

Materials Testing & Consulting, Inc.

Geotechnical Engineering • Materials Testing • Special Inspection • Environmental Consulting



February 29, 2016

Attn: Rob Meyer, Project Manager
Jon Roake, Superintendent

Exxel Pacific

323 Telegraph Road
Bellingham, WA 98226
360.734.2872

robm@exxelpacific.com

jonr@exxelpacific.com

4220 Aurora Avenue N
Seattle, WA 98103

RE: Limited Environmental Discovery Sampling

City Center Apartments
3720 196th Street SW • Lynnwood, WA 98036

MTC Project No.: **15B065-01A**

Dear Mr. Meyer and Mr. Roake:

At your request, Materials Testing & Consulting, Inc. (MTC) has completed limited-scope environmental discovery samplings at the above referenced site currently undergoing site preparation improvements for development into multi-family housing. This correspondence describes our field methodology and presents the findings of analytical laboratory testing for your informational use and project records.

Project Purpose:

MTC is contracted to provide testing and inspection services during construction at the subject site. We understand the contractor was excavating along the southeast edge of the site during the week of October 24, 2015 when an apparent hydrocarbon odor and soil color change was observed by site personnel and operators. Soils were encountered beginning at depths approximately 3 to 4 feet beneath existing ground surface (BGS) to bottom of excavations at approximately 10 feet and continued to extend below view. The contractor and client reported a fuel odor from the exposed soils, and noted some refuse indicating a fill history. No groundwater was observed during excavation. Excavation was ceased, excavated material was immediately stockpiled and project managers were notified.

MTC was immediately contacted and the client requested environmental samples be collected from the exposed material for initial assessment of suspected petroleum products. MTC consulted on the types of tests applicable to assessing suspected petroleum contamination, as well as the inherent limitations to accuracy and interpretation of sampling at that time from the open excavation. The client elected to

Corporate • 777 Chrysler Drive • Burlington, WA 98233 • Phone 360.755.1990 • Fax 360.755.1980
SW Region • 2118 Black Lake Blvd. S.W. • Olympia, WA 98512 • Phone 360.534.9777 • Fax 360.534.9779
NW Region • 805 Dupont Street, Suite 5 • Bellingham, WA 98225 • Phone 360.647.6061 • Fax 360.647.8111
Kitsap Region • 5451 N.W. Newberry Hill Road, Suite 101 • Silverdale, WA 98383 • Phone/Fax 360.698.6787
Tukwila • 4611 S. 134th Place, Suite #240 • Tukwila, WA 98168 • Phone 206.241.1974 • Fax 206.241.1897

Visit our website: www.mtc-inc.net

commence immediately with the sampling scope as detailed herein, with the understanding that the results would be for informational use and helpful in consideration of further work if deemed necessary.

Sampling and Analytical Methodology:

Initial Visit

On the afternoon of October 19, 2015 (Set-1), an MTC Staff Geologist arrived at the site to collect grab samples of exposed soils for analytical laboratory analysis. All sampling activities were performed within the prior excavated area and per prior discussion with the client, with general locations as shown schematically on the attached site plan in Figure 2, Appendix A2. A photo documenting conditions during sampling and actual sample locations is attached in Appendix B.

General soil conditions at the sample area consisted of topsoil vegetation growing within a brown sand with silt and gravel unit that extended from the existing surface to between approximately 4.0 to 5.0 feet BPG. Beneath, MTC observed a unit of gray sand with gravel and silt along with blue-gray silt to sandy-silt lenses. Within both units refuse and urban debris was observed, indicating a fill or disturbed origin of the deposit. No free water was observed on the surface or within the face of the sidewall. Topography varied across the vicinity of concern, with the area north of the sample location cleared and in the process of being graded, and the area to the south at an elevation up to 15 feet higher. The face of the excavation did not exhibit an obvious sheen. A faint fuel odor was present at a distance though decreased as you neared the source material and as fresh soils were exposed, as was reported by the contractor during initial excavation.

MTC agreed to sample soils at four locations, two along the exposed face and two composite samples from the existing stockpile for general characterization. After selection of sample locations and depths within the exposed wall, a fresh surface was uncovered for sample retrieval using a modified sampler. Soils were retrieved directly into laboratory-sterilized sample jars via grab sampling using laboratory-provided collection implements and precautions were taken to limit cross-contamination. Samples were immediately sealed and placed on ice for temporary storage, then delivered directly to Edge Analytical Laboratories upon completion of site sampling. MTC was solely responsible for the collection and chain of custody of all samples.

Additional Visits

As site improvements and earthwork activities continued moving to the northeast, MTC was requested to visit the site on 3 more occasions to assess potentially contaminated soils encountered during routine construction operations on October 28, 2015 (Set-2), November 4, 2015 (Set-3), and January 22, 2016 (Set-4). Set-2 was sampled approximately 50 feet north of Set-1. MTC observed soils conditions and characteristics were similar to the previous sampling event and obtained four analytical samples, two

from the potentially contaminated soils and two from 2.0 feet below the base of the suspect soils. Set-3 was sampled in a 4.0-foot deep trench along the east boundary of the property where a 3.0-foot wide vein of potentially contaminated soils was observed. These soils were characteristically similar to the previous two sampling events and emitted a faint odor. MTC obtained two samples, one from the base of the excavation 2.0 feet beyond the suspect samples and one from the stockpile created during excavation. Set-3 was obtained approximately 20 feet east of Set-2 beneath a 3-inch concrete slab that was currently being used as a holding area for construction materials. MTC communicated with the contractor that it was reasonable to expect that the vein of potentially contaminated soils traversed from the west extent of Set-3 to the east extent of Set-2 and likely another sampling event would be necessary identify potential contaminant levels and identification.

On January 20, 2016, MTC was informed that excavation of the area beneath the slab had begun and an underground metal tank was discovered with liquid inside. The process of obtaining a contractor for tank pumping and removal had already begun and MTC would be notified as developments occurred to be available for sampling support. The contractor partnered with Budget Environmental Services (BES) who removed approximately 1,000 gallons of liquid from the tank before removing the tank for disposal on January 22, 2016. Additionally, BES obtained soil samples to submit for laboratory tests. MTC was not onsite during the tank removal process, though arrived during the final phase of soil removal to obtain samples as possible from the tank removal area and stockpile for analytical confirmation testing.

Soils from all four sets were sampled for petroleum range tests, NWTPH-Gx with BTEX and NWTPH-Dx. Set-4 was also sampled for cPAH and PCB contamination. BES soils were sampled for petroleum range tests, TPH-Gasoline and BTEX as well as one lead test. Complete analytical results, laboratory QC data, and Chain of Custody documentation are attached in Appendix C at the end of this letter.

Environmental Sampling Results and Discussion:

MTC received and reviewed the results of analytical laboratory analyses in comparison to MTCA Method A guidelines. Tables 1 through 6 below summarize results for each set per location and the analysis for each soil sample.

Results: 10-19-15 Sampling at Excavation

TABLE 1: Results of NWTPH Analyses on 10.19.15 – Soil Samples

Medium	Location	Depth (B P G, feet)	Analysis	Gasoline C ₈ -C ₁₂ (mg/kg)	Diesel C ₁₂ -C ₂₄ (mg/kg)	Oil >C ₂₄ (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)
Soil	E-Wall N	10	NWTPH-Gx & Dx	ND	ND	97.4	ND	ND	ND	ND
	E-Wall S	6.5	NWTPH-Gx & Dx	ND	ND	138	ND	ND	ND	ND
	Stock-1	-	NWTPH-Gx & Dx	ND	ND	ND	ND	ND	ND	ND
	Stock-2	-	NWTPH-Gx & Dx	ND	ND	70.4	ND	ND	ND	ND
MTCA Method A Standards				100	2000	2000	0.03	7	6	9
PQL - NWTPH-Gx & Dx *				25	50	50	0.025	0.1	0.1	0.2

All values presented in units of mg/kg (ppm).

ND = Not detected by method Practical Quantitation Limits (* PQL – specified by laboratory).

Results of soil NWTPH-Gx analysis indicate that gasoline-range petroleum hydrocarbons and BTEX additives were not detected above practical quantitation limits in sampled soils from any location. Per Washington State MTCA standards, Method A cleanup levels for gas-range hydrocarbons in soil are 100 mg/kg (100 ppm), approximately four times the laboratory PQL; BTEX standards are also shown above.

NWTPH-Dx analysis for heavier petroleum products did not detect diesel-range hydrocarbons at levels above practical quantitation limits in any of the samples. Oil-range hydrocarbons were detected at both sites in the source wall, as well as in the composite sample from the stockpile (Stock-2), though all the sample locations were well below typical Method A cleanup levels for unrestricted land use (2000 ppm). The composite sample Stock-1 taken on the south side of the existing stockpile returned a non-detect above practical quantitation limits in the composite sample.

Results: 10-28-15 Sampling at Excavation

TABLE 2: Results of NWTPH Analyses on 10.28.15 – Soil Samples

Medium	Location	Depth (B P G, feet)	Analysis	Gasoline C ₈ -C ₁₂ (mg/kg)	Diesel C ₁₂ -C ₂₄ (mg/kg)	Oil >C ₂₄ (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)
Soil	N-1	2.5	NWTPH-Gx & Dx	ND	503	ND	ND	ND	ND	ND
	N Edge-1	2.0	NWTPH-Gx & Dx	ND	ND	ND	ND	ND	ND	ND
	S Base-1	4.5	NWTPH-Gx & Dx	ND	51.5	ND	ND	ND	ND	ND
	N Base-1	5.0	NWTPH-Gx & Dx	ND	ND	ND	ND	ND	ND	ND
MTCA Method A Standards				100	2000	2000	0.03	7	6	9
PQL - NWTPH-Gx & Dx *				25	50	50	0.025	0.1	0.1	0.2

All values presented in units of mg/kg (ppm).

ND = Not detected by method Practical Quantitation Limits (* PQL – specified by laboratory).

Results of soil NWTPH-Gx analysis from October 28, 2015, indicate that gasoline-range petroleum hydrocarbons and BTEX additives were not detected above practical quantitation limits in sampled soils from any location.

NWTPH-Dx analysis for heavier petroleum products did not detect diesel-range hydrocarbons at levels above practical quantitation limits in the samples North-Base or N Edge-1, though did detect low levels at the N-1 and S Base-1 though well below typical Method A cleanup levels for unrestricted land use (2000 ppm). Oil-range hydrocarbons were not detected above practical quantitation limits any samples.

Results: 11-05-15 Sampling at Trenching

TABLE 3: Results of NWTPH Analyses on 11.05.15 – Soil Samples

Medium	Location	Depth (B P G, feet)	Analysis	Gasoline C ₈ -C ₁₂ (mg/kg)	Diesel C ₁₂ -C ₂₄ (mg/kg)	Oil >C ₂₄ (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)
Soil	B-1	5.5	NWTPH-Gx & Dx	ND	ND	ND	ND	ND	ND	ND
	S-1	stockpile	NWTPH-Gx & Dx	139	69	ND	ND	ND	ND	ND
MICA Method A Standards				100	2000	2000	0.03	7	6	9
PQL - NWTPH-Gx & Dx *				25	50	50	0.025	0.1	0.1	0.2

All values presented in units of mg/kg (ppm).

ND = Not detected by method Practical Quantitation Limits (* PQL – specified by laboratory).

Results of soil NWTPH-Gx analysis from November 5, 2015, indicate that gasoline-range petroleum hydrocarbons were detected above practical quantitation limits in sampled soils, though BTEX additives were not. However, a conversation with the chemist and a note within the sample results indicate that *“the spectrum for the sample does not resemble gasoline and more likely resembles diesel fuel. However, a value is reported for gasoline range organics as there is a significant amount eluting within the gasoline range”*.

NWTPH-Dx analysis for heavier petroleum products detected diesel-range hydrocarbons at levels above practical quantitation limits in the stockpile sample, S-1, though did detect low levels at the B-1 samples taken at the base of the overexcavation. Diesel detection was well below typical Method A cleanup levels for unrestricted land use (2000 ppm). Oil-range hydrocarbons were not detected above practical quantitation limits in any samples.

Results: 1-22-16 Sampling at Tank Removal

TABLE 4: Results of NWTPH, PCB and cPHA Analyses on 01.22.16 – Soil Samples

Medium	Location	Depth (BPG, feet)	Analysis	Gasoline C ₈ -C ₁₂ (mg/kg)	Diesel C ₁₂ -C ₂₄ (mg/kg)	Oil >C ₂₄ (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)
Soil	Base-S	4.5	NWTPH-Gx & Dx	ND	ND	ND	ND	ND	ND	ND
	Tank	stockpile	NWTPH-Gx & Dx	420	223.6	ND	ND	ND	ND	0.3
	Tank	2.5	NWTPH-Gx & Dx	ND	ND	ND	ND	ND	ND	ND
	Stockpile-S	stockpile	NWTPH-Gx & Dx	263	ND	ND	ND	ND	ND	ND
	Stockpile-W	stockpile	NWTPH-Gx & Dx	874	472	ND	ND	ND	ND	ND
	Tank -Base	5.0	NWTPH-Gx & Dx	ND	ND	ND	ND	ND	ND	ND
MTCA Method A Standards				100	2000	2000	0.03	7	6	9
PQL - NWTPH-Gx & Dx *				25	50	50	0.025	0.1	0.1	0.2

Location	Depth (BPG, feet)	Analysis	1-METHYLNAPHTHALENE	2-METHYLNAPHTHALENE	ACENAPHTHYLENE	ACENAPHTHENE	ANTHRACENE	BENZ[A]ANTHRACENE	BENZO[A]PYRENE	BENZO[B]JFLUORANTHENE	BENZO[G,H,I]PERYLENE	BENZO[K]FLUORANTHENE	CHRYSENE	DIBENZ[A,H]ANTHRACENE	FLUORANTHENE	FLUORENE	INDENO[1,2,3-CD]PYRENE	NAPHTHALENE	PHENANTHRENE	PYRENE	Analysis	AROCLOR 1016	AROCLOR 1221	AROCLOR 1232	AROCLOR 1242	AROCLOR 1248	AROCLOR 1254	AROCLOR 1260	AROCLOR 1268
Tank	2.5	8270D	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8082	ND	ND	ND	ND	ND	ND	ND	ND
Tank -Base	5	8270D	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8082	ND	ND	ND	ND	ND	ND	ND	ND
MTCA Method A Standards			2.00						0.10	0.10				250				5.00											
MTCA Method B Standards				80000			16000	1.37				3200	56000		11200	3200	1600		400	1.37		5.60					1.60		
MTCA Method C Standards																												0.50	

All values presented in units of mg/kg (ppm).

ND = Not detected by method Practical Quantitation Limits (* PQL – specified by laboratory).

Results of soil NWTPH-Gx analysis from samples collected January 22, 2016, indicate that gasoline-range petroleum hydrocarbons were detected above practical quantitation limits in sampled soils from the stockpile along with a single reading of xylenes from the sample obtained from the tank stockpile. MTC communicated the results to the contractor upon receipt and advised them to communicate the findings to their receiving facility.

NWTPH-Dx analysis for heavier petroleum products did not detect diesel-range hydrocarbons at levels above practical quantitation limits in the samples taken below the tank within the base of the overexcavation. Low levels were detected within the composite samples taken from the stockpile, though well below typical Method A cleanup levels for unrestricted land use (2000 ppm). Oil-range hydrocarbons were not detected above practical quantitation limits any samples.

Analysis for polychlorinated biphenyl (PCB) and carcinogenic polycyclic aromatic hydrocarbons (cPAH) returned non-detect results for the two samples taken in the vicinity of the tank and submitted for analysis.

Since no water was observed on site or within the excavation, no water sampling or testing occurred during the sampling events. However, per the City of Lynnwood discharge permit #IWD-009261-2015 associated with the project site, tests of site surface water and shallow groundwater have been regularly

tested for BTEX, lead, zinc, arsenic, cadmium, chromium, flashpoint and lower explosive limit. Results for these groundwater tests have all been below City of Lynnwood tolerances and MTCA limits for Method A or Method B cleanup levels.

Closing Remarks:

Materials Testing & Consulting, Inc. (MTC) has completed several limited discovery environmental samplings at the above referenced project site on behalf of the client, after suspected petroleum-affected soils were encountered during routine site excavations on multiple occasions. Results have indicated that generally low but detectable levels of petroleum products were discovered within suspected disturbed or fill soils at the referenced excavation areas, with an average concentration around 100 ppm for oil-range product and an average concentration of 260 ppm for diesel-range product where present. To our knowledge, based on results of confirmation sampling and site observations, affected soils were removed from the discovery locations and disposed at an approved facility.

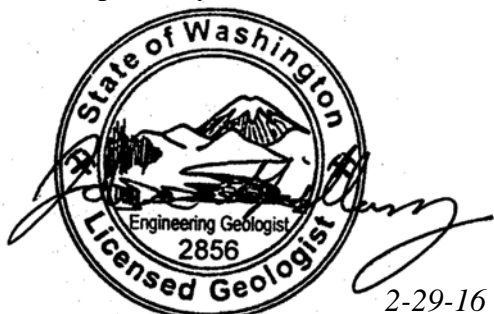
During the course of the project, an abandoned underground fuel tank was also discovered and removed by a certified subcontractor. Gasoline-range petroleum products were present above cleanup levels within the soils in the vicinity of the discovered tank, and within the composite samples of the stockpiled soils related to tank removal. Diesel-range product was also present, ranging from about 220 ppm to 470 ppm. After excavation of affected soils, the samples obtained from the base of the tank excavation, taken approximately 3.0 feet below the prior tank location, returned non-detect results indicating no remaining presence of significant contaminants below the excavation zone. This was in agreement with visual indications at the time of the sampling.

Prior to this formal documentation, MTC communicated with the client and contractor throughout the process to report site observations via daily reports and to deliver the results of analytical testing. MTC has recommended that the client supply the sampling results to the disposal facility to confirm contents of exported soils and determine suitable disposal methods. MTC also recommends and assumes the client will furnish these results to governing agencies for review and final project approval.

MTC has performed limited sampling during the discovery and excavation of suspected contaminated soils during routine site earthwork activities, and has provided confirmation samplings at the limits of overexcavations to remove affected soils. Our scope of environmental services was limited solely to the above described sampling and documentation activities conducted at specific request of the client in support of site development activities underway. By accepting the scope of this study as determined in cooperation with the client, and its findings reported herein, the client shall understand that while these results provide information as to environmental conditions at the given sample stockpiles, locations and depths, they should not be considered exhaustive or conclusive in terms of assessing the site conditions. With this limited level of study, it is not possible to further address potential variations in or risks from contamination at the site undiscovered by the sampling protocol. If additional environmental study is deemed necessary, MTC will be pleased to be contacted to discuss further services on the project.

Mr. Meyer and Mr. Roake, we trust this report presents the information you require. If you have questions, please do not hesitate to call.

Respectfully Submitted;



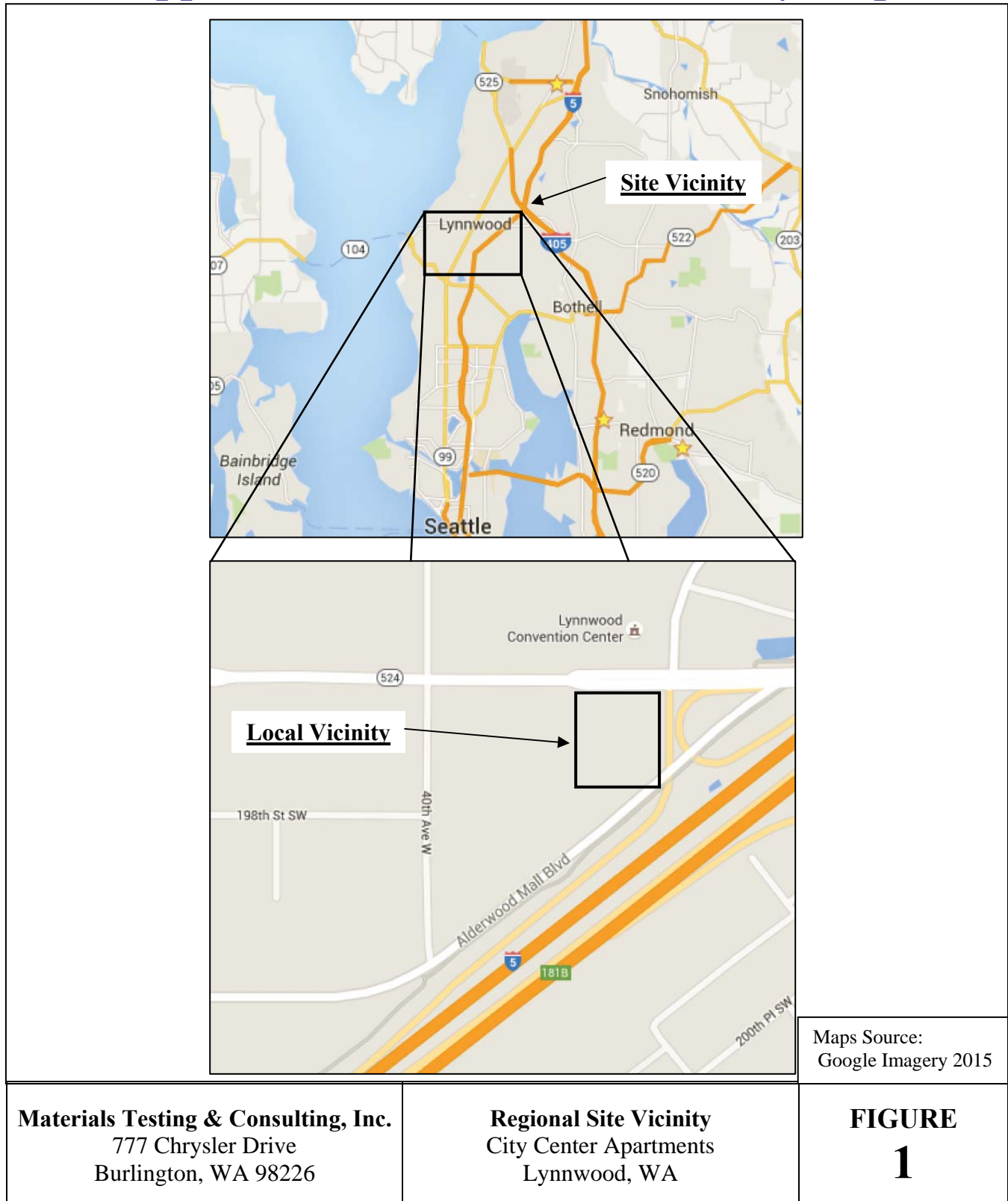
John R. Gillaspay

John R. Gillaspay, L.E.G.
NW Region Geotechnical Division Manager

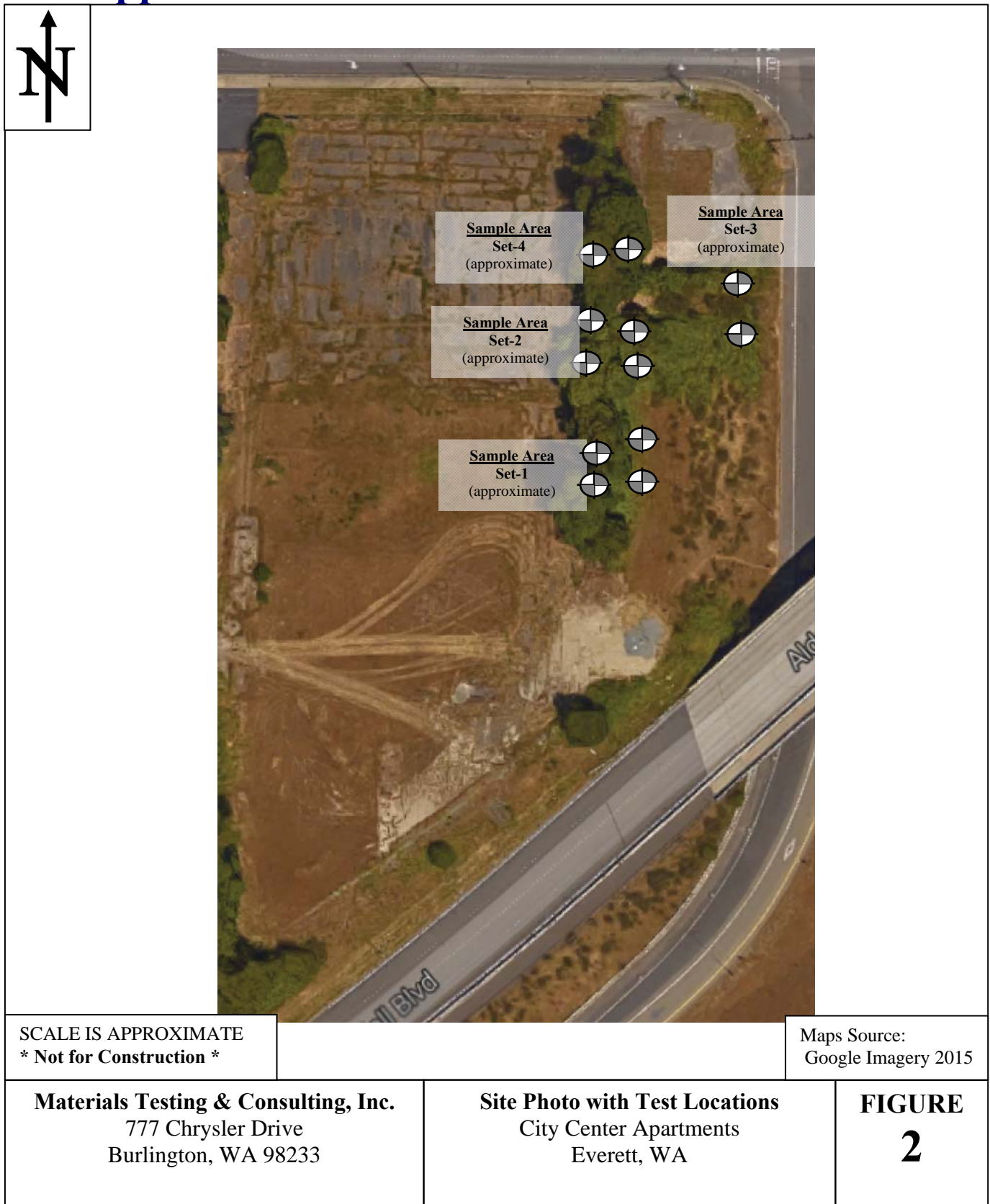
Meghan Hallam
Staff Geologist

Attached: Appendix A. Site Plan with Test Locations
 Appendix B. Photos of Sampling
 Appendix C. Laboratory Analytical Results

Appendix A1. Location and Vicinity Map



Appendix A2. Site Photo with Test Locations



Appendix B. Site Photos



PHOTO A. Excavation at the time of sampling on October 19, 2015. Looking southwest, Alderwood Mall Boulevard in background.



PHOTO B. Photo looking east shows area of concern on October 28, 2015 in red prior to excavation beginning. Upon completion an area approximately 36 feet long, 10 feet wide and approximately 3.5 feet deep at the ends becoming approximately 4.5 feet deep in the center.



PHOTO C. Image on the left reveals potentially contaminated soils at the excavation of Set-2. Image on the right shows the north end of the excavation during removal. Note the difference in color between the suspected affected soils and their surroundings to sides and below.



PHOTO D. Photo looking west shows area of concern during November 5, 2016 site visit where a vein of potentially contaminated soils was exposed in a trench along the east property boundary.



PHOTO E. Photo looking south shows the area where the discovered tank was exposed and removed on January 22, 2016.

Appendix C. Analytical Laboratory Results

SET-1

Sampled on October 19, 2015



Burlington, WA	Corporate Laboratory (a)	1620 S Walnut St.	Burlington, WA 98233	800.755.9295 • 360.757.1400
Bellingham, WA	Microbiology (b)	805 Orchard Dr Ste 4	Bellingham, WA 98225	360.715.1212
Portland, OR	Microbiology/Chemistry (c)	9150 SW Pioneer Ct Ste W	Wilsonville, OR 97070	503.682.7802
Corvallis, OR	Microbiology (d)	540 SW Third Street	Corvallis, OR 97333	541.753.4946

October 22, 2015

Page 1 of 1

Mr John Gillaspay
Materials Testing & Consulting
777 Chrysler Drive
Burlington, WA 98233

RE: 15-22596 - Soil Gx & Dx

Dear Mr John Gillaspay,

Your project: Soil Gx & Dx, was received on Monday October 19, 2015.

All samples were analyzed within the accepted holding times, were appropriately preserved and were analyzed according to approved analytical protocols. The quality control data was within laboratory acceptance limits, unless specified in the QA reports.

If you have questions phone us at 800 755-9295.

Respectfully

A handwritten signature in blue ink, appearing to read "L Henderson", with a long horizontal flourish extending to the right.

Lawrence J Henderson, PhD
Director of Laboratories, Vice President

Enclosures: Data Report
QC Reports
Chain of Custody




Burlington, WA	Corporate Laboratory (a)	1620 S Walnut St	Burlington, WA 98233	800.755.9295 • 360.757.1400
Bellingham, WA	Microbiology (b)	805 Orchard Dr Ste 4	Bellingham, WA 98225	360.715.1212
Portland, OR	Microbiology/Chemistry (c)	9150 SW Pioneer Ct Ste W	Wilsonville, OR 97070	503.682.7802
Corvallis, OR	Microbiology (d)	540 SW Third Street	Corvallis, OR 97333	541.753.4946

Page 1 of 2

Hydrocarbon Data Report

Client Name: Materials Testing & Consulting
777 Chrysler Drive
Burlington, WA 98233

Reference Number: **15-22596**
Project: Soil Gx & Dx
Report Date: 10/22/15
Date Received: 10/19/15
Approved By: pdm,rjk
Authorized by:


Lawrence J Henderson, PhD
Director of Laboratories, Vice President

Sample Description: E Wall - E Wall Face
Lab Number: 50217
Date Analyzed: 10/19/15

Sample Date: 10/19/15
Collected By:
Analyzed By: RJK

Parameter	Result	Flag	DF	Cleanup Level	PQL	MDL	Units	Method	Lab	Batch	Comment
NWTPH-Gx											
BENZENE	ND		1	0.03	0.03		mg/Kg	8260B/5035A	a	GXS_151019	
TOLUENE	ND		1	7.0	0.12		mg/Kg	8260B/5035A	a	GXS_151019	
ETHYLBENZENE	ND		1	6.0	0.12		mg/Kg	8260B/5035A	a	GXS_151019	
TOTAL XYLENES	ND		1	9.0	0.24		mg/Kg	8260B/5035A	a	GXS_151019	
GAS Range Organics	ND		1	100/30*	30		mg/Kg	8260B/5035A	a	GXS_151019	

Sample Description: E Wall S - E Wall Face-S
Lab Number: 50218
Date Analyzed: 10/19/15

Sample Date: 10/19/15
Collected By:
Analyzed By: RJK

Parameter	Result	Flag	DF	Cleanup Level	PQL	MDL	Units	Method	Lab	Batch	Comment
NWTPH-Gx											
BENZENE	ND		1	0.03	0.03		mg/Kg	8260B/5035A	a	GXS_151019	
TOLUENE	ND		1	7.0	0.13		mg/Kg	8260B/5035A	a	GXS_151019	
ETHYLBENZENE	ND		1	6.0	0.13		mg/Kg	8260B/5035A	a	GXS_151019	
TOTAL XYLENES	ND		1	9.0	0.26		mg/Kg	8260B/5035A	a	GXS_151019	
GAS Range Organics	ND		1	100/30*	32		mg/Kg	8260B/5035A	a	GXS_151019	

Sample Description: Stock-1 - Stockpile S
Lab Number: 50219
Date Analyzed: 10/19/15

Sample Date: 10/19/15
Collected By:
Analyzed By: RJK

Parameter	Result	Flag	DF	Cleanup Level	PQL	MDL	Units	Method	Lab	Batch	Comment
NWTPH-Gx											

Notation:

ND - A result of "ND" indicates that the compound was not detected above the Lab's Method Reporting Limit - MRL.

PQL = Practical Quantitation Limit is the lowest level that can be achieved within specified limits of precision and accuracy during routine laboratory operating conditions.

D.F. - Dilution Factor

Cleanup Level - The regulatory limit for Method A Cleanup Levels (MTCA, Chapter 173-340 WAC) contaminants in the specified matrix. Amended Feb 12, 2001

The Cleanup level for Gasoline Range Organics (GRO) is 100 mg/Kg for gas mixtures without benzene and when the total ethylbenzene, toluene and xylenes are less than 1% of the gasoline concentration. The Cleanup level for GRO is 30 mg/Kg for all other mixtures.

If you have any questions concerning this report contact us at the above phone number.

Form: cHClD.rpt

Hydrocarbon Data Report

BENZENE	ND	1	0.03	0.03	mg/Kg	8260B/5035A	a	GXS_151019
TOLUENE	ND	1	7.0	0.13	mg/Kg	8260B/5035A	a	GXS_151019
ETHYLBENZENE	ND	1	6.0	0.13	mg/Kg	8260B/5035A	a	GXS_151019
TOTAL XYLENES	ND	1	9.0	0.26	mg/Kg	8260B/5035A	a	GXS_151019
GAS Range Organics	ND	1	100/30*	32	mg/Kg	8260B/5035A	a	GXS_151019

Sample Description: Stock-2 - Stockpile N
Lab Number: 50220
Date Analyzed: 10/19/15

Sample Date: 10/19/15
Collected By:
Analyzed By: RJK

Parameter	Result	Flag	DF	Cleanup Level	PQL	MDL	Units	Method	Lab	Batch	Comment
-----------	--------	------	----	---------------	-----	-----	-------	--------	-----	-------	---------

NWTPH-Gx

BENZENE	ND		1	0.03	0.025		mg/Kg	8260B/5035A	a	GXS_151019	
TOLUENE	ND		1	7.0	0.10		mg/Kg	8260B/5035A	a	GXS_151019	
ETHYLBENZENE	ND		1	6.0	0.10		mg/Kg	8260B/5035A	a	GXS_151019	
TOTAL XYLENES	ND		1	9.0	0.20		mg/Kg	8260B/5035A	a	GXS_151019	
GAS Range Organics	ND		1	100/30*	25		mg/Kg	8260B/5035A	a	GXS_151019	

Notation:

ND - A result of "ND" indicates that the compound was not detected above the Lab's Method Reporting Limit - MRL.

PQL = Practical Quantitation Limit is the lowest level that can be achieved within specified limits of precision and accuracy during routine laboratory operating conditions.

D.F. - Dilution Factor

Cleanup Level - The regulatory limit for Method A Cleanup Levels (MTCA, Chapter 173-340 WAC) contaminants in the specified matrix. Amended Feb 12, 2001

The Cleanup level for Gasoline Range Organics (GRO) is 100 mg/Kg for gas mixtures without benzene and when the total ethylbenzene, toluene and xylenes are less than 1% of the gasoline concentration. The Cleanup level for GRO is 30 mg/Kg for all other mixtures.




Burlington, WA	Corporate Laboratory (a)	1620 S Walnut St	Burlington, WA 98233	800.755.9295 • 360.757.1400
Bellingham, WA	Microbiology (b)	805 Orchard Dr Ste 4	Bellingham, WA 98225	360.715.1212
Portland, OR	Microbiology/Chemistry (c)	9150 SW Pioneer Ct Ste W	Wilsonville, OR 97070	503.682.7802
Corvallis, OR	Microbiology (d)	540 SW Third Street	Corvallis, OR 97333	541.753.4946

Page 1 of 2

Hydrocarbon Data Report

Client Name: Materials Testing & Consulting
777 Chrysler Drive
Burlington, WA 98233

Reference Number: **15-22596**
Project: Soil Gx & Dx
Report Date: 10/22/15
Date Received: 10/19/15
Approved By: pdm,rjk
Authorized by:


Lawrence J Henderson, PhD
Director of Laboratories, Vice President

Sample Description: E Wall - E Wall Face
Lab Number: 50217
Date Analyzed: 10/20/15

Sample Date: 10/19/15
Collected By:
Analyzed By: KAH

Parameter	Result	Flag	DF	Cleanup Level	PQL	MDL	Units	Method	Lab	Batch	Comment
-----------	--------	------	----	---------------	-----	-----	-------	--------	-----	-------	---------

NWTPH-Dx

DIESEL (C12 - C24)	ND		1	2000	50		mg/Kg	NWTPH-Dx/35 50B	a	DXS_151020	
HEAVIER OILS (>C24)	97.4		1	2000	50		mg/Kg	NWTPH-Dx/35 50B	a	DXS_151020	

Sample Description: E Wall S - E Wall Face-S
Lab Number: 50218
Date Analyzed: 10/20/15

Sample Date: 10/19/15
Collected By:
Analyzed By: KAH

Parameter	Result	Flag	DF	Cleanup Level	PQL	MDL	Units	Method	Lab	Batch	Comment
-----------	--------	------	----	---------------	-----	-----	-------	--------	-----	-------	---------

NWTPH-Dx

DIESEL (C12 - C24)	ND		1	2000	50		mg/Kg	NWTPH-Dx/35 50B	a	DXS_151020	
HEAVIER OILS (>C24)	138		1	2000	50		mg/Kg	NWTPH-Dx/35 50B	a	DXS_151020	

Sample Description: Stock-1 - Stockpile S
Lab Number: 50219
Date Analyzed: 10/20/15

Sample Date: 10/19/15
Collected By:
Analyzed By: KAH

Parameter	Result	Flag	DF	Cleanup Level	PQL	MDL	Units	Method	Lab	Batch	Comment
-----------	--------	------	----	---------------	-----	-----	-------	--------	-----	-------	---------

NWTPH-Dx

DIESEL (C12 - C24)	ND		1	2000	50		mg/Kg	NWTPH-Dx/35 50B	a	DXS_151020	
HEAVIER OILS (>C24)	ND		1	2000	50		mg/Kg	NWTPH-Dx/35 50B	a	DXS_151020	

Notation:

ND - A result of "ND" indicates that the compound was not detected above the Lab's Method Reporting Limit - MRL.

PQL = Practical Quantitation Limit is the lowest level that can be achieved within specified limits of precision and accuracy during routine laboratory operating conditions.

D.F. - Dilution Factor

Cleanup Level - The regulatory limit for Method A Cleanup Levels (MTCA, Chapter 173-340 WAC) contaminants in the specified matrix. Amended Feb 12, 2001

The Cleanup level for Gasoline Range Organics (GRO) is 100 mg/Kg for gas mixtures without benzene and when the total ethylbenzene, toluene and xylenes are less than 1% of the gasoline concentration. The Cleanup level for GRO is 30 mg/Kg for all other mixtures.

If you have any questions concerning this report contact us at the above phone number.

Form: cHCID.rpt

Hydrocarbon Data Report

Sample Description: Stock-2 - Stockpile N
Lab Number: 50220
Date Analyzed: 10/20/15

Sample Date: 10/19/15
Collected By:
Analyzed By: KAH

Parameter	Result	Flag	DF	Cleanup Level	PQL	MDL	Units	Method	Lab	Batch	Comment
NWTPH-Dx											
DIESEL (C12 - C24)	ND		1	2000	50		mg/Kg	NWTPH-Dx/35 50B	a	DXS_151020	
HEAVIER OILS (>C24)	70.4		1	2000	50		mg/Kg	NWTPH-Dx/35 50B	a	DXS_151020	

Notation:

ND - A result of "ND" indicates that the compound was not detected above the Lab's Method Reporting Limit - MRL.

PQL = Practical Quantitation Limit is the lowest level that can be achieved within specified limits of precision and accuracy during routine laboratory operating conditions.

D.F. - Dilution Factor

Cleanup Level - The regulatory limit for Method A Cleanup Levels (MTCA, Chapter 173-340 WAC) contaminants in the specified matrix. Amended Feb 12, 2001

The Cleanup level for Gasoline Range Organics (GRO) is 100 mg/Kg for gas mixtures without benzene and when the total ethylbenzene, toluene and xylenes are less than 1% of the gasoline concentration. The Cleanup level for GRO is 30 mg/Kg for all other mixtures.



SAMPLE INDEPENDENT QUALITY CONTROL REPORT

Laboratory Fortified Blank

Reference Number: **15-22596**

Report Date: 10/22/15

Batch	Analyte	Result	True Value	Units	Method	% Recovery	Limits*	QC Qualifier	QC Type	Comment
DXS_151020	0 DIESEL (C12 - C24)	103	125	mg/Kg	NWTPH-Dx	82	70-130		LFB	
GXS_151019	0 BENZENE	1	1	mg/Kg	8260B	100	80-120		LFB	
	0 ETHYLBENZENE	0.95	1	mg/Kg	8260B	95	80-120		LFB	
	0 GAS Range Organics	60.3	63	mg/Kg	8260B	96	80-120		LFB	
	0 TOLUENE	1	1	mg/Kg	8260B	100	80-120		LFB	
	0 TOTAL XYLENES	2.9	3	mg/Kg	8260B	97	80-120		LFB	

*Notation:

% Recovery = (Result of Analysis)/(True Value) * 100

NA = Indicates % Recovery could not be calculated.

Limits are intended for water matrices only. These criteria are for guidance only when reported with soils/solids.



SAMPLE INDEPENDENT QUALITY CONTROL REPORT

Method Blank

Reference Number: **15-22596**

Report Date: 10/22/15

Batch	Analyte	Result	True Value	Units	Method	% Recovery	Limits*	QC Qualifier	QC Type	Comment
DXS_151020	0 DIESEL (C12 - C24)	ND		mg/Kg	NWTPH-Dx	0-0		MB		
	0 HEAVIER OILS (>C24)	ND		mg/Kg	NWTPH-Dx	0-0		MB		
GXS_151019	0 BENZENE	ND		mg/Kg	8260B	0-0		MB		
	0 ETHYLBENZENE	ND		mg/Kg	8260B	0-0		MB		
	0 GAS Range Organics	ND		mg/Kg	8260B	0-0		MB		
	0 TOLUENE	ND		mg/Kg	8260B	0-0		MB		
	0 TOTAL XYLENES	ND		mg/Kg	8260B	0-0		MB		

*Notation:

% Recovery = (Result of Analysis)/(True Value) * 100

NA = Indicates % Recovery could not be calculated.

Limits are intended for water matrices only. These criteria are for guidance only when reported with soils/solids.



Reference Number: **15-22596**
Report Date: 10/22/2015

Page 1 of 2

SAMPLE DEPENDENT
QUALITY CONTROL REPORT
Duplicate, Matrix Spike/Matrix Spike Duplicate and Confirmation Result Report

Batch	Sample	Analyte	Result	Duplicate		Units	%RPD	Limits	QC		
				Result					Qualifier	Type	Comments
Duplicate											
GXS_151019											
	50220	BENZENE	ND	ND		mg/Kg	NA	0-40		DUP	
	50220	ETHYLBENZENE	ND	ND		mg/Kg	NA	0-40		DUP	
	50220	GAS Range Organics	ND	ND		mg/Kg	NA	0-40		DUP	
	50220	TOLUENE	ND	ND		mg/Kg	NA	0-40		DUP	
	50220	TOTAL XYLENES	ND	ND		mg/Kg	NA	0-40		DUP	
TS_151020											
	50220	TOTAL SOLIDS FOR CALCULATION	89.34	87.64		%	1.9	0-20		DUP	

%RPD = Relative Percent Difference

NA = Indicates %RPD could not be calculated

Matrix Spike (MS)/Matrix Spike Duplicate (MSD) analyses are used to determine the accuracy (MS) and precision (MSD) of an analytical method in a given sample matrix. Therefore, the usefulness of this report is limited to samples of similar matrices analyzed in the same analytical batch.

Only Duplicate sample with detections are listed in this report

Limits are intended for water matrices only. These criteria are for guidance only when reported with soils/solids.

FORM: QC Dependent.rpt

Batch	Sample	Analyte	Result	Duplicate		Spike Conc	Units	Percent Recovery		Limits*	%RPD	Limits*	QC		
				Spike Result	Spike Result			MS	MSD				Qualifier	Type	Comments
Laboratory Fortified Matrix (MS)															
GXS_151019															
	50217	BENZENE	ND	1.6		1.5	mg/Kg	107	NA	70-130	NA	0-20		LFM	
	50217	ETHYLBENZENE	ND	1.5		1.5	mg/Kg	100	NA	70-130	NA	0-20		LFM	
	50217	TOLUENE	ND	1.6		1.5	mg/Kg	107	NA	70-130	NA	0-20		LFM	
	50217	TOTAL XYLENES	ND	4.5		4.5	mg/Kg	100	NA	70-130	NA	0-20		LFM	

%RPD = Relative Percent Difference

NA = Indicates %RPD could not be calculated

Matrix Spike (MS)/Matrix Spike Duplicate (MSD) analyses are used to determine the accuracy (MS) and precision (MSD) of an analytical method in a given sample matrix. Therefore, the usefulness of this report is limited to samples of similar matrices analyzed in the same analytical batch.

Only Duplicate sample with detections are listed in this report

Limits are intended for water matrices only. These criteria are for guidance only when reported with soils/solids.

FORM: QC Dependent.rpt

SET-2

Sampled on October 28, 2015



Burlington, WA	Corporate Laboratory (a)	1620 S Walnut St.	Burlington, WA 98233	800.755.9295 • 360.757.1400
Bellingham, WA	Microbiology (b)	805 Orchard Dr Ste 4	Bellingham, WA 98225	360.715.1212
Portland, OR	Microbiology/Chemistry (c)	9150 SW Pioneer Ct Ste W	Wilsonville, OR 97070	503.682.7802
Corvallis, OR	Microbiology (d)	540 SW Third Street	Corvallis, OR 97333	541.753.4946

November 3, 2015

Page 1 of 1

Ms. Meghan Hallam
Materials Testing & Consulting
777 Chrysler Drive
Burlington, WA 98233
RE: 15-23318 - City Center Apartments

Dear Ms. Meghan Hallam,

Your project: City Center Apartments, was received on Wednesday October 28, 2015.

All samples were analyzed within the accepted holding times, were appropriately preserved and were analyzed according to approved analytical protocols. The quality control data was within laboratory acceptance limits, unless specified in the QA reports.

If you have questions phone us at 800 755-9295.

Respectfully

A handwritten signature in blue ink that reads "Pat Miller". The signature is fluid and cursive, with a long horizontal stroke at the end.

Patrick Miller, MS
QA Officer

Enclosures: Data Report
QC Reports
Chain of Custody



Burlington, WA	Corporate Laboratory (a)	1620 S Walnut St	Burlington, WA 98233	800.755.9295 • 360.757.1400
Bellingham, WA	Microbiology (b)	805 Orchard Dr Site 4	Bellingham, WA 98225	360.715.1212
Portland, OR	Microbiology/Chemistry (c)	9150 SW Pioneer Ct Site W	Wilsonville, OR 97070	503.682.7802
Corvallis, OR	Microbiology (d)	540 SW Third Street	Corvallis, OR 97333	541.753.4946

Page 1 of 2

Hydrocarbon Data Report

Client Name: Materials Testing & Consulting
777 Chrysler Drive
Burlington, WA 98233

Reference Number: **15-23318**
Project: City Center Apartments
Report Date: 11/3/15
Date Received: 10/28/15
Approved By: hy,rjk
Authorized by:


Patrick Miller, MS
QA Officer

Sample Description: N-1 - NE Site Corner	Sample Date: 10/28/15
Lab Number: 51770	Collected By: Meghan Hallam
Date Analyzed: 10/29/15	Analyzed By: RJK

Parameter	Result	Flag	DF	Cleanup Level	PQL	MDL	Units	Method	Lab	Batch	Comment
NWTPH-Gx											
BENZENE	ND		1	0.03	0.03		mg/Kg	8260B/5035A	a	GXS_151029	
TOLUENE	ND		1	7.0	0.12		mg/Kg	8260B/5035A	a	GXS_151029	
ETHYLBENZENE	ND		1	6.0	0.12		mg/Kg	8260B/5035A	a	GXS_151029	
TOTAL XYLENES	ND		1	9.0	0.24		mg/Kg	8260B/5035A	a	GXS_151029	
GAS Range Organics	ND		1	100/30*	30		mg/Kg	8260B/5035A	a	GXS_151029	

Sample Description: N EDGE-1 - NE Site Corner	Sample Date: 10/28/15
Lab Number: 51771	Collected By: Meghan Hallam
Date Analyzed: 10/29/15	Analyzed By: RJK

Parameter	Result	Flag	DF	Cleanup Level	PQL	MDL	Units	Method	Lab	Batch	Comment
NWTPH-Gx											
BENZENE	ND		1	0.03	0.03		mg/Kg	8260B/5035A	a	GXS_151029	
TOLUENE	ND		1	7.0	0.12		mg/Kg	8260B/5035A	a	GXS_151029	
ETHYLBENZENE	ND		1	6.0	0.12		mg/Kg	8260B/5035A	a	GXS_151029	
TOTAL XYLENES	ND		1	9.0	0.24		mg/Kg	8260B/5035A	a	GXS_151029	
GAS Range Organics	ND		1	100/30*	30		mg/Kg	8260B/5035A	a	GXS_151029	

Sample Description: S BASE-1 - NE Site Corner	Sample Date: 10/28/15
Lab Number: 51772	Collected By: Meghan Hallam
Date Analyzed: 10/29/15	Analyzed By: RJK

Parameter	Result	Flag	DF	Cleanup Level	PQL	MDL	Units	Method	Lab	Batch	Comment
NWTPH-Gx											

Notation:

ND - A result of "ND" indicates that the compound was not detected above the Lab's Method Reporting Limit - MRL.

PQL = Practical Quantitation Limit is the lowest level that can be achieved within specified limits of precision and accuracy during routine laboratory operating conditions.

D.F. - Dilution Factor

Cleanup Level - The regulatory limit for Method A Cleanup Levels (MTCA, Chapter 173-340 WAC) contaminants in the specified matrix. Amended Feb 12, 2001

The Cleanup level for Gasoline Range Organics (GRO) is 100 mg/Kg for gas mixtures without benzene and when the total ethylbenzene, toluene and xylenes are less than 1% of the gasoline concentration. The Cleanup level for GRO is 30 mg/Kg for all other mixtures.

If you have any questions concerning this report contact us at the above phone number.

Form: cHCID.rpt

Hydrocarbon Data Report

BENZENE	ND	1	0.03	0.03	mg/Kg	8260B/5035A	a	GXS_151029
TOLUENE	ND	1	7.0	0.13	mg/Kg	8260B/5035A	a	GXS_151029
ETHYLBENZENE	ND	1	6.0	0.13	mg/Kg	8260B/5035A	a	GXS_151029
TOTAL XYLENES	ND	1	9.0	0.26	mg/Kg	8260B/5035A	a	GXS_151029
GAS Range Organics	ND	1	100/30*	32	mg/Kg	8260B/5035A	a	GXS_151029

Sample Description: N BASE-1 - NE Site Corner
Lab Number: 51773
Date Analyzed: 10/29/15

Sample Date: 10/28/15
Collected By: Meghan Hallam
Analyzed By: RJK

Parameter	Result	Flag	DF	Cleanup Level	PQL	MDL	Units	Method	Lab	Batch	Comment
-----------	--------	------	----	---------------	-----	-----	-------	--------	-----	-------	---------

NWTPH-Gx

BENZENE	ND		1	0.03	0.03		mg/Kg	8260B/5035A	a	GXS_151029	
TOLUENE	ND		1	7.0	0.12		mg/Kg	8260B/5035A	a	GXS_151029	
ETHYLBENZENE	ND		1	6.0	0.12		mg/Kg	8260B/5035A	a	GXS_151029	
TOTAL XYLENES	ND		1	9.0	0.24		mg/Kg	8260B/5035A	a	GXS_151029	
GAS Range Organics	ND		1	100/30*	30		mg/Kg	8260B/5035A	a	GXS_151029	

Notation:

ND - A result of "ND" indicates that the compound was not detected above the Lab's Method Reporting Limit - MRL.

PQL = Practical Quantitation Limit is the lowest level that can be achieved within specified limits of precision and accuracy during routine laboratory operating conditions.

D.F. - Dilution Factor

Cleanup Level - The regulatory limit for Method A Cleanup Levels (MTCA, Chapter 173-340 WAC) contaminants in the specified matrix. Amended Feb 12, 2001

The Cleanup level for Gasoline Range Organics (GRO) is 100 mg/Kg for gas mixtures without benzene and when the total ethylbenzene, toluene and xylenes are less than 1% of the gasoline concentration. The Cleanup level for GRO is 30 mg/Kg for all other mixtures.



Burlington, WA	Corporate Laboratory (a)	1620 S Walnut St	Burlington, WA 98233	800.755.9295 • 360.757.1400
Bellingham, WA	Microbiology (b)	805 Orchard Dr Site 4	Bellingham, WA 98225	360.715.1212
Portland, OR	Microbiology/Chemistry (c)	9150 SW Pioneer Ct Site W	Wilsonville, OR 97070	503.682.7802
Corvallis, OR	Microbiology (d)	540 SW Third Street	Corvallis, OR 97333	541.753.4946

Page 1 of 2

Hydrocarbon Data Report

Client Name: Materials Testing & Consulting
777 Chrysler Drive
Burlington, WA 98233

Reference Number: **15-23318**
Project: City Center Apartments
Report Date: 11/3/15
Date Received: 10/28/15
Approved By: hy,rjk
Authorized by:


Patrick Miller, MS
QA Officer

Sample Description: N-1 - NE Site Corner	Sample Date: 10/28/15
Lab Number: 51770	Collected By: Meghan Hallam
Date Analyzed: 10/29/15	Analyzed By: HY

Parameter	Result	Flag	DF	Cleanup Level	PQL	MDL	Units	Method	Lab	Batch	Comment
NWTPH-Dx											
DIESEL (C12 - C24)	503		1	2000	50		mg/Kg	NWTPH-Dx/35 50B	a	DXS_151029	
HEAVIER OILS (>C24)	ND		1	2000	50		mg/Kg	NWTPH-Dx/35 50B	a	DXS_151029	

Sample Description: N EDGE-1 - NE Site Corner	Sample Date: 10/28/15
Lab Number: 51771	Collected By: Meghan Hallam
Date Analyzed: 10/29/15	Analyzed By: HY

Parameter	Result	Flag	DF	Cleanup Level	PQL	MDL	Units	Method	Lab	Batch	Comment
NWTPH-Dx											
DIESEL (C12 - C24)	ND		1	2000	50		mg/Kg	NWTPH-Dx/35 50B	a	DXS_151029	
HEAVIER OILS (>C24)	ND		1	2000	50		mg/Kg	NWTPH-Dx/35 50B	a	DXS_151029	

Sample Description: S BASE-1 - NE Site Corner	Sample Date: 10/28/15
Lab Number: 51772	Collected By: Meghan Hallam
Date Analyzed: 10/29/15	Analyzed By: HY

Parameter	Result	Flag	DF	Cleanup Level	PQL	MDL	Units	Method	Lab	Batch	Comment
NWTPH-Dx											
DIESEL (C12 - C24)	51.5		1	2000	50		mg/Kg	NWTPH-Dx/35 50B	a	DXS_151029	
HEAVIER OILS (>C24)	ND		1	2000	50		mg/Kg	NWTPH-Dx/35 50B	a	DXS_151029	

Notation:

ND - A result of "ND" indicates that the compound was not detected above the Lab's Method Reporting Limit - MRL.

PQL = Practical Quantitation Limit is the lowest level that can be achieved within specified limits of precision and accuracy during routine laboratory operating conditions.

D.F. - Dilution Factor

Cleanup Level - The regulatory limit for Method A Cleanup Levels (MTCA, Chapter 173-340 WAC) contaminants in the specified matrix. Amended Feb 12, 2001

The Cleanup level for Gasoline Range Organics (GRO) is 100 mg/Kg for gas mixtures without benzene and when the total ethylbenzene, toluene and xylenes are less than 1% of the gasoline concentration. The Cleanup level for GRO is 30 mg/Kg for all other mixtures.

If you have any questions concerning this report contact us at the above phone number.

Form: cHCID.rpt

Hydrocarbon Data Report

Sample Description: N BASE-1 - NE Site Corner
Lab Number: 51773
Date Analyzed: 10/29/15

Sample Date: 10/28/15
Collected By: Meghan Hallam
Analyzed By: HY

Parameter	Result	Flag	DF	Cleanup Level	PQL	MDL	Units	Method	Lab	Batch	Comment
NWTPH-Dx											
DIESEL (C12 - C24)	ND		1	2000	50		mg/Kg	NWTPH-Dx/35 50B	a	DXS_151029	
HEAVIER OILS (>C24)	ND		1	2000	50		mg/Kg	NWTPH-Dx/35 50B	a	DXS_151029	

Notation:

ND - A result of "ND" indicates that the compound was not detected above the Lab's Method Reporting Limit - MRL.

PQL = Practical Quantitation Limit is the lowest level that can be achieved within specified limits of precision and accuracy during routine laboratory operating conditions.

D.F. - Dilution Factor

Cleanup Level - The regulatory limit for Method A Cleanup Levels (MTCA, Chapter 173-340 WAC) contaminants in the specified matrix. Amended Feb 12, 2001

The Cleanup level for Gasoline Range Organics (GRO) is 100 mg/Kg for gas mixtures without benzene and when the total ethylbenzene, toluene and xylenes are less than 1% of the gasoline concentration. The Cleanup level for GRO is 30 mg/Kg for all other mixtures.



SAMPLE INDEPENDENT QUALITY CONTROL REPORT

Laboratory Fortified Blank

Reference Number: **15-23318**

Report Date: 11/03/15

Batch	Analyte	Result	True		Method	% Recovery	Limits*	QC		Comment
			Value	Units				Qualifier	Type	
DXS_151029	0 DIESEL (C12 - C24)	90.6	125	mg/Kg	NWTPH-Dx	72	70-130		LFB	
GXS_151029	0 BENZENE	1.1	1	mg/Kg	8260B	110	80-120		LFB	
	0 ETHYLBENZENE	0.8	1	mg/Kg	8260B	80	80-120		LFB	
	0 GAS Range Organics	50.3	62.5	mg/Kg	8260B	80	80-120		LFB	
	0 TOLUENE	1.0	1	mg/Kg	8260B	100	80-120		LFB	
	0 TOTAL XYLENES	2.5	3	mg/Kg	8260B	83	80-120		LFB	

*Notation:

% Recovery = (Result of Analysis)/(True Value) * 100

NA = Indicates % Recovery could not be calculated.

Limits are intended for water matrices only. These criteria are for guidance only when reported with soils/solids.



SAMPLE INDEPENDENT QUALITY CONTROL REPORT

Method Blank

Reference Number: **15-23318**

Report Date: 11/03/15

Batch	Analyte	Result	True Value	Units	Method	% Recovery	Limits*	QC Qualifier	QC Type	Comment
DXS_151029	0 DIESEL (C12 - C24)	ND		mg/Kg	NWTPH-Dx	0-0		MB		
	0 HEAVIER OILS (>C24)	ND		mg/Kg	NWTPH-Dx	0-0		MB		
GXS_151029	0 BENZENE	ND		mg/Kg	8260B	0-0		MB		
	0 ETHYLBENZENE	ND		mg/Kg	8260B	0-0		MB		
	0 GAS Range Organics	ND		mg/Kg	8260B	0-0		MB		
	0 TOLUENE	ND		mg/Kg	8260B	0-0		MB		
	0 TOTAL XYLENES	ND		mg/Kg	8260B	0-0		MB		

*Notation:

% Recovery = (Result of Analysis)/(True Value) * 100

NA = Indicates % Recovery could not be calculated.

Limits are intended for water matrices only. These criteria are for guidance only when reported with soils/solids.



Reference Number: **15-23318**

Report Date: 11/3/2015

Page 1 of 2

SAMPLE DEPENDENT QUALITY CONTROL REPORT Duplicate, Matrix Spike/Matrix Spike Duplicate and Confirmation Result Report

Batch	Sample	Analyte	Result	Duplicate		Units	%RPD	Limits	QC		
				Result					Qualifier	Type	Comments
Duplicate											
DXS_151029											
	51770	DIESEL (C12 - C24)	503	415		mg/Kg	19.2	0-20		DUP	
	51770	HEAVIER OILS (>C24)	ND	ND		mg/Kg	NA	0-20		DUP	
GXS_151029											
	51770	BENZENE	ND	ND		mg/Kg	NA	0-40		DUP	
	51770	ETHYLBENZENE	ND	ND		mg/Kg	NA	0-40		DUP	
	51770	GAS Range Organics	ND	ND		mg/Kg	NA	0-40		DUP	
	51770	TOLUENE	ND	ND		mg/Kg	NA	0-40		DUP	
	51770	TOTAL XYLENES	ND	ND		mg/Kg	NA	0-40		DUP	
ts_151030											
	51976	TOTAL SOLIDS FOR CALCULATION	91.44	90.71		%	0.8	0-20		DUP	

%RPD = Relative Percent Difference

NA = Indicates %RPD could not be calculated

Matrix Spike (MS)/Matrix Spike Duplicate (MSD) analyses are used to determine the accuracy (MS) and precision (MSD) of an analytical method in a given sample matrix. Therefore, the usefulness of this report is limited to samples of similar matrices analyzed in the same analytical batch.

Only Duplicate sample with detections are listed in this report

Limits are intended for water matrices only. These criteria are for guidance only when reported with soils/solids.

FORM: QC Dependent.rpt

Batch	Sample	Analyte	Result	Duplicate		Spike Conc	Units	Percent Recovery		Limits*	%RPD	Limits*	QC		
				Spike Result	Spike Result			MS	MSD				Qualifier	Type	Comments
Laboratory Fortified Matrix (MS)															
GXS_151029															
	51771	BENZENE		1.0		1.2	mg/Kg	83	NA	70-130	NA	0-20		LFM	
	51771	ETHYLBENZENE		1.4		1.2	mg/Kg	117	NA	70-130	NA	0-20		LFM	
	51771	TOLUENE		1.0		1.2	mg/Kg	83	NA	70-130	NA	0-20		LFM	
	51771	TOTAL XYLENES		4.1		3.6	mg/Kg	114	NA	70-130	NA	0-20		LFM	

%RPD = Relative Percent Difference

NA = Indicates %RPD could not be calculated

Matrix Spike (MS)/Matrix Spike Duplicate (MSD) analyses are used to determine the accuracy (MS) and precision (MSD) of an analytical method in a given sample matrix. Therefore, the usefulness of this report is limited to samples of similar matrices analyzed in the same analytical batch.

Only Duplicate sample with detections are listed in this report

Limits are intended for water matrices only. These criteria are for guidance only when reported with soils/solids.

FORM: QC Dependent.rpt

Chain of Custody / Analysis Request

(Please complete all applicable shaded sections)

Report to:	Materials Testing & Consulting	Bill to:	Materials Testing & Consulting
Ship Address:	777 Chrysler Drive	Address:	777 Chrysler Drive
City:	Burlington	City:	Burlington
State:	WA	State:	WA
Zip:	98233	Zip:	98233
Attn:	Megan	Phone:	
Phone:	360.755-1990	FAX:	
Email:	megan.hallen@mtc-inc.net	Attn:	
Project:	City center Apartments	Card#:	



ANALYTICAL
Main Lab (800-755-9295)
1620 South Walnut St. Burlington, WA 98233
Microbiology (888-725-1212)
805 W. Orchard Dr. Suite 4 Bellingham, WA 98225

Wilsonville Lab (503-682-7802)
9150 SW Pioneer Ct. Suite W Wilsonville, OR 97070
Corvallis Lab (541-753-4946)
540 SW 3rd St. Corvallis, OR 97333

Analyses Requested

Instructions

- Use one line per sample Location.
- Be specific in analysis requests.
- (NEW) List each metal individually (NEW)
- Check off analyses to be performed for each sample Location.
- Enter number of containers.

Turn Around Time Required

☐ Standard

☐ Half-time (50% surcharge)

☒ Quickest (100% surcharge) Phone Call Req.

☐ Emergency (Phone Call Req.)

Field ID	Location	Grab/Comp.	Sample Matrix	Date	Time	NWTPH-Dx (Soil)	NWTPH-Gx	Containers
1	N-1		S	10-28	12:38	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1
2	N EDGE-1		↓	12-48		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1
3	S BASE-1		↓	13:03		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1
4	N BASE		↓	13:13		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1
5						<input type="checkbox"/>	<input type="checkbox"/>	
6						<input type="checkbox"/>	<input type="checkbox"/>	
7						<input type="checkbox"/>	<input type="checkbox"/>	
8						<input type="checkbox"/>	<input type="checkbox"/>	
9						<input type="checkbox"/>	<input type="checkbox"/>	
10						<input type="checkbox"/>	<input type="checkbox"/>	

Sampled by: _____ Phone: _____ FAX: _____ Email: _____

Sample Receipt Request (Must include FAX or Email) ☐ * W - water DW - drinking water WW - waste water OL - oil Other _____

Relinquished by: Megan Hallen Date: 10-28 Time: 1530 Received by: [Signature] Date: 10-28-15 Time: 1630

Custody seals intact Yes ☐ No ☐ N/A ☒

Sample temp 8.1 C satisfactory Yes ☐ No ☒

Samples received intact Yes ☒ No ☐

Chain of custody & labels agree Yes ☒ No ☐

SET-3

Sampled on November 5 2015



Burlington, WA	Corporate Laboratory (a)	1620 S Walnut St.	Burlington, WA 98233	800.755.9295 • 360.757.1400
Bellingham, WA	Microbiology (b)	805 Orchard Dr Ste 4	Bellingham, WA 98225	360.715.1212
Portland, OR	Microbiology/Chemistry (c)	9150 SW Pioneer Ct Ste W	Wilsonville, OR 97070	503.682.7802
Corvallis, OR	Microbiology (d)	540 SW Third Street	Corvallis, OR 97333	541.753.4946

November 11, 2015

Page 1 of 1

Ms. Meghan Hallam
Materials Testing & Consulting
777 Chrysler Drive
Burlington, WA 98233
RE: 15-24085 - City Center Apts-Env

Dear Ms. Meghan Hallam,

Your project: City Center Apts-Env, was received on Friday November 06, 2015.

All samples were analyzed within the accepted holding times, were appropriately preserved and were analyzed according to approved analytical protocols. The quality control data was within laboratory acceptance limits, unless specified in the QA reports.

If you have questions phone us at 800 755-9295.

Respectfully

A handwritten signature in blue ink, appearing to read "LJ Henderson", with a long, sweeping horizontal line extending to the right.

Lawrence J Henderson, PhD
Director of Laboratories, Vice President

Enclosures: Data Report
QC Reports
Chain of Custody



Burlington, WA *Corporate Laboratory (a)*
1620 S Walnut St - Burlington, WA 98233 - 800.755.9295 • 360.757.1400
Bellingham, WA *Microbiology (b)*
805 Orchard Dr Ste 4 - Bellingham, WA 98225 - 360.715.1212


Portland, OR *Microbiology/Chemistry (c)*
9150 SW Pioneer Ct Ste W - Wilsonville, OR 97070 - 503.682.7802
Corvallis, OR *Microbiology/Chemistry (d)*
540 SW Third Street - Corvallis, OR 97333 - 541.753.4946
Bend, OR *Microbiology (e)*
20332 Empire Blvd Ste 4 - Bend, OR 97701 - 541.639.8425

Page 1 of 1

Hydrocarbon Data Report

Client Name: Materials Testing & Consulting
777 Chrysler Drive
Burlington, WA 98233

Reference Number: **15-24085**
Project: City Center Apts-Env
Report Date: 11/11/15
Date Received: 11/6/15
Approved By: hy,pdm
Authorized by:


Lawrence J Henderson, PhD
Director of Laboratories, Vice President

Sample Description: B-1 - Base-Etrench
Lab Number: 53574
Date Analyzed: 11/9/15

Sample Date: 11/4/15
Collected By:
Analyzed By: HY

Parameter	Result	Flag	DF	Cleanup Level	PQL	MDL	Units	Method	Lab	Batch	Comment
NWTPH-Gx											
BENZENE	ND		1	0.03	0.03		mg/Kg	8260B/5035A	a	GXS_151109	
TOLUENE	ND		1	7.0	0.13		mg/Kg	8260B/5035A	a	GXS_151109	
ETHYLBENZENE	ND		1	6.0	0.13		mg/Kg	8260B/5035A	a	GXS_151109	
TOTAL XYLENES	ND		1	9.0	0.26		mg/Kg	8260B/5035A	a	GXS_151109	
GAS Range Organics	ND		1	100/30*	32		mg/Kg	8260B/5035A	a	GXS_151109	

Sample Description: S-1 - Stockpile
Lab Number: 53575
Date Analyzed: 11/9/15

Sample Date: 11/4/15
Collected By:
Analyzed By: HY

Parameter	Result	Flag	DF	Cleanup Level	PQL	MDL	Units	Method	Lab	Batch	Comment
NWTPH-Gx											
BENZENE	ND		1	0.03	0.03		mg/Kg	8260B/5035A	a	GXS_151109	
TOLUENE	ND		1	7.0	0.12		mg/Kg	8260B/5035A	a	GXS_151109	
ETHYLBENZENE	ND		1	6.0	0.12		mg/Kg	8260B/5035A	a	GXS_151109	
TOTAL XYLENES	ND		1	9.0	0.24		mg/Kg	8260B/5035A	a	GXS_151109	
GAS Range Organics	139	N1	1	100/30*	30	0.015	mg/Kg	8260B/5035A	a	GXS_151109	

Notation:

ND - A result of "ND" indicates that the compound was not detected above the Lab's Method Reporting Limit - MRL.
PQL = Practical Quantitation Limit is the lowest level that can be achieved within specified limits of precision and accuracy during routine laboratory operating conditions.
D.F. - Dilution Factor

Cleanup Level - The regulatory limit for Method A Cleanup Levels (MTCA, Chapter 173-340 WAC) contaminants in the specified matrix. Amended Feb 12, 2001

The Cleanup level for Gasoline Range Organics (GRO) is 100 mg/Kg for gas mixtures without benzene and when the total ethylbenzene, toluene and xylenes are less than 1% of the gasoline concentration. The Cleanup level for GRO is 30 mg/Kg for all other mixtures.

If you have any questions concerning this report contact us at the above phone number.

Form: cHCID.rpt



Burlington, WA *Corporate Laboratory (a)*
1620 S Walnut St - Burlington, WA 98233 - 800.755.9295 • 360.757.1400
Bellingham, WA *Microbiology (b)*
805 Orchard Dr Ste 4 - Bellingham, WA 98225 - 360.715.1212


Portland, OR *Microbiology/Chemistry (c)*
9150 SW Pioneer Ct Ste W - Wilsonville, OR 97070 - 503.682.7802
Corvallis, OR *Microbiology/Chemistry (d)*
540 SW Third Street - Corvallis, OR 97333 - 541.753.4946
Bend, OR *Microbiology (e)*
20332 Empire Blvd Ste 4 - Bend, OR 97701 - 541.639.8425

Page 1 of 1

Hydrocarbon Data Report

Client Name: Materials Testing & Consulting
777 Chrysler Drive
Burlington, WA 98233

Reference Number: **15-24085**
Project: City Center Apts-Env
Report Date: 11/11/15
Date Received: 11/6/15
Approved By: hy,pdm
Authorized by:


Lawrence J Henderson, PhD
Director of Laboratories, Vice President

Sample Description: B-1 - Base-Etrench
Lab Number: 53574
Date Analyzed: 11/9/15

Sample Date: 11/4/15
Collected By:
Analyzed By: KAH

Parameter	Result	Flag	DF	Cleanup Level	PQL	MDL	Units	Method	Lab	Batch	Comment
NWTPH-Dx											
DIESEL (C12 - C24)	ND		1	2000	50		mg/Kg	NWTPH-Dx/35 50B	a	DXS_151109	
HEAVIER OILS (>C24)	ND		1	2000	50		mg/Kg	NWTPH-Dx/35 50B	a	DXS_151109	

Sample Description: S-1 - Stockpile
Lab Number: 53575
Date Analyzed: 11/9/15

Sample Date: 11/4/15
Collected By:
Analyzed By: KAH

Parameter	Result	Flag	DF	Cleanup Level	PQL	MDL	Units	Method	Lab	Batch	Comment
NWTPH-Dx											
DIESEL (C12 - C24)	69		1	2000	50		mg/Kg	NWTPH-Dx/35 50B	a	DXS_151109	
HEAVIER OILS (>C24)	ND		1	2000	50		mg/Kg	NWTPH-Dx/35 50B	a	DXS_151109	

Notation:

ND - A result of "ND" indicates that the compound was not detected above the Lab's Method Reporting Limit - MRL.

PQL = Practical Quantitation Limit is the lowest level that can be achieved within specified limits of precision and accuracy during routine laboratory operating conditions.

D.F. - Dilution Factor

Cleanup Level - The regulatory limit for Method A Cleanup Levels (MTCA, Chapter 173-340 WAC) contaminants in the specified matrix. Amended Feb 12, 2001

The Cleanup level for Gasoline Range Organics (GRO) is 100 mg/Kg for gas mixtures without benzene and when the total ethylbenzene, toluene and xylenes are less than 1% of the gasoline concentration. The Cleanup level for GRO is 30 mg/Kg for all other mixtures.

If you have any questions concerning this report contact us at the above phone number.

Form: cHCID.rpt



Qualifier Definitions

Reference Number: 15-24085

Report Date: 11/11/15

Qualifier	Definition
N1	See case narrative.

Note: Some qualifier definitions found on this page may pertain to results or QC data which are not printed with this report.



Burlington, WA	Corporate Laboratory (a)	1620 S Walnut St	Burlington, WA 98233	800.755.9295 • 360.757.1400
Bellingham, WA	Microbiology (b)	805 Orchard Dr Ste 4	Bellingham, WA 98225	360.715.1212
Portland, OR	Microbiology/Chemistry (c)	9150 SW Pioneer Ct Ste W	Wilsonville, OR 97070	503.682.7802
Corvallis, OR	Microbiology (d)	540 SW Third Street	Corvallis, OR 97333	541.753.4946

November 11, 2015

Page 1 of 1

Case Narrative

Reference: **15-24085**

Lab Sample ID	Sample Information	
53575	S-1 - Stockpile	
Analytical Method	Notes	Created by
8260B	The spectrum for this sample does not resemble gasoline and more likely resembles diesel fuel. However, a value is reported for gasoline range organics as there is a significant amount eluting within the gasoline range.	HY



SAMPLE INDEPENDENT QUALITY CONTROL REPORT

Laboratory Fortified Blank

Reference Number: **15-24085**

Report Date: 11/11/15

Batch	Analyte	Result	True		Method	%	Recovery	Limits*	QC		Comment
			Value	Units					Qualifier	Type	
DXS_151109	0 DIESEL (C12 - C24)	97.6	125	mg/Kg	NWTPH-Dx	78	70-130			LFB	
GXS_151109	0 BENZENE	1.0	1	mg/Kg	8260B	100	80-120			LFB	
	0 ETHYLBENZENE	1.1	1	mg/Kg	8260B	110	80-120			LFB	
	0 TOLUENE	1.0	1	mg/Kg	8260B	100	80-120			LFB	
	0 TOTAL XYLENES	3.2	3	mg/Kg	8260B	107	80-120			LFB	

*Notation:

% Recovery = (Result of Analysis)/(True Value) * 100

NA = Indicates % Recovery could not be calculated.

Limits are intended for water matrices only. These criteria are for guidance only when reported with soils/solids.



SAMPLE INDEPENDENT QUALITY CONTROL REPORT

Method Blank

Reference Number: **15-24085**

Report Date: 11/11/15

Batch	Analyte	Result	True Value	Units	Method	% Recovery	Limits*	QC Qualifier	QC Type	Comment
DXS_151109	0 DIESEL (C12 - C24)	ND		mg/Kg	NWTPH-Dx	0-0		MB		
	0 HEAVIER OILS (>C24)	ND		mg/Kg	NWTPH-Dx	0-0		MB		
GXS_151109	0 BENZENE	ND		mg/Kg	8260B	0-0		MB		
	0 ETHYLBENZENE	ND		mg/Kg	8260B	0-0		MB		
	0 GAS Range Organics	ND		mg/Kg	8260B	0-0		MB		
	0 TOLUENE	ND		mg/Kg	8260B	0-0		MB		
	0 TOTAL XYLENES	ND		mg/Kg	8260B	0-0		MB		

*Notation:

 $\% \text{ Recovery} = (\text{Result of Analysis}) / (\text{True Value}) * 100$

NA = Indicates % Recovery could not be calculated.

Limits are intended for water matrices only. These criteria are for guidance only when reported with soils/solids.



Reference Number: **15-24085**
Report Date: 11/11/2015

Page 1 of 2

SAMPLE DEPENDENT QUALITY CONTROL REPORT

Duplicate, Matrix Spike/Matrix Spike Duplicate and Confirmation Result Report

Batch	Sample	Analyte	Result	Duplicate		Units	%RPD	Limits	QC		
				Result					Qualifier	Type	Comments
Duplicate											
DXS_151109											
	53575	DIESEL (C12 - C24)	69	92.7		mg/Kg	29.3	0-20		DUP	
	53575	HEAVIER OILS (>C24)	ND	ND		mg/Kg	NA	0-20		DUP	
GXS_151109											
	53088	BENZENE	ND	ND		mg/Kg	NA	0-40		DUP	
	53088	ETHYLBENZENE	ND	ND		mg/Kg	NA	0-40		DUP	
	53088	GAS Range Organics	ND	ND		mg/Kg	NA	0-40		DUP	
	53088	TOLUENE	ND	ND		mg/Kg	NA	0-40		DUP	
	53088	TOTAL XYLENES	ND	ND		mg/Kg	NA	0-40		DUP	
TS_151106											
	53568	TOTAL SOLIDS FOR CALCULATION	19.13	19.04		%	0.5	0-20		DUP	

%RPD = Relative Percent Difference

NA = Indicates %RPD could not be calculated

Matrix Spike (MS)/Matrix Spike Duplicate (MSD) analyses are used to determine the accuracy (MS) and precision (MSD) of an analytical method in a given sample matrix. Therefore, the usefulness of this report is limited to samples of similar matrices analyzed in the same analytical batch.

Only Duplicate sample with detections are listed in this report

Limits are intended for water matrices only. These criteria are for guidance only when reported with soils/solids.

FORM: QC Dependent.rpt

Batch	Sample	Analyte	Result	Duplicate			Percent Recovery				QC			Type	Comments
				Spike Result	Spike Result	Spike Conc	Units	MS	MSD	Limits*	%RPD	Limits*	Qualifier		
Laboratory Fortified Matrix (MS)															
GXS_151109															
	53088	BENZENE	ND	1.1		1.3	mg/Kg	85	NA	70-130	NA	0-20		LFM	
	53088	ETHYLBENZENE	ND	1.2		1.3	mg/Kg	92	NA	70-130	NA	0-20		LFM	
	53088	TOLUENE	ND	1.1		1.3	mg/Kg	85	NA	70-130	NA	0-20		LFM	
	53088	TOTAL XYLENES	ND	3.5		4	mg/Kg	88	NA	70-130	NA	0-20		LFM	

%RPD = Relative Percent Difference

NA = Indicates %RPD could not be calculated

Matrix Spike (MS)/Matrix Spike Duplicate (MSD) analyses are used to determine the accuracy (MS) and precision (MSD) of an analytical method in a given sample matrix. Therefore, the usefulness of this report is limited to samples of similar matrices analyzed in the same analytical batch.

Only Duplicate sample with detections are listed in this report

Limits are intended for water matrices only. These criteria are for guidance only when reported with soils/solids.

FORM: QC Dependent.rpt

Chain of Custody / Analysis Request (Please complete all applicable shaded sections)

Report to:	Materials Testing & Consulting	Bill to:	Materials Testing & Consulting	Ref #	For Lab Use Only
Ship Address:	777 Chrysler Drive	Address:	777 Chrysler Drive	Check Regulatory Program	
City:	Burlington	City:	Burlington	<input type="checkbox"/> Safe Drinking Water Act	
Attn:	Megan	Phone:		<input type="checkbox"/> Clean Water Act	
Phone:	360.755-1990	P.O. #:		<input type="checkbox"/> RCRA / CERCLA	
FAX:	755-1980	Attn:		<input type="checkbox"/> Other	
Email:	me@man-hallam@mtc-inc.net	<input type="checkbox"/> Visa	<input type="checkbox"/> M/C	<input type="checkbox"/> A/E	Expires /
Project	CITY CENTER APTS-ENH	Card#:			

ANALYTICAL
Main Lab (800-755-9295)
1620 South Walnut St. Burlington, WA 98233
Microbiology (888-725-1212)
805 W. Orchard Dr. Suite 4 Bellingham, WA 98225
Wiltonville Lab (503-682-7802)
9150 SW Pioneer Ct. Suite W Wilsonville, OR 97070
Corvallis Lab (541-753-4946)
540 SW 3rd St. Corvallis, OR 97333

Instructions

- Use one line per sample location.
- Be specific in analysis requests.
- (NEW) List each metal individually. (NEW)
☐ Standard
☒ Half-time (50% surcharge)
☒ Quickest (100% surcharge) Phone Call Req.
- Check off analyses to be performed for each sample location.
- Enter number of containers.

Turn Around Time Required

Field ID	Location	Grab/Comp.	Sample Matrix	Date	Time	8260/5035 Soil (NWTPH-G/BTEX only)	NWTPH-Dx (Soil)	Analyses Requested					Number of Containers	
1	B-1													
2	S-1													
3														
4														
5														
6														
7														
8														
9														
10														

Special Instructions
Conditions on Receipt



CO027396

15-24085
53574 - 53575

Sampled by:	Phone:	FAX:	Email:	Total Containers
-------------	--------	------	--------	------------------

Sample Receipt Request (Must include FAX or Email) ☐ * W - water DW - drinking water SW - surface water GW - Ground water WW - waste water OL - oil S - soil Other _____

Relinquished by	Date	Time	Received by	Date	Time	Custody seals intact	Yes	No	N/A
<i>[Signature]</i>	11-06-15	0813	<i>[Signature]</i>	11-06-15	8:15	Sample temp 20 C satisfactory	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						Samples received intact	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						Chain of custody & labels agree	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

WT

SET-4

Sampled on January 22, 2016



Burlington, WA	Corporate Laboratory (a)	1620 S Walnut St.	Burlington, WA 98233	800.755.9295 • 360.757.1400
Bellingham, WA	Microbiology (b)	805 Orchard Dr Ste 4	Bellingham, WA 98225	360.715.1212
Portland, OR	Microbiology/Chemistry (c)	9150 SW Pioneer Ct Ste W	Wilsonville, OR 97070	503.682.7802
Corvallis, OR	Microbiology (d)	540 SW Third Street	Corvallis, OR 97333	541.753.4946

January 29, 2016

Page 1 of 1

Ms. Meghan Hallam
Materials Testing & Consulting
777 Chrysler Drive
Burlington, WA 98233
RE: 16-01619 - City CTR ENV

Dear Ms. Meghan Hallam,

Your project: City CTR ENV, was received on Friday January 22, 2016.

All samples were analyzed within the accepted holding times, were appropriately preserved and were analyzed according to approved analytical protocols. The quality control data was within laboratory acceptance limits, unless specified in the QA reports.

If you have questions phone us at 800 755-9295.

Respectfully

A handwritten signature in blue ink, appearing to read "LJ Henderson", with a long horizontal flourish extending to the right.

Lawrence J Henderson, PhD
Director of Laboratories, Vice President

Enclosures: Data Report
QC Reports
Chain of Custody



Burlington, WA *Corporate Laboratory (a)*
1620 S Walnut St - Burlington, WA 98233 - 800.755.9295 • 360.757.1400
Bellingham, WA *Microbiology (b)*
805 Orchard Dr Ste 4 - Bellingham, WA 98225 - 360.715.1212

Portland, OR *Microbiology/Chemistry (c)*
9150 SW Pioneer Ct Ste W - Wilsonville, OR 97070 - 503.682.7802
Corvallis, OR *Microbiology/Chemistry (d)*
540 SW Third Street - Corvallis, OR 97333 - 541.753.4946
Bend, OR *Microbiology (e)*
20332 Empire Blvd Ste 4 - Bend, OR 97701 - 541.639.8425

Page 1 of 3

Hydrocarbon Data Report

Client Name: Materials Testing & Consulting
777 Chrysler Drive
Burlington, WA 98233

Reference Number: **16-01619**

Project: City CTR ENV

Report Date: 1/29/16

Date Received: 1/22/16

Approved By: co,hy

Authorized by:

Lawrence J Henderson, PhD
Director of Laboratories, Vice President

Sample Description: Base-S
Lab Number: 3763
Date Analyzed: 1/26/16

Sample Date: 1/22/16 14:38
Collected By:
Analyzed By: HY

Parameter	Result	Flag	DF	Cleanup Level	PQL	MDL	Units	Method	Lab	Batch	Comment
NWTPH-Gx											
BENZENE	ND		1	0.03	0.03		mg/Kg	8260B/5030B	a	GXS_160126	
TOLUENE	ND		1	7.0	0.12		mg/Kg	8260B/5030B	a	GXS_160126	
ETHYLBENZENE	ND		1	6.0	0.12		mg/Kg	8260B/5030B	a	GXS_160126	
TOTAL XYLENES	ND		1	9.0	0.24		mg/Kg	8260B/5030B	a	GXS_160126	
GAS Range Organics	ND		1	100/30*	30		mg/Kg	8260B/5035A	a	GXS_160126	

Sample Description: Tank - Tank-Stockpile
Lab Number: 3764
Date Analyzed: 1/26/16

Sample Date: 1/22/16 13:29
Collected By:
Analyzed By: HY

Parameter	Result	Flag	DF	Cleanup Level	PQL	MDL	Units	Method	Lab	Batch	Comment
NWTPH-Gx											
BENZENE	ND		1	0.03	0.03		mg/Kg	8260B/5035A	a	GXS_160126	
TOLUENE	ND		1	7.0	0.12		mg/Kg	8260B/5035A	a	GXS_160126	
ETHYLBENZENE	ND		1	6.0	0.12		mg/Kg	8260B/5035A	a	GXS_160126	
TOTAL XYLENES	0.3		1	9.0	0.24		mg/Kg	8260B/5035A	a	GXS_160126	
GAS Range Organics	420		1	100/30*	30		mg/Kg	8260B/5035A	a	GXS_160126	

Sample Description: Tank
Lab Number: 3765
Date Analyzed: 1/26/16

Sample Date: 1/22/16 13:29
Collected By:
Analyzed By: HY

Parameter	Result	Flag	DF	Cleanup Level	PQL	MDL	Units	Method	Lab	Batch	Comment
NWTPH-Gx											

Notation:

ND - A result of "ND" indicates that the compound was not detected above the Lab's Method Reporting Limit - MRL.

PQL = Practical Quantitation Limit is the lowest level that can be achieved within specified limits of precision and accuracy during routine laboratory operating conditions.

D.F. - Dilution Factor

Cleanup Level - The regulatory limit for Method A Cleanup Levels (MTCA, Chapter 173-340 WAC) contaminants in the specified matrix. Amended Feb 12, 2001

The Cleanup level for Gasoline Range Organics (GRO) is 100 mg/Kg for gas mixtures without benzene and when the total ethylbenzene, toluene and xylenes are less than 1% of the gasoline concentration. The Cleanup level for GRO is 30 mg/Kg for all other mixtures.

If you have any questions concerning this report contact us at the above phone number.

Form: cHCID.rpt

Hydrocarbon Data Report

BENZENE	ND	1	0.03	0.03	mg/Kg	8260B/5035A	a	GXS_160126
TOLUENE	ND	1	7.0	0.13	mg/Kg	8260B/5035A	a	GXS_160126
ETHYLBENZENE	ND	1	6.0	0.13	mg/Kg	8260B/5035A	a	GXS_160126
TOTAL XYLENES	ND	1	9.0	0.26	mg/Kg	8260B/5035A	a	GXS_160126
GAS Range Organics	ND	1	100/30*	32	mg/Kg	8260B/5035A	a	GXS_160126

Sample Description: Stockpile - Stock-S	Sample Date: 1/22/16 13:29
Lab Number: 3766	Collected By:
Date Analyzed: 1/26/16	Analyzed By: HY

Parameter	Result	Flag	DF	Cleanup Level	PQL	MDL	Units	Method	Lab	Batch	Comment
-----------	--------	------	----	---------------	-----	-----	-------	--------	-----	-------	---------

NWTPH-Gx

BENZENE	ND	1	0.03	0.03	mg/Kg	8260B/5035A	a	GXS_160126
TOLUENE	ND	1	7.0	0.13	mg/Kg	8260B/5035A	a	GXS_160126
ETHYLBENZENE	ND	1	6.0	0.13	mg/Kg	8260B/5035A	a	GXS_160126
TOTAL XYLENES	ND	1	9.0	0.26	mg/Kg	8260B/5035A	a	GXS_160126
GAS Range Organics	263	1	100/30*	32	mg/Kg	8260B/5035A	a	GXS_160126

Sample Description: Stockpile - Stock-W	Sample Date: 1/22/16 13:29
Lab Number: 3767	Collected By:
Date Analyzed: 1/26/16	Analyzed By: HY

Parameter	Result	Flag	DF	Cleanup Level	PQL	MDL	Units	Method	Lab	Batch	Comment
-----------	--------	------	----	---------------	-----	-----	-------	--------	-----	-------	---------

NWTPH-Gx

BENZENE	ND	1	0.03	0.03	mg/Kg	8260B/5035A	a	GXS_160126
TOLUENE	ND	1	7.0	0.13	mg/Kg	8260B/5035A	a	GXS_160126
ETHYLBENZENE	ND	1	6.0	0.13	mg/Kg	8260B/5035A	a	GXS_160126
TOTAL XYLENES	ND	1	9.0	0.26	mg/Kg	8260B/5035A	a	GXS_160126
GAS Range Organics	874	1	100/30*	32	mg/Kg	8260B/5035A	a	GXS_160126

Sample Description: Tank - Base	Sample Date: 1/22/16 0:00
Lab Number: 3768	Collected By:
Date Analyzed: 1/26/16	Analyzed By: HY

Parameter	Result	Flag	DF	Cleanup Level	PQL	MDL	Units	Method	Lab	Batch	Comment
-----------	--------	------	----	---------------	-----	-----	-------	--------	-----	-------	---------

NWTPH-Gx

BENZENE	ND	1	0.03	0.03	mg/Kg	8260B/5035A	a	GXS_160126
TOLUENE	ND	1	7.0	0.13	mg/Kg	8260B/5035A	a	GXS_160126
ETHYLBENZENE	ND	1	6.0	0.13	mg/Kg	8260B/5035A	a	GXS_160126
TOTAL XYLENES	ND	1	9.0	0.26	mg/Kg	8260B/5035A	a	GXS_160126
GAS Range Organics	ND	1	100/30*	32	mg/Kg	8260B/5035A	a	GXS_160126

Notation:

ND - A result of "ND" indicates that the compound was not detected above the Lab's Method Reporting Limit - MRL.
PQL = Practical Quantitation Limit is the lowest level that can be achieved within specified limits of precision and accuracy during routine laboratory operating conditions.
D.F. - Dilution Factor
Cleanup Level - The regulatory limit for Method A Cleanup Levels (MTCA, Chapter 173-340 WAC) contaminants in the specified matrix. Amended Feb 12, 2001

The Cleanup level for Gasoline Range Organics (GRO) is 100 mg/Kg for gas mixtures without benzene and when the total ethylbenzene, toluene and xylenes are less than 1% of the gasoline concentration. The Cleanup level for GRO is 30 mg/Kg for all other mixtures.

Hydrocarbon Data Report

Notation:

ND - A result of "ND" indicates that the compound was not detected above the Lab's Method Reporting Limit - MRL.

PQL = Practical Quantitation Limit is the lowest level that can be achieved within specified limits of precision and accuracy during routine laboratory operating conditions.

D.F. - Dilution Factor

Cleanup Level - The regulatory limit for Method A Cleanup Levels (MTCA, Chapter 173-340 WAC) contaminants in the specified matrix. Amended Feb 12, 2001

The Cleanup level for Gasoline Range Organics (GRO) is 100 mg/Kg for gas mixtures without benzene and when the total ethylbenzene, toluene and xylenes are less than 1% of the gasoline concentration. The Cleanup level for GRO is 30 mg/Kg for all other mixtures.



Burlington, WA *Corporate Laboratory (a)*
1620 S Walnut St - Burlington, WA 98233 - 800.755.9295 • 360.757.1400
Bellingham, WA *Microbiology (b)*
805 Orchard Dr Ste 4 - Bellingham, WA 98225 - 360.715.1212

Portland, OR *Microbiology/Chemistry (c)*
9150 SW Pioneer Ct Ste W - Wilsonville, OR 97070 - 503.682.7802
Corvallis, OR *Microbiology/Chemistry (d)*
540 SW Third Street - Corvallis, OR 97333 - 541.753.4946
Bend, OR *Microbiology (e)*
20332 Empire Blvd Ste 4 - Bend, OR 97701 - 541.639.8425

Page 1 of 2

Hydrocarbon Data Report

Client Name: Materials Testing & Consulting
777 Chrysler Drive
Burlington, WA 98233

Reference Number: **16-01619**

Project: City CTR ENV

Report Date: 1/29/16

Date Received: 1/22/16

Approved By: co,hy

Authorized by:

Lawrence J Henderson, PhD
Director of Laboratories, Vice President

Sample Description: Base-S
Lab Number: 3763
Date Analyzed: 1/26/16

Sample Date: 1/22/16 14:38
Collected By:
Analyzed By: KAH

Parameter	Result	Flag	DF	Cleanup Level	PQL	MDL	Units	Method	Lab	Batch	Comment
NWTPH-Dx											
DIESEL (C12 - C24)	ND		1	2000	50		mg/Kg	NWTPH-Dx/35 50B	a	DXS_160125	
HEAVIER OILS (>C24)	ND		1	2000	50		mg/Kg	NWTPH-Dx/35 50B	a	DXS_160125	

Sample Description: Tank - Tank-Stockpile
Lab Number: 3764
Date Analyzed: 1/26/16

Sample Date: 1/22/16 13:29
Collected By:
Analyzed By: KAH

Parameter	Result	Flag	DF	Cleanup Level	PQL	MDL	Units	Method	Lab	Batch	Comment
NWTPH-Dx											
DIESEL (C12 - C24)	223.6		1	2000	50		mg/Kg	NWTPH-Dx/35 50B	a	DXS_160125	
HEAVIER OILS (>C24)	ND		1	2000	50		mg/Kg	NWTPH-Dx/35 50B	a	DXS_160125	

Sample Description: Tank
Lab Number: 3765
Date Analyzed: 1/26/16

Sample Date: 1/22/16 13:29
Collected By:
Analyzed By: KAH

Parameter	Result	Flag	DF	Cleanup Level	PQL	MDL	Units	Method	Lab	Batch	Comment
NWTPH-Dx											
DIESEL (C12 - C24)	ND		1	2000	50		mg/Kg	NWTPH-Dx/35 50B	a	DXS_160125	
HEAVIER OILS (>C24)	ND		1	2000	50		mg/Kg	NWTPH-Dx/35 50B	a	DXS_160125	

Notation:

ND - A result of "ND" indicates that the compound was not detected above the Lab's Method Reporting Limit - MRL.

PQL = Practical Quantitation Limit is the lowest level that can be achieved within specified limits of precision and accuracy during routine laboratory operating conditions.

D.F. - Dilution Factor

Cleanup Level - The regulatory limit for Method A Cleanup Levels (MTCA, Chapter173-340 WAC) contaminants in the specified matrix. Amended Feb 12, 2001

The Cleanup level for Gasoline Range Organics (GRO) is 100 mg/Kg for gas mixtures without benzene and when the total ethylbenzene, toluene and xylenes are less than 1% of the gasoline concentration. The Cleanup level for GRO is 30 mg/Kg for all other mixtures.

If you have any questions concerning this report contact us at the above phone number.

Form: cHCID.rpt

Hydrocarbon Data Report

Sample Description: Stockpile - Stock-S						Sample Date: 1/22/16 13:29					
Lab Number: 3766						Collected By:					
Date Analyzed: 1/26/16						Analyzed By: KAH					
Parameter	Result	Flag	DF	Cleanup Level	PQL	MDL	Units	Method	Lab	Batch	Comment

NWTPH-Dx

DIESEL (C12 - C24)	ND		1	2000	50		mg/Kg	NWTPH-Dx/35 50B	a	DXS_160125	
HEAVIER OILS (>C24)	ND		1	2000	50		mg/Kg	NWTPH-Dx/35 50B	a	DXS_160125	

Sample Description: Stockpile - Stock-W						Sample Date: 1/22/16 13:29					
Lab Number: 3767						Collected By:					
Date Analyzed: 1/26/16						Analyzed By: KAH					
Parameter	Result	Flag	DF	Cleanup Level	PQL	MDL	Units	Method	Lab	Batch	Comment

NWTPH-Dx

DIESEL (C12 - C24)	472		1	2000	50		mg/Kg	NWTPH-Dx/35 50B	a	DXS_160125	
HEAVIER OILS (>C24)	ND		1	2000	50		mg/Kg	NWTPH-Dx/35 50B	a	DXS_160125	

Sample Description: Tank - Base						Sample Date: 1/22/16 0:00					
Lab Number: 3768						Collected By:					
Date Analyzed: 1/26/16						Analyzed By: KAH					
Parameter	Result	Flag	DF	Cleanup Level	PQL	MDL	Units	Method	Lab	Batch	Comment

NWTPH-Dx

DIESEL (C12 - C24)	ND		1	2000	50		mg/Kg	NWTPH-Dx/35 50B	a	DXS_160125	
HEAVIER OILS (>C24)	ND		1	2000	50		mg/Kg	NWTPH-Dx/35 50B	a	DXS_160125	

Notation:

ND - A result of "ND" indicates that the compound was not detected above the Lab's Method Reporting Limit - MRL.

PQL = Practical Quantitation Limit is the lowest level that can be achieved within specified limits of precision and accuracy during routine laboratory operating conditions.

D.F. - Dilution Factor

Cleanup Level - The regulatory limit for Method A Cleanup Levels (MTCA, Chapter173-340 WAC) contaminants in the specified matrix. Amended Feb 12, 2001

The Cleanup level for Gasoline Range Organics (GRO) is 100 mg/Kg for gas mixtures without benzene and when the total ethylbenzene, toluene and xylenes are less than 1% of the gasoline concentration. The Cleanup level for GRO is 30 mg/Kg for all other mixtures.



Burlington, WA	Corporate Laboratory (a)	1620 S Walnut St	Burlington, WA 98233	800.755.9295 • 360.757.1400
Bellingham, WA	Microbiology (b)	805 Orchard Dr Ste 4	Bellingham, WA 98225	360.715.1212
Portland, OR	Microbiology/Chemistry (c)	9150 SW Pioneer Ct Ste W	Wilsonville, OR 97070	503.682.7802
Corvallis, OR	Microbiology (d)	540 SW Third Street	Corvallis, OR 97333	541.753.4946

WSDOE Lab C567

DATA REPORT

Page 1 of 1

Client Name: Materials Testing & Consulting
777 Chrysler Drive
Burlington, WA 98233

Reference Number: **16-01619**
Project: City CTR ENV

Lab Number: 03768
Field ID: Tank
Sample Description: Base
Matrix: Soil
Sample Date: 1/22/16
Extraction Date: 1/28/16
Extraction Method: 3550B

Report Date: 1/29/16
Date Analyzed: 1/29/16
Analyst: CO
Analytical Method: 8082
Batch: 8082_S160128
Approved By: hy

Authorized by:

Lawrence J Henderson, PhD
Director of Laboratories, Vice President

CAS	Compound	RESULT	Flag	UNITS	PQL	MRL	MDL	D.F.	Lab	COMMENT
12674-11-1	AROCLOR 1016	ND		mg/Kg	0.1	0.1		1.00	a	
11104-28-1	AROCLOR 1221	ND		mg/Kg	0.1	0.1		1.00	a	
11141-16-1	AROCLOR 1232	ND		mg/Kg	0.1	0.1		1.00	a	
53469-21-1	AROCLOR 1242	ND		mg/Kg	0.1	0.1		1.00	a	
12672-29-1	AROCLOR 1248	ND		mg/Kg	0.1	0.1		1.00	a	
11097-69-1	AROCLOR 1254	ND		mg/Kg	0.1	0.1		1.00	a	
11096-82-1	AROCLOR 1260	ND		mg/Kg	0.1	0.1		1.00	a	
11100-14-1	AROCLOR 1268	ND		mg/Kg	0.1	0.1		1.00	a	
1336-36-3	PCBS (Total Aroclors)	ND		mg/Kg	0.1	0.1		1.00	a	

Notes:

Flags are data qualifiers. If there are data qualifiers on your report definitions can be found on an accompanying sheet.

ND - indicates the compound was not detected above the PQL or MDL.

PQL = Practical Quantitation Limit is the lowest level that can be achieved within specified limits of precision and accuracy during routine laboratory operating conditions.

D.F. - Dilution Factor.

If you have any questions concerning this report contact us at the above phone number.



Burlington, WA	Corporate Laboratory (a)	1620 S Walnut St	Burlington, WA 98233	800.755.9295 • 360.757.1400
Bellingham, WA	Microbiology (b)	805 Orchard Dr Ste 4	Bellingham, WA 98225	360.715.1212
Portland, OR	Microbiology/Chemistry (c)	9150 SW Pioneer Ct Ste W	Wilsonville, OR 97070	503.682.7802
Corvallis, OR	Microbiology (d)	540 SW Third Street	Corvallis, OR 97333	541.753.4946

WSDOE Lab C567

DATA REPORT

Page 1 of 1

Client Name: Materials Testing & Consulting
777 Chrysler Drive
Burlington, WA 98233

Reference Number: **16-01619**
Project: City CTR ENV

Lab Number: 03768
Field ID: Tank
Sample Description: Base
Matrix: Soil
Sample Date: 1/22/16
Extraction Date: 1/25/16
Extraction Method: 3550B

Report Date: 1/29/16
Date Analyzed: 1/28/16
Analyst: CO
Analytical Method: 8270D
Batch: PAH_S160125
Approved By: hy

Authorized by:

Lawrence J Henderson, PhD
Director of Laboratories, Vice President

CAS	Compound	RESULT	Flag	UNITS	PQL	MRL	MDL	D.F.	Lab	COMMENT
- Polynuclear Aromatic Hydrocarbons (PAHs)										
208-96-8	ACENAPHTHYLENE	ND		mg/Kg	0.05	0.05		1.00	a	
83-32-9	ACENAPTHENE	ND		mg/Kg	0.05	0.05		1.00	a	
120-12-7	ANTHRACENE	ND		mg/Kg	0.05	0.05		1.00	a	
56-55-3	BENZ[A]ANTHRACENE	ND		mg/Kg	0.05	0.05		1.00	a	cPAH
50-32-8	BENZO[A]PYRENE	ND		mg/Kg	0.05	0.05		1.00	a	cPAH
205-99-2	BENZO[B/J]FLUORANTHENE	ND		mg/Kg	0.05	0.05		1.00	a	cPAH
191-24-2	BENZO[G,H,I]PERYLENE	ND		mg/Kg	0.05	0.05		1.00	a	
207-08-9	BENZO[K]FLUORANTHENE	ND		mg/Kg	0.05	0.05		1.00	a	cPAH
218-01-9	CHRYSENE	ND		mg/Kg	0.05	0.05		1.00	a	cPAH
53-70-3	DIBENZ[A,H]ANTHRACENE	ND		mg/Kg	0.05	0.05		1.00	a	cPAH
206-44-0	FLUORANTHENE	ND		mg/Kg	0.05	0.05		1.00	a	
86-73-7	FLUORENE	ND		mg/Kg	0.05	0.05		1.00	a	
193-39-5	INDENO[1,2,3,C,D]PYRENE	ND		mg/Kg	0.05	0.05		1.00	a	cPAH
91-20-3	NAPHTHALENE	ND		mg/Kg	0.05	0.05		1.00	a	
85-01-8	PHENANTHRENE	ND		mg/Kg	0.05	0.05		1.00	a	
129-00-0	PYRENE	ND		mg/Kg	0.05	0.05		1.00	a	

Notes:

Flags are data qualifiers. If there are data qualifiers on your report definitions can be found on an accompanying sheet.

ND - indicates the compound was not detected above the PQL or MDL.

PQL = Practical Quantitation Limit is the lowest level that can be achieved within specified limits of precision and accuracy during routine laboratory operating conditions.

D.F. - Dilution Factor.

If you have any questions concerning this report contact us at the above phone number.



Burlington, WA	Corporate Laboratory (a)	1620 S Walnut St	Burlington, WA 98233	800.755.9295 • 360.757.1400
Bellingham, WA	Microbiology (b)	805 Orchard Dr Ste 4	Bellingham, WA 98225	360.715.1212
Portland, OR	Microbiology/Chemistry (c)	9150 SW Pioneer Ct Ste W	Wilsonville, OR 97070	503.682.7802
Corvallis, OR	Microbiology (d)	540 SW Third Street	Corvallis, OR 97333	541.753.4946

WSDOE Lab C567

DATA REPORT

Page 1 of 1

Client Name: Materials Testing & Consulting
777 Chrysler Drive
Burlington, WA 98233

Reference Number: **16-01619**
Project: City CTR ENV

Lab Number: 03765
Field ID: Tank
Sample Description: Tank
Matrix: Soil
Sample Date: 1/22/16
Extraction Date: 1/28/16
Extraction Method: 3550B

Report Date: 1/29/16
Date Analyzed: 1/29/16
Analyst: CO
Analytical Method: 8082
Batch: 8082_S160128
Approved By: hy

Authorized by:

Lawrence J Henderson, PhD
Director of Laboratories, Vice President

CAS	Compound	RESULT	Flag	UNITS	PQL	MRL	MDL	D.F.	Lab	COMMENT
12674-11-1	AROCLOR 1016	ND		mg/Kg	0.1	0.1		1.00	a	
11104-28-1	AROCLOR 1221	ND		mg/Kg	0.1	0.1		1.00	a	
11141-16-1	AROCLOR 1232	ND		mg/Kg	0.1	0.1		1.00	a	
53469-21-1	AROCLOR 1242	ND		mg/Kg	0.1	0.1		1.00	a	
12672-29-1	AROCLOR 1248	ND		mg/Kg	0.1	0.1		1.00	a	
11097-69-1	AROCLOR 1254	ND		mg/Kg	0.1	0.1		1.00	a	
11096-82-1	AROCLOR 1260	ND		mg/Kg	0.1	0.1		1.00	a	
11100-14-1	AROCLOR 1268	ND		mg/Kg	0.1	0.1		1.00	a	
1336-36-3	PCBS (Total Aroclors)	ND		mg/Kg	0.1	0.1		1.00	a	

Notes:

Flags are data qualifiers. If there are data qualifiers on your report definitions can be found on an accompanying sheet.

ND - indicates the compound was not detected above the PQL or MDL.

PQL = Practical Quantitation Limit is the lowest level that can be achieved within specified limits of precision and accuracy during routine laboratory operating conditions.

D.F. - Dilution Factor.

If you have any questions concerning this report contact us at the above phone number.



Burlington, WA	Corporate Laboratory (a)	1620 S Walnut St	Burlington, WA 98233	800.755.9295 • 360.757.1400
Bellingham, WA	Microbiology (b)	805 Orchard Dr Ste 4	Bellingham, WA 98225	360.715.1212
Portland, OR	Microbiology/Chemistry (c)	9150 SW Pioneer Ct Ste W	Wilsonville, OR 97070	503.682.7802
Corvallis, OR	Microbiology (d)	540 SW Third Street	Corvallis, OR 97333	541.753.4946

WSDOE Lab C567

DATA REPORT

Page 1 of 1

Client Name: Materials Testing & Consulting
777 Chrysler Drive
Burlington, WA 98233

Reference Number: **16-01619**
Project: City CTR ENV

Lab Number: 03765
Field ID: Tank
Sample Description: Tank
Matrix: Soil
Sample Date: 1/22/16
Extraction Date: 1/25/16
Extraction Method: 3550B

Report Date: 1/29/16
Date Analyzed: 1/28/16
Analyst: CO
Analytical Method: 8270D
Batch: PAH_S160125
Approved By: hy

Authorized by:

Lawrence J Henderson, PhD
Director of Laboratories, Vice President

CAS	Compound	RESULT	Flag	UNITS	PQL	MRL	MDL	D.F.	Lab	COMMENT
- Polynuclear Aromatic Hydrocarbons (PAHs)										
208-96-8	ACENAPHTHYLENE	ND		mg/Kg	0.05	0.05		1.00	a	
83-32-9	ACENAPTHENE	ND		mg/Kg	0.05	0.05		1.00	a	
120-12-7	ANTHRACENE	ND		mg/Kg	0.05	0.05		1.00	a	
56-55-3	BENZ[A]ANTHRACENE	ND		mg/Kg	0.05	0.05		1.00	a	cPAH
50-32-8	BENZO[A]PYRENE	ND		mg/Kg	0.05	0.05		1.00	a	cPAH
205-99-2	BENZO[B/J]FLUORANTHENE	ND		mg/Kg	0.05	0.05		1.00	a	cPAH
191-24-2	BENZO[G,H,I]PERYLENE	ND		mg/Kg	0.05	0.05		1.00	a	
207-08-9	BENZO[K]FLUORANTHENE	ND		mg/Kg	0.05	0.05		1.00	a	cPAH
218-01-9	CHRYSENE	ND		mg/Kg	0.05	0.05		1.00	a	cPAH
53-70-3	DIBENZ[A,H]ANTHRACENE	ND		mg/Kg	0.05	0.05		1.00	a	cPAH
206-44-0	FLUORANTHENE	ND		mg/Kg	0.05	0.05		1.00	a	
86-73-7	FLUORENE	ND		mg/Kg	0.05	0.05		1.00	a	
193-39-5	INDENO[1,2,3,C,D]PYRENE	ND		mg/Kg	0.05	0.05		1.00	a	cPAH
91-20-3	NAPHTHALENE	ND		mg/Kg	0.05	0.05		1.00	a	
85-01-8	PHENANTHRENE	ND		mg/Kg	0.05	0.05		1.00	a	
129-00-0	PYRENE	ND		mg/Kg	0.05	0.05		1.00	a	

Notes:

Flags are data qualifiers. If there are data qualifiers on your report definitions can be found on an accompanying sheet.

ND - indicates the compound was not detected above the PQL or MDL.

PQL = Practical Quantitation Limit is the lowest level that can be achieved within specified limits of precision and accuracy during routine laboratory operating conditions.

D.F. - Dilution Factor.

If you have any questions concerning this report contact us at the above phone number.


Reference Number: **16-01619**

Report Date: 1/29/2016

Page 1 of 2

SAMPLE DEPENDENT QUALITY CONTROL REPORT

Duplicate, Matrix Spike/Matrix Spike Duplicate and Confirmation Result Report

Batch	Sample	Analyte	Result	Duplicate		Units	%RPD	Limits	QC		
				Result					Qualifier	Type	Comments
Duplicate											
8082_S160128											
	3765	AROCLOR 1016	ND	ND		mg/Kg	NA	0-50		DUP	
	3765	AROCLOR 1221	ND	ND		mg/Kg	NA	0-50		DUP	
	3765	AROCLOR 1232	ND	ND		mg/Kg	NA	0-50		DUP	
	3765	AROCLOR 1242	ND	ND		mg/Kg	NA	0-50		DUP	
	3765	AROCLOR 1248	ND	ND		mg/Kg	NA	0-50		DUP	
	3765	AROCLOR 1254	ND	ND		mg/Kg	NA	0-50		DUP	
	3765	AROCLOR 1260	ND	ND		mg/Kg	NA	0-50		DUP	
	3765	AROCLOR 1268	ND	ND		mg/Kg	NA	0-50		DUP	
	3765	PCBS (Total Aroclors)	ND	ND		mg/Kg	NA	0-50		DUP	
DXS_160125											
	3766	DIESEL (C12 - C24)	ND	ND		mg/Kg	NA	0-20		DUP	
	3766	HEAVIER OILS (>C24)	ND	ND		mg/Kg	NA	0-20		DUP	
GXS_160126											
	3764	BENZENE	ND	ND		mg/Kg	NA	0-40		DUP	
	3764	ETHYLBENZENE	ND	ND		mg/Kg	NA	0-40		DUP	
	3764	GAS Range Organics	420	442		mg/Kg	5.1	0-40		DUP	
	3764	TOLUENE	ND	ND		mg/Kg	NA	0-40		DUP	
	3764	TOTAL XYLENES	0.3	0.3		mg/Kg	0.0	0-40		DUP	
TS_160125											
	3718	TOTAL SOLIDS FOR CALCULATION	16.61	16.40		%	1.3	0-20		DUP	

%RPD = Relative Percent Difference

NA = Indicates %RPD could not be calculated

Matrix Spike (MS)/Matrix Spike Duplicate (MSD) analyses are used to determine the accuracy (MS) and precision (MSD) of an analytical method in a given sample matrix. Therefore, the usefulness of this report is limited to samples of similar matrices analyzed in the same analytical batch.

Only Duplicate sample with detections are listed in this report

Limits are intended for water matrices only. These criteria are for guidance only when reported with soils/solids.

FORM: QC Dependent.rpt

Batch	Sample	Analyte	Result	Spike Result	Duplicate		Spike Conc	Units	Percent Recovery		Limits*	%RPD	Limits*	QC		
					Spike Result	Conc			MS	MSD				Qualifier	Type	Comments
Laboratory Fortified Matrix (MS)																
8082_S160128																
	3768	AROCLOR 1254	ND	0.08			0.1	mg/Kg	80	NA	29-131	NA	0-20			LFM
GXS_160126																
	3763	BENZENE	ND	0.90			1.21	mg/Kg	74	NA	70-130	NA	0-20			LFM
	3763	ETHYLBENZENE	ND	0.86			1.21	mg/Kg	71	NA	70-130	NA	0-20			LFM
	3763	TOLUENE	ND	0.88			1.21	mg/Kg	73	NA	70-130	NA	0-20			LFM
	3763	TOTAL XYLENES	ND	2.58			3.62	mg/Kg	71	NA	70-130	NA	0-20			LFM
PAH_S160125																
	3768	2 - FLUOROBIPHENYL (Surr)	96	109				%			70-130	NA	0-20			LFM
	3768	ACENAPHTHYLENE	ND	2.20			2	mg/Kg	110	NA	33-145	NA	0-20			LFM
	3768	ACENAPHTHENE	ND	2.00			2	mg/Kg	100	NA	47-145	NA	0-40			LFM
	3768	ANTHRACENE	ND	1.86			2	mg/Kg	93	NA	27-133	NA	0-20			LFM
	3768	BENZ[A]ANTHRACENE	ND	1.84			2	mg/Kg	92	NA	33-143	NA	0-20			LFM
	3768	BENZO[A]PYRENE	ND	1.70			2	mg/Kg	85	NA	17-163	NA	0-20			LFM
	3768	BENZO[B/J]FLUORANTHENE	ND	1.76			2	mg/Kg	88	NA	24-159	NA	0-20			LFM
	3768	BENZO[G,H,I]PERYLENE	ND	2.04			2	mg/Kg	102	NA	1-219	NA	0-20			LFM
	3768	BENZO[K]FLUORANTHENE	ND	2.00			2	mg/Kg	100	NA	11-162	NA	0-20			LFM
	3768	CHRYSENE	ND	1.64			2	mg/Kg	82	NA	17-168	NA	0-20			LFM
	3768	d5-NITROBENZENE (Surr)	102	106				%			70-130	NA	0-20			LFM
	3768	DIBENZ[A,H]ANTHRACENE	ND	1.42			2	mg/Kg	71	NA	1-227	NA	0-40			LFM
	3768	FLUORANTHENE	ND	1.93			2	mg/Kg	97	NA	26-137	NA	0-20			LFM
	3768	FLUORENE	ND	2.07			2	mg/Kg	104	NA	59-121	NA	0-20			LFM
	3768	INDENO[1,2,3,C,D]PYRENE	ND	1.61			2	mg/Kg	81	NA	1-171	NA	0-20			LFM
	3768	NAPHTHALENE	ND	1.96			2	mg/Kg	98	NA	21-133	NA	0-20			LFM
	3768	PHENANTHRENE	ND	1.92			2	mg/Kg	96	NA	54-120	NA	0-20			LFM
	3768	p-TERPHENYL-d14 (Surr)	102	101				%			70-130	NA	0-20			LFM
	3768	PYRENE	ND	1.98			2	mg/Kg	99	NA	52-115	NA	0-20			LFM

%RPD = Relative Percent Difference

NA = Indicates %RPD could not be calculated

Matrix Spike (MS)/Matrix Spike Duplicate (MSD) analyses are used to determine the accuracy (MS) and precision (MSD) of an analytical method in a given sample matrix. Therefore, the usefulness of this report is limited to samples of similar matrices analyzed in the same analytical batch.

Only Duplicate sample with detections are listed in this report

Limits are intended for water matrices only. These criteria are for guidance only when reported with soils/solids.

FORM: QC Dependent.rpt



SAMPLE INDEPENDENT QUALITY CONTROL REPORT

Laboratory Fortified Blank

Reference Number: **16-01619**

Report Date: 01/29/16

Batch	Analyte	Result	True Value	Units	Method	% Recovery	Limits*	QC Qualifier Type	Comment
8082_S160128	0 AROCLOR 1254	0.09	0.1	mg/Kg	8082	90	29-131	LFB	
DXS_160125	0 DIESEL (C12 - C24)	109.7	125	mg/Kg	NWTPH-Dx	88	70-130	LFB	
GXS_160126	0 BENZENE	0.94	1	mg/Kg	8260B	94	80-120	LFB	
	0 ETHYLBENZENE	0.89	1	mg/Kg	8260B	89	80-120	LFB	
	0 GAS Range Organics	62.5	62.5	mg/Kg	8260B	100	80-120	LFB	
	0 TOLUENE	0.93	1	mg/Kg	8260B	93	80-120	LFB	
	0 TOTAL XYLENES	2.65	3	mg/Kg	8260B	88	80-120	LFB	
PAH_S160125	0 ACENAPHTHYLENE	2.06	2	mg/Kg	8270D	103	33-145	LFB	
	0 ACENAPTHENE	2.00	2	mg/Kg	8270D	100	47-145	LFB	
	0 ANTHRACENE	1.78	2	mg/Kg	8270D	89	27-133	LFB	
	0 BENZ[A]ANTHRACENE	1.75	2	mg/Kg	8270D	88	33-143	LFB	
	0 BENZO[A]PYRENE	1.64	2	mg/Kg	8270D	82	17-163	LFB	
	0 BENZO[B/J]FLUORANTHENE	1.82	2	mg/Kg	8270D	91	24-159	LFB	
	0 BENZO[G,H,I]PERYLENE	1.89	2	mg/Kg	8270D	95	1-219	LFB	
	0 BENZO[K]FLUORANTHENE	2.04	2	mg/Kg	8270D	102	11-162	LFB	
	0 CHRYSENE	1.48	2	mg/Kg	8270D	74	17-168	LFB	
	0 DIBENZ[A,H]ANTHRACENE	1.25	2	mg/Kg	8270D	63	1-227	LFB	
	0 FLUORANTHENE	1.93	2	mg/Kg	8270D	97	26-137	LFB	
	0 FLUORENE	2.05	2	mg/Kg	8270D	103	59-121	LFB	
	0 INDENO[1,2,3,C,D]PYRENE	1.52	2	mg/Kg	8270D	76	1-171	LFB	
	0 NAPHTHALENE	2.00	2	mg/Kg	8270D	100	21-133	LFB	
	0 PHENANTHRENE	1.96	2	mg/Kg	8270D	98	54-120	LFB	
	0 PYRENE	1.97	2	mg/Kg	8270D	99	52-115	LFB	

*Notation:

% Recovery = (Result of Analysis)/(True Value) * 100

NA = Indicates % Recovery could not be calculated.

Limits are intended for water matrices only. These criteria are for guidance only when reported with soils/solids.



SAMPLE INDEPENDENT QUALITY CONTROL REPORT

Method Blank

Reference Number: **16-01619**

Report Date: 01/29/16

Batch	Analyte	Result	True Value	Units	Method	% Recovery	Limits*	QC Qualifier	QC Type	Comment
8082_S160128	0 AROCLOR 1016	ND		mg/Kg	8082		0-0		MB	
	0 AROCLOR 1221	ND		mg/Kg	8082		0-0		MB	
	0 AROCLOR 1232	ND		mg/Kg	8082		0-0		MB	
	0 AROCLOR 1242	ND		mg/Kg	8082		0-0		MB	
	0 AROCLOR 1248	ND		mg/Kg	8082		0-0		MB	
	0 AROCLOR 1254	ND		mg/Kg	8082		0-0		MB	
	0 AROCLOR 1260	ND		mg/Kg	8082		0-0		MB	
	0 AROCLOR 1268	ND		mg/Kg	8082		0-0		MB	
DXS_160125	0 DIESEL (C12 - C24)	ND		mg/Kg	NWTPH-Dx		0-0		MB	
	0 HEAVIER OILS (>C24)	ND		mg/Kg	NWTPH-Dx		0-0		MB	
GXS_160126	0 BENZENE	ND		mg/Kg	8260B		0-0		MB	TB 16-01619
	0 ETHYLBENZENE	ND		mg/Kg	8260B		0-0		MB	TB 16-01619
	0 GAS Range Organics	ND		mg/Kg	8260B		0-0		MB	TB 16-01619
	0 TOLUENE	ND		mg/Kg	8260B		0-0		MB	TB 16-01619
	0 TOTAL XYLENES	ND		mg/Kg	8260B		0-0		MB	TB 16-01619
	1 BENZENE	ND		mg/Kg	8260B		0-0		MB	TB 16-01510
	1 ETHYLBENZENE	ND		mg/Kg	8260B		0-0		MB	TB 16-01510
	1 GAS Range Organics	ND		mg/Kg	8260B		0-0		MB	TB 16-01510
	1 TOLUENE	ND		mg/Kg	8260B		0-0		MB	TB 16-01510
	1 TOTAL XYLENES	ND		mg/Kg	8260B		0-0		MB	TB 16-01510
PAH_S160125	0 ACENAPHTHYLENE	ND		mg/Kg	8270D		0-0		MB	
	0 ACENAPHTHENE	ND		mg/Kg	8270D		0-0		MB	
	0 ANTHRACENE	ND		mg/Kg	8270D		0-0		MB	
	0 BENZ[A]ANTHRACENE	ND		mg/Kg	8270D		0-0		MB	
	0 BENZO[A]PYRENE	ND		mg/Kg	8270D		0-0		MB	
	0 BENZO[B/J]FLUORANTHENE	ND		mg/Kg	8270D		0-0		MB	
	0 BENZO[G,H,I]PERYLENE	ND		mg/Kg	8270D		0-0		MB	
	0 BENZO[K]FLUORANTHENE	ND		mg/Kg	8270D		0-0		MB	
	0 CHRYSENE	ND		mg/Kg	8270D		0-0		MB	

*Notation:

% Recovery = (Result of Analysis)/(True Value) * 100

NA = Indicates % Recovery could not be calculated.

Limits are intended for water matrices only. These criteria are for guidance only when reported with soils/solids.



SAMPLE INDEPENDENT QUALITY CONTROL REPORT

Method Blank

Reference Number: **16-01619**

Report Date: 01/29/16

			True		%	QC	QC			
Batch	Analyte	Result	Value	Units	Method	Recovery	Limits*	Qualifier	Type	Comment
PAH_S160125	0 DIBENZ[A,H]ANTHRACENE	ND		mg/Kg	8270D		0-0		MB	
	0 FLUORANTHENE	ND		mg/Kg	8270D		0-0		MB	
	0 FLUORENE	ND		mg/Kg	8270D		0-0		MB	
	0 INDENO[1,2,3,C,D]PYRENE	ND		mg/Kg	8270D		0-0		MB	
	0 NAPHTHALENE	ND		mg/Kg	8270D		0-0		MB	
	0 PHENANTHRENE	ND		mg/Kg	8270D		0-0		MB	
	0 PYRENE	ND		mg/Kg	8270D		0-0		MB	

*Notation:

% Recovery = (Result of Analysis)/(True Value) * 100

NA = Indicates % Recovery could not be calculated.

Limits are intended for water matrices only. These criteria are for guidance only when reported with soils/solids.

(Please complete all applicable shaded sections)

Page ____ of ____
28009

ANALYTICAL
Main Lab (800-755-9295)
1620 South Walnut St. Burlington, WA 98233
Microbiology (888-725-1121)
805 W. Orchard Dr. Suite 4 Bellingham, WA 98225

Wilsonville Lab (503-682-7802)
9150 SW Pioneer Ct. Suite W Wilsonville, OR 97107
Corvallis Lab (541-753-4946)
540 SW 3rd St. Corvallis, OR 97333

Analyses Requested

- Turn Around Time Required
- ☐ Standard
- ☒ Half-time (50% surcharge)
- ☐ Quickest (100% surcharge) Phone Call Req.
- ☐ Emergency (Phone Call Req.)

						Turn Around Time Required	
1. Use one line per sample Location. 2. Be specific in analysis requests. 3. (NEW) List each metal individually (NEW) 4. Check off analyses to be performed for each sample Location. 5. Enter number of containers.							
Field ID	Location	Grab/Comp.	Sample Matrix*	Date	Time		
1 BASE-S	BASE-S	G	S	07-22	1329	<input type="checkbox"/>	<input checked="" type="checkbox"/> Standard
2 TANK	TANK-STOCKPILE	C				<input type="checkbox"/>	<input checked="" type="checkbox"/> Half-time (50% surcharge)
3 TANK	TANK	C				<input type="checkbox"/>	<input type="checkbox"/> Quickest (100% surcharge) Phone Call Req.
4 STOCKPILE	STOCK-P	C				<input type="checkbox"/>	<input type="checkbox"/> Emergency (Phone Call Req.)
5 STOCKPILE	STOCK-W	C				<input type="checkbox"/>	
6 TANK	TANK -BASE	G			1438	<input checked="" type="checkbox"/>	
7						<input type="checkbox"/>	
8						<input type="checkbox"/>	
9						<input type="checkbox"/>	
10						<input type="checkbox"/>	

Sampled by: _____ Phone: _____ FAX: _____ Email: _____

Total Containers _____


Containers _____

Special Instructions
Conditions on Receipt

3763 - 3768

16-01619

C002R009



OL - oil

Yes No N/A

□ □ □

Chain of custody & labels agree

Wilsonville Lab (503-682-7802)
9150 SW Pioneer Ct. Suite W Wilsonville, OR 97070
Corvallis Lab (541-753-4946)
540 SW 3rd St. Corvallis, OR 97333

BUDGET ENVIRONMENTAL SERVICES

Analytical Results

Sampled on January 22, 2016

DRAFT

Date of Report: 01/26/16
 Date Received: 01/22/16
 Project: BES 1210, F&BI 601283
 Date Extracted: 01/22/16
 Date Analyzed: 01/22/16

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
 FOR BENZENE, TOLUENE, ETHYLBENZENE,
 XYLENES AND TPH AS GASOLINE
 USING METHODS 8021B AND NWTPH-Gx**
 Results Reported on a Dry Weight Basis
 Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Gasoline Range</u>	<u>Surrogate (% Recovery)</u> (Limit 50-150)
B-1-7-012216 601283-01 1/5	0.54	2.5	0.53	2.8	78	82
B-2-7-012216 601283-02	<0.02	<0.02	<0.02	<0.06	<2	81
B-3-7-012216 601283-03	<0.02	<0.02	<0.02	<0.06	39	81
SP-1-1-012216 601283-04 1/5	<0.02 j	<0.1	1.4	6.7	380	91
SP-2-1-012216 601283-05 1/5	<0.02 j	<0.1	1.1	6.2	380	85
SP-3-1-012216 601283-06 1/5	0.18	0.70	1.2	0.99	260	82
Method Blank 06-110 MB	<0.02	<0.02	<0.02	<0.06	<2	81

DRAFT

Analysis For Total Metals By EPA Method 200.8

Client ID:	SP-1-1-012216	Client:	Budget Environmental Services
Date Received:	01/22/16	Project:	BES 1210, F&BI 601283
Date Extracted:	01/26/16	Lab ID:	601283-04
Date Analyzed:	01/26/16 13:17:29	Data File:	601283-04.039
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	123	60	125

	Concentration
Analyte:	mg/kg (ppm) Dry Weight

Lead	2.81
------	------

DRAFT

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	Budget Environmental Services
Date Received:	NA	Project:	BES 1210, F&BI 601283
Date Extracted:	01/26/16	Lab ID:	I6-55 mb
Date Analyzed:	01/26/16 13:07:03	Data File:	I6-55 mb.037
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	117	60	125

Analyte:	Concentration mg/kg (ppm) Dry Weight
----------	---

Lead	<1
------	----