limit	Base of Excavation	North Sidewall	South Sidewall	East Sidewall	RL
Date		May 11, 2015	May 11, 2015	May 11, 2015	May 11, 2015	
Depth		2.13m (7 ft.)	1.83m (6 ft.)	1.83m (6 ft.)	1.83m (6 ft.)	
EPHC10-19	20	4220	228	55	162	1000
EPH C19-32	20	640	100	22	34	1000
Notes:						
Values are in ug/g dry (ppm).						
RL means applicable Residential with Drinking Water standards from the Contaminated Sites Regulations.						
Bold values are above the RL standard.						
None means no RL standard for compound.						

Table 1 continued: EPHs in Soils for 4238 Pine Crescent, Vancouver

	Detection Limit	West Sidewall	Final Base of Excavation			RL
Date		May 11, 2015	May 20, 2015			
Depth		1.83m (6 ft.)	3.05m (10 ft.)			
EPHC10-19	20	84	<20			1000
EPH C19-32	20	24	<20			1000
Notes:						
Values are in ug/g dry (ppm).						
RL means applicable Residential with Drinking Water standards from the Contaminated Sites Regulations.						
Bold values are above the RL standard.						
None means no RL standard for compound.						

Table 2: Polycyclic Aromatic Hydrocarbons (PAHs) in Soils for 4238 Pine Crescent, Vancouver					
	Detection Limit	North Sidewall			RL
Date		May 11, 2015			
Depth of Sample		1.83m (6 ft.)			
Acenaphthene	0.01	<0.01			none
Acenaphthylene	0.01	<0.01			none
Anthracene	0.02	<0.02			none
Benzo(a)anthracene	0.02	<0.02			1
Benzo(a)pyrene	0.05	<0.05			1
Benzo(b)fluoranthene	0.02	<0.02			1
Benzo(g,h,i)perylene	0.05	<0.05			none
Benzo(k)fluoranthene	0.02	<0.02			1
Chrysene	0.05	<0.05			none
Dibenzo(a,h)anthracene	0.02	<0.02			1
Fluoranthene	0.05	<0.05			none
Fluorene	0.02	<0.02			none
Indeno(1,2,3-c,d)pyrene	0.02	<0.02			1
Naphthalene	0.01	<0.01			none
Phenanthrene	0.02	<0.02			5
Pyrene	0.02	<0.02			10
Notes:					
Values are in ug/g dry (ppm)					
RL means applicable Residential standards with drinking water standards from the Contaminated Sites Regulations.					
Bold values are above the RL standard.					
None means no RL standard for compound.					

Figure 2: UST Location and Soils Concentrations for 4238 Pine Crescent, Vancouver, B.C.



<p>Sample # Depth Sample Date</p> <p>↓ ↓ ↓</p> <p>South Sidewall 8 ft. / 2.43 m deep, June 28, 2014 EPH10-19 is 47 ppm, <RL(1000) EPH19-32 is 31 ppm, <RL(1000)</p> <p>Constituent Concentration CSR Result</p>	<p>Legend</p> <p>Source: City of Coquitlam</p> <p>CSR Residential Standard</p>	<p>Drawn By: Joe O. Davis, M.Sc. GIT March 18, 2015 Locations are Approximate Ventus Consulting Inc. Suite 406 - 2490 West 2nd Ave. Vancouver, B.C. V6K 1J6 604 730-0771</p>
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↑ N

TITLE SEARCH PRINT

2015-05-11, 12:49:01

File Reference:

Requestor: Joe Davis

Declared Value \$ 3740000

****CURRENT INFORMATION ONLY - NO CANCELLED INFORMATION SHOWN****

Land Title District VANCOUVER
Land Title Office VANCOUVER

Title Number CA2146955
From Title Number BJ251876

Application Received 2011-08-16

Application Entered 2011-08-31

Registered Owner in Fee Simple
Registered Owner/Mailing Address: MEI DI XU, HOMEMAKER
4238 PINE CRESCENT
VANCOUVER, BC
V6J 4K7

Taxation Authority CITY OF VANCOUVER

Description of Land
Parcel Identifier: 011-032-341
Legal Description:
LOT 12 BLOCK 667 DISTRICT LOT 526 PLAN 6011

Legal Notations NONE

Charges, Liens and Interests
Nature: MORTGAGE
Registration Number: CA2146956
Registration Date and Time: 2011-08-16 14:10
Registered Owner: CIBC MORTGAGES INC.
INCORPORATION NO. A33457

Duplicate Indefeasible Title NONE OUTSTANDING

Transfers NONE

Pending Applications NONE



UNDERGROUND STORAGE TANK REMOVAL/DECOMMISSIONING REPORT

This report must be completed and submitted to the City of Vancouver (Environmental Contamination Team) after completion of underground storage tank (UST) removal projects.

1. Site Information

Owners Name: [Gary Geng](#)
 Site Address: [4238 Pine Crescent, Vancouver, B.C](#)

2. Excavation Plan:

A scaled (about 1:200) plan including (at minimum): north arrow, nearby buildings, tank location, extents of excavation, soil sample location, and soil sample analytical results summary.

[Figure 2 of the report shows these items.](#)

3. Site Photos (electronic only) Attached:

The photos must include the tank-hold excavation and the removed tank.
[See Appendix A of report.](#)

4. Tank Information

Was oil or oily water removed from the tank? [Yes](#)
 Was all associated piping (feedlines Lines, vent pipe) removed? [Yes](#)
 Tank Summary Table:

		Perforation(s)		Other Visible Damage (e.g. pipe damage)		Product in UST	Date UST removed from service
Permit #	Capacity (L)	Yes	No	Yes	No		(YYYY/MM/DD)
F1412247	2800 L	Yes		No		2500 L <3% oil	No record

5. Tank and Piping Disposal / Recycling: [ABC Recycling Ltd. 8081 Meadow Ave., Burnaby. BC](#)
 Tank Disposal / Recycling receipts attached: [See Appendix F.](#)

6. Liquid Waste Disposal

Liquid / Sludge disposal (type/volume/class): [oily water <3% / 2500 L / unknown](#)
 Receiver name/address: [Sumas Environmental Services Inc. on 4623 Byrne Road in Burnaby, B.C.](#)
 Disposal date (YYYY/MM/DD): [2015/05/12](#)
 Liquid Waste Disposal Receipt / Manifest attached: Y () N () [Yes](#)

7. Soil Disposal

Soil Volume (m3) disposed: [12.01](#)
 Soil Disposal Carrier: [N/A](#)
 Soil Receiver Information: [N/A](#)
 Receiver Name / company name [Ecowaste Industries Ltd.](#)
 Receiver Address [200 – 10991 Shellbridge Way, Richmond, BC](#)
 Soil Relocation Agreement Required Y () N () [Yes](#)
 Disposal Date: [May 21, 2015](#)
 Soil disposal receipt attached Y () N () [Yes](#)

8. Field Observations

Field screening (e.g. soil vapour, visual observations, staining) summary

Was product or contamination suspected of migrating into preferential pathways or beneath building(s)? Y () N () **No**

Groundwater Observations:

Was water present in the excavation? Y () N () **No**

Was there a petroleum hydrocarbon sheen evident on the excavation water? Y () N () **No**

Comments:

9. Confirmatory Soil Sampling

Total number of discrete insitu soil samples analysed: **6 EPHs and 1 PAH**

Sampler's name and company: **Joe Davis, M.Sc. / Ventus Consulting Inc.**

Sample Chain of Custody and Lab certificate of analysis attached Y () **Yes**

CALA laboratory name: **AGAT Laboratories**

Laboratory address: **Unit 120, 8600 Glenlyon Parkway, Burnaby, B.C.**

Analysis / PCOCs: **EPHs and PAHs**

10. Ministry of Environment Forms

Was a Notice of Independent Remediation (NIR) completed? Y () N () **Yes**

Was a Notice of Offsite Migration (NOM) required and submitted Y () N () **No**

Comments:

11. Conclusion Summary Table

Address	Contractor / Consultant	Tank Details, (L, Condition)	Liquid Waste Disposal Details	Soil Receiver and m3 disposed	Confirmatory samples Meet Standards (Y/N, PCOCs)	Estimated Residual Volume of Contamination	Offsite Migration (Y/N)	MOE Forms Submitted
4238 Pine Crescent	SNR / Ventus	2800L poor	2500 L	12.01	Y, EPHs and PAHs	None	N	NIR

12. Name and License of individual / firm who completed this Report / Form:

Name (company and individual): **Ventus Consulting Inc. / Joe Davis**

Business License Number: **Licence # 14-162804**

Date of Tank Removal: (MM/DD/YYYY): **05/11/2015**

13. Conclusion Statement:

Please select the appropriate checkmark that accurately reflects site conditions.
 "I confirm all information contained in this report is true and accurate. Based on this information, residual soils are less than / (or) exceed , the applicable (select one: residential / commercial / industrial) standards. Contamination is / (or) is not /, suspected or confirmed to have migrated offsite."

Joe Davis, M.Sc. GIT ASCT

July 23, 2015

