# Voluntary Remediation Work Plan
# Proposed 'The Afton' Site – Phase 2
# 620 S. 9th Street
# Boise, Idaho

Project No. BO15086F

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## TABLE OF CONTENTS


**Section** **Page**

1.0 PROJECT INTRODUCTION ..... 3
- 1.1 Purpose ..... 3
- 1.2 Background and Operational History ..... 3
- 1.3 Scope of Services ..... 4
- 1.4 Limitations ..... 4

2.0 SITE ASSESSMENT INFORMATION ..... 5
- 2.1 Geology ..... 5
- 2.2 Current Uses of On-site Ground and Surface Water ..... 5
- 2.3 Future Uses of On-site Ground and Surface Water ..... 6
- 2.4 Current Uses of Site and Immediately Adjacent Properties ..... 6
- 2.5 Future Uses of Site and Immediately Adjacent Properties ..... 6
- 2.6 Wells Locations and Uses ..... 6
- 2.7 Site Characterization Analytical Results ..... 6
- 2.8 Regulatory and Compliance History ..... 8

3.0 RISK EVALUATION INFORMATION ..... 8
- 3.1 Evaluation of the Data ..... 9
- 3.2 Exposure Assessment of Exposure Pathways ..... 9
- 3.3 Risk Evaluation Assumptions ..... 9
- 3.4 Input Parameters ..... 9
- 3.5 REM Results ..... 10
  - 3.5.1 Residential Receptors ..... 10
  - 3.5.2 Non-Residential Receptors ..... 10
  - 3.5.3 Construction Worker Receptors ..... 10
  - 3.5.4 Groundwater Protection ..... 11

4.0 Proposed Remediation Standards ..... 11
- 4.1 Proposed Remedial Services ..... 13
  - 4.1.1 Soil Excavation, Disposal, and Capping ..... 13
  - 4.1.2 Permeable Paver Section ..... 14
  - 4.1.3 Groundwater Monitoring ..... 15
  - 4.1.4 Soil Vapor Sampling ..... 15
- 4.2 VRWP Completion Report ..... 15

5.0 PROPOSED SCHEDULE ..... 15

6.0 REFERENCES ..... 17


**FIGURES**


Figure 1 Site Plan and Vicinity Map
Figure 2 Current Use, Site and Adjacent Properties
Figure 3 Future Use, Site and Adjacent Properties
Figure 4 Well Location Map (1/2 Mile Radius)
Figure 5 Groundwater Contour Map
Figure 6 Proposed Building Footprint
Figure 7 Permeable Paver Section


**APPENDICES**


Appendix A – Tables
Appendix B – Previous Site Investigation
Appendix C – REM and PetroREM Data Sheets




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## LIST OF ACRONYMS

| | |
|---|---|
| ASTM | American Society for Testing and Materials |
| CCDC | Capitol City Development Corporation |
| COCs | Chemicals of Concern |
| CY | Cubic yard |
| DEQ | Idaho Department of Environmental Quality |
| EATL | Eurofins Air Toxics Laboratory |
| EPA | U.S. Environmental Protection Agency |
| ESA | Environmental Site Assessment |
| ESC | Environmental Science Corporation |
| HASP | Health and Safety Plan |
| HI | Hazard Index |
| IDAPA | Idaho Administrative Procedures Act |
| IDTL | Initial Default Target Level |
| IDW | Investigation Derived Waste |
| IDWR | Idaho Department of Well Resources |
| MDL | Method Detection Limit |
| mg/kg | milligram per kilogram |
| mg/l | milligram per liter |
| $mg/m^3$ | milligrams per meter cubed |
| OSWER | Office of Solid Waste and Emergency Response |
| PAH | Polycyclic aromatic hydrocarbon |
| PID | Photo-ionization Detector |
| ppm | parts per million |
| PQL | Practical Quantitative Limit |
| QAPP | Quality Assurance Project Plan |
| RATL | Remedial Action Target Level |
| RCRA | Resource Conservation and Recovery Act |
| RECs | Recognized Environmental Conditions |
| REM | Risk Evaluation Model |
| RSLs | Regional Screening Levels |
| RUSL | Residential Use Screening Level |
| SISA | Site Investigation and Sample Analysis |
| TCLP | Toxicity Characteristic Leaching Procedure |
| VCP | Voluntary Cleanup Program |
| VISLs | Vapor Intrusion Screening Levels |
| VOCs | Volatile organic compounds |
| VRA | Voluntary Remediation Agreement |
| VRWP | Voluntary Remediation Work Plan |


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**Voluntary Remediation Work Plan**
Proposed 'The Afton' Phase 2 Development
620 South 9th Street
Boise, Idaho

## 1.0 PROJECT INTRODUCTION

This Voluntary Remediation Work Plan (VRWP) describes the voluntary remediation activities proposed for the proposed 'The Afton' Phase 2 site located at 620 S. 9th Street in Boise, Idaho (site), as shown on Figure 1, *Site Plan and Vicinity Map*. This site VRWP has been prepared to be in compliance with requirements of the Department of Environmental Quality's (DEQs) Voluntary Cleanup Program (VCP), as outlined in Idaho Administrative Code IDAPA 58.01.18 Section 22. Strata, A Professional Services Corporation (STRATA) performed these services for 620 S. 9th Street LLC referencing our proposal BO15089D, dated September 18, 2015.

### 1.1 Purpose

The VRWP outlines the proposed site remediation efforts for volatile organic compound (VOC) impacted soil vapor and polycyclic aromatic hydrocarbon (PAH) and Resource Conservation and Recovery Act (RCRA) Priority Pollutant Metals (PPM)-impacted soil.

### 1.2 Background and Operational History

The site was owned by the Capitol City Development Corporation (CCDC) from 2001 until September 2015, when it was purchased by 620 S. 9th Street LLC. The proposed Phase 2 site portion was operated as the Boise Iron Works and Foundry Co. from 1912 to 1950. The former site warehouse structure was constructed in 1951 and used as an electronic wholesale warehouse until 1985. Between 1990 and 2001, the warehouse was occupied by various commercial businesses including computer arts and audio visual companies. The CCDC permitted the Boise Public Works Department to store equipment and material, and allowed the site to be periodically used by the Boise City Fire Department for training. The entire site (Phase 1 and Phase 2) was entered into the DEQ VCP on May 29, 2015.

The site buildings were demolished in July 2015, in preparation for Site Investigation and Sample Analysis (SISA) field activities and proposed Phase 2 development as The Afton, a multi-use commercial and residential complex.

Phase 1 is currently under construction. Prior to construction 5,085 cubic yards of metal-impacted soil was excavated and removed for disposal under the Phase 1 VRWP. Confirmation soil samples were collected from the Phase 1 excavation floor, and though there were detections of VOCs, PAHs, and metals, the concentrations remaining do not exceed regulatory cleanup levels. Groundwater sampling was also conducted on the two remaining monitoring wells, with VOC, PAH, and metals concentrations detected but not exceeding regulatory screening levels. Additional soil confirmation samples will be collected from a planned permeable paver section once excavated to complete Phase 1 VRWP requirements.


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### 1.3 Scope of Services

The primary objective for this VRWP is to describe proposed remediation activities addressing identified soil and soil vapor contamination from past site use. These activities will be discussed in conjunction with VCP requirements, as outlined in Idaho Administrative Code IDAPA 58.01.18 Section 22, including:

- The current and reasonably anticipated future use of on-site ground and surface water;
- The current and reasonably anticipated future uses of the site and immediately adjacent properties;
- An estimate of the human and environmental risk from releases or threatened releases of hazardous substances or petroleum at the site based upon the current use of the site and adjacent properties and reasonably anticipated future uses of the site, if a risk-based concentration is proposed as a remediation standard;
- Proposed remediation standards developed in accordance with IDAPA 58.01.18 Section 023;
- A schedule to accomplish the proposed statement of work.

### 1.4 Limitations

Conditions may vary from those encountered at specific excavations, tests, assessments, investigations, or exploratory services; the data, interpretations, findings, and our recommendations are based solely upon data obtained at the time and within the scope of these services. STRATA's services were performed in a manner consistent with generally accepted practices of the profession undertaken in similar situations in the same geographical area during the same time period. STRATA makes no warranties, either express or implied, regarding the findings, opinions, or recommendations. Please note STRATA does not warrant the work of laboratories, regulatory agencies, or other third parties supplying information used in the preparation of the report.

Findings, opinions, and recommendations resulting from these services are based upon information derived from the on-site activities and other services performed under this scope of services; such information is subject to change over time. Certain indicators of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, non-detectable, or not present during these services, and we cannot represent the site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified. Subsurface conditions may vary from those encountered at specific test pits or wells or during other surveys, tests, assessments, investigations, or exploratory services. The data, interpretations, findings, and our recommendations are based solely upon data obtained at the time and within the scope of these services.

This report and its attachments have been prepared for the exclusive use of the 620 S 9th Street, LLC and DEQ, and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the site) is prohibited without the express written authorization of 620 S. 9th Street LLC and STRATA. Any unauthorized distribution or reuse is at the client's sole risk. Notwithstanding the


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foregoing, reliance by authorized parties will be subject to the terms, conditions, and limitations stated in this report.

## 2.0 SITE ASSESSMENT INFORMATION

The site is located at 620 S. 9th Street in Boise, Idaho, as indicated on Figure 1. The site is currently used as equipment staging and material laydown area for The Afton Phase 1 development; the buildings which previously occupied the site were demolished in July 2015. Onsite features include graded gravel areas occupying the former building footprint area, and asphalt-paved former parking areas. A chain-link security fence currently surrounds the site.

### 2.1 Geology

The site is in the central portion of the Western Snake River Plain. The Western Snake River Plain is a northwest-trending structural basin bounded by high angle faults of Miocene and younger age. The basin separates the mountains of the Idaho Batholith on the northeast and the Owyhee Range on the southwest. Sedimentary deposits shed from adjacent uplands, as well as basaltic and andesitic flows and ash deposits associated with regional volcanic activity, fill the basin to depths exceeding 4,000 feet (Othberg, 1994).

The site vicinity is underlain by Alluvium of Boise and Snake River. The alluvium is comprised of sandy cobble gravel up to 45 feet thick (Othberg and Stanford, 1992). Boring logs from the site indicate engineered gravel and silty sand fill material up to 7 feet below ground surface overlying silty sand and gravel with sand to a depth of 20 feet below ground surface (STRATA, 2011, 2015c).

The closest surface water feature is the Boise River, located approximately 600 feet southwest of the site. Groundwater underlying the site is an unconfined upper zone of the Boise Valley Aquifer. Groundwater is approximately 10 feet below ground surface.

### 2.2 Current Uses of On-site Ground and Surface Water

One monitoring well is currently located on the proposed Phase 2 site. A total of four monitoring wells were installed during STRATA's July 2015 Site Investigation Sampling and Analysis (SISA) activities; however three wells were destroyed during Phase 1 construction activities. Groundwater beneath the site was first encountered within gravel with sand approximately 13 feet below ground surface. Static groundwater was measured between 9 and 11 feet below ground surface in the monitoring wells. The groundwater gradient is approximately 0.004 ft/ft to the west-northwest.

There are no on-site surface water features. Storm water runoff follows on-site surface topography and enters storm water drains located along the West River Street and S. 8th Street right-of-ways. Storm water discharges to the Boise River, located approximately 600 feet to the southwest. The site has a connection to United Water's potable water system.


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### 2.3 Future Uses of On-site Ground and Surface Water

There is no planned anticipated future use of on-site groundwater. Surface water is not present at the site and future surface water features are not anticipated. The single Phase 2 site groundwater monitoring well is anticipated to remain in place until remediation activities are successfully completed, at which time it will be abandoned. The onsite groundwater is not anticipated to have a future beneficial use.

### 2.4 Current Uses of Site and Immediately Adjacent Properties

The current uses of the site and immediately adjacent properties are depicted on Figure 2, *Current Use, Site and Adjacent Properties*. As previously noted the site building was demolished in July 2015, in anticipation of SISA field activities and site development.

The site is situated amid mixed-use commercial properties. A small vacant building and paved public parking area bound the site to the north. West River Street bounds the site on the south. South across West River Street is the Frame Job/River House Gallery and BioMark; the Boise River is located beyond these buildings. The Phase 1 of The Afton development is located adjacent to the east. Further east is South 8th Street and the Foothills School. South 9th Street is adjacent to the west. West across South 9th Street is Idaho Self Storage, West Lee Street, and the Mardi Gras Events Center.

### 2.5 Future Uses of Site and Immediately Adjacent Properties

The reasonable anticipated future uses of the site and immediately adjacent properties are depicted on Figure 3, *Future Use, Site and Adjacent Properties*. The site is anticipated to be redeveloped and designated for multi-use (first and second floor commercial/retail with third floor residential, with the exception of three town homes with ground floor levels). Surrounding property use is anticipated to remain the same or similar to existing features for the foreseeable future.

### 2.6 Wells Locations and Uses

Wells located on-site and within a ½-mile radius are depicted on Figure 4, *Well Location Map (1/2-Mile Radius)*. As discussed in Section 2.2, one monitoring well is currently located on-site. Table A-1 in Appendix A includes additional information about the wells located within a ½-mile radius of the site.

Based on the well log search and the fact there are several wells used for irrigation and domestic purposes, groundwater in the general vicinity of the property has beneficial use.

### 2.7 Site Characterization Analytical Results

Gem Environmental Management, LLC performed a Phase I ESA at the site dated January 12, 2015, encompassing both the Phase 1 and 2 site parcels. Gem identified the following RECs in connection with the Phase 1 parcel:

*"Previous ESAs prepared for the site identified several hazardous substances and/or petroleum products as know or potential recognized environmental conditions at the site. The chemicals included (1) ACM [asbestos containing material] and LBP [lead based paint]… (2) possible metals, PCBs*


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*[polychlorinated biphenyls], VOCs, SVOCs [semi-volatile organic compounds], and/or cyanide in soil and/or groundwater due to past on-site foundry and electrical supply operations. The results of the limited site investigation activities performed by STRATA, Inc., in 2011 indicated:*

- *A slightly elevated (above the "residential use screening level" [RUSL]) concentration of benzo(a)anthracene in one of the three groundwater samples at the site (i.e. in monitoring well BMW-2 in the southwestern part of the site).*
- *PCE [tetrachloroethylene] in "residential air" at a concentration in soil vapor that exceeded the ten-fold factor of the EPA RSL [Environmental Protection Agency Regional Screening Levels] for PCE in residential and industrial air.*
- *1,3-butadiene in "residential air" at a concentration in soil that exceeded the 10x EPA RSL for that compound in residential and industrial air.*
- *Benzene, carbon tetrachloride, and naphthalene in an "indoor air sample" at concentrations that exceeded the EPA RSL for residential air."*

Gem also concluded that *"with the respect to the presence of benzo(a)anthracene in groundwater beneath the site, its presence represents a recognized environmental condition in connection with the site; however, the relatively low concentration does not likely represent a significant threat to human health or the environment given its absence in the two other on-site wells and the absence of groundwater beneath the site for potable use"* and *"with respect to the VOC and SVOC concentrations detected in soil vapor and indoor air, those issues are considered recognized environmental conditions that should be considered with respect to future site development (e.g. implementation of a vapor barrier, adequate ventilation, etc.) depending on the receptor exposure that may result. We also note that the source(s) of the compounds was/were not determined during the previous assessment work; however, they appear to have resulted from on-site activities (e.g. fire-fighting training exercises)."*

In July 2015, a SISA (STRATA, 2015c) was prepared for the combined Phase 1 and Phase 2 parcels to address recognized environmental conditions (RECs) and identified data gaps from previous site, and adjacent property investigations. The prior investigation data is used to evaluate the need and scope of potential remediation, as well as be in compliance with requirements of the DEQs Voluntary Remediation Agreement (VRA), as outlined in Idaho Administrative Code IDAPA 58.01.18 Section 22.03(a). STRATA performed these services for 620 S. 9th Street LLC referencing our proposal BOP15086C, dated June 30, 2015. The Phase 2 parcel SISA field activities included advancing direct-push boreholes; soil field-screening; soil sampling; temporary groundwater monitoring well installation and sampling; soil vapor point installation and sampling; and laboratory analysis. The following conclusions were drawn from the field effort and subsequent data evaluation:


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- Though site soil is impacted by VOC concentrations they do not exceed established regulatory screening levels. However, due to sample dilution, laboratory MDLs were elevated above the DEQ Residential Use Screening Levels (RUSLs), Initial Default Target Levels (IDTLs), or Environmental Protection Agency (EPA) Regional Screening Levels (RSLs) in at least 16 VOC analytes.
- The PAH analytes benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene, and naphthalene exceed the RUSLs in multiple soil samples collected across the site.
- The PPM analytes arsenic, copper, lead, mercury, and silver exceed the soil IDTLs in multiple samples collected across the site. However, based on review of the Washington Department of Ecology (DOE) background soil metals summary (WDOE, 1994), arsenic concentrations in eastern Washington, which has similar geology to the southern Idaho region, had arsenic concentrations ranging between 0.89 to 28.6 milligrams per kilogram (mg/kg), with a 90th percentile ranging between 5.13 and 9.34 mg/kg, and a median range between 2.64 and 4.99 mg/kg. This would indicate that site arsenic metal concentrations detected are present within the typical range for naturally-occurring or background concentrations. The elevated copper, lead, mercury, and silver concentrations are likely due to the past site use as a foundry and the historic industrial use of adjacent properties.
- Groundwater was encountered between 9 and 10 feet below ground surface, and appears to lie within a semi-confined aquifer. VOC, PAH, and PPM analytes were detected in groundwater but the reported concentrations did not exceed established regulatory levels.
- Groundwater flow direction is to the west-northwest; however, this may vary seasonally.
- VOC analytes were detected in deep soil vapor (≥5 feet), with Freon-11 (trichlorofluoromethane) exceeding established regulatory levels. Additionally, due to sample dilution, laboratory Method Detection Limits (MDLs) were elevated above the DEQ Vapor Intrusion Screening Levels (VISLs) or EPA RSLs in at least 22 VOC analytes.

Groundwater monitoring well locations (former and current on-site wells) and groundwater flow direction are shown on Figure 5, *Groundwater Contour Map.* A copy of the SISA investigation is provided in Appendix B.

In August 2016, groundwater and soil vapor sampling was conducted in anticipation of Phase 2 VRWP preparation. Monitoring well TW-4, and soil vapor points VP-1A and VP-2 were sampled for groundwater and soil vapor, respectively. Detected groundwater analytes (VOCs, PAHs, and PPMs) did not exceed the RUSLs or IDTLs. The detected soil vapor VOC analyte Freon-11 exceeded the former EPA RSL in VP-1A. Freon-11 and the analyte 1,1,1-trichloroethane were detected in VP-2, but did not exceed the RSLs. The August 2016 data was collected under an amended QAPP (STRATA, 2016a), and the sampling event is detailed in the August 2016 Phase 1 VRWP progress report (STRATA, 2016b).

### 2.8 Regulatory and Compliance History

The site was entered into the DEQ VCP on May 29, 2015. Other site environmental permits, covenants, or liens, have not been issued.

## 3.0 RISK EVALUATION INFORMATION

The data used in this risk evaluation was obtained during STRATA's August 2015 SISA. Copies of the REM summary sheets are included in Appendix C, *REM Data Sheets*.


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### 3.1 Evaluation of the Data

A summary of the data is provided in Section 2.7 of this VRWP.

### 3.2 Exposure Assessment of Exposure Pathways

To evaluate exposure assessment of exposure pathways and the cumulative risk associated with chemicals of concern (COCs) detected in soil, groundwater, and soil vapor samples, STRATA performed a Risk Evaluation using DEQs 2004 Risk Evaluation Manual (REM) RE-1 model and the 2012 *Application of Risk Based Corrective Action at Petroleum Release Site*s model (PetroREM). The models were performed to evaluate:

- Inhalation of vapors and particulates, dermal contact, and accidental ingestion derived from direct contact with surficial soil for residential, non-residential, and construction worker receptors.
- Indoor inhalation of vapor emissions from subsurface soil for residential, non-residential, and construction worker receptors.
- Indoor inhalation of vapor emissions from soil and/or groundwater through soil vapor.
- Groundwater protection via soil leaching to groundwater pathway.

### 3.3 Risk Evaluation Assumptions

The following assumptions were made in the risk analysis evaluations:

- The site was commercial, but is under consideration for multi-use (residential and non-residential) receptors.
- The inhalation of vapors and particulates, dermal contact, and accidental ingestion for construction workers was considered a complete pathway anticipating future site development.
- The indoor inhalation of vapor emissions from subsurface soils pathway for residential and non-residential receptors was considered a complete pathway anticipating future site development.
- The indoor inhalation of vapor emissions from soil and/or groundwater pathway through soil vapor for residential and non-residential receptors was considered a complete pathway anticipating future site development.
- Data collected during the most recent groundwater monitoring event (August 2016) was used to evaluate groundwater protection.
- Data collected during the most recent soil vapor sampling event (August 2016) was used as model input.
- PetroREM-specific COCs were selected for use in that model; while non-PetroREM COCs and metals were used in the REM. Each model's risk and hazard indices results were summed to get comparative values.

### 3.4 Input Parameters

The REM and PetroREM were performed utilizing the default model parameters. We reviewed the DEQ default parameters and consider them appropriate and sometimes conservative for this site. Soil concentrations from the SISA input to the model were the largest value detected for each analyte, as shown in Appendix A, Tables A-2 through A-8. The largest groundwater and soil vapor concentrations from the


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most recent (August 2016) sampling event were input to the model. The MDL was used for non-detect analytes requiring a model input.

## 3.5 REM Results

### 3.5.1 Residential Receptors

Combined REM and PetroREM results indicated the DEQ accepted cumulative risk value of 1.0E-05 and cumulative Hazard Index (HI) of 1.0 from multiple COCs to residential receptors was exceeded for the following pathways:

- The inhalation of vapors and particulates, dermal contact, and accidental ingestion;
- The indoor inhalation of vapor emissions from surface and subsurface soil pathways; and
- Indoor inhalation of vapor emissions from soil and/or groundwater through soil vapor.

Remedial Action Target Levels (RATLs) were established with respect to the residential receptors. The generated RATLs are presented in Appendix C, sheet RATL.R.

### 3.5.2 Non-Residential Receptors

Combined REM and PetroREM results indicated the DEQ accepted cumulative risk value of 1.0E-05 from multiple COCs to non-residential receptors was exceeded for the following pathways.

- The inhalation of vapors and particulates, dermal contact, and accidental ingestion;
- The indoor inhalation of vapor emissions from surface and subsurface soil pathways; and
- Indoor inhalation of vapor emissions from soil and/or groundwater through soil vapor.

The cumulative HI for non-residential receptors from these pathways did not exceed the DEQ accepted HI of 1.0. Cumulatively, RATLs were required with respect to non-residential receptors.

### 3.5.3 Construction Worker Receptors

REM and PetroREM results indicated the DEQ accepted cumulative risk value of 1.0E-05 from multiple COCs to construction workers through the inhalation of vapors and particulates, dermal contact, and accidental ingestion from the surface soil pathway was not exceeded. Additionally, the cumulative HI for construction worker receptors from this pathway does not exceed the DEQ accepted HI of 1.0. RATLs were not required with respect to construction worker receptors.


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### 3.5.4 Groundwater Protection

Reported groundwater concentrations did not exceed their respective RUSLs or IDTLs in the monitoring well. However, soil concentrations for benzo(a)anthracene, benzo(b)fluoranthene, dibenz(a,h)anthracene, antimony, arsenic, copper, lead, and mercury exceeded the REM and PetroREM *Soil Concentration directly beneath the source protective of groundwater at the point of exposure (POE)* with the potential that soil leaching could impact groundwater. Arsenic concentrations also exceeded the REM values; however, per report Section 2.7, the arsenic concentrations observed are considered within accepted background range for this area and will not be evaluated.

Copies of the REM and PetroREM model data input and output sheets are provided in Appendix C. Individual and cumulative risk calculations are presented in the *Summary of Cumulative Risk and Hazard Index sheet* (Appendix C).

## 4.0 Proposed Remediation Standards

STRATA proposes using the site-specific standards for VOCs, PAHs, and PPMs based on the lowest proposed value between the PetroREM and REM RATLs and groundwater protection are presented in Tables 1 and 2 below as site remediation standards.

**Table 1 – Proposed Soil Remediation Standards***

| Matrix | Analyte | Proposed Remediation Level* (mg/kg)[1] | Highest Detected Soil Concentration (mg/kg) |
|---|---|---|---|
| Soil | 1,2,4-Trimethylbenzene | 0.00508 | **0.0076**** |
| | 2-Butanone (MEK) | 7.76 | 0.0099 |
| | Acetone | 28.6 | 0.068 |
| | Benzene | 0.038 | 0.010 |
| | Toluene | 19.9 | 0.0037 |
| | Total Xylenes | 0.51 | 0.0016 |
| | Tetrachloroethene | 0.0153 | 0.0014 |
| | Acenaphthene | 262 | 0.057 |
| | Acenaphthylene | 62.0 | 0.13 |
| | Anthracene | 3,200 | 0.19 |
| | Benzo(a)anthracene | 0.09 | **1.3** |
| | Benzo(a)pyrene | 0.02 | **2.0** |
| | Benzo(b)fluoranthene | 1.9 | **3.1** |
| | Benzo(g,h,i)perylene | 31.0 | 2.0 |
| | Benzo(k)fluoranthene | 0.909 | **0.93** |
| | Chrysene | 9.5 | 1.8 |
| | Dibenzo(a,h)anthracene | 0.00324 | **0.48** |
| | Fluoranthene | 1,400 | 2.1 |
| | Fluorene | 240 | 0.043 |
| | Indeno(1,2,3-cd)pyrene | 0.325 | **1.6** |
| | Naphthalene | 0.0562 | **0.13** |
| | Phenanthrene | 31.0 | 0.73 |
| | Pyrene | 1,000 | 2.2 |


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| | | | |
|---|---|---|---|
| | 2-Methylnaphthalene | 0.190 | 0.13 |
| | Antimony | 0.951 | **9.1** |
| | Arsenic*** | 0.30 | **12** |
| | Barium | 166 | 109 |
| | Beryllium | 4.75 | 0.61 |
| | Cadmium | 1.32 | 0.76 |
| | Chromium | 3,570 | 17 |
| | Copper | 88.0 | **4,400** |
| | Lead | 49.6 | **420** |
| | Mercury | 0.714 | **3.4** |
| | Nickel | 47.6 | 25 |
| | Silver | 11.9 | 1.1 |
| | Zinc | 714 | 340 |

1. mg/kg – milligrams per kilogram
*Proposed Remediation Level based on lowest RATL generated in the PetroREM and REM models for the residential receptor with respect to the inhalation of vapors and particulates, dermal contact, and accidental ingestion, or indoor inhalation of vapor emissions pathways, or the RUSL.
**Bold concentrations exceed the RATL.
***The arsenic concentration is considered background for this area and will not be considered an exceedance.
Orange Highlight - Target proposed site-specific remediation level.

Soil concentrations protective of groundwater are shown in Table 2 below.

**Table 2 – Soil Concentrations Protective of Groundwater**

| Matrix | Analyte | Proposed Soil Concentration Protective of Groundwater (mg/kg)[1] | Highest Detected Soil Concentration (mg/kg) |
|---|---|---|---|
| Soil | 1,1,1-Trichloroethane | 1.18 | <0.0074 |
| | 1,2,4-Trimethylbenzene | 9.83 | 0.0076 |
| | 2-Butanone (MEK) | 11.8 | 0.0099 |
| | Acetone | 17.4 | 0.068 |
| | Benzene | 0.0249 | 0.010 |
| | Chloroform | 0.00564 | <0.014 |
| | Toluene | 6.64 | 0.0037 |
| | Total Xylenes | 91.4 | 0.0016 |
| | Tetrachloroethene | 0.0319 | 0.0014 |
| | Trichlorofluoromethane | 44.6 | <0.0099 |
| | Acenaphthene | 200 | 0.057 |
| | Acenaphthylene | 78 | 0.13 |
| | Anthracene | 3,200 | 0.19 |
| | Benzo(a)anthracene | 0.0927 | **1.3**** |
| | Benzo(a)pyrene | 2.09 | 2.0 |
| | Benzo(b)fluoranthene | 0.314 | **3.1** |
| | Benzo(g,h,i)perylene | 8,800 | 2.0 |
| | Benzo(k)fluoranthene | 3.08 | 0.93 |
| | Chrysene | 9.46 | 1.8 |
| | Dibenzo(a,h)anthracene | 0.259 | **0.48** |
| | Fluoranthene | 1,440 | 2.1 |
| | Fluorene | 240 | 0.043 |


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| | | | |
|---|---|---|---|
| | Indeno(1,2,3-cd)pyrene | 4.71 | 1.6 |
| | Naphthalene | 21.4 | 0.13 |
| | Phenanthrene | 79 | 0.73 |
| | Pyrene | 1,060 | 2.2 |
| | 2-Methylnaphthalene | 3.31 | 0.13 |
| | Antimony | 4.77 | **9.1** |
| | Barium | 896 | 109 |
| | Beryllium | 1.63 | 0.61 |
| | Cadmium | 1.35 | 0.76 |
| | Chromium | 2,130 | 17 |
| | Copper | 921 | **4,400** |
| | Lead | 49.6 | **420** |
| | Mercury | 0.00509 | **3.4** |
| | Nickel | 59.1 | 25 |
| | Silver | 0.189 | 1.1 |
| | Zinc | 886 | 340 |

*Proposed Soil Concentration Protective of Groundwater based on value generated in the PetroREM and REM models.
**Bold concentrations exceed the Proposed Soil Concentration.
Orange Highlight - Target proposed site-specific remediation level.

## 4.1 Proposed Remedial Services

Based on the PetroREM and REM model results, the greatest risk to residential and non-residential receptors is inhalation of vapors and particulates, dermal contact, and accidental ingestion from surface soils. The greatest hazard is to the child receptor from indoor inhalation of vapor emissions from subsurface soils. There is no hazard to non-residential receptors. There is no risk or hazard to construction workers. Additionally, though groundwater sample analytical results indicate impacts are not a concern; there is a potential for soil contaminants leaching to groundwater. Based on the proposed site development, we propose the following remedial services to address site risk and groundwater protection.

### 4.1.1 Soil Excavation, Disposal, and Capping

An estimated 4,670 cubic yards (CY) of soil is slated for removal from the Phase 2 foundation area as shown on Figure 6, *Proposed Building Footprint*. Foundation excavations will vary with the deepest approximately 4 feet deep. Associated utility trenches will be approximately 3 to 4 feet deep. This volume is comparable to that removed from the Phase 1 excavation.

STRATA will perform confirmation soil sampling activities to assist with on-site remediation efforts. Based on proposed site development; soil dig-and-haul activities for the building footprint, overlain with paved cap (concrete and asphalt) is the selected remediation strategy. An estimated 10 confirmation soil samples will be collected from roughly equally-spaced centers located across the foundation and utility trench excavation floors and submitted to Environmental Science Corporation (ESC) in Mt. Juliet, Tennessee for analysis of VOCs by EPA Method 8260B, PAHs by EPA Method 8270C-[(selected ion monitoring (SIM)], RCRA PPMs + barium by EPA Method 6010/7470, and ignitability by EPA Method


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D93/1010A. An expedited 48 to 72-hour turn-around time will be requested for the samples. Backfill of the sampled areas will be delayed until sample results have been returned and concentrations in representative confirmation soil samples are below the RATLs. If sample results indicate soil impacts are above the proposed remediation levels, additional excavation and confirmation sampling will occur. Analytical results will be compared to the proposed remediation levels identified in Tables 1 and 2 in Section 4.0.

Soil toxicity characteristic leaching procedure (TCLP) testing for lead during the SISA indicated the soil is not considered hazardous waste. The remaining analyte concentrations were not reported at what would be considered hazardous waste levels. Though not considered hazardous waste, the soil is impacted with petroleum and metals concentrations exceeding DEQ cleanup criteria. The excavated soil will be removed to the L&R Environmental Landfill in Ada County, Idaho for disposal and/or treatment. Clean backfill material from a local gravel pit source will be used as backfill.

After the redevelopment activities are complete, driveways, selected walk-ways, and parking areas will be covered by a 5-inch slab on grade concrete cement acting as a cap and restricting exposure to underlying site soils. Other soils will lie within the proposed building footprint, which will also act as a cap and restrict exposure.

4.1.2 Permeable Paver Section

Approximately 1,600 square feet of walkways will be overlain by permeable pavers as shown on Figure 6 and Figure 7, *Permeable Paver Section*. The permeable pavers are underlain by a seepage bed to address site surface water and building roof drain discharge. The permeable paver section will be excavated to a depth of approximately 3 feet below grade, for an estimated 178 CY removed. Prior to backfilling with clean sand and gravel, four confirmation soil samples will be sampled at equal spacing along the excavation floor length and submitted to ESC for analysis of VOCs by EPA Method 8260B, PAHs by EPA Method 8270C-SIM, and PPMs + barium by EPA Method 6010/7470. Additionally, to verify clean backfill, this material will be sampled at the source and submitted to ESC for VOC, PAH, and PPM + barium analysis as noted above. A 48 to 72 hour sample turn-around time will be requested. Backfilling of the sampled area will be delayed until sample results have been returned and concentrations fall below the remediation level. If sample results indicate soil impacts above the proposed RATLs or RUSLs, additional excavation and confirmation sampling will occur. Analytical results will be compared to the proposed remediation levels identified in Tables 1 and 2 in Section 4.0 above.

Upon completion of confirmation sampling and verification that in situ soil is below remediation levels, the engineered seepage bed will be placed. The seepage bed will be comprised of 0.35-inches of American Society of Testing and Materials (ASTM) C-33 sand overlain by 2.25-feet of ASTM No. 2 subbase material (fine to coarse gravel), 0.35-inches of ASTM No. 57 base material (coarse sand and fine gravel), and 0.1-inch of ASTM No. 8 bedding and joint opening filler (fine to coarse sand). The permeable paver


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section walls will be wrapped in geotextile fabric to prevent adjacent soil movement into the engineered seepage bed.

4.1.3 Groundwater Monitoring

It is anticipated the last remaining on-site monitoring well will be destroyed during foundation excavation activities, and thus would not be available for sampling post-excavation. However, one groundwater sampling event is scheduled upon completion of the Phase 1 permeable paver excavation section (and before Phase 2 excavation activities). The groundwater analytical results from this sampling event will be compared to the RUSLs, or if an RUSL is not established for a specific analyte the IDTLs. The RUSLs and IDTLs are comparable to the PetroREM and REM *Allowable Groundwater Concentration protective of the Point of Exposure (POE)* presented in Appendix C. If necessary, a replacement monitoring well will be installed to assess groundwater following completion of Phase 2 development.

4.1.4 Soil Vapor Sampling

Freon-11 concentrations exceeding the EPA RSL were reported during the August 2016 VRWP Progress Report sampling activities. However, between the initial Freon-11 detection in July 2015, and the current results there has been an estimated 86 percent reduction in Freon-11 in soil vapor at five feet below ground surface. Based on this data, Freon-11 is naturally attenuating. Additionally, it is possible that Phase 2 foundation excavation activities will further volatilize this analyte, causing further concentration reduction. It is anticipated the two soil vapor points will be destroyed during foundation excavation activities. If the vapor points are destroyed, it is recommended that at least one soil vapor point be replaced in the vicinity of existing vapor point VP-1A to measure soil vapor concentrations upon completion of excavation activities to assess Freon-11 concentrations and determine whether vapor mitigation measures are required.

### 4.2 VRWP Completion Report

Following successful completion of the VRWP objectives, STRATA will submit a VRWP Completion Report, including a request for a certification of completion for the Phase 2 site.

## 5.0 PROPOSED SCHEDULE

The following proposed schedule is based on approval of the VRWP by DEQ and following the 30-day public comment period before the timeline commences. The timeline is also dependent on meeting the remediation standards for the site following excavation activities. To further clarify, as soon as objectives of the VRWP are successfully completed, remediation activities will be considered completed, and STRATA will submit a VRWP Completion Report to DEQ. STRATA makes no assumptions regarding the timeframe required to successfully remediate the site.


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| Remedial Activity | Timeframe | Total Anticipated Time |
|---|---|---|
| Amended QAPP Completion | 1st week following 30-day Public Review Period and pending DEQ approval. | 2 weeks |
| Soil Vapor Sampling | Following Public Review Period, pending DEQ QAPP approval. | 1 day sampling, 2 weeks for analytical results |
| Excavation Activities | Following Public Review Period, pending DEQ QAPP approval, and completion of excavation activities. If analytical results indicate continued impacts exceeding proposed site-specific remediation goals, resampling will occur before backfill and/or concrete form setting can begin. | 2 weeks |
| Confirmation Soil Sampling | 1st week following Public Review Period, pending DEQ QAPP approval, and completion of excavation activities. | 2 weeks |
| Assess analytical data for possible VRWP Completion Report | Following completion of excavation activities and receipt of final laboratory analytical results. | 3 weeks |


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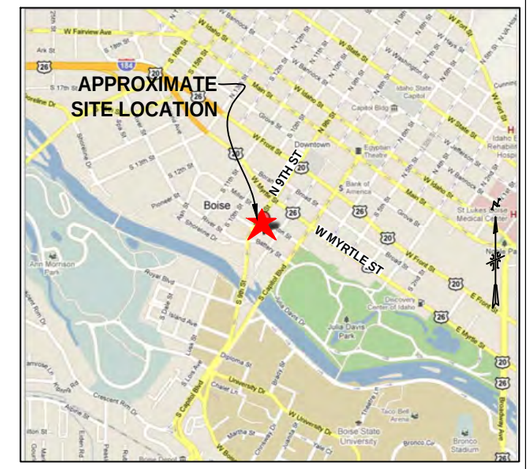
## VICINITY MAP

NOT TO SCALE

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REFERENCE: Site Plan Provided by Idaho Survey Group, Date; 3–15–2011. Aerial provided by Google Earth.

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DRAWING DATE: 7-5-2016

DRAWING BY: PJ | CHECKED BY: A.P.

**SITE PLAN AND VICINITY MAP**
**Voluntary Remediation Work Plan**
**Proposed 'The Afton' Phase 2 Site**
**620 S. 9th Street**
**Boise, Idaho**

0 25 50 100

SCALE: 1 inch = 50 ft

STRATA
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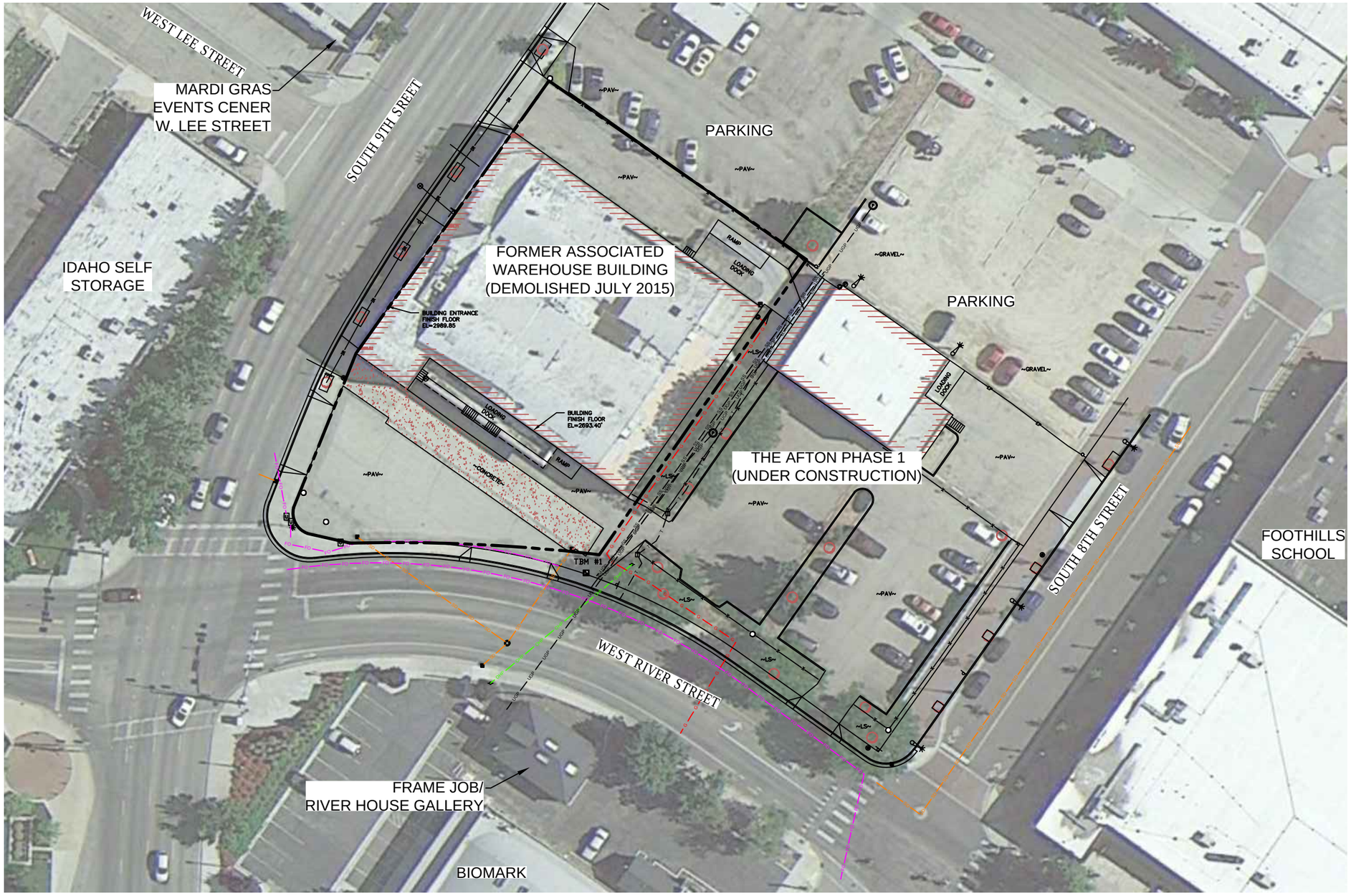
Integrity from the Ground Up

620 S 9th LLC BO15086F | FIGURE: 1




## LEGEND

- FOUND 1/2" IRON PIN
- FOUND 5/8" IRON PIN
- BENCH MARK
- PROPERTY BOUNDARY LINE
- FENCE
- GAS METER
- WATER VALVE
- WATER METER
- FIRE DEPT. CONNECTION
- DROP INLET
- TELEPHONE JUNCTION BOX
- POWER POLE
- POWER JUNCTION BOX
- POWER METER
- POWER MANHOLE
- MONITOR WELL
- VAPOR POINT
- SUB – SLAB VAPOR POINT
- PEDESTRIAN SIGNAL POLE
- TRAFFIC SIGNAL BOX
- STREET LIGHT
- TRAFFIC SIGN
- DECIDUOUS TREE
- ~LS~ LANDSCAPED AREA
- ~PAV~ PAVED AREA
- SD — STORM DRAIN LINE W/MANHOLE
- W — DOMESTIC WATER LINE
- T — TELEPHONE LINE
- G — GAS LINE
- OHP — OVERHEAD POWER LINE
- UGP — UNDERGROUND POWER LINE
- IRRIGATION LINE
- EDGE OF PAVEMENT
- EXTRUDED CURB
- CURB, GUTTER AND SIDEWALK

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# CURRENT USE, SITE AND ADJACENT PROPERTIES
## Voluntary Remediation Work Plan
## Proposed 'The Afton' Phase 2 Site
## 620 S. 9th Street
## Boise, Idaho

DRAWING DATE: 7-5-2016

DRAWING BY: PJ | CHECKED BY: A.P.

0 25 50 100

SCALE: 1 inch = 50 ft

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620 S 9th LLC BO15086F | FIGURE: 2

REFERENCE: Site Plan Provided by Idaho Survey Group, Date; 3–15–2011. Aerial provided by Google Earth.

# FUTURE USE, SITE AND ADJACENT PROPERTIES

## Voluntary Remediation Work Plan
## Proposed 'The Afton' Phase 2 Site
## 620 S. 9th Street
## Boise, Idaho

DRAWING DATE: 7-5-2016

DRAWING BY: PJ | CHECKED BY: A.P.

0 25 50 100

SCALE: 1 inch = 50 ft

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620 S 9th LLC BO15086F | FIGURE: 3

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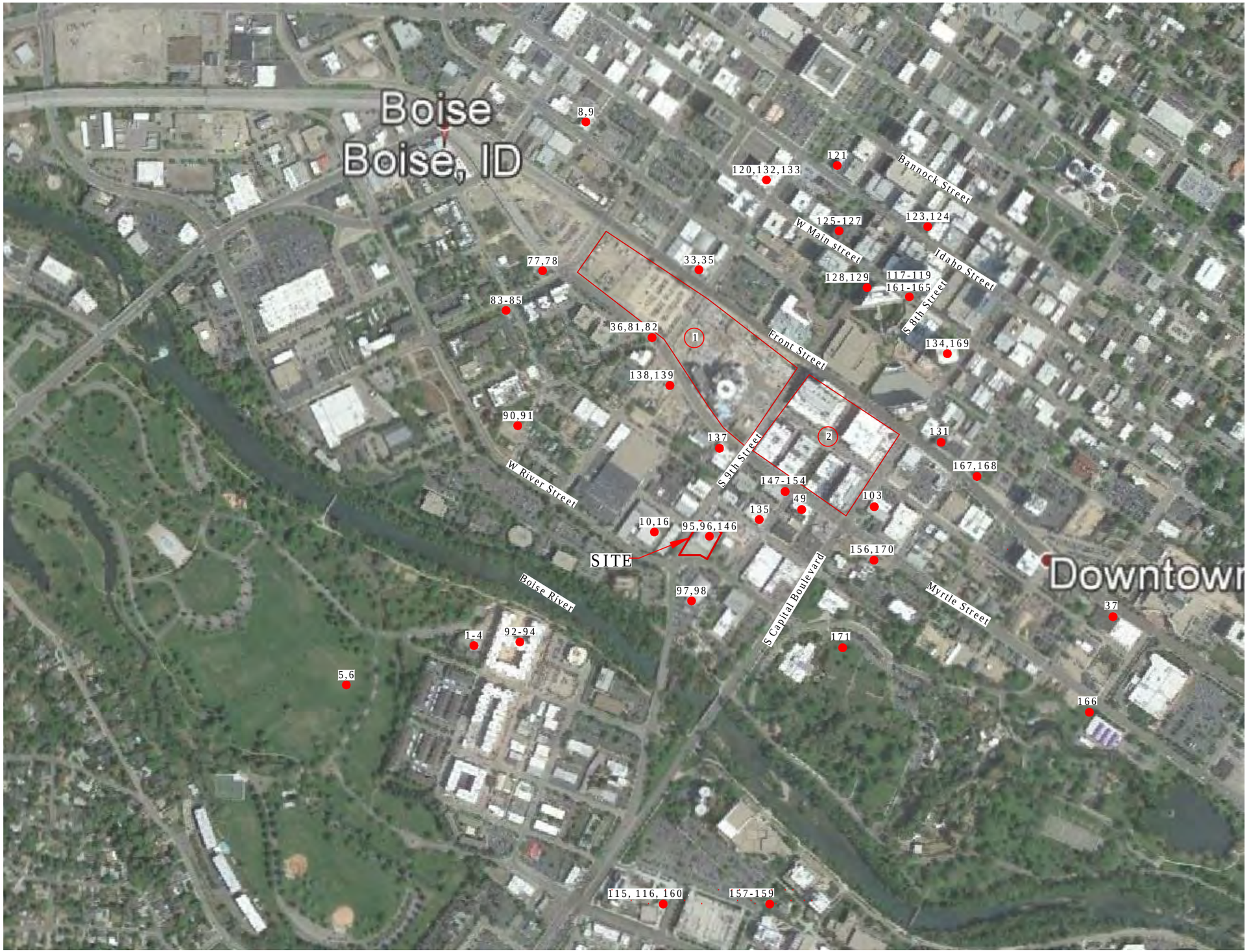
REFERENCE: Site Plan Provided by Idaho Survey Group, Date; 3–15–2011. Aerial provided by Google Earth.




1 Approximate well locations. Number designation correlates with Table A-1 in Appendix A.

1 12 - 32, 46 - 48, 50 - 76, 79, 80, 86 - 89, 99 100, 122, 143 -145

2 7, 101, 102, 104 - 114, 130, 136

WELL LOCATION MAP
Voluntary Remediation
Work Plan
Proposed 'The Afton'
Phase 2 Site
620 S. 9th Street
Boise, Idaho

N

0 300 600 1200

SCALE: 1 inch = 600 feet

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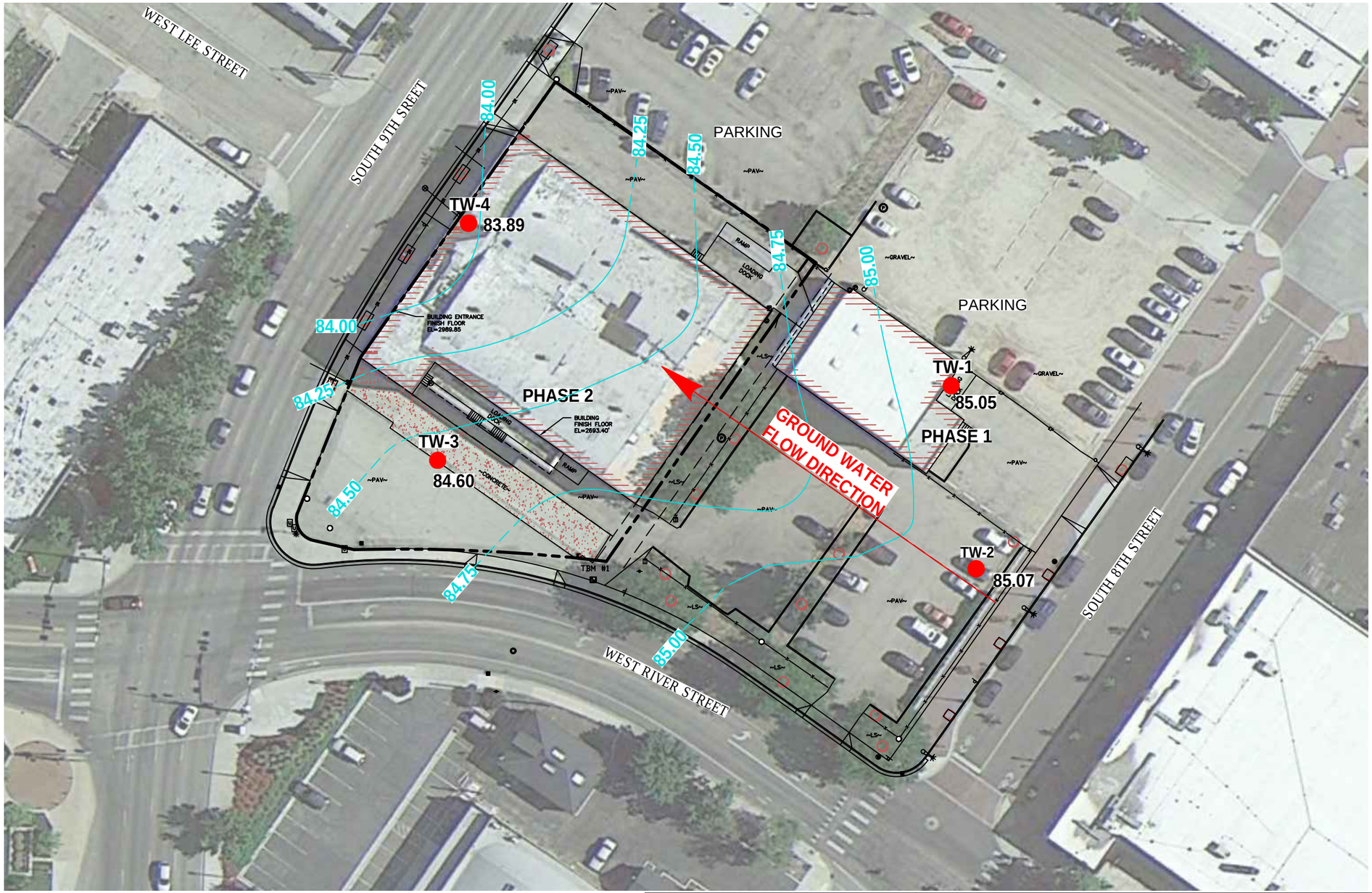
| DRAWING DATE: 7-5-2016 | |
| DRAWING BY: DMS/PJ | CHECKED BY: APP |
| Client 620 S 9th LLC | Project No. BO15086F FIGURE: 4 |

REFERENCE: Aerial Image Provided by Google Earth.




Temporary well location. Note: TW-1, TW-2, and TW-3 have been destroyed by construction activities

TW-1

85.00 Potentiometric Groundwater contour

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**GROUNDWATER CONTOUR MAP**
**Voluntary Remediation Work Plan**
**Proposed 'The Afton' Phase 2 Site**
**620 S. 9th Street**
**Boise, Idaho**

0 25 50 100

SCALE: 1 inch = 50 ft

STRATA
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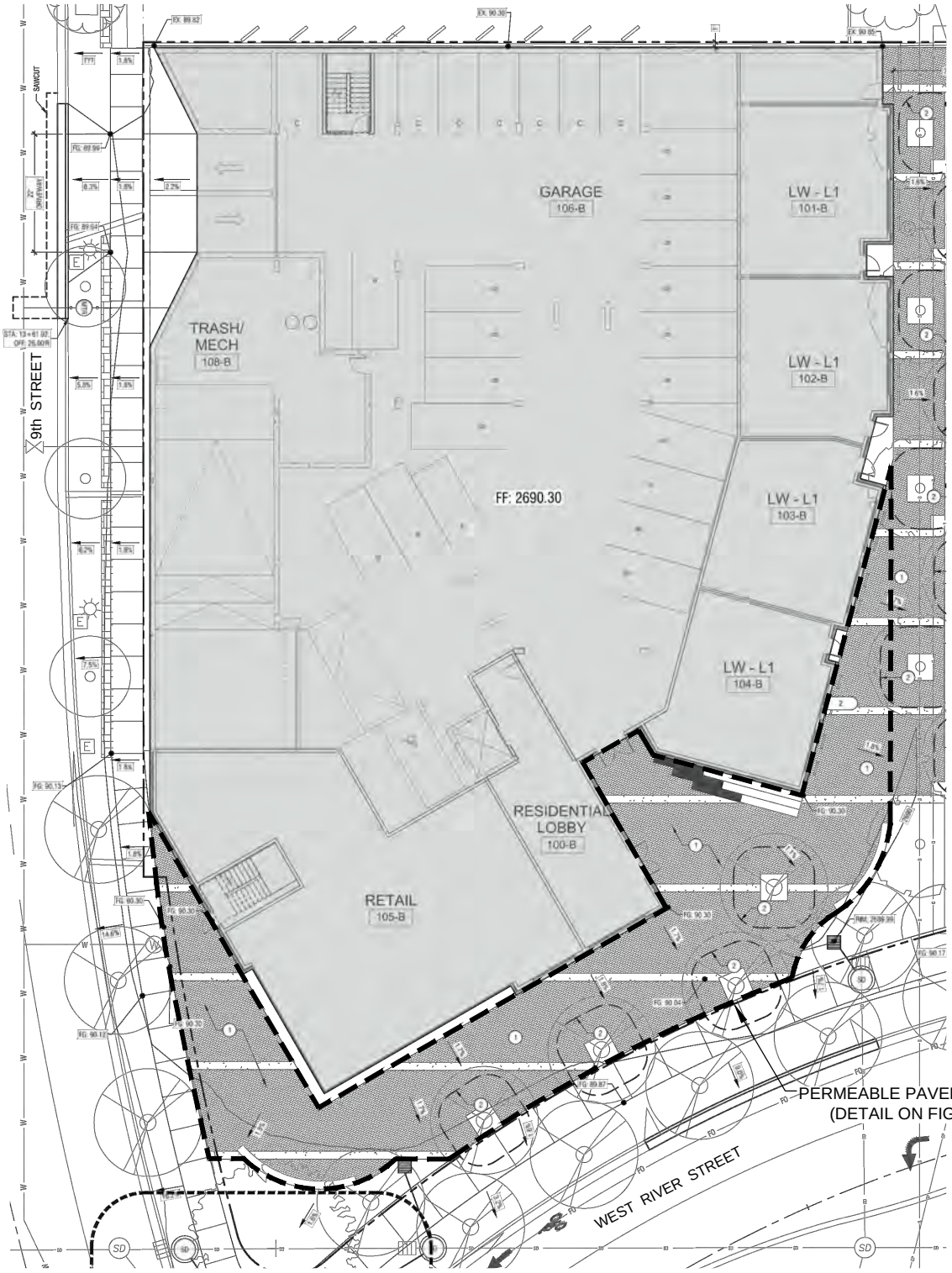
620 S 9th LLC BO15086F | FIGURE: 5

REFERENCE: Site Plan Provided by Idaho Survey Group, Date; 3–15–2011. Aerial provided by Google Earth.

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# PROPOSED BUILDING FOOTPRINT
## Voluntary Remediation Work Plan
## Proposed 'The Afton' Phase 2 Site
## 620 South 9th Street
## Boise, Idaho

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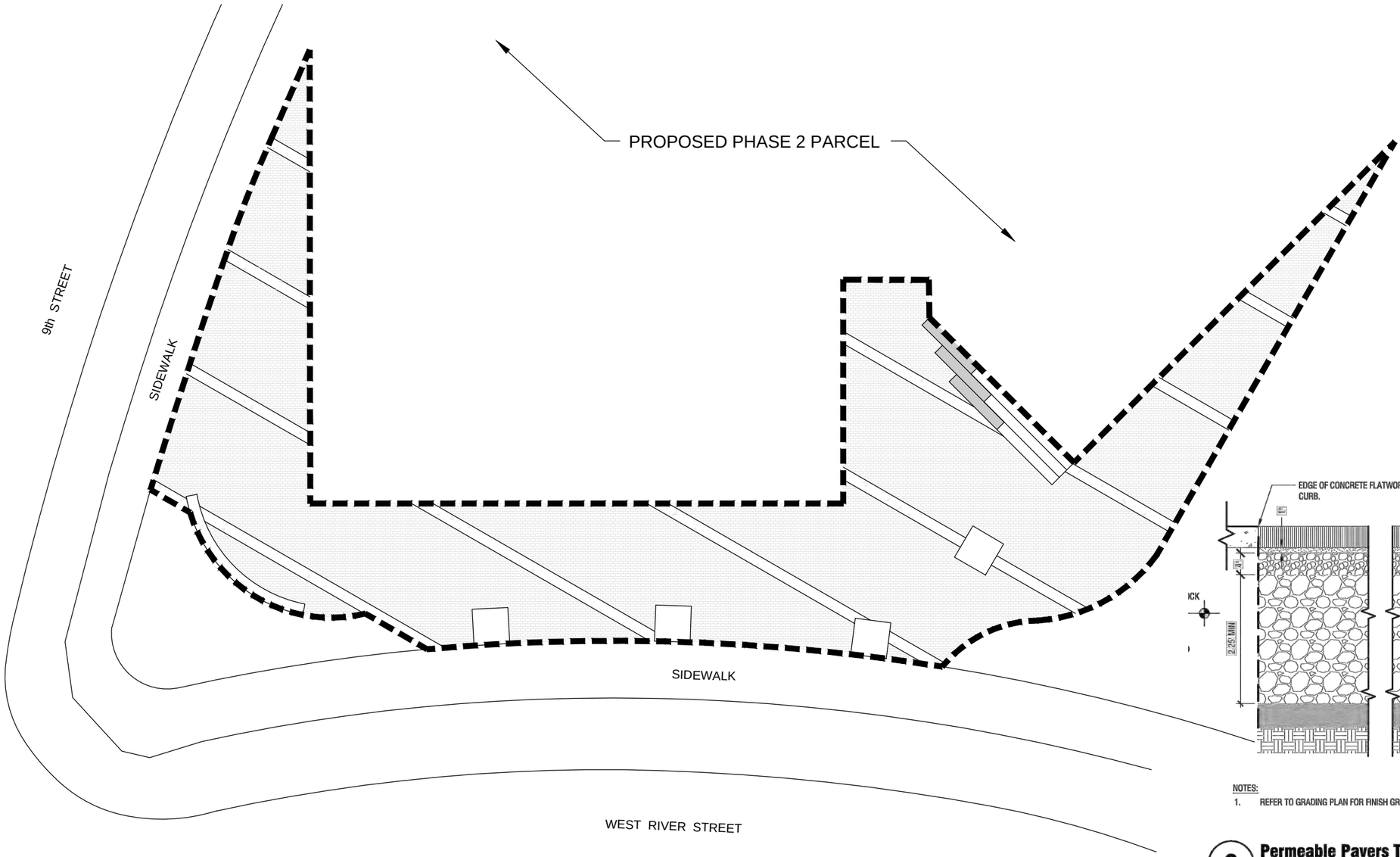
0 30 60 120

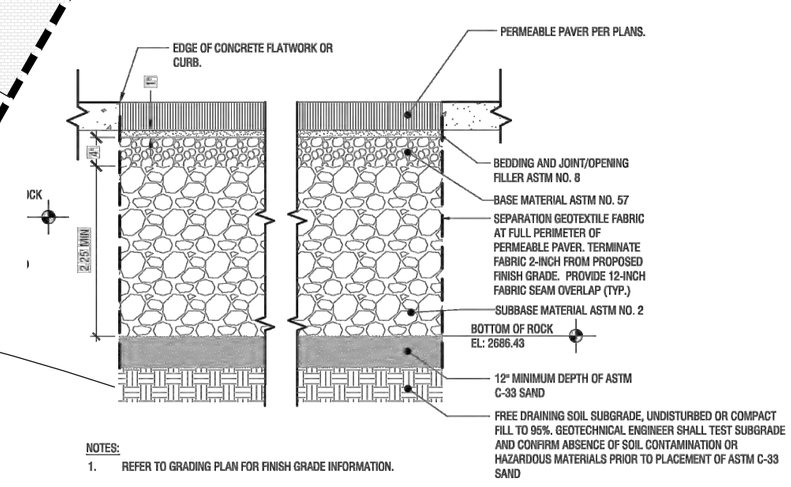
SCALE: 1 inch = 60 ft

| | |
|---|---|
| DRAWING DATE: 10-5-2016 | |
| DRAWING BY: MAT | CHECKED BY: APP |
| 620 S 9th LLC BO15086F | FIGURE: 6 |

REFERENCE: Base map provided by The Land Group Inc., Sheet C3.00, Dated 6-13-14.

10/5/2016 4:43:55 PM - V:\STRATA - IDAHO PROJECTS\STRATA - BOISE PROJECTS\2015 PROJECTS\BO15086F - THE AFTON PHASE 2 SITE\BO15086F FIGURES.DWG - MARIE TAYLOR




NOTES:

1. REFER TO GRADING PLAN FOR FINISH GRADE INFORMATION.

**8** **Permeable Pavers Typical Section**

Scale: 1" = 1'

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REFERENCE: Base map provided by The Land Group Inc., Sheet C3.00, Dated 6-13-14.

**PERMEABLE PAVER SECTION**
**Voluntary Remediation Work Plan**
**Proposed 'The Afton' Phase 2 Site**
**620 South 9th Street**
**Boise, Idaho**

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# APPENDIX A

# TABLES

**Table A-1 - Wells within 0.5-Mile of Site**

| Well Map Reference | Well Address | Owner | Type | Total Depth (feet bgs[1]) | Static Water Level (feet bgs) | Permit/Tag No. |
|---|---|---|---|---|---|---|
| 1 | 1104 Royal Blvd | City of Boise | Monitoring | 20 | 4 | 63-97-W-0182-001 |
| 2 | 1104 Royal Blvd | City of Boise | Monitoring | 20 | 5 | 63-96-W-0053-001 |
| 3 | 1104 Royal Blvd | City of Boise | Monitoring | 20 | 5 | 63-96-W-0054-001 |
| 4 | 1104 Royal Blvd | City of Boise | Monitoring | 20 | 5 | 63-96-W-0055-001 |
| 5 | Ann Morrison Park | City of Boise | Irrigation | 315 | 6 | 63-03147 |
| 6 | Ann Morrison Park | City of Boise | Irrigation | 435 | 4 | -- |
| 7 | 8th Street Marketplace | BODO, LLC | Monitoring | | 17 | -- |
| 8 | 1402 Grove Street | Hale Development | Monitoring | Abandoned 09-10-2012 | | |
| 9 | 1402 W. Grove St | Hale Development | Monitoring | Abandoned 09-10-2012 | | |
| 10 | 970 W. River St. | Idaho Records Mgmt | Monitoring | Abandoned 10-10-2003 | | |
| 11 | 970 W. River St. | Idaho Records Mgmt | Monitoring | Abandoned 10-10-2003 | | |
| 12 | 11th & Front | JR Simplot Co./UPRR | Monitoring | 61 | 16 | 63-91-C-136-002 |
| 13 | 11th & Front | JR Simplot Co./UPRR | Monitoring | Abandoned 12-18-91 | | |
| 14 | 11th & Myrtle | JR Simplot Co./UPRR | Monitoring | 60 | 16 | 63-91-C-136-004 |
| 15 | 11th & Front | JR Simplot Co. | Monitoring | 58.5 | 16 | 63-91-C-136-001 |
| 16 | Front & Myrtle | S Sixteen | Monitoring | 55 | 16 | 63-93-C-0805-023 |
| 17 | Front & Myrtle | S Sixteen | Monitoring | 60 | 16 | 63-93-C-0805-021 |
| 18 | Front & Myrtle | S Sixteen | Monitoring | 22.5 | 16 | 63-93-C-0805-029 |
| 19 | Front & Myrtle | S Sixteen | Monitoring | 21 | 15 | 63-93-C-0805-028 |
| 20 | Front & Myrtle | S Sixteen | Monitoring | 25 | 15 | 63-93-C-0805-026 |
| 21 | Front & Myrtle | S Sixteen | Monitoring | 19 | 15.5 | 63-93-C-0805-027 |
| 22 | Front & Myrtle | S Sixteen | Monitoring | 25 | 15 | 63-93-C-0805-032 |
| 23 | Front & Myrtle | S Sixteen | Monitoring | 25 | 16 | 63-93-C-0805-034 |
| 24 | Front & Myrtle | S Sixteen | Monitoring | 91.5 | 16 | 63-93-C-0805-025 |
| 25 | Front & Myrtle | S Sixteen | Monitoring | 59 | 16 | 63-93-C-0805-024 |
| 26 | Front & Myrtle | S Sixteen | Monitoring | 80 | 15.5 | 63-93-C-0805-022 |
| 27 | Front & Myrtle | S Sixteen | Monitoring | 22.5 | 16 | 63-93-C-0805-031 |
| 28 | Front & Myrtle | S Sixteen | Monitoring | 75 | 15 | 63-93-C-0805-033 |

| Well Map Reference | Well Address | Owner | Type | Total Depth (feet bgs[1]) | Static Water Level (feet bgs) | Permit/Tag No. |
|---|---|---|---|---|---|---|
| 29 | Front & Myrtle | S Sixteen | Monitoring | 70 | 17.5 | 63-93-C-0805-036 |
| 30 | Front & Myrtle | S Sixteen | Monitoring | 63 | 20 | 63-93-C-0805-038 |
| 31 | Front & Myrtle | S Sixteen | Monitoring | 66 | 19 | 63-93-C-0805-037 |
| 32 | Front & Myrtle | S Sixteen | Monitoring | 84 | 16 | 63-93-C-0805-020 |
| 33 | 1100 W. Front St | Marie Atwell | Monitoring | 25 | 17 | D0059051 |
| 34 | 1100 W. Front St | Marie Atwell | Monitoring | 25 | 17 | D0059052 |
| 35 | 1100 W. Front St | Marie Atwell | Monitoring | 25 | 17 | D0059053 |
| 36 | 1109 Myrtle Street | The Hosac Co. | Monitoring | 20 | 15 | 63-92-C-216-001 |
| 37 | 219 S. 3th Street | United Water Idaho | Municipal | -- | 7 | -- |
| 38 | 217 S. 11th Street | ACHD | Monitoring | 25 | 14 | 63-93-W-0313-001 |
| 39 | 217 S. 11th Street | ACHD | Monitoring | 25 | 13 | 63-93-W-0314-001 |
| 40 | 217 S. 11th Street | ACHD | Monitoring | 25 | 13 | 63-93-W-0312-001 |
| 41 | 1402 Grove Street | American Linen | Monitoring | 20 | 14 | D0019603 |
| 42 | 1402 Grove Street | American Linen | Monitoring | 28 | 14 | D0017722 |
| 43 | 1402 Grove Street | American Linen | Monitoring | 25 | 14 | D0017723 |
| 44 | 1402 Grove Street | American Linen | Monitoring | 20 | 14 | D0013943 |
| 45 | 518 W. Front Street | C Squared Development | Monitoring | 25 | 22 | D0047851 |
| 46 | 11th & Front | ACHD | Monitoring | 27 | 20 | 63-92-C-232-001 |
| 47 | 11th & Front | ACHD | Monitoring | 27 | 19 | 63-92-C-230-001 |
| 48 | 11th & Front | ACHD | Monitoring | 27 | 20 | 63-92-C-231-001 |
| 49 | 501 S. 8th Street | S Sixteen | Monitoring | 64 | 17.5 | D0009303 |
| 50 | Front/Myrtle, 10th/13th | S Sixteen | Monitoring | 40 | 17 | D0009952 |
| 51 | Front/Myrtle, 10th/13th | S Sixteen | Monitoring | 64 | 17 | |
| 52 | Front/Myrtle, 10th/13th | S Sixteen | Monitoring | 40 | 17 | |
| 53 | Front/Myrtle, 10th/13th | S Sixteen | Monitoring | 65 | 16 | |
| 54 | Front/Myrtle, 10th/13th | S Sixteen | Monitoring | 82 | 17 | |
| 55 | Front/Myrtle, 10th/13th | S Sixteen | Monitoring | 30 | 16 | |
| 56 | Front/Myrtle, 10th/13th | S Sixteen | Monitoring | 30 | 16 | |
| 57 | Front/Myrtle, 10th/13th | S Sixteen | Monitoring | 25 | 15 | |
| 58 | Front/Myrtle, 10th/13th | S Sixteen | Monitoring | 65 | 15 | |

| Well Map Reference | Well Address | Owner | Type | Total Depth (feet bgs[1]) | Static Water Level (feet bgs) | Permit/Tag No. |
|---|---|---|---|---|---|---|
| 59 | Front/Myrtle, 10th/13th | S Sixteen | Monitoring | 82 | 17 | |
| 60 | Front/Myrtle, 10th/13th | S Sixteen | Monitoring | 93 | 11 | |
| 61 | Front/Myrtle, 10th/13th | S Sixteen | Monitoring | 30 | 16 | |
| 62 | Front/Myrtle, 10th/13th | S Sixteen | Monitoring | 19 | 17 | |
| 63 | Front/Myrtle, 10th/13th | S Sixteen | Monitoring | 25 | 15 | |
| 64 | Front/Myrtle, 10th/13th | S Sixteen | Monitoring | 25 | 15 | |
| 65 | Front/Myrtle, 10th/13th | S Sixteen | Monitoring | 69 | 30 | |
| 66 | Front/Myrtle, 10th/13th | S Sixteen | Monitoring | 25 | 15 | |
| 67 | Front/Myrtle, 10th/13th | S Sixteen | Monitoring | 71 | 15 | |
| 68 | Front/Myrtle, 10th/13th | S Sixteen | Monitoring | 19 | 17 | |
| 69 | Front/Myrtle, 10th/13th | S Sixteen | Monitoring | 19 | 17 | |
| 70 | Front/Myrtle, 10th/13th | S Sixteen | Monitoring | 25 | 15 | |
| 71 | Front/Myrtle, 10th/13th | S Sixteen | Monitoring | 25 | 15 | |
| 72 | Front/Myrtle, 10th/13th | S Sixteen | Monitoring | 25 | 15 | |
| 73 | Front/Myrtle, 10th/13th | S Sixteen | Monitoring | 71 | 15 | |
| 74 | Front/Myrtle, 10th/13th | S Sixteen | Monitoring | 27 | 18 | |
| 75 | Front/Myrtle, 10th/13th | S Sixteen | Monitoring | 65 | 16 | |
| 76 | Front/Myrtle, 10th/13th | S Sixteen | Monitoring | 30 | 18 | |
| 77 | 415 S 13th Street | Sabala Brothers | Monitoring | 20 | 13 | 63-92-C-073-001 |
| 78 | 415 S 13th Street | Sabala Brothers | Monitoring | 20 | 13 | 63-92-C-073-002 |
| 79 | S. 10th Street | JR Simplot | Monitoring | Abandoned 11-11-2009 | | |
| 80 | S. 10th Street | JR Simplot | Monitoring | Abandoned 11-11-2009 | | |
| 81 | 1109 Myrtle Street | The Hosac Co. | Monitoring | 22 | 16 | |
| 82 | 1109 Myrtle Street | The Hosac Co. | Monitoring | 22 | 16 | |
| 83 | 500 S. 13th Street | The Hosac Co. | Monitoring | 17 | 12 | |
| 84 | 500 S. 13th Street | The Hosac Co. | Monitoring | 17 | 12 | |
| 85 | 500 S. 13th Street | The Hosac Co. | Monitoring | 21 | 15 | 63-94-C-0290-001 |
| 86 | 13th & Front | UPRR | Monitoring | 62 | 16 | |
| 87 | 13th & Front | UPRR | Monitoring | 68 | 17 | |
| 88 | 13th & Front | UPRR | Monitoring | 58 | 15 | |

| Well Map Reference | Well Address | Owner | Type | Total Depth (feet bgs[1]) | Static Water Level (feet bgs) | Permit/Tag No. |
|---|---|---|---|---|---|---|
| 89 | 13th & Front | UPRR | Monitoring | 58 | 15 | |
| 90 | 9th & Lee | Orson Merrell | Domestic | 40 | 16 | -- |
| 91 | 1117 Lee Street | Roy Spring | Domestic | 25 | 10 | -- |
| 92 | 1004 Royal Blvd | Boise Terminal Co. | Monitoring | 20 | 6 | 63-92-W-245 |
| 93 | 1004 Royal Blvd | Boise Terminal Co. | Monitoring | 20 | 6 | 63-92-W-246 |
| 94 | 1004 Royal Blvd | Boise Terminal Co. | Monitoring | 20 | 6 | 63-92-W-244 |
| 95 | 620 S. 9th Street | CCDC | Monitoring | Abandoned | | |
| 96 | 620 S. 9th Street | CCDC | Monitoring | Abandoned | | |
| 97 | 705 S. 8th Street | City of Boise | Monitoring | 30 | 11 | D0063936 |
| 98 | 705 S. 8th Street | City of Boise | Monitoring | 28 | 10 | D0063935 |
| 99 | Front & Capitol | S Sixteen | Monitoring | 40 | 3 | 63-93-C-0805-050 |
| 100 | Front & Capitol | S Sixteen | Monitoring | 40 | 16 | 63-93-C-0805-051 |
| 101 | 8th Street Mktplace | S Sixteen | Monitoring | 25 | 15 | 63-93-C-0805-055 |
| 102 | 8th Street Mktplace | S Sixteen | Monitoring | 35 | 13 | 63-93-C-0805-501 |
| 103 | 410 S. Capitol | S Sixteen | Monitoring | 25 | 17 | 63-93-C-0805-060 |
| 104 | Front & Capitol | S Sixteen | Monitoring | Abandone 5-5-1997 | | |
| 105 | Front & Capitol | S Sixteen | Monitoring | 25 | 13 | 63-93-C-0805-058 |
| 106 | Front & Capitol | S Sixteen | Monitoring | 25 | 13 | 63-93-C-0805-059 |
| 107 | Front & Capitol | S Sixteen | Monitoring | 40 | 15 | 63-97-C-0234-000 |
| 108 | Front & Capitol | S Sixteen | Monitoring | 30 | 3 | 63-93-C-0805-049 |
| 109 | Front & Capitol | S Sixteen | Monitoring | 40 | 16 | 63-93-C-0805-052 |
| 110 | Front & Capitol | S Sixteen | Monitoring | 25 | 15 | 63-93-C-0805-054 |
| 111 | Front & Capitol | S Sixteen | Monitoring | 25 | 15 | 63-93-C-0805-053 |
| 112 | Front & Capitol | S Sixteen | Monitoring | 25 | 13 | 63-93-C-0805-056 |
| 113 | Front & Capitol | S Sixteen | Monitoring | 40 | 16 | 63-97-C-0235-200 |
| 114 | Front & Capitol | S Sixteen | Monitoring | 40 | 13 | 63-97-C-0233-000 |
| 115 | 2360 University Dr. | University Inn | Monitoring | 20 | 9 | 63-93-C-002-001 |
| 116 | 2360 University Dr. | University Inn | Monitoring | 20 | 10 | 63-93-C-0004-001 |
| 117 | 8th & 9th St. Blk 44 | LD Knapp & Assoc | Monitoring | 30 | 26 | D0047130 |
| 118 | 8th & 9th St. Blk 44 | LD Knapp & Assoc | Monitoring | 30 | 26 | D0047131 |

| Well Map Reference | Well Address | Owner | Type | Total Depth (feet bgs[1]) | Static Water Level (feet bgs) | Permit/Tag No. |
|---|---|---|---|---|---|---|
| 119 | 8th & 9th St. Blk 44 | LD Knapp & Assoc | Monitoring | 30 | 28 | D0047132 |
| 120 | 1102 Main Street | Chen Northern | Monitoring | 25 | 12 | 63-92-C-057 |
| 121 | 205 N. 10th Street | Idaho First Nat'l Bank | Air Conditioning | 514 | 21 | -- |
| 122 | Front & Myrtle | JRS Properties | Monitoring | 63 | 17.5 | 63-91-2-205 |
| 123 | 202 N. 9th Street | K Co/Community | Heat Pump | 115 | 30 | D0000161 |
| 124 | 202 N. 9th Street | K Co/Community | Heat Pump | 110 | 30 | D0000162 |
| 125 | 928 W. Main Street | Parklane Mgmt | Heat Pump | 158 | 18 | D0020067 |
| 126 | 928 W. Main Street | Parklane Mgmt | Heat Pump | 158 | 18 | D0066031 |
| 127 | 928 W. Main Street | Parklane Mgmt | Heat Pump | 288 | 15 | D0001000 |
| 128 | 1001 West Main St | Provident Federal Svgs | Air Conditioning | 62 | 11 | -- |
| 129 | 1001 West Main St | Provident Federal Svgs | Air Conditioning | 300 | 29 | -- |
| 130 | 8th Street Mktplace | 8th Street Mktplace | Monitoring | 25 | 19 | 63-92-W-029-001 |
| 131 | 614 Front Street | American Cleaning | Domestic | 46 | 24 | -- |
| 132 | 1102 Main Street | Chen Northern | Monitoring | 25 | 14 | 63-92-C-058 |
| 133 | 1102 Main Street | Chen Northern | Monitoring | 35 | 30 | 63-92-C-056 |
| 134 | 101 S. Capitol | Gardner Co. | Monitoring | 40 | 23 | D0066043 |
| 135 | 516 S. 8th Street | ID Laundry & Dry Clner | Commercial | 630 | 99 | -- |
| 136 | 8th Street Mktplace | JM Montgomery | Monitoring | 25 | 19 | -- |
| 137 | 601 S. 9th | Meadow Gold Dairy | Industrial | 230 | 50 | -- |
| 138 | 401 S. 10th Street | State of Idaho | Monitoring | 20 | 15 | 909845-858415 |
| 139 | 402 S. 10th Street | State of Idaho | Monitoring | 20 | 15 | 909844-858414 |
| 140 | S. 11th Street | State of Idaho | Monitoring | 20 | 17 | 909842-858412 |
| 141 | 301 S. 9th Street | State of Idaho | Monitoring | 20 | 17 | 909846-858416 |
| 142 | 301 S. 9th Street | State of Idaho | Monitoring | 20 | 15 | 909838-858408 |
| 143 | S. 11th Street | State of Idaho | Monitoring | 20 | 16 | 909839-858409 |
| 144 | S. 11th Street | State of Idaho | Monitoring | 20 | 17 | 909839-858407 |
| 145 | Borah St, 9th & 11th | UPRR | Monitoring | 65 | 15 | 63-91-C-135-004 |
| 146 | 620 S. 9th Street | CCDC | Monitoring | Abandoned | | |
| 147 | 508 S. 8th Street | Clark Magstadt | Monitoring | 25 | 13 | D0047135 |
| 148 | 508 S. 8th Street | Clark Magstadt | Monitoring | 25 | 13 | D0047136 |
| 149 | 508 S. 8th Street | Clark Magstadt | Monitoring | 25 | 14 | D0047134 |

| Well Map Reference | Well Address | Owner | Type | Total Depth (feet bgs[1]) | Static Water Level (feet bgs) | Permit/Tag No. |
|---|---|---|---|---|---|---|
| 150 | 508 S. 8th Street | Clark Magstadt | Monitoring | 25 | 15 | |
| 151 | 508 S. 8th Street | Clark Magstadt | Monitoring | 25 | 15 | D0063870 |
| 152 | 508 S. 8th Street | Clark Magstadt | Monitoring | 24 | 15 | D0063871 |
| 153 | 508 S. 8th Street | Clark Magstadt | Monitoring | 25 | 16 | D0063869 |
| 154 | 508 S. 8th Street | Clark Magstadt | Monitoring | 25 | 16 | D0063868 |
| 155 | 9th & Broad | Al Marsden | Monitoring | 30 | 21 | 63-92-W-623 |
| 156 | 515 S. 6th | Parkside Investments | Heat Pump | 18 | 10 | -- |
| 157 | BSU Campus | BSU | Monitoring | 25 | 7 | D0031659 |
| 158 | Morrison Center | BSU | Monitoring | 20 | 11 | D0047626 |
| 159 | BSU Campus | BSU | Irrigation | 200 | 14 | 898167-844846 |
| 160 | 2360 University Dr. | University Inn | Monitoring | 20 | 10 | -- |
| 161 | 710-720 W. Idaho St | Parklane Co | Injection | 63 | 30 | 63-96-C-0397-000 |
| 162 | 710-720 W. Idaho St | Parklane Co | Industrial | 63 | 30 | 63-96-C-0396-000 |
| 163 | 710-720 W. Idaho St | Parklane Co | Injection | 90 | 30 | 63-99-W-0720-100 |
| 164 | 710-720 W. Idaho St | Parklane Co | Industrial | 195 | 30 | D0012150 |
| 165 | 710-720 W. Idaho St | Parklane Co | Industrial | 195 | 30 | D0047061 |
| 166 | 101 E. Myrtle St | ANR Freight System | Monitoring | 21 | 11 | 63-93-C-0804-001 |
| 167 | 520 W. Front | CCDC | Monitoring | 25 | 21 | D0048209 |
| 168 | 520 W. Front | CCDC | Monitoring | 25 | 21 | D0048210 |
| 169 | 101 Capitol Blvd | Idaho First Nat'l Bank | Dewatering | 83 | -- | -- |
| 170 | 515 S. 6th | Parkside Investments | Heat Pump | 52 | 14 | 63-84-C-0048-000 |
| 171 | Julia Davis Park | City of Boise | Injection | 3,200 | 12 | D0000298 |
| | | | | | | |
| | | | | | | |

1. bgs - below ground surface
2. --- Well tag number not provided on Idaho Department of Water Resources website.

**Table A-2**
**Laboratory Analytical Results - Soil VOCs[1]**
**Proposed 'The Afton' Site**
**620 S. 9th Street**
**Boise, Idaho**

| Sample ID | Date Sampled | Units | Analyte[2] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Acetone | Benzene | 2-Butanone (MEK) | Naphthalene | Tetrachloroethene | Toluene | 1,2,4-Trimethylbenzene | 1,2,3-Trimethylbenzene | Total Xylenes |
| DU3 S-1 (P) | 7/30/2015 | mg/kg | <0.26 | <0.0072 | <0.12 | **0.036(J)** | <0.0073 | <0.012 | **0.0076(J)** | <0.0076 | <0.018 |
| DU3 S-2 | 7/30/2015 | mg/kg | <0.28 | <0.0074 | <0.13 | <0.028 | <0.0076 | <0.012 | <0.0058 | <0.0079 | <0.019 |
| DU3 S-3 | 7/30/2015 | mg/kg | <0.26 | <0.0070 | <0.12 | <0.026 | <0.0072 | <0.011 | <0.0055 | <0.0075 | <0.018 |
| DU3 S-4 (D) | 7/30/2015 | mg/kg | <0.26 | <0.0069 | <0.12 | <0.026 | <0.0070 | <0.011 | <0.0054 | <0.0073 | <0.018 |
| TW-3-1 | 7/29/2015 | mg/kg | **0.050(J)** | **0.0011(J)** | **0.0083(J)** | <0.0010 | <0.00028 | <0.00043 | <0.00021 | <0.00021 | <0.00070 |
| B-6 | 7/29/2015 | mg/kg | **0.044(J)** | **0.010** | <0.0047 | <0.0010 | <0.00028 | **0.0037(J)** | <0.00021 | **0.00091(JV3)[5]** | **0.0016(J)** |
| B-7 | 7/29/2015 | mg/kg | **0.047(J)** | **0.0021** | **0.0089(J)** | <0.0010 | <0.00028 | <0.00043 | <0.00021 | <0.00021 | <0.00070 |
| B-8 | 7/29/2015 | mg/kg | **0.031(J)** | **0.00068(J)** | <0.0047 | <0.0010 | <0.00028 | <0.00043 | <0.00021 | <0.00021 | <0.00070 |
| B-9 | 7/29/2015 | mg/kg | **0.068** | **0.0025** | **0.0099(J)** | <0.0010 | **0.0014** | **0.00088(J)** | <0.00021 | <0.00021 | <0.00070 |
| B-10 | 7/29/2015 | mg/kg | <0.24 | <0.0066 | <0.11 | <0.024 | <0.0068 | <0.011 | <0.0052 | <0.0070 | <0.017 |
| B-11 | 7/29/2015 | mg/kg | <0.30 | <0.0081 | <0.14 | <0.030 | <0.0083 | <0.013 | <0.0063 | <0.0086 | <0.021 |
| B-12 | 7/29/2015 | mg/kg | <0.25 | <0.0068 | <0.12 | <0.025 | <0.0077 | <0.011 | <0.0053 | <0.0072 | <0.018 |
| B-13 | 7/29/2015 | mg/kg | <0.38 | <0.010 | <0.18 | <0.038 | <0.010 | <0.016 | <0.0079 | <0.011 | <0.026 |
| B-13D | 7/29/2015 | mg/kg | <0.38 | <0.010 | <0.18 | <0.038 | <0.010 | <0.017 | <0.0081 | <0.011 | <0.027 |
| DEQ RUSL[6]/IDTL[7]/EPA RSL[8] | | | 17.4 | 0.025 | 11.8 | 0.12 | 0.0288 | 6.6 | 0.193 | 63 | 27 |

Notes:
1. VOCs - Volatile Organic Compounds
2. Analysis by EPA Method 8260B
3. mg/kg - milligrams per kilogram
4. (J) - EPA QC Qualifier - Estimated value below the lowest calibration point. Confidence correlates with concentration.
5. (V3) - ESC data qualifier - The internal standard exhibit poor recovery due to sample matrix interference.
   high. The analytical results will be biased BDL, but results will be unaffected.
6. DEQ RUSLs - Idaho Department of Environmental Quality Petroleum Residential Use Screening Levels (August 2012)
7. DEQ IDTLs - DEQ Initial Default Target Levels (July 2004)
8. EPA RSL - Environmental Protection Agency Regional Screening Level, June 2015 (revised)
9. NE - Not established

(P) - Primary sample
(D) - Duplicate sample
**Bold** - Concentrations reported above laboratory Method Detection Limit (MDL)
Value - Concentration used in risk evaluation

**Table A-3**
**Laboratory Analytical Results - Soil PAHs[1]**
**Proposed 'The Afton' Site**
**620 S. 9th Street**
**Boise, Idaho**

| Sample ID | Date Sampled | Units | Analyte[2] | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Anthracene | Acenaphthene | Acenaphthylene | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(g,h,i)perylene | Benzo(k)fluoranthracene | Chrysene | Dibenz(a,h)anthracene | Fluoranthene | Fluorene | Indeno(1,2,3-cd)pyrene | Naphthalene | Phenanthrene | Pyrene | 1-Methylnaphthalene | 2-Methylnaphthalene |
| DU3 S-1 (P) | 7/30/2015 | mg/kg | **0.16** | **0.040(J)** | <0.012 | **1.3** | **2.0** | **3.1** | **2.0** | **0.93** | **1.8** | **0.48** | **1.9** | **0.041(J)** | **1.6** | **0.067(J)** | **0.54** | **2.0** | <0.040 | <0.040 |
| DU3 S-2 | 7/30/2015 | mg/kg | **0.068** | **0.020(J)** | **0.0045(J)** | **1.1** | **1.4** | **2.1** | **1.3** | **0.63** | **1.3** | **0.34** | **1.4** | **0.013(J)** | **1.0** | **0.053(J)** | **0.37** | **1.4** | **0.041(J)** | **0.048(J)** |
| DU3 S-3 | 7/30/2015 | mg/kg | **0.11** | **0.033(J)** | <0.0060 | **1.1** | **1.4** | **1.9** | **1.2** | **0.56** | **1.3** | **0.30** | **1.7** | **0.023(J)** | **0.90** | **0.13(J)** | **0.51** | **1.7** | **0.024(J)** | **0.039(J)** |
| DU3 S-4 (D) | 7/30/2015 | mg/kg | **0.15** | **0.041(J)** | <0.0060 | **1.3** | **1.6** | **2.2** | **1.3** | **0.62** | **1.5** | **0.32** | **2.1** | **0.036(J)** | **1.0** | **0.040(J)** | **0.73** | **2.1** | **0.024(J)** | **0.029(J)** |
| TW-3-1 | 7/29/2015 | mg/kg | **0.081** | **0.0056(J)** | **0.13** | **0.27** | **0.58** | **0.61** | **0.64** | **0.22** | **0.44** | **0.13** | **0.55** | **0.011(J)** | **0.47** | **0.064(J)** | **0.12** | **0.74** | <0.010 | **0.018(J)** |
| B-6 | 7/29/2015 | mg/kg | **0.10** | **0.057** | **0.0061(J)** | **0.079** | **1.4** | **1.8** | **1.4** | **0.56** | **1.0** | **0.30** | **1.0** | **0.043** | **1.1** | **0.12(J)** | **0.38** | **1.1** | **0.080(J)** | **0.13** |
| B-7 | 7/29/2015 | mg/kg | <0.00060 | <0.00060 | <0.00060 | **0.00091(J)** | **0.00075(J)** | **0.0010(J)** | <0.00060 | <0.00060 | <0.00060 | <0.00060 | **0.00079(J)** | <0.00060 | <0.00060 | <0.0020 | <0.00060 | **0.0010(J)** | <0.0020 | <0.0020 |
| B-8 | 7/29/2015 | mg/kg | **0.0056(J)** | **0.0015(J)** | <0.00060 | **0.021** | **0.018** | **0.020** | **0.011** | **0.0068** | **0.022** | **0.0025(J)** | **0.041** | **0.0016(J)** | **0.0086** | <0.0020 | **0.026** | **0.045** | <0.0020 | <0.0020 |
| B-9 | 7/29/2015 | mg/kg | **0.19** | <0.0030 | <0.0030 | **1.0** | **0.91** | **0.80** | **0.41** | **0.27** | **1.1** | **0.13** | **1.3** | **0.014(J)** | **0.38** | **0.038(J)** | **0.58** | **2.2** | <0.010 | **0.014(J)** |
| B-10 | 7/29/2015 | mg/kg | <0.00060 | <0.00060 | <0.00060 | <0.00060 | <0.00060 | <0.00060 | <0.00060 | <0.00060 | <0.00060 | <0.00060 | 0.00086(J) | <0.00060 | <0.00060 | <0.0020 | **0.00084(J)** | **0.0010(J)** | <0.0020 | <0.0020 |
| B-11 | 7/29/2015 | mg/kg | **0.025(J)** | **0.0059(J)** | <0.0030 | **0.14** | **0.18** | **0.17** | **0.13** | **0.065** | **0.17** | **0.029(J)** | **0.25** | **0.0039(J)** | **0.10** | <0.010 | **0.098** | **0.30** | <0.010 | <0.010 |
| B-12 | 7/29/2015 | mg/kg | **0.0098** | **0.0017(J)** | **0.00073(J)** | **0.048** | **0.050** | **0.045** | **0.026** | **0.019** | **0.050** | **0.0065(J)** | **0.088** | **0.0054(J)** | **0.023** | **0.0030(J)** | **0.065** | **0.12** | **0.0024(J)** | <0.0020 |
| B-13 | 7/29/2015 | mg/kg | **0.024** | **0.0021(J)** | **0.0018(J)** | **0.094** | **0.20** | **0.21** | **0.18** | **0.058** | **0.13** | **0.038** | **0.15** | **0.0041(J)** | **0.15** | **0.020(J)** | **0.036** | **0.22** | <0.0040 | **0.0063(J)** |
| B-13D | 7/29/2015 | mg/kg | **0.021** | **0.0026(J)** | **0.0014(J)** | **0.082** | **0.17** | **0.19** | **0.15** | **0.049** | **0.12** | **0.033** | **0.15** | **0.0051(J)** | **0.13** | **0.017(J)** | **0.043** | **0.21** | <0.0040 | **0.0061(J)** |
| DEQ RUSL[5]/IDTL[6]/EPA RSLs[7] | | mg/kg | 3,200 | 200 | 78 | 0.09 | 0.02 | 0.19 | 1,180 | 1.9 | 9.5 | 0.0422 | 1,400 | 240 | 0.422 | 0.12 | 79 | 1,000 | 18 | 3.31 |

Notes:
1. PAHs - Polycyclic Aromatic Hydrocarbons
2. Analysis by EPA Method 8270C-SIM
3. mg/kg - milligrams per kilogram
4. (J) - EPA QC Qualifier - Estimated value below the lowest calibration point. Confidence correlates with concentration.
5. DEQ RUSLs - Idaho Department of Environmental Quality Petroleum Residential Use Screening Levels (August 2012)
6. DEQ IDTLs - DEQ Initial Default Target Levels (July 2004)
7. EPA RSL - Environmental Protection Agency Regional Screening Level, June 2015 (revised)

(P) - Primary sample
(D) - Duplicate sample
**Bold** - Concentrations reported above laboratory MDL
**Bold** - Concentration exceeds the RUSL, IDTL, or EPA RSL
Value - Concentration used in risk evaluation

**Table A-4**
**Laboratory Analytical Results - Soil Priority Pollutant Metals (PPMs)**
**Proposed 'The Afton' Site**
**620 S. 9th Street**
**Boise, Idaho**

| Sample ID | Date Sampled | Units | Analyte[1] | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Antimony | Arsenic | Beryllium | Cadmium | Chromium | Copper | Lead | Mercury | Nickel | Silver | Zinc |
| DU3 S-1 (P) | 7/30/2015 | mg/kg | **1.4(J)** | **8.6** | **0.36** | **0.51(J)** | **6.8** | **170** | **110*** | **0.33** | **8.3** | **<0.28** | **110** |
| DU3 S-2 | 7/30/2015 | mg/kg | **10** | **12** | **0.34** | **0.63** | **8.2** | **4,400** | **420*** | **0.54** | **25** | **1.1** | **290** |
| DU3 S-3 | 7/30/2015 | mg/kg | **9.1** | **12** | **0.36** | **0.69** | **8.4** | **700** | **340*** | **1.2** | **12** | **0.40(J)** | **190** |
| DU3 S-4 (D) | 7/30/2015 | mg/kg | **3.5** | **11** | **0.32** | **0.76** | **10** | **510** | **220*** | **1.0** | **10** | **<0.28** | **220** |
| TW-3-1 | 7/29/2015 | mg/kg | <0.75 | **9.0** | **0.39** | **0.48(J)** | **13** | **14** | **43** | **0.081** | **9.2** | **<0.28** | **160** |
| B-6 | 7/29/2015 | mg/kg | **1.8(J)** | **9.1** | **0.33** | **0.37(J)** | **5.1** | **62** | **110*** | **3.4** | **4.4** | **<0.28** | **340** |
| B-7 | 7/29/2015 | mg/kg | <0.75 | **12** | **0.38** | **0.083(J)** | **5.0** | **5.1** | **7.3** | **0.025** | **3.9** | **<0.28** | **31** |
| B-8 | 7/29/2015 | mg/kg | <0.75 | **7.3** | **0.23** | <0.070 | **2.8** | **2.0(J)** | **7.6** | **0.040** | **2.2** | **<0.28** | **19** |
| B-9 | 7/29/2015 | mg/kg | <0.75 | **7.6** | **0.46** | **0.19(J)** | **8.6** | **12** | **130*** | **0.68** | **4.9** | **<0.28** | **57** |
| B-10 | 7/29/2015 | mg/kg | <0.75 | **4.7** | **0.31** | **0.22(J)** | **12** | **8.4** | **27** | **0.046** | **8.1** | **<0.28** | **55** |
| B-11 | 7/29/2015 | mg/kg | <0.75 | **9.7** | **0.13(J)** | **0.28(J)** | **8.3** | **12** | **51** | **0.13** | **5.8** | **<0.28** | **71** |
| B-12 | 7/29/2015 | mg/kg | <0.75 | **7.8** | **0.16(J)** | **0.18(J)** | **6.5** | **6.1** | **170*** | **0.073** | **4.4** | **1.0(J)** | **41** |
| B-13 | 7/29/2015 | mg/kg | <0.75 | **8.7** | **0.61** | **0.33(J)** | **17** | **22** | **44** | **0.060** | **14** | **<0.28** | **100** |
| B-13D | 7/29/2015 | mg/kg | <0.75 | **10** | **0.35** | **0.34(J)** | **15** | **17** | **44** | **0.070** | **11** | **<0.28** | **95** |
| DEQ IDTLs[7] | | | 4.77 | 0.391 | 1.63 | 1.35 | 2,130 | 921 | 49.6 | 0.00509 | 59.1 | 0.189 | 886 |

Notes:
1. Analysis by EPA Methods 6010B and 7471A
2. mg/kg - milligrams per kilogram
3. (J) - EPA QC Qualifier - Estimated value below the lowest calibration point. Confidence correlates with concentration
4. (J6) - Data Qualifier - The sample matrix interfered with the ability to make any accurate determination; spike value is low
5. (J3) - Data Qualifier - The associated batch QC was outhside the established quality control range for precision.
6. NA - Not analyzed
7. DEQ IDTLs - Idaho Department of Environmental Quality Initial Default Target Levels (July 2004)
8. 20X TCLP - 20 Times the Toxicity Characteristic Leaching Procedure value from 40 CFR Chapter 1 section 261.24
9. NE - Not established in 40 CFR Chapter 1 section 261.24
10. TCLP - Toxicity Characteristic Leaching Procedure

(P) - Primary sample
(D) - Duplicate sample
**Bold** - Concentrations reported above laboratory Method Detection Limit (MDL)
**Bold** - MDL/PQL exceeds IDTL
**Bold** - Concentration exceeds the IDTL
**Value** - Cpncentration used in risk evaluation

**Table A-5**
**Laboratory Analytical Results - Groundwater VOCs[1]**
**620 S. 9th Street**
**Boise, Idaho**

| Sample ID | Sample Date | Units | Analyte[2] | | | |
|---|---|---|---|---|---|---|
| | | | 1,1,1-Trichloroethane | Trichlorofluoromethane | 1,2-Dibromoethane (EDB) | Chloroform |
| TW-3 | 7/31/2015 | mg/l | <0.00032 | <0.0012 | <0.0000024 | <0.00032 |
| | 1/15/2016 | | <0.000319 | <0.0012 | **0.0000119** | <0.000324 |
| | 8/15/2016 | | No sample, well destroyed | | | |
| TW-4 | 7/31/2015 | mg/l | **0.00042(J)[4]** | **0.0084** | <0.0000024 | <0.00032 |
| | 1/15/2016 | | <0.000319 | <0.0012 | <0.0000024 | <0.000324 |
| | 8/15/2016 | | <0.000319 | <0.0012 | <0.0000024 | **0.000433(J)** |
| TW-4D | 7/31/2015 | mg/l | **0.00040(J)** | **0.0080** | <0.0000024 | <0.00032 |
| | 1/15/2016 | | <0.000319 | <0.0012 | <0.0000024 | <0.000324 |
| | 8/15/2016 | | <0.000319 | <0.0012 | <0.0000024 | **0.000475(J)** |
| DEQ IDTL[5] | | mg/l | 0.20 | 2.05 | 0.00005 | 0.0018 |

Notes:
1. VOCs - Volatile Organic Compounds
2. Analysis by EPA Method 8260B
3. mg/l - milligrams per liter
4. (J) - EPA QC Qualifier - Estimated value below the lowest calibration point. Confidence correlates with concentration.
5. DEQ IDTL - DEQ Initial Default Target Level (July 2004)

**Bold** - Concentration reported above laboratory Method Detection Limit.

**Table A-6**
**Laboratory Analytical Results - Groundwater PAHs[1]**
**620 S. 9th Street**
**Boise, Idaho**

| Sample ID | Sample Date | Units | Analyte[2] | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Benzo(a)anthracene | Benzo(b)fluoranthene | benzo(g,h,i)perylene | Naphthalene | Phenanthrene | Pyrene | 1-Methylnaphthalene | 2-Methylnaphthalene |
| TW-3 | 7/31/2015 | mg/l | **0.000010(J)** | <0.0000021 | <0.000023 | **0.000023(J)** | <0.0000082 | **0.000070** | **0.0000092(J)** | **0.0000097(J)** |
| | 1/15/2016 | | **0.0000196(J)** | **0.00000421(J)** | <0.00000227 | <0.0000198 | **0.0000108(J)** | **0.000227** | <0.00000821 | <0.00000902 |
| | 8/15/2016 | | No sample, well destroyed in 2016 due to construction | | | | | | | |
| TW-4 | 7/31/2015 | mg/l | **0.0000061(J)** | <0.0000021 | <0.00000227 | <0.000020 | **0.000016(J)** | <0.000012 | <0.0000082 | **0.000010(J)** |
| | 1/15/2016 | | <0.0000041 | <0.00000212 | <0.00000227 | <0.0000198 | **0.0000117(J)** | <0.0000117 | <0.00000821 | <0.00000902 |
| | 8/15/2016 | | <0.0000041 | <0.00000212 | **0.00000343(J)** | <0.0000198 | <0.0000082 | <0.0000117 | <0.00000821 | <0.00000902 |
| TW-4D | 7/31/2015 | mg/l | **0.0000066(J)** | <0.0000021 | <0.00000227 | <0.000020 | **0.000016(J)** | <0.000012 | <0.0000082 | **0.000010(J)** |
| | 1/15/2016 | | <0.0000041 | <0.00000212 | <0.00000227 | <0.0000198 | **0.0000102(J)** | <0.0000117 | <0.00000821 | <0.00000902 |
| | 8/15/2016 | | <0.0000041 | <0.00000212 | **0.00000302(J)** | **0.000103(J)** | **0.00000932(J)** | <0.0000117 | **0.0000188(J)** | **0.0000327(J)** |
| DEQ RUSL[5]/IDTL[6] | | mg/l | 0.000030 | 0.000030 | 0.313 | 0.070 | 0.313 | 1.1 | NE[7] | 0.0417 |

Notes:
1. PAHs - Polycyclic Aromatic Hydrocarbons
2. Analysis by Environmental Protection Agency Method 8270C-SIM
3. mg/l - milligrams per liter
4. (J) - EPA QC Qualifier - Estimated value below the lowest calibration point. Confidence correlates with concentration.
5. DEQ RUSL - Idaho Department of Environmental Quality Petroleum Residential Use Screening Level (August 2012)
6. DEQ IDTL - DEQ Initial Default Target Level (July 2004)
7. NE - Not established

**Bold** - Concentration reported above laboratory Method Detection Limit

**Table A-7**
**Laboratory Analytical Results - Groundwater Priority Pollutant Metals**
**620 S. 9th Street**
**Boise, Idaho**

| Sample ID | Sample Date | Units | Analyte[1] | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Antimony | Arsenic | Barium | Chromium | Copper | Mercury | Lead | Nickel | Selenium | Zinc |
| TW-3 | 7/31/2015 | mg/l | **0.00050(J)** | **0.0013(J)** | NA | <0.0014 | <0.0053 | <0.000049 | <0.00024 | <0.0049 | <0.0074 | **0.0073(J)** |
| | 1/15/2016 | | <0.0075 | <0.0065 | NA | <0.0014 | <0.0053 | <0.000049 | **0.00594** | <0.0049 | <0.0074 | <0.0059 |
| | 8/15/2016 | | No sample, well destroyed in June/July 2016 due to construction | | | | | | | | | |
| TW-4 | 7/31/2015 | mg/l | **0.00084(J)** | **0.0018(J)** | NA | **0.0056(J)** | **0.0062(J)** | **0.000068(J)** | **0.0064** | <0.0049 | <0.0074 | **0.015(J)** |
| | 1/15/2016 | | <0.0075 | <0.0065 | NA | <0.0014 | <0.0053 | <0.000049 | **0.00486(J)** | <0.0049 | <0.0074 | <0.0059 |
| | 8/15/2016 | | <0.000754 | **0.000482(J)** | **0.0687** | **0.000714(J)** | **0.00397(J)** | <0.000049 | **0.000406(J)** | **0.0021** | **0.00069(J)** | <0.00256 |
| TW-4D | 7/31/2015 | mg/l | **0.0011(J)** | **0.0020** | NA | **0.0055(J)** | **0.0081(J)** | **0.000072(J)** | **0.0078** | <0.0049 | <0.0074 | **0.015(J)** |
| | 1/15/2016 | | <0.0075 | <0.0065 | NA | <0.0014 | **0.00591(J)** | <0.000049 | **0.00463(J)** | <0.0049 | <0.0074 | <0.0059 |
| | 8/15/2016 | | **0.00114(J)** | **0.000439(J)** | **0.0728** | **0.00124(J)** | **0.00418(J)** | **0.0000766(J)** | **0.000282(J)** | **0.00152(J)** | **0.000698(J)** | **0.00431(J)** |
| DEQ IDTL[4] | | mg/l | 0.0060 | 0.010 | 2.0 | 0.10 | 1.3 | 0.0020 | 0.015 | 0.209 | 0.05 | 3.13 |

Notes:
1. Analysis by Environmental Protection Agency Methods 6010B/6020/7470A
2. mg/l - milligrams per liter
3. (J) - EPA QC Qualifier - Estimated value below the lowest calibration point. Confidence correlates with concentration.
4. DEQ IDTL - Idaho Department of Environmental Quality Initial Default Target Level (July 2004)

**Bold** - Concentration reported above laboratory Method Detection Limit

**Table A-8**
**Laboratory Analytical Results - Soil Vapor VOCs[1]**
**620 S. 9th Street**
**Boise, Idaho**

| Sample ID | Sample Date | Units | Analyte[2] | |
|---|---|---|---|---|
| | | | Freon 11 (Trichlorofluormethane) | 1,1,1-Trichloroethane |
| VP-1 | 7/31/2015 | µg/m$^{3(3)}$ | **210,000** | <350 |
| VP-1A | 8/15/2016 | | **26,000(J0)** | <59 |
| VP-1D | 7/31/2015 | µg/m$^3$ | **200,000** | <360 |
| VP-1AD | 8/15/2016 | | **29,000(J0)** | <68 |
| VP-2 | 7/31/2015 | µg/m$^3$ | **19,000** | **220** |
| | 8/15/2016 | | **2,600(J0)** | **300** |
| EPA RSLs[4] | | µg/m$^3$ | 7,300* | 520,000 |

Notes:
1. VOCs - Volatile Organic Compounds
2. Analysis by EPA Method TO-15 Low Level
3. µg/m$^3$ - milligrams per cubic meter
4. EPA RSL - Environmental Protection Agency Regional Screening Level for Residential Air x100 (June 2015, Revised)

**Bold** - Concentration reported above laboratory Method Detection Limit.

**Bold** - Concentration exceeds EPA RSL.
*Trichlorofluoromethane RSL removed by EPA in 2016.

(J0) - Estimated value due to bias in the CCV.

# APPENDIX B

# PREVIOUS SITE INVESTIGATION

# Site Investigation and Sample Analysis
# Proposed 'The Afton' Site
# 620 S. 9th Street
# Boise, Idaho

Project No. BO15086B


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**September 14, 2015**

## TABLE OF CONTENTS


**Section** **Page**

1.0 PROJECT INTRODUCTION ..... 2
- 1.1 Purpose ..... 2
- 1.2 Background ..... 2
- 1.3 Scope of Services ..... 3
- 1.4 Limitations ..... 3
- 1.5 Health and Safety ..... 4
- 1.6 Deviations from the QAPP ..... 4

2.0 SITE LOCATION AND GENERAL VICINITY DESCRIPTION ..... 5
- 2.1 Geology ..... 5

3.0 FIELD INVESTIGATION ..... 5
- 3.1 Multi Increment and Discrete Soil Sampling ..... 5
  - 3.1.1 Monitoring Well Installation and Sampling Methods ..... 8
- 3.2 Soil Vapor ..... 9
- 3.3 Laboratory Analytical Results ..... 10
  - 3.3.1 Soil Sampling Results ..... 10
  - 3.3.2 Groundwater Sampling Results ..... 19
  - 3.3.3 Soil Vapor Sampling Results ..... 20
- 3.4 Investigation-Derived Waste ..... 20

4.0 QUALITY CONTROL EVALUATION ..... 21

5.0 CONCLUSIONS ..... 22

6.0 RECOMMENDATIONS ..... 23

7.0 REFERENCES ..... 23


**FIGURES**


Figure 1 Site Map
Figure 2 Proposed Development Phases, Decision Unit, and Discrete Sampling Area Locations
Figure 3 Discrete Soil, Temporary Monitoring Well, and Soil Vapor Point Locations
Figure 4 Groundwater Potentiometric Contour Map


**APPENDICES**


Appendix A – Photographic Documentation
Appendix B – Borehole Logs and Monitoring Well Construction Diagrams
Appendix C – Water Quality Parameter Data
Appendix D – Data Tables
Appendix E – Laboratory Analytical Reports
Appendix F - QAQC Report


**APPENDIX D - LIST OF TABLES**


Table D-1 Helium Tracer Gas Leak Detection
Table D-2 Soil Vapor Screening Results
Table D-3 Laboratory Analytical Results - Soil VOCs
Table D-4 Laboratory Analytical Results - Soil VOCs (Non-Detections Exceeding IDTLs)
Table D-5 Laboratory Analytical Results - Soil PAHs
Table D-6 Laboratory Analytical Results - Soil PPMs
Table D-7 Laboratory Analytical Results - Groundwater VOCs
Table D-8 Laboratory Analytical Results - Groundwater PAHs
Table D-9 Laboratory Analytical Results - Groundwater PPMs
Table D-10 Laboratory Analytical Results - Soil Vapor VOCs

## LIST OF ACRONYMS

| | |
|---|---|
| ADEC | Alaska Department of Environmental Conservation |
| CCDC | Capital City Development Corporation |
| COC | Chemical of concern |
| DEQ | Idaho Department of Environmental Quality |
| DSA | Discrete Sampling Area |
| DU | Decision Unit |
| EATL | Eurofins Air Toxics Laboratory |
| EDB | Ethylene Dibromide |
| EPA | U.S. Environmental Protection Agency |
| ESA | Environmental Site Assessment |
| ESC | Environmental Science Corporation |
| HASP | Health and Safety Plan |
| IDTLs | Initial Default Target Levels |
| IDW | Investigation Derived Waste |
| MDL | Method Detection Limit |
| MI | Multi Increment |
| PAHs | Polycyclic Aromatic Hydrocarbons |
| PID | Photo-ionization Detector |
| PPM | Priority Pollutant Metal |
| ppm | Parts per million |
| QAPP | Quality Assurance Project Plan |
| RSL | Regional Screening Level |
| RUSLs | Residential Use Screening Levels |
| SISA | Site Investigation and Sample Analysis |
| VISL | Vapor Intrusion Screening Level |
| VOCs | Volatile organic compounds |
| VRA | Voluntary Remediation Agreement |

# 1.0 PROJECT INTRODUCTION

This Site Investigation Sampling and Analysis (SISA) report describes the voluntary site investigation activities for 620 S. 9th Street LLC's proposed 'The Afton' development located at 620 S. 9th Street in Boise, Idaho (site), as shown on Figure 1, *Site Plan*. This investigation includes the two site development phases: Phase 1 comprising the eastern portion of 620 S. 9th Street formerly occupied by a small office building, a warehouse, and paved parking areas; and Phase 2 encompassing the western portion occupied by the former Associated Warehouse building.

This SISA has been prepared for the site to be in compliance with requirements of the Department of Environmental Quality's (DEQs) Voluntary Remediation Agreement (VRA), as outlined in Idaho Administrative Code IDAPA 58.01.18 Section 22.03(a). Strata, A Professional Services Corporation (STRATA) performed these services for 620 S. 9th Street LLC referencing our proposal BOP15086C, dated June 30, 2015.

## 1.1 Purpose

The purpose of this project was to assess the site soil, soil vapor, and groundwater with respect to past site use. Data collection included subsurface soil sampling from composite multi increment (MI) boreholes, discrete sample boreholes, groundwater monitoring, and soil vapor point sampling.

## 1.2 Background

The site has been owned by the Capitol City Development Corporation (CCDC) since 2001. The proposed Phase 1 site portion was occupied by residential dwellings from 1893 until approximately 1950. A small warehouse was constructed in the 1960's and utilized by various businesses through 2015. Though gasoline fuel and paint were noted in the Gem Environmental January 2015, Phase I Environmental Site Assessment (ESA), a CCDC representative reported that Valley Landscape does not store or use chemical pesticides or herbicides at the site.

The proposed Phase 2 site portion was operated as the Boise Iron Works and Foundry Co. from 1912 to 1950. The former site warehouse structure was constructed in 1951 and used as an electronic wholesale warehouse until 1985. Between 1990 and 2001, the warehouse was occupied by various commercial businesses including computer arts and audio visual companies. The CCDC permitted the Boise Public Works Department to store equipment and material, and allowed the site to be periodically used by the Boise City Fire Department for training.


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The site buildings were demolished in July 2015, in preparation for this investigation and proposed site development as The Afton, a multi-use commercial and residential complex. DEQ is concerned that past site use impacts as a foundry and potential impacts from past adjacent property uses have not been fully assessed.

The work performed for this project is to fill previous investigation data gaps needed to assess the site. The primary chemicals of concern for this project are volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs), and priority pollutant metals (PPMs).

### 1.3 Scope of Services

The primary objective for this SISA is to collect subsurface soil, deep soil vapor, and groundwater samples to evaluate impacts from past site and adjacent property use. STRATA's services were performed referencing our Proposal dated May 26, 2015, and Revised Proposal, dated July 23, 2015, and included:

- Preparing a Site Investigation Sampling and Analysis Plan;
- Preparing a Quality Assurance Project Plan (QAPP) prior to beginning fieldwork activities;
- Preparing a health and safety plan (HASP) for the proposed fieldwork activities;
- Subcontracting with an Idaho licensed drilling contractor to advance boreholes and install monitoring wells and soil vapor points;
- Overseeing drilling activities, logging soils, and collecting subsurface soil samples;
- Developing and sampling temporary groundwater monitoring wells;
- Sampling deep soil vapor points; and
- Preparing this report documenting the drilling activities, soil and groundwater sampling activities, analytical test results, and STRATA's conclusions and recommendations.

### 1.4 Limitations

Conditions may vary from those encountered at specific excavations, tests, assessments, investigations, or exploratory services; the data, interpretations, findings, and our recommendations are based solely upon data obtained at the time and within the scope of these services. STRATA's services were performed in a manner consistent with generally accepted practices of the profession undertaken in similar situations in the same geographical area during the same time period. STRATA makes no warranties, either express or implied, regarding the findings, opinions, or recommendations. Please note STRATA does not warrant the work of laboratories, regulatory agencies, or other third parties supplying information used in the


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preparation of the report. These SISA services were performed in accordance with Proposal BO15086C, dated July 23, 2015, and reference ASTM E1903-11.

Findings, opinions, and recommendations resulting from these services are based upon information derived from the on-site activities and other services performed under this scope of services; such information is subject to change over time. Certain indicators of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, non-detectable, or not present during these services, and we cannot represent the site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified. Subsurface conditions may vary from those encountered at specific test pits or wells or during other surveys, tests, assessments, investigations, or exploratory services. The data, interpretations, findings, and our recommendations are based solely upon data obtained at the time and within the scope of these services.

This report and its attachments have been prepared for the exclusive use of 620 S. 9th Street LLC, DEQ, and the CCDC, and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the site) is prohibited without the express written authorization of 620 S. 9th Street LLC, and STRATA. Any unauthorized distribution or reuse is at the client's sole risk. Notwithstanding the foregoing, reliance by authorized parties will be subject to the terms, conditions, and limitations stated in this report.

### 1.5 Health and Safety

Field services were performed referencing the HASP (STRATA, 2015a). STRATA personnel acted as the Site Safety and Health Officer for the project and performed both safety and environmental surveillance during the fieldwork. A copy of the HASP was maintained in the field. Field personnel, including subcontractors, received a briefing summarizing key elements of the HASP and were required to sign the HASP acknowledging understanding and acceptance of the procedures outlined therein. Prior to commencing work, a site safety (tailgate) meeting was held by STRATA to cover planned activities and potential safety hazards.

### 1.6 Deviations from the QAPP

Total lead samples were analyzed for Toxicity Characteristic Leaching Procedure (TCLP) based on total lead results exceeding the 20X TCLP analytical results. The TCLP analysis was not outlined in the approved QAPP (STRATA, 2015b).


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## 2.0 SITE LOCATION AND GENERAL VICINITY DESCRIPTION

The site is located at 620 S. 9th Street in Boise, Idaho, as indicated on Figure 1, *Site Map*. The site is currently vacant; the buildings which occupied the site being demolished in July 2015. The site is situated amid mixed-use commercial properties. South 9th Street, a small vacant building, and paved public parking area bound the site to the north. West River Street and the intersection of West River Street and S. 9th Street bound the site on the south. South across West River Street is the Frame Job/River House Gallery, BioMark, office buildings, and the Boise River beyond the office buildings. Paved and gravel public parking pay lots, a small warehouse building, South 8th Street, and the Foothills School are located to the east; and South 9th Street, Idaho Self Storage, West Lee Street, and the Mardi Gras Events Center are located to the west of the site.

### 2.1 Geology

The site is in the central portion of the Western Snake River Plain. The Western Snake River Plain is a northwest-trending structural basin bounded by high angle faults of Miocene and younger age. The basin separates the mountains of the Idaho Batholith on the northeast and the Owyhee Range on the southwest. Sedimentary deposits shed from adjacent uplands, as well as basaltic and andesitic flows and ash deposits associated with regional volcanic activity, fill the basin to depths exceeding 4,000 feet (Othberg, 1994).

The site vicinity is underlain by Alluvium of Boise and Snake River. The alluvium is comprised of sandy cobble gravel up to 45 feet thick (Othberg and Stanford, 1992). Boring logs from the site indicate engineered gravel and silty sand fill material up to 7 feet below ground surface overlying silty sand and gravel with sand to a depth of 20 feet below ground surface (STRATA, 2011).

## 3.0 FIELD INVESTIGATION

Field activities were performed in July 2015. A STRATA environmental professional performed supervised the drilling activities, and performed soil, groundwater, and soil vapor sampling.

### 3.1 Multi Increment and Discrete Soil Sampling

Cascade Drilling, LLP of Meridian, Idaho was subcontracted to perform direct-push borehole drilling. Using a Geoprobe 6620, a total of 260 multi increment (MI) and discrete sample boreholes were advanced, sampled, and backfilled on July 27 through 30, 2015.


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Three Decision Units (DUs) and three discrete sampling areas (DSAs) were delineated for site sampling purposes, and are shown on Figure 2, *Proposed Development Phases, Decision Unit, and Discrete Sampling Area Locations*. DU #1 comprised the northern one-half of Phase 1; DU #2 comprised the southern one-half of Phase 1; and DU #3 encompassing the former Associated Warehouse building footprint. Discrete soil sampling was conducted in four site locations: within DU#1 in the vicinity of the drum observed adjacent to the Small Warehouse Building, as noted in the Gem Environmental Phase I ESA (Gem, 2015); in DSA#1 along the railroad spur (now alleyway) along the western Phase 1 boundary; in DSA#2 in the paved loading dock area along the northern site boundary; and in DSA#3 in the paved parking area along the southern site boundary.

MI Soil Sampling

Each DU was sampled referencing protocols in the Interstate Technology Regulatory Council *Incremental Sampling Methodology Technical and Regulatory Guidance* (ITRC, February 2012).

Thirty soil aliquots were collected for each DU sample. Each aliquot was collected between 1.0 and 1.5 feet below ground surface using direct push macrocore drilling methods. Aliquot sampling locations were selected using Microsoft® Excel's <RANDBETWEEN> function to generate random numbers oriented to a grid system developed for each DU. An aliquot sample location based on the randomly generated grid numbers was marked in the field using temporary marker cones or pin flags. Collected soil core aliquots were placed in a triple-rinsed 5-gallon plastic bucket, and blended by shaking and rotating the bucket (with lid). The mixed soil was transferred to an aluminum foil baking pan for further homogenization and sampling using the cone and quartering method (Gerlach and Nocerino, 2013). This sequence (random number generation, field locating, aliquot collection, blending, and quartering) was repeated for each sample collected in the DUs.

To reduce volatilization, VOC soil samples were collected referencing Alaska Department of Environmental Conservation (ADEC) Method AK 101 Gasoline Range Organics from five randomly-generated borehole locations using <RANDBETWEEN> in each DU and submitted for analysis by Environmental Protection Agency (EPA) Method 8260B (ADEC, 2009). The ADEC Method AK 101 allows for collecting and solvent extracting composite VOC soil samples similar to EPA Method 5035. Each VOC composite sample consisted of five, 5


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gram subsamples collected directly from the soil cores, using a laboratory-supplied Terracore Soil Sampler, and placed in a 60 milliliter container with methanol solvent.

Based on historical site usage and per ITRC guidance to develop 95% confidence intervals on mean concentrations, two MI soil samples and one duplicate (or co-located in the case of the VOC samples), designated DU1 S-1, DU1 S-2, and DU1 S-3 were collected from DU #1, respectively. Two MI soil samples and a duplicate, designated DU2 S-1, DU2 S-2, and DU2-S-3, respectively, were collected from DU #2. Three MI soil samples and a duplicate, designated DU3 S-1, DU3 S-2, DU3 S-3, and DU3 S-4, respectively, were collected from DU#3. A total of 10 MI soil samples (7 plus 3 duplicates) were collected, and a total of 10 Method AK 101 VOC soil samples (7 plus 3 duplicates) were collected.

The soil samples were collected in laboratory-supplied containers, placed in an ice-filled cooler, and submitted to Environmental Science Corporation laboratory (ESC) in Mt. Juliet, Tennessee for analysis of VOCs by EPA Method 8260B, PAHs by EPA Method 8270C-SIM, and PPMs using EPA Method 6010/7471. Additionally, soil samples DU3 S-2 and DU3 S-3 were analyzed for lead TCLP by EPA Method 6010B.

Discrete Soil Sampling

Discrete soil sampling was conducted in DU#1 within obvious soil staining in the vicinity of the drum adjacent to the former Small Warehouse Building, as noted in the Gem Environmental Phase I ESA. A borehole was advanced to a depth of approximately 17.5 feet below ground surface at this location (and completed as temporary monitoring well TW-1). The soil core was screened using a photo-ionization detector (PID) and logged. One soil sample was collected from a depth of 3 feet below ground surface: where the interval with the highest PID reading of 0.9 parts per million (ppm), was reported. The soil sample was collected in laboratory-supplied containers, placed in an ice-filled cooler and submitted to ESC for analysis of VOCs by EPA Method 8260B (referencing EPA Method 5035); and PAHs by EPA Method 8270C-SIM.

Discrete soil sampling was conducted in DSA#1. Four soil borings were advanced on approximately 35 foot centers (as measured from the W. River Street sidewalk gutter on the southern site boundary) to depths ranging between 1.0 and 1.5 feet below ground surface, as shown on Figure 3, *Discrete Soil, Temporary Monitoring Well, and Soil Vapor Point Locations*.

Discrete soil sampling was also conducted in DSA#2 and DSA#3, at locations shown on Figure 3. Four DSA#2 samples were collected between 1.0 and 1.5 feet below ground surface.


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One borehole was further advanced to 17.5 feet below ground surface and completed as a temporary monitoring well (TW-3). Five DSA#3 samples were also collected from between 1.0 and 1.5 feet below ground surface.

The 14 soil samples (13 plus one duplicate) were collected in laboratory-supplied containers, placed in an ice-filled cooler and submitted to ESC for analysis of VOCs by EPA Method 8260B (referencing EPA Method 5035); PAHs by EPA Method 8270C-SIM, and PPMs using EPA Method 6010/7471.

MI and discrete soil sample analytical results are compared to Residential Use Screening Levels (RUSLs), for petroleum compounds established in the Petroleum Risk Evaluation Manual (DEQ, 2012), the Initial Default Target Levels (IDTLs) from the DEQ Risk Evaluation Manual (DEQ, 2004) for non-petroleum constituents, and the EPA Regional Screening Levels (RSLs) (EPA, 2015) for constituents with no established RUSLs or IDTLs.

Investigation-derived waste (IDW) from onsite drilling and sampling activities was returned to the on-site soil stockpile. The soil analytical data described above may be used to assess toxicity characteristic hazardous waste constituents for the stockpiled soil disposal purposes.

### 3.1.1 Monitoring Well Installation and Sampling Methods

STRATA installed four temporary groundwater monitoring wells at the site to assess groundwater quality and to ascertain groundwater flow direction. The locations of the monitoring wells, designated TW-1 through TW-4, are shown on Figure 3 and Figure 4, *Groundwater Potentiometric Contour Map*. The four, 1-inch wells were each installed to depths of 17.5 feet below ground surface. The wells were installed by an Idaho licensed drilling contractor in accordance with Idaho Administrative Code IDAPA 37.03.09, Section 025, and observed by a STRATA environmental professional licensed as a geologist in the state of Idaho.

The monitoring wells were developed by STRATA using a pump and surge method until purge water ran clear. The monitoring wells were allowed to rest at least 24 hours prior to sampling.

One groundwater monitoring event was performed using the temporary monitoring wells on July 31, 2015. Prior to purging, depth to groundwater was measured in each well with an electronic water level meter. Measured water level data was used to calculate groundwater elevations using top-of-casing survey data prepared by STRATA for this project. Based on the calculated piezometric surface elevations, site groundwater flow is to the west-northwest at a


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gradient of about 0.004 ft/ft. Groundwater elevation data is presented in Appendix C, Table C-1. Groundwater potentiometric surface elevation contours are shown on Figure 4.

Prior to sampling, each monitoring well was purged using a low-flow pump and flow cell. Measured water quality parameters included temperature, oxygen reduction potential, turbidity, specific conductivity, pH and dissolved oxygen during purging activities. Groundwater samples were collected after groundwater parameters stabilized. Stabilization is defined by EPA (1996) as the last three readings from 5 minute intervals showing dissolved oxygen within 10 percent, pH within 0.1 unit, temperature within 10 percent, specific conductivity within 3 percent, depth to water within 0.2 feet, and turbidity within 10 percent. Water quality parameter data are presented on Tables C-2 through C-5 in Appendix C.

Groundwater samples were collected in laboratory-supplied containers and submitted to ESC for analytical testing according to the following analytical testing schedules:

- VOCs by EPA Method 8260B
- 1,2-Dibromoethane (EDB) by EPA Method 8011;
- PAHs by EPA Method 8270C-SIM; and
- PPMs by EPA Method 6010B/7471A.

Groundwater analytical results were compared to the DEQ Petroleum RUSLs or IDTLs. Groundwater analytical results are discussed later in the report.

IDW from groundwater sampling activities was drummed and stored onsite. The groundwater analytical data described above will be used to assess toxicity characteristic hazardous waste constituents for the purge water. Based on the analytical results, the purge water is non-hazardous and with DEQ's permission may be disposed on-site.

### 3.2 Soil Vapor

Two deep soil vapor points (VP-1 and VP-2) were installed in the gravel fill in the former Associated Warehouse basement location, as shown on Figure 3. Each soil vapor point construction consists of a Teflon™ tubing extending to the surface from a 6-inch stainless steel screen located at a sample depth of 5-feet below ground surface.

Prior to sampling, each vapor point was checked for ambient air leakage to the subsurface referencing the tracer gas method in the *Handbook for Site-Specific Assessment of Sub-Surface Vapor Intrusion to Indoor Air* (EPRI, 2005). First, a shroud was placed over the soil vapor point surface seal. Teflon™ tubing was routed from the sampling port through the shroud. The soil vapor point and tubing were purged at least three volumes of air to remove stagnant residual air from the sample train. A portable multi-gas detector was used to monitor the soil


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vapor and ambient air within the shroud prior to and after injection of the helium tracer gas. A greater than 5 percent concentration of helium recorded through the soil vapor port is considered unacceptable; however, helium was not detected in the sampling points during the tracer testing. Appendix D, Table D-1 presents the helium gas readings for the soil vapor points.

Upon completion of the leak test, a three-gas meter with attached vacuum pump was connected to the Teflon™ tubing and the vacuum pumped activated. The three-gas meter was allowed to run and continuously display readings until the displayed readings stabilized. Percent oxygen, and carbon dioxide and methane readings were recorded. The three-gas meter recorded low oxygen levels and low carbon dioxide readings. A PID was also used to record total VOC readings from the sample point. Stabilized readings of 0.0 ppm were recorded during the sampling. Appendix D, Table D-2 summarizes the field screening data from the three-gas meter and PID for the soil vapor points.

Immediately after leak detection activities, a soil vapor sample was collected by attaching a certified one-liter Summa Canister and flow regulator supplied by Eurofins Air Toxics Laboratory (EATL) of Folsom, California. The Summa Canister remained attached to the sampling point until canister pressure read less than 6.4 inches of mercury. The soil vapor samples were submitted to EATL for laboratory analysis of VOCs by EPA Method TO-15 Low Level. The analytical results are compared to the DEQ Vapor Intrusion Screening Levels (VISLs) or the EPA RSLs for Residential Air (June 2015). Copies of the executed chain-of-custody form and laboratory data sheets are provided in Appendix E (EATL Report No. 1507528). Soil vapor sample results can be found in Appendix D, Tables D-10 and D-11, and are discussed later in this report.

## 3.3 Laboratory Analytical Results

### 3.3.1 Soil Sampling Results

Ten MI soil samples (7 plus 3 duplicates) were collected from DU's #1 through 3. Fourteen discrete soil samples (13 plus one duplicate) were collected from DU#1, and the DSAs #1 through 3. The following summarizes the results of laboratory analyses performed on the site soil samples. Laboratory result summaries are presented in Tables D-3 through D-6 of Appendix D. Borehole sampling locations are illustrated on Figure 3.

Soil sample analytical results were compared to DEQ's Petroleum RUSLs. If the chemical of concern (COC) was not listed on the Petroleum RUSL table they were compared to


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the DEQ IDTLs, or the EPA RSLs for Residential sites. The laboratory analytical report (ESC Report No. L779930) is included in Appendix E. The following summarizes the sample results:

- DU1 S-1/S-3 - VOC analytes were not detected above the laboratory Method Detection Limits (MDLs). However, due to sample dilution the following analyte MDLs exceeded the regulatory screening levels (acrylonitrile, bromodichloromethane, bromomethane, carbon tetrachloride, chloroform, 1,2-dibromo-3-chloropropane, EDB, 1,2-dichloropropane, cis-1,3-dichloropropene, trans-1,3-dichloropropene, methylene chloride, 1,1,2,2-tetrachloroethane, trichloroethene, 1,2,3-trichloropropane, and vinyl chloride).

  The PAH analytes benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and dibenz(a,h)anthracene exceeded the RUSLs or IDTLs. Anthracene, acenaphthene, benzo(g,h,i)perylene, benzo(k)fluoranthracene, chrysene, fluoranthene, fluorene, indeno(1,2,3-cd)pyrene, phenanthrene, and pyrene were detected above the laboratory MDL, but did not exceed the RUSLs/IDTLs. The remaining PAH analytes were not reported above the laboratory MDLs.

  The PPM analytes arsenic, lead, and mercury exceeded the IDTLs. The silver MDL exceeds the IDTL, as noted in the project QAPP. Beryllium, cadmium, chromium, copper, nickel, and zinc were detected above the laboratory MDL, but did not exceed the IDTLs. Antimony was not reported above the MDL.

- DU1 S-2 – VOC analytes were not detected above the laboratory MDLs. However, due to sample dilution the following analyte MDLs exceeded the regulatory screening levels (acrylonitrile, bromodichloromethane, bromomethane, carbon tetrachloride, chloroform, 1,2-dibromo-3-chloropropane, EDB, 1,2-dichloropropane, cis-1,3-dichloropropene, trans-1,3-dichloropropene, methylene chloride, 1,1,2,2-tetrachloroethane, trichloroethene, 1,2,3-trichloropropane, and vinyl chloride).

  The PAH analytes benzo(a)anthracene and benzo(a)pyrene exceeded the RUSLs. Anthracene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthracene, chrysene, dibenz(a,h)anthracene, fluoranthene, indeno(1,2,3-cd)pyrene, phenanthrene, and pyrene were detected above the laboratory MDLs, but did not exceed the RUSLs/IDTLs/RSLs. The remaining PAH analytes were not reported above the laboratory MDLs.

  The PPM analytes arsenic, and mercury exceeded the IDTLs. The silver MDL exceeds the IDTL, as noted in the project QAPP. Beryllium, cadmium, chromium, copper, lead, nickel, and zinc were detected above the laboratory MDL, but did not exceed the IDTLs. Antimony was not reported above the MDL.

- DU2 S-1/S-3 – The VOC analytes naphthalene, toluene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, and total xylenes were detected above the laboratory MDLs. Additionally, due to sample dilution the following analyte MDLs exceeded the regulatory screening levels (acrylonitrile, bromodichloromethane, bromomethane, carbon tetrachloride, chloroform, 1,2-dibromo-3-chloropropane, EDB, 1,2-dichloropropane, cis-1,3-dichloropropene, trans-1,3-dichloropropene, methylene chloride, 1,1,2,2-tetrachloroethane, 1,1,2-trichloroethane, trichloroethene, 1,2,3-trichloropropane, and vinyl chloride).


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The PAH analytes benzo(a)anthracene and benzo(a)pyrene exceeded the RUSLs. Anthracene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthracene, chrysene, dibenz(a,h)anthracene, fluoranthene, indeno(1,2,3-cd)pyrene, phenanthrene, and pyrene were detected above the laboratory MDLs, but did not exceed the RUSLs/IDTLs/RSLs. The remaining PAH analytes were not reported above the laboratory MDLs.

The PPM analytes arsenic, lead, and mercury exceeded the IDTLs. The silver MDL exceeds the IDTL, as noted in the project QAPP. Beryllium, cadmium, chromium, copper, nickel, and zinc were detected above the laboratory MDL, but did not exceed the IDTLs. Antimony was not reported above the MDL.

- DU2 S-2 – The VOC analytes were not detected above the laboratory MDLs. However, due to sample dilution the following analyte MDLs exceeded the regulatory screening levels (acrylonitrile, bromodichloromethane, chloroform, 1,2-dibromo-3-chloropropane, EDB, cis-1,3-dichloropropene, trans-1,3-dichloropropene, methylene chloride, 1,1,2,2-tetrachloroethane, trichloroethene, and 1,2,3-trichloropropane).

  The PAH analyte benzo(a)pyrene exceeded the RUSL. The analytes benzo(a)anthracene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthracene, chrysene, dibenz(a,h)anthracene, fluoranthene, indeno(1,2,3-cd)pyrene, phenanthrene, and pyrene were detected above the laboratory MDLs, but did not exceed the RUSLs/IDTLs/RSLs. The remaining PAH analytes were not reported above the laboratory MDLs.

  The PPM analytes arsenic, lead, and mercury exceeded the IDTLs. The silver MDL exceeds the IDTL, as noted in the project QAPP. Beryllium, cadmium, chromium, copper, nickel, and zinc were detected above the laboratory MDL, but did not exceed the IDTLs. Antimony was not reported above the MDL.

- DU3 S-1/S-4 – The VOC analytes naphthalene and 1,2,4-trimethylbenzene were detected above the laboratory MDLs, but did not exceed their respective RUSL or IDTL. Due to sample dilution the following analyte MDLs exceeded the regulatory screening levels (acrylonitrile, bromodichloromethane, chloroform, 1,2-dibromo-3-chloropropane, EDB, 1,2-dichloropropane, cis-1,3-dichloropropene, trans-1,3-dichloropropene, methylene chloride, 1,1,2,2-tetrachloroethane, trichloroethene, and 1,2,3-trichloropropane). The remaining VOC analytes were not detected above the laboratory MDLs.

  The PAH analytes benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene exceeded their respective RUSLs or IDTLs. The analytes anthracene, acenaphthene, benzo(g,h,i)perylene, benzo(k)fluoranthracene, chrysene, fluoranthene, fluorene, naphthalene, phenanthrene, pyrene, 1-methylnaphthalene, and 2-methylnaphthalene were detected above the laboratory MDLs, but did not exceed the RUSLs/IDTLs/RSLs. The remaining PAH analytes were not reported above the laboratory MDLs.

  The PPM analytes arsenic, lead, and mercury exceeded the IDTLs. The silver MDL exceeds the IDTL, as noted in the project QAPP. Antimony, beryllium, cadmium, chromium, copper, nickel, and zinc were detected above the laboratory MDLs, but did not exceed the IDTLs.


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- DU3 S-2 – Due to sample dilution the following analyte MDLs exceeded the regulatory screening levels (acrylonitrile, bromodichloromethane, chloroform, 1,2-dibromo-3-chloropropane, EDB, 1,2-dichloropropane, cis-1,3-dichloropropene, trans-1,3-dichloropropene, methylene chloride, 1,1,2,2-tetrachloroethane, trichloroethene, and 1,2,3-trichloropropane). The remaining VOC analytes were not detected above the laboratory MDLs.

  The PAH analytes benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene exceeded their respective RUSLs or IDTLs. The analytes anthracene, acenaphthene, acenaphthylene, benzo(g,h,i)perylene, benzo(k)fluoranthracene, chrysene, fluoranthene, fluorene, naphthalene, phenanthrene, pyrene, 1-methylnaphthalene, and 2-methylnaphthalene were detected above the laboratory MDLs, but did not exceed the RUSLs/IDTLs/RSLs. The remaining PAH analytes were not reported above the laboratory MDLs.

  The PPM analytes arsenic, copper, lead, mercury, and silver exceeded the IDTLs. Antimony, beryllium, cadmium, chromium, nickel, and zinc were detected above the laboratory MDLs, but did not exceed the IDTLs. The total lead TCLP analysis result did not exceed the MDL.

- DU3 S-3 – Due to sample dilution the following analyte MDLs exceeded the regulatory screening levels (acrylonitrile, bromodichloromethane, chloroform, 1,2-dibromo-3-chloropropane, EDB, 1,2-dibromopropane, cis-1,3-dichloropropene, trans-1,3-dichloropropene, methylene chloride, 1,1,2,2-tetrachloroethane, trichloroethene, and 1,2,3-trichloropropane). The remaining VOC analytes were not detected above the laboratory MDLs.

  The PAH analytes benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene, and naphthalene exceeded their respective RUSLs or IDTLs. The analytes anthracene, acenaphthene, benzo(g,h,i)perylene, benzo(k)fluoranthracene, chrysene, fluoranthene, fluorene, phenanthrene, pyrene, 1-methylnaphthalene, and 2-methylnaphthalene were detected above the laboratory MDLs, but did not exceed the RUSLs/IDTLs/RSLs. The remaining PAH analytes were not reported above the laboratory MDLs.

  The PPM analytes arsenic, lead, mercury, and silver exceeded the IDTLs. Antimony, beryllium, cadmium, chromium, copper, nickel, and zinc were detected above the laboratory MDLs, but did not exceed the IDTLs. The total lead TCLP analysis result did not exceed the MDL.

- B-TW-1 – The analytes acetone, benzene, 2-butanone, and toluene were reported above the MDLs but did not exceed their respective RUSLs/IDTLs/RSLs. Due to sample dilution the following analyte MDLs exceeded the regulatory screening levels (acrylonitrile, 1,2-dibromo-3-chloropropane, EDB, and 1,2,3-trichloropropane). The remaining VOC analytes were not detected above the laboratory MDLs.

  The PAH analyte benzo(b)fluoranthene exceeded the RUSL. The analytes anthracene, acenaphthene, benzo(a)anthracene, benzo(a)pyrene, benzo(g,h,i)perylene, benzo(k)fluoranthracene, chrysene, dibenz(a,h)anthracene, fluoranthene, indeno(1,2,3-cd)pyrene, phenanthrene, and pyrene were detected above the laboratory MDLs, but


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did not exceed the RUSLs/IDTLs/RSLs. The remaining PAH analytes were not reported above the laboratory MDLs.

The PPMs were not analyzed for this sample per the project QAPP.

- B-1 – The VOC analyte naphthalene exceeded the RUSL. The analytes benzene, p-isopropyltoluene, toluene, 1,2,4-trimethylbenzene, 1,2,3-trimethylbenzene, 1,3,5-trimethylbenzene, and total xylenes were reported above the MDLs but did not exceed their respective RUSLs/IDTLs/RSLs. Additionally, due to sample dilution the following analyte MDLs exceeded the regulatory screening levels (acrylonitrile, bromodichloromethane, chloroform, 1,2-dibromo-3-chloropropane, EDB, 1,2-dichloropropane, cis-1,3-dichloropropene, trans-1,3-dichloropropene, methylene chloride, 1,1,2,2-tetrachloroethane, trichloroethene, 1,2,3-trichloropropane, and vinyl chloride). The remaining VOC analytes were not detected above the laboratory MDLs.

  The PAH analytes benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene, and naphthalene exceeded their respective RUSLs or IDTLs. The analytes anthracene, acenaphthene, benzo(g,h,i)perylene, benzo(k)fluoranthracene, chrysene, fluoranthene, phenanthrene, pyrene, 1-methylnaphthalene, and 2-methylnaphthalene were detected above the laboratory MDLs, but did not exceed the RUSLs/IDTLs/RSLs. The remaining PAH analytes were not reported above the laboratory MDLs.

  The PPM analytes arsenic, lead, and mercury exceeded the IDTLs. The silver MDL exceeds the IDTL, as noted in the project QAPP. Antimony, beryllium, cadmium, chromium, copper, nickel, and zinc were detected above the laboratory MDLs, but did not exceed the IDTLs.

- B-2 – The VOC analytes benzene, naphthalene, and 1,2,4-trimethylbenzene exceeded the RUSLs or IDTLs. The analytes n-butylbenzene, sec-butylbenzene, ethylbenzene, isopropylbenzene, p-isopropyltoluene, n-propylbenzene, toluene, 1,2,3-trimethylbenzene, 1,3,5-trimethylbenzene, and total xylenes were detected above the MDLs, but did not exceed the regulatory screening levels. Additionally, due to sample dilution the following analyte MDLs exceeded the regulatory screening levels (acrylonitrile, bromodichloromethane, bromomethane, carbon tetrachloride, chloroform, 1,2-dibromo-3-chloropropane, EDB, 1,2-dichloropropane, cis-1,3-dichloropropene, trans-1,3-dichloropropene, methylene chloride, 1,1,2,2-tetrachloroethane, trichloroethene, 1,2,3-trichloropropane, and vinyl chloride). The remaining VOC analytes were not detected above the laboratory MDLs.

  The PAH analytes benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and naphthalene exceeded their respective RUSLs or IDTLs. The analytes anthracene, acenaphthene, acenaphthylene, benzo(g,h,i)perylene, benzo(k)fluoranthracene, chrysene, dibenz(a,h)anthracene, fluoranthene, indeno(1,2,3-cd)pyrene, phenanthrene, pyrene, 1-methylnaphthalene, and 2-methylnaphthalene were detected above the laboratory MDLs, but did not exceed the RUSLs/IDTLs/RSLs. The remaining PAH analytes were not reported above the laboratory MDLs.

  The PPM analytes arsenic, lead, and mercury exceeded the IDTLs. The silver MDL exceeds the IDTL, as noted in the project QAPP. Antimony, beryllium, cadmium,


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chromium, copper, nickel, and zinc were detected above the laboratory MDLs, but did not exceed the IDTLs.

- B-3 – Due to sample dilution the following analyte MDLs exceeded the regulatory screening levels (acrylonitrile, bromodichloromethane, chloroform, 1,2-dibromo-3-chloropropane, EDB, 1,2-dichloropropane, cis-1,3-dichloropropene, trans-1,3-dichloropropene, methylene chloride, 1,1,2,2-tetrachloroethane, trichloroethene, and 1,2,3-trichloropropane). The remaining VOC analytes were not detected above the laboratory MDLs.

  The PAH analytes benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthracene, chrysene, fluoranthene, indeno(1,2,3-cd)pyrene, and pyrene were detected above the laboratory MDLs, but did not exceed the RUSLs/IDTLs/RSLs. The remaining PAH analytes were not reported above the laboratory MDLs.

  The PPM analytes arsenic and mercury exceeded their IDTLs. The silver MDL exceeds the IDTL, as noted in the project QAPP. Beryllium, chromium, copper, lead, nickel, and zinc were detected above the laboratory MDLs, but did not exceed the IDTLs. Antimony and cadmium were not reported above the MDLs.

- B-4 – Due to sample dilution the following analyte MDLs exceeded the regulatory screening levels (acrylonitrile, bromodichloromethane, chloroform, 1,2-dibromo-3-chloropropane, EDB, cis-1,3-dichloropropene, trans-1,3-dichloropropene, methylene chloride, 1,1,2,2-tetrachloroethane, and 1,2,3-trichloropropane). The remaining VOC analytes were not detected above the laboratory MDLs.

  The PAH analyte benzo(a)pyrene exceeded the RUSL. The analytes anthracene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthracene, chrysene, dibenz(a,h)anthracene, fluoranthene, indeno(1,2,3-cd)pyrene, phenanthrene, and pyrene were detected above the laboratory MDLs, but did not exceed the RUSLs/IDTLs/RSLs. The remaining PAH analytes were not reported above the laboratory MDLs.

  The PPM analytes arsenic and mercury exceeded their IDTLs. The silver MDL exceeds the IDTL, as noted in the project QAPP. Beryllium, cadmium, chromium, copper, lead, nickel, and zinc were detected above the laboratory MDLs, but did not exceed the IDTLs. Antimony was not reported above the MDL.

- TW-3-1 – The analytes acetone, benzene, and 2-butanone were detected above the MDLs, but did not exceed their regulatory screening levels. Due to sample dilution the following analyte MDLs exceeded the regulatory screening levels (acrylonitrile, 1,2-dibromo-3-chloropropane, EDB, and 1,2,3-trichloropropane). The remaining VOC analytes were not detected above the laboratory MDLs.

  The PAH analytes benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene exceeded their respective RUSLs or IDTLs. The analytes anthracene, acenaphthene, acenaphthylene, benzo(g,h,i)perylene, benzo(k)fluoranthracene, chrysene, fluoranthene, fluorene, naphthalene, phenanthrene, pyrene, and 2-methylnaphthalene were detected above the laboratory MDLs, but did not exceed the RUSLs/IDTLs/RSLs. The remaining PAH analytes were not reported above the laboratory MDLs.


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The PPM analytes arsenic and mercury exceeded their IDTLs. The silver MDL exceeds the IDTL, as noted in the project QAPP. Beryllium, cadmium, chromium, copper, lead, nickel, and zinc were detected above the laboratory MDLs, but did not exceed the IDTLs. Antimony was not reported above the MDL.

- B-6 – The analytes acetone, benzene, toluene, 1,2,3-trimethylbenzene, and total xylenes were detected above the MDLs, but did not exceed their regulatory screening levels. Due to sample dilution the following analyte MDLs exceeded the regulatory screening levels (acrylonitrile, 1,2-dibromo-3-chloropropane, EDB, and 1,2,3-trichloropropane). The remaining VOC analytes were not detected above the laboratory MDLs.

  The PAH analytes benzo(a)pyrene, benzo(b)fluoranthene, dibenz(a,h)anthracene, and naphthalene exceeded their respective RUSLs or IDTLs. The analytes anthracene, acenaphthene, acenaphthylene, benzo(a)anthracene, benzo(g,h,i)perylene, benzo(k)fluoranthracene, chrysene, fluoranthene, fluorene, indeno(1,2,3-cd)pyrene, phenanthrene, pyrene, 1-methylnaphthalene, and 2-methylnaphthalene were detected above the laboratory MDLs, but did not exceed the RUSLs/IDTLs/RSLs. The remaining PAH analytes were not reported above the laboratory MDLs.

  The PPM analytes arsenic, lead, and mercury exceeded their IDTLs. The silver MDL exceeds the IDTL, as noted in the project QAPP. Antimony, beryllium, cadmium, chromium, copper, nickel, and zinc were detected above the laboratory MDLs, but did not exceed the IDTLs.

- B-7 – The analytes acetone, benzene, and 2-butanone were detected above the MDLs, but did not exceed their regulatory screening levels. Due to sample dilution the following analyte MDLs exceeded the regulatory screening levels (acrylonitrile, 1,2-dibromo-3-chloropropane, EDB, and 1,2,3-trichloropropane). The remaining VOC analytes were not detected above the laboratory MDLs.

  The PAH analytes benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, fluoranthene, and pyrene were detected above the laboratory MDLs, but did not exceed the RUSLs/IDTLs. The remaining PAH analytes were not reported above the laboratory MDLs.

  The PPM analytes arsenic and mercury exceeded their IDTLs. The silver MDL exceeds the IDTL, as noted in the project QAPP. Beryllium, cadmium, chromium, copper, lead, nickel, and zinc were detected above the laboratory MDLs, but did not exceed the IDTLs. Antimony was not reported above the MDL.

- B-8 – The analytes acetone and benzene were detected above the MDLs, but did not exceed their regulatory screening levels. Due to sample dilution the following analyte MDLs exceeded the regulatory screening levels (acrylonitrile, 1,2-dibromo-3-chloropropane, EDB, and 1,2,3-trichloropropane). The remaining VOC analytes were not detected above the laboratory MDLs.

  The PAH analytes anthracene, acenaphthene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthracene, chrysene, dibenz(a,h)anthracene, fluoranthene, fluorene, indeno(1,2,3-cd)pyrene, phenanthrene, and pyrene were detected above the laboratory MDLs, but did not exceed the


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RUSLs/IDTLs. The remaining PAH analytes were not reported above the laboratory MDLs.

The PPM analytes arsenic and mercury exceeded their IDTLs. The silver MDL exceeds the IDTL, as noted in the project QAPP. Beryllium, chromium, copper, lead, nickel, and zinc were detected above the laboratory MDLs, but did not exceed the IDTLs. Antimony and cadmium were not reported above the MDL.

- B-9 - Due to sample dilution the following analyte MDLs exceeded the regulatory screening levels (acrylonitrile, 1,2-dibromo-3-chloropropane, EDB, and 1,2,3-trichloropropane). The analytes acetone, benzene, 2-butanone, tetrachloroethene, and toluene were detected above the MDLs, but did not exceed their regulatory screening levels. The remaining VOC analytes were not detected above the laboratory MDLs.

  The PAH analytes benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and dibenz(a,h)anthracene exceeded their RUSL or IDTL. The analytes anthracene, benzo(g,h,i)perylene, benzo(k)fluoranthracene, chrysene, fluoranthene, fluorene, indeno(1,2,3-cd)pyrene, naphthalene, phenanthrene, pyrene, and 2-methylnaphthalene were detected above the laboratory MDLs, but did not exceed the RUSLs/IDTLs. The remaining PAH analytes were not reported above the laboratory MDLs.

  The PPM analytes arsenic, lead, and mercury exceeded their IDTLs. The silver MDL exceeds the IDTL, as noted in the project QAPP. Beryllium, cadmium, chromium, copper, nickel, and zinc were detected above the laboratory MDLs, but did not exceed the IDTLs. Antimony was not reported above the MDL.

- B-10 - Due to sample dilution the following analyte MDLs exceeded the regulatory screening levels (acrylonitrile, bromodichloromethane, 1,2-dibromo-3-chloropropane, EDB, cis-1,3-dichloropropene, trans-1,3-dichloropropene, methylene chloride, 1,1,2,2-tetrachloroethane, trichloroethene, and 1,2,3-trichloropropane). The remaining VOC analytes were not detected above the laboratory MDLs.

  The PAH analytes phenanthrene and pyrene were detected above the laboratory MDLs, but did not exceed the RUSLs or IDTLs. The remaining PAH analytes were not reported above the laboratory MDLs.

  The PPM analytes arsenic and mercury exceeded their IDTLs. The silver MDL exceeds the IDTL, as noted in the project QAPP. Beryllium, cadmium, chromium, copper, lead, nickel, and zinc were detected above the laboratory MDLs, but did not exceed the IDTLs. Antimony was not reported above the MDL.

- B-11 - Due to sample dilution the following analyte MDLs exceeded the regulatory screening levels (acrylonitrile, bromodichloromethane, chloroform, 1,2-dibromo-3-chloropropane, EDB, 1,2-dichloropropane, cis-1,3-dichloropropene, trans-1,3-dichloropropene, methylene chloride, 1,1,2,2-tetrachloroethane, trichloroethene, and 1,2,3-trichloropropane). The remaining VOC analytes were not detected above the laboratory MDLs.

  The PAH analytes benzo(a)anthracene and benzo(a)pyrene exceeded their RUSLs. The analytes anthracene, acenaphthene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthracene, chrysene, dibenz(a,h)anthracene, fluoranthene, fluorene,


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indeno(1,2,3-cd)pyrene, phenanthrene, and pyrene were detected above the laboratory MDLs, but did not exceed the RUSLs/IDTLs. The remaining PAH analytes were not reported above the laboratory MDLs.

The PPM analytes arsenic, lead, and mercury exceeded their IDTLs. The silver MDL exceeds the IDTL, as noted in the project QAPP. Beryllium, cadmium, chromium, copper, nickel, and zinc were detected above the laboratory MDLs, but did not exceed the IDTLs. Antimony was not reported above the MDL.

- B-12 - Due to sample dilution the following analyte MDLs exceeded the regulatory screening levels (acrylonitrile, bromodichloromethane, chloroform, 1,2-dibromo-3-chloropropane, EDB, 1,2-dichloropropane, cis-1,3-dichloropropene, trans-1,3-dichloropropene, methylene chloride, 1,1,2,2-tetrachloroethane, trichloroethene, and 1,2,3-trichloropropane). The remaining VOC analytes were not detected above the laboratory MDLs.

  The PAH analyte benzo(a)pyrene exceeded the RUSL. The analytes anthracene, acenaphthene, acenaphthylene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthracene, chrysene, dibenz(a,h)anthracene, fluoranthene, fluorene, indeno(1,2,3-cd)pyrene, naphthalene, phenanthrene, pyrene, and 1-methylnapthalene were detected above the laboratory MDLs, but did not exceed the RUSLs/IDTLs. The remaining PAH analytes were not reported above the laboratory MDLs.

  The PPM analytes arsenic, lead, mercury, and silver exceeded their IDTLs. Beryllium, cadmium, chromium, copper, nickel, and zinc were detected above the laboratory MDLs, but did not exceed the IDTLs. Antimony was not reported above the MDL.

- B-13/13D - Due to sample dilution the following analyte MDLs exceeded the regulatory screening levels (acrylonitrile, bromodichloromethane, bromomethane, carbon tetrachloride, chloroform, 1,2-dibromo-3-chloropropane, EDB, 1,2-dichloropropane, cis-1,3-dichloropropene, trans-1,3-dichloropropene, methylene chloride, 1,1,2,2-tetrachloroethane, trichloroethene, 1,2,3-trichloropropane, and vinyl chloride). The remaining VOC analytes were not detected above the laboratory MDLs.

  The PAH analytes benzo(a)anthracene, benzo(a)pyrene, and benzo(b)fluoranthene exceeded their RUSLs. The analytes anthracene, acenaphthene, acenaphthylene, benzo(g,h,i)perylene, benzo(k)fluoranthracene, chrysene, dibenz(a,h)anthracene, fluoranthene, fluorene, indeno(1,2,3-cd)pyrene, naphthalene, phenanthrene, pyrene, and 2-methylnapthalene were detected above the laboratory MDLs, but did not exceed the RUSLs/IDTLs. The remaining PAH analytes were not reported above the laboratory MDLs.

  The PPM analytes arsenic and mercury exceeded their IDTLs. Beryllium, cadmium, chromium, copper, lead, nickel, and zinc were detected above the laboratory MDLs, but did not exceed the IDTLs. Antimony was not reported above the MDL.

Statistical interpretation of the MI data within each DU and across the site indicates there is little variation on compounds found and concentrations reported within and between the DUs.


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VOC concentrations are exceeded only by those analytes with elevated PQLs and MDLs due to sample dilution. PAH analytes exceed the RUSLs and IDTLs in the three DUs, with the highest concentrations found in DU3. Benzo(a)pyrene is prevalent in all three DUs. The PPM analytes were detected in the three DUs, with the highest concentrations in DU3 (the site of the former metal foundry). Arsenic is believed to be at background concentrations, but copper, lead, mercury, and to some extent silver values are likely due to the foundry presence and the surrounding areas historical industrial use.

3.3.2 Groundwater Sampling Results

Groundwater samples were collected from each of the 4 temporary monitoring wells (TW-1 through TW-4). Laboratory analytical result summaries are presented in Appendix D, Tables D-5 through D-7. Temporary monitoring well locations are illustrated on Figures 3 and 4.

Groundwater sample analytical results were compared to the DEQ Petroleum RUSLs. If the COC was not listed on the RUSL table they were compared to the IDTLs. The laboratory analytical report (ESC Report No. L780238) is included in Appendix E. The following summarizes the sample results:

- TW-1 – The VOC analytes were not detected above the laboratory MDLs.

  The PAH analytes benzo(a)anthracene, benzo(b)fluoranthracene, and 2-methylnaphthalene were detected above the laboratory MDLs, but did not exceed their respective RUSLs or IDTLs. The remaining PAH analytes were not detected above the laboratory MDLs.

  The PPMs antimony and arsenic were reported above the laboratory MDLs, but did not exceed their ITDLs. The remaining PPMs were not detected above the laboratory MDLs.
- TW-2 – The VOC analytes were not detected above the laboratory MDLs.

  The PAH analytes benzo(a)anthracene, phenanthrene, and 2-methylnaphthalene were detected above the laboratory MDLs, but did not exceed their respective RUSLs or IDTLs. The remaining PAH analytes were not detected above the laboratory MDLs.

  The PPMs antimony, arsenic, chromium, and lead were reported above the laboratory MDLs, but did not exceed their ITDLs. The remaining PPMs were not detected above the laboratory MDLs.
- TW-3 – The VOC analytes were not detected above the laboratory MDLs.

  The PAH analytes benzo(a)anthracene, naphthalene, pyrene, 1-methylnaphthalene, and 2-methylnaphthalene were detected above the laboratory MDLs, but did not exceed their respective RUSLs or IDTLs. The remaining PAH analytes were not detected above the laboratory MDLs.

  The PPMs antimony, arsenic, and zinc were reported above the laboratory MDLs, but did not exceed their ITDLs. The remaining PPMs were not detected above the laboratory MDLs.


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- TW-4/TW-4D – The VOC analytes 1,1,1-trichloroethane and trichlorofluoromethane were reported above the MDLs, but did not exceed their IDTLs. The remaining VOC analytes were not detected above the laboratory MDLs.

The PAH analytes benzo(a)anthracene, phenanthrene, and 2-methylnaphthalene were detected above the laboratory MDLs, but did not exceed their respective RUSLs or IDTLs. The remaining PAH analytes were not detected above the laboratory MDLs.

The PPMs antimony, arsenic, chromium, copper, mercury, lead, and zinc were reported above the laboratory MDLs, but did not exceed their ITDLs. The remaining PPMs were not detected above the laboratory MDLs.

### 3.3.3 Soil Vapor Sampling Results

Three soil vapor samples (two plus one duplicate) were collected and analyzed for VOCs by TO-15 low level. Tables D-10 and D-11 in Appendix D provides a summary of the soil vapor sample results. Soil vapor point locations are illustrated on Figure 3.

Reported analytes were compared to the DEQ VISLs. If a VISL is not established, the analytical result was compared to the EPA RSLs for Residential Air. The laboratory analytical report (EATL Report No. 1507528) is included in Appendix E. The following summarizes the sample results:

- VP-1/VP-1D: Freon 11 was reported above the MDL, but does not have an established EPA RSL for comparison. Due to sample dilution, the following analyte MDLs were elevated and exceeded the VISL or RSLs (vinyl chloride, 1,3-butadiene, 1,1-dichloroethane, chloroform, carbon tetrachloride, benzene, EDC, trichloroethene, 1,2-dichloropropane, 1,4-dioxane, bromodichloromethane, cis-1,3-dichloropropane, 1,1,2-trichlorethane, tetrachloroethene, dibromochloromethane, EDB, ethylbenzene, bromoform, 1,1,2,2-tetrachloroethane, 1,4-dichlorobenzene, 1,2,4-trichlorobenzene, and hexachlorobutadiene ). The remaining VOC analytes were not reported above laboratory reporting limits.
- VP-2: Freon 11 and 1,1,1-trichloroethane were reported above the MDLs. 1,1,1-Trichloroethane concentrations did not exceed the EPA RSL. Due to sample dilution, the following analyte MDLs were elevated and exceeded the VISL or RSLs (vinyl chloride, 1,3-butadiene, 1,1-dichloroethane, chloroform, carbon tetrachloride, benzene, EDC, trichloroethene, 1,2-dichloropropane, 1,4-dioxane, bromodichloromethane, cis-1,3-dichloropropane, 1,1,2-trichlorethane, tetrachloroethene, dibromochloromethane, EDB, bromoform, 1,1,2,2-tetrachloroethane, 1,4-dichlorobenzene, 1,2,4-trichlorobenzene, and hexachlorobutadiene). The remaining VOC analytes were not reported above the laboratory reporting limits.

## 3.4 Investigation-Derived Waste

Soil and groundwater analytical data collected was used to assess hazardous waste constituent characteristics for disposal purposes. The data showed soil COCs exceeded the


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RUSLs/IDTLs. Comparison of the total metals analytical results to 20x TCLP indicated that lead concentrations were considered hazardous waste. Lead TCLP analysis revealed that the analyte was below the detection limit, and would not be considered hazardous waste. As a result of the high PAH and metals concentrations, excavated soil, though considered non-hazardous, should be disposed at a facility licensed to receive the material. The groundwater purge water data showed detected concentrations, but none that exceeded the RUSLs/IDTLs. With DEQ's permission, the purge water may be disposed onsite.

Other non-hazardous wastes such as disposable personal protective equipment and disposable field sampling supplies or equipment were disposed referencing federal, state, and local regulations.

## 4.0 QUALITY CONTROL EVALUATION

Referencing the QAPP procedures, a quality control evaluation of the analytical data packages was performed, and is presented in Appendix F. The analytical data are considered acceptable and have met the quality control and quality assurance objectives and goals for this project. The following was identified during the review:

- Laboratory blank soil, groundwater, and soil vapor samples were not detected above the method blank reporting limit.
- The soil laboratory control sample percent recoveries were below established criteria for methyl tert-butyl ether (MTBE); 1,2,3-trichlorobenzene; 1,2-dibromo-3-chloropropane, acrylonitrile, and dichlorodifluoromethane in soil. The analytes received appropriate laboratory data qualifiers. The analytes were not detected in the samples, and are not considered target contaminants for the site; the data was not rejected.
- The laboratory matrix spike and matrix spike duplicate samples for mercury and zinc in soil were below established criteria and received a 'J6' qualifier, reflecting a matrix-influenced low bias. Mercury and zinc were detected above the MDLs in the corresponding soil sample, and the data was not rejected.
- Sample dilution elevated multiple analyte PQLs and MDLs above the regulatory limits. The data was not rejected for risk evaluation use.
- Soil VOC surrogate recoveries in field sample B-6 were outside established criteria. The associated surrogate received a 'J2' qualifier, and was not rejected for risk evaluation use.
- Soil PAH surrogate recoveries in field samples DU1 S-1, DU1 S-2, DU1 S-3, DU2 S-1, DU2 S-2, DU2 S-3, DU3 S-1, and B-1 could not be used for control limit evaluation due to sample dilution.
- Soil metal surrogates were within method established criteria.
- The groundwater laboratory control sample percent recovery for acrolein was given the 'J4' qualifier indicating the laboratory control sample concentration exceeded the upper control limit. High percent recovery reflects a conservative high bias. Exceeding


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concentration analytes were not detected in the sample. The data was not rejected for risk evaluation use.

- Groundwater surrogate recoveries were within established criteria.
- Groundwater samples were not diluted for analysis.
- VOC analytes were not detected in the soil or groundwater trip blanks.
- Soil and groundwater duplicate sample RPDs exceeded acceptable levels of precision; however, many of the reported concentrations are either non-detect, 'J' qualified. 'J'-qualified data is reported below the PQL/RDL and is an estimate. Estimated data may not be relied upon for precision or accuracy, and therefore does not support RPD evaluation. The data may be used to evaluate site risk.
- Calibration verification for soil vapor analytes was within established criteria as modified for the TO-15 LL application, with the exception of alpha-Chlorotoluene, which exceeded the quality control limit. Alpha-Chlorotoluene was not detected in the sample and is not considered a target analyte for the site. The data was not rejected for risk evaluation purposes.
- Chloromethane, vinyl chloride, chloroethane, ethanol, acetone, 2-propanol, methylene chloride, 4-methyl-2-pentanone, and 2-hexanone were detected in soil vapor laboratory control and laboratory control duplicate samples outside established criteria, and received a 'Q' qualifier. The analytes were not detected and despite potential inaccuracy, the datum was not rejected for use in risk evaluation.
- Soil vapor sample dilution elevated the method detection limits above the VISLs and RSL by orders of magnitude. The analyte data with elevated detection limits was rejected for use.
- Soil vapor surrogate recoveries were within established criteria.
- The soil vapor duplicate sample RPDs were within established criteria.

## 5.0 CONCLUSIONS

The SISA performed on July 27 through 31, 2015, included advancing direct-push boreholes; soil field-screening; soil sampling; temporary groundwater monitoring well installation and sampling; soil vapor point installation and sampling; and laboratory analysis. The following conclusions can be drawn from the field effort and subsequent data evaluation:

- Though site soil is impacted by VOC concentrations they do not exceed established regulatory screening levels. However, due to sample dilution, laboratory MDLs were elevated above the DEQ RUSLs, IDTLs, or EPA RSLs in at least 16 VOC analytes.
- The PAH analytes benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene, and naphthalene exceed the RUSLs in multiple soil samples collected across the site.
- The PPM analytes arsenic, copper, lead, mercury, and silver exceed the soil IDTLs in multiple samples collected across the site. However, based on our familiarity with subsurface conditions in the area, it is our professional opinion that the arsenic metal concentrations detected are present within the typical range for naturally-occurring or background concentrations. The elevated copper, lead, mercury, and silver


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concentrations are likely due to the past site use as a foundry and the historic industrial use of adjacent properties.

- Groundwater was encountered between 9 and 10 feet below ground surface, and appears to lie within a semi-confined aquifer. VOC, PAH, and PPM analytes were detected in groundwater but the reported concentrations did not exceed established regulatory levels.
- Groundwater flow direction is to the west-northwest; however, this may vary seasonally.
- VOC analytes were detected in deep soil vapor (≥5 feet), but did not exceed established regulatory levels. However, due to sample dilution, laboratory MDLs were elevated above the DEQ VISLs or EPA RSLs in at least 22 VOC analytes.

## 6.0 RECOMMENDATIONS

Based upon the results of our limited site assessment, soil, groundwater, and soil vapor sample laboratory analysis, STRATA recommends the following:

- Additional soil vapor sampling to assess the high Freon 11 (trichlorofluoromethane) values, and to address the high dilution factor in the vapor samples, which caused data rejection.
- Evaluating the data with regards to risk, using the 2008 DEQ Risk Evaluation Manual.
- Preparing a soil management and/or remediation work plan to address handling of PAH- and metals-impacted soil encountered during construction activities. Soil should be disposed at a facility licensed to receive the material, if necessary.
- Abandonment of the four temporary monitoring wells according to Idaho Code by a state of Idaho licensed well driller.
- Removal of the two soil vapor points.

## 7.0 REFERENCES

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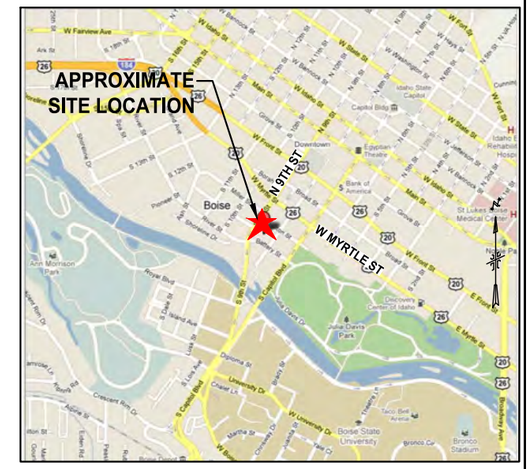
## VICINITY MAP

NOT TO SCALE




## LEGEND

- FOUND 1/2" IRON PIN
- FOUND 5/8" IRON PIN
- BENCH MARK
- PROPERTY BOUNDARY LINE
- FENCE
- GAS METER
- WATER VALVE
- WATER METER
- FIRE DEPT. CONNECTION
- DROP INLET
- TELEPHONE JUNCTION BOX
- POWER POLE
- POWER JUNCTION BOX
- POWER METER
- POWER MANHOLE
- MONITOR WELL
- VAPOR POINT
- SUB – SLAB VAPOR POINT
- PEDESTRIAN SIGNAL POLE
- TRAFFIC SIGNAL BOX
- STREET LIGHT
- TRAFFIC SIGN
- DECIDUOUS TREE
- ~LS~ LANDSCAPED AREA
- ~PAV~ PAVED AREA
- STORM DRAIN LINE W/MANHOLE
- ROOF DRAIN LINE
- DOMESTIC WATER LINE
- FIRE SERVICE LINE
- TELEPHONE LINE
- GAS LINE
- OVERHEAD POWER LINE
- UNDERGROUND POWER LINE
- IRRIGATION LINE
- EDGE OF PAVEMENT
- EXTRUDED CURB
- CURB, GUTTER AND SIDEWALK

# SITE MAP
## Site Investigation
## Sampling and Analysis
## Proposed 'The Afton Site'
## 620 S. 9th Street
## Boise, Idaho

DRAWING DATE: 8-14-2015

DRAWING BY: DMS | CHECKED BY: A.P.

0 25 50 100

SCALE: 1 inch = 50 ft

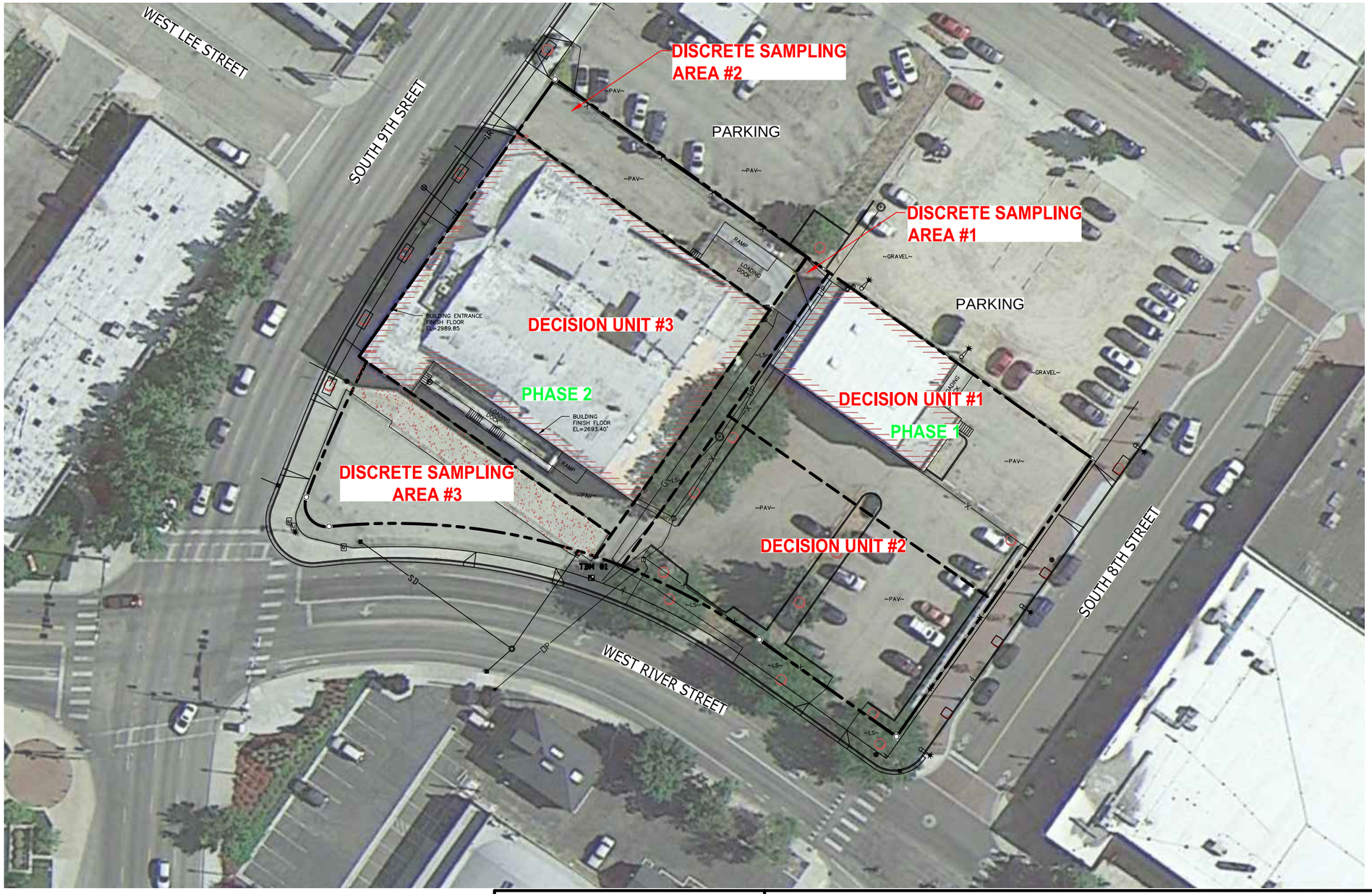
STRATA
A PROFESSIONAL SERVICES CORPORATION
Integrity from the Ground Up

620 S 9th LLC BO15086B | FIGURE: 1

THIS PLAN COMPRISES A PORTION OF STRATA'S REPORT AND THE TEXT OF THE REPORT CONTAINS ESSENTIAL INFORMATION: BEFORE UTILIZING THIS PLAN FOR ANY PURPOSE WHATSOEVER, THE REPORT SHOULD BE READ COMPLETELY. THIS PLAN IS INTENDED TO HELP VISUALIZE THE INFORMATION PROVIDED IN THE REPORT. THESE LOCATIONS AND INFORMATION WERE ADDED TO EXISTING PLANS OF THE SITE PREVIOUSLY PREPARED BY OTHERS AND NO CHECK OF ACCURACY, CURRENCY, APPROPRIATENESS, ETC., OF INFORMATION PROVIDED BY OTHERS WAS PERFORMED, SINCE SUCH CHECKS WERE NOT PART OF STRATA'S SCOPE OF SERVICES.

REFERENCE: Site Plan Provided by Idaho Survey Group, Date; 3–15–2011. Aerial provided by Google Earth.

R:\Projects\2015\BOISE\BO15086C - 620s 9th STREET\BO15086B QAP.dwg, FIG-1, 8/17/2015 7:40:05 AM, DSasso, AutoCAD PDF (General Documentation).pc3




## LEGEND

- FOUND 1/2" IRON PIN
- FOUND 5/8" IRON PIN
- BENCH MARK
- PROPERTY BOUNDARY LINE
- FENCE
- GAS METER
- WATER VALVE
- WATER METER
- FIRE DEPT. CONNECTION
- DROP INLET
- TELEPHONE JUNCTION BOX
- POWER POLE
- POWER JUNCTION BOX
- POWER METER
- POWER MANHOLE
- MONITOR WELL
- VAPOR POINT
- SUB – SLAB VAPOR POINT
- PEDESTRIAN SIGNAL POLE
- TRAFFIC SIGNAL BOX
- STREET LIGHT
- TRAFFIC SIGN
- DECIDUOUS TREE
- ~LS~ LANDSCAPED AREA
- ~PAV~ PAVED AREA
- STORM DRAIN LINE W/MANHOLE
- ROOF DRAIN LINE
- DOMESTIC WATER LINE
- FIRE SERVICE LINE
- TELEPHONE LINE
- GAS LINE
- OVERHEAD POWER LINE
- UNDERGROUND POWER LINE
- IRRIGATION LINE
- EDGE OF PAVEMENT
- EXTRUDED CURB
- CURB, GUTTER AND SIDEWALK

# DECISION UNIT AND DISCRETE SAMPLING AREA LOCATIONS

**Site Investigation Sampling and Analysis**
**Proposed 'The Afton Site'**
**620 S. 9th Street**
**Boise, Idaho**

DRAWING DATE: 8-14-2015

DRAWING BY: DMS | CHECKED BY: A.P.

0 25 50 100
SCALE: 1 inch = 50 ft

STRATA
A PROFESSIONAL SERVICES CORPORATION
Integrity from the Ground Up

620 S 9th LLC BO15086B | FIGURE: 2

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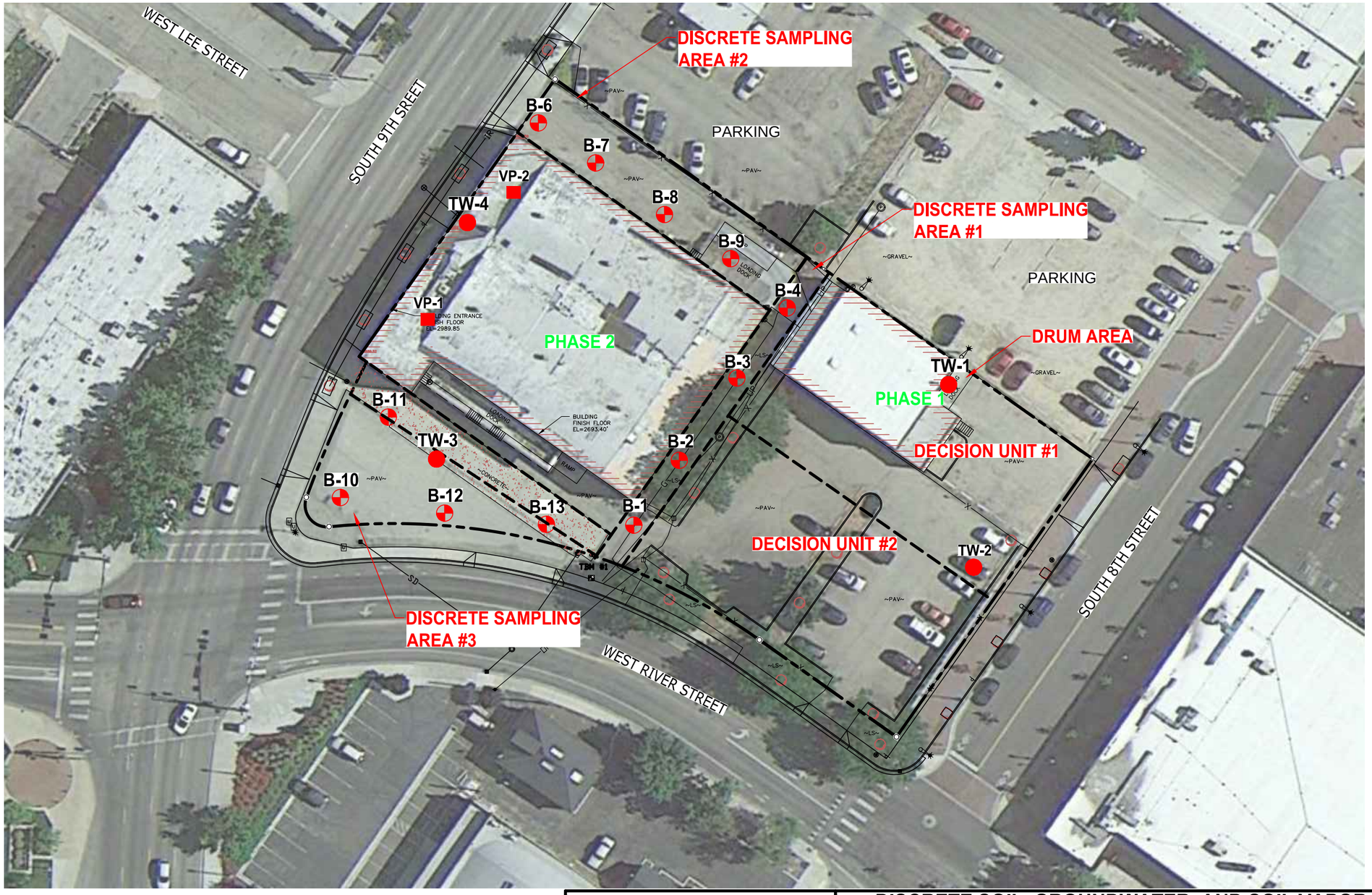


## LEGEND

- FOUND 1/2" IRON PIN
- FOUND 5/8" IRON PIN
- BENCH MARK
- PROPERTY BOUNDARY LINE
- FENCE
- GAS METER
- WATER VALVE
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- TELEPHONE LINE
- GAS LINE
- OVERHEAD POWER LINE
- UNDERGROUND POWER LINE
- IRRIGATION LINE
- EDGE OF PAVEMENT
- EXTRUDED CURB
- CURB, GUTTER AND SIDEWALK

B-1 Discreet soil sampling location

TW-1 Temporary well location

VP-1 Vapor point location

# DISCRETE SOIL, GROUNDWATER, AND SOIL VAPOR SAMPLING LOCATIONS

## Site Investigation Sampling and Analysis
## Proposed 'The Afton Site'
## 620 S. 9th Street
## Boise, Idaho

DRAWING DATE: 8-14-2015

DRAWING BY: DMS | CHECKED BY: A.P.

0 25 50 100

SCALE: 1 inch = 50 ft

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620 S 9th LLC BO15086B | FIGURE: 3

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REFERENCE: Site Plan Provided by Idaho Survey Group, Date; 3–15–2011. Aerial provided by Google Earth.

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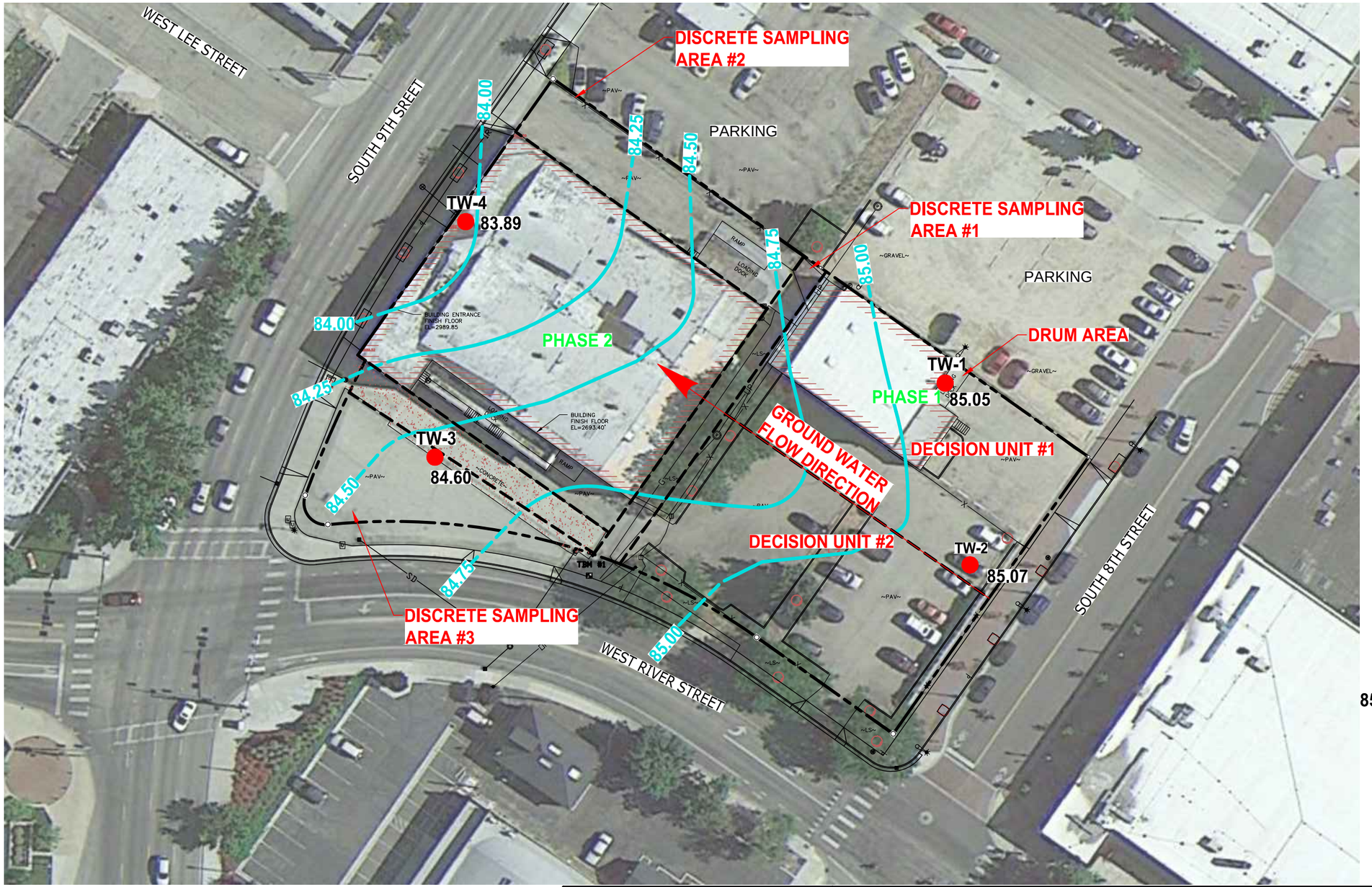


## LEGEND

- FOUND 1/2" IRON PIN
- FOUND 5/8" IRON PIN
- BENCH MARK
- PROPERTY BOUNDARY LINE
- FENCE
- GAS METER
- WATER VALVE
- WATER METER
- FIRE DEPT. CONNECTION
- DROP INLET
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- POWER POLE
- POWER JUNCTION BOX
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- GAS LINE
- OVERHEAD POWER LINE
- UNDERGROUND POWER LINE
- IRRIGATION LINE
- EDGE OF PAVEMENT
- EXTRUDED CURB
- CURB, GUTTER AND SIDEWALK

TW-1 Temporary well location

85.00 Potentiometric Groundwater contour

# GROUNDWATER CONTOUR MAP
## Site Investigation Sampling and Analysis
## Proposed 'The Afton Site'
## 620 S. 9th Street
## Boise, Idaho

DRAWING DATE: 8-14-2015

DRAWING BY: DMS | CHECKED BY: A.P.

0 25 50 100

SCALE: 1 inch = 50 ft

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620 S 9th LLC BO15086B | FIGURE: 4

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# APPENDIX A

## Photographic Documentation

Note: Location of notable site features is shown on Figure 2.

**Photograph 1**: View looking northeast across Decision Unit (DU) #1. South 8th Street and the Foothills School are on the photograph far right.

**Photograph 2**: View looking south across DU#1. The graded area is the former small warehouse location.

**Photograph 3**: View looking southwest across DU#2. Note orange and yellow cones (arrows) depicting aliquot sampling locations.


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**Photograph 4**: View looking south across DU#3. This area was formerly occupied by the Associated Warehouse building. Note soil fill pile formerly located under the Associated Warehouse loading dock and warehouse portion (left side of photo). The former warehouse basement was located between the photographer and the excavator on the right.

**Photograph 5**: View looking east across DU#3 and soil fill pile.

**Photograph 6**: Discrete sampling area and temporary monitoring well TW-1 shown along the northeastern site boundary. Note dark stained soil along fence line (arrow).


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**Photograph 7**: View looking southwest along Discrete Sampling Area (DSA) #1, which follows the former railroad spur/alleyway. Wood debris is in photograph lower left foreground. Soil fill pile in DU#3 is in background right.

**Photograph 8**: Looking northeast along DSA#1. Note soil fill pile in DU#3 on left.

**Photograph 9**: View looking east-southeast along DSA#2.


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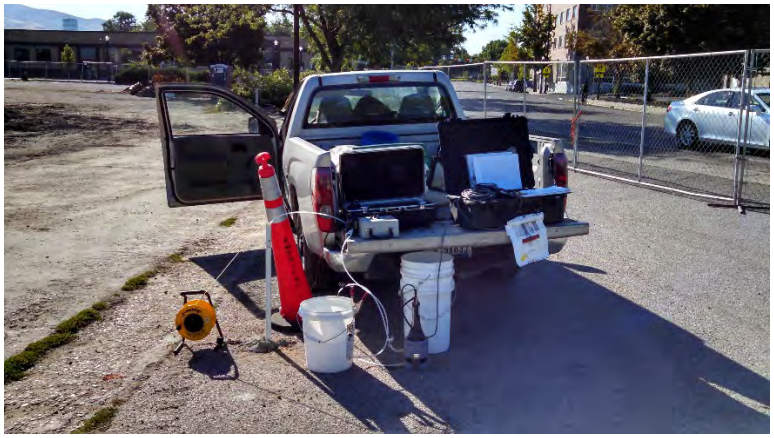
**Photograph 10**: View looking south across a portion of DSA#3. West River Street is in the background.

**Photograph 11**: Temporary monitoring well TW-2 located along the southeastern site boundary. South 8th Street and the Foothills School are shown in the background.



**Photograph 12**: Groundwater sampling at temporary monitoring well TW-3. View looking to the east-southeast.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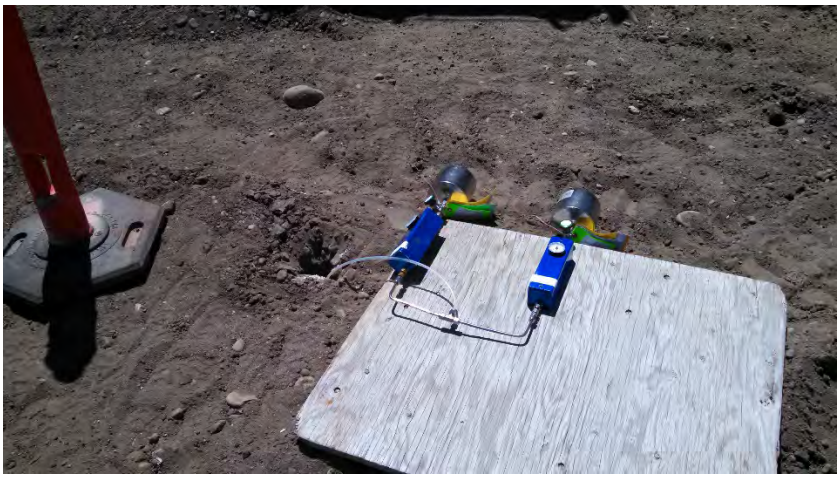
**Photograph 13**: Groundwater sampling at temporary monitoring well TW-4, located along the northwestern site boundary. South 9th Street is in the background.

**Photograph 14**: Soil vapor points (orange traffic candles) located in area of former Associated Warehouse basement. View looking to the south-southwest.



**Photograph 15**: Soil vapor sampling at soil vapor point VP-1.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**Photograph 16**: Soil vapor sampling at soil vapor point VP-2.


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# APPENDIX B

## Borehole Logs and Monitoring Well Construction Diagrams

| USCS Description | Depth (In Feet) | USCS Class | Symbol | Sample Type | RQD % | Recovered % | Dry Density (Pcf) | Moisture Content (%) | Monitoring WELL | REMARKS<br>Note: BGS = Below Ground Surface |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2<br>1 | | | | | | | | | 2.5 foot stick up<br>2 - inch Schedule<br>40 PVC well casing. |
| CLAY - brown, moist, soft | 0<br>1<br>2<br>3 | CL | | | | | | | | Collect sample B - TW - 1<br>at 3 feet BGS |
| Poorly Graded SAND with Gravel - yellow - brown, dry, fine to coarse sand, with fine to coarse gravel | 4<br>5<br>6<br>7 | SP | | | | | | | | Bentonite chips<br>from 4.5 to 6.0<br>feet BGS. |
| Poorly Graded GRAVEL with Sand-mottled (white to olive green), dry, fine to coarse gravel with fine to coarse sand | 8<br>9<br>10<br>11<br>12<br>13<br>14<br>15<br>16<br>17 | GP | | | | | | | | 10 x 20 Colorado silica<br>from 6.5 to 17.5 feet BGS.<br>1 - inch 0.010 - Slot,<br>Sch 40 PVC Screen from<br>7.5 feet to 17.5 feet BGS.<br>GW measurement on<br>7-31-15 at 12.91 below top<br>of casing (BTOC)<br>Groundwater encountered at<br>14 feet BGS |
| Borehole terminated at 17.5 feet BGS | | | | | | | | | | End cap |

| | |
|---|---|
| Client: 620 S 9th LLC | Boring Number: TW-1 |
| Project: B015086B | Date Drilled: 7-27-2015 |
| Drill Rig: GEOPROBE 6620 DT | Boring Diameter: 3 3/4" |
| Depth to Groundwater: 10' | Logged By: AP |

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# EXPLORATORY BORING LOG

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| USCS Description | Depth (In Feet) | USCS Class | Symbol | Sample Type | RQD % | Recovered % | Dry Density (Pcf) | Moisture Content (%) | Monitoring WELL | REMARKS<br>Note: BGS = Below Ground Surface |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2<br>1 | | | | | | | | | 2.5 foot stick up<br>2 - inch Schedule<br>40 PVC well casing. |
| Asphalt concrete (2-1/2") | 0 | AC | | | | | | | | |
| CLAY with Silt - brown, moist, soft | 1<br>2 | CL | | | | | | | | |
| Poorly Graded SAND with Gravel - yellow - brown, dry, fine to coarse sand, with fine to coarse gravel | 3<br>4 | SP | | | | | | | | |
| Poorly Graded GRAVEL with Sand- mottled (white, brown, gray), dry to wet, fine to coarse gravel with fine to coarse sand | 5<br>6<br>7<br>8<br>9<br>10<br>11<br>12<br>13<br>14<br>15<br>16<br>17 | GP | | | | | | | | Bentonite chips from 4.5 to 6.0 feet BGS.<br>10 x 20 Colorado silica from 6.5 to 17.5 feet BGS.<br>1 - inch 0.010 - Slot, Sch 40 PVC Screen from 7.5 feet to 17.5 feet BGS.<br>GW measurement on 7-31-15 at 12.83 below top of casing (BTOC)<br>Groundwater encountered at 14 feet BGS |
| Borehole terminated at 17.5 feet BGS | | | | | | | | | | End cap |

| | |
|---|---|
| Client: 620 S 9th LLC | Boring Number: TW-2 |
| Project: B015086B | Date Drilled: 7-27-2015 |
| Drill Rig: GEOPROBE 6620 DT | Boring Diameter: 3 3/4" |
| Depth to Groundwater: 14' | Logged By: AP |

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Integrity from the Ground Up

# EXPLORATORY BORING LOG

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| USCS Description | Depth (In Feet) | USCS Class | Symbol | Sample Type | RQD % | Recovered % | Dry Density (Pcf) | Moisture Content (%) | Monitoring WELL | REMARKS<br>Note: BGS = Below Ground Surface |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2<br>1 | | | | | | | | | 2.5 foot stick up<br>2 - inch Schedule<br>40 PVC well casing. |
| Asphalt concrete (2-1/2") | 0 | AC | | | | | | | | |
| Poorly Graded GRAVEL with Sand (fill) - tan, dry, fine to coarse gravel with fine to coarse sand | 1<br>2 | GP | | | | | | | | |
| CLAY - dark brown, moist, soft | 3 | CL | | | | | | | | |
| Poorly Graded SAND with Gravel - gray - dark brown, dry, fine to coarse sand, with fine to coarse gravel | 4 | SP | | | | | | | | |
| Poorly Graded GRAVEL with Sand- mottled (white, brown, gray), dry to wet, fine to coarse gravel with fine to coarse sand | 5<br>6<br>7<br>8<br>9 | GP | | | | | | | | Bentonite chips from 4.5 to 6.0 feet BGS.<br>10 x 20 Colorado silica from 6.5 to 17.5 feet BGS.<br>1 - inch 0.010 - Slot, Sch 40 PVC Screen from 7.5 feet to 17.5 feet BGS.<br>GW measurement on 7-31-15 at 12.56 below top of casing (BTOC) |
| Poorly Graded SAND with Gravel - gray - dark brown, dry, fine to coarse sand, with fine to coarse gravel | 10<br>11<br>12<br>13<br>14<br>15<br>16<br>17 | SP | | | | | | | | Groundwater encountered at 14 feet BGS |
| Borehole terminated at 17.5 feet BGS | | | | | | | | | | End cap |

| | | |
|---|---|---|
| Client: 620 S 9th LLC | Boring Number: TW-3 | STRATA<br>A Professional Services Corporation<br>Integrity from the Ground Up |
| Project: B015086B | Date Drilled: 7-27-2015 | |
| Drill Rig: GEOPROBE 6620 DT | Boring Diameter: 3 3/4" | |
| Depth to Groundwater: 14' | Logged By: AP | |

# EXPLORATORY BORING LOG

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| USCS Description | Depth (In Feet) | USCS Class | Symbol | Sample Type | RQD % | Recovered % | Dry Density (Pcf) | Moisture Content (%) | Monitoring WELL | REMARKS<br>Note: BGS = Below Ground Surface |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2, 1 | | | | | | | | | 2.5 foot stick up 2 - inch Schedule 40 PVC well casing. |
| Poorly Graded GRAVEL with Sand (fill) - mottled, white to brown, dry, fine to coarse gravel with fine to coarse sand | 0, 1, 2, 3, 4, 5 | GP | | | | | | | | |
| Poorly Graded GRAVEL with Sand (fill) - grades brown | 6, 7, 8, 9, 10 | GP | | | | | | | | Bentonite chips from 4.5 to 6.0 feet BGS.<br>10 x 20 Colorado silica from 6.5 to 17.5 feet BGS.<br>1 - inch 0.010 - Slot, Sch 40 PVC Screen from 7.5 feet to 17.5 feet BGS.<br>GW measurement on 7-31-15 at 13.79 below top of casing (BTOC) |
| Poorly Graded SAND with Gravel - gray - dark brown, dry, fine to coarse sand, with fine to coarse gravel | 11 | SP | | | | | | | | |
| Poorly Graded GRAVEL with Sand - brown, dry to wet, fine to coarse gravel with fine to coarse sand | 12, 13, 14, 15, 16, 17 | GP | | | | | | | | Groundwater encountered at 14 feet BGS |
| Borehole terminated at 17.5 feet BGS | | | | | | | | | | End cap |

| | | |
|---|---|---|
| Client: 620 S 9th LLC | Boring Number: TW-4 | STRATA<br>A Professional Services Corporation<br>Integrity from the Ground Up |
| Project: B015086B | Date Drilled: 7-27-2015 | |
| Drill Rig: GEOPROBE 6620 DT | Boring Diameter: 3 3/4" | |
| Depth to Groundwater: 14' | Logged By: AP | |

# EXPLORATORY BORING LOG

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# APPENDIX C

## Water Quality Parameter Data

## Table C-1: Groundwater Elevation Data

| Well No. | TOC[1] Elevation (feet) | Total Depth (feet) | Date Measured | Well Diameter (inches) | Depth to Water (feet) | GW Elevation (feet) |
|---|---|---|---|---|---|---|
| TW-1 | 97.96 | 17.5 | 7/31/15 | 1.0 | 12.91 | 85.05 |
| TW-2 | 97.90 | 17.5 | 7/31/15 | 1.0 | 12.83 | 85.07 |
| TW-3 | 97.16 | 17.5 | 7/31/15 | 1.0 | 12.56 | 84.60 |
| TW-4 | 97.68 | 17.5 | 7/31/15 | 1.0 | 13.79 | 83.89 |

Notes:
1. TOC – Top of Casing. Based on arbitrary 100-foot datum.

## Table C-2: TW-1 Low-Flow Groundwater Sampling Geochemical Parameter Data

Well installed on 7/27/15. Start low flow pumping on 7/31/15 at 1030 hrs. Sampling performed at 1100 hrs. Initial water level at **12.91 feet** below top of casing. Instrument used: Horiba U-52.

| Monitoring Well | Time | Total Purge Volume (gal)[1] | pH | Temp (°C)[2] | Cond. (mS/cm)[3] | ORP (mV)[4] | DO (mg/L)[5] | Turbidity (NTU)[6] | Depth of Water Below Top of Casing (ft)[7] | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| TW-1 | 1030 | 0 | 6.9 | 21.2 | 0.440 | 66 | 1.54 | 32.2 | 12.91 | None |
| | 1035 | | 6.7 | 19.1 | 0.409 | 68 | 0.0 | 0.0 | 12.91 | |
| | 1040 | | 6.7 | 19.0 | 0.405 | 73 | 0.0 | 0.0 | 12.91 | |
| | 1045 | | 6.7 | 19.0 | 0.404 | 77 | 0.0 | 0.0 | 19.91 | |
| | 1050 | | 6.7 | 19.0 | 0.404 | 78 | 0.0 | 0.0 | 12.92 | |
| | 1055 | | 6.7 | 19.0 | 0.404 | 78 | 0.0 | 0.0 | 12.92 | |
| | 1100 | 3 | 6.7 | 19.0 | 0.403 | 80 | 0.4 | 0.0 | 12.92 | |

## Table C-3: TW-2 Low-Flow Groundwater Sampling Geochemical Parameter Data

Well installed on 7/27/15. Start low flow pumping on 7/31/15 at 1120 hrs. Sampling performed at 1155 hrs. Initial water level at **12.83 feet** below top of casing. Instrument used: Horiba U-52.

| Monitoring Well | Time | Total Purge Volume (gal)[1] | pH | Temp (°C)[2] | Cond. (mS/cm)[3] | ORP (mV)[4] | DO (mg/L)[5] | Turbidity (NTU)[6] | Depth of Water Below Top of Casing (ft)[7] | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| TW-2 | 1120 | 0 | 6.3 | 22.2 | 0.425 | 5 | 0.0 | 800 | 12.83 | None |
| | 1125 | | 6.0 | 21.3 | 0.401 | 32 | 0.0 | 237 | 12.84 | |
| | 1130 | | 6.0 | 21.1 | 0.400 | 62 | 0.0 | 93.3 | 12.84 | |
| | 1135 | | 6.0 | 21.0 | 0.408 | 71 | 0.0 | 25.6 | 12.84 | |
| | 1140 | | 6.0 | 21.0 | 0.411 | 71 | 0.0 | 11.2 | 12.84 | |
| | 1145 | | 6.0 | 21.0 | 0.415 | 66 | 0.0 | 6.0 | 12.84 | |
| | 1150 | | 6.0 | 21.0 | 0.418 | 67 | 0.0 | 15.6 | 12.84 | |
| | 1155 | 3.5 | 6.0 | 21.0 | 0.422 | 67 | 0..0 | 2.3 | 12.84 | |

## Table C-4: TW-3 Low Flow Groundwater Sampling Geochemical Parameter Data

Well installed on 7/29/15. Start low flow pumping on 7/31/15 at 0920 hrs. Sampling performed at 1005 hrs. Initial water level at **12.56 feet** below top of casing. Instrument Used: Horiba U-52.

| Monitoring Well | Time | Total Purge Volume (gal) | pH | Temp (°C) | Cond. (mS/cm) | ORP (mV) | DO (mg/L) | Turbidity (NTU) | Depth of Water Below Top of Casing (ft)* | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| TW-3 | 0920 | 0 | 6.2 | 20.7 | 0.739 | 30 | 0.97 | 640 | 12.56 | None |
| | 0925 | | 6.0 | 21.2 | 0.684 | 2 | 0.27 | 270 | 12.56 | |
| | 0930 | | 5.9 | 21.3 | 0.636 | 0 | 0.03 | 29.5 | 12.56 | |
| | 0935 | | 5.9 | 21.3 | 0.655 | -4 | 0.0 | 21.9 | 12.57 | |
| | 0940 | | 6.0 | 21.4 | 0.654 | 1 | 0.0 | 15.7 | 12.57 | |
| | 0945 | | 6.3 | 21.5 | 0.644 | -18 | 0.0 | 5.0 | 12.57 | |
| | 0950 | | 6.6 | 21.5 | 0.638 | -36 | 0.0 | 7.7 | 12.57 | |
| | 0955 | | 6.6 | 21.5 | 0.638 | -32 | 0.0 | 6.4 | 12.57 | |
| | 1000 | | 6.5 | 21.6 | 0.634 | -32 | 0.0 | 5.0 | 12.57 | |
| | 1005 | 4.5 | 6.5 | 21.6 | 0.627 | -40 | 0.0 | 4.3 | 12.57 | |

## Table C-5: TW-4 Low Flow Groundwater Sampling Geochemical Parameter Data

Well installed on 7/29/15. Start low flow pumping on 7/31/15 at 0745 hrs. Sampling performed at 0845 hrs. Initial water level at **13.79 feet** below top of casing. Instrument Used: Horiba U-52.

| Monitoring Well | Time | Total Purge Volume (gal) | pH | Temp (°C) | Cond. (mS/cm) | ORP (mV) | DO (mg/L) | Turbidity (NTU) | Depth of Water Below Top of Casing (ft) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| TW-4 | 0745 | 0 | 6.4 | 19.8 | 0.554 | 111 | 3.84 | 91.5 | 13.79 | None |
| | 0750 | | 6.5 | 18.8 | 0.595 | -29 | 0.0 | 83.9 | 13.92 | |
| | 0755 | | 6.4 | 18.7 | 0.591 | -39 | 0.0 | 80.2 | 13.92 | |
| | 0800 | | 6.3 | 18.6 | 0.570 | -45 | 0.0 | 85.2 | 13.92 | |
| | 0805 | | 6.3 | 18.5 | 0.560 | -48 | 0.0 | 78.5 | 13.92 | |
| | 0810 | | 6.2 | 18.5 | 0.553 | -49 | 0.0 | 68.8 | 13.92 | |
| | 0815 | | 6.2 | 18.5 | 0.548 | -47 | 0.0 | 63.2 | 13.92 | |
| | 0820 | | 6.2 | 18.5 | 0.548 | -53 | 0.0 | 57.0 | 13.92 | |
| | 0825 | | 6.2 | 18.5 | 0.551 | -52 | 0.0 | 44.0 | 13.92 | |
| | 0830 | | 6.2 | 18.5 | 0.552 | -51 | 0.0 | 36.1 | 13.92 | |
| | 0835 | | 6.2 | 18.5 | 0.552 | -52 | 0.0 | 28.4 | 13.92 | |
| | 0840 | | 6.2 | 18.5 | 0.549 | -52 | 0.0 | 28.2 | 13.92 | |
| | 0845 | 5 | 6.2 | 18.5 | 0.540 | -53 | 0.0 | 29.4 | 13.92 | |

Notes:
1. gal – Gallons
2. °C – Degrees Celsius
3. mS/cm –milliSiemens per centimeter
4. mV – millivolts
5. mg/L – milligrams per liter
6. NTU – Nephelometric Turbidity Units
7. ft – feet
8. NR – Not recorded

.

# APPENDIX D

## Data Tables

## TABLE D-1: HELIUM TRACER GAS LEAK DETECTION

| Location | Ambient Air (%)[1] | He[2] in Shroud (%) | 5% He in Shroud (%) | He in Sample Port (%) | Acceptable Leakage? |
|---|---|---|---|---|---|
| VP-1 | 0.0 | 15.2 | 0.0 | 0.00 | Yes |
| VP-2 | 0.0 | 15.6 | 0.0 | 0.0 | Yes |

Notes:
1. % - percent
2. He - Helium

## TABLE D-2: SOIL VAPOR SCREENING RESULTS

| Sample Point | Oxygen (%) | Carbon Dioxide (ppm)[1] | Methane[2] | PID[3] (ppm) |
|---|---|---|---|---|
| SV-1 | 16.7 | 1.6 | 0 | 0.0 |
| SV-2 | 17.3 | 0.2 | 0 | 0.0 |

Notes:
1. ppm – parts per million
2. PID – Photo-ionization detector

**Table D-3**
**Laboratory Analytical Results - Soil VOCs[1]**
**Proposed 'The Afton' Site**
**620 S. 9th Street**
**Boise, Idaho**

| Sample ID | Date Sampled | Units | Analyte[2] | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Acetone | Benzene | n-Butylbenzene | sec-Butylbenzene | Ethylbenzene | Isopropylbenzene | p-Isopropyltoluene | 2-Butanone (MEK) | Naphthalene | n-Propylbenzene | Tetrachloroethene | Toluene | 1,2,4-Trimethylbenzene | 1,2,3-Trimethylbenzene | 1,3,5-Trimethylbenzene | Total Xylenes |
| DU1 S-1 (P) | 7/29/2015 | mg/kg[3] | <0.33 | <0.0090 | <0.0086 | <0.0067 | <0.0099 | <0.0081 | <0.0068 | <0.16 | <0.033 | <0.0068 | <0.0092 | <0.014 | <0.0070 | <0.0095 | <0.0088 | <0.023 |
| DU1 S-2 | 7/29/2015 | mg/kg | <0.44 | <0.012 | <0.011 | <0.0088 | <0.013 | <0.011 | <0.0090 | <0.20 | <0.044 | <0.0091 | <0.012 | <0.019 | <0.0093 | <0.013 | <0.012 | <0.031 |
| DU1 S-3 (D) | 7/29/2015 | mg/kg | <0.47 | <0.013 | <0.012 | <0.0094 | <0.014 | <0.011 | <0.0096 | <0.22 | <0.047 | <0.0097 | <0.013 | <0.020 | <0.0099 | <0.013 | <0.012 | <0.033 |
| DU2 S-1 (P) | 7/29/2015 | mg/kg | <0.54 | <0.015 | <0.014 | <0.011 | <0.016 | <0.013 | <0.011 | <0.25 | **0.07 (J)[4]** | <0.011 | <0.015 | **0.027(J)** | **0.026(J)** | **0.023(J)** | <0.014 | **0.054(J)** |
| DU2 S-2 | 7/29/2015 | mg/kg | <0.25 | <0.0067 | <0.0064 | <0.0050 | <0.0074 | <0.0060 | <0.0050 | <0.12 | <0.025 | <0.0051 | <0.0068 | <0.011 | <0.0052 | <0.0071 | <0.0066 | <0.017 |
| DU2 S-3 (D) | 7/29/2015 | mg/kg | <0.25 | <0.0068 | <0.0065 | <0.0051 | <0.0075 | <0.0061 | <0.0052 | <0.12 | <0.025 | <0.0052 | <0.0077 | <0.011 | <0.0053 | <0.0072 | <0.0067 | <0.018 |
| DU3 S-1 (P) | 7/30/2015 | mg/kg | <0.26 | <0.0072 | <0.0068 | <0.0052 | <0.0079 | <0.0064 | <0.0054 | <0.12 | **0.036(J)** | <0.0054 | <0.0073 | <0.012 | **0.0076(J)** | <0.0076 | <0.0070 | <0.018 |
| DU3 S-2 | 7/30/2015 | mg/kg | <0.28 | <0.0074 | <0.0071 | <0.0055 | <0.0082 | <0.0067 | <0.0056 | <0.13 | <0.028 | <0.0057 | <0.0076 | <0.012 | <0.0058 | <0.0079 | <0.0073 | <0.019 |
| DU3 S-3 | 7/30/2015 | mg/kg | <0.26 | <0.0070 | <0.0067 | <0.0052 | <0.0077 | <0.0063 | <0.0053 | <0.12 | <0.026 | <0.0054 | <0.0072 | <0.011 | <0.0055 | <0.0075 | <0.0069 | <0.018 |
| DU3 S-4 (D) | 7/30/2015 | mg/kg | <0.26 | <0.0069 | <0.0066 | <0.0051 | <0.0076 | <0.0062 | <0.0052 | <0.12 | <0.026 | <0.0052 | <0.0070 | <0.011 | <0.0054 | <0.0073 | <0.0068 | <0.018 |
| B-TW-1 | 7/27/2015 | mg/kg | **0.12** | **0.0038** | <0.00026 | <0.00020 | <0.00030 | <0.00024 | <0.00021 | **0.020** | <0.0010 | <0.00021 | <0.00028 | **0.0011(J)** | <0.00021 | <0.00029 | <0.00027 | <0.00070 |
| B-1 | 7/29/2015 | mg/kg | <0.34 | **0.015(J)** | <0.0088 | <0.0068 | <0.010 | <0.0083 | **0.027(J)** | <0.16 | **0.12(J)** | <0.070 | <0.0094 | **0.063(J)** | **0.070** | **0.060** | **0.017(J)** | **0.16** |
| B-2 | 7/29/2015 | mg/kg | <0.42 | **0.047** | **0.036(J)** | **0.023(J)** | **0.062** | **0.039(J)** | **0.19** | <0.20 | **0.92** | **0.036(J)** | <0.012 | **0.32** | **0.47** | **0.39** | **0.13** | **0.98** |
| B-3 | 7/29/2015 | mg/kg | <0.27 | <0.0073 | <0.0070 | <0.0054 | <0.0080 | <0.0066 | <0.0055 | <0.13 | <0.027 | <0.0056 | <0.0074 | <0.012 | <0.0057 | <0.0077 | <0.0072 | <0.019 |
| B-4 | 7/29/2015 | mg/kg | <0.25 | <0.0067 | <0.0064 | <0.0050 | <0.0074 | <0.0060 | <0.0050 | <0.12 | <0.025 | <0.0051 | <0.0068 | <0.011 | <0.0052 | <0.0071 | <0.0066 | <0.017 |
| TW-3-1 | 7/29/2015 | mg/kg | **0.050(J)** | **0.0011(J)** | <0.00026 | <0.00020 | <0.00030 | <0.00024 | <0.00021 | **0.0083(J)** | <0.0010 | <0.00021 | <0.00028 | <0.00043 | <0.00021 | <0.00021 | <0.00027 | <0.00070 |
| B-6 | 7/29/2015 | mg/kg | **0.044(J)** | **0.010** | <0.00026 | <0.00020 | <0.00030 | <0.00024 | <0.00021 | <0.0047 | <0.0010 | <0.00021 | <0.00028 | **0.0037(J)** | <0.00021 | **0.00091(JV3)[5]** | <0.00027 | **0.0016(J)** |
| B-7 | 7/29/2015 | mg/kg | **0.047(J)** | **0.0021** | <0.00026 | <0.00020 | <0.00030 | <0.00024 | <0.00021 | **0.0089(J)** | <0.0010 | <0.00021 | <0.00028 | <0.00043 | <0.00021 | <0.00021 | <0.00027 | <0.00070 |
| B-8 | 7/29/2015 | mg/kg | **0.031(J)** | **0.00068(J)** | <0.00026 | <0.00020 | <0.00030 | <0.00024 | <0.00021 | <0.0047 | <0.0010 | <0.00021 | <0.00028 | <0.00043 | <0.00021 | <0.00021 | <0.00027 | <0.00070 |
| B-9 | 7/29/2015 | mg/kg | **0.068** | **0.0025** | <0.00026 | <0.00020 | <0.00030 | <0.00024 | <0.00021 | **0.0099(J)** | <0.0010 | <0.00021 | **0.0014** | **0.00088(J)** | <0.00021 | <0.00021 | <0.00027 | <0.00070 |
| B-10 | 7/29/2015 | mg/kg | <0.24 | <0.0066 | <0.0063 | <0.0049 | <0.0073 | <0.0060 | <0.0050 | <0.11 | <0.024 | <0.0050 | <0.0068 | <0.011 | <0.0052 | <0.0070 | <0.0065 | <0.017 |
| B-11 | 7/29/2015 | mg/kg | <0.30 | <0.0081 | <0.0077 | <0.0060 | <0.0089 | <0.0073 | <0.0061 | <0.14 | <0.030 | <0.0062 | <0.0083. | <0.013 | <0.0063 | <0.0086 | <0.0080 | <0.021 |
| B-12 | 7/29/2015 | mg/kg | <0.25 | <0.0068 | <0.0065 | <0.0051 | <0.0075 | <0.0061 | <0.0052 | <0.12 | <0.025 | <0.0052 | <0.0077 | <0.011 | <0.0053 | <0.0072 | <0.0067 | <0.018 |
| B-13 | 7/29/2015 | mg/kg | <0.38 | <0.010 | <0.0097 | <0.0075 | <0.011 | <0.0091 | <0.0076 | <0.18 | <0.038 | <0.0077 | <0.010 | <0.016 | <0.0079 | <0.011 | <0.010 | <0.026 |
| B-13D | 7/29/2015 | mg/kg | <0.38 | <0.010 | <0.0099 | <0.0077 | <0.011 | <0.0093 | <0.0078 | <0.18 | <0.038 | <0.0079 | <0.010 | <0.017 | <0.0081 | <0.011 | <0.010 | <0.027 |
| DEQ RUSL[6]/IDTL[7]/EPA RSL[8] | | | 17.4 | 0.025 | 3,900 | 1.17 | 0.25 | 3.46 | NE[9] | 11.8 | 0.12 | NE | 0.0288 | 6.6 | 0.193 | 63 | 0.145 | 27 |

Notes:
1. VOCs - Volatile Organic Compounds
2. Analysis by EPA Method 8260B
3. mg/kg - milligrams per kilogram
4. (J) - EPA QC Qualifier - Estimated value below the lowest calibration point. Confidence correlates with concentration.
5. (V3) - ESC data qualifier - The internal standard exhibit poor recovery due to sample matrix interference. The analytical results will be biased high. BDL results will be unaffected.
6. DEQ RUSLs - Idaho Department of Environmental Quality Petroleum Residential Use Screening Levels (August 2012)
7. DEQ IDTLs - DEQ Initial Default Target Levels (July 2004)
8. EPA RSL - Environmental Protection Agency Regional Screening Level, June 2015 (revised)
9. NE - Not established

(P) - Primary sample
(D) - Duplicate sample
**Bold** - Concentrations reported above laboratory Method Detection Limit (MDL)
**Bold** - Concentration exceeds the RUSL, IDTL, or EPA RSL

**Table D-4**
**Laboratory Analytical Results - Soil VOCs[1] (Non-Detections Exceeding IDTLs)**
**Proposed 'The Afton' Site**
**620 S. 9th Street**
**Boise, Idaho**

| Sample ID | Date Sampled | Units | Analyte[2] | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Acrylonitrile | Bromodichloromethane | Bromomethane | Carbon Tetrachloride | Chloroform | 1,2-Dibromo-3-chloropropane | 1,2-Dibromoethane (EDB) | 1,2-Dichloropropane | cis-1,3-Dichloropropene | trans-1,3-Dichloropropene | Methylene Chloride | 1,1,2,2-Tetrachloroethane | 1,1,2-Trichloroethane | Trichloroethene | 1,2,3-Trichloropropane | Vinyl Chloride |
| DU1 S-1 (P) | 7/29/2015 | mg/kg[3] | **<0.060** | **<0.0084** | <0.044 | <0.011 | **<0.0076** | **<0.035** | **<0.011** | **<0.012** | **<0.0087** | **<0.0089** | **<0.033** | **<0.012** | <0.0092 | **<0.0093** | **<0.025** | **<0.0097** |
| DU1 S-2 | 7/29/2015 | mg/kg | **<0.079** | **<0.011** | **<0.059** | **<0.014** | **<0.010** | **<0.046** | **<0.015** | **<0.016** | **<0.012** | **<0.012** | **<0.044** | **<0.016** | <0.012 | **<0.012** | **<0.033** | **<0.013** |
| DU1 S-3 (D) | 7/29/2015 | mg/kg | **<0.084** | **<0.012** | **<0.063** | **<0.015** | **<0.011** | **<0.049** | **<0.016** | **<0.017** | **<0.012** | **<0.013** | **<0.047** | **<0.017** | <0.013 | **<0.013** | **<0.035** | **<0.014** |
| DU2 S-1 (P) | 7/29/2015 | mg/kg | **<0.097** | **<0.014** | **<.072** | **<0.018** | **<0.012** | **<0.057** | **<0.018** | **<0.019** | **<0.014** | **<0.014** | **<0.054** | **<0.020** | **<0.015** | **<0.015** | **<0.040** | **<0.016** |
| DU2 S-2 | 7/29/2015 | mg/kg | **<0.044** | **<0.0063** | <0.033 | <0.0081 | **<0.0057** | **<0.026** | **<0.0085** | <0.0089 | **<0.0065** | **<0.0066** | **<0.025** | **<0.0090** | <0.0068 | **<0.0069** | **<0.018** | <0.0072 |
| DU2 S-3 (D) | 7/29/2015 | mg/kg | **<0.045** | **<0.0064** | <0.034 | <0.0083 | **<0.0058** | **<0.026** | **<0.0087** | **<0.0090** | **<0.0066** | **<0.0067** | **<0.025** | **<0.0092** | <0.0070 | **<0.0070** | **<0.019** | <0.0078 |
| DU3 S-1 (P) | 7/30/2015 | mg/kg | **<0.047** | **<0.0067** | <0.036 | <0.0087 | **<0.0061** | **<0.028** | **<0.0091** | **<0.0095** | **<0.0069** | **<0.0071** | **<0.026** | **<0.0097** | <0.0073 | **<0.0074** | **<0.020** | <0.0077 |
| DU3 S-2 | 7/30/2015 | mg/kg | **<0.049** | **<0.0070** | <0.037 | <0.0090 | **<0.0063** | **<0.029** | **<0.0094** | **<0.0098** | **<0.0072** | **<0.0073** | **<0.028** | **<0.010** | <0.0076 | **<0.0077** | **<0.020** | <0.0080 |
| DU3 S-3 | 7/30/2015 | mg/kg | **<0.046** | **<0.0066** | <0.035 | <0.0085 | **<0.0060** | **<0.027** | **<0.0089** | **<0.0093** | **<0.0068** | **<0.0069** | **<0.026** | **<0.0095** | <0.0072 | **<0.0072** | **<0.019** | <0.0076 |
| DU3 S-4 (D) | 7/30/2015 | mg/kg | **<0.046** | **<0.0065** | <0.034 | <0.0084 | **<0.0058** | **<0.027** | **<0.0087** | **<0.0091** | **<0.0067** | **<0.0068** | **<0.026** | **<0.0093** | <0.0071 | **<0.0071** | **<0.019** | <0.0074 |
| B-TW-1 | 7/27/2015 | mg/kg | **<0.0018** | <0.00025 | <0.0013 | <0.00033 | <0.00023 | **<0.0010** | **<0.00034** | <0.00036 | <0.00026 | <0.00027 | <0.001 | <0.00036 | <0.00028 | <0.00028 | **<0.00074** | <0.00029 |
| B-1 | 7/29/2015 | mg/kg | **<0.061** | **<0.0086** | <0.046 | <0.011 | **<0.0078** | **<0.036** | **<0.012** | **<0.012** | **<0.0089** | **<0.0091** | **<0.034** | **<0.012** | <0.0094 | **<0.0095** | **<0.025** | **<0.0099** |
| B-2 | 7/29/2015 | mg/kg | **<0.075** | **<0.011** | **<0.056** | **<0.014** | **<0.0096** | **<0.044** | **<0.014** | **<0.015** | **<0.011** | **<0.011** | **<0.042** | **<0.015** | <0.012 | **<0.012** | **<0.031** | **<0.012** |
| B-3 | 7/29/2015 | mg/kg | **<0.048** | **<0.0068** | <0.036 | <0.0088 | **<0.0062** | **<0.028** | **<0.0093** | **<0.0097** | **<0.0071** | **<0.0072** | **<0.027** | **<0.0098** | <0.0075 | **<0.0074** | **<0.020** | <0.0078 |
| B-4 | 7/29/2015 | mg/kg | **<0.044** | **<0.0063** | <0.033 | <0.0081 | **<0.0057** | **<0.026** | **<0.0085** | <0.0089 | **<0.0065** | **<0.0066** | **<0.025** | **<0.0090** | <0.0068 | <0.0069 | **<0.018** | <0.0072 |
| TW-3-1 | 7/29/2015 | mg/kg | **<0.0018(J3)** | <0.00025 | <0.0013 | <0.00033 | <0.00023 | **<0.0010(J3)** | **<0.00034** | <0.00036 | <0.00026 | <0.00027 | <0.001 | <0.00036 | <0.00028 | <0.00028 | **<0.00074** | <0.00029 |
| B-6 | 7/29/2015 | mg/kg | **<0.0018** | <0.00025 | <0.0013 | <0.00033 | <0.00023 | **<0.0010** | **<0.00034** | <0.00036 | <0.00026 | <0.00027 | <0.001 | <0.00036 | <0.00028 | <0.00028 | **<0.00074** | <0.00029 |
| B-7 | 7/29/2015 | mg/kg | **<0.0018** | <0.00025 | <0.0013 | <0.00033 | <0.00023 | **<0.0010** | **<0.00034** | <0.00036 | <0.00026 | <0.00027 | <0.001 | <0.00036 | <0.00028 | <0.00028 | **<0.00074** | <0.00029 |
| B-8 | 7/29/2015 | mg/kg | **<0.0018** | <0.00025 | <0.0013 | <0.00033 | <0.00023 | **<0.0010** | **<0.00034** | <0.00036 | <0.00026 | <0.00027 | <0.001 | <0.00036 | <0.00028 | <0.00028 | **<0.00074** | <0.00029 |
| B-9 | 7/29/2015 | mg/kg | **<0.0018** | <0.00025 | <0.0013 | <0.00033 | <0.00023 | **<0.0010** | **<0.00034** | <0.00036 | <0.00026 | <0.00027 | <0.001 | <0.00036 | <0.00028 | <0.00028 | **<0.00074** | <0.00029 |
| B-10 | 7/29/2015 | mg/kg | **<0.044(J3)[4]** | **<0.0062** | <0.033 | <0.0080 | <0.0056 | **<0.026(J3)** | **<0.0084** | <0.0088 | **<0.0064** | **<0.0065** | **<0.024** | **<0.0089** | <0.0068 | **<0.0068** | **<0.018** | <0.0071 |
| B-11 | 7/29/2015 | mg/kg | **<0.054(J3)** | **<0.0076** | <0.040 | <0.0098 | **<0.0069** | **<0.032(J3)** | **<0.010** | **<0.011** | **<0.0079** | **<0.0080** | **<0.030** | **<0.011** | <0.0083 | **<0.0084** | **<0.022** | <0.0087 |
| B-12 | 7/29/2015 | mg/kg | **<0.045(J3)** | **<0.0064** | <0.034 | <0.0083 | **<0.0058** | **<0.026(J3)** | **<0.0087** | **<0.0090** | **<0.0066** | **<0.0067** | **<0.025** | **<0.0092** | <0.0070 | **<0.0070** | **<0.019** | <0.0078 |
| B-13 | 7/29/2015 | mg/kg | **<0.067(J3)** | **<0.0095** | <0.050 | **<0.012** | **<0.0086** | **<0.039(J3)** | **<0.013** | **<0.013** | **<0.0098** | **<0.010** | **<0.038** | **<0.014** | <0.010 | **<0.010** | **<0.028** | **<0.011** |
| B-13D | 7/29/2015 | mg/kg | **<0.068(J3)** | **<0.0097** | **<0.051** | **<0.012** | **<0.0088** | **<0.040(J3)** | **<0.013** | **<0.014** | **<0.010** | **<0.010** | **<0.038** | **<0.014** | <.0010 | **<0.011** | **<0.028** | **<0.011** |
| DEQ IDTL[5] | | | 0.000194 | 0.00268 | 0.0501 | 0.0114 | 0.00564 | 0.000975 | 0.00014 | 0.0089 | 0.00245 | 0.00245 | 0.0169 | 0.000915 | 0.0141 | 0.00288 | 0.000245 | 0.00963 |

Notes:
1. VOCs - Volatile Organic Compounds
2. Analysis by EPA Method 8260B
3. mg/kg - milligrams per kilogram
4. ( J3) - ESC Data Qualifier - The associated batch QC was outside the established quality control range for precision.
5. DEQ IDTLs - DEQ Initial Default Target Levels (July 2004)
(P) - Primary sample
(D) - Duplicate sample
**Bold** - Due to sample dilution the MDL exceeds the IDTL

**Table D-5**
**Laboratory Analytical Results - Soil PAHs[1]**
**Proposed 'The Afton' Site**
**620 S. 9th Street**
**Boise, Idaho**

| Sample ID | Date Sampled | Units | Analyte[2] | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Anthracene | Acenaphthene | Acenaphthylene | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(g,h,i)perylene | Benzo(k)fluoranthracene | Chrysene | Dibenz(a,h)anthracene | Fluoranthene | Fluorene | Indeno(1,2,3-cd)pyrene | Naphthalene | Phenanthrene | Pyrene | 1-Methylnaphthalene | 2-Methylnaphthalene |
| DU1 S-1 (P) | 7/29/2015 | mg/kg[3] | **0.067(J)[4]** | <0.012 | <0.012 | **0.14(J)** | **0.12(J)** | **0.17** | **0.094(J)** | **0.075(J)** | **0.18** | **0.022(J)** | **0.30** | <0.012 | **0.078(J)** | <0.040 | **0.16** | **0.35** | <0.040 | <0.040 |
| DU1 S-2 | 7/29/2015 | mg/kg | **0.022(J)** | <0.012 | <0.012 | **0.11(J)** | **0.10(J)** | **0.15** | **0.078(J)** | **0.052(J)** | **0.14(J)** | **0.018(J)** | **0.20** | <0.012 | **0.066(J)** | <0.040 | **0.11** | **0.22** | <0.040 | <0.040 |
| DU1 S-3 (D) | 7/29/2015 | mg/kg | **0.26** | **0.022(J)** | <0.012 | **0.29** | **0.25** | **0.40** | **0.18** | **0.11(J)** | **0.42** | **0.042(J)** | **0.72** | **0.028(J)** | **0.16** | <0.040 | **0.37** | **0.86** | <0.040 | <0.040 |
| DU2 S-1 (P) | 7/29/2015 | mg/kg | **0.017(J)** | <0.012 | <0.012 | **0.072(J)** | **0.091(J)** | **0.11(J)** | **0.081(J)** | **0.046(J)** | **0.096(J)** | **0.016(J)** | **0.13(J)** | <0.012 | **0.062(J)** | <0.040 | **0.076(J)** | **0.15** | <0.040 | <0.040 |
| DU2 S-2 | 7/29/2015 | mg/kg | <0.012 | <0.012 | <0.012 | **0.057(J)** | **0.066(J)** | **0.093(J)** | **0.064(J)** | **0.026(J)** | **0.076(J)** | **0.013(J)** | **0.11(J)** | <0.012 | **0.049(J)** | <0.040 | **0.049(J)** | **0.12(J)** | <0.040 | <0.040 |
| DU2 S-3 (D) | 7/29/2015 | mg/kg | **0.023(J)** | <0.012 | <0.012 | **0.095(J)** | **0.12(J)** | **0.14** | **0.096(J)** | **0.045(J)** | **0.12(J)** | **0.016(J)** | **0.22** | <0.012 | **0.072(J)** | <0.040 | **0.13(J)** | **0.24** | <0.040 | <0.040 |
| DU3 S-1 (P) | 7/30/2015 | mg/kg | **0.16** | **0.040(J)** | <0.012 | **1.3** | **2.0** | **3.1** | **2.0** | **0.93** | **1.8** | **0.48** | **1.9** | **0.041(J)** | **1.6** | **0.067(J)** | **0.54** | **2.0** | <0.040 | <0.040 |
| DU3 S-2 | 7/30/2015 | mg/kg | **0.068** | **0.020(J)** | **0.0045(J)** | **1.1** | **1.4** | **2.1** | **1.3** | **0.63** | **1.3** | **0.34** | **1.4** | **0.013(J)** | **1.0** | **0.053(J)** | **0.37** | **1.4** | **0.041(J)** | **0.048(J)** |
| DU3 S-3 | 7/30/2015 | mg/kg | **0.11** | **0.033(J)** | <0.0060 | **1.1** | **1.4** | **1.9** | **1.2** | **0.56** | **1.3** | **0.30** | **1.7** | **0.023(J)** | **0.90** | **0.13(J)** | **0.51** | **1.7** | **0.024(J)** | **0.039(J)** |
| DU3 S-4 (D) | 7/30/2015 | mg/kg | **0.15** | **0.041(J)** | <0.0060 | **1.3** | **1.6** | **2.2** | **1.3** | **0.62** | **1.5** | **0.32** | **2.1** | **0.036(J)** | **1.0** | **0.040(J)** | **0.73** | **2.1** | **0.024(J)** | **0.029(J)** |
| B-TW-1 | 7/27/2015 | mg/kg | **0.0053(J)** | **0.0012(J)** | <0.00060 | **0.0079** | **0.0095** | **0.019** | **0.015** | **0.0048(J)** | **0.018** | **0.0018(J)** | **0.012** | 0.0031(J) | **0.0076** | <0.0020 | **0.0088** | **0.045** | <0.0020 | <0.0020 |
| B-1 | 7/29/2015 | mg/kg | **0.12** | **0.014(J)** | <0.012 | **0.26** | **0.46** | **0.65** | **0.61** | **0.23** | **0.50** | **0.12(J)** | **0.50** | 0.013(J) | **0.46** | **0.16(J)** | **0.26** | **0.53** | **0.092(J)** | **0.11(J)** |
| B-2 | 7/29/2015 | mg/kg | **0.060** | **0.0099(J)** | **0.0059(J)** | **0.16** | **0.17** | **0.21** | **0.16** | **0.071** | **0.21** | **0.033** | **0.31** | 0.015(J) | **0.12** | **0.13** | **0.20** | **0.34** | **0.11** | **0.12** |
| B-3 | 7/29/2015 | mg/kg | <0.00060 | <0.00060 | <0.00060 | **0.0014(J)** | **0.0013(J)** | **0.0015(J)** | **0.0010(J)** | **0.00076(J)** | **0.0012(J)** | <0.00060 | **0.0024(J)** | <0.00060 | **0.00083(J)** | <0.0020 | <0.00060 | **0.0024(J)** | <0.0020 | <0.0020 |
| B-4 | 7/29/2015 | mg/kg | **0.0020(J)** | <0.00060 | <0.00060 | **0.025** | **0.026** | **0.027** | **0.015** | **0.010** | **0.026** | **0.0034(J)** | **0.035** | <0.00060 | **0.014** | <0.0020 | **0.0032(J)** | **0.044** | <0.0020 | <0.0020 |
| TW-3-1 | 7/29/2015 | mg/kg | **0.081** | **0.0056(J)** | **0.13** | **0.27** | **0.58** | **0.61** | **0.64** | **0.22** | **0.44** | **0.13** | **0.55** | **0.011(J)** | **0.47** | **0.064(J)** | **0.12** | **0.74** | <0.010 | **0.018(J)** |
| B-6 | 7/29/2015 | mg/kg | **0.10** | **0.057** | **0.0061(J)** | **0.079** | **1.4** | **1.8** | **1.4** | **0.56** | **1.0** | **0.30** | **1.0** | **0.043** | **1.1** | **0.12(J)** | **0.38** | **1.1** | **0.080(J)** | **0.13** |
| B-7 | 7/29/2015 | mg/kg | <0.00060 | <0.00060 | <0.00060 | **0.00091(J)** | **0.00075(J)** | **0.0010(J)** | <0.00060 | <0.00060 | <0.00060 | <0.00060 | **0.00079(J)** | <0.00060 | <0.00060 | <0.0020 | <0.00060 | **0.0010(J)** | <0.0020 | <0.0020 |
| B-8 | 7/29/2015 | mg/kg | **0.0056(J)** | **0.0015(J)** | <0.00060 | **0.021** | **0.018** | **0.020** | **0.011** | **0.0068** | **0.022** | **0.0025(J)** | **0.041** | **0.0016(J)** | **0.0086** | <0.0020 | **0.026** | **0.045** | <0.0020 | <0.0020 |
| B-9 | 7/29/2015 | mg/kg | **0.19** | <0.0030 | <0.0030 | **1.0** | **0.91** | **0.80** | **0.41** | **0.27** | **1.1** | **0.13** | **1.3** | **0.014(J)** | **0.38** | **0.038(J)** | **0.58** | **2.2** | <0.010 | **0.014(J)** |
| B-10 | 7/29/2015 | mg/kg | <0.00060 | <0.00060 | <0.00060 | <0.00060 | <0.00060 | <0.00060 | <0.00060 | <0.00060 | <0.00060 | <0.00060 | 0.00086(J) | <0.00060 | <0.00060 | <0.0020 | **0.00084(J)** | **0.0010(J)** | <0.0020 | <0.0020 |
| B-11 | 7/29/2015 | mg/kg | **0.025(J)** | **0.0059(J)** | <0.0030 | **0.14** | **0.18** | **0.17** | **0.13** | **0.065** | **0.17** | **0.029(J)** | **0.25** | **0.0039(J)** | **0.10** | <0.010 | **0.098** | **0.30** | <0.010 | <0.010 |
| B-12 | 7/29/2015 | mg/kg | **0.0098** | **0.0017(J)** | **0.00073(J)** | **0.048** | **0.050** | **0.045** | **0.026** | **0.019** | **0.050** | **0.0065(J)** | **0.088** | **0.0054(J)** | **0.023** | **0.0030(J)** | **0.065** | **0.12** | **0.0024(J)** | <0.0020 |
| B-13 | 7/29/2015 | mg/kg | **0.024** | **0.0021(J)** | **0.0018(J)** | **0.094** | **0.20** | **0.21** | **0.18** | **0.058** | **0.13** | **0.038** | **0.15** | **0.0041(J)** | **0.15** | **0.020(J)** | **0.036** | **0.22** | <0.0040 | **0.0063(J)** |
| B-13D | 7/29/2015 | mg/kg | **0.021** | **0.0026(J)** | **0.0014(J)** | **0.082** | **0.17** | **0.19** | **0.15** | **0.049** | **0.12** | **0.033** | **0.15** | **0.0051(J)** | **0.13** | **0.017(J)** | **0.043** | **0.21** | <0.0040 | **0.0061(J)** |
| DEQ RUSL[5]/IDTL[6]/EPA RSLs[7] | | mg/kg | 3,200 | 200 | 78 | 0.09 | 0.02 | 0.19 | 1,180 | 1.9 | 9.5 | 0.0422 | 1,400 | 240 | 0.422 | 0.12 | 79 | 1,000 | 18 | 3.31 |

Notes:
1. PAHs - Polycyclic Aromatic Hydrocarbons
2. Analysis by EPA Method 8270C-SIM
3. mg/kg - milligrams per kilogram
4. (J) - EPA QC Qualifier - Estimated value below the lowest calibration point. Confidence correlates with concentration.
5. DEQ RUSLs - Idaho Department of Environmental Quality Petroleum Residential Use Screening Levels (August 2012)
6. DEQ IDTLs - DEQ Initial Default Target Levels (July 2004)
7. EPA RSL - Environmental Protection Agency Regional Screening Level, June 2015 (revised)

(P) - Primary sample
(D) - Duplicate sample
**Bold** - Concentrations reported above laboratory MDL
**Bold** - Concentration exceeds the RUSL, IDTL, or EPA RSL

**Table D-6**
**Laboratory Analytical Results - Soil Priority Pollutant Metals (PPMs)**
**Proposed 'The Afton' Site**
**620 S. 9th Street**
**Boise, Idaho**

| Sample ID | Date Sampled | Units | Analyte[1] | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Antimony | Arsenic | Beryllium | Cadmium | Chromium | Copper | Lead | Mercury | Nickel | Silver | Zinc |
| DU1 S-1 (P) | 7/29/2015 | mg/kg[2] | <0.75 | **7.5** | **0.52** | **0.67** | **8.1** | **8.6** | **52** | **0.38** | **4.9** | **<0.28** | **190** |
| DU1 S-2 | 7/29/2015 | mg/kg | <0.75 | **7.0** | **0.44** | **0.22(J)[3]** | **7.0** | **9.6** | **44** | **0.30** | **5.1** | **<0.28** | **83** |
| DU1 S-3 (D) | 7/29/2015 | mg/kg | <0.75 | **10** | **0.50** | **0.34(J)** | **8.3** | **9.3** | **53** | **0.45(J6)[4]** | **5.5** | **<0.28** | **120(J3J6)[5]** |
| DU2 S-1 (P) | 7/29/2015 | mg/kg | <0.75 | **7.3** | **0.52** | **0.47(J)** | **9.4** | **21** | **120*** | **0.24** | **6.8** | **<0.28** | **170** |
| DU2 S-2 | 7/29/2015 | mg/kg | <0.75 | **6.5** | **0.47** | **0.66** | **8.0** | **19** | **270*** | **0.26** | **5.7** | **<0.28** | **270** |
| DU2 S-3 (D) | 7/29/2015 | mg/kg | <0.75 | **5.8** | **0.48** | **0.54** | **7.7** | **21** | **150*** | **0.24** | **5.4** | **<0.28** | **210** |
| DU3 S-1 (P) | 7/30/2015 | mg/kg | **1.4(J)** | **8.6** | **0.36** | **0.51(J)** | **6.8** | **170** | **110*** | **0.33** | **8.3** | **<0.28** | **110** |
| DU3 S-2 | 7/30/2015 | mg/kg | **10** | **12** | **0.34** | **0.63** | **8.2** | **4,400** | **420*** | **0.54** | **25** | **1.1** | **290** |
| DU3 S-3 | 7/30/2015 | mg/kg | **9.1** | **12** | **0.36** | **0.69** | **8.4** | **700** | **340*** | **1.2** | **12** | **0.40(J)** | **190** |
| DU3 S-4 (D) | 7/30/2015 | mg/kg | **3.5** | **11** | **0.32** | **0.76** | **10** | **510** | **220*** | **1.0** | **10** | **<0.28** | **220** |
| B-TW-1 | 7/27/2015 | mg/kg | NA[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| B-1 | 7/29/2015 | mg/kg | **0.92(J)** | **4.2** | **0.31** | **0.42(J)** | **6.1** | **140** | **100*** | **0.066** | **6.6** | **<0.28** | **120** |
| B-2 | 7/29/2015 | mg/kg | **2.2** | **7.0** | **0.60** | **0.50(J)** | **8.0** | **18** | **120*** | **0.54** | **6.0** | **<0.28** | **330** |
| B-3 | 7/29/2015 | mg/kg | <0.75 | **2.1(J)** | **0.27** | <0.070 | **3.1** | **6.0** | **19** | **0.069** | **1.9(J)** | **<0.28** | **21** |
| B-4 | 7/29/2015 | mg/kg | <0.75 | **5.9** | **0.32** | **0.086(J)** | **4.2** | **2.9** | **6.8** | **0.010 (J)** | **2.8** | **<0.28** | **24** |
| TW-3-1 | 7/29/2015 | mg/kg | <0.75 | **9.0** | **0.39** | **0.48(J)** | **13** | **14** | **43** | **0.081** | **9.2** | **<0.28** | **160** |
| B-6 | 7/29/2015 | mg/kg | **1.8(J)** | **9.1** | **0.33** | **0.37(J)** | **5.1** | **62** | **110*** | **3.4** | **4.4** | **<0.28** | **340** |
| B-7 | 7/29/2015 | mg/kg | <0.75 | **12** | **0.38** | **0.083(J)** | **5.0** | **5.1** | **7.3** | **0.025** | **3.9** | **<0.28** | **31** |
| B-8 | 7/29/2015 | mg/kg | <0.75 | **7.3** | **0.23** | <0.070 | **2.8** | **2.0(J)** | **7.6** | **0.040** | **2.2** | **<0.28** | **19** |
| B-9 | 7/29/2015 | mg/kg | <0.75 | **7.6** | **0.46** | **0.19(J)** | **8.6** | **12** | **130*** | **0.68** | **4.9** | **<0.28** | **57** |
| B-10 | 7/29/2015 | mg/kg | <0.75 | **4.7** | **0.31** | **0.22(J)** | **12** | **8.4** | **27** | **0.046** | **8.1** | **<0.28** | **55** |
| B-11 | 7/29/2015 | mg/kg | <0.75 | **9.7** | **0.13(J)** | **0.28(J)** | **8.3** | **12** | **51** | **0.13** | **5.8** | **<0.28** | **71** |
| B-12 | 7/29/2015 | mg/kg | <0.75 | **7.8** | **0.16(J)** | **0.18(J)** | **6.5** | **6.1** | **170*** | **0.073** | **4.4** | **1.0(J)** | **41** |
| B-13 | 7/29/2015 | mg/kg | <0.75 | **8.7** | **0.61** | **0.33(J)** | **17** | **22** | **44** | **0.060** | **14** | **<0.28** | **100** |
| B-13D | 7/29/2015 | mg/kg | <0.75 | **10** | **0.35** | **0.34(J)** | **15** | **17** | **44** | **0.070** | **11** | **<0.28** | **95** |
| DEQ IDTLs[7] | | | 4.77 | 0.391 | 1.63 | 1.35 | 2,130 | 921 | 49.6 | 0.00509 | 59.1 | 0.189 | 886 |
| DU3 S-2 | 7/29/2015 | mg/l | NA | NA | NA | NA | NA | NA | <0.45 | NA | NA | NA | NA |
| DU3 S-3 | 7/29/2015 | mg/l | NA | NA | NA | NA | NA | NA | <0.45 | NA | NA | NA | NA |
| 20X TCLP[8] | | mg/kg | NE[9] | 100 | NE | 20 | 100 | NE | 20 | 4 | NE | 100 | NE |
| TCLP[10] | | mg/l | NE | 5 | NE | 1 | 5 | NE | 5 | 0.2 | NE | 5 | NE |

Notes:
1. Analysis by EPA Methods 6010B and 7471A
2. mg/kg - milligrams per kilogram
3. (J) - EPA QC Qualifier - Estimated value below the lowest calibration point. Confidence correlates with concentration.
4. (J6) - Data Qualifier - The sample matrix interfered with the ability to make any accurate determination; spike value is low.
5. (J3) - Data Qualifier - The associated batch QC was outhside the established quality control range for precision.
6. NA - Not analyzed
7. DEQ IDTLs - Idaho Department of Environmental Quality Initial Default Target Levels (July 2004)
8. 20X TCLP - 20 Times the Toxicity Characteristic Leaching Procedure value from 40 CFR Chapter 1 section 261.24.
9. NE - Not established in 40 CFR Chapter 1 section 261.24
10. TCLP - Toxicity Characteristic Leaching Procedure

(P) - Primary sample
(D) - Duplicate sample
**Bold** - Concentrations reported above laboratory Method Detection Limit (MDL)
**Bold** - MDL/PQL exceeds IDTL
**Bold** - Concentration exceeds the IDTL
***** - Concentration exceeds 20x TCLP; highest concentrations were rerun for lead TCLP. Results are included at bottom of table.

**Table D-7**
**Laboratory Analytical Results - Groundwater VOCs[1]**
**620 S. 9th Street**
**Boise, Idaho**

| Sample ID | Sample Date | Units | Analyte[2] | |
|---|---|---|---|---|
| | | | 1,1,1-Trichloroethane | Trichlorofluoromethane |
| TW-1 | 7/31/2015 | mg/l[3] | <0.00032 | <0.0012 |
| TW-2 | 7/31/2015 | mg/l | <0.00032 | <0.0012 |
| TW-3 | 7/31/2015 | mg/l | <0.00032 | <0.0012 |
| TW-4 | 7/31/2015 | mg/l | **0.00042(J)[4]** | **0.0084** |
| TW-4D | 7/31/2015 | mg/l | **0.00040(J)** | **0.0080** |
| DEQ IDTL[5] | | mg/l | 0.20 | 2.05 |

Notes:
1. VOCs - Volatile Organic Compounds
2. Analysis by EPA Method 8260B
3. mg/l - milligrams per liter
4. (J) - EPA QC Qualifier - Estimated value below the lowest calibration point. Confidence correlates with concentration.
5. DEQ IDTL - DEQ Initial Default Target Level (July 2004)

**Bold** - Concentration reported above laboratory Method Detection Limit.

**Table D-8**
**Laboratory Analytical Results - Groundwater PAHs[1]**
**620 S. 9th Street**
**Boise, Idaho**

| Sample ID | Sample Date | Units | Analyte[2] | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Benzo(a)anthracene | Benzo(b)fluoranthene | Naphthalene | Phenanthrene | Pyrene | 1-Methylnaphthalene | 2-Methylnaphthalene |
| TW-1 | 7/31/2015 | mg/l[3] | **0.0000055(J)[4]** | **0.0000023(J)** | <0.000020 | <0.0000082 | <0.000012 | <0.0000082 | **0.0000094(J)** |
| TW-2 | 7/31/2015 | mg/l | **0.0000050(J)** | <0.0000021 | <0.000020 | **0.0000089(J)** | <0.000012 | <0.0000082 | **0.000012(J)** |
| TW-3 | 7/31/2015 | mg/l | **0.000010(J)** | <0.0000021 | **0.000023(J)** | <0.0000082 | **0.000070** | **0.0000092(J)** | **0.0000097(J)** |
| TW-4 | 7/31/2015 | mg/l | **0.0000061(J)** | <0.0000021 | <0.000020 | **0.000016(J)** | <0.000012 | <0.0000082 | **0.000010(J)** |
| TW-4D | 7/31/2015 | mg/l | **0.0000066(J)** | <0.0000021 | <0.000020 | **0.000016(J)** | <0.000012 | <0.0000082 | **0.000010(J)** |
| DEQ RUSL[5]/IDTL[6] | | mg/l | 0.000030 | 0.000030 | 0.070 | 0.313 | 1.1 | NE[7] | 0.0417 |

Notes:

1. PAHs - Polycyclic Aromatic Hydrocarbons
2. Analysis by Environmental Protection Agency Method 8270C-SIM
3. mg/l - milligrams per liter
4. (J) - EPA QC Qualifier - Estimated value below the lowest calibration point. Confidence correlates with concentration.
5. DEQ RUSL - Idaho Department of Environmental Quality Petroleum Residential Use Screening Level (August 2012)
6. DEQ IDTL - DEQ Initial Default Target Level (July 2004)
7. NE - Not established

**Bold** - Concentration reported above laboratory Method Detection Limit

**Table D-9**
**Laboratory Analytical Results - Groundwater Priority Pollutant Metals**
**620 S. 9th Street**
**Boise, Idaho**

| Sample ID | Sample Date | Units | Analyte[1] | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Antimony | Arsenic | Chromium | Copper | Mercury | Lead | Zinc |
| TW-1 | 7/31/2015 | mg/l[2] | **0.00034(J)[3]** | **0.0018(J)** | <0.0014 | <0.0053 | <0.000049 | <0.00024 | <0.0059 |
| TW-2 | 7/31/2015 | mg/l | **0.00068(J)** | **0.0023** | **0.0022(J)** | <0.0053 | <0.000049 | **0.0014(J)** | <0.0059 |
| TW-3 | 7/31/2015 | mg/l | **0.00050(J)** | **0.0013(J)** | <0.0014 | <0.0053 | <0.000049 | <0.00024 | **0.0073(J)** |
| TW-4 | 7/31/2015 | mg/l | **0.00084(J)** | **0.0018(J)** | **0.0056(J)** | **0.0062(J)** | **0.000068(J)** | **0.0064** | **0.015(J)** |
| TW-4D | 7/31/2015 | mg/l | **0.0011(J)** | **0.0020** | **0.0055(J)** | **0.0081(J)** | **0.000072(J)** | **0.0078** | **0.015(J)** |
| DEQ IDTL[4] | | mg/l | 0.0060 | 0.010 | 0.10 | 1.3 | 0.0020 | 0.015 | 3.13 |

Notes:

1. Analysis by Environmental Protection Agency Methods 6010B/6020/7470A
2. mg/l - milligrams per liter
3. (J) - EPA QC Qualifier - Estimated value below the lowest calibration point. Confidence correlates with concentration.
4. DEQ IDTL - Idaho Department of Environmental Quality Initial Default Target Level (July 2004)

**Bold** - Concentration reported above laboratory Method Detection Limit

**Table D-10**
**Laboratory Analytical Results - Soil Vapor VOCs[1]**
**620 S. 9th Street**
**Boise, Idaho**

| Sample ID | Sample Date | Units | Analyte[2] | |
|---|---|---|---|---|
| | | | Freon 11 | 1,1,1-Trichloroethane |
| VP-1 | 7/31/2015 | µg/m$^{3(3)}$ | **210,000** | <350 |
| VP-1D | 7/31/2015 | µg/m$^3$ | **200,000** | <360 |
| VP-2 | 7/31/2015 | µg/m$^3$ | **19,000** | **220** |
| EPA RSLs[4] | | µg/m$^3$ | NE | 5,200 |

Notes:
1. VOCs - Volatile Organic Compounds
2. Analysis by EPA Method TO-15 Low Level
3. µg/m$^3$ - milligrams per liter
4. EPA RSL - Environmental Protection Agency Regional Screening Level for Residential Air (June 2015, Revised)

**Bold** - Concentration reported above laboratory Method Detection Limit.

**Table D-11**
**Laboratory Analytical Results - Soil Vapor VOCs[1] (Non-Detections Exceeding VISLs/RSLs)**
**620 S. 9th Street**
**Boise, Idaho**

| Sample ID | Sample Date | Units | Analyte[2] | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Vinyl Chloride | 1,3-Butadiene | 1,1-Dichloroethane | Chloroform | Carbon Tetrachloride | Benzene | 1,2-dichloroethane (EDC) | Trichloroethene | 1,2-Dichloropropane | 1,4-Dioxane | Bromodichloromethane | cis-1,3-Dichloropropane | 1,1,2-Trichloroethane | Tetrachloroethene | Dibromochloromethane | 1,2-Dibromoethane (EDB) | Ethylbenzene | Bromoform | 1,1,2,2-Tetrachloroethane | 1,4-Dichlorobenene | 1,2,4-Trichlorobenzene | Hexachlorobutadiene |
| VP-1 | 7/31/2015 | µg/m$^{3(3)}$ | <160 | <140 | <260 | <310 | <400 | <210 | <260 | <350 | <300 | <930 | <430 | <290 | <350 | <440 | <550 | <500 | <280 | <670 | <440 | <390 | <1,900 | <2,800 |
| VP-1D | 7/31/2015 | µg/m$^3$ | <170 | <150 | <260 | <320 | <420 | <210 | <270 | <350 | <300 | <950 | <440 | <300 | <360 | <450 | <560 | <510 | <290 | <680 | <450 | <400 | <2,000 | <2,800 |
| VP-2 | 7/31/2015 | µg/m$^3$ | <28 | <24 | <43 | <53 | <68 | <34 | <44 | <58 | <50 | <160 | <72 | <49 | <59 | <73 | <92 | <83 | <47 | <110 | <74 | <65 | <320 | <460 |
| VISLs[4]/EPA RSLs[5] | | µg/m$^3$ | 0.17 | 0.094 | 1.8 | 0.12 | 0.47 | 31 | 9 | 0.48 | 0.28 | 0.56 | 0.076 | 0.7 | 0.18 | 11 | 0.1 | 0.4 | 97 | 2.6 | 0.048 | 0.26 | 2.1 | 0.13 |

Notes:
1. VOCs - Volatile Organic Compounds
2. Analysis by EPA Method TO-15 Low Level
3. µg/m$^3$ - milligrams per cubic meter
4. VISLs - Vapor Instrusion Screening Levels (DEQ, August 2012)
5. EPA RSL - Environmental Protection Agency Regional Screening Level for Residential Air (June 2015, Revised)

**Bold** - Concentration reported above laboratory Method Detection Limit.

# APPENDIX E

## Laboratory Analytical Reports

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8/12/2015
Mr. Andrew Provant
STRATA Geotechnical Engineering
8653 W Hackamore Drive

Boise ID 83709

Project Name: 620 S. 8TH ST.
Project #:
Workorder #: 1507528

Dear Mr. Andrew Provant

The following report includes the data for the above referenced project for sample(s) received on 7/30/2015 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Kelly Buettner at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Kelly Buettner

Project Manager

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# WORK ORDER #: 1507528

Work Order Summary

| | | | |
|---|---|---|---|
| **CLIENT:** | Mr. Andrew Provant<br>STRATA Geotechnical Engineering<br>8653 W Hackamore Drive<br>Boise, ID 83709 | **BILL TO:** | Mr. Andrew Provant<br>STRATA Geotechnical Engineering<br>8653 W Hackamore Drive<br>Boise, ID 83709 |
| **PHONE:** | 208-376-8200 | **P.O. #** | B015086B |
| **FAX:** | | **PROJECT #** | 620 S. 8TH ST. |
| **DATE RECEIVED:** | 07/30/2015 | **CONTACT:** | Kelly Buettner |
| **DATE COMPLETED:** | 08/12/2015 | | |

| FRACTION # | NAME | TEST | RECEIPT VAC./PRES. | FINAL PRESSURE |
|---|---|---|---|---|
| 01A | VP-1 | Modified TO-15 | 6.5 "Hg | 15 psi |
| 02A | VP-1D | Modified TO-15 | 7.0 "Hg | 15 psi |
| 03A | VP-2 | Modified TO-15 | 7.5 "Hg | 15 psi |
| 04A | Lab Blank | Modified TO-15 | NA | NA |
| 04B | Lab Blank | Modified TO-15 | NA | NA |
| 05A | CCV | Modified TO-15 | NA | NA |
| 05B | CCV | Modified TO-15 | NA | NA |
| 06A | LCS | Modified TO-15 | NA | NA |
| 06AA | LCSD | Modified TO-15 | NA | NA |
| 06B | LCS | Modified TO-15 | NA | NA |
| 06BB | LCSD | Modified TO-15 | NA | NA |

CERTIFIED BY: Heidi Mayo DATE: 08/12/15

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704343-14-7, UT NELAP CA009332014-5, VA NELAP - 460197, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2014, Expiration date: 10/17/2015.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, Inc.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 9563
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

**LABORATORY NARRATIVE**
**Modified TO-15**
**STRATA Geotechnical Engineering**
**Workorder# 1507528**

Three 1 Liter Summa Canister (100% Certified) samples were received on July 30, 2015. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

| ***Requirement*** | ***TO-15*** | ***ATL Modifications*** |
|---|---|---|
| Initial Calibration | </=30% RSD with 2 compounds allowed out to < 40% RSD | </=30% RSD with 4 compounds allowed out to < 40% RSD |
| Blank and standards | Zero Air | UHP Nitrogen provides a higher purity gas matrix than zero air |

## Receiving Notes

There were no receiving discrepancies.

## Analytical Notes

All Quality Control Limit exceedances and affected sample results are noted by flags. Each flag is defined at the bottom of this Case Narrative and on each Sample Result Summary page. Target compound non-detects in the samples that are associated with high bias in QC analyses have not been flagged.

Samples VP-1, VP-1D and VP-2 were transferred from Low Level analysis to full scan TO-15 due to high levels of target compounds.

Dilution was performed on samples VP-1, VP-1D and VP-2 due to the presence of high level target species.

## Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data

page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

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# Summary of Detected Compounds
# EPA METHOD TO-15 GC/MS

**Client Sample ID: VP-1**

**Lab ID#: 1507528-01A**

| Compound | Rpt. Limit (ppbv) | Amount (ppbv) | Rpt. Limit (ug/m3) | Amount (ug/m3) |
|---|---|---|---|---|
| Freon 11 | 64 | 37000 | 360 | 210000 |

**Client Sample ID: VP-1D**

**Lab ID#: 1507528-02A**

| Compound | Rpt. Limit (ppbv) | Amount (ppbv) | Rpt. Limit (ug/m3) | Amount (ug/m3) |
|---|---|---|---|---|
| Freon 11 | 66 | 35000 | 370 | 200000 |

**Client Sample ID: VP-2**

**Lab ID#: 1507528-03A**

| Compound | Rpt. Limit (ppbv) | Amount (ppbv) | Rpt. Limit (ug/m3) | Amount (ug/m3) |
|---|---|---|---|---|
| Freon 11 | 11 | 3500 | 61 | 19000 |
| 1,1,1-Trichloroethane | 11 | 40 | 59 | 220 |

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**Client Sample ID: VP-1**

**Lab ID#: 1507528-01A**

**EPA METHOD TO-15 GC/MS**

| | | | |
|---|---|---|---|
| **File Name:** | **14081207** | **Date of Collection:** | **7/29/15 2:54:00 PM** |
| **Dil. Factor:** | **12.9** | **Date of Analysis:** | **8/12/15 09:36 AM** |

| Compound | Rpt. Limit (ppbv) | Amount (ppbv) | Rpt. Limit (ug/m3) | Amount (ug/m3) |
|---|---|---|---|---|
| Freon 12 | 64 | Not Detected | 320 | Not Detected |
| Freon 114 | 64 | Not Detected | 450 | Not Detected |
| Chloromethane | 260 | Not Detected | 530 | Not Detected |
| Vinyl Chloride | 64 | Not Detected | 160 | Not Detected |
| 1,3-Butadiene | 64 | Not Detected | 140 | Not Detected |
| Bromomethane | 64 | Not Detected | 250 | Not Detected |
| Chloroethane | 260 | Not Detected | 680 | Not Detected |
| Freon 11 | 64 | 37000 | 360 | 210000 |
| Ethanol | 260 | Not Detected | 490 | Not Detected |
| Freon 113 | 64 | Not Detected | 490 | Not Detected |
| 1,1-Dichloroethene | 64 | Not Detected | 260 | Not Detected |
| Acetone | 260 | Not Detected | 610 | Not Detected |
| 2-Propanol | 260 | Not Detected | 630 | Not Detected |
| Carbon Disulfide | 64 | Not Detected | 200 | Not Detected |
| 3-Chloropropene | 260 | Not Detected | 810 | Not Detected |
| Methylene Chloride | 64 | Not Detected | 220 | Not Detected |
| Methyl tert-butyl ether | 64 | Not Detected | 230 | Not Detected |
| trans-1,2-Dichloroethene | 64 | Not Detected | 260 | Not Detected |
| Hexane | 64 | Not Detected | 230 | Not Detected |
| 1,1-Dichloroethane | 64 | Not Detected | 260 | Not Detected |
| 2-Butanone (Methyl Ethyl Ketone) | 260 | Not Detected | 760 | Not Detected |
| cis-1,2-Dichloroethene | 64 | Not Detected | 260 | Not Detected |
| Tetrahydrofuran | 64 | Not Detected | 190 | Not Detected |
| Chloroform | 64 | Not Detected | 310 | Not Detected |
| 1,1,1-Trichloroethane | 64 | Not Detected | 350 | Not Detected |
| Cyclohexane | 64 | Not Detected | 220 | Not Detected |
| Carbon Tetrachloride | 64 | Not Detected | 400 | Not Detected |
| 2,2,4-Trimethylpentane | 64 | Not Detected | 300 | Not Detected |
| Benzene | 64 | Not Detected | 210 | Not Detected |
| 1,2-Dichloroethane | 64 | Not Detected | 260 | Not Detected |
| Heptane | 64 | Not Detected | 260 | Not Detected |
| Trichloroethene | 64 | Not Detected | 350 | Not Detected |
| 1,2-Dichloropropane | 64 | Not Detected | 300 | Not Detected |
| 1,4-Dioxane | 260 | Not Detected | 930 | Not Detected |
| Bromodichloromethane | 64 | Not Detected | 430 | Not Detected |
| cis-1,3-Dichloropropene | 64 | Not Detected | 290 | Not Detected |
| 4-Methyl-2-pentanone | 64 | Not Detected | 260 | Not Detected |
| Toluene | 64 | Not Detected | 240 | Not Detected |
| trans-1,3-Dichloropropene | 64 | Not Detected | 290 | Not Detected |
| 1,1,2-Trichloroethane | 64 | Not Detected | 350 | Not Detected |
| Tetrachloroethene | 64 | Not Detected | 440 | Not Detected |
| 2-Hexanone | 260 | Not Detected | 1000 | Not Detected |

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**Client Sample ID: VP-1**

**Lab ID#: 1507528-01A**

**EPA METHOD TO-15 GC/MS**

| | | | |
|---|---|---|---|
| **File Name:** | **14081207** | **Date of Collection:** | **7/29/15 2:54:00 PM** |
| **Dil. Factor:** | **12.9** | **Date of Analysis:** | **8/12/15 09:36 AM** |

| Compound | Rpt. Limit (ppbv) | Amount (ppbv) | Rpt. Limit (ug/m3) | Amount (ug/m3) |
|---|---|---|---|---|
| Dibromochloromethane | 64 | Not Detected | 550 | Not Detected |
| 1,2-Dibromoethane (EDB) | 64 | Not Detected | 500 | Not Detected |
| Chlorobenzene | 64 | Not Detected | 300 | Not Detected |
| Ethyl Benzene | 64 | Not Detected | 280 | Not Detected |
| m,p-Xylene | 64 | Not Detected | 280 | Not Detected |
| o-Xylene | 64 | Not Detected | 280 | Not Detected |
| Styrene | 64 | Not Detected | 270 | Not Detected |
| Bromoform | 64 | Not Detected | 670 | Not Detected |
| Cumene | 64 | Not Detected | 320 | Not Detected |
| 1,1,2,2-Tetrachloroethane | 64 | Not Detected | 440 | Not Detected |
| Propylbenzene | 64 | Not Detected | 320 | Not Detected |
| 4-Ethyltoluene | 64 | Not Detected | 320 | Not Detected |
| 1,3,5-Trimethylbenzene | 64 | Not Detected | 320 | Not Detected |
| 1,2,4-Trimethylbenzene | 64 | Not Detected | 320 | Not Detected |
| 1,3-Dichlorobenzene | 64 | Not Detected | 390 | Not Detected |
| 1,4-Dichlorobenzene | 64 | Not Detected | 390 | Not Detected |
| alpha-Chlorotoluene | 64 | Not Detected | 330 | Not Detected |
| 1,2-Dichlorobenzene | 64 | Not Detected | 390 | Not Detected |
| 1,2,4-Trichlorobenzene | 260 | Not Detected | 1900 | Not Detected |
| Hexachlorobutadiene | 260 | Not Detected | 2800 | Not Detected |

**Container Type: 1 Liter Summa Canister (100% Certified)**

| Surrogates | %Recovery | Method Limits |
|---|---|---|
| 1,2-Dichloroethane-d4 | 109 | 70-130 |
| Toluene-d8 | 98 | 70-130 |
| 4-Bromofluorobenzene | 98 | 70-130 |

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**Client Sample ID: VP-1D**

**Lab ID#: 1507528-02A**

**EPA METHOD TO-15 GC/MS**

| | | | |
|---|---|---|---|
| **File Name:** | **14081208** | **Date of Collection:** | **7/29/15 2:54:00 PM** |
| **Dil. Factor:** | **13.2** | **Date of Analysis:** | **8/12/15 10:05 AM** |

| Compound | Rpt. Limit (ppbv) | Amount (ppbv) | Rpt. Limit (ug/m3) | Amount (ug/m3) |
|---|---|---|---|---|
| Freon 12 | 66 | Not Detected | 330 | Not Detected |
| Freon 114 | 66 | Not Detected | 460 | Not Detected |
| Chloromethane | 260 | Not Detected | 540 | Not Detected |
| Vinyl Chloride | 66 | Not Detected | 170 | Not Detected |
| 1,3-Butadiene | 66 | Not Detected | 150 | Not Detected |
| Bromomethane | 66 | Not Detected | 260 | Not Detected |
| Chloroethane | 260 | Not Detected | 700 | Not Detected |
| Freon 11 | 66 | 35000 | 370 | 200000 |
| Ethanol | 260 | Not Detected | 500 | Not Detected |
| Freon 113 | 66 | Not Detected | 500 | Not Detected |
| 1,1-Dichloroethene | 66 | Not Detected | 260 | Not Detected |
| Acetone | 260 | Not Detected | 630 | Not Detected |
| 2-Propanol | 260 | Not Detected | 650 | Not Detected |
| Carbon Disulfide | 66 | Not Detected | 200 | Not Detected |
| 3-Chloropropene | 260 | Not Detected | 830 | Not Detected |
| Methylene Chloride | 66 | Not Detected | 230 | Not Detected |
| Methyl tert-butyl ether | 66 | Not Detected | 240 | Not Detected |
| trans-1,2-Dichloroethene | 66 | Not Detected | 260 | Not Detected |
| Hexane | 66 | Not Detected | 230 | Not Detected |
| 1,1-Dichloroethane | 66 | Not Detected | 270 | Not Detected |
| 2-Butanone (Methyl Ethyl Ketone) | 260 | Not Detected | 780 | Not Detected |
| cis-1,2-Dichloroethene | 66 | Not Detected | 260 | Not Detected |
| Tetrahydrofuran | 66 | Not Detected | 190 | Not Detected |
| Chloroform | 66 | Not Detected | 320 | Not Detected |
| 1,1,1-Trichloroethane | 66 | Not Detected | 360 | Not Detected |
| Cyclohexane | 66 | Not Detected | 230 | Not Detected |
| Carbon Tetrachloride | 66 | Not Detected | 420 | Not Detected |
| 2,2,4-Trimethylpentane | 66 | Not Detected | 310 | Not Detected |
| Benzene | 66 | Not Detected | 210 | Not Detected |
| 1,2-Dichloroethane | 66 | Not Detected | 270 | Not Detected |
| Heptane | 66 | Not Detected | 270 | Not Detected |
| Trichloroethene | 66 | Not Detected | 350 | Not Detected |
| 1,2-Dichloropropane | 66 | Not Detected | 300 | Not Detected |
| 1,4-Dioxane | 260 | Not Detected | 950 | Not Detected |
| Bromodichloromethane | 66 | Not Detected | 440 | Not Detected |
| cis-1,3-Dichloropropene | 66 | Not Detected | 300 | Not Detected |
| 4-Methyl-2-pentanone | 66 | Not Detected | 270 | Not Detected |
| Toluene | 66 | Not Detected | 250 | Not Detected |
| trans-1,3-Dichloropropene | 66 | Not Detected | 300 | Not Detected |
| 1,1,2-Trichloroethane | 66 | Not Detected | 360 | Not Detected |
| Tetrachloroethene | 66 | Not Detected | 450 | Not Detected |
| 2-Hexanone | 260 | Not Detected | 1100 | Not Detected |

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**Client Sample ID: VP-1D**

**Lab ID#: 1507528-02A**

**EPA METHOD TO-15 GC/MS**

| | | | |
|---|---|---|---|
| **File Name:** | **14081208** | **Date of Collection:** | **7/29/15 2:54:00 PM** |
| **Dil. Factor:** | **13.2** | **Date of Analysis:** | **8/12/15 10:05 AM** |

| Compound | Rpt. Limit (ppbv) | Amount (ppbv) | Rpt. Limit (ug/m3) | Amount (ug/m3) |
|---|---|---|---|---|
| Dibromochloromethane | 66 | Not Detected | 560 | Not Detected |
| 1,2-Dibromoethane (EDB) | 66 | Not Detected | 510 | Not Detected |
| Chlorobenzene | 66 | Not Detected | 300 | Not Detected |
| Ethyl Benzene | 66 | Not Detected | 290 | Not Detected |
| m,p-Xylene | 66 | Not Detected | 290 | Not Detected |
| o-Xylene | 66 | Not Detected | 290 | Not Detected |
| Styrene | 66 | Not Detected | 280 | Not Detected |
| Bromoform | 66 | Not Detected | 680 | Not Detected |
| Cumene | 66 | Not Detected | 320 | Not Detected |
| 1,1,2,2-Tetrachloroethane | 66 | Not Detected | 450 | Not Detected |
| Propylbenzene | 66 | Not Detected | 320 | Not Detected |
| 4-Ethyltoluene | 66 | Not Detected | 320 | Not Detected |
| 1,3,5-Trimethylbenzene | 66 | Not Detected | 320 | Not Detected |
| 1,2,4-Trimethylbenzene | 66 | Not Detected | 320 | Not Detected |
| 1,3-Dichlorobenzene | 66 | Not Detected | 400 | Not Detected |
| 1,4-Dichlorobenzene | 66 | Not Detected | 400 | Not Detected |
| alpha-Chlorotoluene | 66 | Not Detected | 340 | Not Detected |
| 1,2-Dichlorobenzene | 66 | Not Detected | 400 | Not Detected |
| 1,2,4-Trichlorobenzene | 260 | Not Detected | 2000 | Not Detected |
| Hexachlorobutadiene | 260 | Not Detected | 2800 | Not Detected |

**Container Type: 1 Liter Summa Canister (100% Certified)**

| Surrogates | %Recovery | Method Limits |
|---|---|---|
| 1,2-Dichloroethane-d4 | 107 | 70-130 |
| Toluene-d8 | 100 | 70-130 |
| 4-Bromofluorobenzene | 94 | 70-130 |

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**Client Sample ID: VP-2**

**Lab ID#: 1507528-03A**

**EPA METHOD TO-15 GC/MS FULL SCAN**

| | | | |
|---|---|---|---|
| **File Name:** | **17081117** | **Date of Collection:** | **7/29/15 3:01:00 PM** |
| **Dil. Factor:** | **21.6** | **Date of Analysis:** | **8/11/15 07:43 PM** |

| Compound | Rpt. Limit (ppbv) | Amount (ppbv) | Rpt. Limit (ug/m3) | Amount (ug/m3) |
|---|---|---|---|---|
| Freon 12 | 11 | Not Detected | 53 | Not Detected |
| Freon 114 | 11 | Not Detected | 76 | Not Detected |
| Chloromethane | 110 | Not Detected | 220 | Not Detected |
| Vinyl Chloride | 11 | Not Detected | 28 | Not Detected |
| 1,3-Butadiene | 11 | Not Detected | 24 | Not Detected |
| Bromomethane | 110 | Not Detected | 420 | Not Detected |
| Chloroethane | 43 | Not Detected | 110 | Not Detected |
| Freon 11 | 11 | 3500 | 61 | 19000 |
| Ethanol | 43 | Not Detected | 81 | Not Detected |
| Freon 113 | 11 | Not Detected | 83 | Not Detected |
| 1,1-Dichloroethene | 11 | Not Detected | 43 | Not Detected |
| Acetone | 110 | Not Detected | 260 | Not Detected |
| 2-Propanol | 43 | Not Detected | 110 | Not Detected |
| Carbon Disulfide | 43 | Not Detected | 130 | Not Detected |
| 3-Chloropropene | 43 | Not Detected | 140 | Not Detected |
| Methylene Chloride | 110 | Not Detected | 380 | Not Detected |
| Methyl tert-butyl ether | 11 | Not Detected | 39 | Not Detected |
| trans-1,2-Dichloroethene | 11 | Not Detected | 43 | Not Detected |
| Hexane | 11 | Not Detected | 38 | Not Detected |
| 1,1-Dichloroethane | 11 | Not Detected | 44 | Not Detected |
| 2-Butanone (Methyl Ethyl Ketone) | 43 | Not Detected | 130 | Not Detected |
| cis-1,2-Dichloroethene | 11 | Not Detected | 43 | Not Detected |
| Tetrahydrofuran | 11 | Not Detected | 32 | Not Detected |
| Chloroform | 11 | Not Detected | 53 | Not Detected |
| 1,1,1-Trichloroethane | 11 | 40 | 59 | 220 |
| Cyclohexane | 11 | Not Detected | 37 | Not Detected |
| Carbon Tetrachloride | 11 | Not Detected | 68 | Not Detected |
| 2,2,4-Trimethylpentane | 11 | Not Detected | 50 | Not Detected |
| Benzene | 11 | Not Detected | 34 | Not Detected |
| 1,2-Dichloroethane | 11 | Not Detected | 44 | Not Detected |
| Heptane | 11 | Not Detected | 44 | Not Detected |
| Trichloroethene | 11 | Not Detected | 58 | Not Detected |
| 1,2-Dichloropropane | 11 | Not Detected | 50 | Not Detected |
| 1,4-Dioxane | 43 | Not Detected | 160 | Not Detected |
| Bromodichloromethane | 11 | Not Detected | 72 | Not Detected |
| cis-1,3-Dichloropropene | 11 | Not Detected | 49 | Not Detected |
| 4-Methyl-2-pentanone | 11 | Not Detected | 44 | Not Detected |
| Toluene | 11 | Not Detected | 41 | Not Detected |
| trans-1,3-Dichloropropene | 11 | Not Detected | 49 | Not Detected |
| 1,1,2-Trichloroethane | 11 | Not Detected | 59 | Not Detected |
| Tetrachloroethene | 11 | Not Detected | 73 | Not Detected |
| 2-Hexanone | 43 | Not Detected | 180 | Not Detected |

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**Client Sample ID: VP-2**

**Lab ID#: 1507528-03A**

**EPA METHOD TO-15 GC/MS FULL SCAN**

| | | | |
|---|---|---|---|
| **File Name:** | **17081117** | **Date of Collection:** | **7/29/15 3:01:00 PM** |
| **Dil. Factor:** | **21.6** | **Date of Analysis:** | **8/11/15 07:43 PM** |

| Compound | Rpt. Limit (ppbv) | Amount (ppbv) | Rpt. Limit (ug/m3) | Amount (ug/m3) |
|---|---|---|---|---|
| Dibromochloromethane | 11 | Not Detected | 92 | Not Detected |
| 1,2-Dibromoethane (EDB) | 11 | Not Detected | 83 | Not Detected |
| Chlorobenzene | 11 | Not Detected | 50 | Not Detected |
| Ethyl Benzene | 11 | Not Detected | 47 | Not Detected |
| m,p-Xylene | 11 | Not Detected | 47 | Not Detected |
| o-Xylene | 11 | Not Detected | 47 | Not Detected |
| Styrene | 11 | Not Detected | 46 | Not Detected |
| Bromoform | 11 | Not Detected | 110 | Not Detected |
| Cumene | 11 | Not Detected | 53 | Not Detected |
| 1,1,2,2-Tetrachloroethane | 11 | Not Detected | 74 | Not Detected |
| Propylbenzene | 11 | Not Detected | 53 | Not Detected |
| 4-Ethyltoluene | 11 | Not Detected | 53 | Not Detected |
| 1,3,5-Trimethylbenzene | 11 | Not Detected | 53 | Not Detected |
| 1,2,4-Trimethylbenzene | 11 | Not Detected | 53 | Not Detected |
| 1,3-Dichlorobenzene | 11 | Not Detected | 65 | Not Detected |
| 1,4-Dichlorobenzene | 11 | Not Detected | 65 | Not Detected |
| alpha-Chlorotoluene | 11 | Not Detected | 56 | Not Detected |
| 1,2-Dichlorobenzene | 11 | Not Detected | 65 | Not Detected |
| 1,2,4-Trichlorobenzene | 43 | Not Detected | 320 | Not Detected |
| Hexachlorobutadiene | 43 | Not Detected | 460 | Not Detected |

**Container Type: 1 Liter Summa Canister (100% Certified)**

| Surrogates | %Recovery | Method Limits |
|---|---|---|
| Toluene-d8 | 107 | 70-130 |
| 1,2-Dichloroethane-d4 | 111 | 70-130 |
| 4-Bromofluorobenzene | 77 | 70-130 |

eurofins | Air Toxics

**Client Sample ID: Lab Blank**

**Lab ID#: 1507528-04A**

**EPA METHOD TO-15 GC/MS FULL SCAN**

| | | | |
|---|---|---|---|
| **File Name:** | **17081105** | **Date of Collection: NA** | |
| **Dil. Factor:** | **1.00** | **Date of Analysis: 8/11/15 11:31 AM** | |

| Compound | Rpt. Limit (ppbv) | Amount (ppbv) | Rpt. Limit (ug/m3) | Amount (ug/m3) |
|---|---|---|---|---|
| Freon 12 | 0.50 | Not Detected | 2.5 | Not Detected |
| Freon 114 | 0.50 | Not Detected | 3.5 | Not Detected |
| Chloromethane | 5.0 | Not Detected | 10 | Not Detected |
| Vinyl Chloride | 0.50 | Not Detected | 1.3 | Not Detected |
| 1,3-Butadiene | 0.50 | Not Detected | 1.1 | Not Detected |
| Bromomethane | 5.0 | Not Detected | 19 | Not Detected |
| Chloroethane | 2.0 | Not Detected | 5.3 | Not Detected |
| Freon 11 | 0.50 | Not Detected | 2.8 | Not Detected |
| Ethanol | 2.0 | Not Detected | 3.8 | Not Detected |
| Freon 113 | 0.50 | Not Detected | 3.8 | Not Detected |
| 1,1-Dichloroethene | 0.50 | Not Detected | 2.0 | Not Detected |
| Acetone | 5.0 | Not Detected | 12 | Not Detected |
| 2-Propanol | 2.0 | Not Detected | 4.9 | Not Detected |
| Carbon Disulfide | 2.0 | Not Detected | 6.2 | Not Detected |
| 3-Chloropropene | 2.0 | Not Detected | 6.3 | Not Detected |
| Methylene Chloride | 5.0 | Not Detected | 17 | Not Detected |
| Methyl tert-butyl ether | 0.50 | Not Detected | 1.8 | Not Detected |
| trans-1,2-Dichloroethene | 0.50 | Not Detected | 2.0 | Not Detected |
| Hexane | 0.50 | Not Detected | 1.8 | Not Detected |
| 1,1-Dichloroethane | 0.50 | Not Detected | 2.0 | Not Detected |
| 2-Butanone (Methyl Ethyl Ketone) | 2.0 | Not Detected | 5.9 | Not Detected |
| cis-1,2-Dichloroethene | 0.50 | Not Detected | 2.0 | Not Detected |
| Tetrahydrofuran | 0.50 | Not Detected | 1.5 | Not Detected |
| Chloroform | 0.50 | Not Detected | 2.4 | Not Detected |
| 1,1,1-Trichloroethane | 0.50 | Not Detected | 2.7 | Not Detected |
| Cyclohexane | 0.50 | Not Detected | 1.7 | Not Detected |
| Carbon Tetrachloride | 0.50 | Not Detected | 3.1 | Not Detected |
| 2,2,4-Trimethylpentane | 0.50 | Not Detected | 2.3 | Not Detected |
| Benzene | 0.50 | Not Detected | 1.6 | Not Detected |
| 1,2-Dichloroethane | 0.50 | Not Detected | 2.0 | Not Detected |
| Heptane | 0.50 | Not Detected | 2.0 | Not Detected |
| Trichloroethene | 0.50 | Not Detected | 2.7 | Not Detected |
| 1,2-Dichloropropane | 0.50 | Not Detected | 2.3 | Not Detected |
| 1,4-Dioxane | 2.0 | Not Detected | 7.2 | Not Detected |
| Bromodichloromethane | 0.50 | Not Detected | 3.4 | Not Detected |
| cis-1,3-Dichloropropene | 0.50 | Not Detected | 2.3 | Not Detected |
| 4-Methyl-2-pentanone | 0.50 | Not Detected | 2.0 | Not Detected |
| Toluene | 0.50 | Not Detected | 1.9 | Not Detected |
| trans-1,3-Dichloropropene | 0.50 | Not Detected | 2.3 | Not Detected |
| 1,1,2-Trichloroethane | 0.50 | Not Detected | 2.7 | Not Detected |
| Tetrachloroethene | 0.50 | Not Detected | 3.4 | Not Detected |
| 2-Hexanone | 2.0 | Not Detected | 8.2 | Not Detected |

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**Client Sample ID: Lab Blank**

**Lab ID#: 1507528-04A**

**EPA METHOD TO-15 GC/MS FULL SCAN**

| | | | |
|---|---|---|---|
| **File Name:** | **17081105** | **Date of Collection: NA** | |
| **Dil. Factor:** | **1.00** | **Date of Analysis: 8/11/15 11:31 AM** | |

| Compound | Rpt. Limit (ppbv) | Amount (ppbv) | Rpt. Limit (ug/m3) | Amount (ug/m3) |
|---|---|---|---|---|
| Dibromochloromethane | 0.50 | Not Detected | 4.2 | Not Detected |
| 1,2-Dibromoethane (EDB) | 0.50 | Not Detected | 3.8 | Not Detected |
| Chlorobenzene | 0.50 | Not Detected | 2.3 | Not Detected |
| Ethyl Benzene | 0.50 | Not Detected | 2.2 | Not Detected |
| m,p-Xylene | 0.50 | Not Detected | 2.2 | Not Detected |
| o-Xylene | 0.50 | Not Detected | 2.2 | Not Detected |
| Styrene | 0.50 | Not Detected | 2.1 | Not Detected |
| Bromoform | 0.50 | Not Detected | 5.2 | Not Detected |
| Cumene | 0.50 | Not Detected | 2.4 | Not Detected |
| 1,1,2,2-Tetrachloroethane | 0.50 | Not Detected | 3.4 | Not Detected |
| Propylbenzene | 0.50 | Not Detected | 2.4 | Not Detected |
| 4-Ethyltoluene | 0.50 | Not Detected | 2.4 | Not Detected |
| 1,3,5-Trimethylbenzene | 0.50 | Not Detected | 2.4 | Not Detected |
| 1,2,4-Trimethylbenzene | 0.50 | Not Detected | 2.4 | Not Detected |
| 1,3-Dichlorobenzene | 0.50 | Not Detected | 3.0 | Not Detected |
| 1,4-Dichlorobenzene | 0.50 | Not Detected | 3.0 | Not Detected |
| alpha-Chlorotoluene | 0.50 | Not Detected | 2.6 | Not Detected |
| 1,2-Dichlorobenzene | 0.50 | Not Detected | 3.0 | Not Detected |
| 1,2,4-Trichlorobenzene | 2.0 | Not Detected | 15 | Not Detected |
| Hexachlorobutadiene | 2.0 | Not Detected | 21 | Not Detected |

**Container Type: NA - Not Applicable**

| Surrogates | %Recovery | Method Limits |
|---|---|---|
| Toluene-d8 | 103 | 70-130 |
| 1,2-Dichloroethane-d4 | 116 | 70-130 |
| 4-Bromofluorobenzene | 79 | 70-130 |

eurofins | Air Toxics

**Client Sample ID: Lab Blank**

**Lab ID#: 1507528-04B**

**EPA METHOD TO-15 GC/MS**

| | | | |
|---|---|---|---|
| **File Name:** | **14081205** | **Date of Collection: NA** | |
| **Dil. Factor:** | **1.00** | **Date of Analysis: 8/12/15 08:43 AM** | |

| Compound | Rpt. Limit (ppbv) | Amount (ppbv) | Rpt. Limit (ug/m3) | Amount (ug/m3) |
|---|---|---|---|---|
| Freon 12 | 5.0 | Not Detected | 25 | Not Detected |
| Freon 114 | 5.0 | Not Detected | 35 | Not Detected |
| Chloromethane | 20 | Not Detected | 41 | Not Detected |
| Vinyl Chloride | 5.0 | Not Detected | 13 | Not Detected |
| 1,3-Butadiene | 5.0 | Not Detected | 11 | Not Detected |
| Bromomethane | 5.0 | Not Detected | 19 | Not Detected |
| Chloroethane | 20 | Not Detected | 53 | Not Detected |
| Freon 11 | 5.0 | Not Detected | 28 | Not Detected |
| Ethanol | 20 | Not Detected | 38 | Not Detected |
| Freon 113 | 5.0 | Not Detected | 38 | Not Detected |
| 1,1-Dichloroethene | 5.0 | Not Detected | 20 | Not Detected |
| Acetone | 20 | Not Detected | 48 | Not Detected |
| 2-Propanol | 20 | Not Detected | 49 | Not Detected |
| Carbon Disulfide | 5.0 | Not Detected | 16 | Not Detected |
| 3-Chloropropene | 20 | Not Detected | 63 | Not Detected |
| Methylene Chloride | 5.0 | Not Detected | 17 | Not Detected |
| Methyl tert-butyl ether | 5.0 | Not Detected | 18 | Not Detected |
| trans-1,2-Dichloroethene | 5.0 | Not Detected | 20 | Not Detected |
| Hexane | 5.0 | Not Detected | 18 | Not Detected |
| 1,1-Dichloroethane | 5.0 | Not Detected | 20 | Not Detected |
| 2-Butanone (Methyl Ethyl Ketone) | 20 | Not Detected | 59 | Not Detected |
| cis-1,2-Dichloroethene | 5.0 | Not Detected | 20 | Not Detected |
| Tetrahydrofuran | 5.0 | Not Detected | 15 | Not Detected |
| Chloroform | 5.0 | Not Detected | 24 | Not Detected |
| 1,1,1-Trichloroethane | 5.0 | Not Detected | 27 | Not Detected |
| Cyclohexane | 5.0 | Not Detected | 17 | Not Detected |
| Carbon Tetrachloride | 5.0 | Not Detected | 31 | Not Detected |
| 2,2,4-Trimethylpentane | 5.0 | Not Detected | 23 | Not Detected |
| Benzene | 5.0 | Not Detected | 16 | Not Detected |
| 1,2-Dichloroethane | 5.0 | Not Detected | 20 | Not Detected |
| Heptane | 5.0 | Not Detected | 20 | Not Detected |
| Trichloroethene | 5.0 | Not Detected | 27 | Not Detected |
| 1,2-Dichloropropane | 5.0 | Not Detected | 23 | Not Detected |
| 1,4-Dioxane | 20 | Not Detected | 72 | Not Detected |
| Bromodichloromethane | 5.0 | Not Detected | 34 | Not Detected |
| cis-1,3-Dichloropropene | 5.0 | Not Detected | 23 | Not Detected |
| 4-Methyl-2-pentanone | 5.0 | Not Detected | 20 | Not Detected |
| Toluene | 5.0 | Not Detected | 19 | Not Detected |
| trans-1,3-Dichloropropene | 5.0 | Not Detected | 23 | Not Detected |
| 1,1,2-Trichloroethane | 5.0 | Not Detected | 27 | Not Detected |
| Tetrachloroethene | 5.0 | Not Detected | 34 | Not Detected |
| 2-Hexanone | 20 | Not Detected | 82 | Not Detected |

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**Client Sample ID: Lab Blank**

**Lab ID#: 1507528-04B**

**EPA METHOD TO-15 GC/MS**

| | | | |
|---|---|---|---|
| **File Name:** | **14081205** | **Date of Collection: NA** | |
| **Dil. Factor:** | **1.00** | **Date of Analysis: 8/12/15 08:43 AM** | |

| Compound | Rpt. Limit (ppbv) | Amount (ppbv) | Rpt. Limit (ug/m3) | Amount (ug/m3) |
|---|---|---|---|---|
| Dibromochloromethane | 5.0 | Not Detected | 42 | Not Detected |
| 1,2-Dibromoethane (EDB) | 5.0 | Not Detected | 38 | Not Detected |
| Chlorobenzene | 5.0 | Not Detected | 23 | Not Detected |
| Ethyl Benzene | 5.0 | Not Detected | 22 | Not Detected |
| m,p-Xylene | 5.0 | Not Detected | 22 | Not Detected |
| o-Xylene | 5.0 | Not Detected | 22 | Not Detected |
| Styrene | 5.0 | Not Detected | 21 | Not Detected |
| Bromoform | 5.0 | Not Detected | 52 | Not Detected |
| Cumene | 5.0 | Not Detected | 24 | Not Detected |
| 1,1,2,2-Tetrachloroethane | 5.0 | Not Detected | 34 | Not Detected |
| Propylbenzene | 5.0 | Not Detected | 24 | Not Detected |
| 4-Ethyltoluene | 5.0 | Not Detected | 24 | Not Detected |
| 1,3,5-Trimethylbenzene | 5.0 | Not Detected | 24 | Not Detected |
| 1,2,4-Trimethylbenzene | 5.0 | Not Detected | 24 | Not Detected |
| 1,3-Dichlorobenzene | 5.0 | Not Detected | 30 | Not Detected |
| 1,4-Dichlorobenzene | 5.0 | Not Detected | 30 | Not Detected |
| alpha-Chlorotoluene | 5.0 | Not Detected | 26 | Not Detected |
| 1,2-Dichlorobenzene | 5.0 | Not Detected | 30 | Not Detected |
| 1,2,4-Trichlorobenzene | 20 | Not Detected | 150 | Not Detected |
| Hexachlorobutadiene | 20 | Not Detected | 210 | Not Detected |

**Container Type: NA - Not Applicable**

| Surrogates | %Recovery | Method Limits |
|---|---|---|
| 1,2-Dichloroethane-d4 | 106 | 70-130 |
| Toluene-d8 | 99 | 70-130 |
| 4-Bromofluorobenzene | 97 | 70-130 |

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**Client Sample ID: CCV**

**Lab ID#: 1507528-05A**

**EPA METHOD TO-15 GC/MS FULL SCAN**

| | | |
|---|---|---|
| **File Name:** | **17081102** | **Date of Collection: NA** |
| **Dil. Factor:** | **1.00** | **Date of Analysis: 8/11/15 09:55 AM** |

| Compound | %Recovery |
|---|---|
| Freon 12 | 111 |
| Freon 114 | 97 |
| Chloromethane | 130 |
| Vinyl Chloride | 120 |
| 1,3-Butadiene | 116 |
| Bromomethane | 111 |
| Chloroethane | 124 |
| Freon 11 | 104 |
| Ethanol | 123 |
| Freon 113 | 91 |
| 1,1-Dichloroethene | 98 |
| Acetone | 127 |
| 2-Propanol | 116 |
| Carbon Disulfide | 118 |
| 3-Chloropropene | 106 |
| Methylene Chloride | 128 |
| Methyl tert-butyl ether | 97 |
| trans-1,2-Dichloroethene | 102 |
| Hexane | 108 |
| 1,1-Dichloroethane | 119 |
| 2-Butanone (Methyl Ethyl Ketone) | 109 |
| cis-1,2-Dichloroethene | 96 |
| Tetrahydrofuran | 116 |
| Chloroform | 107 |
| 1,1,1-Trichloroethane | 97 |
| Cyclohexane | 98 |
| Carbon Tetrachloride | 93 |
| 2,2,4-Trimethylpentane | 112 |
| Benzene | 119 |
| 1,2-Dichloroethane | 122 |
| Heptane | 119 |
| Trichloroethene | 105 |
| 1,2-Dichloropropane | 128 |
| 1,4-Dioxane | 110 |
| Bromodichloromethane | 115 |
| cis-1,3-Dichloropropene | 109 |
| 4-Methyl-2-pentanone | 124 |
| Toluene | 110 |
| trans-1,3-Dichloropropene | 117 |
| 1,1,2-Trichloroethane | 113 |
| Tetrachloroethene | 93 |
| 2-Hexanone | 122 |

eurofins | Air Toxics

**Client Sample ID: CCV**

**Lab ID#: 1507528-05A**

**EPA METHOD TO-15 GC/MS FULL SCAN**

| | | |
|---|---|---|
| **File Name:** | **17081102** | **Date of Collection: NA** |
| **Dil. Factor:** | **1.00** | **Date of Analysis: 8/11/15 09:55 AM** |

| Compound | %Recovery |
|---|---|
| Dibromochloromethane | 103 |
| 1,2-Dibromoethane (EDB) | 106 |
| Chlorobenzene | 100 |
| Ethyl Benzene | 104 |
| m,p-Xylene | 104 |
| o-Xylene | 98 |
| Styrene | 108 |
| Bromoform | 98 |
| Cumene | 102 |
| 1,1,2,2-Tetrachloroethane | 122 |
| Propylbenzene | 107 |
| 4-Ethyltoluene | 104 |
| 1,3,5-Trimethylbenzene | 101 |
| 1,2,4-Trimethylbenzene | 94 |
| 1,3-Dichlorobenzene | 95 |
| 1,4-Dichlorobenzene | 96 |
| alpha-Chlorotoluene | 120 |
| 1,2-Dichlorobenzene | 97 |
| 1,2,4-Trichlorobenzene | 86 |
| Hexachlorobutadiene | 93 |

**Container Type: NA - Not Applicable**

| Surrogates | %Recovery | Method Limits |
|---|---|---|
| Toluene-d8 | 113 | 70-130 |
| 1,2-Dichloroethane-d4 | 115 | 70-130 |
| 4-Bromofluorobenzene | 86 | 70-130 |

eurofins | Air Toxics

**Client Sample ID: CCV**

**Lab ID#: 1507528-05B**

**EPA METHOD TO-15 GC/MS**

| | | |
|---|---|---|
| **File Name:** | **14081202** | **Date of Collection: NA** |
| **Dil. Factor:** | **1.00** | **Date of Analysis: 8/12/15 07:12 AM** |

| Compound | %Recovery |
|---|---|
| Freon 12 | 114 |
| Freon 114 | 110 |
| Chloromethane | 106 |
| Vinyl Chloride | 97 |
| 1,3-Butadiene | 97 |
| Bromomethane | 100 |
| Chloroethane | 99 |
| Freon 11 | 113 |
| Ethanol | 116 |
| Freon 113 | 111 |
| 1,1-Dichloroethene | 106 |
| Acetone | 98 |
| 2-Propanol | 105 |
| Carbon Disulfide | 105 |
| 3-Chloropropene | 110 |
| Methylene Chloride | 100 |
| Methyl tert-butyl ether | 109 |
| trans-1,2-Dichloroethene | 109 |
| Hexane | 108 |
| 1,1-Dichloroethane | 113 |
| 2-Butanone (Methyl Ethyl Ketone) | 104 |
| cis-1,2-Dichloroethene | 106 |
| Tetrahydrofuran | 106 |
| Chloroform | 112 |
| 1,1,1-Trichloroethane | 117 |
| Cyclohexane | 109 |
| Carbon Tetrachloride | 126 |
| 2,2,4-Trimethylpentane | 108 |
| Benzene | 102 |
| 1,2-Dichloroethane | 111 |
| Heptane | 106 |
| Trichloroethene | 95 |
| 1,2-Dichloropropane | 104 |
| 1,4-Dioxane | 113 |
| Bromodichloromethane | 111 |
| cis-1,3-Dichloropropene | 118 |
| 4-Methyl-2-pentanone | 112 |
| Toluene | 107 |
| trans-1,3-Dichloropropene | 117 |
| 1,1,2-Trichloroethane | 105 |
| Tetrachloroethene | 107 |
| 2-Hexanone | 105 |

eurofins | Air Toxics

**Client Sample ID: CCV**

**Lab ID#: 1507528-05B**

**EPA METHOD TO-15 GC/MS**

| | | | |
|---|---|---|---|
| **File Name:** | **14081202** | **Date of Collection: NA** | |
| **Dil. Factor:** | **1.00** | **Date of Analysis: 8/12/15 07:12 AM** | |

| **Compound** | **%Recovery** |
|---|---|
| Dibromochloromethane | 113 |
| 1,2-Dibromoethane (EDB) | 110 |
| Chlorobenzene | 108 |
| Ethyl Benzene | 113 |
| m,p-Xylene | 114 |
| o-Xylene | 114 |
| Styrene | 121 |
| Bromoform | 118 |
| Cumene | 116 |
| 1,1,2,2-Tetrachloroethane | 130 |
| Propylbenzene | 114 |
| 4-Ethyltoluene | 117 |
| 1,3,5-Trimethylbenzene | 120 |
| 1,2,4-Trimethylbenzene | 119 |
| 1,3-Dichlorobenzene | 110 |
| 1,4-Dichlorobenzene | 110 |
| alpha-Chlorotoluene | 136 Q |
| 1,2-Dichlorobenzene | 113 |
| 1,2,4-Trichlorobenzene | 110 |
| Hexachlorobutadiene | 107 |

Q = Exceeds Quality Control limits.

**Container Type: NA - Not Applicable**

| **Surrogates** | **%Recovery** | **Method Limits** |
|---|---|---|
| 1,2-Dichloroethane-d4 | 106 | 70-130 |
| Toluene-d8 | 100 | 70-130 |
| 4-Bromofluorobenzene | 100 | 70-130 |

eurofins | Air Toxics

**Client Sample ID: LCS**

**Lab ID#: 1507528-06A**

**EPA METHOD TO-15 GC/MS FULL SCAN**

| | | | |
|---|---|---|---|
| **File Name:** | **17081103** | **Date of Collection: NA** | |
| **Dil. Factor:** | **1.00** | **Date of Analysis: 8/11/15 10:30 AM** | |

| Compound | %Recovery | Method Limits |
|---|---|---|
| Freon 12 | 120 | 70-130 |
| Freon 114 | 107 | 70-130 |
| Chloromethane | 139 Q | 70-130 |
| Vinyl Chloride | 133 Q | 70-130 |
| 1,3-Butadiene | 126 | 70-130 |
| Bromomethane | 117 | 70-130 |
| Chloroethane | 132 Q | 70-130 |
| Freon 11 | 113 | 70-130 |
| Ethanol | 145 Q | 70-130 |
| Freon 113 | 93 | 70-130 |
| 1,1-Dichloroethene | 105 | 70-130 |
| Acetone | 133 Q | 70-130 |
| 2-Propanol | 131 Q | 70-130 |
| Carbon Disulfide | 109 | 70-130 |
| 3-Chloropropene | 106 | 70-130 |
| Methylene Chloride | 135 Q | 70-130 |
| Methyl tert-butyl ether | 99 | 70-130 |
| trans-1,2-Dichloroethene | 92 | 70-130 |
| Hexane | 117 | 70-130 |
| 1,1-Dichloroethane | 122 | 70-130 |
| 2-Butanone (Methyl Ethyl Ketone) | 114 | 70-130 |
| cis-1,2-Dichloroethene | 108 | 70-130 |
| Tetrahydrofuran | 123 | 70-130 |
| Chloroform | 112 | 70-130 |
| 1,1,1-Trichloroethane | 101 | 70-130 |
| Cyclohexane | 104 | 70-130 |
| Carbon Tetrachloride | 99 | 70-130 |
| 2,2,4-Trimethylpentane | 119 | 70-130 |
| Benzene | 115 | 70-130 |
| 1,2-Dichloroethane | 118 | 70-130 |
| Heptane | 115 | 70-130 |
| Trichloroethene | 103 | 70-130 |
| 1,2-Dichloropropane | 126 | 70-130 |
| 1,4-Dioxane | 111 | 70-130 |
| Bromodichloromethane | 116 | 70-130 |
| cis-1,3-Dichloropropene | 102 | 70-130 |
| 4-Methyl-2-pentanone | 128 | 70-130 |
| Toluene | 107 | 70-130 |
| trans-1,3-Dichloropropene | 119 | 70-130 |
| 1,1,2-Trichloroethane | 112 | 70-130 |
| Tetrachloroethene | 94 | 70-130 |
| 2-Hexanone | 142 Q | 70-130 |

eurofins | Air Toxics

**Client Sample ID: LCS**

**Lab ID#: 1507528-06A**

**EPA METHOD TO-15 GC/MS FULL SCAN**

| | | | |
|---|---|---|---|
| **File Name:** | **17081103** | **Date of Collection: NA** | |
| **Dil. Factor:** | **1.00** | **Date of Analysis: 8/11/15 10:30 AM** | |

| **Compound** | **%Recovery** | **Method Limits** |
|---|---|---|
| Dibromochloromethane | 105 | 70-130 |
| 1,2-Dibromoethane (EDB) | 108 | 70-130 |
| Chlorobenzene | 101 | 70-130 |
| Ethyl Benzene | 106 | 70-130 |
| m,p-Xylene | 105 | 70-130 |
| o-Xylene | 104 | 70-130 |
| Styrene | 112 | 70-130 |
| Bromoform | 98 | 70-130 |
| Cumene | 104 | 70-130 |
| 1,1,2,2-Tetrachloroethane | 125 | 70-130 |
| Propylbenzene | 112 | 70-130 |
| 4-Ethyltoluene | 103 | 70-130 |
| 1,3,5-Trimethylbenzene | 106 | 70-130 |
| 1,2,4-Trimethylbenzene | 99 | 70-130 |
| 1,3-Dichlorobenzene | 98 | 70-130 |
| 1,4-Dichlorobenzene | 99 | 70-130 |
| alpha-Chlorotoluene | 127 | 70-130 |
| 1,2-Dichlorobenzene | 99 | 70-130 |
| 1,2,4-Trichlorobenzene | 92 | 70-130 |
| Hexachlorobutadiene | 97 | 70-130 |

Q = Exceeds Quality Control limits.

**Container Type: NA - Not Applicable**

| **Surrogates** | **%Recovery** | **Method Limits** |
|---|---|---|
| Toluene-d8 | 110 | 70-130 |
| 1,2-Dichloroethane-d4 | 119 | 70-130 |
| 4-Bromofluorobenzene | 86 | 70-130 |

eurofins | Air Toxics

**Client Sample ID: LCSD**

**Lab ID#: 1507528-06AA**

**EPA METHOD TO-15 GC/MS FULL SCAN**

| | | | |
|---|---|---|---|
| **File Name:** | **17081104** | **Date of Collection: NA** | |
| **Dil. Factor:** | **1.00** | **Date of Analysis: 8/11/15 10:52 AM** | |

| Compound | %Recovery | Method Limits |
|---|---|---|
| Freon 12 | 122 | 70-130 |
| Freon 114 | 110 | 70-130 |
| Chloromethane | 142 Q | 70-130 |
| Vinyl Chloride | 133 Q | 70-130 |
| 1,3-Butadiene | 126 | 70-130 |
| Bromomethane | 118 | 70-130 |
| Chloroethane | 138 Q | 70-130 |
| Freon 11 | 116 | 70-130 |
| Ethanol | 140 Q | 70-130 |
| Freon 113 | 96 | 70-130 |
| 1,1-Dichloroethene | 107 | 70-130 |
| Acetone | 137 Q | 70-130 |
| 2-Propanol | 140 Q | 70-130 |
| Carbon Disulfide | 112 | 70-130 |
| 3-Chloropropene | 109 | 70-130 |
| Methylene Chloride | 140 Q | 70-130 |
| Methyl tert-butyl ether | 102 | 70-130 |
| trans-1,2-Dichloroethene | 93 | 70-130 |
| Hexane | 118 | 70-130 |
| 1,1-Dichloroethane | 125 | 70-130 |
| 2-Butanone (Methyl Ethyl Ketone) | 118 | 70-130 |
| cis-1,2-Dichloroethene | 113 | 70-130 |
| Tetrahydrofuran | 125 | 70-130 |
| Chloroform | 114 | 70-130 |
| 1,1,1-Trichloroethane | 102 | 70-130 |
| Cyclohexane | 107 | 70-130 |
| Carbon Tetrachloride | 100 | 70-130 |
| 2,2,4-Trimethylpentane | 123 | 70-130 |
| Benzene | 117 | 70-130 |
| 1,2-Dichloroethane | 120 | 70-130 |
| Heptane | 116 | 70-130 |
| Trichloroethene | 104 | 70-130 |
| 1,2-Dichloropropane | 128 | 70-130 |
| 1,4-Dioxane | 115 | 70-130 |
| Bromodichloromethane | 117 | 70-130 |
| cis-1,3-Dichloropropene | 105 | 70-130 |
| 4-Methyl-2-pentanone | 132 Q | 70-130 |
| Toluene | 109 | 70-130 |
| trans-1,3-Dichloropropene | 120 | 70-130 |
| 1,1,2-Trichloroethane | 113 | 70-130 |
| Tetrachloroethene | 95 | 70-130 |
| 2-Hexanone | 140 Q | 70-130 |

eurofins | Air Toxics

**Client Sample ID: LCSD**

**Lab ID#: 1507528-06AA**

**EPA METHOD TO-15 GC/MS FULL SCAN**

| | | | |
|---|---|---|---|
| **File Name:** | **17081104** | **Date of Collection: NA** | |
| **Dil. Factor:** | **1.00** | **Date of Analysis: 8/11/15 10:52 AM** | |

| **Compound** | **%Recovery** | **Method Limits** |
|---|---|---|
| Dibromochloromethane | 104 | 70-130 |
| 1,2-Dibromoethane (EDB) | 107 | 70-130 |
| Chlorobenzene | 101 | 70-130 |
| Ethyl Benzene | 106 | 70-130 |
| m,p-Xylene | 106 | 70-130 |
| o-Xylene | 104 | 70-130 |
| Styrene | 111 | 70-130 |
| Bromoform | 98 | 70-130 |
| Cumene | 105 | 70-130 |
| 1,1,2,2-Tetrachloroethane | 123 | 70-130 |
| Propylbenzene | 111 | 70-130 |
| 4-Ethyltoluene | 107 | 70-130 |
| 1,3,5-Trimethylbenzene | 102 | 70-130 |
| 1,2,4-Trimethylbenzene | 100 | 70-130 |
| 1,3-Dichlorobenzene | 98 | 70-130 |
| 1,4-Dichlorobenzene | 99 | 70-130 |
| alpha-Chlorotoluene | 127 | 70-130 |
| 1,2-Dichlorobenzene | 99 | 70-130 |
| 1,2,4-Trichlorobenzene | 96 | 70-130 |
| Hexachlorobutadiene | 100 | 70-130 |

Q = Exceeds Quality Control limits.

**Container Type: NA - Not Applicable**

| **Surrogates** | **%Recovery** | **Method Limits** |
|---|---|---|
| Toluene-d8 | 110 | 70-130 |
| 1,2-Dichloroethane-d4 | 120 | 70-130 |
| 4-Bromofluorobenzene | 88 | 70-130 |

eurofins | Air Toxics

**Client Sample ID: LCS**

**Lab ID#: 1507528-06B**

**EPA METHOD TO-15 GC/MS**

| | | | |
|---|---|---|---|
| **File Name:** | **14081203** | **Date of Collection: NA** | |
| **Dil. Factor:** | **1.00** | **Date of Analysis: 8/12/15 07:37 AM** | |

| Compound | %Recovery | Method Limits |
|---|---|---|
| Freon 12 | 103 | 70-130 |
| Freon 114 | 101 | 70-130 |
| Chloromethane | 90 | 70-130 |
| Vinyl Chloride | 87 | 70-130 |
| 1,3-Butadiene | 82 | 70-130 |
| Bromomethane | 90 | 70-130 |
| Chloroethane | 96 | 70-130 |
| Freon 11 | 106 | 70-130 |
| Ethanol | 83 | 70-130 |
| Freon 113 | 99 | 70-130 |
| 1,1-Dichloroethene | 96 | 70-130 |
| Acetone | 87 | 70-130 |
| 2-Propanol | 96 | 70-130 |
| Carbon Disulfide | 83 | 70-130 |
| 3-Chloropropene | 91 | 70-130 |
| Methylene Chloride | 90 | 70-130 |
| Methyl tert-butyl ether | 84 | 70-130 |
| trans-1,2-Dichloroethene | 82 | 70-130 |
| Hexane | 90 | 70-130 |
| 1,1-Dichloroethane | 97 | 70-130 |
| 2-Butanone (Methyl Ethyl Ketone) | 90 | 70-130 |
| cis-1,2-Dichloroethene | 104 | 70-130 |
| Tetrahydrofuran | 89 | 70-130 |
| Chloroform | 101 | 70-130 |
| 1,1,1-Trichloroethane | 101 | 70-130 |
| Cyclohexane | 99 | 70-130 |
| Carbon Tetrachloride | 104 | 70-130 |
| 2,2,4-Trimethylpentane | 93 | 70-130 |
| Benzene | 91 | 70-130 |
| 1,2-Dichloroethane | 104 | 70-130 |
| Heptane | 93 | 70-130 |
| Trichloroethene | 92 | 70-130 |
| 1,2-Dichloropropane | 96 | 70-130 |
| 1,4-Dioxane | 98 | 70-130 |
| Bromodichloromethane | 102 | 70-130 |
| cis-1,3-Dichloropropene | 96 | 70-130 |
| 4-Methyl-2-pentanone | 108 | 70-130 |
| Toluene | 97 | 70-130 |
| trans-1,3-Dichloropropene | 94 | 70-130 |
| 1,1,2-Trichloroethane | 100 | 70-130 |
| Tetrachloroethene | 99 | 70-130 |
| 2-Hexanone | 90 | 70-130 |

eurofins | Air Toxics

**Client Sample ID: LCS**

**Lab ID#: 1507528-06B**

**EPA METHOD TO-15 GC/MS**

| | | | |
|---|---|---|---|
| **File Name:** | **14081203** | **Date of Collection: NA** | |
| **Dil. Factor:** | **1.00** | **Date of Analysis: 8/12/15 07:37 AM** | |

| **Compound** | **%Recovery** | **Method Limits** |
|---|---|---|
| Dibromochloromethane | 100 | 70-130 |
| 1,2-Dibromoethane (EDB) | 97 | 70-130 |
| Chlorobenzene | 100 | 70-130 |
| Ethyl Benzene | 98 | 70-130 |
| m,p-Xylene | 102 | 70-130 |
| o-Xylene | 104 | 70-130 |
| Styrene | 105 | 70-130 |
| Bromoform | 104 | 70-130 |
| Cumene | 103 | 70-130 |
| 1,1,2,2-Tetrachloroethane | 114 | 70-130 |
| Propylbenzene | 106 | 70-130 |
| 4-Ethyltoluene | 106 | 70-130 |
| 1,3,5-Trimethylbenzene | 108 | 70-130 |
| 1,2,4-Trimethylbenzene | 107 | 70-130 |
| 1,3-Dichlorobenzene | 103 | 70-130 |
| 1,4-Dichlorobenzene | 101 | 70-130 |
| alpha-Chlorotoluene | 110 | 70-130 |
| 1,2-Dichlorobenzene | 103 | 70-130 |
| 1,2,4-Trichlorobenzene | 116 | 70-130 |
| Hexachlorobutadiene | 112 | 70-130 |

**Container Type: NA - Not Applicable**

| **Surrogates** | **%Recovery** | **Method Limits** |
|---|---|---|
| 1,2-Dichloroethane-d4 | 108 | 70-130 |
| Toluene-d8 | 100 | 70-130 |
| 4-Bromofluorobenzene | 102 | 70-130 |

eurofins | Air Toxics

**Client Sample ID: LCSD**

**Lab ID#: 1507528-06BB**

**EPA METHOD TO-15 GC/MS**

| | | | |
|---|---|---|---|
| **File Name:** | **14081204** | **Date of Collection: NA** | |
| **Dil. Factor:** | **1.00** | **Date of Analysis: 8/12/15 08:03 AM** | |

| Compound | %Recovery | Method Limits |
|---|---|---|
| Freon 12 | 104 | 70-130 |
| Freon 114 | 102 | 70-130 |
| Chloromethane | 94 | 70-130 |
| Vinyl Chloride | 94 | 70-130 |
| 1,3-Butadiene | 85 | 70-130 |
| Bromomethane | 89 | 70-130 |
| Chloroethane | 91 | 70-130 |
| Freon 11 | 103 | 70-130 |
| Ethanol | 84 | 70-130 |
| Freon 113 | 97 | 70-130 |
| 1,1-Dichloroethene | 96 | 70-130 |
| Acetone | 86 | 70-130 |
| 2-Propanol | 96 | 70-130 |
| Carbon Disulfide | 82 | 70-130 |
| 3-Chloropropene | 86 | 70-130 |
| Methylene Chloride | 88 | 70-130 |
| Methyl tert-butyl ether | 83 | 70-130 |
| trans-1,2-Dichloroethene | 84 | 70-130 |
| Hexane | 90 | 70-130 |
| 1,1-Dichloroethane | 94 | 70-130 |
| 2-Butanone (Methyl Ethyl Ketone) | 89 | 70-130 |
| cis-1,2-Dichloroethene | 101 | 70-130 |
| Tetrahydrofuran | 90 | 70-130 |
| Chloroform | 98 | 70-130 |
| 1,1,1-Trichloroethane | 98 | 70-130 |
| Cyclohexane | 93 | 70-130 |
| Carbon Tetrachloride | 102 | 70-130 |
| 2,2,4-Trimethylpentane | 92 | 70-130 |
| Benzene | 92 | 70-130 |
| 1,2-Dichloroethane | 104 | 70-130 |
| Heptane | 93 | 70-130 |
| Trichloroethene | 89 | 70-130 |
| 1,2-Dichloropropane | 95 | 70-130 |
| 1,4-Dioxane | 98 | 70-130 |
| Bromodichloromethane | 102 | 70-130 |
| cis-1,3-Dichloropropene | 97 | 70-130 |
| 4-Methyl-2-pentanone | 106 | 70-130 |
| Toluene | 97 | 70-130 |
| trans-1,3-Dichloropropene | 95 | 70-130 |
| 1,1,2-Trichloroethane | 96 | 70-130 |
| Tetrachloroethene | 98 | 70-130 |
| 2-Hexanone | 92 | 70-130 |

eurofins | Air Toxics

**Client Sample ID: LCSD**

**Lab ID#: 1507528-06BB**

**EPA METHOD TO-15 GC/MS**

| | | | |
|---|---|---|---|
| **File Name:** | **14081204** | **Date of Collection: NA** | |
| **Dil. Factor:** | **1.00** | **Date of Analysis: 8/12/15 08:03 AM** | |

| Compound | %Recovery | Method Limits |
|---|---|---|
| Dibromochloromethane | 100 | 70-130 |
| 1,2-Dibromoethane (EDB) | 98 | 70-130 |
| Chlorobenzene | 96 | 70-130 |
| Ethyl Benzene | 100 | 70-130 |
| m,p-Xylene | 99 | 70-130 |
| o-Xylene | 104 | 70-130 |
| Styrene | 106 | 70-130 |
| Bromoform | 106 | 70-130 |
| Cumene | 103 | 70-130 |
| 1,1,2,2-Tetrachloroethane | 113 | 70-130 |
| Propylbenzene | 100 | 70-130 |
| 4-Ethyltoluene | 100 | 70-130 |
| 1,3,5-Trimethylbenzene | 107 | 70-130 |
| 1,2,4-Trimethylbenzene | 108 | 70-130 |
| 1,3-Dichlorobenzene | 103 | 70-130 |
| 1,4-Dichlorobenzene | 103 | 70-130 |
| alpha-Chlorotoluene | 116 | 70-130 |
| 1,2-Dichlorobenzene | 105 | 70-130 |
| 1,2,4-Trichlorobenzene | 121 | 70-130 |
| Hexachlorobutadiene | 117 | 70-130 |

**Container Type: NA - Not Applicable**

| Surrogates | %Recovery | Method Limits |
|---|---|---|
| 1,2-Dichloroethane-d4 | 103 | 70-130 |
| Toluene-d8 | 102 | 70-130 |
| 4-Bromofluorobenzene | 102 | 70-130 |

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**Sample Transportation Notice**
Relinquishing signature on the documents indicates that samples being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and rules governing Air Toxics. Limited assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action of any kind, related to the collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX (916) 985-1020



Project Manager: Andrew Revans
Collected by: (Print and Sign) Andrew Revans
Company: SWRCB
Email:
Address: 8653 W. Farmington
City: Galt
State: CA Zip: 95632
Phone: (209) 376-5200
Fax: 209-376-8201

Project Info:
P.O.#: 3015003653
Project #:
Project Name: 62-5 [illegible] St.

Turn Around Time:
☒ Normal
☐ Rush

Lab Use Only
Preconditioned by:
Date:
Preconditioned Gas: $N_2$ He

| Lab I.D. | Field Sample I.D. (Location) | Can # | Date of Collection | Time of Collection | Analyses Requested | Canister Pressure/Vacuum inHg | Final inHg | Receipt | Final psig |
|---|---|---|---|---|---|---|---|---|---|
| 01A | VP-1 | 2052 | 7-29-15 | [illegible] | TO-15 LL | -28 | -5 | | |
| 02A | VP-10 | 2180 | 7-29-15 | [illegible] | TO-15 LL | -29 | -5 | | |
| 03A | VP-2 | 12282 | 7-29-15 | [illegible] | TO-15 LL | -27 | -5 | | |

Relinquished by: (signature) Date/Time: 7-30-15/1730
Received by: (signature) Date/Time: 0930 7/30/2015
Notes:
Relinquished by: (signature) Date/Time:
Received by: (signature) Date/Time:
Relinquished by: (signature) Date/Time:
Received by: (signature) Date/Time:

Lab Use Only
Shipper Name: Fedex
Air Bill #:
Temp (°C): N/A
Condition: Good
Custody Seals Intact? Yes No None
Work Order #: 1517528

**Strata - ID**

8653 W Hackamore Dr
Boise, ID 83709

Billing Information:
**Accounts Payable - Terrelyn Roark**
**8653 W Hackamore Dr**
**Boise, ID 83709**

Report to: **Andrew Provant**

Email To: **aprovant@stratageotech.com; cbrischler@stratageotech.com**

Project Description: **620 S. 9th Street**

City/State Collected: Boise, ID

Phone: **208-376-8200**
Fax: **208-376-8201**

Client Project # **BO15086B**

Lab Project # **STRENVID-BO15086B**

Collected by (print): Andrew Provant

Site/Facility ID # **620 S. 9TH STREET**

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y ✓

***Rush?*** (Lab MUST Be Notified)
___ Same Day .....200%
___ Next Day .....100%
___ Two Day .....50%
___ Three Day .....25%

Date Results Needed

Email? ___No X__Yes
FAX? ___No ___Yes

Chain of Custody Page 1 of 3

ESC LAB SCIENCES
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12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# L779980
D249
Ta

Acctnum: STRENVID
Template: T104047
Prelogin: P517399
TSR: 358 - Jarred Willis
PB: 7-14-15 AP
Shipped Via: FedEx Ground

Analysis / Container / Preservative

| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | No. of Cntrs | AK101(GRO) / V8260 60mlAmb/MeOH/Syr | PAHSIMLVI 40mlAmb-NoPres-WT | PP Metals 2ozClr-NoPres | PP Metals 500mlHDPE-HNO3 | SV8011 40mlClr-NaThio | SV8270PAHSIM / TS 4ozClr-NoPres | V8260 40ml/NaHSO4/Syr/MeOH | V8260 40mlAmb-HCl | V8260- Trip Blank 40mlAmb-HCl-Blk | VOC Screen 2ozClr-NoPres | Rem./Contaminant | Sample # (lab only) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DU#1 S-1 | C | SS | 1.5' | 7-29-15 | 0800 | 4 | X | | X | | | X | | | | X | | -01 |
| DU#1 S-2 | C | SS | 1.5' | 7-29-15 | 0820 | 4 | X | | X | | | X | | | | X | | 02 |
| DU#1 S-3* | C | SS | 1.5' | 7-29-15 | 0815 | 4 | X | | X | | | X | | | | X | | 03 |
| DU#2 S-1 | C | SS | 1.5' | 7-29-15 | 0900 | 4 | X | | X | | | X | | | | X | | 04 |
| DU#2 S-2 | C | SS | 1.5' | 7-29-15 | 0826 | 4 | X | | X | | | X | | | | X | | 05 |
| DU#2 S-3 | C | SS | 1.5' | 7-29-15 | 0835 | 4 | X | | X | | | X | | | | X | | 06 |
| DU#3 S-1 | C | SS | 1.5' | 7-30-15 | 1530 | 4 | X | | X | | | X | | | | X | | 07 |
| B-TW-1 | G | SS | 3' | 7-27-15 | 1615 | ~~6~~ 5 | | | ~~X~~ NO | | | X | X | | | X | | 08 |
| B-#1 | G | SS | 1.5' | 7-29-15 | 1506 | ~~6~~ 4 | | | X | | | X | X | | | X | | 09 |
| B-#2 | G | SS | 1.5' | 7-29-15 | 1515 | ~~6~~ 4 | | | X | | | X | X | | | X | | 10 |

* Matrix: **SS** - Soil **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other ___

**Remarks:** * Use for MS/MSD

6443135597217
6443135725679
6443135725680

pH ___ Temp ___
Flow ___ Other ___

Hold #

| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) |
|---|---|---|---|
| | 7-30-15 | 1700 | |
| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) |
| Relinquished by : (Signature) | Date: | Time: | Received for lab by: (Signature) |

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ ___

Temp: 3.4 °C Bottles Received: 113

Date: 7/31/15 Time: 0900

Condition: (lab use only) JWS

COC Seal Intact: ___Y ___N ___NA

pH Checked: NCF:

**Strata - ID**

8653 W Hackamore Dr
Boise, ID 83709

Billing Information:
Accounts Payable - Terrelyn Roark
8653 W Hackamore Dr
Boise, ID 83709

Report to: Andrew Provant

Email To: aprovant@stratageotech.com; cbrischler@stratageotech.com

Project Description: 620 S. 9th Street

City/State Collected: Boise, ID

Phone: 208-376-8200
Fax: 208-376-8201

Client Project #: BO15086B

Lab Project #: STRENVID-BO15086B

Collected by (print): Andrew Provant

Site/Facility ID #: 620 S. 9TH STREET

P.O. #

Collected by (signature): [signature]

Immediately Packed on Ice N ____ Y ✓

*Rush?* (Lab MUST Be Notified)
____ Same Day .....200%
____ Next Day .....100%
____ Two Day .....50%
____ Three Day .....25%

Date Results Needed

Email? ___No X__Yes
FAX? ___No ___Yes

Chain of Custody Page 2 of 3

ESC LAB SCIENCES
YOUR LAB OF CHOICE
12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# L779930

Table #

Acctnum: STRENVID
Template: T104047
Prelogin: P517399
TSR: 358 - Jarred Willis
PB: 7-14-15 AP
Shipped Via: FedEx Ground

Analysis / Container / Preservative

| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | No. of Cntrs | AK101(GRO) / V8260 60mlAmb/MeOH/Syr | PAHSIMLVI 40mlAmb-NoPres-WT | PP Metals 2ozClr-NoPres | PP Metals 500mlHDPE-HNO3 | SV8011 40mlClr-NaThio | SV8270PAHSIM / TS 4ozClr-NoPres | V8260 40ml/NaHSO4/Syr/MeOH | V8260 40mlAmb-HCl | V8260- Trip Blank 40mlAmb-HCl-Blk | VOC Screen 2ozClr-NoPres | Rem./Contaminant | Sample # (lab only) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B-~~4~~3 | G | SS | 1.5' | 7-29-15 | 1520 | ~~6~~ 4 | | | X | | | X | X | | | X | | -11 |
| B-~~5~~4 | G | SS | 1.5' | 7-29-15 | 1525 | ~~6~~ 4 | | | X | | | X | X | | | X | | 12 |
| B-6 | G | SS | 1.5' | 7-29-15 | 1005 | 6 | | NO | X | NO | NO | X | X | NO | | X | | 13 |
| DU#3 ~~4~~ S-2 | C | ~~SS GW~~ | 1.5' | 7-30-15 | 1540 | ~~4~~ 10 | | X | X | X | X | X | X | X | | X | | 14 |
| DU#3 ~~5~~ S-3 | C | ~~SS GW~~ | 1.5' | 7-30-15 | 1600 | ~~4~~ 10 | | X | X | X | X | X | X | X | | X | | 15 |
| DU#3 ~~6~~ S-4 | C | ~~SS GW~~ | 1.5' | 7-30-15 | 1610 | ~~4~~ 10 | | X | X | X | X | X | X | X | | X | | 16 |
| ~~TRIP BLANK DU#3 4~~ | | ~~SS GW~~ | | | | ~~4~~ | | | X | | | X | X | | | X | NO | |
| TRIP BLANK | | GW | | | | X 2 | | | | | | | | | X | | | 17 |
| | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other_____

NO

Remarks:

pH _____ Temp _____
Flow _____ Other _____

6443135 97217

Hold #

| Relinquished by: (Signature) | Date: | Time: | Received by: (Signature) | Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ ____ | Condition: (lab use only) JWS |
|---|---|---|---|---|---|
| [signature] | 7-30-15 | 1700 | | | |
| Relinquished by: (Signature) | Date: | Time: | Received by: (Signature) | Temp: 3.4 °C Bottles Received: 113 | COC Seal Intact: ____Y ____N ____NA |
| Relinquished by: (Signature) | Date: | Time: | Received for lab by: (Signature) | Date: 7/31/15 Time: 0900 | pH Checked: NCF: |

Chain of Custody Page 3 of 3

ESC LAB SCIENCES
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Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

**Strata - ID**
8653 W Hackamore Dr
Boise, ID 83709

Billing Information:
Accounts Payable - Terrelyn Roark
8653 W Hackamore Dr
Boise, ID 83709

Report to: Andrew Provant
Email To: aprovant@stratageotech.com; cbrischler@stratageotech.com

Project Description: 620 S. 9th Street
City/State Collected: Boise, ID

Phone: 208-376-8200
Fax: 208-376-8201
Client Project # BO15086B
Lab Project # STRENVID-BO15086B

Collected by (print): Andrew Provant
Site/Facility ID # 620 S. 9TH STREET
P.O. #

Collected by (signature): [signature]
Immediately Packed on Ice N ___ Y ✓
*Rush?* (Lab MUST Be Notified)
___ Same Day ....200%
___ Next Day ....100%
___ Two Day ....50%
___ Three Day ....25%
Date Results Needed
Email? ___No X__Yes
FAX? ___No ___Yes

L# L779930
Table #
Acctnum: STRENVID
Template: T104291
Prelogin: P518117
TSR: 358 - Jarred Willis
PB: 7-23-15 [illegible]
Shipped Via: FedEx 2nd Day

Analysis / Container / Preservative

| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | No. of Cntrs | AK101(GRO) / V8260 60mlAmb/MeOH/Syr | PAHSIMLVI 40mlAmb-NoPres-WT | PP Metals 2ozClr-NoPres | PP Metals 500mlHDPE-HNO3 | SV8011 40mlClr-NaThio | SV8270PAHSIM / TS 4ozClr-NoPres | V8260 40mlAmb-HCl | V8260 60mlAmb/MeOH/Syr | V8260- Trip Blank 40mlAmb-HCl-Blk | VOC Screen 2ozClr-NoPres | Rem./Contaminant | Sample # (lab only) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B-7 | G | SS | 1.5' | 7-29-15 | 1010 | 6 | X | | X | | | X | X | X | | X | | -18 |
| B-8 | G | SS | 1.5' | 7-29-15 | 1020 | 6 | X | | X | | | X | X | X | | X | | 19 |
| B-9 | G | SS | 1.5' | 7-29-15 | 1025 | 6 | X | | X | | | X | X | X | | X | | 20 |
| TW-3-1 | G | SS | 1.5' | 7-29-15 | 1330 | 6 | | | X | | | X | X | X | | X | | 21 |
| B-10 | G | SS | 1.5' | 7-29-15 | 1425 | 4 | | | X | | | X | | X | | X | | 22 |
| B-11 | G | SS | 1.5' | 7-29-15 | 1415 | 4 | | | X | | | X | | X | | X | | 23 |
| B-12 | G | SS | 1.5' | 7-29-15 | 1430 | 4 | | | X | | | X | | X | | X | | 24 |
| B-13 | G | SS | 1.5' | 7-29-15 | 1440 | 4 | | | X | | | X | | X | | X | | 25 |
| B-13 D | G | SS | 1.5' | 7-29-15 | 1440 | 4 | | | X | | | X | | X | | X | | 26 |
| | | SS | | | | 4 | | | X | | | X | | X | | X | | |

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other_____

Remarks:

pH _____ Temp _____
Flow _____ Other _____

| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) |
|---|---|---|---|
| [signature] | 7-30-15 | 1700 | |
| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) |
| | | | |
| Relinquished by : (Signature) | Date: | Time: | Received for lab by: (Signature) |
| | | | [signature] |

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ _____
Temp: 3.4 °C Bottles Received: 113
Date: 7/31/15 Time: 0900

Hold #
Condition: (lab use only) JWS
COC Seal Intact: ___Y ___N ___NA
pH Checked: NCF:

Chain of Custody Page 1 of 1

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Fax: 615-758-5859

L# L780238
C046

Acctnum: STRENVID
Template: T104291
Prelogin: P518117
TSR: 358 - Jarred Willis
PB: 7-23-15 [illegible]
Shipped Via: FedEx 2nd Day

**Strata - ID**
8653 W Hackamore Dr
Boise, ID 83709

Billing Information:
Accounts Payable - Terrelyn Roark
8653 W Hackamore Dr
Boise, ID 83709

Report to: Andrew Provant
Email To: aprovant@stratageotech.com; cbrischler@stratageotech.com

Project Description: 620 S. 9th Street
City/State Collected: Boise, ID

Phone: 208-376-8200
Fax: 208-376-8201
Client Project #: BO15086C
Lab Project #: STRENVID-BO15086B

Collected by (print): Andrew Provant
Site/Facility ID #: 620 S. 9TH STREET
P.O. #

Collected by (signature): [signature]
Immediately Packed on Ice N ___ Y ✓
*Rush?* (Lab MUST Be Notified)
___ Same Day ....200%
___ Next Day ....100%
___ Two Day ....50%
___ Three Day ....25%
Date Results Needed
Email? ___No X__Yes
FAX? ___No ___Yes

Analysis / Container / Preservative

| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | No. of Cntrs | AK101(GRO) / V8260 60mlAmb/MeOH/Syr | PAHSIMLVI 40mlAmb-NoPres-WT | PP Metals 2ozClr-NoPres | PP Metals 500mlHDPE-HNO3 | SV8011 40mlClr-NaThio | SV8270PAHSIM / TS 4ozClr-NoPres | V8260 40mlAmb-HCl | V8260 60mlAmb/MeOH/Syr | V8260- Trip Blank 40mlAmb-HCl-Blk | VOC Screen 2ozClr-NoPres | Rem./Contaminant | Sample # (lab only) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TW-1 | — | GW ~~SS~~ | — | 7-31-15 | 1100 | 10 ~~8~~ | | X | ~~X~~ NO | X | X | ~~X~~ NO | X | ~~X~~ NO | | ~~X~~ | | -01 |
| TW-2 | — | GW ~~SS~~ | — | 7-31-15 | 1155 | 10 ~~8~~ | | X | ~~X~~ | X | X | ~~X~~ | X | ~~X~~ | | ~~X~~ | | -02 |
| TW-3 | — | GW | — | 7-31-15 | 1005 | 10 | | X | | X | X | | X | | | | | ~~-03~~ |
| TW-4 | — | GW | — | 7-31-15 | 0845 | 10 | | X | | X | X | | X | | | | | ~~-05~~ 04 |
| TRIP BLANK | | GW | | | | 2 ~~1~~ | | | | | | | | | X | | | ~~-06~~ 06 |
| TW-4D | — | GW | — | 7-31-15 | 0845 | 10 | | X | | X | X | | X | | | | | ~~-07~~ -05 |

30

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other_____

Remarks:

pH _____ Temp _____ XXXX XXXX 5690
Flow _____ Other _____
Hold #

| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) |
|---|---|---|---|
| [signature] | 7-31-15 | 1300 | |
| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) |
| | | | |
| Relinquished by : (Signature) | Date: | Time: | Received for lab by: (Signature) |
| | | | [signature] |

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ _____
Temp: 3.4 °C Bottles Received: 52
Date: 8/1/15 Time: 0900

Condition: ok (lab use only) JWS
COC Seal Intact: ✓ Y ___N ___NA
pH Checked: NCF:

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Tax I.D. 62-0814289

Est. 1970

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

# Report Summary

Tuesday August 11, 2015

Report Number: L779930
Samples Received: 07/31/15
Client Project: BO15086B

Description: 620 S. 9th Street

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By: _____

Jarred Willis , ESC Representative

*Laboratory Certification Numbers*

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197, FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1, TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364, EPA - TN002

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-01

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : DU 1 S-1

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 08:00

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Total Solids | 83.0 | 0.0333 | | % | | 2540 G-2 | 08/04/15 | 1 |
| Mercury | 0.38 | 0.0028 | 0.024 | mg/kg | | 7471A | 08/07/15 | 1 |
| Antimony | U | 0.75 | 2.4 | mg/kg | | 6010B | 08/07/15 | 1 |
| Arsenic | 7.5 | 0.65 | 2.4 | mg/kg | | 6010B | 08/07/15 | 1 |
| Beryllium | 0.52 | 0.070 | 0.24 | mg/kg | | 6010B | 08/07/15 | 1 |
| Cadmium | 0.67 | 0.070 | 0.60 | mg/kg | | 6010B | 08/07/15 | 1 |
| Chromium | 8.1 | 0.14 | 1.2 | mg/kg | | 6010B | 08/07/15 | 1 |
| Copper | 8.6 | 0.53 | 2.4 | mg/kg | | 6010B | 08/07/15 | 1 |
| Lead | 52. | 0.19 | 0.60 | mg/kg | | 6010B | 08/07/15 | 1 |
| Nickel | 4.9 | 0.49 | 2.4 | mg/kg | | 6010B | 08/07/15 | 1 |
| Selenium | U | 0.74 | 2.4 | mg/kg | | 6010B | 08/07/15 | 1 |
| Silver | U | 0.28 | 1.2 | mg/kg | | 6010B | 08/07/15 | 1 |
| Thallium | U | 0.65 | 2.4 | mg/kg | | 6010B | 08/07/15 | 1 |
| Zinc | 190 | 0.59 | 6.0 | mg/kg | | 6010B | 08/07/15 | 1 |
| TPHGAK C6 to C10 | U | 0.76 | 4.2 | mg/kg | | AK101 | 08/04/15 | 34.5 |
| Surrogate Recovery-% | | | | | | | | |
| a,a,a-Trifluorotoluene(FID) | 91.0 | | | % Rec. | | AK101 | 08/04/15 | 1 |
| a,a,a-Trifluorotoluene(PID) | 102. | | | % Rec. | | 8021 | 08/04/15 | 1 |
| Volatile Organics | | | | | | | | |
| Acetone | U | 0.33 | 2.0 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| Acrylonitrile | U | 0.060 | 0.40 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| Benzene | U | 0.0090 | 0.040 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| Bromobenzene | U | 0.0094 | 0.040 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| Bromodichloromethane | U | 0.0084 | 0.040 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| Bromoform | U | 0.014 | 0.040 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| Bromomethane | U | 0.044 | 0.20 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| n-Butylbenzene | U | 0.0086 | 0.040 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| sec-Butylbenzene | U | 0.0067 | 0.040 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| tert-Butylbenzene | U | 0.0068 | 0.040 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| Carbon tetrachloride | U | 0.011 | 0.040 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| Chlorobenzene | U | 0.0070 | 0.040 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| Chlorodibromomethane | U | 0.012 | 0.040 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| Chloroethane | U | 0.031 | 0.20 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| 2-Chloroethyl vinyl ether | U | 0.078 | 2.0 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| Chloroform | U | 0.0076 | 0.20 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| Chloromethane | U | 0.012 | 0.10 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| 2-Chlorotoluene | U | 0.010 | 0.040 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| 4-Chlorotoluene | U | 0.0080 | 0.040 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| 1,2-Dibromo-3-Chloropropane | U | 0.035 | 0.20 | mg/kg | | 8260B | 08/04/15 | 33.25 |

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
Note:
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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-01

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : DU 1 S-1

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 08:00

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| 1,2-Dibromoethane | U | 0.011 | 0.040 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| Dibromomethane | U | 0.013 | 0.040 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| 1,2-Dichlorobenzene | U | 0.010 | 0.040 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| 1,3-Dichlorobenzene | U | 0.0079 | 0.040 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| 1,4-Dichlorobenzene | U | 0.0075 | 0.040 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| Dichlorodifluoromethane | U | 0.024 | 0.20 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| 1,1-Dichloroethane | U | 0.0066 | 0.040 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| 1,2-Dichloroethane | U | 0.0088 | 0.040 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| 1,1-Dichloroethene | U | 0.010 | 0.040 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| cis-1,2-Dichloroethene | U | 0.0078 | 0.040 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| trans-1,2-Dichloroethene | U | 0.0088 | 0.040 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| 1,2-Dichloropropane | U | 0.012 | 0.040 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| 1,1-Dichloropropene | U | 0.010 | 0.040 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| 1,3-Dichloropropane | U | 0.0069 | 0.040 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| cis-1,3-Dichloropropene | U | 0.0087 | 0.040 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| trans-1,3-Dichloropropene | U | 0.0089 | 0.040 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| 2,2-Dichloropropane | U | 0.0093 | 0.040 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| Di-isopropyl ether | U | 0.0082 | 0.040 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| Ethylbenzene | U | 0.0099 | 0.040 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| Hexachloro-1,3-butadiene | U | 0.011 | 0.040 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| Isopropylbenzene | U | 0.0081 | 0.040 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| p-Isopropyltoluene | U | 0.0068 | 0.040 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| 2-Butanone (MEK) | U | 0.16 | 0.40 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| Methylene Chloride | U | 0.033 | 0.20 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| 4-Methyl-2-pentanone (MIBK) | U | 0.062 | 0.40 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| Methyl tert-butyl ether | U | 0.0070 | 0.040 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| Naphthalene | U | 0.033 | 0.20 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| n-Propylbenzene | U | 0.0068 | 0.040 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| Styrene | U | 0.0078 | 0.040 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| 1,1,1,2-Tetrachloroethane | U | 0.0088 | 0.040 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| 1,1,2,2-Tetrachloroethane | U | 0.012 | 0.040 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| 1,1,2-Trichlorotrifluoroethane | U | 0.012 | 0.040 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| Tetrachloroethene | U | 0.0092 | 0.040 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| Toluene | U | 0.014 | 0.20 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| 1,2,3-Trichlorobenzene | U | 0.010 | 0.040 | mg/kg | J4 | 8260B | 08/04/15 | 33.25 |
| 1,2,4-Trichlorobenzene | U | 0.013 | 0.040 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| 1,1,1-Trichloroethane | U | 0.0095 | 0.040 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| 1,1,2-Trichloroethane | U | 0.0092 | 0.040 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| Trichloroethene | U | 0.0093 | 0.040 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| Trichlorofluoromethane | U | 0.013 | 0.20 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| 1,2,3-Trichloropropane | U | 0.025 | 0.10 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| 1,2,4-Trimethylbenzene | U | 0.0070 | 0.040 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| 1,2,3-Trimethylbenzene | U | 0.0095 | 0.040 | mg/kg | | 8260B | 08/04/15 | 33.25 |

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-01

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : DU 1 S-1

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 08:00

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| 1,3,5-Trimethylbenzene | U | 0.0088 | 0.040 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| Vinyl chloride | U | 0.0097 | 0.040 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| Xylenes, Total | U | 0.023 | 0.12 | mg/kg | | 8260B | 08/04/15 | 33.25 |
| Surrogate Recovery | | | | | | | | |
| Toluene-d8 | 106. | | | % Rec. | | 8260B | 08/04/15 | 1 |
| Dibromofluoromethane | 94.5 | | | % Rec. | | 8260B | 08/04/15 | 1 |
| 4-Bromofluorobenzene | 111. | | | % Rec. | | 8260B | 08/04/15 | 1 |
| Polynuclear Aromatic Hydrocarbons | | | | | | | | |
| Anthracene | 0.067 | 0.012 | 0.14 | mg/kg | J | 8270C-SI | 08/10/15 | 20 |
| Acenaphthene | U | 0.012 | 0.14 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Acenaphthylene | U | 0.012 | 0.14 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Benzo(a)anthracene | 0.14 | 0.012 | 0.14 | mg/kg | J | 8270C-SI | 08/10/15 | 20 |
| Benzo(a)pyrene | 0.12 | 0.012 | 0.14 | mg/kg | J | 8270C-SI | 08/10/15 | 20 |
| Benzo(b)fluoranthene | 0.17 | 0.012 | 0.14 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Benzo(g,h,i)perylene | 0.094 | 0.012 | 0.14 | mg/kg | J | 8270C-SI | 08/10/15 | 20 |
| Benzo(k)fluoranthene | 0.075 | 0.012 | 0.14 | mg/kg | J | 8270C-SI | 08/10/15 | 20 |
| Chrysene | 0.18 | 0.012 | 0.14 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Dibenz(a,h)anthracene | 0.022 | 0.012 | 0.14 | mg/kg | J | 8270C-SI | 08/10/15 | 20 |
| Fluoranthene | 0.30 | 0.012 | 0.14 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Fluorene | U | 0.012 | 0.14 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Indeno(1,2,3-cd)pyrene | 0.078 | 0.012 | 0.14 | mg/kg | J | 8270C-SI | 08/10/15 | 20 |
| Naphthalene | U | 0.040 | 0.48 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Phenanthrene | 0.16 | 0.012 | 0.14 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Pyrene | 0.35 | 0.012 | 0.14 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| 1-Methylnaphthalene | U | 0.040 | 0.48 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| 2-Methylnaphthalene | U | 0.040 | 0.48 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| 2-Chloronaphthalene | U | 0.040 | 0.48 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Surrogate Recovery | | | | | | | | |
| Nitrobenzene-d5 | 61.8 | | | % Rec. | J7 | 8270C-SI | 08/10/15 | 20 |
| 2-Fluorobiphenyl | 73.2 | | | % Rec. | J7 | 8270C-SI | 08/10/15 | 20 |
| p-Terphenyl-d14 | 70.1 | | | % Rec. | J7 | 8270C-SI | 08/10/15 | 20 |

Results listed are dry weight basis.
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Note:
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Tax I.D. 62-0814289

Est. 1970

# REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-02

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : DU 1 S-2

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 09:20

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Total Solids | 88.3 | 0.0333 | | % | | 2540 G-2 | 08/04/15 | 1 |
| Mercury | 0.30 | 0.0028 | 0.023 | mg/kg | | 7471A | 08/07/15 | 1 |
| Antimony | U | 0.75 | 2.3 | mg/kg | | 6010B | 08/07/15 | 1 |
| Arsenic | 7.0 | 0.65 | 2.3 | mg/kg | | 6010B | 08/07/15 | 1 |
| Beryllium | 0.44 | 0.070 | 0.23 | mg/kg | | 6010B | 08/07/15 | 1 |
| Cadmium | 0.22 | 0.070 | 0.57 | mg/kg | J | 6010B | 08/07/15 | 1 |
| Chromium | 7.0 | 0.14 | 1.1 | mg/kg | | 6010B | 08/07/15 | 1 |
| Copper | 9.6 | 0.53 | 2.3 | mg/kg | | 6010B | 08/07/15 | 1 |
| Lead | 44. | 0.19 | 0.57 | mg/kg | | 6010B | 08/07/15 | 1 |
| Nickel | 5.1 | 0.49 | 2.3 | mg/kg | | 6010B | 08/07/15 | 1 |
| Selenium | U | 0.74 | 2.3 | mg/kg | | 6010B | 08/07/15 | 1 |
| Silver | U | 0.28 | 1.1 | mg/kg | | 6010B | 08/07/15 | 1 |
| Thallium | U | 0.65 | 2.3 | mg/kg | | 6010B | 08/07/15 | 1 |
| Zinc | 83. | 0.59 | 5.7 | mg/kg | | 6010B | 08/07/15 | 1 |
| TPHGAK C6 to C10 | U | 0.97 | 5.0 | mg/kg | | AK101 | 08/04/15 | 44 |
| Surrogate Recovery-% | | | | | | | | |
| a,a,a-Trifluorotoluene(FID) | 91.0 | | | % Rec. | | AK101 | 08/04/15 | 1 |
| a,a,a-Trifluorotoluene(PID) | 102. | | | % Rec. | | 8021 | 08/04/15 | 1 |
| Volatile Organics | | | | | | | | |
| Acetone | U | 0.44 | 2.5 | mg/kg | | 8260B | 08/04/15 | 44 |
| Acrylonitrile | U | 0.079 | 0.50 | mg/kg | | 8260B | 08/04/15 | 44 |
| Benzene | U | 0.012 | 0.050 | mg/kg | | 8260B | 08/04/15 | 44 |
| Bromobenzene | U | 0.012 | 0.050 | mg/kg | | 8260B | 08/04/15 | 44 |
| Bromodichloromethane | U | 0.011 | 0.050 | mg/kg | | 8260B | 08/04/15 | 44 |
| Bromoform | U | 0.019 | 0.050 | mg/kg | | 8260B | 08/04/15 | 44 |
| Bromomethane | U | 0.059 | 0.25 | mg/kg | | 8260B | 08/04/15 | 44 |
| n-Butylbenzene | U | 0.011 | 0.050 | mg/kg | | 8260B | 08/04/15 | 44 |
| sec-Butylbenzene | U | 0.0088 | 0.050 | mg/kg | | 8260B | 08/04/15 | 44 |
| tert-Butylbenzene | U | 0.0091 | 0.050 | mg/kg | | 8260B | 08/04/15 | 44 |
| Carbon tetrachloride | U | 0.014 | 0.050 | mg/kg | | 8260B | 08/04/15 | 44 |
| Chlorobenzene | U | 0.0093 | 0.050 | mg/kg | | 8260B | 08/04/15 | 44 |
| Chlorodibromomethane | U | 0.016 | 0.050 | mg/kg | | 8260B | 08/04/15 | 44 |
| Chloroethane | U | 0.042 | 0.25 | mg/kg | | 8260B | 08/04/15 | 44 |
| 2-Chloroethyl vinyl ether | U | 0.10 | 2.5 | mg/kg | | 8260B | 08/04/15 | 44 |
| Chloroform | U | 0.010 | 0.25 | mg/kg | | 8260B | 08/04/15 | 44 |
| Chloromethane | U | 0.016 | 0.12 | mg/kg | | 8260B | 08/04/15 | 44 |
| 2-Chlorotoluene | U | 0.013 | 0.050 | mg/kg | | 8260B | 08/04/15 | 44 |
| 4-Chlorotoluene | U | 0.010 | 0.050 | mg/kg | | 8260B | 08/04/15 | 44 |
| 1,2-Dibromo-3-Chloropropane | U | 0.046 | 0.25 | mg/kg | | 8260B | 08/04/15 | 44 |

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-02

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : DU 1 S-2

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 09:20

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| 1,2-Dibromoethane | U | 0.015 | 0.050 | mg/kg | | 8260B | 08/04/15 | 44 |
| Dibromomethane | U | 0.017 | 0.050 | mg/kg | | 8260B | 08/04/15 | 44 |
| 1,2-Dichlorobenzene | U | 0.013 | 0.050 | mg/kg | | 8260B | 08/04/15 | 44 |
| 1,3-Dichlorobenzene | U | 0.010 | 0.050 | mg/kg | | 8260B | 08/04/15 | 44 |
| 1,4-Dichlorobenzene | U | 0.0099 | 0.050 | mg/kg | | 8260B | 08/04/15 | 44 |
| Dichlorodifluoromethane | U | 0.031 | 0.25 | mg/kg | | 8260B | 08/04/15 | 44 |
| 1,1-Dichloroethane | U | 0.0088 | 0.050 | mg/kg | | 8260B | 08/04/15 | 44 |
| 1,2-Dichloroethane | U | 0.012 | 0.050 | mg/kg | | 8260B | 08/04/15 | 44 |
| 1,1-Dichloroethene | U | 0.013 | 0.050 | mg/kg | | 8260B | 08/04/15 | 44 |
| cis-1,2-Dichloroethene | U | 0.010 | 0.050 | mg/kg | | 8260B | 08/04/15 | 44 |
| trans-1,2-Dichloroethene | U | 0.012 | 0.050 | mg/kg | | 8260B | 08/04/15 | 44 |
| 1,2-Dichloropropane | U | 0.016 | 0.050 | mg/kg | | 8260B | 08/04/15 | 44 |
| 1,1-Dichloropropene | U | 0.014 | 0.050 | mg/kg | | 8260B | 08/04/15 | 44 |
| 1,3-Dichloropropane | U | 0.0091 | 0.050 | mg/kg | | 8260B | 08/04/15 | 44 |
| cis-1,3-Dichloropropene | U | 0.012 | 0.050 | mg/kg | | 8260B | 08/04/15 | 44 |
| trans-1,3-Dichloropropene | U | 0.012 | 0.050 | mg/kg | | 8260B | 08/04/15 | 44 |
| 2,2-Dichloropropane | U | 0.012 | 0.050 | mg/kg | | 8260B | 08/04/15 | 44 |
| Di-isopropyl ether | U | 0.011 | 0.050 | mg/kg | | 8260B | 08/04/15 | 44 |
| Ethylbenzene | U | 0.013 | 0.050 | mg/kg | | 8260B | 08/04/15 | 44 |
| Hexachloro-1,3-butadiene | U | 0.015 | 0.050 | mg/kg | | 8260B | 08/04/15 | 44 |
| Isopropylbenzene | U | 0.011 | 0.050 | mg/kg | | 8260B | 08/04/15 | 44 |
| p-Isopropyltoluene | U | 0.0090 | 0.050 | mg/kg | | 8260B | 08/04/15 | 44 |
| 2-Butanone (MEK) | U | 0.20 | 0.50 | mg/kg | | 8260B | 08/04/15 | 44 |
| Methylene Chloride | U | 0.044 | 0.25 | mg/kg | | 8260B | 08/04/15 | 44 |
| 4-Methyl-2-pentanone (MIBK) | U | 0.083 | 0.50 | mg/kg | | 8260B | 08/04/15 | 44 |
| Methyl tert-butyl ether | U | 0.0093 | 0.050 | mg/kg | | 8260B | 08/04/15 | 44 |
| Naphthalene | U | 0.044 | 0.25 | mg/kg | | 8260B | 08/04/15 | 44 |
| n-Propylbenzene | U | 0.0091 | 0.050 | mg/kg | | 8260B | 08/04/15 | 44 |
| Styrene | U | 0.010 | 0.050 | mg/kg | | 8260B | 08/04/15 | 44 |
| 1,1,1,2-Tetrachloroethane | U | 0.012 | 0.050 | mg/kg | | 8260B | 08/04/15 | 44 |
| 1,1,2,2-Tetrachloroethane | U | 0.016 | 0.050 | mg/kg | | 8260B | 08/04/15 | 44 |
| 1,1,2-Trichlorotrifluoroethane | U | 0.016 | 0.050 | mg/kg | | 8260B | 08/04/15 | 44 |
| Tetrachloroethene | U | 0.012 | 0.050 | mg/kg | | 8260B | 08/04/15 | 44 |
| Toluene | U | 0.019 | 0.25 | mg/kg | | 8260B | 08/04/15 | 44 |
| 1,2,3-Trichlorobenzene | U | 0.013 | 0.050 | mg/kg | J4 | 8260B | 08/04/15 | 44 |
| 1,2,4-Trichlorobenzene | U | 0.017 | 0.050 | mg/kg | | 8260B | 08/04/15 | 44 |
| 1,1,1-Trichloroethane | U | 0.013 | 0.050 | mg/kg | | 8260B | 08/04/15 | 44 |
| 1,1,2-Trichloroethane | U | 0.012 | 0.050 | mg/kg | | 8260B | 08/04/15 | 44 |
| Trichloroethene | U | 0.012 | 0.050 | mg/kg | | 8260B | 08/04/15 | 44 |
| Trichlorofluoromethane | U | 0.017 | 0.25 | mg/kg | | 8260B | 08/04/15 | 44 |
| 1,2,3-Trichloropropane | U | 0.033 | 0.12 | mg/kg | | 8260B | 08/04/15 | 44 |
| 1,2,4-Trimethylbenzene | U | 0.0093 | 0.050 | mg/kg | | 8260B | 08/04/15 | 44 |
| 1,2,3-Trimethylbenzene | U | 0.013 | 0.050 | mg/kg | | 8260B | 08/04/15 | 44 |

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-02

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : DU 1 S-2

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 09:20

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| 1,3,5-Trimethylbenzene | U | 0.012 | 0.050 | mg/kg | | 8260B | 08/04/15 | 44 |
| Vinyl chloride | U | 0.013 | 0.050 | mg/kg | | 8260B | 08/04/15 | 44 |
| Xylenes, Total | U | 0.031 | 0.15 | mg/kg | | 8260B | 08/04/15 | 44 |
| Surrogate Recovery | | | | | | | | |
| Toluene-d8 | 105. | | | % Rec. | | 8260B | 08/04/15 | 1 |
| Dibromofluoromethane | 95.2 | | | % Rec. | | 8260B | 08/04/15 | 1 |
| 4-Bromofluorobenzene | 108. | | | % Rec. | | 8260B | 08/04/15 | 1 |
| Polynuclear Aromatic Hydrocarbons | | | | | | | | |
| Anthracene | 0.022 | 0.012 | 0.14 | mg/kg | J | 8270C-SI | 08/10/15 | 20 |
| Acenaphthene | U | 0.012 | 0.14 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Acenaphthylene | U | 0.012 | 0.14 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Benzo(a)anthracene | 0.11 | 0.012 | 0.14 | mg/kg | J | 8270C-SI | 08/10/15 | 20 |
| Benzo(a)pyrene | 0.10 | 0.012 | 0.14 | mg/kg | J | 8270C-SI | 08/10/15 | 20 |
| Benzo(b)fluoranthene | 0.15 | 0.012 | 0.14 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Benzo(g,h,i)perylene | 0.078 | 0.012 | 0.14 | mg/kg | J | 8270C-SI | 08/10/15 | 20 |
| Benzo(k)fluoranthene | 0.052 | 0.012 | 0.14 | mg/kg | J | 8270C-SI | 08/10/15 | 20 |
| Chrysene | 0.14 | 0.012 | 0.14 | mg/kg | J | 8270C-SI | 08/10/15 | 20 |
| Dibenz(a,h)anthracene | 0.018 | 0.012 | 0.14 | mg/kg | J | 8270C-SI | 08/10/15 | 20 |
| Fluoranthene | 0.20 | 0.012 | 0.14 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Fluorene | U | 0.012 | 0.14 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Indeno(1,2,3-cd)pyrene | 0.066 | 0.012 | 0.14 | mg/kg | J | 8270C-SI | 08/10/15 | 20 |
| Naphthalene | U | 0.040 | 0.45 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Phenanthrene | 0.11 | 0.012 | 0.14 | mg/kg | J | 8270C-SI | 08/10/15 | 20 |
| Pyrene | 0.22 | 0.012 | 0.14 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| 1-Methylnaphthalene | U | 0.040 | 0.45 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| 2-Methylnaphthalene | U | 0.040 | 0.45 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| 2-Chloronaphthalene | U | 0.040 | 0.45 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Surrogate Recovery | | | | | | | | |
| Nitrobenzene-d5 | 60.8 | | | % Rec. | J7 | 8270C-SI | 08/10/15 | 20 |
| 2-Fluorobiphenyl | 80.3 | | | % Rec. | J7 | 8270C-SI | 08/10/15 | 20 |
| p-Terphenyl-d14 | 78.5 | | | % Rec. | J7 | 8270C-SI | 08/10/15 | 20 |

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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-03

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : DU 1 S-3

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 08:15

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Total Solids | 89.3 | 0.0333 | | % | | 2540 G-2 | 08/04/15 | 1 |
| Mercury | 0.45 | 0.0028 | 0.022 | mg/kg | J6 | 7471A | 08/07/15 | 1 |
| Antimony | U | 0.75 | 2.2 | mg/kg | | 6010B | 08/07/15 | 1 |
| Arsenic | 10. | 0.65 | 2.2 | mg/kg | | 6010B | 08/07/15 | 1 |
| Beryllium | 0.50 | 0.070 | 0.22 | mg/kg | | 6010B | 08/07/15 | 1 |
| Cadmium | 0.34 | 0.070 | 0.56 | mg/kg | J | 6010B | 08/07/15 | 1 |
| Chromium | 8.3 | 0.14 | 1.1 | mg/kg | | 6010B | 08/07/15 | 1 |
| Copper | 9.3 | 0.53 | 2.2 | mg/kg | | 6010B | 08/07/15 | 1 |
| Lead | 53. | 0.19 | 0.56 | mg/kg | | 6010B | 08/07/15 | 1 |
| Nickel | 5.5 | 0.49 | 2.2 | mg/kg | | 6010B | 08/07/15 | 1 |
| Selenium | U | 0.74 | 2.2 | mg/kg | | 6010B | 08/07/15 | 1 |
| Silver | U | 0.28 | 1.1 | mg/kg | | 6010B | 08/07/15 | 1 |
| Thallium | U | 0.65 | 2.2 | mg/kg | | 6010B | 08/07/15 | 1 |
| Zinc | 120 | 0.59 | 5.6 | mg/kg | J3J6 | 6010B | 08/07/15 | 1 |
| TPHGAK C6 to C10 | U | 1.0 | 5.3 | mg/kg | | AK101 | 08/04/15 | 47 |
| Surrogate Recovery-% | | | | | | | | |
| a,a,a-Trifluorotoluene(FID) | 91.0 | | | % Rec. | | AK101 | 08/04/15 | 1 |
| a,a,a-Trifluorotoluene(PID) | 102. | | | % Rec. | | 8021 | 08/04/15 | 1 |
| Volatile Organics | | | | | | | | |
| Acetone | U | 0.47 | 2.6 | mg/kg | | 8260B | 08/04/15 | 47 |
| Acrylonitrile | U | 0.084 | 0.53 | mg/kg | | 8260B | 08/04/15 | 47 |
| Benzene | U | 0.013 | 0.053 | mg/kg | | 8260B | 08/04/15 | 47 |
| Bromobenzene | U | 0.013 | 0.053 | mg/kg | | 8260B | 08/04/15 | 47 |
| Bromodichloromethane | U | 0.012 | 0.053 | mg/kg | | 8260B | 08/04/15 | 47 |
| Bromoform | U | 0.020 | 0.053 | mg/kg | | 8260B | 08/04/15 | 47 |
| Bromomethane | U | 0.063 | 0.26 | mg/kg | | 8260B | 08/04/15 | 47 |
| n-Butylbenzene | U | 0.012 | 0.053 | mg/kg | | 8260B | 08/04/15 | 47 |
| sec-Butylbenzene | U | 0.0094 | 0.053 | mg/kg | | 8260B | 08/04/15 | 47 |
| tert-Butylbenzene | U | 0.0097 | 0.053 | mg/kg | | 8260B | 08/04/15 | 47 |
| Carbon tetrachloride | U | 0.015 | 0.053 | mg/kg | | 8260B | 08/04/15 | 47 |
| Chlorobenzene | U | 0.010 | 0.053 | mg/kg | | 8260B | 08/04/15 | 47 |
| Chlorodibromomethane | U | 0.018 | 0.053 | mg/kg | | 8260B | 08/04/15 | 47 |
| Chloroethane | U | 0.044 | 0.26 | mg/kg | | 8260B | 08/04/15 | 47 |
| 2-Chloroethyl vinyl ether | U | 0.11 | 2.6 | mg/kg | | 8260B | 08/04/15 | 47 |
| Chloroform | U | 0.011 | 0.26 | mg/kg | | 8260B | 08/04/15 | 47 |
| Chloromethane | U | 0.018 | 0.13 | mg/kg | | 8260B | 08/04/15 | 47 |
| 2-Chlorotoluene | U | 0.014 | 0.053 | mg/kg | | 8260B | 08/04/15 | 47 |
| 4-Chlorotoluene | U | 0.011 | 0.053 | mg/kg | | 8260B | 08/04/15 | 47 |
| 1,2-Dibromo-3-Chloropropane | U | 0.049 | 0.26 | mg/kg | | 8260B | 08/04/15 | 47 |

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-03

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : DU 1 S-3

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 08:15

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| 1,2-Dibromoethane | U | 0.016 | 0.053 | mg/kg | | 8260B | 08/04/15 | 47 |
| Dibromomethane | U | 0.018 | 0.053 | mg/kg | | 8260B | 08/04/15 | 47 |
| 1,2-Dichlorobenzene | U | 0.014 | 0.053 | mg/kg | | 8260B | 08/04/15 | 47 |
| 1,3-Dichlorobenzene | U | 0.011 | 0.053 | mg/kg | | 8260B | 08/04/15 | 47 |
| 1,4-Dichlorobenzene | U | 0.011 | 0.053 | mg/kg | | 8260B | 08/04/15 | 47 |
| Dichlorodifluoromethane | U | 0.034 | 0.26 | mg/kg | | 8260B | 08/04/15 | 47 |
| 1,1-Dichloroethane | U | 0.0094 | 0.053 | mg/kg | | 8260B | 08/04/15 | 47 |
| 1,2-Dichloroethane | U | 0.012 | 0.053 | mg/kg | | 8260B | 08/04/15 | 47 |
| 1,1-Dichloroethene | U | 0.014 | 0.053 | mg/kg | | 8260B | 08/04/15 | 47 |
| cis-1,2-Dichloroethene | U | 0.011 | 0.053 | mg/kg | | 8260B | 08/04/15 | 47 |
| trans-1,2-Dichloroethene | U | 0.012 | 0.053 | mg/kg | | 8260B | 08/04/15 | 47 |
| 1,2-Dichloropropane | U | 0.017 | 0.053 | mg/kg | | 8260B | 08/04/15 | 47 |
| 1,1-Dichloropropene | U | 0.015 | 0.053 | mg/kg | | 8260B | 08/04/15 | 47 |
| 1,3-Dichloropropane | U | 0.0097 | 0.053 | mg/kg | | 8260B | 08/04/15 | 47 |
| cis-1,3-Dichloropropene | U | 0.012 | 0.053 | mg/kg | | 8260B | 08/04/15 | 47 |
| trans-1,3-Dichloropropene | U | 0.012 | 0.053 | mg/kg | | 8260B | 08/04/15 | 47 |
| 2,2-Dichloropropane | U | 0.013 | 0.053 | mg/kg | | 8260B | 08/04/15 | 47 |
| Di-isopropyl ether | U | 0.012 | 0.053 | mg/kg | | 8260B | 08/04/15 | 47 |
| Ethylbenzene | U | 0.014 | 0.053 | mg/kg | | 8260B | 08/04/15 | 47 |
| Hexachloro-1,3-butadiene | U | 0.016 | 0.053 | mg/kg | | 8260B | 08/04/15 | 47 |
| Isopropylbenzene | U | 0.011 | 0.053 | mg/kg | | 8260B | 08/04/15 | 47 |
| p-Isopropyltoluene | U | 0.0096 | 0.053 | mg/kg | | 8260B | 08/04/15 | 47 |
| 2-Butanone (MEK) | U | 0.22 | 0.53 | mg/kg | | 8260B | 08/04/15 | 47 |
| Methylene Chloride | U | 0.047 | 0.26 | mg/kg | | 8260B | 08/04/15 | 47 |
| 4-Methyl-2-pentanone (MIBK) | U | 0.088 | 0.53 | mg/kg | | 8260B | 08/04/15 | 47 |
| Methyl tert-butyl ether | U | 0.010 | 0.053 | mg/kg | | 8260B | 08/04/15 | 47 |
| Naphthalene | U | 0.047 | 0.26 | mg/kg | | 8260B | 08/04/15 | 47 |
| n-Propylbenzene | U | 0.0097 | 0.053 | mg/kg | | 8260B | 08/04/15 | 47 |
| Styrene | U | 0.011 | 0.053 | mg/kg | | 8260B | 08/04/15 | 47 |
| 1,1,1,2-Tetrachloroethane | U | 0.012 | 0.053 | mg/kg | | 8260B | 08/04/15 | 47 |
| 1,1,2,2-Tetrachloroethane | U | 0.017 | 0.053 | mg/kg | | 8260B | 08/04/15 | 47 |
| 1,1,2-Trichlorotrifluoroethane | U | 0.017 | 0.053 | mg/kg | | 8260B | 08/04/15 | 47 |
| Tetrachloroethene | U | 0.013 | 0.053 | mg/kg | | 8260B | 08/04/15 | 47 |
| Toluene | U | 0.020 | 0.26 | mg/kg | | 8260B | 08/04/15 | 47 |
| 1,2,3-Trichlorobenzene | U | 0.014 | 0.053 | mg/kg | J4 | 8260B | 08/04/15 | 47 |
| 1,2,4-Trichlorobenzene | U | 0.018 | 0.053 | mg/kg | | 8260B | 08/04/15 | 47 |
| 1,1,1-Trichloroethane | U | 0.013 | 0.053 | mg/kg | | 8260B | 08/04/15 | 47 |
| 1,1,2-Trichloroethane | U | 0.013 | 0.053 | mg/kg | | 8260B | 08/04/15 | 47 |
| Trichloroethene | U | 0.013 | 0.053 | mg/kg | | 8260B | 08/04/15 | 47 |
| Trichlorofluoromethane | U | 0.018 | 0.26 | mg/kg | | 8260B | 08/04/15 | 47 |
| 1,2,3-Trichloropropane | U | 0.035 | 0.13 | mg/kg | | 8260B | 08/04/15 | 47 |
| 1,2,4-Trimethylbenzene | U | 0.0099 | 0.053 | mg/kg | | 8260B | 08/04/15 | 47 |
| 1,2,3-Trimethylbenzene | U | 0.013 | 0.053 | mg/kg | | 8260B | 08/04/15 | 47 |

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
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Est. 1970

REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-03

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : DU 1 S-3

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 08:15

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| 1,3,5-Trimethylbenzene | U | 0.012 | 0.053 | mg/kg | | 8260B | 08/04/15 | 47 |
| Vinyl chloride | U | 0.014 | 0.053 | mg/kg | | 8260B | 08/04/15 | 47 |
| Xylenes, Total | U | 0.033 | 0.16 | mg/kg | | 8260B | 08/04/15 | 47 |
| Surrogate Recovery | | | | | | | | |
| Toluene-d8 | 106. | | | % Rec. | | 8260B | 08/04/15 | 1 |
| Dibromofluoromethane | 95.9 | | | % Rec. | | 8260B | 08/04/15 | 1 |
| 4-Bromofluorobenzene | 110. | | | % Rec. | | 8260B | 08/04/15 | 1 |
| Polynuclear Aromatic Hydrocarbons | | | | | | | | |
| Anthracene | 0.26 | 0.012 | 0.13 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Acenaphthene | 0.022 | 0.012 | 0.13 | mg/kg | J | 8270C-SI | 08/10/15 | 20 |
| Acenaphthylene | U | 0.012 | 0.13 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Benzo(a)anthracene | 0.29 | 0.012 | 0.13 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Benzo(a)pyrene | 0.25 | 0.012 | 0.13 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Benzo(b)fluoranthene | 0.40 | 0.012 | 0.13 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Benzo(g,h,i)perylene | 0.18 | 0.012 | 0.13 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Benzo(k)fluoranthene | 0.11 | 0.012 | 0.13 | mg/kg | J | 8270C-SI | 08/10/15 | 20 |
| Chrysene | 0.42 | 0.012 | 0.13 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Dibenz(a,h)anthracene | 0.042 | 0.012 | 0.13 | mg/kg | J | 8270C-SI | 08/10/15 | 20 |
| Fluoranthene | 0.72 | 0.012 | 0.13 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Fluorene | 0.028 | 0.012 | 0.13 | mg/kg | J | 8270C-SI | 08/10/15 | 20 |
| Indeno(1,2,3-cd)pyrene | 0.16 | 0.012 | 0.13 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Naphthalene | U | 0.040 | 0.45 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Phenanthrene | 0.37 | 0.012 | 0.13 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Pyrene | 0.86 | 0.012 | 0.13 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| 1-Methylnaphthalene | U | 0.040 | 0.45 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| 2-Methylnaphthalene | U | 0.040 | 0.45 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| 2-Chloronaphthalene | U | 0.040 | 0.45 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Surrogate Recovery | | | | | | | | |
| Nitrobenzene-d5 | 61.1 | | | % Rec. | J7 | 8270C-SI | 08/10/15 | 20 |
| 2-Fluorobiphenyl | 79.8 | | | % Rec. | J7 | 8270C-SI | 08/10/15 | 20 |
| p-Terphenyl-d14 | 78.3 | | | % Rec. | J7 | 8270C-SI | 08/10/15 | 20 |

Results listed are dry weight basis.
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Tax I.D. 62-0814289

Est. 1970

# REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-04

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : DU 2 S-1

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 09:00

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Total Solids | 91.6 | 0.0333 | | % | | 2540 G-2 | 08/04/15 | 1 |
| Mercury | 0.24 | 0.0028 | 0.022 | mg/kg | | 7471A | 08/07/15 | 1 |
| Antimony | U | 0.75 | 2.2 | mg/kg | | 6010B | 08/07/15 | 1 |
| Arsenic | 7.3 | 0.65 | 2.2 | mg/kg | | 6010B | 08/07/15 | 1 |
| Beryllium | 0.52 | 0.070 | 0.22 | mg/kg | | 6010B | 08/07/15 | 1 |
| Cadmium | 0.47 | 0.070 | 0.54 | mg/kg | J | 6010B | 08/07/15 | 1 |
| Chromium | 9.4 | 0.14 | 1.1 | mg/kg | | 6010B | 08/07/15 | 1 |
| Copper | 21. | 0.53 | 2.2 | mg/kg | | 6010B | 08/07/15 | 1 |
| Lead | 120 | 0.19 | 0.54 | mg/kg | | 6010B | 08/07/15 | 1 |
| Nickel | 6.8 | 0.49 | 2.2 | mg/kg | | 6010B | 08/07/15 | 1 |
| Selenium | U | 0.74 | 2.2 | mg/kg | | 6010B | 08/07/15 | 1 |
| Silver | U | 0.28 | 1.1 | mg/kg | | 6010B | 08/07/15 | 1 |
| Thallium | U | 0.65 | 2.2 | mg/kg | | 6010B | 08/07/15 | 1 |
| Zinc | 170 | 0.59 | 5.4 | mg/kg | | 6010B | 08/07/15 | 1 |
| TPHGAK C6 to C10 | U | 1.2 | 5.9 | mg/kg | | AK101 | 08/04/15 | 54 |
| Surrogate Recovery-% | | | | | | | | |
| a,a,a-Trifluorotoluene(FID) | 90.9 | | | % Rec. | | AK101 | 08/04/15 | 1 |
| a,a,a-Trifluorotoluene(PID) | 102. | | | % Rec. | | 8021 | 08/04/15 | 1 |
| Volatile Organics | | | | | | | | |
| Acetone | U | 0.54 | 2.9 | mg/kg | | 8260B | 08/04/15 | 54 |
| Acrylonitrile | U | 0.097 | 0.59 | mg/kg | | 8260B | 08/04/15 | 54 |
| Benzene | U | 0.014 | 0.059 | mg/kg | | 8260B | 08/04/15 | 54 |
| Bromobenzene | U | 0.015 | 0.059 | mg/kg | | 8260B | 08/04/15 | 54 |
| Bromodichloromethane | U | 0.014 | 0.059 | mg/kg | | 8260B | 08/04/15 | 54 |
| Bromoform | U | 0.023 | 0.059 | mg/kg | | 8260B | 08/04/15 | 54 |
| Bromomethane | U | 0.072 | 0.29 | mg/kg | | 8260B | 08/04/15 | 54 |
| n-Butylbenzene | U | 0.014 | 0.059 | mg/kg | | 8260B | 08/04/15 | 54 |
| sec-Butylbenzene | U | 0.011 | 0.059 | mg/kg | | 8260B | 08/04/15 | 54 |
| tert-Butylbenzene | U | 0.011 | 0.059 | mg/kg | | 8260B | 08/04/15 | 54 |
| Carbon tetrachloride | U | 0.018 | 0.059 | mg/kg | | 8260B | 08/04/15 | 54 |
| Chlorobenzene | U | 0.011 | 0.059 | mg/kg | | 8260B | 08/04/15 | 54 |
| Chlorodibromomethane | U | 0.020 | 0.059 | mg/kg | | 8260B | 08/04/15 | 54 |
| Chloroethane | U | 0.051 | 0.29 | mg/kg | | 8260B | 08/04/15 | 54 |
| 2-Chloroethyl vinyl ether | U | 0.13 | 2.9 | mg/kg | | 8260B | 08/04/15 | 54 |
| Chloroform | U | 0.012 | 0.29 | mg/kg | | 8260B | 08/04/15 | 54 |
| Chloromethane | U | 0.020 | 0.15 | mg/kg | | 8260B | 08/04/15 | 54 |
| 2-Chlorotoluene | U | 0.016 | 0.059 | mg/kg | | 8260B | 08/04/15 | 54 |
| 4-Chlorotoluene | U | 0.013 | 0.059 | mg/kg | | 8260B | 08/04/15 | 54 |
| 1,2-Dibromo-3-Chloropropane | U | 0.057 | 0.29 | mg/kg | | 8260B | 08/04/15 | 54 |

Results listed are dry weight basis.
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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-04

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : DU 2 S-1

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 09:00

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| 1,2-Dibromoethane | U | 0.018 | 0.059 | mg/kg | | 8260B | 08/04/15 | 54 |
| Dibromomethane | U | 0.021 | 0.059 | mg/kg | | 8260B | 08/04/15 | 54 |
| 1,2-Dichlorobenzene | U | 0.016 | 0.059 | mg/kg | | 8260B | 08/04/15 | 54 |
| 1,3-Dichlorobenzene | U | 0.013 | 0.059 | mg/kg | | 8260B | 08/04/15 | 54 |
| 1,4-Dichlorobenzene | U | 0.012 | 0.059 | mg/kg | | 8260B | 08/04/15 | 54 |
| Dichlorodifluoromethane | U | 0.038 | 0.29 | mg/kg | | 8260B | 08/04/15 | 54 |
| 1,1-Dichloroethane | U | 0.011 | 0.059 | mg/kg | | 8260B | 08/04/15 | 54 |
| 1,2-Dichloroethane | U | 0.014 | 0.059 | mg/kg | | 8260B | 08/04/15 | 54 |
| 1,1-Dichloroethene | U | 0.016 | 0.059 | mg/kg | | 8260B | 08/04/15 | 54 |
| cis-1,2-Dichloroethene | U | 0.013 | 0.059 | mg/kg | | 8260B | 08/04/15 | 54 |
| trans-1,2-Dichloroethene | U | 0.014 | 0.059 | mg/kg | | 8260B | 08/04/15 | 54 |
| 1,2-Dichloropropane | U | 0.019 | 0.059 | mg/kg | | 8260B | 08/04/15 | 54 |
| 1,1-Dichloropropene | U | 0.017 | 0.059 | mg/kg | | 8260B | 08/04/15 | 54 |
| 1,3-Dichloropropane | U | 0.011 | 0.059 | mg/kg | | 8260B | 08/04/15 | 54 |
| cis-1,3-Dichloropropene | U | 0.014 | 0.059 | mg/kg | | 8260B | 08/04/15 | 54 |
| trans-1,3-Dichloropropene | U | 0.014 | 0.059 | mg/kg | | 8260B | 08/04/15 | 54 |
| 2,2-Dichloropropane | U | 0.015 | 0.059 | mg/kg | | 8260B | 08/04/15 | 54 |
| Di-isopropyl ether | U | 0.013 | 0.059 | mg/kg | | 8260B | 08/04/15 | 54 |
| Ethylbenzene | U | 0.016 | 0.059 | mg/kg | | 8260B | 08/04/15 | 54 |
| Hexachloro-1,3-butadiene | U | 0.018 | 0.059 | mg/kg | | 8260B | 08/04/15 | 54 |
| Isopropylbenzene | U | 0.013 | 0.059 | mg/kg | | 8260B | 08/04/15 | 54 |
| p-Isopropyltoluene | U | 0.011 | 0.059 | mg/kg | | 8260B | 08/04/15 | 54 |
| 2-Butanone (MEK) | U | 0.25 | 0.59 | mg/kg | | 8260B | 08/04/15 | 54 |
| Methylene Chloride | U | 0.054 | 0.29 | mg/kg | | 8260B | 08/04/15 | 54 |
| 4-Methyl-2-pentanone (MIBK) | U | 0.10 | 0.59 | mg/kg | | 8260B | 08/04/15 | 54 |
| Methyl tert-butyl ether | U | 0.011 | 0.059 | mg/kg | | 8260B | 08/04/15 | 54 |
| Naphthalene | 0.070 | 0.054 | 0.29 | mg/kg | J | 8260B | 08/04/15 | 54 |
| n-Propylbenzene | U | 0.011 | 0.059 | mg/kg | | 8260B | 08/04/15 | 54 |
| Styrene | U | 0.013 | 0.059 | mg/kg | | 8260B | 08/04/15 | 54 |
| 1,1,1,2-Tetrachloroethane | U | 0.014 | 0.059 | mg/kg | | 8260B | 08/04/15 | 54 |
| 1,1,2,2-Tetrachloroethane | U | 0.020 | 0.059 | mg/kg | | 8260B | 08/04/15 | 54 |
| 1,1,2-Trichlorotrifluoroethane | U | 0.020 | 0.059 | mg/kg | | 8260B | 08/04/15 | 54 |
| Tetrachloroethene | U | 0.015 | 0.059 | mg/kg | | 8260B | 08/04/15 | 54 |
| Toluene | 0.027 | 0.023 | 0.29 | mg/kg | J | 8260B | 08/04/15 | 54 |
| 1,2,3-Trichlorobenzene | U | 0.016 | 0.059 | mg/kg | J4 | 8260B | 08/04/15 | 54 |
| 1,2,4-Trichlorobenzene | U | 0.021 | 0.059 | mg/kg | | 8260B | 08/04/15 | 54 |
| 1,1,1-Trichloroethane | U | 0.015 | 0.059 | mg/kg | | 8260B | 08/04/15 | 54 |
| 1,1,2-Trichloroethane | U | 0.015 | 0.059 | mg/kg | | 8260B | 08/04/15 | 54 |
| Trichloroethene | U | 0.015 | 0.059 | mg/kg | | 8260B | 08/04/15 | 54 |
| Trichlorofluoromethane | U | 0.021 | 0.29 | mg/kg | | 8260B | 08/04/15 | 54 |
| 1,2,3-Trichloropropane | U | 0.040 | 0.15 | mg/kg | | 8260B | 08/04/15 | 54 |
| 1,2,4-Trimethylbenzene | 0.026 | 0.011 | 0.059 | mg/kg | J | 8260B | 08/04/15 | 54 |
| 1,2,3-Trimethylbenzene | 0.023 | 0.015 | 0.059 | mg/kg | J | 8260B | 08/04/15 | 54 |

Results listed are dry weight basis.
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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-04

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : DU 2 S-1

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 09:00

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| 1,3,5-Trimethylbenzene | U | 0.014 | 0.059 | mg/kg | | 8260B | 08/04/15 | 54 |
| Vinyl chloride | U | 0.016 | 0.059 | mg/kg | | 8260B | 08/04/15 | 54 |
| Xylenes, Total | 0.054 | 0.038 | 0.18 | mg/kg | J | 8260B | 08/04/15 | 54 |
| Surrogate Recovery | | | | | | | | |
| Toluene-d8 | 105. | | | % Rec. | | 8260B | 08/04/15 | 1 |
| Dibromofluoromethane | 95.0 | | | % Rec. | | 8260B | 08/04/15 | 1 |
| 4-Bromofluorobenzene | 109. | | | % Rec. | | 8260B | 08/04/15 | 1 |
| Polynuclear Aromatic Hydrocarbons | | | | | | | | |
| Anthracene | 0.017 | 0.012 | 0.13 | mg/kg | J | 8270C-SI | 08/10/15 | 20 |
| Acenaphthene | U | 0.012 | 0.13 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Acenaphthylene | U | 0.012 | 0.13 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Benzo(a)anthracene | 0.072 | 0.012 | 0.13 | mg/kg | J | 8270C-SI | 08/10/15 | 20 |
| Benzo(a)pyrene | 0.091 | 0.012 | 0.13 | mg/kg | J | 8270C-SI | 08/10/15 | 20 |
| Benzo(b)fluoranthene | 0.11 | 0.012 | 0.13 | mg/kg | J | 8270C-SI | 08/10/15 | 20 |
| Benzo(g,h,i)perylene | 0.081 | 0.012 | 0.13 | mg/kg | J | 8270C-SI | 08/10/15 | 20 |
| Benzo(k)fluoranthene | 0.046 | 0.012 | 0.13 | mg/kg | J | 8270C-SI | 08/10/15 | 20 |
| Chrysene | 0.096 | 0.012 | 0.13 | mg/kg | J | 8270C-SI | 08/10/15 | 20 |
| Dibenz(a,h)anthracene | 0.016 | 0.012 | 0.13 | mg/kg | J | 8270C-SI | 08/10/15 | 20 |
| Fluoranthene | 0.13 | 0.012 | 0.13 | mg/kg | J | 8270C-SI | 08/10/15 | 20 |
| Fluorene | U | 0.012 | 0.13 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Indeno(1,2,3-cd)pyrene | 0.062 | 0.012 | 0.13 | mg/kg | J | 8270C-SI | 08/10/15 | 20 |
| Naphthalene | U | 0.040 | 0.44 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Phenanthrene | 0.076 | 0.012 | 0.13 | mg/kg | J | 8270C-SI | 08/10/15 | 20 |
| Pyrene | 0.15 | 0.012 | 0.13 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| 1-Methylnaphthalene | U | 0.040 | 0.44 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| 2-Methylnaphthalene | U | 0.040 | 0.44 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| 2-Chloronaphthalene | U | 0.040 | 0.44 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Surrogate Recovery | | | | | | | | |
| Nitrobenzene-d5 | 62.2 | | | % Rec. | J7 | 8270C-SI | 08/10/15 | 20 |
| 2-Fluorobiphenyl | 70.6 | | | % Rec. | J7 | 8270C-SI | 08/10/15 | 20 |
| p-Terphenyl-d14 | 67.8 | | | % Rec. | J7 | 8270C-SI | 08/10/15 | 20 |

Results listed are dry weight basis.
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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-05

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : DU 2 S-2

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 08:25

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Total Solids | 89.4 | 0.0333 | | % | | 2540 G-2 | 08/04/15 | 1 |
| Mercury | 0.26 | 0.0028 | 0.022 | mg/kg | | 7471A | 08/07/15 | 1 |
| Antimony | U | 0.75 | 2.2 | mg/kg | | 6010B | 08/07/15 | 1 |
| Arsenic | 6.5 | 0.65 | 2.2 | mg/kg | | 6010B | 08/07/15 | 1 |
| Beryllium | 0.47 | 0.070 | 0.22 | mg/kg | | 6010B | 08/07/15 | 1 |
| Cadmium | 0.66 | 0.070 | 0.56 | mg/kg | | 6010B | 08/07/15 | 1 |
| Chromium | 8.0 | 0.14 | 1.1 | mg/kg | | 6010B | 08/07/15 | 1 |
| Copper | 19. | 0.53 | 2.2 | mg/kg | | 6010B | 08/07/15 | 1 |
| Lead | 270 | 0.19 | 0.56 | mg/kg | | 6010B | 08/07/15 | 1 |
| Nickel | 5.7 | 0.49 | 2.2 | mg/kg | | 6010B | 08/07/15 | 1 |
| Selenium | U | 0.74 | 2.2 | mg/kg | | 6010B | 08/07/15 | 1 |
| Silver | U | 0.28 | 1.1 | mg/kg | | 6010B | 08/07/15 | 1 |
| Thallium | U | 0.65 | 2.2 | mg/kg | | 6010B | 08/07/15 | 1 |
| Zinc | 270 | 0.59 | 5.6 | mg/kg | | 6010B | 08/07/15 | 1 |
| TPHGAK C6 to C10 | U | 0.54 | 2.8 | mg/kg | | AK101 | 08/04/15 | 24.75 |
| Surrogate Recovery-% | | | | | | | | |
| a,a,a-Trifluorotoluene(FID) | 91.0 | | | % Rec. | | AK101 | 08/04/15 | 1 |
| a,a,a-Trifluorotoluene(PID) | 102. | | | % Rec. | | 8021 | 08/04/15 | 1 |
| Volatile Organics | | | | | | | | |
| Acetone | U | 0.25 | 1.4 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| Acrylonitrile | U | 0.044 | 0.28 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| Benzene | U | 0.0067 | 0.028 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| Bromobenzene | U | 0.0070 | 0.028 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| Bromodichloromethane | U | 0.0063 | 0.028 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| Bromoform | U | 0.010 | 0.028 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| Bromomethane | U | 0.033 | 0.14 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| n-Butylbenzene | U | 0.0064 | 0.028 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| sec-Butylbenzene | U | 0.0050 | 0.028 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| tert-Butylbenzene | U | 0.0051 | 0.028 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| Carbon tetrachloride | U | 0.0081 | 0.028 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| Chlorobenzene | U | 0.0052 | 0.028 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| Chlorodibromomethane | U | 0.0092 | 0.028 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| Chloroethane | U | 0.023 | 0.14 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| 2-Chloroethyl vinyl ether | U | 0.058 | 1.4 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| Chloroform | U | 0.0057 | 0.14 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| Chloromethane | U | 0.0093 | 0.069 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| 2-Chlorotoluene | U | 0.0074 | 0.028 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| 4-Chlorotoluene | U | 0.0059 | 0.028 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| 1,2-Dibromo-3-Chloropropane | U | 0.026 | 0.14 | mg/kg | | 8260B | 08/04/15 | 24.75 |

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
Note:
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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-05

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : DU 2 S-2

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 08:25

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| 1,2-Dibromoethane | U | 0.0085 | 0.028 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| Dibromomethane | U | 0.0094 | 0.028 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| 1,2-Dichlorobenzene | U | 0.0075 | 0.028 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| 1,3-Dichlorobenzene | U | 0.0059 | 0.028 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| 1,4-Dichlorobenzene | U | 0.0056 | 0.028 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| Dichlorodifluoromethane | U | 0.018 | 0.14 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| 1,1-Dichloroethane | U | 0.0049 | 0.028 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| 1,2-Dichloroethane | U | 0.0066 | 0.028 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| 1,1-Dichloroethene | U | 0.0075 | 0.028 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| cis-1,2-Dichloroethene | U | 0.0058 | 0.028 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| trans-1,2-Dichloroethene | U | 0.0065 | 0.028 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| 1,2-Dichloropropane | U | 0.0089 | 0.028 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| 1,1-Dichloropropene | U | 0.0078 | 0.028 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| 1,3-Dichloropropane | U | 0.0051 | 0.028 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| cis-1,3-Dichloropropene | U | 0.0065 | 0.028 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| trans-1,3-Dichloropropene | U | 0.0066 | 0.028 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| 2,2-Dichloropropane | U | 0.0069 | 0.028 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| Di-isopropyl ether | U | 0.0061 | 0.028 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| Ethylbenzene | U | 0.0074 | 0.028 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| Hexachloro-1,3-butadiene | U | 0.0085 | 0.028 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| Isopropylbenzene | U | 0.0060 | 0.028 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| p-Isopropyltoluene | U | 0.0050 | 0.028 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| 2-Butanone (MEK) | U | 0.12 | 0.28 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| Methylene Chloride | U | 0.025 | 0.14 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| 4-Methyl-2-pentanone (MIBK) | U | 0.046 | 0.28 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| Methyl tert-butyl ether | U | 0.0052 | 0.028 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| Naphthalene | U | 0.025 | 0.14 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| n-Propylbenzene | U | 0.0051 | 0.028 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| Styrene | U | 0.0058 | 0.028 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| 1,1,1,2-Tetrachloroethane | U | 0.0065 | 0.028 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| 1,1,2,2-Tetrachloroethane | U | 0.0090 | 0.028 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| 1,1,2-Trichlorotrifluoroethane | U | 0.0090 | 0.028 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| Tetrachloroethene | U | 0.0068 | 0.028 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| Toluene | U | 0.011 | 0.14 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| 1,2,3-Trichlorobenzene | U | 0.0076 | 0.028 | mg/kg | J4 | 8260B | 08/04/15 | 24.75 |
| 1,2,4-Trichlorobenzene | U | 0.0096 | 0.028 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| 1,1,1-Trichloroethane | U | 0.0071 | 0.028 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| 1,1,2-Trichloroethane | U | 0.0068 | 0.028 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| Trichloroethene | U | 0.0069 | 0.028 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| Trichlorofluoromethane | U | 0.0094 | 0.14 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| 1,2,3-Trichloropropane | U | 0.018 | 0.069 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| 1,2,4-Trimethylbenzene | U | 0.0052 | 0.028 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| 1,2,3-Trimethylbenzene | U | 0.0071 | 0.028 | mg/kg | | 8260B | 08/04/15 | 24.75 |

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-05

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : DU 2 S-2

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 08:25

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| 1,3,5-Trimethylbenzene | U | 0.0066 | 0.028 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| Vinyl chloride | U | 0.0072 | 0.028 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| Xylenes, Total | U | 0.017 | 0.083 | mg/kg | | 8260B | 08/04/15 | 24.75 |
| Surrogate Recovery | | | | | | | | |
| Toluene-d8 | 106. | | | % Rec. | | 8260B | 08/04/15 | 1 |
| Dibromofluoromethane | 95.1 | | | % Rec. | | 8260B | 08/04/15 | 1 |
| 4-Bromofluorobenzene | 107. | | | % Rec. | | 8260B | 08/04/15 | 1 |
| Polynuclear Aromatic Hydrocarbons | | | | | | | | |
| Anthracene | U | 0.012 | 0.13 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Acenaphthene | U | 0.012 | 0.13 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Acenaphthylene | U | 0.012 | 0.13 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Benzo(a)anthracene | 0.057 | 0.012 | 0.13 | mg/kg | J | 8270C-SI | 08/10/15 | 20 |
| Benzo(a)pyrene | 0.066 | 0.012 | 0.13 | mg/kg | J | 8270C-SI | 08/10/15 | 20 |
| Benzo(b)fluoranthene | 0.093 | 0.012 | 0.13 | mg/kg | J | 8270C-SI | 08/10/15 | 20 |
| Benzo(g,h,i)perylene | 0.064 | 0.012 | 0.13 | mg/kg | J | 8270C-SI | 08/10/15 | 20 |
| Benzo(k)fluoranthene | 0.026 | 0.012 | 0.13 | mg/kg | J | 8270C-SI | 08/10/15 | 20 |
| Chrysene | 0.076 | 0.012 | 0.13 | mg/kg | J | 8270C-SI | 08/10/15 | 20 |
| Dibenz(a,h)anthracene | 0.013 | 0.012 | 0.13 | mg/kg | J | 8270C-SI | 08/10/15 | 20 |
| Fluoranthene | 0.11 | 0.012 | 0.13 | mg/kg | J | 8270C-SI | 08/10/15 | 20 |
| Fluorene | U | 0.012 | 0.13 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Indeno(1,2,3-cd)pyrene | 0.049 | 0.012 | 0.13 | mg/kg | J | 8270C-SI | 08/10/15 | 20 |
| Naphthalene | U | 0.040 | 0.45 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Phenanthrene | 0.049 | 0.012 | 0.13 | mg/kg | J | 8270C-SI | 08/10/15 | 20 |
| Pyrene | 0.12 | 0.012 | 0.13 | mg/kg | J | 8270C-SI | 08/10/15 | 20 |
| 1-Methylnaphthalene | U | 0.040 | 0.45 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| 2-Methylnaphthalene | U | 0.040 | 0.45 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| 2-Chloronaphthalene | U | 0.040 | 0.45 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Surrogate Recovery | | | | | | | | |
| Nitrobenzene-d5 | 56.2 | | | % Rec. | J7 | 8270C-SI | 08/10/15 | 20 |
| 2-Fluorobiphenyl | 63.2 | | | % Rec. | J7 | 8270C-SI | 08/10/15 | 20 |
| p-Terphenyl-d14 | 61.1 | | | % Rec. | J7 | 8270C-SI | 08/10/15 | 20 |

Results listed are dry weight basis.
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Tax I.D. 62-0814289

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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-06

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : DU 2 S-3

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 08:35

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Total Solids | 91.9 | 0.0333 | | % | | 2540 G-2 | 08/02/15 | 1 |
| Mercury | 0.24 | 0.0028 | 0.022 | mg/kg | | 7471A | 08/07/15 | 1 |
| Antimony | U | 0.75 | 2.2 | mg/kg | | 6010B | 08/07/15 | 1 |
| Arsenic | 5.8 | 0.65 | 2.2 | mg/kg | | 6010B | 08/07/15 | 1 |
| Beryllium | 0.48 | 0.070 | 0.22 | mg/kg | | 6010B | 08/07/15 | 1 |
| Cadmium | 0.54 | 0.070 | 0.54 | mg/kg | | 6010B | 08/07/15 | 1 |
| Chromium | 7.7 | 0.14 | 1.1 | mg/kg | | 6010B | 08/07/15 | 1 |
| Copper | 21. | 0.53 | 2.2 | mg/kg | | 6010B | 08/07/15 | 1 |
| Lead | 150 | 0.19 | 0.54 | mg/kg | | 6010B | 08/07/15 | 1 |
| Nickel | 5.4 | 0.49 | 2.2 | mg/kg | | 6010B | 08/07/15 | 1 |
| Selenium | U | 0.74 | 2.2 | mg/kg | | 6010B | 08/07/15 | 1 |
| Silver | U | 0.28 | 1.1 | mg/kg | | 6010B | 08/07/15 | 1 |
| Thallium | U | 0.65 | 2.2 | mg/kg | | 6010B | 08/07/15 | 1 |
| Zinc | 210 | 0.59 | 5.4 | mg/kg | | 6010B | 08/07/15 | 1 |
| TPHGAK C6 to C10 | U | 0.56 | 2.7 | mg/kg | | AK101 | 08/04/15 | 25.25 |
| Surrogate Recovery-% | | | | | | | | |
| a,a,a-Trifluorotoluene(FID) | 91.0 | | | % Rec. | | AK101 | 08/04/15 | 1 |
| a,a,a-Trifluorotoluene(PID) | 102. | | | % Rec. | | 8021 | 08/04/15 | 1 |
| Volatile Organics | | | | | | | | |
| Acetone | U | 0.25 | 1.4 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| Acrylonitrile | U | 0.045 | 0.27 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| Benzene | U | 0.0068 | 0.027 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| Bromobenzene | U | 0.0072 | 0.027 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| Bromodichloromethane | U | 0.0064 | 0.027 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| Bromoform | U | 0.011 | 0.027 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| Bromomethane | U | 0.034 | 0.14 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| n-Butylbenzene | U | 0.0065 | 0.027 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| sec-Butylbenzene | U | 0.0051 | 0.027 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| tert-Butylbenzene | U | 0.0052 | 0.027 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| Carbon tetrachloride | U | 0.0083 | 0.027 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| Chlorobenzene | U | 0.0054 | 0.027 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| Chlorodibromomethane | U | 0.0094 | 0.027 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| Chloroethane | U | 0.024 | 0.14 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| 2-Chloroethyl vinyl ether | U | 0.059 | 1.4 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| Chloroform | U | 0.0058 | 0.14 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| Chloromethane | U | 0.0095 | 0.069 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| 2-Chlorotoluene | U | 0.0076 | 0.027 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| 4-Chlorotoluene | U | 0.0061 | 0.027 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| 1,2-Dibromo-3-Chloropropane | U | 0.026 | 0.14 | mg/kg | | 8260B | 08/04/15 | 25.25 |

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-06

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : DU 2 S-3

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 08:35

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| 1,2-Dibromoethane | U | 0.0087 | 0.027 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| Dibromomethane | U | 0.0096 | 0.027 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| 1,2-Dichlorobenzene | U | 0.0077 | 0.027 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| 1,3-Dichlorobenzene | U | 0.0060 | 0.027 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| 1,4-Dichlorobenzene | U | 0.0057 | 0.027 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| Dichlorodifluoromethane | U | 0.018 | 0.14 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| 1,1-Dichloroethane | U | 0.0050 | 0.027 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| 1,2-Dichloroethane | U | 0.0067 | 0.027 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| 1,1-Dichloroethene | U | 0.0076 | 0.027 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| cis-1,2-Dichloroethene | U | 0.0059 | 0.027 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| trans-1,2-Dichloroethene | U | 0.0067 | 0.027 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| 1,2-Dichloropropane | U | 0.0090 | 0.027 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| 1,1-Dichloropropene | U | 0.0080 | 0.027 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| 1,3-Dichloropropane | U | 0.0052 | 0.027 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| cis-1,3-Dichloropropene | U | 0.0066 | 0.027 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| trans-1,3-Dichloropropene | U | 0.0067 | 0.027 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| 2,2-Dichloropropane | U | 0.0070 | 0.027 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| Di-isopropyl ether | U | 0.0063 | 0.027 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| Ethylbenzene | U | 0.0075 | 0.027 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| Hexachloro-1,3-butadiene | U | 0.0086 | 0.027 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| Isopropylbenzene | U | 0.0061 | 0.027 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| p-Isopropyltoluene | U | 0.0052 | 0.027 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| 2-Butanone (MEK) | U | 0.12 | 0.27 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| Methylene Chloride | U | 0.025 | 0.14 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| 4-Methyl-2-pentanone (MIBK) | U | 0.047 | 0.27 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| Methyl tert-butyl ether | U | 0.0054 | 0.027 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| Naphthalene | U | 0.025 | 0.14 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| n-Propylbenzene | U | 0.0052 | 0.027 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| Styrene | U | 0.0059 | 0.027 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| 1,1,1,2-Tetrachloroethane | U | 0.0067 | 0.027 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| 1,1,2,2-Tetrachloroethane | U | 0.0092 | 0.027 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| 1,1,2-Trichlorotrifluoroethane | U | 0.0092 | 0.027 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| Tetrachloroethene | U | 0.0070 | 0.027 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| Toluene | U | 0.011 | 0.14 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| 1,2,3-Trichlorobenzene | U | 0.0077 | 0.027 | mg/kg | J4 | 8260B | 08/04/15 | 25.25 |
| 1,2,4-Trichlorobenzene | U | 0.0098 | 0.027 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| 1,1,1-Trichloroethane | U | 0.0072 | 0.027 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| 1,1,2-Trichloroethane | U | 0.0070 | 0.027 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| Trichloroethene | U | 0.0070 | 0.027 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| Trichlorofluoromethane | U | 0.0096 | 0.14 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| 1,2,3-Trichloropropane | U | 0.019 | 0.069 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| 1,2,4-Trimethylbenzene | U | 0.0053 | 0.027 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| 1,2,3-Trimethylbenzene | U | 0.0072 | 0.027 | mg/kg | | 8260B | 08/04/15 | 25.25 |

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-06

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : DU 2 S-3

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 08:35

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| 1,3,5-Trimethylbenzene | U | 0.0067 | 0.027 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| Vinyl chloride | U | 0.0073 | 0.027 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| Xylenes, Total | U | 0.018 | 0.082 | mg/kg | | 8260B | 08/04/15 | 25.25 |
| Surrogate Recovery | | | | | | | | |
| Toluene-d8 | 104. | | | % Rec. | | 8260B | 08/04/15 | 1 |
| Dibromofluoromethane | 94.9 | | | % Rec. | | 8260B | 08/04/15 | 1 |
| 4-Bromofluorobenzene | 108. | | | % Rec. | | 8260B | 08/04/15 | 1 |
| Polynuclear Aromatic Hydrocarbons | | | | | | | | |
| Anthracene | 0.023 | 0.012 | 0.13 | mg/kg | J | 8270C-SI | 08/10/15 | 20 |
| Acenaphthene | U | 0.012 | 0.13 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Acenaphthylene | U | 0.012 | 0.13 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Benzo(a)anthracene | 0.095 | 0.012 | 0.13 | mg/kg | J | 8270C-SI | 08/10/15 | 20 |
| Benzo(a)pyrene | 0.12 | 0.012 | 0.13 | mg/kg | J | 8270C-SI | 08/10/15 | 20 |
| Benzo(b)fluoranthene | 0.14 | 0.012 | 0.13 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Benzo(g,h,i)perylene | 0.096 | 0.012 | 0.13 | mg/kg | J | 8270C-SI | 08/10/15 | 20 |
| Benzo(k)fluoranthene | 0.045 | 0.012 | 0.13 | mg/kg | J | 8270C-SI | 08/10/15 | 20 |
| Chrysene | 0.12 | 0.012 | 0.13 | mg/kg | J | 8270C-SI | 08/10/15 | 20 |
| Dibenz(a,h)anthracene | 0.016 | 0.012 | 0.13 | mg/kg | J | 8270C-SI | 08/10/15 | 20 |
| Fluoranthene | 0.22 | 0.012 | 0.13 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Fluorene | U | 0.012 | 0.13 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Indeno(1,2,3-cd)pyrene | 0.072 | 0.012 | 0.13 | mg/kg | J | 8270C-SI | 08/10/15 | 20 |
| Naphthalene | U | 0.040 | 0.44 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Phenanthrene | 0.13 | 0.012 | 0.13 | mg/kg | J | 8270C-SI | 08/10/15 | 20 |
| Pyrene | 0.24 | 0.012 | 0.13 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| 1-Methylnaphthalene | U | 0.040 | 0.44 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| 2-Methylnaphthalene | U | 0.040 | 0.44 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| 2-Chloronaphthalene | U | 0.040 | 0.44 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Surrogate Recovery | | | | | | | | |
| Nitrobenzene-d5 | 57.4 | | | % Rec. | J7 | 8270C-SI | 08/10/15 | 20 |
| 2-Fluorobiphenyl | 67.7 | | | % Rec. | J7 | 8270C-SI | 08/10/15 | 20 |
| p-Terphenyl-d14 | 66.5 | | | % Rec. | J7 | 8270C-SI | 08/10/15 | 20 |

Results listed are dry weight basis.
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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-07

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : DU 3 S-1

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/30/15 15:30

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Total Solids | 89.9 | 0.0333 | | % | | 2540 G-2 | 08/02/15 | 1 |
| Mercury | 0.33 | 0.0028 | 0.022 | mg/kg | | 7471A | 08/07/15 | 1 |
| Antimony | 1.4 | 0.75 | 2.2 | mg/kg | J | 6010B | 08/07/15 | 1 |
| Arsenic | 8.6 | 0.65 | 2.2 | mg/kg | | 6010B | 08/07/15 | 1 |
| Beryllium | 0.36 | 0.070 | 0.22 | mg/kg | | 6010B | 08/07/15 | 1 |
| Cadmium | 0.51 | 0.070 | 0.56 | mg/kg | J | 6010B | 08/07/15 | 1 |
| Chromium | 6.8 | 0.14 | 1.1 | mg/kg | | 6010B | 08/07/15 | 1 |
| Copper | 170 | 0.53 | 2.2 | mg/kg | | 6010B | 08/07/15 | 1 |
| Lead | 110 | 0.19 | 0.56 | mg/kg | | 6010B | 08/07/15 | 1 |
| Nickel | 8.3 | 0.49 | 2.2 | mg/kg | | 6010B | 08/07/15 | 1 |
| Selenium | U | 0.74 | 2.2 | mg/kg | | 6010B | 08/07/15 | 1 |
| Silver | U | 0.28 | 1.1 | mg/kg | | 6010B | 08/07/15 | 1 |
| Thallium | U | 0.65 | 2.2 | mg/kg | | 6010B | 08/07/15 | 1 |
| Zinc | 110 | 0.59 | 5.6 | mg/kg | | 6010B | 08/07/15 | 1 |
| TPHGAK C6 to C10 | U | 0.58 | 2.9 | mg/kg | | AK101 | 08/04/15 | 26.5 |
| Surrogate Recovery-% | | | | | | | | |
| a,a,a-Trifluorotoluene(FID) | 90.7 | | | % Rec. | | AK101 | 08/04/15 | 1 |
| a,a,a-Trifluorotoluene(PID) | 102. | | | % Rec. | | 8021 | 08/04/15 | 1 |
| Volatile Organics | | | | | | | | |
| Acetone | U | 0.26 | 1.5 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| Acrylonitrile | U | 0.047 | 0.29 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| Benzene | U | 0.0072 | 0.029 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| Bromobenzene | U | 0.0075 | 0.029 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| Bromodichloromethane | U | 0.0067 | 0.029 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| Bromoform | U | 0.011 | 0.029 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| Bromomethane | U | 0.036 | 0.15 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| n-Butylbenzene | U | 0.0068 | 0.029 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| sec-Butylbenzene | U | 0.0053 | 0.029 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| tert-Butylbenzene | U | 0.0054 | 0.029 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| Carbon tetrachloride | U | 0.0087 | 0.029 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| Chlorobenzene | U | 0.0056 | 0.029 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| Chlorodibromomethane | U | 0.0099 | 0.029 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| Chloroethane | U | 0.025 | 0.15 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| 2-Chloroethyl vinyl ether | U | 0.062 | 1.5 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| Chloroform | U | 0.0061 | 0.15 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| Chloromethane | U | 0.0099 | 0.074 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| 2-Chlorotoluene | U | 0.0080 | 0.029 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| 4-Chlorotoluene | U | 0.0064 | 0.029 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| 1,2-Dibromo-3-Chloropropane | U | 0.028 | 0.15 | mg/kg | | 8260B | 08/04/15 | 26.5 |

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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-07

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : DU 3 S-1

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/30/15 15:30

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| 1,2-Dibromoethane | U | 0.0091 | 0.029 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| Dibromomethane | U | 0.010 | 0.029 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| 1,2-Dichlorobenzene | U | 0.0081 | 0.029 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| 1,3-Dichlorobenzene | U | 0.0063 | 0.029 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| 1,4-Dichlorobenzene | U | 0.0060 | 0.029 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| Dichlorodifluoromethane | U | 0.019 | 0.15 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| 1,1-Dichloroethane | U | 0.0053 | 0.029 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| 1,2-Dichloroethane | U | 0.0070 | 0.029 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| 1,1-Dichloroethene | U | 0.0080 | 0.029 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| cis-1,2-Dichloroethene | U | 0.0062 | 0.029 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| trans-1,2-Dichloroethene | U | 0.0070 | 0.029 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| 1,2-Dichloropropane | U | 0.0095 | 0.029 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| 1,1-Dichloropropene | U | 0.0084 | 0.029 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| 1,3-Dichloropropane | U | 0.0055 | 0.029 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| cis-1,3-Dichloropropene | U | 0.0069 | 0.029 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| trans-1,3-Dichloropropene | U | 0.0071 | 0.029 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| 2,2-Dichloropropane | U | 0.0074 | 0.029 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| Di-isopropyl ether | U | 0.0066 | 0.029 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| Ethylbenzene | U | 0.0079 | 0.029 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| Hexachloro-1,3-butadiene | U | 0.0091 | 0.029 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| Isopropylbenzene | U | 0.0064 | 0.029 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| p-Isopropyltoluene | U | 0.0054 | 0.029 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| 2-Butanone (MEK) | U | 0.12 | 0.29 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| Methylene Chloride | U | 0.026 | 0.15 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| 4-Methyl-2-pentanone (MIBK) | U | 0.050 | 0.29 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| Methyl tert-butyl ether | U | 0.0056 | 0.029 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| Naphthalene | 0.036 | 0.026 | 0.15 | mg/kg | J | 8260B | 08/04/15 | 26.5 |
| n-Propylbenzene | U | 0.0054 | 0.029 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| Styrene | U | 0.0062 | 0.029 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| 1,1,1,2-Tetrachloroethane | U | 0.0070 | 0.029 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| 1,1,2,2-Tetrachloroethane | U | 0.0097 | 0.029 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| 1,1,2-Trichlorotrifluoroethane | U | 0.0097 | 0.029 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| Tetrachloroethene | U | 0.0073 | 0.029 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| Toluene | U | 0.012 | 0.15 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| 1,2,3-Trichlorobenzene | U | 0.0081 | 0.029 | mg/kg | J4 | 8260B | 08/04/15 | 26.5 |
| 1,2,4-Trichlorobenzene | U | 0.010 | 0.029 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| 1,1,1-Trichloroethane | U | 0.0076 | 0.029 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| 1,1,2-Trichloroethane | U | 0.0073 | 0.029 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| Trichloroethene | U | 0.0074 | 0.029 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| Trichlorofluoromethane | U | 0.010 | 0.15 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| 1,2,3-Trichloropropane | U | 0.020 | 0.074 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| 1,2,4-Trimethylbenzene | 0.0076 | 0.0056 | 0.029 | mg/kg | J | 8260B | 08/04/15 | 26.5 |
| 1,2,3-Trimethylbenzene | U | 0.0076 | 0.029 | mg/kg | | 8260B | 08/04/15 | 26.5 |

Results listed are dry weight basis.
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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-07

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : DU 3 S-1

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/30/15 15:30

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| 1,3,5-Trimethylbenzene | U | 0.0070 | 0.029 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| Vinyl chloride | U | 0.0077 | 0.029 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| Xylenes, Total | U | 0.018 | 0.088 | mg/kg | | 8260B | 08/04/15 | 26.5 |
| Surrogate Recovery | | | | | | | | |
| Toluene-d8 | 106. | | | % Rec. | | 8260B | 08/04/15 | 1 |
| Dibromofluoromethane | 95.5 | | | % Rec. | | 8260B | 08/04/15 | 1 |
| 4-Bromofluorobenzene | 109. | | | % Rec. | | 8260B | 08/04/15 | 1 |
| Polynuclear Aromatic Hydrocarbons | | | | | | | | |
| Anthracene | 0.16 | 0.012 | 0.13 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Acenaphthene | 0.040 | 0.012 | 0.13 | mg/kg | J | 8270C-SI | 08/10/15 | 20 |
| Acenaphthylene | U | 0.012 | 0.13 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Benzo(a)anthracene | 1.3 | 0.012 | 0.13 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Benzo(a)pyrene | 2.0 | 0.012 | 0.13 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Benzo(b)fluoranthene | 3.1 | 0.012 | 0.13 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Benzo(g,h,i)perylene | 2.0 | 0.012 | 0.13 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Benzo(k)fluoranthene | 0.93 | 0.012 | 0.13 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Chrysene | 1.8 | 0.012 | 0.13 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Dibenz(a,h)anthracene | 0.48 | 0.012 | 0.13 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Fluoranthene | 1.9 | 0.012 | 0.13 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Fluorene | 0.041 | 0.012 | 0.13 | mg/kg | J | 8270C-SI | 08/10/15 | 20 |
| Indeno(1,2,3-cd)pyrene | 1.6 | 0.012 | 0.13 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Naphthalene | 0.067 | 0.040 | 0.44 | mg/kg | J | 8270C-SI | 08/10/15 | 20 |
| Phenanthrene | 0.54 | 0.012 | 0.13 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Pyrene | 2.0 | 0.012 | 0.13 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| 1-Methylnaphthalene | U | 0.040 | 0.44 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| 2-Methylnaphthalene | U | 0.040 | 0.44 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| 2-Chloronaphthalene | U | 0.040 | 0.44 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Surrogate Recovery | | | | | | | | |
| Nitrobenzene-d5 | 92.1 | | | % Rec. | J7 | 8270C-SI | 08/10/15 | 20 |
| 2-Fluorobiphenyl | 80.1 | | | % Rec. | J7 | 8270C-SI | 08/10/15 | 20 |
| p-Terphenyl-d14 | 77.4 | | | % Rec. | J7 | 8270C-SI | 08/10/15 | 20 |

Results listed are dry weight basis.
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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-08

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : B-TW-1

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/27/15 16:15

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Total Solids | 79.8 | 0.0333 | | % | | 2540 G-2 | 08/02/15 | 1 |
| Volatile Organics | | | | | | | | |
| Acetone | 0.12 | 0.010 | 0.063 | mg/kg | | 8260B | 08/04/15 | 1 |
| Acrylonitrile | U | 0.0018 | 0.012 | mg/kg | | 8260B | 08/04/15 | 1 |
| Benzene | 0.0038 | 0.00027 | 0.0012 | mg/kg | | 8260B | 08/04/15 | 1 |
| Bromobenzene | U | 0.00028 | 0.0012 | mg/kg | | 8260B | 08/04/15 | 1 |
| Bromodichloromethane | U | 0.00025 | 0.0012 | mg/kg | | 8260B | 08/04/15 | 1 |
| Bromoform | U | 0.00042 | 0.0012 | mg/kg | | 8260B | 08/04/15 | 1 |
| Bromomethane | U | 0.0013 | 0.0063 | mg/kg | | 8260B | 08/04/15 | 1 |
| n-Butylbenzene | U | 0.00026 | 0.0012 | mg/kg | | 8260B | 08/04/15 | 1 |
| sec-Butylbenzene | U | 0.00020 | 0.0012 | mg/kg | | 8260B | 08/04/15 | 1 |
| tert-Butylbenzene | U | 0.00021 | 0.0012 | mg/kg | | 8260B | 08/04/15 | 1 |
| Carbon tetrachloride | U | 0.00033 | 0.0012 | mg/kg | | 8260B | 08/04/15 | 1 |
| Chlorobenzene | U | 0.00021 | 0.0012 | mg/kg | | 8260B | 08/04/15 | 1 |
| Chlorodibromomethane | U | 0.00037 | 0.0012 | mg/kg | | 8260B | 08/04/15 | 1 |
| Chloroethane | U | 0.00095 | 0.0063 | mg/kg | | 8260B | 08/04/15 | 1 |
| 2-Chloroethyl vinyl ether | U | 0.0023 | 0.063 | mg/kg | | 8260B | 08/04/15 | 1 |
| Chloroform | U | 0.00023 | 0.0063 | mg/kg | | 8260B | 08/04/15 | 1 |
| Chloromethane | U | 0.00038 | 0.0031 | mg/kg | | 8260B | 08/04/15 | 1 |
| 2-Chlorotoluene | U | 0.00030 | 0.0012 | mg/kg | | 8260B | 08/04/15 | 1 |
| 4-Chlorotoluene | U | 0.00024 | 0.0012 | mg/kg | | 8260B | 08/04/15 | 1 |
| 1,2-Dibromo-3-Chloropropane | U | 0.0010 | 0.0063 | mg/kg | | 8260B | 08/04/15 | 1 |
| 1,2-Dibromoethane | U | 0.00034 | 0.0012 | mg/kg | | 8260B | 08/04/15 | 1 |
| Dibromomethane | U | 0.00038 | 0.0012 | mg/kg | | 8260B | 08/04/15 | 1 |
| 1,2-Dichlorobenzene | U | 0.00030 | 0.0012 | mg/kg | | 8260B | 08/04/15 | 1 |
| 1,3-Dichlorobenzene | U | 0.00024 | 0.0012 | mg/kg | | 8260B | 08/04/15 | 1 |
| 1,4-Dichlorobenzene | U | 0.00023 | 0.0012 | mg/kg | | 8260B | 08/04/15 | 1 |
| Dichlorodifluoromethane | U | 0.00071 | 0.0063 | mg/kg | | 8260B | 08/04/15 | 1 |
| 1,1-Dichloroethane | U | 0.00020 | 0.0012 | mg/kg | | 8260B | 08/04/15 | 1 |
| 1,2-Dichloroethane | U | 0.00026 | 0.0012 | mg/kg | | 8260B | 08/04/15 | 1 |
| 1,1-Dichloroethene | U | 0.00030 | 0.0012 | mg/kg | | 8260B | 08/04/15 | 1 |
| cis-1,2-Dichloroethene | U | 0.00024 | 0.0012 | mg/kg | | 8260B | 08/04/15 | 1 |
| trans-1,2-Dichloroethene | U | 0.00026 | 0.0012 | mg/kg | | 8260B | 08/04/15 | 1 |
| 1,2-Dichloropropane | U | 0.00036 | 0.0012 | mg/kg | | 8260B | 08/04/15 | 1 |
| 1,1-Dichloropropene | U | 0.00032 | 0.0012 | mg/kg | | 8260B | 08/04/15 | 1 |
| 1,3-Dichloropropane | U | 0.00021 | 0.0012 | mg/kg | | 8260B | 08/04/15 | 1 |
| cis-1,3-Dichloropropene | U | 0.00026 | 0.0012 | mg/kg | | 8260B | 08/04/15 | 1 |
| trans-1,3-Dichloropropene | U | 0.00027 | 0.0012 | mg/kg | | 8260B | 08/04/15 | 1 |
| 2,2-Dichloropropane | U | 0.00028 | 0.0012 | mg/kg | | 8260B | 08/04/15 | 1 |
| Di-isopropyl ether | U | 0.00025 | 0.0012 | mg/kg | | 8260B | 08/04/15 | 1 |
| Ethylbenzene | U | 0.00030 | 0.0012 | mg/kg | | 8260B | 08/04/15 | 1 |
| Hexachloro-1,3-butadiene | U | 0.00034 | 0.0012 | mg/kg | | 8260B | 08/04/15 | 1 |

Results listed are dry weight basis.
U = ND (Not Detected)
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Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-08

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : B-TW-1

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/27/15 16:15

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Isopropylbenzene | U | 0.00024 | 0.0012 | mg/kg | | 8260B | 08/04/15 | 1 |
| p-Isopropyltoluene | U | 0.00020 | 0.0012 | mg/kg | | 8260B | 08/04/15 | 1 |
| 2-Butanone (MEK) | 0.020 | 0.0047 | 0.012 | mg/kg | | 8260B | 08/04/15 | 1 |
| Methylene Chloride | U | 0.0010 | 0.0063 | mg/kg | | 8260B | 08/04/15 | 1 |
| 4-Methyl-2-pentanone (MIBK) | U | 0.0019 | 0.012 | mg/kg | | 8260B | 08/04/15 | 1 |
| Methyl tert-butyl ether | U | 0.00021 | 0.0012 | mg/kg | | 8260B | 08/04/15 | 1 |
| Naphthalene | U | 0.0010 | 0.0063 | mg/kg | | 8260B | 08/04/15 | 1 |
| n-Propylbenzene | U | 0.00021 | 0.0012 | mg/kg | | 8260B | 08/04/15 | 1 |
| Styrene | U | 0.00023 | 0.0012 | mg/kg | | 8260B | 08/04/15 | 1 |
| 1,1,1,2-Tetrachloroethane | U | 0.00026 | 0.0012 | mg/kg | | 8260B | 08/04/15 | 1 |
| 1,1,2,2-Tetrachloroethane | U | 0.00036 | 0.0012 | mg/kg | | 8260B | 08/04/15 | 1 |
| 1,1,2-Trichlorotrifluoroethane | U | 0.00036 | 0.0012 | mg/kg | | 8260B | 08/04/15 | 1 |
| Tetrachloroethene | U | 0.00028 | 0.0012 | mg/kg | | 8260B | 08/04/15 | 1 |
| Toluene | 0.0011 | 0.00043 | 0.0063 | mg/kg | J | 8260B | 08/04/15 | 1 |
| 1,2,3-Trichlorobenzene | U | 0.00031 | 0.0012 | mg/kg | J4 | 8260B | 08/04/15 | 1 |
| 1,2,4-Trichlorobenzene | U | 0.00039 | 0.0012 | mg/kg | | 8260B | 08/04/15 | 1 |
| 1,1,1-Trichloroethane | U | 0.00029 | 0.0012 | mg/kg | | 8260B | 08/04/15 | 1 |
| 1,1,2-Trichloroethane | U | 0.00028 | 0.0012 | mg/kg | | 8260B | 08/04/15 | 1 |
| Trichloroethene | U | 0.00028 | 0.0012 | mg/kg | | 8260B | 08/04/15 | 1 |
| Trichlorofluoromethane | U | 0.00038 | 0.0063 | mg/kg | | 8260B | 08/04/15 | 1 |
| 1,2,3-Trichloropropane | U | 0.00074 | 0.0031 | mg/kg | | 8260B | 08/04/15 | 1 |
| 1,2,4-Trimethylbenzene | U | 0.00021 | 0.0012 | mg/kg | | 8260B | 08/04/15 | 1 |
| 1,2,3-Trimethylbenzene | U | 0.00029 | 0.0012 | mg/kg | | 8260B | 08/04/15 | 1 |
| 1,3,5-Trimethylbenzene | U | 0.00027 | 0.0012 | mg/kg | | 8260B | 08/04/15 | 1 |
| Vinyl chloride | U | 0.00029 | 0.0012 | mg/kg | | 8260B | 08/04/15 | 1 |
| Xylenes, Total | U | 0.00070 | 0.0038 | mg/kg | | 8260B | 08/04/15 | 1 |
| Surrogate Recovery | | | | | | | | |
| Toluene-d8 | 103. | | | % Rec. | | 8260B | 08/04/15 | 1 |
| Dibromofluoromethane | 107. | | | % Rec. | | 8260B | 08/04/15 | 1 |
| 4-Bromofluorobenzene | 80.1 | | | % Rec. | | 8260B | 08/04/15 | 1 |
| Polynuclear Aromatic Hydrocarbons | | | | | | | | |
| Anthracene | 0.0053 | 0.00060 | 0.0075 | mg/kg | J | 8270C-SI | 08/09/15 | 1 |
| Acenaphthene | 0.0012 | 0.00060 | 0.0075 | mg/kg | J | 8270C-SI | 08/09/15 | 1 |
| Acenaphthylene | U | 0.00060 | 0.0075 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| Benzo(a)anthracene | 0.0079 | 0.00060 | 0.0075 | mg/kg | | 8270C-SI | 08/10/15 | 1 |
| Benzo(a)pyrene | 0.0095 | 0.00060 | 0.0075 | mg/kg | | 8270C-SI | 08/10/15 | 1 |
| Benzo(b)fluoranthene | 0.019 | 0.00060 | 0.0075 | mg/kg | | 8270C-SI | 08/10/15 | 1 |
| Benzo(g,h,i)perylene | 0.015 | 0.00060 | 0.0075 | mg/kg | | 8270C-SI | 08/10/15 | 1 |
| Benzo(k)fluoranthene | 0.0048 | 0.00060 | 0.0075 | mg/kg | J | 8270C-SI | 08/10/15 | 1 |
| Chrysene | 0.018 | 0.00060 | 0.0075 | mg/kg | | 8270C-SI | 08/10/15 | 1 |
| Dibenz(a,h)anthracene | 0.0018 | 0.00060 | 0.0075 | mg/kg | J | 8270C-SI | 08/10/15 | 1 |
| Fluoranthene | 0.012 | 0.00060 | 0.0075 | mg/kg | | 8270C-SI | 08/09/15 | 1 |

Results listed are dry weight basis.
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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-08

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : B-TW-1

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/27/15 16:15

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Fluorene | 0.0031 | 0.00060 | 0.0075 | mg/kg | J | 8270C-SI | 08/09/15 | 1 |
| Indeno(1,2,3-cd)pyrene | 0.0076 | 0.00060 | 0.0075 | mg/kg | | 8270C-SI | 08/10/15 | 1 |
| Naphthalene | U | 0.0020 | 0.025 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| Phenanthrene | 0.0088 | 0.00060 | 0.0075 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| Pyrene | 0.045 | 0.00060 | 0.0075 | mg/kg | | 8270C-SI | 08/10/15 | 1 |
| 1-Methylnaphthalene | U | 0.0020 | 0.025 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| 2-Methylnaphthalene | U | 0.0020 | 0.025 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| 2-Chloronaphthalene | U | 0.0020 | 0.025 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| Surrogate Recovery | | | | | | | | |
| Nitrobenzene-d5 | 39.1 | | | % Rec. | | 8270C-SI | 08/09/15 | 1 |
| 2-Fluorobiphenyl | 34.6 | | | % Rec. | J2 | 8270C-SI | 08/09/15 | 1 |
| p-Terphenyl-d14 | 64.7 | | | % Rec. | | 8270C-SI | 08/10/15 | 1 |

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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-09

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : B-1

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 15:06

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Total Solids | 97.3 | 0.0333 | | % | | 2540 G-2 | 08/02/15 | 1 |
| Mercury | 0.066 | 0.0028 | 0.020 | mg/kg | | 7471A | 08/07/15 | 1 |
| Antimony | 0.92 | 0.75 | 2.0 | mg/kg | J | 6010B | 08/07/15 | 1 |
| Arsenic | 4.2 | 0.65 | 2.0 | mg/kg | | 6010B | 08/07/15 | 1 |
| Beryllium | 0.31 | 0.070 | 0.20 | mg/kg | | 6010B | 08/07/15 | 1 |
| Cadmium | 0.42 | 0.070 | 0.51 | mg/kg | J | 6010B | 08/07/15 | 1 |
| Chromium | 6.1 | 0.14 | 1.0 | mg/kg | | 6010B | 08/07/15 | 1 |
| Copper | 140 | 0.53 | 2.0 | mg/kg | | 6010B | 08/07/15 | 1 |
| Lead | 100 | 0.19 | 0.51 | mg/kg | | 6010B | 08/07/15 | 1 |
| Nickel | 6.6 | 0.49 | 2.0 | mg/kg | | 6010B | 08/07/15 | 1 |
| Selenium | U | 0.74 | 2.0 | mg/kg | | 6010B | 08/07/15 | 1 |
| Silver | U | 0.28 | 1.0 | mg/kg | | 6010B | 08/07/15 | 1 |
| Thallium | U | 0.65 | 2.0 | mg/kg | | 6010B | 08/07/15 | 1 |
| Zinc | 120 | 0.59 | 5.1 | mg/kg | | 6010B | 08/07/15 | 1 |
| Volatile Organics | | | | | | | | |
| Acetone | U | 0.34 | 1.7 | mg/kg | | 8260B | 08/04/15 | 34 |
| Acrylonitrile | U | 0.061 | 0.35 | mg/kg | | 8260B | 08/04/15 | 34 |
| Benzene | 0.015 | 0.0092 | 0.035 | mg/kg | J | 8260B | 08/04/15 | 34 |
| Bromobenzene | U | 0.0096 | 0.035 | mg/kg | | 8260B | 08/04/15 | 34 |
| Bromodichloromethane | U | 0.0086 | 0.035 | mg/kg | | 8260B | 08/04/15 | 34 |
| Bromoform | U | 0.014 | 0.035 | mg/kg | | 8260B | 08/04/15 | 34 |
| Bromomethane | U | 0.046 | 0.17 | mg/kg | | 8260B | 08/04/15 | 34 |
| n-Butylbenzene | U | 0.0088 | 0.035 | mg/kg | | 8260B | 08/04/15 | 34 |
| sec-Butylbenzene | U | 0.0068 | 0.035 | mg/kg | | 8260B | 08/04/15 | 34 |
| tert-Butylbenzene | U | 0.0070 | 0.035 | mg/kg | | 8260B | 08/04/15 | 34 |
| Carbon tetrachloride | U | 0.011 | 0.035 | mg/kg | | 8260B | 08/04/15 | 34 |
| Chlorobenzene | U | 0.0072 | 0.035 | mg/kg | | 8260B | 08/04/15 | 34 |
| Chlorodibromomethane | U | 0.013 | 0.035 | mg/kg | | 8260B | 08/04/15 | 34 |
| Chloroethane | U | 0.032 | 0.17 | mg/kg | | 8260B | 08/04/15 | 34 |
| 2-Chloroethyl vinyl ether | U | 0.080 | 1.7 | mg/kg | | 8260B | 08/04/15 | 34 |
| Chloroform | U | 0.0078 | 0.17 | mg/kg | | 8260B | 08/04/15 | 34 |
| Chloromethane | U | 0.013 | 0.087 | mg/kg | | 8260B | 08/04/15 | 34 |
| 2-Chlorotoluene | U | 0.010 | 0.035 | mg/kg | | 8260B | 08/04/15 | 34 |
| 4-Chlorotoluene | U | 0.0082 | 0.035 | mg/kg | | 8260B | 08/04/15 | 34 |
| 1,2-Dibromo-3-Chloropropane | U | 0.036 | 0.17 | mg/kg | | 8260B | 08/04/15 | 34 |
| 1,2-Dibromoethane | U | 0.012 | 0.035 | mg/kg | | 8260B | 08/04/15 | 34 |
| Dibromomethane | U | 0.013 | 0.035 | mg/kg | | 8260B | 08/04/15 | 34 |
| 1,2-Dichlorobenzene | U | 0.010 | 0.035 | mg/kg | | 8260B | 08/04/15 | 34 |
| 1,3-Dichlorobenzene | U | 0.0081 | 0.035 | mg/kg | | 8260B | 08/04/15 | 34 |
| 1,4-Dichlorobenzene | U | 0.0077 | 0.035 | mg/kg | | 8260B | 08/04/15 | 34 |

Results listed are dry weight basis.
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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-09

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : B-1

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 15:06

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | U | 0.024 | 0.17 | mg/kg | | 8260B | 08/04/15 | 34 |
| 1,1-Dichloroethane | U | 0.0068 | 0.035 | mg/kg | | 8260B | 08/04/15 | 34 |
| 1,2-Dichloroethane | U | 0.0090 | 0.035 | mg/kg | | 8260B | 08/04/15 | 34 |
| 1,1-Dichloroethene | U | 0.010 | 0.035 | mg/kg | | 8260B | 08/04/15 | 34 |
| cis-1,2-Dichloroethene | U | 0.0080 | 0.035 | mg/kg | | 8260B | 08/04/15 | 34 |
| trans-1,2-Dichloroethene | U | 0.0090 | 0.035 | mg/kg | | 8260B | 08/04/15 | 34 |
| 1,2-Dichloropropane | U | 0.012 | 0.035 | mg/kg | | 8260B | 08/04/15 | 34 |
| 1,1-Dichloropropene | U | 0.011 | 0.035 | mg/kg | | 8260B | 08/04/15 | 34 |
| 1,3-Dichloropropane | U | 0.0070 | 0.035 | mg/kg | | 8260B | 08/04/15 | 34 |
| cis-1,3-Dichloropropene | U | 0.0089 | 0.035 | mg/kg | | 8260B | 08/04/15 | 34 |
| trans-1,3-Dichloropropene | U | 0.0091 | 0.035 | mg/kg | | 8260B | 08/04/15 | 34 |
| 2,2-Dichloropropane | U | 0.0095 | 0.035 | mg/kg | | 8260B | 08/04/15 | 34 |
| Di-isopropyl ether | U | 0.0084 | 0.035 | mg/kg | | 8260B | 08/04/15 | 34 |
| Ethylbenzene | U | 0.010 | 0.035 | mg/kg | | 8260B | 08/04/15 | 34 |
| Hexachloro-1,3-butadiene | U | 0.012 | 0.035 | mg/kg | | 8260B | 08/04/15 | 34 |
| Isopropylbenzene | U | 0.0083 | 0.035 | mg/kg | | 8260B | 08/04/15 | 34 |
| p-Isopropyltoluene | 0.027 | 0.0069 | 0.035 | mg/kg | J | 8260B | 08/04/15 | 34 |
| 2-Butanone (MEK) | U | 0.16 | 0.35 | mg/kg | | 8260B | 08/04/15 | 34 |
| Methylene Chloride | U | 0.034 | 0.17 | mg/kg | | 8260B | 08/04/15 | 34 |
| 4-Methyl-2-pentanone (MIBK) | U | 0.064 | 0.35 | mg/kg | | 8260B | 08/04/15 | 34 |
| Methyl tert-butyl ether | U | 0.0072 | 0.035 | mg/kg | | 8260B | 08/04/15 | 34 |
| Naphthalene | 0.12 | 0.034 | 0.17 | mg/kg | J | 8260B | 08/04/15 | 34 |
| n-Propylbenzene | U | 0.0070 | 0.035 | mg/kg | | 8260B | 08/04/15 | 34 |
| Styrene | U | 0.0080 | 0.035 | mg/kg | | 8260B | 08/04/15 | 34 |
| 1,1,1,2-Tetrachloroethane | U | 0.0090 | 0.035 | mg/kg | | 8260B | 08/04/15 | 34 |
| 1,1,2,2-Tetrachloroethane | U | 0.012 | 0.035 | mg/kg | | 8260B | 08/04/15 | 34 |
| 1,1,2-Trichlorotrifluoroethane | U | 0.012 | 0.035 | mg/kg | | 8260B | 08/04/15 | 34 |
| Tetrachloroethene | U | 0.0094 | 0.035 | mg/kg | | 8260B | 08/04/15 | 34 |
| Toluene | 0.063 | 0.015 | 0.17 | mg/kg | J | 8260B | 08/04/15 | 34 |
| 1,2,3-Trichlorobenzene | U | 0.010 | 0.035 | mg/kg | J4 | 8260B | 08/04/15 | 34 |
| 1,2,4-Trichlorobenzene | U | 0.013 | 0.035 | mg/kg | | 8260B | 08/04/15 | 34 |
| 1,1,1-Trichloroethane | U | 0.0097 | 0.035 | mg/kg | | 8260B | 08/04/15 | 34 |
| 1,1,2-Trichloroethane | U | 0.0094 | 0.035 | mg/kg | | 8260B | 08/04/15 | 34 |
| Trichloroethene | U | 0.0095 | 0.035 | mg/kg | | 8260B | 08/04/15 | 34 |
| Trichlorofluoromethane | U | 0.013 | 0.17 | mg/kg | | 8260B | 08/04/15 | 34 |
| 1,2,3-Trichloropropane | U | 0.025 | 0.087 | mg/kg | | 8260B | 08/04/15 | 34 |
| 1,2,4-Trimethylbenzene | 0.070 | 0.0072 | 0.035 | mg/kg | | 8260B | 08/04/15 | 34 |
| 1,2,3-Trimethylbenzene | 0.060 | 0.0098 | 0.035 | mg/kg | | 8260B | 08/04/15 | 34 |
| 1,3,5-Trimethylbenzene | 0.017 | 0.0090 | 0.035 | mg/kg | J | 8260B | 08/04/15 | 34 |
| Vinyl chloride | U | 0.0099 | 0.035 | mg/kg | | 8260B | 08/04/15 | 34 |
| Xylenes, Total | 0.16 | 0.024 | 0.10 | mg/kg | | 8260B | 08/04/15 | 34 |
| Surrogate Recovery | | | | | | | | |
| Toluene-d8 | 106. | | | % Rec. | | 8260B | 08/04/15 | 1 |

Results listed are dry weight basis.
U = ND (Not Detected)
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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-09

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : B-1

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 15:06

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Dibromofluoromethane | 96.6 | | | % Rec. | | 8260B | 08/04/15 | 1 |
| 4-Bromofluorobenzene | 110. | | | % Rec. | | 8260B | 08/04/15 | 1 |
| Polynuclear Aromatic Hydrocarbons | | | | | | | | |
| Anthracene | 0.12 | 0.012 | 0.12 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Acenaphthene | 0.014 | 0.012 | 0.12 | mg/kg | J | 8270C-SI | 08/10/15 | 20 |
| Acenaphthylene | U | 0.012 | 0.12 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Benzo(a)anthracene | 0.26 | 0.012 | 0.12 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Benzo(a)pyrene | 0.46 | 0.012 | 0.12 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Benzo(b)fluoranthene | 0.65 | 0.012 | 0.12 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Benzo(g,h,i)perylene | 0.61 | 0.012 | 0.12 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Benzo(k)fluoranthene | 0.23 | 0.012 | 0.12 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Chrysene | 0.50 | 0.012 | 0.12 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Dibenz(a,h)anthracene | 0.12 | 0.012 | 0.12 | mg/kg | J | 8270C-SI | 08/10/15 | 20 |
| Fluoranthene | 0.50 | 0.012 | 0.12 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Fluorene | 0.013 | 0.012 | 0.12 | mg/kg | J | 8270C-SI | 08/10/15 | 20 |
| Indeno(1,2,3-cd)pyrene | 0.46 | 0.012 | 0.12 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Naphthalene | 0.16 | 0.040 | 0.41 | mg/kg | J | 8270C-SI | 08/10/15 | 20 |
| Phenanthrene | 0.26 | 0.012 | 0.12 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Pyrene | 0.53 | 0.012 | 0.12 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| 1-Methylnaphthalene | 0.092 | 0.040 | 0.41 | mg/kg | J | 8270C-SI | 08/10/15 | 20 |
| 2-Methylnaphthalene | 0.11 | 0.040 | 0.41 | mg/kg | J | 8270C-SI | 08/10/15 | 20 |
| 2-Chloronaphthalene | U | 0.040 | 0.41 | mg/kg | | 8270C-SI | 08/10/15 | 20 |
| Surrogate Recovery | | | | | | | | |
| Nitrobenzene-d5 | 65.1 | | | % Rec. | J7 | 8270C-SI | 08/10/15 | 20 |
| 2-Fluorobiphenyl | 78.0 | | | % Rec. | J7 | 8270C-SI | 08/10/15 | 20 |
| p-Terphenyl-d14 | 72.9 | | | % Rec. | J7 | 8270C-SI | 08/10/15 | 20 |

Results listed are dry weight basis.
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Est. 1970

# REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-10

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : B-2

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 15:15

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Total Solids | 93.8 | 0.0333 | | % | | 2540 G-2 | 08/02/15 | 1 |
| Mercury | 0.54 | 0.0028 | 0.021 | mg/kg | | 7471A | 08/07/15 | 1 |
| Antimony | 2.2 | 0.75 | 2.1 | mg/kg | | 6010B | 08/07/15 | 1 |
| Arsenic | 7.0 | 0.65 | 2.1 | mg/kg | | 6010B | 08/07/15 | 1 |
| Beryllium | 0.60 | 0.070 | 0.21 | mg/kg | | 6010B | 08/07/15 | 1 |
| Cadmium | 0.50 | 0.070 | 0.53 | mg/kg | J | 6010B | 08/07/15 | 1 |
| Chromium | 8.0 | 0.14 | 1.1 | mg/kg | | 6010B | 08/07/15 | 1 |
| Copper | 18. | 0.53 | 2.1 | mg/kg | | 6010B | 08/07/15 | 1 |
| Lead | 120 | 0.19 | 0.53 | mg/kg | | 6010B | 08/07/15 | 1 |
| Nickel | 6.0 | 0.49 | 2.1 | mg/kg | | 6010B | 08/07/15 | 1 |
| Selenium | U | 0.74 | 2.1 | mg/kg | | 6010B | 08/07/15 | 1 |
| Silver | U | 0.28 | 1.1 | mg/kg | | 6010B | 08/07/15 | 1 |
| Thallium | U | 0.65 | 2.1 | mg/kg | | 6010B | 08/07/15 | 1 |
| Zinc | 330 | 0.59 | 5.3 | mg/kg | | 6010B | 08/07/15 | 1 |
| Volatile Organics | | | | | | | | |
| Acetone | U | 0.42 | 2.2 | mg/kg | | 8260B | 08/05/15 | 41.75 |
| Acrylonitrile | U | 0.075 | 0.44 | mg/kg | | 8260B | 08/05/15 | 41.75 |
| Benzene | 0.047 | 0.011 | 0.044 | mg/kg | | 8260B | 08/05/15 | 41.75 |
| Bromobenzene | U | 0.012 | 0.044 | mg/kg | | 8260B | 08/05/15 | 41.75 |
| Bromodichloromethane | U | 0.011 | 0.044 | mg/kg | | 8260B | 08/05/15 | 41.75 |
| Bromoform | U | 0.018 | 0.044 | mg/kg | | 8260B | 08/05/15 | 41.75 |
| Bromomethane | U | 0.056 | 0.22 | mg/kg | | 8260B | 08/05/15 | 41.75 |
| n-Butylbenzene | 0.036 | 0.011 | 0.044 | mg/kg | J | 8260B | 08/05/15 | 41.75 |
| sec-Butylbenzene | 0.023 | 0.0084 | 0.044 | mg/kg | J | 8260B | 08/05/15 | 41.75 |
| tert-Butylbenzene | U | 0.0086 | 0.044 | mg/kg | | 8260B | 08/05/15 | 41.75 |
| Carbon tetrachloride | U | 0.014 | 0.044 | mg/kg | | 8260B | 08/05/15 | 41.75 |
| Chlorobenzene | U | 0.0088 | 0.044 | mg/kg | | 8260B | 08/05/15 | 41.75 |
| Chlorodibromomethane | U | 0.016 | 0.044 | mg/kg | | 8260B | 08/05/15 | 41.75 |
| Chloroethane | U | 0.039 | 0.22 | mg/kg | | 8260B | 08/05/15 | 41.75 |
| 2-Chloroethyl vinyl ether | U | 0.098 | 2.2 | mg/kg | | 8260B | 08/05/15 | 41.75 |
| Chloroform | U | 0.0096 | 0.22 | mg/kg | | 8260B | 08/05/15 | 41.75 |
| Chloromethane | U | 0.016 | 0.11 | mg/kg | | 8260B | 08/05/15 | 41.75 |
| 2-Chlorotoluene | U | 0.012 | 0.044 | mg/kg | | 8260B | 08/05/15 | 41.75 |
| 4-Chlorotoluene | U | 0.010 | 0.044 | mg/kg | | 8260B | 08/05/15 | 41.75 |
| 1,2-Dibromo-3-Chloropropane | U | 0.044 | 0.22 | mg/kg | | 8260B | 08/05/15 | 41.75 |
| 1,2-Dibromoethane | U | 0.014 | 0.044 | mg/kg | | 8260B | 08/05/15 | 41.75 |
| Dibromomethane | U | 0.016 | 0.044 | mg/kg | | 8260B | 08/05/15 | 41.75 |
| 1,2-Dichlorobenzene | U | 0.013 | 0.044 | mg/kg | | 8260B | 08/05/15 | 41.75 |
| 1,3-Dichlorobenzene | U | 0.010 | 0.044 | mg/kg | | 8260B | 08/05/15 | 41.75 |
| 1,4-Dichlorobenzene | U | 0.0094 | 0.044 | mg/kg | | 8260B | 08/05/15 | 41.75 |

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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-10

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : B-2

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 15:15

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | U | 0.030 | 0.22 | mg/kg | | 8260B | 08/05/15 | 41.75 |
| 1,1-Dichloroethane | U | 0.0083 | 0.044 | mg/kg | | 8260B | 08/05/15 | 41.75 |
| 1,2-Dichloroethane | U | 0.011 | 0.044 | mg/kg | | 8260B | 08/05/15 | 41.75 |
| 1,1-Dichloroethene | U | 0.013 | 0.044 | mg/kg | | 8260B | 08/05/15 | 41.75 |
| cis-1,2-Dichloroethene | U | 0.0098 | 0.044 | mg/kg | | 8260B | 08/05/15 | 41.75 |
| trans-1,2-Dichloroethene | U | 0.011 | 0.044 | mg/kg | | 8260B | 08/05/15 | 41.75 |
| 1,2-Dichloropropane | U | 0.015 | 0.044 | mg/kg | | 8260B | 08/05/15 | 41.75 |
| 1,1-Dichloropropene | U | 0.013 | 0.044 | mg/kg | | 8260B | 08/05/15 | 41.75 |
| 1,3-Dichloropropane | U | 0.0086 | 0.044 | mg/kg | | 8260B | 08/05/15 | 41.75 |
| cis-1,3-Dichloropropene | U | 0.011 | 0.044 | mg/kg | | 8260B | 08/05/15 | 41.75 |
| trans-1,3-Dichloropropene | U | 0.011 | 0.044 | mg/kg | | 8260B | 08/05/15 | 41.75 |
| 2,2-Dichloropropane | U | 0.012 | 0.044 | mg/kg | | 8260B | 08/05/15 | 41.75 |
| Di-isopropyl ether | U | 0.010 | 0.044 | mg/kg | | 8260B | 08/05/15 | 41.75 |
| Ethylbenzene | 0.062 | 0.012 | 0.044 | mg/kg | | 8260B | 08/05/15 | 41.75 |
| Hexachloro-1,3-butadiene | U | 0.014 | 0.044 | mg/kg | | 8260B | 08/05/15 | 41.75 |
| Isopropylbenzene | 0.039 | 0.010 | 0.044 | mg/kg | J | 8260B | 08/05/15 | 41.75 |
| p-Isopropyltoluene | 0.19 | 0.0085 | 0.044 | mg/kg | | 8260B | 08/05/15 | 41.75 |
| 2-Butanone (MEK) | U | 0.20 | 0.44 | mg/kg | | 8260B | 08/05/15 | 41.75 |
| Methylene Chloride | U | 0.042 | 0.22 | mg/kg | | 8260B | 08/05/15 | 41.75 |
| 4-Methyl-2-pentanone (MIBK) | U | 0.078 | 0.44 | mg/kg | | 8260B | 08/05/15 | 41.75 |
| Methyl tert-butyl ether | U | 0.0088 | 0.044 | mg/kg | | 8260B | 08/05/15 | 41.75 |
| Naphthalene | 0.92 | 0.042 | 0.22 | mg/kg | | 8260B | 08/05/15 | 41.75 |
| n-Propylbenzene | 0.036 | 0.0086 | 0.044 | mg/kg | J | 8260B | 08/05/15 | 41.75 |
| Styrene | U | 0.0098 | 0.044 | mg/kg | | 8260B | 08/05/15 | 41.75 |
| 1,1,1,2-Tetrachloroethane | U | 0.011 | 0.044 | mg/kg | | 8260B | 08/05/15 | 41.75 |
| 1,1,2,2-Tetrachloroethane | U | 0.015 | 0.044 | mg/kg | | 8260B | 08/05/15 | 41.75 |
| 1,1,2-Trichlorotrifluoroethane | U | 0.015 | 0.044 | mg/kg | | 8260B | 08/05/15 | 41.75 |
| Tetrachloroethene | U | 0.012 | 0.044 | mg/kg | | 8260B | 08/05/15 | 41.75 |
| Toluene | 0.32 | 0.018 | 0.22 | mg/kg | | 8260B | 08/05/15 | 41.75 |
| 1,2,3-Trichlorobenzene | U | 0.013 | 0.044 | mg/kg | J4 | 8260B | 08/05/15 | 41.75 |
| 1,2,4-Trichlorobenzene | U | 0.016 | 0.044 | mg/kg | | 8260B | 08/05/15 | 41.75 |
| 1,1,1-Trichloroethane | U | 0.012 | 0.044 | mg/kg | | 8260B | 08/05/15 | 41.75 |
| 1,1,2-Trichloroethane | U | 0.012 | 0.044 | mg/kg | | 8260B | 08/05/15 | 41.75 |
| Trichloroethene | U | 0.012 | 0.044 | mg/kg | | 8260B | 08/05/15 | 41.75 |
| Trichlorofluoromethane | U | 0.016 | 0.22 | mg/kg | | 8260B | 08/05/15 | 41.75 |
| 1,2,3-Trichloropropane | U | 0.031 | 0.11 | mg/kg | | 8260B | 08/05/15 | 41.75 |
| 1,2,4-Trimethylbenzene | 0.47 | 0.0088 | 0.044 | mg/kg | | 8260B | 08/05/15 | 41.75 |
| 1,2,3-Trimethylbenzene | 0.39 | 0.012 | 0.044 | mg/kg | | 8260B | 08/05/15 | 41.75 |
| 1,3,5-Trimethylbenzene | 0.13 | 0.011 | 0.044 | mg/kg | | 8260B | 08/05/15 | 41.75 |
| Vinyl chloride | U | 0.012 | 0.044 | mg/kg | | 8260B | 08/05/15 | 41.75 |
| Xylenes, Total | 0.98 | 0.029 | 0.13 | mg/kg | | 8260B | 08/05/15 | 41.75 |
| Surrogate Recovery | | | | | | | | |
| Toluene-d8 | 105. | | | % Rec. | | 8260B | 08/05/15 | 1 |

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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-10

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : B-2

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 15:15

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Dibromofluoromethane | 96.7 | | | % Rec. | | 8260B | 08/05/15 | 1 |
| 4-Bromofluorobenzene | 112. | | | % Rec. | | 8260B | 08/05/15 | 1 |
| Polynuclear Aromatic Hydrocarbons | | | | | | | | |
| Anthracene | 0.060 | 0.0030 | 0.032 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Acenaphthene | 0.0099 | 0.0030 | 0.032 | mg/kg | J | 8270C-SI | 08/10/15 | 5 |
| Acenaphthylene | 0.0059 | 0.0030 | 0.032 | mg/kg | J | 8270C-SI | 08/10/15 | 5 |
| Benzo(a)anthracene | 0.16 | 0.0030 | 0.032 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Benzo(a)pyrene | 0.17 | 0.0030 | 0.032 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Benzo(b)fluoranthene | 0.21 | 0.0030 | 0.032 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Benzo(g,h,i)perylene | 0.16 | 0.0030 | 0.032 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Benzo(k)fluoranthene | 0.071 | 0.0030 | 0.032 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Chrysene | 0.21 | 0.0030 | 0.032 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Dibenz(a,h)anthracene | 0.033 | 0.0030 | 0.032 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Fluoranthene | 0.31 | 0.0030 | 0.032 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Fluorene | 0.015 | 0.0030 | 0.032 | mg/kg | J | 8270C-SI | 08/10/15 | 5 |
| Indeno(1,2,3-cd)pyrene | 0.12 | 0.0030 | 0.032 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Naphthalene | 0.13 | 0.010 | 0.11 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Phenanthrene | 0.20 | 0.0030 | 0.032 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Pyrene | 0.34 | 0.0030 | 0.032 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| 1-Methylnaphthalene | 0.11 | 0.010 | 0.11 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| 2-Methylnaphthalene | 0.12 | 0.010 | 0.11 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| 2-Chloronaphthalene | U | 0.010 | 0.11 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Surrogate Recovery | | | | | | | | |
| Nitrobenzene-d5 | 64.3 | | | % Rec. | | 8270C-SI | 08/10/15 | 5 |
| 2-Fluorobiphenyl | 67.4 | | | % Rec. | | 8270C-SI | 08/10/15 | 5 |
| p-Terphenyl-d14 | 62.0 | | | % Rec. | | 8270C-SI | 08/10/15 | 5 |

Results listed are dry weight basis.
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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-11

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : B-3

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 15:20

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Total Solids | 84.2 | 0.0333 | | % | | 2540 G-2 | 08/02/15 | 1 |
| Mercury | 0.069 | 0.0028 | 0.024 | mg/kg | | 7471A | 08/07/15 | 1 |
| Antimony | U | 0.75 | 2.4 | mg/kg | | 6010B | 08/07/15 | 1 |
| Arsenic | 2.1 | 0.65 | 2.4 | mg/kg | J | 6010B | 08/07/15 | 1 |
| Beryllium | 0.27 | 0.070 | 0.24 | mg/kg | | 6010B | 08/07/15 | 1 |
| Cadmium | U | 0.070 | 0.59 | mg/kg | | 6010B | 08/07/15 | 1 |
| Chromium | 3.1 | 0.14 | 1.2 | mg/kg | | 6010B | 08/07/15 | 1 |
| Copper | 6.0 | 0.53 | 2.4 | mg/kg | | 6010B | 08/07/15 | 1 |
| Lead | 19. | 0.19 | 0.59 | mg/kg | | 6010B | 08/07/15 | 1 |
| Nickel | 1.9 | 0.49 | 2.4 | mg/kg | J | 6010B | 08/07/15 | 1 |
| Selenium | U | 0.74 | 2.4 | mg/kg | | 6010B | 08/07/15 | 1 |
| Silver | U | 0.28 | 1.2 | mg/kg | | 6010B | 08/07/15 | 1 |
| Thallium | U | 0.65 | 2.4 | mg/kg | | 6010B | 08/07/15 | 1 |
| Zinc | 21. | 0.59 | 5.9 | mg/kg | | 6010B | 08/07/15 | 1 |
| Volatile Organics | | | | | | | | |
| Acetone | U | 0.27 | 1.6 | mg/kg | | 8260B | 08/05/15 | 27 |
| Acrylonitrile | U | 0.048 | 0.32 | mg/kg | | 8260B | 08/05/15 | 27 |
| Benzene | U | 0.0073 | 0.032 | mg/kg | | 8260B | 08/05/15 | 27 |
| Bromobenzene | U | 0.0077 | 0.032 | mg/kg | | 8260B | 08/05/15 | 27 |
| Bromodichloromethane | U | 0.0068 | 0.032 | mg/kg | | 8260B | 08/05/15 | 27 |
| Bromoform | U | 0.011 | 0.032 | mg/kg | | 8260B | 08/05/15 | 27 |
| Bromomethane | U | 0.036 | 0.16 | mg/kg | | 8260B | 08/05/15 | 27 |
| n-Butylbenzene | U | 0.0070 | 0.032 | mg/kg | | 8260B | 08/05/15 | 27 |
| sec-Butylbenzene | U | 0.0054 | 0.032 | mg/kg | | 8260B | 08/05/15 | 27 |
| tert-Butylbenzene | U | 0.0056 | 0.032 | mg/kg | | 8260B | 08/05/15 | 27 |
| Carbon tetrachloride | U | 0.0088 | 0.032 | mg/kg | | 8260B | 08/05/15 | 27 |
| Chlorobenzene | U | 0.0057 | 0.032 | mg/kg | | 8260B | 08/05/15 | 27 |
| Chlorodibromomethane | U | 0.010 | 0.032 | mg/kg | | 8260B | 08/05/15 | 27 |
| Chloroethane | U | 0.026 | 0.16 | mg/kg | | 8260B | 08/05/15 | 27 |
| 2-Chloroethyl vinyl ether | U | 0.063 | 1.6 | mg/kg | | 8260B | 08/05/15 | 27 |
| Chloroform | U | 0.0062 | 0.16 | mg/kg | | 8260B | 08/05/15 | 27 |
| Chloromethane | U | 0.010 | 0.080 | mg/kg | | 8260B | 08/05/15 | 27 |
| 2-Chlorotoluene | U | 0.0081 | 0.032 | mg/kg | | 8260B | 08/05/15 | 27 |
| 4-Chlorotoluene | U | 0.0065 | 0.032 | mg/kg | | 8260B | 08/05/15 | 27 |
| 1,2-Dibromo-3-Chloropropane | U | 0.028 | 0.16 | mg/kg | | 8260B | 08/05/15 | 27 |
| 1,2-Dibromoethane | U | 0.0093 | 0.032 | mg/kg | | 8260B | 08/05/15 | 27 |
| Dibromomethane | U | 0.010 | 0.032 | mg/kg | | 8260B | 08/05/15 | 27 |
| 1,2-Dichlorobenzene | U | 0.0082 | 0.032 | mg/kg | | 8260B | 08/05/15 | 27 |
| 1,3-Dichlorobenzene | U | 0.0064 | 0.032 | mg/kg | | 8260B | 08/05/15 | 27 |
| 1,4-Dichlorobenzene | U | 0.0061 | 0.032 | mg/kg | | 8260B | 08/05/15 | 27 |

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
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Est. 1970

REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-11

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : B-3

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 15:20

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | U | 0.019 | 0.16 | mg/kg | | 8260B | 08/05/15 | 27 |
| 1,1-Dichloroethane | U | 0.0054 | 0.032 | mg/kg | | 8260B | 08/05/15 | 27 |
| 1,2-Dichloroethane | U | 0.0072 | 0.032 | mg/kg | | 8260B | 08/05/15 | 27 |
| 1,1-Dichloroethene | U | 0.0082 | 0.032 | mg/kg | | 8260B | 08/05/15 | 27 |
| cis-1,2-Dichloroethene | U | 0.0063 | 0.032 | mg/kg | | 8260B | 08/05/15 | 27 |
| trans-1,2-Dichloroethene | U | 0.0071 | 0.032 | mg/kg | | 8260B | 08/05/15 | 27 |
| 1,2-Dichloropropane | U | 0.0097 | 0.032 | mg/kg | | 8260B | 08/05/15 | 27 |
| 1,1-Dichloropropene | U | 0.0086 | 0.032 | mg/kg | | 8260B | 08/05/15 | 27 |
| 1,3-Dichloropropane | U | 0.0056 | 0.032 | mg/kg | | 8260B | 08/05/15 | 27 |
| cis-1,3-Dichloropropene | U | 0.0071 | 0.032 | mg/kg | | 8260B | 08/05/15 | 27 |
| trans-1,3-Dichloropropene | U | 0.0072 | 0.032 | mg/kg | | 8260B | 08/05/15 | 27 |
| 2,2-Dichloropropane | U | 0.0075 | 0.032 | mg/kg | | 8260B | 08/05/15 | 27 |
| Di-isopropyl ether | U | 0.0067 | 0.032 | mg/kg | | 8260B | 08/05/15 | 27 |
| Ethylbenzene | U | 0.0080 | 0.032 | mg/kg | | 8260B | 08/05/15 | 27 |
| Hexachloro-1,3-butadiene | U | 0.0092 | 0.032 | mg/kg | | 8260B | 08/05/15 | 27 |
| Isopropylbenzene | U | 0.0066 | 0.032 | mg/kg | | 8260B | 08/05/15 | 27 |
| p-Isopropyltoluene | U | 0.0055 | 0.032 | mg/kg | | 8260B | 08/05/15 | 27 |
| 2-Butanone (MEK) | U | 0.13 | 0.32 | mg/kg | | 8260B | 08/05/15 | 27 |
| Methylene Chloride | U | 0.027 | 0.16 | mg/kg | | 8260B | 08/05/15 | 27 |
| 4-Methyl-2-pentanone (MIBK) | U | 0.051 | 0.32 | mg/kg | | 8260B | 08/05/15 | 27 |
| Methyl tert-butyl ether | U | 0.0057 | 0.032 | mg/kg | | 8260B | 08/05/15 | 27 |
| Naphthalene | U | 0.027 | 0.16 | mg/kg | | 8260B | 08/05/15 | 27 |
| n-Propylbenzene | U | 0.0056 | 0.032 | mg/kg | | 8260B | 08/05/15 | 27 |
| Styrene | U | 0.0063 | 0.032 | mg/kg | | 8260B | 08/05/15 | 27 |
| 1,1,1,2-Tetrachloroethane | U | 0.0071 | 0.032 | mg/kg | | 8260B | 08/05/15 | 27 |
| 1,1,2,2-Tetrachloroethane | U | 0.0098 | 0.032 | mg/kg | | 8260B | 08/05/15 | 27 |
| 1,1,2-Trichlorotrifluoroethane | U | 0.0098 | 0.032 | mg/kg | | 8260B | 08/05/15 | 27 |
| Tetrachloroethene | U | 0.0074 | 0.032 | mg/kg | | 8260B | 08/05/15 | 27 |
| Toluene | U | 0.012 | 0.16 | mg/kg | | 8260B | 08/05/15 | 27 |
| 1,2,3-Trichlorobenzene | U | 0.0083 | 0.032 | mg/kg | J4 | 8260B | 08/05/15 | 27 |
| 1,2,4-Trichlorobenzene | U | 0.010 | 0.032 | mg/kg | | 8260B | 08/05/15 | 27 |
| 1,1,1-Trichloroethane | U | 0.0077 | 0.032 | mg/kg | | 8260B | 08/05/15 | 27 |
| 1,1,2-Trichloroethane | U | 0.0075 | 0.032 | mg/kg | | 8260B | 08/05/15 | 27 |
| Trichloroethene | U | 0.0075 | 0.032 | mg/kg | | 8260B | 08/05/15 | 27 |
| Trichlorofluoromethane | U | 0.010 | 0.16 | mg/kg | | 8260B | 08/05/15 | 27 |
| 1,2,3-Trichloropropane | U | 0.020 | 0.080 | mg/kg | | 8260B | 08/05/15 | 27 |
| 1,2,4-Trimethylbenzene | U | 0.0057 | 0.032 | mg/kg | | 8260B | 08/05/15 | 27 |
| 1,2,3-Trimethylbenzene | U | 0.0077 | 0.032 | mg/kg | | 8260B | 08/05/15 | 27 |
| 1,3,5-Trimethylbenzene | U | 0.0072 | 0.032 | mg/kg | | 8260B | 08/05/15 | 27 |
| Vinyl chloride | U | 0.0078 | 0.032 | mg/kg | | 8260B | 08/05/15 | 27 |
| Xylenes, Total | U | 0.019 | 0.096 | mg/kg | | 8260B | 08/05/15 | 27 |
| Surrogate Recovery | | | | | | | | |
| Toluene-d8 | 105. | | | % Rec. | | 8260B | 08/05/15 | 1 |

Results listed are dry weight basis.
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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-11

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : B-3

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 15:20

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Dibromofluoromethane | 96.0 | | | % Rec. | | 8260B | 08/05/15 | 1 |
| 4-Bromofluorobenzene | 109. | | | % Rec. | | 8260B | 08/05/15 | 1 |
| Polynuclear Aromatic Hydrocarbons | | | | | | | | |
| Anthracene | U | 0.00060 | 0.0071 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| Acenaphthene | U | 0.00060 | 0.0071 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| Acenaphthylene | U | 0.00060 | 0.0071 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| Benzo(a)anthracene | 0.0014 | 0.00060 | 0.0071 | mg/kg | J | 8270C-SI | 08/09/15 | 1 |
| Benzo(a)pyrene | 0.0013 | 0.00060 | 0.0071 | mg/kg | J | 8270C-SI | 08/09/15 | 1 |
| Benzo(b)fluoranthene | 0.0015 | 0.00060 | 0.0071 | mg/kg | J | 8270C-SI | 08/09/15 | 1 |
| Benzo(g,h,i)perylene | 0.0010 | 0.00060 | 0.0071 | mg/kg | J | 8270C-SI | 08/09/15 | 1 |
| Benzo(k)fluoranthene | 0.00076 | 0.00060 | 0.0071 | mg/kg | J | 8270C-SI | 08/09/15 | 1 |
| Chrysene | 0.0012 | 0.00060 | 0.0071 | mg/kg | J | 8270C-SI | 08/09/15 | 1 |
| Dibenz(a,h)anthracene | U | 0.00060 | 0.0071 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| Fluoranthene | 0.0024 | 0.00060 | 0.0071 | mg/kg | J | 8270C-SI | 08/09/15 | 1 |
| Fluorene | U | 0.00060 | 0.0071 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| Indeno(1,2,3-cd)pyrene | 0.00083 | 0.00060 | 0.0071 | mg/kg | J | 8270C-SI | 08/09/15 | 1 |
| Naphthalene | U | 0.0020 | 0.024 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| Phenanthrene | U | 0.00060 | 0.0071 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| Pyrene | 0.0024 | 0.00060 | 0.0071 | mg/kg | J | 8270C-SI | 08/09/15 | 1 |
| 1-Methylnaphthalene | U | 0.0020 | 0.024 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| 2-Methylnaphthalene | U | 0.0020 | 0.024 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| 2-Chloronaphthalene | U | 0.0020 | 0.024 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| Surrogate Recovery | | | | | | | | |
| Nitrobenzene-d5 | 46.4 | | | % Rec. | | 8270C-SI | 08/09/15 | 1 |
| 2-Fluorobiphenyl | 46.3 | | | % Rec. | | 8270C-SI | 08/09/15 | 1 |
| p-Terphenyl-d14 | 37.9 | | | % Rec. | | 8270C-SI | 08/09/15 | 1 |

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Tax I.D. 62-0814289

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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-12

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : B-4

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 15:25

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Total Solids | 88.4 | 0.0333 | | % | | 2540 G-2 | 08/02/15 | 1 |
| Mercury | 0.010 | 0.0028 | 0.023 | mg/kg | J | 7471A | 08/07/15 | 1 |
| Antimony | U | 0.75 | 2.3 | mg/kg | | 6010B | 08/07/15 | 1 |
| Arsenic | 5.9 | 0.65 | 2.3 | mg/kg | | 6010B | 08/07/15 | 1 |
| Beryllium | 0.32 | 0.070 | 0.23 | mg/kg | | 6010B | 08/07/15 | 1 |
| Cadmium | 0.086 | 0.070 | 0.56 | mg/kg | J | 6010B | 08/07/15 | 1 |
| Chromium | 4.2 | 0.14 | 1.1 | mg/kg | | 6010B | 08/07/15 | 1 |
| Copper | 2.9 | 0.53 | 2.3 | mg/kg | | 6010B | 08/07/15 | 1 |
| Lead | 6.8 | 0.19 | 0.56 | mg/kg | | 6010B | 08/07/15 | 1 |
| Nickel | 2.8 | 0.49 | 2.3 | mg/kg | | 6010B | 08/07/15 | 1 |
| Selenium | U | 0.74 | 2.3 | mg/kg | | 6010B | 08/07/15 | 1 |
| Silver | U | 0.28 | 1.1 | mg/kg | | 6010B | 08/07/15 | 1 |
| Thallium | U | 0.65 | 2.3 | mg/kg | | 6010B | 08/07/15 | 1 |
| Zinc | 24. | 0.59 | 5.6 | mg/kg | | 6010B | 08/07/15 | 1 |
| Volatile Organics | | | | | | | | |
| Acetone | U | 0.25 | 1.4 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| Acrylonitrile | U | 0.044 | 0.28 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| Benzene | U | 0.0067 | 0.028 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| Bromobenzene | U | 0.0070 | 0.028 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| Bromodichloromethane | U | 0.0063 | 0.028 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| Bromoform | U | 0.010 | 0.028 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| Bromomethane | U | 0.033 | 0.14 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| n-Butylbenzene | U | 0.0064 | 0.028 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| sec-Butylbenzene | U | 0.0050 | 0.028 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| tert-Butylbenzene | U | 0.0051 | 0.028 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| Carbon tetrachloride | U | 0.0081 | 0.028 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| Chlorobenzene | U | 0.0052 | 0.028 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| Chlorodibromomethane | U | 0.0092 | 0.028 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| Chloroethane | U | 0.023 | 0.14 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| 2-Chloroethyl vinyl ether | U | 0.058 | 1.4 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| Chloroform | U | 0.0057 | 0.14 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| Chloromethane | U | 0.0093 | 0.070 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| 2-Chlorotoluene | U | 0.0074 | 0.028 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| 4-Chlorotoluene | U | 0.0059 | 0.028 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| 1,2-Dibromo-3-Chloropropane | U | 0.026 | 0.14 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| 1,2-Dibromoethane | U | 0.0085 | 0.028 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| Dibromomethane | U | 0.0094 | 0.028 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| 1,2-Dichlorobenzene | U | 0.0075 | 0.028 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| 1,3-Dichlorobenzene | U | 0.0059 | 0.028 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| 1,4-Dichlorobenzene | U | 0.0056 | 0.028 | mg/kg | | 8260B | 08/05/15 | 24.75 |

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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-12

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : B-4

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 15:25

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | U | 0.018 | 0.14 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| 1,1-Dichloroethane | U | 0.0049 | 0.028 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| 1,2-Dichloroethane | U | 0.0066 | 0.028 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| 1,1-Dichloroethene | U | 0.0075 | 0.028 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| cis-1,2-Dichloroethene | U | 0.0058 | 0.028 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| trans-1,2-Dichloroethene | U | 0.0065 | 0.028 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| 1,2-Dichloropropane | U | 0.0089 | 0.028 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| 1,1-Dichloropropene | U | 0.0078 | 0.028 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| 1,3-Dichloropropane | U | 0.0051 | 0.028 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| cis-1,3-Dichloropropene | U | 0.0065 | 0.028 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| trans-1,3-Dichloropropene | U | 0.0066 | 0.028 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| 2,2-Dichloropropane | U | 0.0069 | 0.028 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| Di-isopropyl ether | U | 0.0061 | 0.028 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| Ethylbenzene | U | 0.0074 | 0.028 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| Hexachloro-1,3-butadiene | U | 0.0085 | 0.028 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| Isopropylbenzene | U | 0.0060 | 0.028 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| p-Isopropyltoluene | U | 0.0050 | 0.028 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| 2-Butanone (MEK) | U | 0.12 | 0.28 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| Methylene Chloride | U | 0.025 | 0.14 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| 4-Methyl-2-pentanone (MIBK) | U | 0.046 | 0.28 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| Methyl tert-butyl ether | U | 0.0052 | 0.028 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| Naphthalene | U | 0.025 | 0.14 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| n-Propylbenzene | U | 0.0051 | 0.028 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| Styrene | U | 0.0058 | 0.028 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| 1,1,1,2-Tetrachloroethane | U | 0.0065 | 0.028 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| 1,1,2,2-Tetrachloroethane | U | 0.0090 | 0.028 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| 1,1,2-Trichlorotrifluoroethane | U | 0.0090 | 0.028 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| Tetrachloroethene | U | 0.0068 | 0.028 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| Toluene | U | 0.011 | 0.14 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| 1,2,3-Trichlorobenzene | U | 0.0076 | 0.028 | mg/kg | J4 | 8260B | 08/05/15 | 24.75 |
| 1,2,4-Trichlorobenzene | U | 0.0096 | 0.028 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| 1,1,1-Trichloroethane | U | 0.0071 | 0.028 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| 1,1,2-Trichloroethane | U | 0.0068 | 0.028 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| Trichloroethene | U | 0.0069 | 0.028 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| Trichlorofluoromethane | U | 0.0094 | 0.14 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| 1,2,3-Trichloropropane | U | 0.018 | 0.070 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| 1,2,4-Trimethylbenzene | U | 0.0052 | 0.028 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| 1,2,3-Trimethylbenzene | U | 0.0071 | 0.028 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| 1,3,5-Trimethylbenzene | U | 0.0066 | 0.028 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| Vinyl chloride | U | 0.0072 | 0.028 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| Xylenes, Total | U | 0.017 | 0.084 | mg/kg | | 8260B | 08/05/15 | 24.75 |
| Surrogate Recovery | | | | | | | | |
| Toluene-d8 | 105. | | | % Rec. | | 8260B | 08/05/15 | 1 |

Results listed are dry weight basis.
U = ND (Not Detected)
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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-12

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : B-4

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 15:25

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Dibromofluoromethane | 94.0 | | | % Rec. | | 8260B | 08/05/15 | 1 |
| 4-Bromofluorobenzene | 107. | | | % Rec. | | 8260B | 08/05/15 | 1 |
| Polynuclear Aromatic Hydrocarbons | | | | | | | | |
| Anthracene | 0.0020 | 0.00060 | 0.0068 | mg/kg | J | 8270C-SI | 08/09/15 | 1 |
| Acenaphthene | U | 0.00060 | 0.0068 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| Acenaphthylene | U | 0.00060 | 0.0068 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| Benzo(a)anthracene | 0.025 | 0.00060 | 0.0068 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| Benzo(a)pyrene | 0.026 | 0.00060 | 0.0068 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| Benzo(b)fluoranthene | 0.027 | 0.00060 | 0.0068 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| Benzo(g,h,i)perylene | 0.015 | 0.00060 | 0.0068 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| Benzo(k)fluoranthene | 0.010 | 0.00060 | 0.0068 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| Chrysene | 0.026 | 0.00060 | 0.0068 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| Dibenz(a,h)anthracene | 0.0034 | 0.00060 | 0.0068 | mg/kg | J | 8270C-SI | 08/09/15 | 1 |
| Fluoranthene | 0.035 | 0.00060 | 0.0068 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| Fluorene | U | 0.00060 | 0.0068 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| Indeno(1,2,3-cd)pyrene | 0.014 | 0.00060 | 0.0068 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| Naphthalene | U | 0.0020 | 0.023 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| Phenanthrene | 0.0032 | 0.00060 | 0.0068 | mg/kg | J | 8270C-SI | 08/09/15 | 1 |
| Pyrene | 0.044 | 0.00060 | 0.0068 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| 1-Methylnaphthalene | U | 0.0020 | 0.023 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| 2-Methylnaphthalene | U | 0.0020 | 0.023 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| 2-Chloronaphthalene | U | 0.0020 | 0.023 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| Surrogate Recovery | | | | | | | | |
| Nitrobenzene-d5 | 46.3 | | | % Rec. | | 8270C-SI | 08/09/15 | 1 |
| 2-Fluorobiphenyl | 46.1 | | | % Rec. | | 8270C-SI | 08/09/15 | 1 |
| p-Terphenyl-d14 | 40.4 | | | % Rec. | | 8270C-SI | 08/09/15 | 1 |

Results listed are dry weight basis.
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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-13

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : B-6

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 10:05

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Total Solids | 78.7 | 0.0333 | | % | | 2540 G-2 | 08/02/15 | 1 |
| Mercury | 3.4 | 0.014 | 0.13 | mg/kg | | 7471A | 08/07/15 | 5 |
| Antimony | 1.8 | 0.75 | 2.5 | mg/kg | J | 6010B | 08/07/15 | 1 |
| Arsenic | 9.1 | 0.65 | 2.5 | mg/kg | | 6010B | 08/07/15 | 1 |
| Beryllium | 0.33 | 0.070 | 0.25 | mg/kg | | 6010B | 08/07/15 | 1 |
| Cadmium | 0.37 | 0.070 | 0.64 | mg/kg | J | 6010B | 08/07/15 | 1 |
| Chromium | 5.1 | 0.14 | 1.3 | mg/kg | | 6010B | 08/07/15 | 1 |
| Copper | 62. | 0.53 | 2.5 | mg/kg | | 6010B | 08/07/15 | 1 |
| Lead | 110 | 0.19 | 0.64 | mg/kg | | 6010B | 08/07/15 | 1 |
| Nickel | 4.4 | 0.49 | 2.5 | mg/kg | | 6010B | 08/07/15 | 1 |
| Selenium | U | 0.74 | 2.5 | mg/kg | | 6010B | 08/07/15 | 1 |
| Silver | U | 0.28 | 1.3 | mg/kg | | 6010B | 08/07/15 | 1 |
| Thallium | U | 0.65 | 2.5 | mg/kg | | 6010B | 08/07/15 | 1 |
| Zinc | 340 | 0.59 | 6.4 | mg/kg | | 6010B | 08/07/15 | 1 |
| Volatile Organics | | | | | | | | |
| Acetone | 0.044 | 0.010 | 0.064 | mg/kg | J | 8260B | 08/05/15 | 1 |
| Acrylonitrile | U | 0.0018 | 0.013 | mg/kg | | 8260B | 08/05/15 | 1 |
| Benzene | 0.010 | 0.00027 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| Bromobenzene | U | 0.00028 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| Bromodichloromethane | U | 0.00025 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| Bromoform | U | 0.00042 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| Bromomethane | U | 0.0013 | 0.0064 | mg/kg | | 8260B | 08/05/15 | 1 |
| n-Butylbenzene | U | 0.00026 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| sec-Butylbenzene | U | 0.00020 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| tert-Butylbenzene | U | 0.00021 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| Carbon tetrachloride | U | 0.00033 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| Chlorobenzene | U | 0.00021 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| Chlorodibromomethane | U | 0.00037 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| Chloroethane | U | 0.00095 | 0.0064 | mg/kg | | 8260B | 08/05/15 | 1 |
| 2-Chloroethyl vinyl ether | U | 0.0023 | 0.064 | mg/kg | | 8260B | 08/05/15 | 1 |
| Chloroform | U | 0.00023 | 0.0064 | mg/kg | | 8260B | 08/05/15 | 1 |
| Chloromethane | U | 0.00038 | 0.0032 | mg/kg | | 8260B | 08/05/15 | 1 |
| 2-Chlorotoluene | U | 0.00030 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| 4-Chlorotoluene | U | 0.00024 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,2-Dibromo-3-Chloropropane | U | 0.0010 | 0.0064 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,2-Dibromoethane | U | 0.00034 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| Dibromomethane | U | 0.00038 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,2-Dichlorobenzene | U | 0.00030 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,3-Dichlorobenzene | U | 0.00024 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,4-Dichlorobenzene | U | 0.00023 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |

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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-13

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : B-6

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 10:05

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | U | 0.00071 | 0.0064 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,1-Dichloroethane | U | 0.00020 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,2-Dichloroethane | U | 0.00026 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,1-Dichloroethene | U | 0.00030 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| cis-1,2-Dichloroethene | U | 0.00024 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| trans-1,2-Dichloroethene | U | 0.00026 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,2-Dichloropropane | U | 0.00036 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,1-Dichloropropene | U | 0.00032 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,3-Dichloropropane | U | 0.00021 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| cis-1,3-Dichloropropene | U | 0.00026 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| trans-1,3-Dichloropropene | U | 0.00027 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| 2,2-Dichloropropane | U | 0.00028 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| Di-isopropyl ether | U | 0.00025 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| Ethylbenzene | U | 0.00030 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| Hexachloro-1,3-butadiene | U | 0.00034 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| Isopropylbenzene | U | 0.00024 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| p-Isopropyltoluene | U | 0.00020 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| 2-Butanone (MEK) | U | 0.0047 | 0.013 | mg/kg | | 8260B | 08/05/15 | 1 |
| Methylene Chloride | U | 0.0010 | 0.0064 | mg/kg | | 8260B | 08/05/15 | 1 |
| 4-Methyl-2-pentanone (MIBK) | U | 0.0019 | 0.013 | mg/kg | | 8260B | 08/05/15 | 1 |
| Methyl tert-butyl ether | U | 0.00021 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| Naphthalene | U | 0.0010 | 0.0064 | mg/kg | | 8260B | 08/05/15 | 1 |
| n-Propylbenzene | U | 0.00021 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| Styrene | U | 0.00023 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,1,1,2-Tetrachloroethane | U | 0.00026 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,1,2,2-Tetrachloroethane | U | 0.00036 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,1,2-Trichlorotrifluoroethane | U | 0.00036 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| Tetrachloroethene | U | 0.00028 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| Toluene | 0.0037 | 0.00043 | 0.0064 | mg/kg | J | 8260B | 08/05/15 | 1 |
| 1,2,3-Trichlorobenzene | U | 0.00031 | 0.0013 | mg/kg | J4 | 8260B | 08/05/15 | 1 |
| 1,2,4-Trichlorobenzene | U | 0.00039 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,1,1-Trichloroethane | U | 0.00029 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,1,2-Trichloroethane | U | 0.00028 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| Trichloroethene | U | 0.00028 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| Trichlorofluoromethane | U | 0.00038 | 0.0064 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,2,3-Trichloropropane | U | 0.00074 | 0.0032 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,2,4-Trimethylbenzene | U | 0.00021 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,2,3-Trimethylbenzene | 0.00091 | 0.00029 | 0.0013 | mg/kg | JV3 | 8260B | 08/05/15 | 1 |
| 1,3,5-Trimethylbenzene | U | 0.00027 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| Vinyl chloride | U | 0.00029 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| Xylenes, Total | 0.0016 | 0.00070 | 0.0038 | mg/kg | J | 8260B | 08/05/15 | 1 |
| Surrogate Recovery | | | | | | | | |
| Toluene-d8 | 101. | | | % Rec. | | 8260B | 08/05/15 | 1 |

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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-13

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : B-6

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 10:05

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Dibromofluoromethane | 110. | | | % Rec. | | 8260B | 08/05/15 | 1 |
| 4-Bromofluorobenzene | 54.9 | | | % Rec. | J2 | 8260B | 08/05/15 | 1 |
| Polynuclear Aromatic Hydrocarbons | | | | | | | | |
| Anthracene | 0.10 | 0.0030 | 0.038 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Acenaphthene | 0.057 | 0.0030 | 0.038 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Acenaphthylene | 0.0061 | 0.0030 | 0.038 | mg/kg | J | 8270C-SI | 08/10/15 | 5 |
| Benzo(a)anthracene | 0.79 | 0.0030 | 0.038 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Benzo(a)pyrene | 1.4 | 0.0030 | 0.038 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Benzo(b)fluoranthene | 1.8 | 0.0030 | 0.038 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Benzo(g,h,i)perylene | 1.4 | 0.0030 | 0.038 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Benzo(k)fluoranthene | 0.56 | 0.0030 | 0.038 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Chrysene | 1.0 | 0.0030 | 0.038 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Dibenz(a,h)anthracene | 0.30 | 0.0030 | 0.038 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Fluoranthene | 1.0 | 0.0030 | 0.038 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Fluorene | 0.043 | 0.0030 | 0.038 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Indeno(1,2,3-cd)pyrene | 1.1 | 0.0030 | 0.038 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Naphthalene | 0.12 | 0.010 | 0.13 | mg/kg | J | 8270C-SI | 08/10/15 | 5 |
| Phenanthrene | 0.38 | 0.0030 | 0.038 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Pyrene | 1.1 | 0.0030 | 0.038 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| 1-Methylnaphthalene | 0.080 | 0.010 | 0.13 | mg/kg | J | 8270C-SI | 08/10/15 | 5 |
| 2-Methylnaphthalene | 0.13 | 0.010 | 0.13 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| 2-Chloronaphthalene | U | 0.010 | 0.13 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Surrogate Recovery | | | | | | | | |
| Nitrobenzene-d5 | 72.7 | | | % Rec. | | 8270C-SI | 08/10/15 | 5 |
| 2-Fluorobiphenyl | 77.2 | | | % Rec. | | 8270C-SI | 08/10/15 | 5 |
| p-Terphenyl-d14 | 69.7 | | | % Rec. | | 8270C-SI | 08/10/15 | 5 |

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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-14

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : DU 3 S-2

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/30/15 15:40

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Total Solids | 90.8 | 0.0333 | | % | | 2540 G-2 | 08/02/15 | 1 |
| Mercury | 0.54 | 0.0028 | 0.022 | mg/kg | | 7471A | 08/07/15 | 1 |
| Antimony | 10. | 0.75 | 2.2 | mg/kg | | 6010B | 08/07/15 | 1 |
| Arsenic | 12. | 0.65 | 2.2 | mg/kg | | 6010B | 08/07/15 | 1 |
| Beryllium | 0.34 | 0.070 | 0.22 | mg/kg | | 6010B | 08/07/15 | 1 |
| Cadmium | 0.63 | 0.070 | 0.55 | mg/kg | | 6010B | 08/07/15 | 1 |
| Chromium | 8.2 | 0.14 | 1.1 | mg/kg | | 6010B | 08/07/15 | 1 |
| Copper | 4400 | 0.53 | 2.2 | mg/kg | | 6010B | 08/07/15 | 1 |
| Lead | 420 | 0.19 | 0.55 | mg/kg | | 6010B | 08/07/15 | 1 |
| Nickel | 25. | 0.49 | 2.2 | mg/kg | | 6010B | 08/07/15 | 1 |
| Selenium | U | 0.74 | 2.2 | mg/kg | | 6010B | 08/07/15 | 1 |
| Silver | 1.1 | 0.28 | 1.1 | mg/kg | | 6010B | 08/07/15 | 1 |
| Thallium | U | 0.65 | 2.2 | mg/kg | | 6010B | 08/07/15 | 1 |
| Zinc | 290 | 0.59 | 5.5 | mg/kg | | 6010B | 08/07/15 | 1 |
| Volatile Organics | | | | | | | | |
| Acetone | U | 0.28 | 1.5 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| Acrylonitrile | U | 0.049 | 0.30 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| Benzene | U | 0.0074 | 0.030 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| Bromobenzene | U | 0.0078 | 0.030 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| Bromodichloromethane | U | 0.0070 | 0.030 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| Bromoform | U | 0.012 | 0.030 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| Bromomethane | U | 0.037 | 0.15 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| n-Butylbenzene | U | 0.0071 | 0.030 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| sec-Butylbenzene | U | 0.0055 | 0.030 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| tert-Butylbenzene | U | 0.0057 | 0.030 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| Carbon tetrachloride | U | 0.0090 | 0.030 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| Chlorobenzene | U | 0.0058 | 0.030 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| Chlorodibromomethane | U | 0.010 | 0.030 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| Chloroethane | U | 0.026 | 0.15 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| 2-Chloroethyl vinyl ether | U | 0.064 | 1.5 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| Chloroform | U | 0.0063 | 0.15 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| Chloromethane | U | 0.010 | 0.076 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| 2-Chlorotoluene | U | 0.0083 | 0.030 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| 4-Chlorotoluene | U | 0.0066 | 0.030 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| 1,2-Dibromo-3-Chloropropane | U | 0.029 | 0.15 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| 1,2-Dibromoethane | U | 0.0094 | 0.030 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| Dibromomethane | U | 0.010 | 0.030 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| 1,2-Dichlorobenzene | U | 0.0084 | 0.030 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| 1,3-Dichlorobenzene | U | 0.0066 | 0.030 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| 1,4-Dichlorobenzene | U | 0.0062 | 0.030 | mg/kg | | 8260B | 08/05/15 | 27.5 |

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Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-14

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : DU 3 S-2

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/30/15 15:40

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | U | 0.020 | 0.15 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| 1,1-Dichloroethane | U | 0.0055 | 0.030 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| 1,2-Dichloroethane | U | 0.0073 | 0.030 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| 1,1-Dichloroethene | U | 0.0083 | 0.030 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| cis-1,2-Dichloroethene | U | 0.0065 | 0.030 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| trans-1,2-Dichloroethene | U | 0.0073 | 0.030 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| 1,2-Dichloropropane | U | 0.0098 | 0.030 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| 1,1-Dichloropropene | U | 0.0087 | 0.030 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| 1,3-Dichloropropane | U | 0.0057 | 0.030 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| cis-1,3-Dichloropropene | U | 0.0072 | 0.030 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| trans-1,3-Dichloropropene | U | 0.0073 | 0.030 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| 2,2-Dichloropropane | U | 0.0077 | 0.030 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| Di-isopropyl ether | U | 0.0068 | 0.030 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| Ethylbenzene | U | 0.0082 | 0.030 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| Hexachloro-1,3-butadiene | U | 0.0094 | 0.030 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| Isopropylbenzene | U | 0.0067 | 0.030 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| p-Isopropyltoluene | U | 0.0056 | 0.030 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| 2-Butanone (MEK) | U | 0.13 | 0.30 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| Methylene Chloride | U | 0.028 | 0.15 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| 4-Methyl-2-pentanone (MIBK) | U | 0.052 | 0.30 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| Methyl tert-butyl ether | U | 0.0058 | 0.030 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| Naphthalene | U | 0.028 | 0.15 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| n-Propylbenzene | U | 0.0057 | 0.030 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| Styrene | U | 0.0064 | 0.030 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| 1,1,1,2-Tetrachloroethane | U | 0.0073 | 0.030 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| 1,1,2,2-Tetrachloroethane | U | 0.010 | 0.030 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| 1,1,2-Trichlorotrifluoroethane | U | 0.010 | 0.030 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| Tetrachloroethene | U | 0.0076 | 0.030 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| Toluene | U | 0.012 | 0.15 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| 1,2,3-Trichlorobenzene | U | 0.0084 | 0.030 | mg/kg | J4 | 8260B | 08/05/15 | 27.5 |
| 1,2,4-Trichlorobenzene | U | 0.011 | 0.030 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| 1,1,1-Trichloroethane | U | 0.0079 | 0.030 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| 1,1,2-Trichloroethane | U | 0.0076 | 0.030 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| Trichloroethene | U | 0.0077 | 0.030 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| Trichlorofluoromethane | U | 0.010 | 0.15 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| 1,2,3-Trichloropropane | U | 0.020 | 0.076 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| 1,2,4-Trimethylbenzene | U | 0.0058 | 0.030 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| 1,2,3-Trimethylbenzene | U | 0.0079 | 0.030 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| 1,3,5-Trimethylbenzene | U | 0.0073 | 0.030 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| Vinyl chloride | U | 0.0080 | 0.030 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| Xylenes, Total | U | 0.019 | 0.091 | mg/kg | | 8260B | 08/05/15 | 27.5 |
| Surrogate Recovery | | | | | | | | |
| Toluene-d8 | 105. | | | % Rec. | | 8260B | 08/05/15 | 1 |

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-14

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : DU 3 S-2

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/30/15 15:40

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Dibromofluoromethane | 95.7 | | | % Rec. | | 8260B | 08/05/15 | 1 |
| 4-Bromofluorobenzene | 108. | | | % Rec. | | 8260B | 08/05/15 | 1 |
| Polynuclear Aromatic Hydrocarbons | | | | | | | | |
| Anthracene | 0.068 | 0.0030 | 0.033 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Acenaphthene | 0.020 | 0.0030 | 0.033 | mg/kg | J | 8270C-SI | 08/10/15 | 5 |
| Acenaphthylene | 0.0045 | 0.0030 | 0.033 | mg/kg | J | 8270C-SI | 08/10/15 | 5 |
| Benzo(a)anthracene | 1.1 | 0.0030 | 0.033 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Benzo(a)pyrene | 1.4 | 0.0030 | 0.033 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Benzo(b)fluoranthene | 2.1 | 0.0030 | 0.033 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Benzo(g,h,i)perylene | 1.3 | 0.0030 | 0.033 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Benzo(k)fluoranthene | 0.63 | 0.0030 | 0.033 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Chrysene | 1.3 | 0.0030 | 0.033 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Dibenz(a,h)anthracene | 0.34 | 0.0030 | 0.033 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Fluoranthene | 1.4 | 0.0030 | 0.033 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Fluorene | 0.013 | 0.0030 | 0.033 | mg/kg | J | 8270C-SI | 08/10/15 | 5 |
| Indeno(1,2,3-cd)pyrene | 1.0 | 0.0030 | 0.033 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Naphthalene | 0.053 | 0.010 | 0.11 | mg/kg | J | 8270C-SI | 08/10/15 | 5 |
| Phenanthrene | 0.37 | 0.0030 | 0.033 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Pyrene | 1.4 | 0.0030 | 0.033 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| 1-Methylnaphthalene | 0.041 | 0.010 | 0.11 | mg/kg | J | 8270C-SI | 08/10/15 | 5 |
| 2-Methylnaphthalene | 0.048 | 0.010 | 0.11 | mg/kg | J | 8270C-SI | 08/10/15 | 5 |
| 2-Chloronaphthalene | U | 0.010 | 0.11 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Surrogate Recovery | | | | | | | | |
| Nitrobenzene-d5 | 76.7 | | | % Rec. | | 8270C-SI | 08/10/15 | 5 |
| 2-Fluorobiphenyl | 75.5 | | | % Rec. | | 8270C-SI | 08/10/15 | 5 |
| p-Terphenyl-d14 | 70.4 | | | % Rec. | | 8270C-SI | 08/10/15 | 5 |

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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-15

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : DU 3 S-3

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/30/15 16:00

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Total Solids | 90.0 | 0.0333 | | % | | 2540 G-2 | 08/02/15 | 1 |
| Mercury | 1.2 | 0.0056 | 0.044 | mg/kg | | 7471A | 08/07/15 | 2 |
| Antimony | 9.1 | 0.75 | 2.2 | mg/kg | | 6010B | 08/07/15 | 1 |
| Arsenic | 12. | 0.65 | 2.2 | mg/kg | | 6010B | 08/07/15 | 1 |
| Beryllium | 0.36 | 0.070 | 0.22 | mg/kg | | 6010B | 08/07/15 | 1 |
| Cadmium | 0.69 | 0.070 | 0.56 | mg/kg | | 6010B | 08/07/15 | 1 |
| Chromium | 8.4 | 0.14 | 1.1 | mg/kg | | 6010B | 08/07/15 | 1 |
| Copper | 700 | 0.53 | 2.2 | mg/kg | | 6010B | 08/07/15 | 1 |
| Lead | 340 | 0.19 | 0.56 | mg/kg | | 6010B | 08/07/15 | 1 |
| Nickel | 12. | 0.49 | 2.2 | mg/kg | | 6010B | 08/07/15 | 1 |
| Selenium | U | 0.74 | 2.2 | mg/kg | | 6010B | 08/07/15 | 1 |
| Silver | 0.40 | 0.28 | 1.1 | mg/kg | J | 6010B | 08/07/15 | 1 |
| Thallium | U | 0.65 | 2.2 | mg/kg | | 6010B | 08/07/15 | 1 |
| Zinc | 190 | 0.59 | 5.6 | mg/kg | | 6010B | 08/07/15 | 1 |
| Volatile Organics | | | | | | | | |
| Acetone | U | 0.26 | 1.4 | mg/kg | | 8260B | 08/05/15 | 26 |
| Acrylonitrile | U | 0.046 | 0.29 | mg/kg | | 8260B | 08/05/15 | 26 |
| Benzene | U | 0.0070 | 0.029 | mg/kg | | 8260B | 08/05/15 | 26 |
| Bromobenzene | U | 0.0074 | 0.029 | mg/kg | | 8260B | 08/05/15 | 26 |
| Bromodichloromethane | U | 0.0066 | 0.029 | mg/kg | | 8260B | 08/05/15 | 26 |
| Bromoform | U | 0.011 | 0.029 | mg/kg | | 8260B | 08/05/15 | 26 |
| Bromomethane | U | 0.035 | 0.14 | mg/kg | | 8260B | 08/05/15 | 26 |
| n-Butylbenzene | U | 0.0067 | 0.029 | mg/kg | | 8260B | 08/05/15 | 26 |
| sec-Butylbenzene | U | 0.0052 | 0.029 | mg/kg | | 8260B | 08/05/15 | 26 |
| tert-Butylbenzene | U | 0.0054 | 0.029 | mg/kg | | 8260B | 08/05/15 | 26 |
| Carbon tetrachloride | U | 0.0085 | 0.029 | mg/kg | | 8260B | 08/05/15 | 26 |
| Chlorobenzene | U | 0.0055 | 0.029 | mg/kg | | 8260B | 08/05/15 | 26 |
| Chlorodibromomethane | U | 0.0097 | 0.029 | mg/kg | | 8260B | 08/05/15 | 26 |
| Chloroethane | U | 0.024 | 0.14 | mg/kg | | 8260B | 08/05/15 | 26 |
| 2-Chloroethyl vinyl ether | U | 0.061 | 1.4 | mg/kg | | 8260B | 08/05/15 | 26 |
| Chloroform | U | 0.0060 | 0.14 | mg/kg | | 8260B | 08/05/15 | 26 |
| Chloromethane | U | 0.0098 | 0.072 | mg/kg | | 8260B | 08/05/15 | 26 |
| 2-Chlorotoluene | U | 0.0078 | 0.029 | mg/kg | | 8260B | 08/05/15 | 26 |
| 4-Chlorotoluene | U | 0.0062 | 0.029 | mg/kg | | 8260B | 08/05/15 | 26 |
| 1,2-Dibromo-3-Chloropropane | U | 0.027 | 0.14 | mg/kg | | 8260B | 08/05/15 | 26 |
| 1,2-Dibromoethane | U | 0.0089 | 0.029 | mg/kg | | 8260B | 08/05/15 | 26 |
| Dibromomethane | U | 0.0099 | 0.029 | mg/kg | | 8260B | 08/05/15 | 26 |
| 1,2-Dichlorobenzene | U | 0.0079 | 0.029 | mg/kg | | 8260B | 08/05/15 | 26 |
| 1,3-Dichlorobenzene | U | 0.0062 | 0.029 | mg/kg | | 8260B | 08/05/15 | 26 |
| 1,4-Dichlorobenzene | U | 0.0059 | 0.029 | mg/kg | | 8260B | 08/05/15 | 26 |

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REPORT OF ANALYSIS

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Boise, ID 83709

August 11,2015

ESC Sample # : L779930-15

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : DU 3 S-3

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/30/15 16:00

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | U | 0.018 | 0.14 | mg/kg | | 8260B | 08/05/15 | 26 |
| 1,1-Dichloroethane | U | 0.0052 | 0.029 | mg/kg | | 8260B | 08/05/15 | 26 |
| 1,2-Dichloroethane | U | 0.0069 | 0.029 | mg/kg | | 8260B | 08/05/15 | 26 |
| 1,1-Dichloroethene | U | 0.0079 | 0.029 | mg/kg | | 8260B | 08/05/15 | 26 |
| cis-1,2-Dichloroethene | U | 0.0061 | 0.029 | mg/kg | | 8260B | 08/05/15 | 26 |
| trans-1,2-Dichloroethene | U | 0.0069 | 0.029 | mg/kg | | 8260B | 08/05/15 | 26 |
| 1,2-Dichloropropane | U | 0.0093 | 0.029 | mg/kg | | 8260B | 08/05/15 | 26 |
| 1,1-Dichloropropene | U | 0.0082 | 0.029 | mg/kg | | 8260B | 08/05/15 | 26 |
| 1,3-Dichloropropane | U | 0.0054 | 0.029 | mg/kg | | 8260B | 08/05/15 | 26 |
| cis-1,3-Dichloropropene | U | 0.0068 | 0.029 | mg/kg | | 8260B | 08/05/15 | 26 |
| trans-1,3-Dichloropropene | U | 0.0069 | 0.029 | mg/kg | | 8260B | 08/05/15 | 26 |
| 2,2-Dichloropropane | U | 0.0072 | 0.029 | mg/kg | | 8260B | 08/05/15 | 26 |
| Di-isopropyl ether | U | 0.0064 | 0.029 | mg/kg | | 8260B | 08/05/15 | 26 |
| Ethylbenzene | U | 0.0077 | 0.029 | mg/kg | | 8260B | 08/05/15 | 26 |
| Hexachloro-1,3-butadiene | U | 0.0089 | 0.029 | mg/kg | | 8260B | 08/05/15 | 26 |
| Isopropylbenzene | U | 0.0063 | 0.029 | mg/kg | | 8260B | 08/05/15 | 26 |
| p-Isopropyltoluene | U | 0.0053 | 0.029 | mg/kg | | 8260B | 08/05/15 | 26 |
| 2-Butanone (MEK) | U | 0.12 | 0.29 | mg/kg | | 8260B | 08/05/15 | 26 |
| Methylene Chloride | U | 0.026 | 0.14 | mg/kg | | 8260B | 08/05/15 | 26 |
| 4-Methyl-2-pentanone (MIBK) | U | 0.049 | 0.29 | mg/kg | | 8260B | 08/05/15 | 26 |
| Methyl tert-butyl ether | U | 0.0055 | 0.029 | mg/kg | | 8260B | 08/05/15 | 26 |
| Naphthalene | U | 0.026 | 0.14 | mg/kg | | 8260B | 08/05/15 | 26 |
| n-Propylbenzene | U | 0.0054 | 0.029 | mg/kg | | 8260B | 08/05/15 | 26 |
| Styrene | U | 0.0061 | 0.029 | mg/kg | | 8260B | 08/05/15 | 26 |
| 1,1,1,2-Tetrachloroethane | U | 0.0069 | 0.029 | mg/kg | | 8260B | 08/05/15 | 26 |
| 1,1,2,2-Tetrachloroethane | U | 0.0095 | 0.029 | mg/kg | | 8260B | 08/05/15 | 26 |
| 1,1,2-Trichlorotrifluoroethane | U | 0.0095 | 0.029 | mg/kg | | 8260B | 08/05/15 | 26 |
| Tetrachloroethene | U | 0.0072 | 0.029 | mg/kg | | 8260B | 08/05/15 | 26 |
| Toluene | U | 0.011 | 0.14 | mg/kg | | 8260B | 08/05/15 | 26 |
| 1,2,3-Trichlorobenzene | U | 0.0080 | 0.029 | mg/kg | J4 | 8260B | 08/05/15 | 26 |
| 1,2,4-Trichlorobenzene | U | 0.010 | 0.029 | mg/kg | | 8260B | 08/05/15 | 26 |
| 1,1,1-Trichloroethane | U | 0.0074 | 0.029 | mg/kg | | 8260B | 08/05/15 | 26 |
| 1,1,2-Trichloroethane | U | 0.0072 | 0.029 | mg/kg | | 8260B | 08/05/15 | 26 |
| Trichloroethene | U | 0.0072 | 0.029 | mg/kg | | 8260B | 08/05/15 | 26 |
| Trichlorofluoromethane | U | 0.0099 | 0.14 | mg/kg | | 8260B | 08/05/15 | 26 |
| 1,2,3-Trichloropropane | U | 0.019 | 0.072 | mg/kg | | 8260B | 08/05/15 | 26 |
| 1,2,4-Trimethylbenzene | U | 0.0055 | 0.029 | mg/kg | | 8260B | 08/05/15 | 26 |
| 1,2,3-Trimethylbenzene | U | 0.0075 | 0.029 | mg/kg | | 8260B | 08/05/15 | 26 |
| 1,3,5-Trimethylbenzene | U | 0.0069 | 0.029 | mg/kg | | 8260B | 08/05/15 | 26 |
| Vinyl chloride | U | 0.0076 | 0.029 | mg/kg | | 8260B | 08/05/15 | 26 |
| Xylenes, Total | U | 0.018 | 0.087 | mg/kg | | 8260B | 08/05/15 | 26 |
| Surrogate Recovery | | | | | | | | |
| Toluene-d8 | 107. | | | % Rec. | | 8260B | 08/05/15 | 1 |

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REPORT OF ANALYSIS

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Boise, ID 83709

August 11,2015

ESC Sample # : L779930-15

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : DU 3 S-3

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/30/15 16:00

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Dibromofluoromethane | 95.5 | | | % Rec. | | 8260B | 08/05/15 | 1 |
| 4-Bromofluorobenzene | 112. | | | % Rec. | | 8260B | 08/05/15 | 1 |
| Polynuclear Aromatic Hydrocarbons | | | | | | | | |
| Anthracene | 0.11 | 0.0060 | 0.067 | mg/kg | | 8270C-SI | 08/10/15 | 10 |
| Acenaphthene | 0.033 | 0.0060 | 0.067 | mg/kg | J | 8270C-SI | 08/10/15 | 10 |
| Acenaphthylene | U | 0.0060 | 0.067 | mg/kg | | 8270C-SI | 08/10/15 | 10 |
| Benzo(a)anthracene | 1.1 | 0.0060 | 0.067 | mg/kg | | 8270C-SI | 08/10/15 | 10 |
| Benzo(a)pyrene | 1.4 | 0.0060 | 0.067 | mg/kg | | 8270C-SI | 08/10/15 | 10 |
| Benzo(b)fluoranthene | 1.9 | 0.0060 | 0.067 | mg/kg | | 8270C-SI | 08/10/15 | 10 |
| Benzo(g,h,i)perylene | 1.2 | 0.0060 | 0.067 | mg/kg | | 8270C-SI | 08/10/15 | 10 |
| Benzo(k)fluoranthene | 0.56 | 0.0060 | 0.067 | mg/kg | | 8270C-SI | 08/10/15 | 10 |
| Chrysene | 1.3 | 0.0060 | 0.067 | mg/kg | | 8270C-SI | 08/10/15 | 10 |
| Dibenz(a,h)anthracene | 0.30 | 0.0060 | 0.067 | mg/kg | | 8270C-SI | 08/10/15 | 10 |
| Fluoranthene | 1.7 | 0.0060 | 0.067 | mg/kg | | 8270C-SI | 08/10/15 | 10 |
| Fluorene | 0.023 | 0.0060 | 0.067 | mg/kg | J | 8270C-SI | 08/10/15 | 10 |
| Indeno(1,2,3-cd)pyrene | 0.90 | 0.0060 | 0.067 | mg/kg | | 8270C-SI | 08/10/15 | 10 |
| Naphthalene | 0.13 | 0.020 | 0.22 | mg/kg | J | 8270C-SI | 08/10/15 | 10 |
| Phenanthrene | 0.51 | 0.0060 | 0.067 | mg/kg | | 8270C-SI | 08/10/15 | 10 |
| Pyrene | 1.7 | 0.0060 | 0.067 | mg/kg | | 8270C-SI | 08/10/15 | 10 |
| 1-Methylnaphthalene | 0.024 | 0.020 | 0.22 | mg/kg | J | 8270C-SI | 08/10/15 | 10 |
| 2-Methylnaphthalene | 0.039 | 0.020 | 0.22 | mg/kg | J | 8270C-SI | 08/10/15 | 10 |
| 2-Chloronaphthalene | U | 0.020 | 0.22 | mg/kg | | 8270C-SI | 08/10/15 | 10 |
| Surrogate Recovery | | | | | | | | |
| Nitrobenzene-d5 | 81.6 | | | % Rec. | | 8270C-SI | 08/10/15 | 10 |
| 2-Fluorobiphenyl | 77.0 | | | % Rec. | | 8270C-SI | 08/10/15 | 10 |
| p-Terphenyl-d14 | 74.1 | | | % Rec. | | 8270C-SI | 08/10/15 | 10 |

Results listed are dry weight basis.
U = ND (Not Detected)
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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11, 2015

ESC Sample # : L779930-16

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : DU 3 S-4

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/30/15 16:10

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Total Solids | 90.7 | 0.0333 | | % | | 2540 G-2 | 08/02/15 | 1 |
| Mercury | 1.0 | 0.0056 | 0.044 | mg/kg | | 7471A | 08/07/15 | 2 |
| Antimony | 3.5 | 0.75 | 2.2 | mg/kg | | 6010B | 08/07/15 | 1 |
| Arsenic | 11. | 0.65 | 2.2 | mg/kg | | 6010B | 08/07/15 | 1 |
| Beryllium | 0.32 | 0.070 | 0.22 | mg/kg | | 6010B | 08/07/15 | 1 |
| Cadmium | 0.76 | 0.070 | 0.55 | mg/kg | | 6010B | 08/07/15 | 1 |
| Chromium | 10. | 0.14 | 1.1 | mg/kg | | 6010B | 08/07/15 | 1 |
| Copper | 510 | 0.53 | 2.2 | mg/kg | | 6010B | 08/07/15 | 1 |
| Lead | 220 | 0.19 | 0.55 | mg/kg | | 6010B | 08/07/15 | 1 |
| Nickel | 10. | 0.49 | 2.2 | mg/kg | | 6010B | 08/07/15 | 1 |
| Selenium | U | 0.74 | 2.2 | mg/kg | | 6010B | 08/07/15 | 1 |
| Silver | U | 0.28 | 1.1 | mg/kg | | 6010B | 08/07/15 | 1 |
| Thallium | U | 0.65 | 2.2 | mg/kg | | 6010B | 08/07/15 | 1 |
| Zinc | 220 | 0.59 | 5.5 | mg/kg | | 6010B | 08/07/15 | 1 |
| Volatile Organics | | | | | | | | |
| Acetone | U | 0.26 | 1.4 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| Acrylonitrile | U | 0.046 | 0.28 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| Benzene | U | 0.0069 | 0.028 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| Bromobenzene | U | 0.0072 | 0.028 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| Bromodichloromethane | U | 0.0065 | 0.028 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| Bromoform | U | 0.011 | 0.028 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| Bromomethane | U | 0.034 | 0.14 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| n-Butylbenzene | U | 0.0066 | 0.028 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| sec-Butylbenzene | U | 0.0051 | 0.028 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| tert-Butylbenzene | U | 0.0052 | 0.028 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| Carbon tetrachloride | U | 0.0084 | 0.028 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| Chlorobenzene | U | 0.0054 | 0.028 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| Chlorodibromomethane | U | 0.0095 | 0.028 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| Chloroethane | U | 0.024 | 0.14 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| 2-Chloroethyl vinyl ether | U | 0.060 | 1.4 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| Chloroform | U | 0.0058 | 0.14 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| Chloromethane | U | 0.0096 | 0.070 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| 2-Chlorotoluene | U | 0.0077 | 0.028 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| 4-Chlorotoluene | U | 0.0061 | 0.028 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| 1,2-Dibromo-3-Chloropropane | U | 0.027 | 0.14 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| 1,2-Dibromoethane | U | 0.0087 | 0.028 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| Dibromomethane | U | 0.0097 | 0.028 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| 1,2-Dichlorobenzene | U | 0.0078 | 0.028 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| 1,3-Dichlorobenzene | U | 0.0061 | 0.028 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| 1,4-Dichlorobenzene | U | 0.0058 | 0.028 | mg/kg | | 8260B | 08/05/15 | 25.5 |

Results listed are dry weight basis.
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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11, 2015

ESC Sample # : L779930-16

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : DU 3 S-4

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/30/15 16:10

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | U | 0.018 | 0.14 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| 1,1-Dichloroethane | U | 0.0051 | 0.028 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| 1,2-Dichloroethane | U | 0.0068 | 0.028 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| 1,1-Dichloroethene | U | 0.0077 | 0.028 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| cis-1,2-Dichloroethene | U | 0.0060 | 0.028 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| trans-1,2-Dichloroethene | U | 0.0067 | 0.028 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| 1,2-Dichloropropane | U | 0.0091 | 0.028 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| 1,1-Dichloropropene | U | 0.0081 | 0.028 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| 1,3-Dichloropropane | U | 0.0053 | 0.028 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| cis-1,3-Dichloropropene | U | 0.0067 | 0.028 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| trans-1,3-Dichloropropene | U | 0.0068 | 0.028 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| 2,2-Dichloropropane | U | 0.0071 | 0.028 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| Di-isopropyl ether | U | 0.0063 | 0.028 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| Ethylbenzene | U | 0.0076 | 0.028 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| Hexachloro-1,3-butadiene | U | 0.0087 | 0.028 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| Isopropylbenzene | U | 0.0062 | 0.028 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| p-Isopropyltoluene | U | 0.0052 | 0.028 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| 2-Butanone (MEK) | U | 0.12 | 0.28 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| Methylene Chloride | U | 0.026 | 0.14 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| 4-Methyl-2-pentanone (MIBK) | U | 0.048 | 0.28 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| Methyl tert-butyl ether | U | 0.0054 | 0.028 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| Naphthalene | U | 0.026 | 0.14 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| n-Propylbenzene | U | 0.0052 | 0.028 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| Styrene | U | 0.0060 | 0.028 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| 1,1,1,2-Tetrachloroethane | U | 0.0067 | 0.028 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| 1,1,2,2-Tetrachloroethane | U | 0.0093 | 0.028 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| 1,1,2-Trichlorotrifluoroethane | U | 0.0093 | 0.028 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| Tetrachloroethene | U | 0.0070 | 0.028 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| Toluene | U | 0.011 | 0.14 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| 1,2,3-Trichlorobenzene | U | 0.0078 | 0.028 | mg/kg | J4 | 8260B | 08/05/15 | 25.5 |
| 1,2,4-Trichlorobenzene | U | 0.0099 | 0.028 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| 1,1,1-Trichloroethane | U | 0.0073 | 0.028 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| 1,1,2-Trichloroethane | U | 0.0071 | 0.028 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| Trichloroethene | U | 0.0071 | 0.028 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| Trichlorofluoromethane | U | 0.0097 | 0.14 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| 1,2,3-Trichloropropane | U | 0.019 | 0.070 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| 1,2,4-Trimethylbenzene | U | 0.0054 | 0.028 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| 1,2,3-Trimethylbenzene | U | 0.0073 | 0.028 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| 1,3,5-Trimethylbenzene | U | 0.0068 | 0.028 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| Vinyl chloride | U | 0.0074 | 0.028 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| Xylenes, Total | U | 0.018 | 0.084 | mg/kg | | 8260B | 08/05/15 | 25.5 |
| Surrogate Recovery | | | | | | | | |
| Toluene-d8 | 105. | | | % Rec. | | 8260B | 08/05/15 | 1 |

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Tax I.D. 62-0814289

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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11, 2015

ESC Sample # : L779930-16

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : DU 3 S-4

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/30/15 16:10

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Dibromofluoromethane | 94.5 | | | % Rec. | | 8260B | 08/05/15 | 1 |
| 4-Bromofluorobenzene | 112. | | | % Rec. | | 8260B | 08/05/15 | 1 |
| Polynuclear Aromatic Hydrocarbons | | | | | | | | |
| Anthracene | 0.15 | 0.0060 | 0.066 | mg/kg | | 8270C-SI | 08/10/15 | 10 |
| Acenaphthene | 0.041 | 0.0060 | 0.066 | mg/kg | J | 8270C-SI | 08/10/15 | 10 |
| Acenaphthylene | U | 0.0060 | 0.066 | mg/kg | | 8270C-SI | 08/10/15 | 10 |
| Benzo(a)anthracene | 1.3 | 0.0060 | 0.066 | mg/kg | | 8270C-SI | 08/10/15 | 10 |
| Benzo(a)pyrene | 1.6 | 0.0060 | 0.066 | mg/kg | | 8270C-SI | 08/10/15 | 10 |
| Benzo(b)fluoranthene | 2.2 | 0.0060 | 0.066 | mg/kg | | 8270C-SI | 08/10/15 | 10 |
| Benzo(g,h,i)perylene | 1.3 | 0.0060 | 0.066 | mg/kg | | 8270C-SI | 08/10/15 | 10 |
| Benzo(k)fluoranthene | 0.62 | 0.0060 | 0.066 | mg/kg | | 8270C-SI | 08/10/15 | 10 |
| Chrysene | 1.5 | 0.0060 | 0.066 | mg/kg | | 8270C-SI | 08/10/15 | 10 |
| Dibenz(a,h)anthracene | 0.32 | 0.0060 | 0.066 | mg/kg | | 8270C-SI | 08/10/15 | 10 |
| Fluoranthene | 2.1 | 0.0060 | 0.066 | mg/kg | | 8270C-SI | 08/10/15 | 10 |
| Fluorene | 0.036 | 0.0060 | 0.066 | mg/kg | J | 8270C-SI | 08/10/15 | 10 |
| Indeno(1,2,3-cd)pyrene | 1.0 | 0.0060 | 0.066 | mg/kg | | 8270C-SI | 08/10/15 | 10 |
| Naphthalene | 0.040 | 0.020 | 0.22 | mg/kg | J | 8270C-SI | 08/10/15 | 10 |
| Phenanthrene | 0.73 | 0.0060 | 0.066 | mg/kg | | 8270C-SI | 08/10/15 | 10 |
| Pyrene | 2.1 | 0.0060 | 0.066 | mg/kg | | 8270C-SI | 08/10/15 | 10 |
| 1-Methylnaphthalene | 0.024 | 0.020 | 0.22 | mg/kg | J | 8270C-SI | 08/10/15 | 10 |
| 2-Methylnaphthalene | 0.029 | 0.020 | 0.22 | mg/kg | J | 8270C-SI | 08/10/15 | 10 |
| 2-Chloronaphthalene | U | 0.020 | 0.22 | mg/kg | | 8270C-SI | 08/10/15 | 10 |
| Surrogate Recovery | | | | | | | | |
| Nitrobenzene-d5 | 76.3 | | | % Rec. | | 8270C-SI | 08/10/15 | 10 |
| 2-Fluorobiphenyl | 76.5 | | | % Rec. | | 8270C-SI | 08/10/15 | 10 |
| p-Terphenyl-d14 | 73.0 | | | % Rec. | | 8270C-SI | 08/10/15 | 10 |

Results listed are dry weight basis.
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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-17

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : TRIP BLANK

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 00:00

| Parameter | Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics | | | | | | | | |
| Acetone | U | 0.010 | 0.050 | mg/l | | 8260B | 08/02/15 | 1 |
| Acrolein | U | 0.0089 | 0.050 | mg/l | | 8260B | 08/02/15 | 1 |
| Acrylonitrile | U | 0.0019 | 0.010 | mg/l | | 8260B | 08/02/15 | 1 |
| Benzene | U | 0.00033 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Bromobenzene | U | 0.00035 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Bromodichloromethane | U | 0.00038 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Bromoform | U | 0.00047 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Bromomethane | U | 0.00087 | 0.0050 | mg/l | | 8260B | 08/02/15 | 1 |
| n-Butylbenzene | U | 0.00036 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| sec-Butylbenzene | U | 0.00036 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| tert-Butylbenzene | U | 0.00040 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Carbon tetrachloride | U | 0.00038 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Chlorobenzene | U | 0.00035 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Chlorodibromomethane | U | 0.00033 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Chloroethane | U | 0.00045 | 0.0050 | mg/l | | 8260B | 08/02/15 | 1 |
| 2-Chloroethyl vinyl ether | U | 0.0030 | 0.050 | mg/l | J4 | 8260B | 08/02/15 | 1 |
| Chloroform | U | 0.00032 | 0.0050 | mg/l | | 8260B | 08/02/15 | 1 |
| Chloromethane | U | 0.00028 | 0.0025 | mg/l | | 8260B | 08/02/15 | 1 |
| 2-Chlorotoluene | U | 0.00038 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 4-Chlorotoluene | U | 0.00035 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,2-Dibromo-3-Chloropropane | U | 0.0013 | 0.0050 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,2-Dibromoethane | U | 0.00038 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Dibromomethane | U | 0.00035 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,2-Dichlorobenzene | U | 0.00035 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,3-Dichlorobenzene | U | 0.00022 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,4-Dichlorobenzene | U | 0.00027 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Dichlorodifluoromethane | U | 0.00055 | 0.0050 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,1-Dichloroethane | U | 0.00026 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,2-Dichloroethane | U | 0.00036 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,1-Dichloroethene | U | 0.00040 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| cis-1,2-Dichloroethene | U | 0.00026 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| trans-1,2-Dichloroethene | U | 0.00040 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,2-Dichloropropane | U | 0.00031 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,1-Dichloropropene | U | 0.00035 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,3-Dichloropropane | U | 0.00037 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| cis-1,3-Dichloropropene | U | 0.00042 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| trans-1,3-Dichloropropene | U | 0.00042 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 2,2-Dichloropropane | U | 0.00032 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Di-isopropyl ether | U | 0.00032 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Ethylbenzene | U | 0.00038 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Hexachloro-1,3-butadiene | U | 0.00026 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Isopropylbenzene | U | 0.00033 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |

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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-17

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : TRIP BLANK

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 00:00

| Parameter | Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| p-Isopropyltoluene | U | 0.00035 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 2-Butanone (MEK) | U | 0.0039 | 0.010 | mg/l | | 8260B | 08/02/15 | 1 |
| Methylene Chloride | U | 0.0010 | 0.0050 | mg/l | | 8260B | 08/02/15 | 1 |
| 4-Methyl-2-pentanone (MIBK) | U | 0.0021 | 0.010 | mg/l | | 8260B | 08/02/15 | 1 |
| Methyl tert-butyl ether | U | 0.00037 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Naphthalene | U | 0.0010 | 0.0050 | mg/l | | 8260B | 08/02/15 | 1 |
| n-Propylbenzene | U | 0.00035 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Styrene | U | 0.00031 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,1,1,2-Tetrachloroethane | U | 0.00038 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,1,2,2-Tetrachloroethane | U | 0.00013 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,1,2-Trichlorotrifluoroethane | U | 0.00030 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Tetrachloroethene | U | 0.00037 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Toluene | U | 0.00078 | 0.0050 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,2,3-Trichlorobenzene | U | 0.00023 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,2,4-Trichlorobenzene | U | 0.00036 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,1,1-Trichloroethane | U | 0.00032 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,1,2-Trichloroethane | U | 0.00038 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Trichloroethene | U | 0.00040 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Trichlorofluoromethane | U | 0.0012 | 0.0050 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,2,3-Trichloropropane | U | 0.00081 | 0.0025 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,2,4-Trimethylbenzene | U | 0.00037 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,2,3-Trimethylbenzene | U | 0.00032 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,3,5-Trimethylbenzene | U | 0.00039 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Vinyl chloride | U | 0.00026 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Xylenes, Total | U | 0.0011 | 0.0030 | mg/l | | 8260B | 08/02/15 | 1 |
| Surrogate Recovery | | | | | | | | |
| Toluene-d8 | 97.6 | | | % Rec. | | 8260B | 08/02/15 | 1 |
| Dibromofluoromethane | 91.4 | | | % Rec. | | 8260B | 08/02/15 | 1 |
| 4-Bromofluorobenzene | 94.8 | | | % Rec. | | 8260B | 08/02/15 | 1 |

U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
Note:
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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-18

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : B-7

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 10:10

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Total Solids | 84.4 | 0.0333 | | % | | 2540 G-2 | 08/02/15 | 1 |
| Mercury | 0.025 | 0.0028 | 0.024 | mg/kg | | 7471A | 08/07/15 | 1 |
| Antimony | U | 0.75 | 2.4 | mg/kg | | 6010B | 08/07/15 | 1 |
| Arsenic | 12. | 0.65 | 2.4 | mg/kg | | 6010B | 08/07/15 | 1 |
| Beryllium | 0.38 | 0.070 | 0.24 | mg/kg | | 6010B | 08/07/15 | 1 |
| Cadmium | 0.083 | 0.070 | 0.59 | mg/kg | J | 6010B | 08/07/15 | 1 |
| Chromium | 5.0 | 0.14 | 1.2 | mg/kg | | 6010B | 08/07/15 | 1 |
| Copper | 5.1 | 0.53 | 2.4 | mg/kg | | 6010B | 08/07/15 | 1 |
| Lead | 7.3 | 0.19 | 0.59 | mg/kg | | 6010B | 08/07/15 | 1 |
| Nickel | 3.9 | 0.49 | 2.4 | mg/kg | | 6010B | 08/07/15 | 1 |
| Selenium | U | 0.74 | 2.4 | mg/kg | | 6010B | 08/07/15 | 1 |
| Silver | U | 0.28 | 1.2 | mg/kg | | 6010B | 08/07/15 | 1 |
| Thallium | U | 0.65 | 2.4 | mg/kg | | 6010B | 08/07/15 | 1 |
| Zinc | 31. | 0.59 | 5.9 | mg/kg | | 6010B | 08/07/15 | 1 |
| Volatile Organics | | | | | | | | |
| Acetone | 0.047 | 0.010 | 0.059 | mg/kg | J | 8260B | 08/05/15 | 1 |
| Acrylonitrile | U | 0.0018 | 0.012 | mg/kg | | 8260B | 08/05/15 | 1 |
| Benzene | 0.0021 | 0.00027 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| Bromobenzene | U | 0.00028 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| Bromodichloromethane | U | 0.00025 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| Bromoform | U | 0.00042 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| Bromomethane | U | 0.0013 | 0.0059 | mg/kg | | 8260B | 08/05/15 | 1 |
| n-Butylbenzene | U | 0.00026 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| sec-Butylbenzene | U | 0.00020 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| tert-Butylbenzene | U | 0.00021 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| Carbon tetrachloride | U | 0.00033 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| Chlorobenzene | U | 0.00021 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| Chlorodibromomethane | U | 0.00037 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| Chloroethane | U | 0.00095 | 0.0059 | mg/kg | | 8260B | 08/05/15 | 1 |
| 2-Chloroethyl vinyl ether | U | 0.0023 | 0.059 | mg/kg | | 8260B | 08/05/15 | 1 |
| Chloroform | U | 0.00023 | 0.0059 | mg/kg | | 8260B | 08/05/15 | 1 |
| Chloromethane | U | 0.00038 | 0.0030 | mg/kg | | 8260B | 08/05/15 | 1 |
| 2-Chlorotoluene | U | 0.00030 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| 4-Chlorotoluene | U | 0.00024 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,2-Dibromo-3-Chloropropane | U | 0.0010 | 0.0059 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,2-Dibromoethane | U | 0.00034 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| Dibromomethane | U | 0.00038 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,2-Dichlorobenzene | U | 0.00030 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,3-Dichlorobenzene | U | 0.00024 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,4-Dichlorobenzene | U | 0.00023 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |

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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-18

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : B-7

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 10:10

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | U | 0.00071 | 0.0059 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,1-Dichloroethane | U | 0.00020 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,2-Dichloroethane | U | 0.00026 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,1-Dichloroethene | U | 0.00030 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| cis-1,2-Dichloroethene | U | 0.00024 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| trans-1,2-Dichloroethene | U | 0.00026 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,2-Dichloropropane | U | 0.00036 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,1-Dichloropropene | U | 0.00032 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,3-Dichloropropane | U | 0.00021 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| cis-1,3-Dichloropropene | U | 0.00026 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| trans-1,3-Dichloropropene | U | 0.00027 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| 2,2-Dichloropropane | U | 0.00028 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| Di-isopropyl ether | U | 0.00025 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| Ethylbenzene | U | 0.00030 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| Hexachloro-1,3-butadiene | U | 0.00034 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| Isopropylbenzene | U | 0.00024 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| p-Isopropyltoluene | U | 0.00020 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| 2-Butanone (MEK) | 0.0089 | 0.0047 | 0.012 | mg/kg | J | 8260B | 08/05/15 | 1 |
| Methylene Chloride | U | 0.0010 | 0.0059 | mg/kg | | 8260B | 08/05/15 | 1 |
| 4-Methyl-2-pentanone (MIBK) | U | 0.0019 | 0.012 | mg/kg | | 8260B | 08/05/15 | 1 |
| Methyl tert-butyl ether | U | 0.00021 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| Naphthalene | U | 0.0010 | 0.0059 | mg/kg | | 8260B | 08/05/15 | 1 |
| n-Propylbenzene | U | 0.00021 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| Styrene | U | 0.00023 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,1,1,2-Tetrachloroethane | U | 0.00026 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,1,2,2-Tetrachloroethane | U | 0.00036 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,1,2-Trichlorotrifluoroethane | U | 0.00036 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| Tetrachloroethene | U | 0.00028 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| Toluene | U | 0.00043 | 0.0059 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,2,3-Trichlorobenzene | U | 0.00031 | 0.0012 | mg/kg | J4 | 8260B | 08/05/15 | 1 |
| 1,2,4-Trichlorobenzene | U | 0.00039 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,1,1-Trichloroethane | U | 0.00029 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,1,2-Trichloroethane | U | 0.00028 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| Trichloroethene | U | 0.00028 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| Trichlorofluoromethane | U | 0.00038 | 0.0059 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,2,3-Trichloropropane | U | 0.00074 | 0.0030 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,2,4-Trimethylbenzene | U | 0.00021 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,2,3-Trimethylbenzene | U | 0.00029 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,3,5-Trimethylbenzene | U | 0.00027 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| Vinyl chloride | U | 0.00029 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| Xylenes, Total | U | 0.00070 | 0.0036 | mg/kg | | 8260B | 08/05/15 | 1 |
| Surrogate Recovery | | | | | | | | |
| Toluene-d8 | 106. | | | % Rec. | | 8260B | 08/05/15 | 1 |

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Tax I.D. 62-0814289

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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-18

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : B-7

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 10:10

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Dibromofluoromethane | 105. | | | % Rec. | | 8260B | 08/05/15 | 1 |
| 4-Bromofluorobenzene | 88.9 | | | % Rec. | | 8260B | 08/05/15 | 1 |
| Polynuclear Aromatic Hydrocarbons | | | | | | | | |
| Anthracene | U | 0.00060 | 0.0071 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| Acenaphthene | U | 0.00060 | 0.0071 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| Acenaphthylene | U | 0.00060 | 0.0071 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| Benzo(a)anthracene | 0.00091 | 0.00060 | 0.0071 | mg/kg | J | 8270C-SI | 08/09/15 | 1 |
| Benzo(a)pyrene | 0.00075 | 0.00060 | 0.0071 | mg/kg | J | 8270C-SI | 08/09/15 | 1 |
| Benzo(b)fluoranthene | 0.0010 | 0.00060 | 0.0071 | mg/kg | J | 8270C-SI | 08/09/15 | 1 |
| Benzo(g,h,i)perylene | U | 0.00060 | 0.0071 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| Benzo(k)fluoranthene | U | 0.00060 | 0.0071 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| Chrysene | U | 0.00060 | 0.0071 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| Dibenz(a,h)anthracene | U | 0.00060 | 0.0071 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| Fluoranthene | 0.00079 | 0.00060 | 0.0071 | mg/kg | J | 8270C-SI | 08/09/15 | 1 |
| Fluorene | U | 0.00060 | 0.0071 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| Indeno(1,2,3-cd)pyrene | U | 0.00060 | 0.0071 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| Naphthalene | U | 0.0020 | 0.024 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| Phenanthrene | U | 0.00060 | 0.0071 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| Pyrene | 0.0010 | 0.00060 | 0.0071 | mg/kg | J | 8270C-SI | 08/09/15 | 1 |
| 1-Methylnaphthalene | U | 0.0020 | 0.024 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| 2-Methylnaphthalene | U | 0.0020 | 0.024 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| 2-Chloronaphthalene | U | 0.0020 | 0.024 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| Surrogate Recovery | | | | | | | | |
| Nitrobenzene-d5 | 54.2 | | | % Rec. | | 8270C-SI | 08/09/15 | 1 |
| 2-Fluorobiphenyl | 53.8 | | | % Rec. | | 8270C-SI | 08/09/15 | 1 |
| p-Terphenyl-d14 | 46.5 | | | % Rec. | | 8270C-SI | 08/09/15 | 1 |

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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-19

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : B-8

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 10:20

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Total Solids | 90.6 | 0.0333 | | % | | 2540 G-2 | 08/02/15 | 1 |
| Mercury | 0.040 | 0.0028 | 0.022 | mg/kg | | 7471A | 08/07/15 | 1 |
| Antimony | U | 0.75 | 2.2 | mg/kg | | 6010B | 08/07/15 | 1 |
| Arsenic | 7.3 | 0.65 | 2.2 | mg/kg | | 6010B | 08/07/15 | 1 |
| Beryllium | 0.23 | 0.070 | 0.22 | mg/kg | | 6010B | 08/07/15 | 1 |
| Cadmium | U | 0.070 | 0.55 | mg/kg | | 6010B | 08/07/15 | 1 |
| Chromium | 2.8 | 0.14 | 1.1 | mg/kg | | 6010B | 08/07/15 | 1 |
| Copper | 2.0 | 0.53 | 2.2 | mg/kg | J | 6010B | 08/07/15 | 1 |
| Lead | 7.6 | 0.19 | 0.55 | mg/kg | | 6010B | 08/07/15 | 1 |
| Nickel | 2.2 | 0.49 | 2.2 | mg/kg | | 6010B | 08/07/15 | 1 |
| Selenium | U | 0.74 | 2.2 | mg/kg | | 6010B | 08/07/15 | 1 |
| Silver | U | 0.28 | 1.1 | mg/kg | | 6010B | 08/07/15 | 1 |
| Thallium | U | 0.65 | 2.2 | mg/kg | | 6010B | 08/07/15 | 1 |
| Zinc | 19. | 0.59 | 5.5 | mg/kg | | 6010B | 08/07/15 | 1 |
| Volatile Organics | | | | | | | | |
| Acetone | 0.031 | 0.010 | 0.055 | mg/kg | J | 8260B | 08/05/15 | 1 |
| Acrylonitrile | U | 0.0018 | 0.011 | mg/kg | | 8260B | 08/05/15 | 1 |
| Benzene | 0.00068 | 0.00027 | 0.0011 | mg/kg | J | 8260B | 08/05/15 | 1 |
| Bromobenzene | U | 0.00028 | 0.0011 | mg/kg | | 8260B | 08/05/15 | 1 |
| Bromodichloromethane | U | 0.00025 | 0.0011 | mg/kg | | 8260B | 08/05/15 | 1 |
| Bromoform | U | 0.00042 | 0.0011 | mg/kg | | 8260B | 08/05/15 | 1 |
| Bromomethane | U | 0.0013 | 0.0055 | mg/kg | | 8260B | 08/05/15 | 1 |
| n-Butylbenzene | U | 0.00026 | 0.0011 | mg/kg | | 8260B | 08/05/15 | 1 |
| sec-Butylbenzene | U | 0.00020 | 0.0011 | mg/kg | | 8260B | 08/05/15 | 1 |
| tert-Butylbenzene | U | 0.00021 | 0.0011 | mg/kg | | 8260B | 08/05/15 | 1 |
| Carbon tetrachloride | U | 0.00033 | 0.0011 | mg/kg | | 8260B | 08/05/15 | 1 |
| Chlorobenzene | U | 0.00021 | 0.0011 | mg/kg | | 8260B | 08/05/15 | 1 |
| Chlorodibromomethane | U | 0.00037 | 0.0011 | mg/kg | | 8260B | 08/05/15 | 1 |
| Chloroethane | U | 0.00095 | 0.0055 | mg/kg | | 8260B | 08/05/15 | 1 |
| 2-Chloroethyl vinyl ether | U | 0.0023 | 0.055 | mg/kg | | 8260B | 08/05/15 | 1 |
| Chloroform | U | 0.00023 | 0.0055 | mg/kg | | 8260B | 08/05/15 | 1 |
| Chloromethane | U | 0.00038 | 0.0028 | mg/kg | | 8260B | 08/05/15 | 1 |
| 2-Chlorotoluene | U | 0.00030 | 0.0011 | mg/kg | | 8260B | 08/05/15 | 1 |
| 4-Chlorotoluene | U | 0.00024 | 0.0011 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,2-Dibromo-3-Chloropropane | U | 0.0010 | 0.0055 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,2-Dibromoethane | U | 0.00034 | 0.0011 | mg/kg | | 8260B | 08/05/15 | 1 |
| Dibromomethane | U | 0.00038 | 0.0011 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,2-Dichlorobenzene | U | 0.00030 | 0.0011 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,3-Dichlorobenzene | U | 0.00024 | 0.0011 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,4-Dichlorobenzene | U | 0.00023 | 0.0011 | mg/kg | | 8260B | 08/05/15 | 1 |

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-19

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : B-8

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 10:20

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | U | 0.00071 | 0.0055 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,1-Dichloroethane | U | 0.00020 | 0.0011 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,2-Dichloroethane | U | 0.00026 | 0.0011 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,1-Dichloroethene | U | 0.00030 | 0.0011 | mg/kg | | 8260B | 08/05/15 | 1 |
| cis-1,2-Dichloroethene | U | 0.00024 | 0.0011 | mg/kg | | 8260B | 08/05/15 | 1 |
| trans-1,2-Dichloroethene | U | 0.00026 | 0.0011 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,2-Dichloropropane | U | 0.00036 | 0.0011 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,1-Dichloropropene | U | 0.00032 | 0.0011 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,3-Dichloropropane | U | 0.00021 | 0.0011 | mg/kg | | 8260B | 08/05/15 | 1 |
| cis-1,3-Dichloropropene | U | 0.00026 | 0.0011 | mg/kg | | 8260B | 08/05/15 | 1 |
| trans-1,3-Dichloropropene | U | 0.00027 | 0.0011 | mg/kg | | 8260B | 08/05/15 | 1 |
| 2,2-Dichloropropane | U | 0.00028 | 0.0011 | mg/kg | | 8260B | 08/05/15 | 1 |
| Di-isopropyl ether | U | 0.00025 | 0.0011 | mg/kg | | 8260B | 08/05/15 | 1 |
| Ethylbenzene | U | 0.00030 | 0.0011 | mg/kg | | 8260B | 08/05/15 | 1 |
| Hexachloro-1,3-butadiene | U | 0.00034 | 0.0011 | mg/kg | | 8260B | 08/05/15 | 1 |
| Isopropylbenzene | U | 0.00024 | 0.0011 | mg/kg | | 8260B | 08/05/15 | 1 |
| p-Isopropyltoluene | U | 0.00020 | 0.0011 | mg/kg | | 8260B | 08/05/15 | 1 |
| 2-Butanone (MEK) | U | 0.0047 | 0.011 | mg/kg | | 8260B | 08/05/15 | 1 |
| Methylene Chloride | U | 0.0010 | 0.0055 | mg/kg | | 8260B | 08/05/15 | 1 |
| 4-Methyl-2-pentanone (MIBK) | U | 0.0019 | 0.011 | mg/kg | | 8260B | 08/05/15 | 1 |
| Methyl tert-butyl ether | U | 0.00021 | 0.0011 | mg/kg | | 8260B | 08/05/15 | 1 |
| Naphthalene | U | 0.0010 | 0.0055 | mg/kg | | 8260B | 08/05/15 | 1 |
| n-Propylbenzene | U | 0.00021 | 0.0011 | mg/kg | | 8260B | 08/05/15 | 1 |
| Styrene | U | 0.00023 | 0.0011 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,1,1,2-Tetrachloroethane | U | 0.00026 | 0.0011 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,1,2,2-Tetrachloroethane | U | 0.00036 | 0.0011 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,1,2-Trichlorotrifluoroethane | U | 0.00036 | 0.0011 | mg/kg | | 8260B | 08/05/15 | 1 |
| Tetrachloroethene | U | 0.00028 | 0.0011 | mg/kg | | 8260B | 08/05/15 | 1 |
| Toluene | U | 0.00043 | 0.0055 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,2,3-Trichlorobenzene | U | 0.00031 | 0.0011 | mg/kg | J4 | 8260B | 08/05/15 | 1 |
| 1,2,4-Trichlorobenzene | U | 0.00039 | 0.0011 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,1,1-Trichloroethane | U | 0.00029 | 0.0011 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,1,2-Trichloroethane | U | 0.00028 | 0.0011 | mg/kg | | 8260B | 08/05/15 | 1 |
| Trichloroethene | U | 0.00028 | 0.0011 | mg/kg | | 8260B | 08/05/15 | 1 |
| Trichlorofluoromethane | U | 0.00038 | 0.0055 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,2,3-Trichloropropane | U | 0.00074 | 0.0028 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,2,4-Trimethylbenzene | U | 0.00021 | 0.0011 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,2,3-Trimethylbenzene | U | 0.00029 | 0.0011 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,3,5-Trimethylbenzene | U | 0.00027 | 0.0011 | mg/kg | | 8260B | 08/05/15 | 1 |
| Vinyl chloride | U | 0.00029 | 0.0011 | mg/kg | | 8260B | 08/05/15 | 1 |
| Xylenes, Total | U | 0.00070 | 0.0033 | mg/kg | | 8260B | 08/05/15 | 1 |
| Surrogate Recovery | | | | | | | | |
| Toluene-d8 | 105. | | | % Rec. | | 8260B | 08/05/15 | 1 |

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-19

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : B-8

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 10:20

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Dibromofluoromethane | 108. | | | % Rec. | | 8260B | 08/05/15 | 1 |
| 4-Bromofluorobenzene | 88.1 | | | % Rec. | | 8260B | 08/05/15 | 1 |
| Polynuclear Aromatic Hydrocarbons | | | | | | | | |
| Anthracene | 0.0056 | 0.00060 | 0.0066 | mg/kg | J | 8270C-SI | 08/09/15 | 1 |
| Acenaphthene | 0.0015 | 0.00060 | 0.0066 | mg/kg | J | 8270C-SI | 08/09/15 | 1 |
| Acenaphthylene | U | 0.00060 | 0.0066 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| Benzo(a)anthracene | 0.021 | 0.00060 | 0.0066 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| Benzo(a)pyrene | 0.018 | 0.00060 | 0.0066 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| Benzo(b)fluoranthene | 0.020 | 0.00060 | 0.0066 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| Benzo(g,h,i)perylene | 0.011 | 0.00060 | 0.0066 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| Benzo(k)fluoranthene | 0.0068 | 0.00060 | 0.0066 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| Chrysene | 0.022 | 0.00060 | 0.0066 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| Dibenz(a,h)anthracene | 0.0025 | 0.00060 | 0.0066 | mg/kg | J | 8270C-SI | 08/09/15 | 1 |
| Fluoranthene | 0.041 | 0.00060 | 0.0066 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| Fluorene | 0.0016 | 0.00060 | 0.0066 | mg/kg | J | 8270C-SI | 08/09/15 | 1 |
| Indeno(1,2,3-cd)pyrene | 0.0086 | 0.00060 | 0.0066 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| Naphthalene | U | 0.0020 | 0.022 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| Phenanthrene | 0.026 | 0.00060 | 0.0066 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| Pyrene | 0.045 | 0.00060 | 0.0066 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| 1-Methylnaphthalene | U | 0.0020 | 0.022 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| 2-Methylnaphthalene | U | 0.0020 | 0.022 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| 2-Chloronaphthalene | U | 0.0020 | 0.022 | mg/kg | | 8270C-SI | 08/09/15 | 1 |
| Surrogate Recovery | | | | | | | | |
| Nitrobenzene-d5 | 52.9 | | | % Rec. | | 8270C-SI | 08/09/15 | 1 |
| 2-Fluorobiphenyl | 52.8 | | | % Rec. | | 8270C-SI | 08/09/15 | 1 |
| p-Terphenyl-d14 | 43.9 | | | % Rec. | | 8270C-SI | 08/09/15 | 1 |

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# REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-20

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : B-9

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 10:25

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Total Solids | 83.7 | 0.0333 | | % | | 2540 G-2 | 08/02/15 | 1 |
| Mercury | 0.68 | 0.0028 | 0.024 | mg/kg | | 7471A | 08/07/15 | 1 |
| Antimony | U | 0.75 | 2.4 | mg/kg | | 6010B | 08/07/15 | 1 |
| Arsenic | 7.6 | 0.65 | 2.4 | mg/kg | | 6010B | 08/07/15 | 1 |
| Beryllium | 0.46 | 0.070 | 0.24 | mg/kg | | 6010B | 08/07/15 | 1 |
| Cadmium | 0.19 | 0.070 | 0.60 | mg/kg | J | 6010B | 08/07/15 | 1 |
| Chromium | 8.6 | 0.14 | 1.2 | mg/kg | | 6010B | 08/07/15 | 1 |
| Copper | 12. | 0.53 | 2.4 | mg/kg | | 6010B | 08/07/15 | 1 |
| Lead | 130 | 0.19 | 0.60 | mg/kg | | 6010B | 08/07/15 | 1 |
| Nickel | 4.9 | 0.49 | 2.4 | mg/kg | | 6010B | 08/07/15 | 1 |
| Selenium | U | 0.74 | 2.4 | mg/kg | | 6010B | 08/07/15 | 1 |
| Silver | U | 0.28 | 1.2 | mg/kg | | 6010B | 08/07/15 | 1 |
| Thallium | U | 0.65 | 2.4 | mg/kg | | 6010B | 08/07/15 | 1 |
| Zinc | 57. | 0.59 | 6.0 | mg/kg | | 6010B | 08/07/15 | 1 |
| Volatile Organics | | | | | | | | |
| Acetone | 0.068 | 0.010 | 0.060 | mg/kg | | 8260B | 08/05/15 | 1 |
| Acrylonitrile | U | 0.0018 | 0.012 | mg/kg | | 8260B | 08/05/15 | 1 |
| Benzene | 0.0025 | 0.00027 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| Bromobenzene | U | 0.00028 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| Bromodichloromethane | U | 0.00025 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| Bromoform | U | 0.00042 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| Bromomethane | U | 0.0013 | 0.0060 | mg/kg | | 8260B | 08/05/15 | 1 |
| n-Butylbenzene | U | 0.00026 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| sec-Butylbenzene | U | 0.00020 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| tert-Butylbenzene | U | 0.00021 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| Carbon tetrachloride | U | 0.00033 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| Chlorobenzene | U | 0.00021 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| Chlorodibromomethane | U | 0.00037 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| Chloroethane | U | 0.00095 | 0.0060 | mg/kg | | 8260B | 08/05/15 | 1 |
| 2-Chloroethyl vinyl ether | U | 0.0023 | 0.060 | mg/kg | | 8260B | 08/05/15 | 1 |
| Chloroform | U | 0.00023 | 0.0060 | mg/kg | | 8260B | 08/05/15 | 1 |
| Chloromethane | U | 0.00038 | 0.0030 | mg/kg | | 8260B | 08/05/15 | 1 |
| 2-Chlorotoluene | U | 0.00030 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| 4-Chlorotoluene | U | 0.00024 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,2-Dibromo-3-Chloropropane | U | 0.0010 | 0.0060 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,2-Dibromoethane | U | 0.00034 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| Dibromomethane | U | 0.00038 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,2-Dichlorobenzene | U | 0.00030 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,3-Dichlorobenzene | U | 0.00024 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,4-Dichlorobenzene | U | 0.00023 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |

Results listed are dry weight basis.
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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-20

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : B-9

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 10:25

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | U | 0.00071 | 0.0060 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,1-Dichloroethane | U | 0.00020 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,2-Dichloroethane | U | 0.00026 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,1-Dichloroethene | U | 0.00030 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| cis-1,2-Dichloroethene | U | 0.00024 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| trans-1,2-Dichloroethene | U | 0.00026 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,2-Dichloropropane | U | 0.00036 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,1-Dichloropropene | U | 0.00032 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,3-Dichloropropane | U | 0.00021 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| cis-1,3-Dichloropropene | U | 0.00026 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| trans-1,3-Dichloropropene | U | 0.00027 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| 2,2-Dichloropropane | U | 0.00028 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| Di-isopropyl ether | U | 0.00025 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| Ethylbenzene | U | 0.00030 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| Hexachloro-1,3-butadiene | U | 0.00034 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| Isopropylbenzene | U | 0.00024 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| p-Isopropyltoluene | U | 0.00020 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| 2-Butanone (MEK) | 0.0099 | 0.0047 | 0.012 | mg/kg | J | 8260B | 08/05/15 | 1 |
| Methylene Chloride | U | 0.0010 | 0.0060 | mg/kg | | 8260B | 08/05/15 | 1 |
| 4-Methyl-2-pentanone (MIBK) | U | 0.0019 | 0.012 | mg/kg | | 8260B | 08/05/15 | 1 |
| Methyl tert-butyl ether | U | 0.00021 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| Naphthalene | U | 0.0010 | 0.0060 | mg/kg | | 8260B | 08/05/15 | 1 |
| n-Propylbenzene | U | 0.00021 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| Styrene | U | 0.00023 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,1,1,2-Tetrachloroethane | U | 0.00026 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,1,2,2-Tetrachloroethane | U | 0.00036 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,1,2-Trichlorotrifluoroethane | U | 0.00036 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| Tetrachloroethene | 0.0014 | 0.00028 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| Toluene | 0.00088 | 0.00043 | 0.0060 | mg/kg | J | 8260B | 08/05/15 | 1 |
| 1,2,3-Trichlorobenzene | U | 0.00031 | 0.0012 | mg/kg | J4 | 8260B | 08/05/15 | 1 |
| 1,2,4-Trichlorobenzene | U | 0.00039 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,1,1-Trichloroethane | U | 0.00029 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,1,2-Trichloroethane | U | 0.00028 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| Trichloroethene | U | 0.00028 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| Trichlorofluoromethane | U | 0.00038 | 0.0060 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,2,3-Trichloropropane | U | 0.00074 | 0.0030 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,2,4-Trimethylbenzene | U | 0.00021 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,2,3-Trimethylbenzene | U | 0.00029 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,3,5-Trimethylbenzene | U | 0.00027 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| Vinyl chloride | U | 0.00029 | 0.0012 | mg/kg | | 8260B | 08/05/15 | 1 |
| Xylenes, Total | U | 0.00070 | 0.0036 | mg/kg | | 8260B | 08/05/15 | 1 |
| Surrogate Recovery | | | | | | | | |
| Toluene-d8 | 104. | | | % Rec. | | 8260B | 08/05/15 | 1 |

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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-20

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : B-9

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 10:25

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Dibromofluoromethane | 108. | | | % Rec. | | 8260B | 08/05/15 | 1 |
| 4-Bromofluorobenzene | 72.8 | | | % Rec. | | 8260B | 08/05/15 | 1 |
| Polynuclear Aromatic Hydrocarbons | | | | | | | | |
| Anthracene | 0.19 | 0.0030 | 0.036 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Acenaphthene | U | 0.0030 | 0.036 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Acenaphthylene | U | 0.0030 | 0.036 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Benzo(a)anthracene | 1.0 | 0.0030 | 0.036 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Benzo(a)pyrene | 0.91 | 0.0030 | 0.036 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Benzo(b)fluoranthene | 0.80 | 0.0030 | 0.036 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Benzo(g,h,i)perylene | 0.41 | 0.0030 | 0.036 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Benzo(k)fluoranthene | 0.27 | 0.0030 | 0.036 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Chrysene | 1.1 | 0.0030 | 0.036 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Dibenz(a,h)anthracene | 0.13 | 0.0030 | 0.036 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Fluoranthene | 1.3 | 0.0030 | 0.036 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Fluorene | 0.014 | 0.0030 | 0.036 | mg/kg | J | 8270C-SI | 08/10/15 | 5 |
| Indeno(1,2,3-cd)pyrene | 0.38 | 0.0030 | 0.036 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Naphthalene | 0.038 | 0.010 | 0.12 | mg/kg | J | 8270C-SI | 08/10/15 | 5 |
| Phenanthrene | 0.58 | 0.0030 | 0.036 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Pyrene | 2.2 | 0.0030 | 0.036 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| 1-Methylnaphthalene | U | 0.010 | 0.12 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| 2-Methylnaphthalene | 0.014 | 0.010 | 0.12 | mg/kg | J | 8270C-SI | 08/10/15 | 5 |
| 2-Chloronaphthalene | U | 0.010 | 0.12 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Surrogate Recovery | | | | | | | | |
| Nitrobenzene-d5 | 61.6 | | | % Rec. | | 8270C-SI | 08/10/15 | 5 |
| 2-Fluorobiphenyl | 53.3 | | | % Rec. | | 8270C-SI | 08/10/15 | 5 |
| p-Terphenyl-d14 | 47.6 | | | % Rec. | | 8270C-SI | 08/10/15 | 5 |

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
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Est. 1970

REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-21

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : TW-3-1

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 13:30

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Total Solids | 78.6 | 0.0333 | | % | | 2540 G-2 | 08/02/15 | 1 |
| Mercury | 0.081 | 0.0028 | 0.025 | mg/kg | | 7471A | 08/05/15 | 1 |
| Antimony | U | 0.75 | 2.5 | mg/kg | | 6010B | 08/04/15 | 1 |
| Arsenic | 9.0 | 0.65 | 2.5 | mg/kg | | 6010B | 08/04/15 | 1 |
| Beryllium | 0.39 | 0.070 | 0.25 | mg/kg | | 6010B | 08/04/15 | 1 |
| Cadmium | 0.48 | 0.070 | 0.64 | mg/kg | J | 6010B | 08/04/15 | 1 |
| Chromium | 13. | 0.14 | 1.3 | mg/kg | | 6010B | 08/04/15 | 1 |
| Copper | 14. | 0.53 | 2.5 | mg/kg | | 6010B | 08/04/15 | 1 |
| Lead | 43. | 0.19 | 0.64 | mg/kg | | 6010B | 08/04/15 | 1 |
| Nickel | 9.2 | 0.49 | 2.5 | mg/kg | | 6010B | 08/04/15 | 1 |
| Selenium | U | 0.74 | 2.5 | mg/kg | | 6010B | 08/04/15 | 1 |
| Silver | U | 0.28 | 1.3 | mg/kg | | 6010B | 08/04/15 | 1 |
| Thallium | U | 0.65 | 2.5 | mg/kg | | 6010B | 08/04/15 | 1 |
| Zinc | 160 | 0.59 | 6.4 | mg/kg | | 6010B | 08/04/15 | 1 |
| Volatile Organics | | | | | | | | |
| Acetone | 0.050 | 0.010 | 0.064 | mg/kg | J | 8260B | 08/05/15 | 1 |
| Acrylonitrile | U | 0.0018 | 0.013 | mg/kg | J3 | 8260B | 08/05/15 | 1 |
| Benzene | 0.0011 | 0.00027 | 0.0013 | mg/kg | J | 8260B | 08/05/15 | 1 |
| Bromobenzene | U | 0.00028 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| Bromodichloromethane | U | 0.00025 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| Bromoform | U | 0.00042 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| Bromomethane | U | 0.0013 | 0.0064 | mg/kg | | 8260B | 08/05/15 | 1 |
| n-Butylbenzene | U | 0.00026 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| sec-Butylbenzene | U | 0.00020 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| tert-Butylbenzene | U | 0.00021 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| Carbon tetrachloride | U | 0.00033 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| Chlorobenzene | U | 0.00021 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| Chlorodibromomethane | U | 0.00037 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| Chloroethane | U | 0.00095 | 0.0064 | mg/kg | | 8260B | 08/05/15 | 1 |
| 2-Chloroethyl vinyl ether | U | 0.0023 | 0.064 | mg/kg | | 8260B | 08/05/15 | 1 |
| Chloroform | U | 0.00023 | 0.0064 | mg/kg | | 8260B | 08/05/15 | 1 |
| Chloromethane | U | 0.00038 | 0.0032 | mg/kg | | 8260B | 08/05/15 | 1 |
| 2-Chlorotoluene | U | 0.00030 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| 4-Chlorotoluene | U | 0.00024 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,2-Dibromo-3-Chloropropane | U | 0.0010 | 0.0064 | mg/kg | J3 | 8260B | 08/05/15 | 1 |
| 1,2-Dibromoethane | U | 0.00034 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| Dibromomethane | U | 0.00038 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,2-Dichlorobenzene | U | 0.00030 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,3-Dichlorobenzene | U | 0.00024 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,4-Dichlorobenzene | U | 0.00023 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |

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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-21

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : TW-3-1

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 13:30

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | U | 0.00071 | 0.0064 | mg/kg | J3 | 8260B | 08/05/15 | 1 |
| 1,1-Dichloroethane | U | 0.00020 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,2-Dichloroethane | U | 0.00026 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,1-Dichloroethene | U | 0.00030 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| cis-1,2-Dichloroethene | U | 0.00024 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| trans-1,2-Dichloroethene | U | 0.00026 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,2-Dichloropropane | U | 0.00036 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,1-Dichloropropene | U | 0.00032 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,3-Dichloropropane | U | 0.00021 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| cis-1,3-Dichloropropene | U | 0.00026 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| trans-1,3-Dichloropropene | U | 0.00027 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| 2,2-Dichloropropane | U | 0.00028 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| Di-isopropyl ether | U | 0.00025 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| Ethylbenzene | U | 0.00030 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| Hexachloro-1,3-butadiene | U | 0.00034 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| Isopropylbenzene | U | 0.00024 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| p-Isopropyltoluene | U | 0.00020 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| 2-Butanone (MEK) | 0.0083 | 0.0047 | 0.013 | mg/kg | J | 8260B | 08/05/15 | 1 |
| Methylene Chloride | U | 0.0010 | 0.0064 | mg/kg | | 8260B | 08/05/15 | 1 |
| 4-Methyl-2-pentanone (MIBK) | U | 0.0019 | 0.013 | mg/kg | | 8260B | 08/05/15 | 1 |
| Methyl tert-butyl ether | U | 0.00021 | 0.0013 | mg/kg | J4 | 8260B | 08/05/15 | 1 |
| Naphthalene | U | 0.0010 | 0.0064 | mg/kg | | 8260B | 08/05/15 | 1 |
| n-Propylbenzene | U | 0.00021 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| Styrene | U | 0.00023 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,1,1,2-Tetrachloroethane | U | 0.00026 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,1,2,2-Tetrachloroethane | U | 0.00036 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,1,2-Trichlorotrifluoroethane | U | 0.00036 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| Tetrachloroethene | U | 0.00028 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| Toluene | U | 0.00043 | 0.0064 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,2,3-Trichlorobenzene | U | 0.00031 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,2,4-Trichlorobenzene | U | 0.00039 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,1,1-Trichloroethane | U | 0.00029 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,1,2-Trichloroethane | U | 0.00028 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| Trichloroethene | U | 0.00028 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| Trichlorofluoromethane | U | 0.00038 | 0.0064 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,2,3-Trichloropropane | U | 0.00074 | 0.0032 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,2,4-Trimethylbenzene | U | 0.00021 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,2,3-Trimethylbenzene | U | 0.00029 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| 1,3,5-Trimethylbenzene | U | 0.00027 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| Vinyl chloride | U | 0.00029 | 0.0013 | mg/kg | | 8260B | 08/05/15 | 1 |
| Xylenes, Total | U | 0.00070 | 0.0038 | mg/kg | | 8260B | 08/05/15 | 1 |
| Surrogate Recovery | | | | | | | | |
| Toluene-d8 | 104. | | | % Rec. | | 8260B | 08/05/15 | 1 |

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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-21

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : TW-3-1

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 13:30

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Dibromofluoromethane | 102. | | | % Rec. | | 8260B | 08/05/15 | 1 |
| 4-Bromofluorobenzene | 98.3 | | | % Rec. | | 8260B | 08/05/15 | 1 |
| Polynuclear Aromatic Hydrocarbons | | | | | | | | |
| Anthracene | 0.081 | 0.0030 | 0.038 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Acenaphthene | 0.0056 | 0.0030 | 0.038 | mg/kg | J | 8270C-SI | 08/10/15 | 5 |
| Acenaphthylene | 0.13 | 0.0030 | 0.038 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Benzo(a)anthracene | 0.27 | 0.0030 | 0.038 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Benzo(a)pyrene | 0.58 | 0.0030 | 0.038 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Benzo(b)fluoranthene | 0.61 | 0.0030 | 0.038 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Benzo(g,h,i)perylene | 0.64 | 0.0030 | 0.038 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Benzo(k)fluoranthene | 0.22 | 0.0030 | 0.038 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Chrysene | 0.44 | 0.0030 | 0.038 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Dibenz(a,h)anthracene | 0.13 | 0.0030 | 0.038 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Fluoranthene | 0.55 | 0.0030 | 0.038 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Fluorene | 0.011 | 0.0030 | 0.038 | mg/kg | J | 8270C-SI | 08/10/15 | 5 |
| Indeno(1,2,3-cd)pyrene | 0.47 | 0.0030 | 0.038 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Naphthalene | 0.064 | 0.010 | 0.13 | mg/kg | J | 8270C-SI | 08/10/15 | 5 |
| Phenanthrene | 0.12 | 0.0030 | 0.038 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Pyrene | 0.74 | 0.0030 | 0.038 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| 1-Methylnaphthalene | U | 0.010 | 0.13 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| 2-Methylnaphthalene | 0.018 | 0.010 | 0.13 | mg/kg | J | 8270C-SI | 08/10/15 | 5 |
| 2-Chloronaphthalene | U | 0.010 | 0.13 | mg/kg | | 8270C-SI | 08/10/15 | 5 |
| Surrogate Recovery | | | | | | | | |
| Nitrobenzene-d5 | 73.5 | | | % Rec. | | 8270C-SI | 08/10/15 | 5 |
| 2-Fluorobiphenyl | 78.8 | | | % Rec. | | 8270C-SI | 08/10/15 | 5 |
| p-Terphenyl-d14 | 73.8 | | | % Rec. | | 8270C-SI | 08/10/15 | 5 |

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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-22

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : B-10

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 14:25

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Total Solids | 89.2 | 0.0333 | | % | | 2540 G-2 | 08/02/15 | 1 |
| Mercury | 0.046 | 0.0028 | 0.022 | mg/kg | | 7471A | 08/05/15 | 1 |
| Antimony | U | 0.75 | 2.2 | mg/kg | | 6010B | 08/04/15 | 1 |
| Arsenic | 4.7 | 0.65 | 2.2 | mg/kg | | 6010B | 08/04/15 | 1 |
| Beryllium | 0.31 | 0.070 | 0.22 | mg/kg | | 6010B | 08/04/15 | 1 |
| Cadmium | 0.22 | 0.070 | 0.56 | mg/kg | J | 6010B | 08/04/15 | 1 |
| Chromium | 12. | 0.14 | 1.1 | mg/kg | | 6010B | 08/04/15 | 1 |
| Copper | 8.4 | 0.53 | 2.2 | mg/kg | | 6010B | 08/04/15 | 1 |
| Lead | 27. | 0.19 | 0.56 | mg/kg | | 6010B | 08/04/15 | 1 |
| Nickel | 8.1 | 0.49 | 2.2 | mg/kg | | 6010B | 08/04/15 | 1 |
| Selenium | U | 0.74 | 2.2 | mg/kg | | 6010B | 08/04/15 | 1 |
| Silver | U | 0.28 | 1.1 | mg/kg | | 6010B | 08/04/15 | 1 |
| Thallium | U | 0.65 | 2.2 | mg/kg | | 6010B | 08/04/15 | 1 |
| Zinc | 55. | 0.59 | 5.6 | mg/kg | | 6010B | 08/04/15 | 1 |
| Volatile Organics | | | | | | | | |
| Acetone | U | 0.24 | 1.4 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| Acrylonitrile | U | 0.044 | 0.27 | mg/kg | J3 | 8260B | 08/05/15 | 24.5 |
| Benzene | U | 0.0066 | 0.027 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| Bromobenzene | U | 0.0070 | 0.027 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| Bromodichloromethane | U | 0.0062 | 0.027 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| Bromoform | U | 0.010 | 0.027 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| Bromomethane | U | 0.033 | 0.14 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| n-Butylbenzene | U | 0.0063 | 0.027 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| sec-Butylbenzene | U | 0.0049 | 0.027 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| tert-Butylbenzene | U | 0.0050 | 0.027 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| Carbon tetrachloride | U | 0.0080 | 0.027 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| Chlorobenzene | U | 0.0052 | 0.027 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| Chlorodibromomethane | U | 0.0091 | 0.027 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| Chloroethane | U | 0.023 | 0.14 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| 2-Chloroethyl vinyl ether | U | 0.057 | 1.4 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| Chloroform | U | 0.0056 | 0.14 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| Chloromethane | U | 0.0092 | 0.069 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| 2-Chlorotoluene | U | 0.0074 | 0.027 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| 4-Chlorotoluene | U | 0.0059 | 0.027 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| 1,2-Dibromo-3-Chloropropane | U | 0.026 | 0.14 | mg/kg | J3 | 8260B | 08/05/15 | 24.5 |
| 1,2-Dibromoethane | U | 0.0084 | 0.027 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| Dibromomethane | U | 0.0094 | 0.027 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| 1,2-Dichlorobenzene | U | 0.0075 | 0.027 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| 1,3-Dichlorobenzene | U | 0.0058 | 0.027 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| 1,4-Dichlorobenzene | U | 0.0055 | 0.027 | mg/kg | | 8260B | 08/05/15 | 24.5 |

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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-22

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : B-10

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 14:25

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | U | 0.017 | 0.14 | mg/kg | J3 | 8260B | 08/05/15 | 24.5 |
| 1,1-Dichloroethane | U | 0.0049 | 0.027 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| 1,2-Dichloroethane | U | 0.0065 | 0.027 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| 1,1-Dichloroethene | U | 0.0074 | 0.027 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| cis-1,2-Dichloroethene | U | 0.0058 | 0.027 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| trans-1,2-Dichloroethene | U | 0.0065 | 0.027 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| 1,2-Dichloropropane | U | 0.0088 | 0.027 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| 1,1-Dichloropropene | U | 0.0078 | 0.027 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| 1,3-Dichloropropane | U | 0.0051 | 0.027 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| cis-1,3-Dichloropropene | U | 0.0064 | 0.027 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| trans-1,3-Dichloropropene | U | 0.0065 | 0.027 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| 2,2-Dichloropropane | U | 0.0068 | 0.027 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| Di-isopropyl ether | U | 0.0061 | 0.027 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| Ethylbenzene | U | 0.0073 | 0.027 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| Hexachloro-1,3-butadiene | U | 0.0084 | 0.027 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| Isopropylbenzene | U | 0.0060 | 0.027 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| p-Isopropyltoluene | U | 0.0050 | 0.027 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| 2-Butanone (MEK) | U | 0.11 | 0.27 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| Methylene Chloride | U | 0.024 | 0.14 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| 4-Methyl-2-pentanone (MIBK) | U | 0.046 | 0.27 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| Methyl tert-butyl ether | U | 0.0052 | 0.027 | mg/kg | J4 | 8260B | 08/05/15 | 24.5 |
| Naphthalene | U | 0.024 | 0.14 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| n-Propylbenzene | U | 0.0050 | 0.027 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| Styrene | U | 0.0057 | 0.027 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| 1,1,1,2-Tetrachloroethane | U | 0.0065 | 0.027 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| 1,1,2,2-Tetrachloroethane | U | 0.0089 | 0.027 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| 1,1,2-Trichlorotrifluoroethane | U | 0.0089 | 0.027 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| Tetrachloroethene | U | 0.0068 | 0.027 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| Toluene | U | 0.011 | 0.14 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| 1,2,3-Trichlorobenzene | U | 0.0075 | 0.027 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| 1,2,4-Trichlorobenzene | U | 0.0095 | 0.027 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| 1,1,1-Trichloroethane | U | 0.0070 | 0.027 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| 1,1,2-Trichloroethane | U | 0.0068 | 0.027 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| Trichloroethene | U | 0.0068 | 0.027 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| Trichlorofluoromethane | U | 0.0094 | 0.14 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| 1,2,3-Trichloropropane | U | 0.018 | 0.069 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| 1,2,4-Trimethylbenzene | U | 0.0052 | 0.027 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| 1,2,3-Trimethylbenzene | U | 0.0070 | 0.027 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| 1,3,5-Trimethylbenzene | U | 0.0065 | 0.027 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| Vinyl chloride | U | 0.0071 | 0.027 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| Xylenes, Total | U | 0.017 | 0.082 | mg/kg | | 8260B | 08/05/15 | 24.5 |
| Surrogate Recovery | | | | | | | | |
| Toluene-d8 | 109. | | | % Rec. | | 8260B | 08/05/15 | 1 |

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U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-22

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : B-10

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 14:25

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Dibromofluoromethane | 92.0 | | | % Rec. | | 8260B | 08/05/15 | 1 |
| 4-Bromofluorobenzene | 109. | | | % Rec. | | 8260B | 08/05/15 | 1 |
| Polynuclear Aromatic Hydrocarbons | | | | | | | | |
| Anthracene | U | 0.00060 | 0.0067 | mg/kg | | 8270C-SI | 08/07/15 | 1 |
| Acenaphthene | U | 0.00060 | 0.0067 | mg/kg | | 8270C-SI | 08/07/15 | 1 |
| Acenaphthylene | U | 0.00060 | 0.0067 | mg/kg | | 8270C-SI | 08/07/15 | 1 |
| Benzo(a)anthracene | U | 0.00060 | 0.0067 | mg/kg | | 8270C-SI | 08/07/15 | 1 |
| Benzo(a)pyrene | U | 0.00060 | 0.0067 | mg/kg | | 8270C-SI | 08/07/15 | 1 |
| Benzo(b)fluoranthene | U | 0.00060 | 0.0067 | mg/kg | | 8270C-SI | 08/07/15 | 1 |
| Benzo(g,h,i)perylene | U | 0.00060 | 0.0067 | mg/kg | | 8270C-SI | 08/07/15 | 1 |
| Benzo(k)fluoranthene | U | 0.00060 | 0.0067 | mg/kg | | 8270C-SI | 08/07/15 | 1 |
| Chrysene | U | 0.00060 | 0.0067 | mg/kg | | 8270C-SI | 08/07/15 | 1 |
| Dibenz(a,h)anthracene | U | 0.00060 | 0.0067 | mg/kg | | 8270C-SI | 08/07/15 | 1 |
| Fluoranthene | 0.00086 | 0.00060 | 0.0067 | mg/kg | J | 8270C-SI | 08/07/15 | 1 |
| Fluorene | U | 0.00060 | 0.0067 | mg/kg | | 8270C-SI | 08/07/15 | 1 |
| Indeno(1,2,3-cd)pyrene | U | 0.00060 | 0.0067 | mg/kg | | 8270C-SI | 08/07/15 | 1 |
| Naphthalene | U | 0.0020 | 0.022 | mg/kg | | 8270C-SI | 08/07/15 | 1 |
| Phenanthrene | 0.00084 | 0.00060 | 0.0067 | mg/kg | J | 8270C-SI | 08/07/15 | 1 |
| Pyrene | 0.0010 | 0.00060 | 0.0067 | mg/kg | J | 8270C-SI | 08/07/15 | 1 |
| 1-Methylnaphthalene | U | 0.0020 | 0.022 | mg/kg | | 8270C-SI | 08/07/15 | 1 |
| 2-Methylnaphthalene | U | 0.0020 | 0.022 | mg/kg | | 8270C-SI | 08/07/15 | 1 |
| 2-Chloronaphthalene | U | 0.0020 | 0.022 | mg/kg | | 8270C-SI | 08/07/15 | 1 |
| Surrogate Recovery | | | | | | | | |
| Nitrobenzene-d5 | 83.7 | | | % Rec. | | 8270C-SI | 08/07/15 | 1 |
| 2-Fluorobiphenyl | 75.6 | | | % Rec. | | 8270C-SI | 08/07/15 | 1 |
| p-Terphenyl-d14 | 64.9 | | | % Rec. | | 8270C-SI | 08/07/15 | 1 |

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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-23

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : B-11

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 14:15

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Total Solids | 86.6 | 0.0333 | | % | | 2540 G-2 | 08/02/15 | 1 |
| Mercury | 0.13 | 0.0028 | 0.023 | mg/kg | | 7471A | 08/05/15 | 1 |
| Antimony | U | 0.75 | 2.3 | mg/kg | | 6010B | 08/04/15 | 1 |
| Arsenic | 9.7 | 0.65 | 2.3 | mg/kg | | 6010B | 08/04/15 | 1 |
| Beryllium | 0.13 | 0.070 | 0.23 | mg/kg | J | 6010B | 08/04/15 | 1 |
| Cadmium | 0.28 | 0.070 | 0.58 | mg/kg | J | 6010B | 08/04/15 | 1 |
| Chromium | 8.3 | 0.14 | 1.2 | mg/kg | | 6010B | 08/04/15 | 1 |
| Copper | 12. | 0.53 | 2.3 | mg/kg | | 6010B | 08/04/15 | 1 |
| Lead | 51. | 0.19 | 0.58 | mg/kg | | 6010B | 08/04/15 | 1 |
| Nickel | 5.8 | 0.49 | 2.3 | mg/kg | | 6010B | 08/04/15 | 1 |
| Selenium | U | 0.74 | 2.3 | mg/kg | | 6010B | 08/04/15 | 1 |
| Silver | U | 0.28 | 1.2 | mg/kg | | 6010B | 08/04/15 | 1 |
| Thallium | U | 0.65 | 2.3 | mg/kg | | 6010B | 08/04/15 | 1 |
| Zinc | 70. | 0.59 | 5.8 | mg/kg | | 6010B | 08/04/15 | 1 |
| Volatile Organics | | | | | | | | |
| Acetone | U | 0.30 | 1.7 | mg/kg | | 8260B | 08/05/15 | 30 |
| Acrylonitrile | U | 0.054 | 0.35 | mg/kg | J3 | 8260B | 08/05/15 | 30 |
| Benzene | U | 0.0081 | 0.035 | mg/kg | | 8260B | 08/05/15 | 30 |
| Bromobenzene | U | 0.0085 | 0.035 | mg/kg | | 8260B | 08/05/15 | 30 |
| Bromodichloromethane | U | 0.0076 | 0.035 | mg/kg | | 8260B | 08/05/15 | 30 |
| Bromoform | U | 0.013 | 0.035 | mg/kg | | 8260B | 08/05/15 | 30 |
| Bromomethane | U | 0.040 | 0.17 | mg/kg | | 8260B | 08/05/15 | 30 |
| n-Butylbenzene | U | 0.0077 | 0.035 | mg/kg | | 8260B | 08/05/15 | 30 |
| sec-Butylbenzene | U | 0.0060 | 0.035 | mg/kg | | 8260B | 08/05/15 | 30 |
| tert-Butylbenzene | U | 0.0062 | 0.035 | mg/kg | | 8260B | 08/05/15 | 30 |
| Carbon tetrachloride | U | 0.0098 | 0.035 | mg/kg | | 8260B | 08/05/15 | 30 |
| Chlorobenzene | U | 0.0064 | 0.035 | mg/kg | | 8260B | 08/05/15 | 30 |
| Chlorodibromomethane | U | 0.011 | 0.035 | mg/kg | | 8260B | 08/05/15 | 30 |
| Chloroethane | U | 0.028 | 0.17 | mg/kg | | 8260B | 08/05/15 | 30 |
| 2-Chloroethyl vinyl ether | U | 0.070 | 1.7 | mg/kg | | 8260B | 08/05/15 | 30 |
| Chloroform | U | 0.0069 | 0.17 | mg/kg | | 8260B | 08/05/15 | 30 |
| Chloromethane | U | 0.011 | 0.087 | mg/kg | | 8260B | 08/05/15 | 30 |
| 2-Chlorotoluene | U | 0.0090 | 0.035 | mg/kg | | 8260B | 08/05/15 | 30 |
| 4-Chlorotoluene | U | 0.0072 | 0.035 | mg/kg | | 8260B | 08/05/15 | 30 |
| 1,2-Dibromo-3-Chloropropane | U | 0.032 | 0.17 | mg/kg | J3 | 8260B | 08/05/15 | 30 |
| 1,2-Dibromoethane | U | 0.010 | 0.035 | mg/kg | | 8260B | 08/05/15 | 30 |
| Dibromomethane | U | 0.011 | 0.035 | mg/kg | | 8260B | 08/05/15 | 30 |
| 1,2-Dichlorobenzene | U | 0.0092 | 0.035 | mg/kg | | 8260B | 08/05/15 | 30 |
| 1,3-Dichlorobenzene | U | 0.0072 | 0.035 | mg/kg | | 8260B | 08/05/15 | 30 |
| 1,4-Dichlorobenzene | U | 0.0068 | 0.035 | mg/kg | | 8260B | 08/05/15 | 30 |

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Tax I.D. 62-0814289

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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-23

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : B-11

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 14:15

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | U | 0.021 | 0.17 | mg/kg | J3 | 8260B | 08/05/15 | 30 |
| 1,1-Dichloroethane | U | 0.0060 | 0.035 | mg/kg | | 8260B | 08/05/15 | 30 |
| 1,2-Dichloroethane | U | 0.0080 | 0.035 | mg/kg | | 8260B | 08/05/15 | 30 |
| 1,1-Dichloroethene | U | 0.0091 | 0.035 | mg/kg | | 8260B | 08/05/15 | 30 |
| cis-1,2-Dichloroethene | U | 0.0070 | 0.035 | mg/kg | | 8260B | 08/05/15 | 30 |
| trans-1,2-Dichloroethene | U | 0.0079 | 0.035 | mg/kg | | 8260B | 08/05/15 | 30 |
| 1,2-Dichloropropane | U | 0.011 | 0.035 | mg/kg | | 8260B | 08/05/15 | 30 |
| 1,1-Dichloropropene | U | 0.0095 | 0.035 | mg/kg | | 8260B | 08/05/15 | 30 |
| 1,3-Dichloropropane | U | 0.0062 | 0.035 | mg/kg | | 8260B | 08/05/15 | 30 |
| cis-1,3-Dichloropropene | U | 0.0079 | 0.035 | mg/kg | | 8260B | 08/05/15 | 30 |
| trans-1,3-Dichloropropene | U | 0.0080 | 0.035 | mg/kg | | 8260B | 08/05/15 | 30 |
| 2,2-Dichloropropane | U | 0.0084 | 0.035 | mg/kg | | 8260B | 08/05/15 | 30 |
| Di-isopropyl ether | U | 0.0074 | 0.035 | mg/kg | | 8260B | 08/05/15 | 30 |
| Ethylbenzene | U | 0.0089 | 0.035 | mg/kg | | 8260B | 08/05/15 | 30 |
| Hexachloro-1,3-butadiene | U | 0.010 | 0.035 | mg/kg | | 8260B | 08/05/15 | 30 |
| Isopropylbenzene | U | 0.0073 | 0.035 | mg/kg | | 8260B | 08/05/15 | 30 |
| p-Isopropyltoluene | U | 0.0061 | 0.035 | mg/kg | | 8260B | 08/05/15 | 30 |
| 2-Butanone (MEK) | U | 0.14 | 0.35 | mg/kg | | 8260B | 08/05/15 | 30 |
| Methylene Chloride | U | 0.030 | 0.17 | mg/kg | | 8260B | 08/05/15 | 30 |
| 4-Methyl-2-pentanone (MIBK) | U | 0.056 | 0.35 | mg/kg | | 8260B | 08/05/15 | 30 |
| Methyl tert-butyl ether | U | 0.0064 | 0.035 | mg/kg | J4 | 8260B | 08/05/15 | 30 |
| Naphthalene | U | 0.030 | 0.17 | mg/kg | | 8260B | 08/05/15 | 30 |
| n-Propylbenzene | U | 0.0062 | 0.035 | mg/kg | | 8260B | 08/05/15 | 30 |
| Styrene | U | 0.0070 | 0.035 | mg/kg | | 8260B | 08/05/15 | 30 |
| 1,1,1,2-Tetrachloroethane | U | 0.0079 | 0.035 | mg/kg | | 8260B | 08/05/15 | 30 |
| 1,1,2,2-Tetrachloroethane | U | 0.011 | 0.035 | mg/kg | | 8260B | 08/05/15 | 30 |
| 1,1,2-Trichlorotrifluoroethane | U | 0.011 | 0.035 | mg/kg | | 8260B | 08/05/15 | 30 |
| Tetrachloroethene | U | 0.0083 | 0.035 | mg/kg | | 8260B | 08/05/15 | 30 |
| Toluene | U | 0.013 | 0.17 | mg/kg | | 8260B | 08/05/15 | 30 |
| 1,2,3-Trichlorobenzene | U | 0.0092 | 0.035 | mg/kg | | 8260B | 08/05/15 | 30 |
| 1,2,4-Trichlorobenzene | U | 0.012 | 0.035 | mg/kg | | 8260B | 08/05/15 | 30 |
| 1,1,1-Trichloroethane | U | 0.0086 | 0.035 | mg/kg | | 8260B | 08/05/15 | 30 |
| 1,1,2-Trichloroethane | U | 0.0083 | 0.035 | mg/kg | | 8260B | 08/05/15 | 30 |
| Trichloroethene | U | 0.0084 | 0.035 | mg/kg | | 8260B | 08/05/15 | 30 |
| Trichlorofluoromethane | U | 0.011 | 0.17 | mg/kg | | 8260B | 08/05/15 | 30 |
| 1,2,3-Trichloropropane | U | 0.022 | 0.087 | mg/kg | | 8260B | 08/05/15 | 30 |
| 1,2,4-Trimethylbenzene | U | 0.0063 | 0.035 | mg/kg | | 8260B | 08/05/15 | 30 |
| 1,2,3-Trimethylbenzene | U | 0.0086 | 0.035 | mg/kg | | 8260B | 08/05/15 | 30 |
| 1,3,5-Trimethylbenzene | U | 0.0080 | 0.035 | mg/kg | | 8260B | 08/05/15 | 30 |
| Vinyl chloride | U | 0.0087 | 0.035 | mg/kg | | 8260B | 08/05/15 | 30 |
| Xylenes, Total | U | 0.021 | 0.10 | mg/kg | | 8260B | 08/05/15 | 30 |
| Surrogate Recovery | | | | | | | | |
| Toluene-d8 | 105. | | | % Rec. | | 8260B | 08/05/15 | 1 |

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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-23

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : B-11

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 14:15

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Dibromofluoromethane | 90.0 | | | % Rec. | | 8260B | 08/05/15 | 1 |
| 4-Bromofluorobenzene | 114. | | | % Rec. | | 8260B | 08/05/15 | 1 |
| Polynuclear Aromatic Hydrocarbons | | | | | | | | |
| Anthracene | 0.025 | 0.0030 | 0.035 | mg/kg | J | 8270C-SI | 08/07/15 | 5 |
| Acenaphthene | 0.0059 | 0.0030 | 0.035 | mg/kg | J | 8270C-SI | 08/07/15 | 5 |
| Acenaphthylene | U | 0.0030 | 0.035 | mg/kg | | 8270C-SI | 08/07/15 | 5 |
| Benzo(a)anthracene | 0.14 | 0.0030 | 0.035 | mg/kg | | 8270C-SI | 08/07/15 | 5 |
| Benzo(a)pyrene | 0.18 | 0.0030 | 0.035 | mg/kg | | 8270C-SI | 08/07/15 | 5 |
| Benzo(b)fluoranthene | 0.17 | 0.0030 | 0.035 | mg/kg | | 8270C-SI | 08/07/15 | 5 |
| Benzo(g,h,i)perylene | 0.13 | 0.0030 | 0.035 | mg/kg | | 8270C-SI | 08/07/15 | 5 |
| Benzo(k)fluoranthene | 0.065 | 0.0030 | 0.035 | mg/kg | | 8270C-SI | 08/07/15 | 5 |
| Chrysene | 0.17 | 0.0030 | 0.035 | mg/kg | | 8270C-SI | 08/07/15 | 5 |
| Dibenz(a,h)anthracene | 0.029 | 0.0030 | 0.035 | mg/kg | J | 8270C-SI | 08/07/15 | 5 |
| Fluoranthene | 0.25 | 0.0030 | 0.035 | mg/kg | | 8270C-SI | 08/07/15 | 5 |
| Fluorene | 0.0039 | 0.0030 | 0.035 | mg/kg | J | 8270C-SI | 08/07/15 | 5 |
| Indeno(1,2,3-cd)pyrene | 0.10 | 0.0030 | 0.035 | mg/kg | | 8270C-SI | 08/07/15 | 5 |
| Naphthalene | U | 0.010 | 0.12 | mg/kg | | 8270C-SI | 08/07/15 | 5 |
| Phenanthrene | 0.098 | 0.0030 | 0.035 | mg/kg | | 8270C-SI | 08/07/15 | 5 |
| Pyrene | 0.30 | 0.0030 | 0.035 | mg/kg | | 8270C-SI | 08/07/15 | 5 |
| 1-Methylnaphthalene | U | 0.010 | 0.12 | mg/kg | | 8270C-SI | 08/07/15 | 5 |
| 2-Methylnaphthalene | U | 0.010 | 0.12 | mg/kg | | 8270C-SI | 08/07/15 | 5 |
| 2-Chloronaphthalene | U | 0.010 | 0.12 | mg/kg | | 8270C-SI | 08/07/15 | 5 |
| Surrogate Recovery | | | | | | | | |
| Nitrobenzene-d5 | 81.7 | | | % Rec. | | 8270C-SI | 08/07/15 | 5 |
| 2-Fluorobiphenyl | 72.5 | | | % Rec. | | 8270C-SI | 08/07/15 | 5 |
| p-Terphenyl-d14 | 60.1 | | | % Rec. | | 8270C-SI | 08/07/15 | 5 |

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REPORT OF ANALYSIS

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Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-24

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : B-12

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 14:30

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Total Solids | 88.0 | 0.0333 | | % | | 2540 G-2 | 08/02/15 | 1 |
| Mercury | 0.073 | 0.0028 | 0.023 | mg/kg | | 7471A | 08/05/15 | 1 |
| Antimony | U | 0.75 | 2.3 | mg/kg | | 6010B | 08/04/15 | 1 |
| Arsenic | 7.8 | 0.65 | 2.3 | mg/kg | | 6010B | 08/04/15 | 1 |
| Beryllium | 0.16 | 0.070 | 0.23 | mg/kg | J | 6010B | 08/04/15 | 1 |
| Cadmium | 0.18 | 0.070 | 0.57 | mg/kg | J | 6010B | 08/04/15 | 1 |
| Chromium | 6.5 | 0.14 | 1.1 | mg/kg | | 6010B | 08/04/15 | 1 |
| Copper | 6.1 | 0.53 | 2.3 | mg/kg | | 6010B | 08/04/15 | 1 |
| Lead | 170 | 0.19 | 0.57 | mg/kg | | 6010B | 08/04/15 | 1 |
| Nickel | 4.4 | 0.49 | 2.3 | mg/kg | | 6010B | 08/04/15 | 1 |
| Selenium | U | 0.74 | 2.3 | mg/kg | | 6010B | 08/04/15 | 1 |
| Silver | 1.0 | 0.28 | 1.1 | mg/kg | J | 6010B | 08/04/15 | 1 |
| Thallium | U | 0.65 | 2.3 | mg/kg | | 6010B | 08/04/15 | 1 |
| Zinc | 41. | 0.59 | 5.7 | mg/kg | | 6010B | 08/04/15 | 1 |
| Volatile Organics | | | | | | | | |
| Acetone | U | 0.25 | 1.4 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| Acrylonitrile | U | 0.045 | 0.29 | mg/kg | J3 | 8260B | 08/05/15 | 25.25 |
| Benzene | U | 0.0068 | 0.029 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| Bromobenzene | U | 0.0072 | 0.029 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| Bromodichloromethane | U | 0.0064 | 0.029 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| Bromoform | U | 0.011 | 0.029 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| Bromomethane | U | 0.034 | 0.14 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| n-Butylbenzene | U | 0.0065 | 0.029 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| sec-Butylbenzene | U | 0.0051 | 0.029 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| tert-Butylbenzene | U | 0.0052 | 0.029 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| Carbon tetrachloride | U | 0.0083 | 0.029 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| Chlorobenzene | U | 0.0054 | 0.029 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| Chlorodibromomethane | U | 0.0094 | 0.029 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| Chloroethane | U | 0.024 | 0.14 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| 2-Chloroethyl vinyl ether | U | 0.059 | 1.4 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| Chloroform | U | 0.0058 | 0.14 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| Chloromethane | U | 0.0095 | 0.072 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| 2-Chlorotoluene | U | 0.0076 | 0.029 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| 4-Chlorotoluene | U | 0.0061 | 0.029 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| 1,2-Dibromo-3-Chloropropane | U | 0.026 | 0.14 | mg/kg | J3 | 8260B | 08/05/15 | 25.25 |
| 1,2-Dibromoethane | U | 0.0087 | 0.029 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| Dibromomethane | U | 0.0096 | 0.029 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| 1,2-Dichlorobenzene | U | 0.0077 | 0.029 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| 1,3-Dichlorobenzene | U | 0.0060 | 0.029 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| 1,4-Dichlorobenzene | U | 0.0057 | 0.029 | mg/kg | | 8260B | 08/05/15 | 25.25 |

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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Est. 1970

REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-24

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : B-12

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 14:30

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | U | 0.018 | 0.14 | mg/kg | J3 | 8260B | 08/05/15 | 25.25 |
| 1,1-Dichloroethane | U | 0.0050 | 0.029 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| 1,2-Dichloroethane | U | 0.0067 | 0.029 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| 1,1-Dichloroethene | U | 0.0076 | 0.029 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| cis-1,2-Dichloroethene | U | 0.0059 | 0.029 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| trans-1,2-Dichloroethene | U | 0.0067 | 0.029 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| 1,2-Dichloropropane | U | 0.0090 | 0.029 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| 1,1-Dichloropropene | U | 0.0080 | 0.029 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| 1,3-Dichloropropane | U | 0.0052 | 0.029 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| cis-1,3-Dichloropropene | U | 0.0066 | 0.029 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| trans-1,3-Dichloropropene | U | 0.0067 | 0.029 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| 2,2-Dichloropropane | U | 0.0070 | 0.029 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| Di-isopropyl ether | U | 0.0063 | 0.029 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| Ethylbenzene | U | 0.0075 | 0.029 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| Hexachloro-1,3-butadiene | U | 0.0086 | 0.029 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| Isopropylbenzene | U | 0.0061 | 0.029 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| p-Isopropyltoluene | U | 0.0052 | 0.029 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| 2-Butanone (MEK) | U | 0.12 | 0.29 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| Methylene Chloride | U | 0.025 | 0.14 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| 4-Methyl-2-pentanone (MIBK) | U | 0.047 | 0.29 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| Methyl tert-butyl ether | U | 0.0054 | 0.029 | mg/kg | J4 | 8260B | 08/05/15 | 25.25 |
| Naphthalene | U | 0.025 | 0.14 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| n-Propylbenzene | U | 0.0052 | 0.029 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| Styrene | U | 0.0059 | 0.029 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| 1,1,1,2-Tetrachloroethane | U | 0.0067 | 0.029 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| 1,1,2,2-Tetrachloroethane | U | 0.0092 | 0.029 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| 1,1,2-Trichlorotrifluoroethane | U | 0.0092 | 0.029 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| Tetrachloroethene | U | 0.0070 | 0.029 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| Toluene | U | 0.011 | 0.14 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| 1,2,3-Trichlorobenzene | U | 0.0077 | 0.029 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| 1,2,4-Trichlorobenzene | U | 0.0098 | 0.029 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| 1,1,1-Trichloroethane | U | 0.0072 | 0.029 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| 1,1,2-Trichloroethane | U | 0.0070 | 0.029 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| Trichloroethene | U | 0.0070 | 0.029 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| Trichlorofluoromethane | U | 0.0096 | 0.14 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| 1,2,3-Trichloropropane | U | 0.019 | 0.072 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| 1,2,4-Trimethylbenzene | U | 0.0053 | 0.029 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| 1,2,3-Trimethylbenzene | U | 0.0072 | 0.029 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| 1,3,5-Trimethylbenzene | U | 0.0067 | 0.029 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| Vinyl chloride | U | 0.0073 | 0.029 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| Xylenes, Total | U | 0.018 | 0.086 | mg/kg | | 8260B | 08/05/15 | 25.25 |
| Surrogate Recovery | | | | | | | | |
| Toluene-d8 | 108. | | | % Rec. | | 8260B | 08/05/15 | 1 |

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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-24

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : B-12

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 14:30

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Dibromofluoromethane | 89.7 | | | % Rec. | | 8260B | 08/05/15 | 1 |
| 4-Bromofluorobenzene | 111. | | | % Rec. | | 8260B | 08/05/15 | 1 |
| Polynuclear Aromatic Hydrocarbons | | | | | | | | |
| Anthracene | 0.0098 | 0.00060 | 0.0068 | mg/kg | | 8270C-SI | 08/07/15 | 1 |
| Acenaphthene | 0.0017 | 0.00060 | 0.0068 | mg/kg | J | 8270C-SI | 08/07/15 | 1 |
| Acenaphthylene | 0.00073 | 0.00060 | 0.0068 | mg/kg | J | 8270C-SI | 08/07/15 | 1 |
| Benzo(a)anthracene | 0.048 | 0.00060 | 0.0068 | mg/kg | | 8270C-SI | 08/07/15 | 1 |
| Benzo(a)pyrene | 0.050 | 0.00060 | 0.0068 | mg/kg | | 8270C-SI | 08/07/15 | 1 |
| Benzo(b)fluoranthene | 0.045 | 0.00060 | 0.0068 | mg/kg | | 8270C-SI | 08/07/15 | 1 |
| Benzo(g,h,i)perylene | 0.026 | 0.00060 | 0.0068 | mg/kg | | 8270C-SI | 08/07/15 | 1 |
| Benzo(k)fluoranthene | 0.019 | 0.00060 | 0.0068 | mg/kg | | 8270C-SI | 08/07/15 | 1 |
| Chrysene | 0.050 | 0.00060 | 0.0068 | mg/kg | | 8270C-SI | 08/07/15 | 1 |
| Dibenz(a,h)anthracene | 0.0065 | 0.00060 | 0.0068 | mg/kg | J | 8270C-SI | 08/07/15 | 1 |
| Fluoranthene | 0.088 | 0.00060 | 0.0068 | mg/kg | | 8270C-SI | 08/07/15 | 1 |
| Fluorene | 0.0054 | 0.00060 | 0.0068 | mg/kg | J | 8270C-SI | 08/07/15 | 1 |
| Indeno(1,2,3-cd)pyrene | 0.023 | 0.00060 | 0.0068 | mg/kg | | 8270C-SI | 08/07/15 | 1 |
| Naphthalene | 0.0030 | 0.0020 | 0.023 | mg/kg | J | 8270C-SI | 08/07/15 | 1 |
| Phenanthrene | 0.065 | 0.00060 | 0.0068 | mg/kg | | 8270C-SI | 08/07/15 | 1 |
| Pyrene | 0.12 | 0.00060 | 0.0068 | mg/kg | | 8270C-SI | 08/07/15 | 1 |
| 1-Methylnaphthalene | 0.0024 | 0.0020 | 0.023 | mg/kg | J | 8270C-SI | 08/07/15 | 1 |
| 2-Methylnaphthalene | U | 0.0020 | 0.023 | mg/kg | | 8270C-SI | 08/07/15 | 1 |
| 2-Chloronaphthalene | U | 0.0020 | 0.023 | mg/kg | | 8270C-SI | 08/07/15 | 1 |
| Surrogate Recovery | | | | | | | | |
| Nitrobenzene-d5 | 89.2 | | | % Rec. | | 8270C-SI | 08/07/15 | 1 |
| 2-Fluorobiphenyl | 82.6 | | | % Rec. | | 8270C-SI | 08/07/15 | 1 |
| p-Terphenyl-d14 | 70.2 | | | % Rec. | | 8270C-SI | 08/07/15 | 1 |

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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-25

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : B-13

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 14:40

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Total Solids | 87.1 | 0.0333 | | % | | 2540 G-2 | 08/02/15 | 1 |
| Mercury | 0.060 | 0.0028 | 0.023 | mg/kg | | 7471A | 08/05/15 | 1 |
| Antimony | U | 0.75 | 2.3 | mg/kg | | 6010B | 08/04/15 | 1 |
| Arsenic | 8.7 | 0.65 | 2.3 | mg/kg | | 6010B | 08/04/15 | 1 |
| Beryllium | 0.61 | 0.070 | 0.23 | mg/kg | | 6010B | 08/04/15 | 1 |
| Cadmium | 0.33 | 0.070 | 0.57 | mg/kg | J | 6010B | 08/04/15 | 1 |
| Chromium | 17. | 0.14 | 1.1 | mg/kg | | 6010B | 08/04/15 | 1 |
| Copper | 22. | 0.53 | 2.3 | mg/kg | | 6010B | 08/04/15 | 1 |
| Lead | 44. | 0.19 | 0.57 | mg/kg | | 6010B | 08/04/15 | 1 |
| Nickel | 14. | 0.49 | 2.3 | mg/kg | | 6010B | 08/04/15 | 1 |
| Selenium | U | 0.74 | 2.3 | mg/kg | | 6010B | 08/04/15 | 1 |
| Silver | U | 0.28 | 1.1 | mg/kg | | 6010B | 08/04/15 | 1 |
| Thallium | U | 0.65 | 2.3 | mg/kg | | 6010B | 08/04/15 | 1 |
| Zinc | 100 | 0.59 | 5.7 | mg/kg | | 6010B | 08/04/15 | 1 |
| Volatile Organics | | | | | | | | |
| Acetone | U | 0.38 | 2.2 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| Acrylonitrile | U | 0.067 | 0.43 | mg/kg | J3 | 8260B | 08/05/15 | 37.5 |
| Benzene | U | 0.010 | 0.043 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| Bromobenzene | U | 0.011 | 0.043 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| Bromodichloromethane | U | 0.0095 | 0.043 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| Bromoform | U | 0.016 | 0.043 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| Bromomethane | U | 0.050 | 0.22 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| n-Butylbenzene | U | 0.0097 | 0.043 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| sec-Butylbenzene | U | 0.0075 | 0.043 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| tert-Butylbenzene | U | 0.0077 | 0.043 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| Carbon tetrachloride | U | 0.012 | 0.043 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| Chlorobenzene | U | 0.0080 | 0.043 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| Chlorodibromomethane | U | 0.014 | 0.043 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| Chloroethane | U | 0.035 | 0.22 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| 2-Chloroethyl vinyl ether | U | 0.088 | 2.2 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| Chloroform | U | 0.0086 | 0.22 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| Chloromethane | U | 0.014 | 0.11 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| 2-Chlorotoluene | U | 0.011 | 0.043 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| 4-Chlorotoluene | U | 0.0090 | 0.043 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| 1,2-Dibromo-3-Chloropropane | U | 0.039 | 0.22 | mg/kg | J3 | 8260B | 08/05/15 | 37.5 |
| 1,2-Dibromoethane | U | 0.013 | 0.043 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| Dibromomethane | U | 0.014 | 0.043 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| 1,2-Dichlorobenzene | U | 0.011 | 0.043 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| 1,3-Dichlorobenzene | U | 0.0090 | 0.043 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| 1,4-Dichlorobenzene | U | 0.0085 | 0.043 | mg/kg | | 8260B | 08/05/15 | 37.5 |

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REPORT OF ANALYSIS

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Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-25

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : B-13

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 14:40

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | U | 0.027 | 0.22 | mg/kg | J3 | 8260B | 08/05/15 | 37.5 |
| 1,1-Dichloroethane | U | 0.0075 | 0.043 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| 1,2-Dichloroethane | U | 0.0099 | 0.043 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| 1,1-Dichloroethene | U | 0.011 | 0.043 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| cis-1,2-Dichloroethene | U | 0.0088 | 0.043 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| trans-1,2-Dichloroethene | U | 0.0099 | 0.043 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| 1,2-Dichloropropane | U | 0.013 | 0.043 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| 1,1-Dichloropropene | U | 0.012 | 0.043 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| 1,3-Dichloropropane | U | 0.0078 | 0.043 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| cis-1,3-Dichloropropene | U | 0.0098 | 0.043 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| trans-1,3-Dichloropropene | U | 0.010 | 0.043 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| 2,2-Dichloropropane | U | 0.010 | 0.043 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| Di-isopropyl ether | U | 0.0093 | 0.043 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| Ethylbenzene | U | 0.011 | 0.043 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| Hexachloro-1,3-butadiene | U | 0.013 | 0.043 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| Isopropylbenzene | U | 0.0091 | 0.043 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| p-Isopropyltoluene | U | 0.0076 | 0.043 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| 2-Butanone (MEK) | U | 0.18 | 0.43 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| Methylene Chloride | U | 0.038 | 0.22 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| 4-Methyl-2-pentanone (MIBK) | U | 0.070 | 0.43 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| Methyl tert-butyl ether | U | 0.0080 | 0.043 | mg/kg | J4 | 8260B | 08/05/15 | 37.5 |
| Naphthalene | U | 0.038 | 0.22 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| n-Propylbenzene | U | 0.0077 | 0.043 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| Styrene | U | 0.0088 | 0.043 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| 1,1,1,2-Tetrachloroethane | U | 0.0099 | 0.043 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| 1,1,2,2-Tetrachloroethane | U | 0.014 | 0.043 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| 1,1,2-Trichlorotrifluoroethane | U | 0.014 | 0.043 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| Tetrachloroethene | U | 0.010 | 0.043 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| Toluene | U | 0.016 | 0.22 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| 1,2,3-Trichlorobenzene | U | 0.011 | 0.043 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| 1,2,4-Trichlorobenzene | U | 0.014 | 0.043 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| 1,1,1-Trichloroethane | U | 0.011 | 0.043 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| 1,1,2-Trichloroethane | U | 0.010 | 0.043 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| Trichloroethene | U | 0.010 | 0.043 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| Trichlorofluoromethane | U | 0.014 | 0.22 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| 1,2,3-Trichloropropane | U | 0.028 | 0.11 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| 1,2,4-Trimethylbenzene | U | 0.0079 | 0.043 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| 1,2,3-Trimethylbenzene | U | 0.011 | 0.043 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| 1,3,5-Trimethylbenzene | U | 0.010 | 0.043 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| Vinyl chloride | U | 0.011 | 0.043 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| Xylenes, Total | U | 0.026 | 0.13 | mg/kg | | 8260B | 08/05/15 | 37.5 |
| Surrogate Recovery | | | | | | | | |
| Toluene-d8 | 103. | | | % Rec. | | 8260B | 08/05/15 | 1 |

Results listed are dry weight basis.
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Est. 1970

REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-25

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : B-13

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 14:40

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Dibromofluoromethane | 93.6 | | | % Rec. | | 8260B | 08/05/15 | 1 |
| 4-Bromofluorobenzene | 107. | | | % Rec. | | 8260B | 08/05/15 | 1 |
| Polynuclear Aromatic Hydrocarbons | | | | | | | | |
| Anthracene | 0.024 | 0.0012 | 0.014 | mg/kg | | 8270C-SI | 08/07/15 | 2 |
| Acenaphthene | 0.0021 | 0.0012 | 0.014 | mg/kg | J | 8270C-SI | 08/07/15 | 2 |
| Acenaphthylene | 0.0018 | 0.0012 | 0.014 | mg/kg | J | 8270C-SI | 08/07/15 | 2 |
| Benzo(a)anthracene | 0.094 | 0.0012 | 0.014 | mg/kg | | 8270C-SI | 08/07/15 | 2 |
| Benzo(a)pyrene | 0.20 | 0.0012 | 0.014 | mg/kg | | 8270C-SI | 08/07/15 | 2 |
| Benzo(b)fluoranthene | 0.21 | 0.0012 | 0.014 | mg/kg | | 8270C-SI | 08/07/15 | 2 |
| Benzo(g,h,i)perylene | 0.18 | 0.0012 | 0.014 | mg/kg | | 8270C-SI | 08/07/15 | 2 |
| Benzo(k)fluoranthene | 0.058 | 0.0012 | 0.014 | mg/kg | | 8270C-SI | 08/07/15 | 2 |
| Chrysene | 0.13 | 0.0012 | 0.014 | mg/kg | | 8270C-SI | 08/07/15 | 2 |
| Dibenz(a,h)anthracene | 0.038 | 0.0012 | 0.014 | mg/kg | | 8270C-SI | 08/07/15 | 2 |
| Fluoranthene | 0.15 | 0.0012 | 0.014 | mg/kg | | 8270C-SI | 08/07/15 | 2 |
| Fluorene | 0.0041 | 0.0012 | 0.014 | mg/kg | J | 8270C-SI | 08/07/15 | 2 |
| Indeno(1,2,3-cd)pyrene | 0.15 | 0.0012 | 0.014 | mg/kg | | 8270C-SI | 08/07/15 | 2 |
| Naphthalene | 0.020 | 0.0040 | 0.046 | mg/kg | J | 8270C-SI | 08/07/15 | 2 |
| Phenanthrene | 0.036 | 0.0012 | 0.014 | mg/kg | | 8270C-SI | 08/07/15 | 2 |
| Pyrene | 0.22 | 0.0012 | 0.014 | mg/kg | | 8270C-SI | 08/07/15 | 2 |
| 1-Methylnaphthalene | U | 0.0040 | 0.046 | mg/kg | | 8270C-SI | 08/07/15 | 2 |
| 2-Methylnaphthalene | 0.0063 | 0.0040 | 0.046 | mg/kg | J | 8270C-SI | 08/07/15 | 2 |
| 2-Chloronaphthalene | U | 0.0040 | 0.046 | mg/kg | | 8270C-SI | 08/07/15 | 2 |
| Surrogate Recovery | | | | | | | | |
| Nitrobenzene-d5 | 69.6 | | | % Rec. | | 8270C-SI | 08/07/15 | 2 |
| 2-Fluorobiphenyl | 62.7 | | | % Rec. | | 8270C-SI | 08/07/15 | 2 |
| p-Terphenyl-d14 | 52.0 | | | % Rec. | | 8270C-SI | 08/07/15 | 2 |

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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-26

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : B-13D

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 14:40

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Total Solids | 93.5 | 0.0333 | | % | | 2540 G-2 | 08/02/15 | 1 |
| Mercury | 0.070 | 0.0028 | 0.021 | mg/kg | | 7471A | 08/05/15 | 1 |
| Antimony | U | 0.75 | 2.1 | mg/kg | | 6010B | 08/04/15 | 1 |
| Arsenic | 10. | 0.65 | 2.1 | mg/kg | | 6010B | 08/04/15 | 1 |
| Beryllium | 0.35 | 0.070 | 0.21 | mg/kg | | 6010B | 08/04/15 | 1 |
| Cadmium | 0.34 | 0.070 | 0.53 | mg/kg | J | 6010B | 08/04/15 | 1 |
| Chromium | 15. | 0.14 | 1.1 | mg/kg | | 6010B | 08/04/15 | 1 |
| Copper | 17. | 0.53 | 2.1 | mg/kg | | 6010B | 08/04/15 | 1 |
| Lead | 44. | 0.19 | 0.53 | mg/kg | | 6010B | 08/04/15 | 1 |
| Nickel | 11. | 0.49 | 2.1 | mg/kg | | 6010B | 08/04/15 | 1 |
| Selenium | U | 0.74 | 2.1 | mg/kg | | 6010B | 08/04/15 | 1 |
| Silver | U | 0.28 | 1.1 | mg/kg | | 6010B | 08/04/15 | 1 |
| Thallium | U | 0.65 | 2.1 | mg/kg | | 6010B | 08/04/15 | 1 |
| Zinc | 95. | 0.59 | 5.3 | mg/kg | | 6010B | 08/04/15 | 1 |
| Volatile Organics | | | | | | | | |
| Acetone | U | 0.38 | 2.0 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| Acrylonitrile | U | 0.068 | 0.41 | mg/kg | J3 | 8260B | 08/05/15 | 38.25 |
| Benzene | U | 0.010 | 0.041 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| Bromobenzene | U | 0.011 | 0.041 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| Bromodichloromethane | U | 0.0097 | 0.041 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| Bromoform | U | 0.016 | 0.041 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| Bromomethane | U | 0.051 | 0.20 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| n-Butylbenzene | U | 0.0099 | 0.041 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| sec-Butylbenzene | U | 0.0077 | 0.041 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| tert-Butylbenzene | U | 0.0079 | 0.041 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| Carbon tetrachloride | U | 0.012 | 0.041 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| Chlorobenzene | U | 0.0081 | 0.041 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| Chlorodibromomethane | U | 0.014 | 0.041 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| Chloroethane | U | 0.036 | 0.20 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| 2-Chloroethyl vinyl ether | U | 0.090 | 2.0 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| Chloroform | U | 0.0088 | 0.20 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| Chloromethane | U | 0.014 | 0.10 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| 2-Chlorotoluene | U | 0.012 | 0.041 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| 4-Chlorotoluene | U | 0.0092 | 0.041 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| 1,2-Dibromo-3-Chloropropane | U | 0.040 | 0.20 | mg/kg | J3 | 8260B | 08/05/15 | 38.25 |
| 1,2-Dibromoethane | U | 0.013 | 0.041 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| Dibromomethane | U | 0.015 | 0.041 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| 1,2-Dichlorobenzene | U | 0.012 | 0.041 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| 1,3-Dichlorobenzene | U | 0.0091 | 0.041 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| 1,4-Dichlorobenzene | U | 0.0086 | 0.041 | mg/kg | | 8260B | 08/05/15 | 38.25 |

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Tax I.D. 62-0814289

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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-26

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : B-13D

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 14:40

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | U | 0.027 | 0.20 | mg/kg | J3 | 8260B | 08/05/15 | 38.25 |
| 1,1-Dichloroethane | U | 0.0076 | 0.041 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| 1,2-Dichloroethane | U | 0.010 | 0.041 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| 1,1-Dichloroethene | U | 0.012 | 0.041 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| cis-1,2-Dichloroethene | U | 0.0090 | 0.041 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| trans-1,2-Dichloroethene | U | 0.010 | 0.041 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| 1,2-Dichloropropane | U | 0.014 | 0.041 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| 1,1-Dichloropropene | U | 0.012 | 0.041 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| 1,3-Dichloropropane | U | 0.0079 | 0.041 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| cis-1,3-Dichloropropene | U | 0.010 | 0.041 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| trans-1,3-Dichloropropene | U | 0.010 | 0.041 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| 2,2-Dichloropropane | U | 0.011 | 0.041 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| Di-isopropyl ether | U | 0.0095 | 0.041 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| Ethylbenzene | U | 0.011 | 0.041 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| Hexachloro-1,3-butadiene | U | 0.013 | 0.041 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| Isopropylbenzene | U | 0.0093 | 0.041 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| p-Isopropyltoluene | U | 0.0078 | 0.041 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| 2-Butanone (MEK) | U | 0.18 | 0.41 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| Methylene Chloride | U | 0.038 | 0.20 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| 4-Methyl-2-pentanone (MIBK) | U | 0.072 | 0.41 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| Methyl tert-butyl ether | U | 0.0081 | 0.041 | mg/kg | J4 | 8260B | 08/05/15 | 38.25 |
| Naphthalene | U | 0.038 | 0.20 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| n-Propylbenzene | U | 0.0079 | 0.041 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| Styrene | U | 0.0090 | 0.041 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| 1,1,1,2-Tetrachloroethane | U | 0.010 | 0.041 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| 1,1,2,2-Tetrachloroethane | U | 0.014 | 0.041 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| 1,1,2-Trichlorotrifluoroethane | U | 0.014 | 0.041 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| Tetrachloroethene | U | 0.010 | 0.041 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| Toluene | U | 0.017 | 0.20 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| 1,2,3-Trichlorobenzene | U | 0.012 | 0.041 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| 1,2,4-Trichlorobenzene | U | 0.015 | 0.041 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| 1,1,1-Trichloroethane | U | 0.011 | 0.041 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| 1,1,2-Trichloroethane | U | 0.010 | 0.041 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| Trichloroethene | U | 0.011 | 0.041 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| Trichlorofluoromethane | U | 0.015 | 0.20 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| 1,2,3-Trichloropropane | U | 0.028 | 0.10 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| 1,2,4-Trimethylbenzene | U | 0.0081 | 0.041 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| 1,2,3-Trimethylbenzene | U | 0.011 | 0.041 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| 1,3,5-Trimethylbenzene | U | 0.010 | 0.041 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| Vinyl chloride | U | 0.011 | 0.041 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| Xylenes, Total | U | 0.027 | 0.12 | mg/kg | | 8260B | 08/05/15 | 38.25 |
| Surrogate Recovery | | | | | | | | |
| Toluene-d8 | 105. | | | % Rec. | | 8260B | 08/05/15 | 1 |

Results listed are dry weight basis.
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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 11,2015

ESC Sample # : L779930-26

Date Received : July 31, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : B-13D

Project # : BO15086B

Collected By : Andrew Provant
Collection Date : 07/29/15 14:40

| Parameter | Dry Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Dibromofluoromethane | 92.7 | | | % Rec. | | 8260B | 08/05/15 | 1 |
| 4-Bromofluorobenzene | 111. | | | % Rec. | | 8260B | 08/05/15 | 1 |
| Polynuclear Aromatic Hydrocarbons | | | | | | | | |
| Anthracene | 0.021 | 0.0012 | 0.013 | mg/kg | | 8270C-SI | 08/07/15 | 2 |
| Acenaphthene | 0.0026 | 0.0012 | 0.013 | mg/kg | J | 8270C-SI | 08/07/15 | 2 |
| Acenaphthylene | 0.0014 | 0.0012 | 0.013 | mg/kg | J | 8270C-SI | 08/07/15 | 2 |
| Benzo(a)anthracene | 0.082 | 0.0012 | 0.013 | mg/kg | | 8270C-SI | 08/07/15 | 2 |
| Benzo(a)pyrene | 0.17 | 0.0012 | 0.013 | mg/kg | | 8270C-SI | 08/07/15 | 2 |
| Benzo(b)fluoranthene | 0.19 | 0.0012 | 0.013 | mg/kg | | 8270C-SI | 08/07/15 | 2 |
| Benzo(g,h,i)perylene | 0.15 | 0.0012 | 0.013 | mg/kg | | 8270C-SI | 08/07/15 | 2 |
| Benzo(k)fluoranthene | 0.049 | 0.0012 | 0.013 | mg/kg | | 8270C-SI | 08/07/15 | 2 |
| Chrysene | 0.12 | 0.0012 | 0.013 | mg/kg | | 8270C-SI | 08/07/15 | 2 |
| Dibenz(a,h)anthracene | 0.033 | 0.0012 | 0.013 | mg/kg | | 8270C-SI | 08/07/15 | 2 |
| Fluoranthene | 0.15 | 0.0012 | 0.013 | mg/kg | | 8270C-SI | 08/07/15 | 2 |
| Fluorene | 0.0051 | 0.0012 | 0.013 | mg/kg | J | 8270C-SI | 08/07/15 | 2 |
| Indeno(1,2,3-cd)pyrene | 0.13 | 0.0012 | 0.013 | mg/kg | | 8270C-SI | 08/07/15 | 2 |
| Naphthalene | 0.017 | 0.0040 | 0.043 | mg/kg | J | 8270C-SI | 08/07/15 | 2 |
| Phenanthrene | 0.043 | 0.0012 | 0.013 | mg/kg | | 8270C-SI | 08/07/15 | 2 |
| Pyrene | 0.21 | 0.0012 | 0.013 | mg/kg | | 8270C-SI | 08/07/15 | 2 |
| 1-Methylnaphthalene | U | 0.0040 | 0.043 | mg/kg | | 8270C-SI | 08/07/15 | 2 |
| 2-Methylnaphthalene | 0.0061 | 0.0040 | 0.043 | mg/kg | J | 8270C-SI | 08/07/15 | 2 |
| 2-Chloronaphthalene | U | 0.0040 | 0.043 | mg/kg | | 8270C-SI | 08/07/15 | 2 |
| Surrogate Recovery | | | | | | | | |
| Nitrobenzene-d5 | 67.7 | | | % Rec. | | 8270C-SI | 08/07/15 | 2 |
| 2-Fluorobiphenyl | 59.6 | | | % Rec. | | 8270C-SI | 08/07/15 | 2 |
| p-Terphenyl-d14 | 47.1 | | | % Rec. | | 8270C-SI | 08/07/15 | 2 |

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Attachment A
List of Analytes with QC Qualifiers

| Sample Number | Work Group | Sample Type | Analyte | Run ID | Qualifier |
|---|---|---|---|---|---|
| L779930-01 | WG807849 | SAMP | Anthracene | R3059587 | J |
| | WG807849 | SAMP | Benzo(a)anthracene | R3059587 | J |
| | WG807849 | SAMP | Benzo(a)pyrene | R3059587 | J |
| | WG807849 | SAMP | Benzo(g,h,i)perylene | R3059587 | J |
| | WG807849 | SAMP | Benzo(k)fluoranthene | R3059587 | J |
| | WG807849 | SAMP | Dibenz(a,h)anthracene | R3059587 | J |
| | WG807849 | SAMP | Indeno(1,2,3-cd)pyrene | R3059587 | J |
| | WG807849 | SAMP | Nitrobenzene-d5 | R3059587 | J7 |
| | WG807849 | SAMP | 2-Fluorobiphenyl | R3059587 | J7 |
| | WG807849 | SAMP | p-Terphenyl-d14 | R3059587 | J7 |
| | WG806473 | SAMP | 1,2,3-Trichlorobenzene | R3057730 | J4 |
| L779930-02 | WG807849 | SAMP | Anthracene | R3059587 | J |
| | WG807849 | SAMP | Benzo(a)anthracene | R3059587 | J |
| | WG807849 | SAMP | Benzo(a)pyrene | R3059587 | J |
| | WG807849 | SAMP | Benzo(g,h,i)perylene | R3059587 | J |
| | WG807849 | SAMP | Benzo(k)fluoranthene | R3059587 | J |
| | WG807849 | SAMP | Chrysene | R3059587 | J |
| | WG807849 | SAMP | Dibenz(a,h)anthracene | R3059587 | J |
| | WG807849 | SAMP | Indeno(1,2,3-cd)pyrene | R3059587 | J |
| | WG807849 | SAMP | Phenanthrene | R3059587 | J |
| | WG807849 | SAMP | Nitrobenzene-d5 | R3059587 | J7 |
| | WG807849 | SAMP | 2-Fluorobiphenyl | R3059587 | J7 |
| | WG807849 | SAMP | p-Terphenyl-d14 | R3059587 | J7 |
| | WG806473 | SAMP | 1,2,3-Trichlorobenzene | R3057730 | J4 |
| | WG807311 | SAMP | Cadmium | R3058282 | J |
| L779930-03 | WG807849 | SAMP | Acenaphthene | R3059587 | J |
| | WG807849 | SAMP | Benzo(k)fluoranthene | R3059587 | J |
| | WG807849 | SAMP | Dibenz(a,h)anthracene | R3059587 | J |
| | WG807849 | SAMP | Fluorene | R3059587 | J |
| | WG807849 | SAMP | Nitrobenzene-d5 | R3059587 | J7 |
| | WG807849 | SAMP | 2-Fluorobiphenyl | R3059587 | J7 |
| | WG807849 | SAMP | p-Terphenyl-d14 | R3059587 | J7 |
| | WG806473 | SAMP | 1,2,3-Trichlorobenzene | R3057730 | J4 |
| | WG807311 | SAMP | Cadmium | R3058282 | J |
| | WG807311 | SAMP | Zinc | R3058282 | J3J6 |
| | WG806784 | SAMP | Mercury | R3058281 | J6 |
| L779930-04 | WG807849 | SAMP | Anthracene | R3059587 | J |
| | WG807849 | SAMP | Benzo(a)anthracene | R3059587 | J |
| | WG807849 | SAMP | Benzo(a)pyrene | R3059587 | J |
| | WG807849 | SAMP | Benzo(b)fluoranthene | R3059587 | J |
| | WG807849 | SAMP | Benzo(g,h,i)perylene | R3059587 | J |
| | WG807849 | SAMP | Benzo(k)fluoranthene | R3059587 | J |
| | WG807849 | SAMP | Chrysene | R3059587 | J |
| | WG807849 | SAMP | Dibenz(a,h)anthracene | R3059587 | J |
| | WG807849 | SAMP | Fluoranthene | R3059587 | J |
| | WG807849 | SAMP | Indeno(1,2,3-cd)pyrene | R3059587 | J |
| | WG807849 | SAMP | Phenanthrene | R3059587 | J |
| | WG807849 | SAMP | Nitrobenzene-d5 | R3059587 | J7 |
| | WG807849 | SAMP | 2-Fluorobiphenyl | R3059587 | J7 |
| | WG807849 | SAMP | p-Terphenyl-d14 | R3059587 | J7 |
| | WG806473 | SAMP | Naphthalene | R3057730 | J |
| | WG806473 | SAMP | Toluene | R3057730 | J |
| | WG806473 | SAMP | 1,2,3-Trichlorobenzene | R3057730 | J4 |
| | WG806473 | SAMP | 1,2,4-Trimethylbenzene | R3057730 | J |
| | WG806473 | SAMP | 1,2,3-Trimethylbenzene | R3057730 | J |
| | WG806473 | SAMP | Xylenes, Total | R3057730 | J |
| | WG807311 | SAMP | Cadmium | R3058282 | J |
| L779930-05 | WG807849 | SAMP | Benzo(a)anthracene | R3059587 | J |
| | WG807849 | SAMP | Benzo(a)pyrene | R3059587 | J |
| | WG807849 | SAMP | Benzo(b)fluoranthene | R3059587 | J |
| | WG807849 | SAMP | Benzo(g,h,i)perylene | R3059587 | J |
| | WG807849 | SAMP | Benzo(k)fluoranthene | R3059587 | J |
| | WG807849 | SAMP | Chrysene | R3059587 | J |
| | WG807849 | SAMP | Dibenz(a,h)anthracene | R3059587 | J |
| | WG807849 | SAMP | Fluoranthene | R3059587 | J |
| | WG807849 | SAMP | Indeno(1,2,3-cd)pyrene | R3059587 | J |
| | WG807849 | SAMP | Phenanthrene | R3059587 | J |
| | WG807849 | SAMP | Pyrene | R3059587 | J |
| | WG807849 | SAMP | Nitrobenzene-d5 | R3059587 | J7 |

Attachment A
List of Analytes with QC Qualifiers

| Sample Number | Work Group | Sample Type | Analyte | Run ID | Qualifier |
|---|---|---|---|---|---|
| | WG807849 | SAMP | 2-Fluorobiphenyl | R3059587 | J7 |
| | WG807849 | SAMP | p-Terphenyl-d14 | R3059587 | J7 |
| | WG806473 | SAMP | 1,2,3-Trichlorobenzene | R3057730 | J4 |
| L779930-06 | WG807849 | SAMP | Anthracene | R3059587 | J |
| | WG807849 | SAMP | Benzo(a)anthracene | R3059587 | J |
| | WG807849 | SAMP | Benzo(a)pyrene | R3059587 | J |
| | WG807849 | SAMP | Benzo(g,h,i)perylene | R3059587 | J |
| | WG807849 | SAMP | Benzo(k)fluoranthene | R3059587 | J |
| | WG807849 | SAMP | Chrysene | R3059587 | J |
| | WG807849 | SAMP | Dibenz(a,h)anthracene | R3059587 | J |
| | WG807849 | SAMP | Indeno(1,2,3-cd)pyrene | R3059587 | J |
| | WG807849 | SAMP | Phenanthrene | R3059587 | J |
| | WG807849 | SAMP | Nitrobenzene-d5 | R3059587 | J7 |
| | WG807849 | SAMP | 2-Fluorobiphenyl | R3059587 | J7 |
| | WG807849 | SAMP | p-Terphenyl-d14 | R3059587 | J7 |
| | WG806473 | SAMP | 1,2,3-Trichlorobenzene | R3057730 | J4 |
| L779930-07 | WG807849 | SAMP | Acenaphthene | R3059587 | J |
| | WG807849 | SAMP | Fluorene | R3059587 | J |
| | WG807849 | SAMP | Naphthalene | R3059587 | J |
| | WG807849 | SAMP | Nitrobenzene-d5 | R3059587 | J7 |
| | WG807849 | SAMP | 2-Fluorobiphenyl | R3059587 | J7 |
| | WG807849 | SAMP | p-Terphenyl-d14 | R3059587 | J7 |
| | WG806473 | SAMP | Naphthalene | R3057730 | J |
| | WG806473 | SAMP | 1,2,3-Trichlorobenzene | R3057730 | J4 |
| | WG806473 | SAMP | 1,2,4-Trimethylbenzene | R3057730 | J |
| | WG807311 | SAMP | Antimony | R3058282 | J |
| | WG807311 | SAMP | Cadmium | R3058282 | J |
| L779930-08 | WG807849 | SAMP | Anthracene | R3059008 | J |
| | WG807849 | SAMP | Acenaphthene | R3059008 | J |
| | WG807849 | SAMP | Benzo(k)fluoranthene | R3059587 | J |
| | WG807849 | SAMP | Dibenz(a,h)anthracene | R3059587 | J |
| | WG807849 | SAMP | Fluorene | R3059008 | J |
| | WG807849 | SAMP | 2-Fluorobiphenyl | R3059008 | J2 |
| | WG806473 | SAMP | Toluene | R3057730 | J |
| | WG806473 | SAMP | 1,2,3-Trichlorobenzene | R3057730 | J4 |
| L779930-09 | WG807849 | SAMP | Acenaphthene | R3059587 | J |
| | WG807849 | SAMP | Dibenz(a,h)anthracene | R3059587 | J |
| | WG807849 | SAMP | Fluorene | R3059587 | J |
| | WG807849 | SAMP | Naphthalene | R3059587 | J |
| | WG807849 | SAMP | 1-Methylnaphthalene | R3059587 | J |
| | WG807849 | SAMP | 2-Methylnaphthalene | R3059587 | J |
| | WG807849 | SAMP | Nitrobenzene-d5 | R3059587 | J7 |
| | WG807849 | SAMP | 2-Fluorobiphenyl | R3059587 | J7 |
| | WG807849 | SAMP | p-Terphenyl-d14 | R3059587 | J7 |
| | WG806473 | SAMP | Benzene | R3057730 | J |
| | WG806473 | SAMP | p-Isopropyltoluene | R3057730 | J |
| | WG806473 | SAMP | Naphthalene | R3057730 | J |
| | WG806473 | SAMP | Toluene | R3057730 | J |
| | WG806473 | SAMP | 1,2,3-Trichlorobenzene | R3057730 | J4 |
| | WG806473 | SAMP | 1,3,5-Trimethylbenzene | R3057730 | J |
| | WG807311 | SAMP | Antimony | R3058282 | J |
| | WG807311 | SAMP | Cadmium | R3058282 | J |
| L779930-10 | WG807849 | SAMP | Acenaphthene | R3059587 | J |
| | WG807849 | SAMP | Acenaphthylene | R3059587 | J |
| | WG807849 | SAMP | Fluorene | R3059587 | J |
| | WG806473 | SAMP | n-Butylbenzene | R3057730 | J |
| | WG806473 | SAMP | sec-Butylbenzene | R3057730 | J |
| | WG806473 | SAMP | Isopropylbenzene | R3057730 | J |
| | WG806473 | SAMP | n-Propylbenzene | R3057730 | J |
| | WG806473 | SAMP | 1,2,3-Trichlorobenzene | R3057730 | J4 |
| | WG807311 | SAMP | Cadmium | R3058282 | J |
| L779930-11 | WG807849 | SAMP | Benzo(a)anthracene | R3059008 | J |
| | WG807849 | SAMP | Benzo(a)pyrene | R3059008 | J |
| | WG807849 | SAMP | Benzo(b)fluoranthene | R3059008 | J |
| | WG807849 | SAMP | Benzo(g,h,i)perylene | R3059008 | J |
| | WG807849 | SAMP | Benzo(k)fluoranthene | R3059008 | J |
| | WG807849 | SAMP | Chrysene | R3059008 | J |
| | WG807849 | SAMP | Fluoranthene | R3059008 | J |
| | WG807849 | SAMP | Indeno(1,2,3-cd)pyrene | R3059008 | J |
| | WG807849 | SAMP | Pyrene | R3059008 | J |

Attachment A
List of Analytes with QC Qualifiers

| Sample Number | Work Group | Sample Type | Analyte | Run ID | Qualifier |
|---|---|---|---|---|---|
| | WG806473 | SAMP | 1,2,3-Trichlorobenzene | R3057730 | J4 |
| | WG807311 | SAMP | Arsenic | R3058282 | J |
| | WG807311 | SAMP | Nickel | R3058282 | J |
| L779930-12 | WG807849 | SAMP | Anthracene | R3059008 | J |
| | WG807849 | SAMP | Dibenz(a,h)anthracene | R3059008 | J |
| | WG807849 | SAMP | Phenanthrene | R3059008 | J |
| | WG806473 | SAMP | 1,2,3-Trichlorobenzene | R3057730 | J4 |
| | WG807311 | SAMP | Cadmium | R3058282 | J |
| | WG806784 | SAMP | Mercury | R3058281 | J |
| L779930-13 | WG807849 | SAMP | Acenaphthylene | R3059587 | J |
| | WG807849 | SAMP | Naphthalene | R3059587 | J |
| | WG807849 | SAMP | 1-Methylnaphthalene | R3059587 | J |
| | WG806473 | SAMP | Acetone | R3057730 | J |
| | WG806473 | SAMP | Toluene | R3057730 | J |
| | WG806473 | SAMP | 1,2,3-Trichlorobenzene | R3057730 | J4 |
| | WG806473 | SAMP | 1,2,3-Trimethylbenzene | R3057730 | JV3 |
| | WG806473 | SAMP | Xylenes, Total | R3057730 | J |
| | WG806473 | SAMP | 4-Bromofluorobenzene | R3057730 | J2 |
| | WG807311 | SAMP | Antimony | R3058282 | J |
| | WG807311 | SAMP | Cadmium | R3058282 | J |
| L779930-14 | WG807849 | SAMP | Acenaphthene | R3059587 | J |
| | WG807849 | SAMP | Acenaphthylene | R3059587 | J |
| | WG807849 | SAMP | Fluorene | R3059587 | J |
| | WG807849 | SAMP | Naphthalene | R3059587 | J |
| | WG807849 | SAMP | 1-Methylnaphthalene | R3059587 | J |
| | WG807849 | SAMP | 2-Methylnaphthalene | R3059587 | J |
| | WG806473 | SAMP | 1,2,3-Trichlorobenzene | R3057730 | J4 |
| L779930-15 | WG807849 | SAMP | Acenaphthene | R3059587 | J |
| | WG807849 | SAMP | Fluorene | R3059587 | J |
| | WG807849 | SAMP | Naphthalene | R3059587 | J |
| | WG807849 | SAMP | 1-Methylnaphthalene | R3059587 | J |
| | WG807849 | SAMP | 2-Methylnaphthalene | R3059587 | J |
| | WG806473 | SAMP | 1,2,3-Trichlorobenzene | R3057730 | J4 |
| | WG807311 | SAMP | Silver | R3058282 | J |
| L779930-16 | WG807849 | SAMP | Acenaphthene | R3059587 | J |
| | WG807849 | SAMP | Fluorene | R3059587 | J |
| | WG807849 | SAMP | Naphthalene | R3059587 | J |
| | WG807849 | SAMP | 1-Methylnaphthalene | R3059587 | J |
| | WG807849 | SAMP | 2-Methylnaphthalene | R3059587 | J |
| | WG806473 | SAMP | 1,2,3-Trichlorobenzene | R3057730 | J4 |
| L779930-17 | WG806343 | SAMP | 2-Chloroethyl vinyl ether | R3056401 | J4 |
| L779930-18 | WG807849 | SAMP | Benzo(a)anthracene | R3059008 | J |
| | WG807849 | SAMP | Benzo(a)pyrene | R3059008 | J |
| | WG807849 | SAMP | Benzo(b)fluoranthene | R3059008 | J |
| | WG807849 | SAMP | Fluoranthene | R3059008 | J |
| | WG807849 | SAMP | Pyrene | R3059008 | J |
| | WG806473 | SAMP | Acetone | R3057730 | J |
| | WG806473 | SAMP | 2-Butanone (MEK) | R3057730 | J |
| | WG806473 | SAMP | 1,2,3-Trichlorobenzene | R3057730 | J4 |
| | WG807311 | SAMP | Cadmium | R3058282 | J |
| L779930-19 | WG807849 | SAMP | Anthracene | R3059008 | J |
| | WG807849 | SAMP | Acenaphthene | R3059008 | J |
| | WG807849 | SAMP | Dibenz(a,h)anthracene | R3059008 | J |
| | WG807849 | SAMP | Fluorene | R3059008 | J |
| | WG806473 | SAMP | Acetone | R3057730 | J |
| | WG806473 | SAMP | Benzene | R3057730 | J |
| | WG806473 | SAMP | 1,2,3-Trichlorobenzene | R3057730 | J4 |
| | WG807311 | SAMP | Copper | R3058282 | J |
| L779930-20 | WG807849 | SAMP | Fluorene | R3059146 | J |
| | WG807849 | SAMP | Naphthalene | R3059146 | J |
| | WG807849 | SAMP | 2-Methylnaphthalene | R3059146 | J |
| | WG806473 | SAMP | 2-Butanone (MEK) | R3057730 | J |
| | WG806473 | SAMP | Toluene | R3057730 | J |
| | WG806473 | SAMP | 1,2,3-Trichlorobenzene | R3057730 | J4 |
| | WG807311 | SAMP | Cadmium | R3058282 | J |
| L779930-21 | WG807849 | SAMP | Acenaphthene | R3059587 | J |
| | WG807849 | SAMP | Fluorene | R3059587 | J |
| | WG807849 | SAMP | Naphthalene | R3059587 | J |
| | WG807849 | SAMP | 2-Methylnaphthalene | R3059587 | J |
| | WG806472 | SAMP | Acetone | R3057680 | J |

Attachment A
List of Analytes with QC Qualifiers

| Sample Number | Work Group | Sample Type | Analyte | Run ID | Qualifier |
|---|---|---|---|---|---|
| | WG806472 | SAMP | Acrylonitrile | R3057680 | J3 |
| | WG806472 | SAMP | Benzene | R3057680 | J |
| | WG806472 | SAMP | 1,2-Dibromo-3-Chloropropane | R3057680 | J3 |
| | WG806472 | SAMP | Dichlorodifluoromethane | R3057680 | J3 |
| | WG806472 | SAMP | 2-Butanone (MEK) | R3057680 | J |
| | WG806472 | SAMP | Methyl tert-butyl ether | R3057680 | J4 |
| | WG806411 | SAMP | Cadmium | R3056162 | J |
| L779930-22 | WG807206 | SAMP | Fluoranthene | R3059002 | J |
| | WG807206 | SAMP | Phenanthrene | R3059002 | J |
| | WG807206 | SAMP | Pyrene | R3059002 | J |
| | WG806472 | SAMP | Acrylonitrile | R3057680 | J3 |
| | WG806472 | SAMP | 1,2-Dibromo-3-Chloropropane | R3057680 | J3 |
| | WG806472 | SAMP | Dichlorodifluoromethane | R3057680 | J3 |
| | WG806472 | SAMP | Methyl tert-butyl ether | R3057680 | J4 |
| | WG806411 | SAMP | Cadmium | R3056162 | J |
| L779930-23 | WG807206 | SAMP | Anthracene | R3059002 | J |
| | WG807206 | SAMP | Acenaphthene | R3059002 | J |
| | WG807206 | SAMP | Dibenz(a,h)anthracene | R3059002 | J |
| | WG807206 | SAMP | Fluorene | R3059002 | J |
| | WG806472 | SAMP | Acrylonitrile | R3057680 | J3 |
| | WG806472 | SAMP | 1,2-Dibromo-3-Chloropropane | R3057680 | J3 |
| | WG806472 | SAMP | Dichlorodifluoromethane | R3057680 | J3 |
| | WG806472 | SAMP | Methyl tert-butyl ether | R3057680 | J4 |
| | WG806411 | SAMP | Beryllium | R3056162 | J |
| | WG806411 | SAMP | Cadmium | R3056162 | J |
| L779930-24 | WG807206 | SAMP | Acenaphthene | R3059002 | J |
| | WG807206 | SAMP | Acenaphthylene | R3059002 | J |
| | WG807206 | SAMP | Dibenz(a,h)anthracene | R3059002 | J |
| | WG807206 | SAMP | Fluorene | R3059002 | J |
| | WG807206 | SAMP | Naphthalene | R3059002 | J |
| | WG807206 | SAMP | 1-Methylnaphthalene | R3059002 | J |
| | WG806472 | SAMP | Acrylonitrile | R3057680 | J3 |
| | WG806472 | SAMP | 1,2-Dibromo-3-Chloropropane | R3057680 | J3 |
| | WG806472 | SAMP | Dichlorodifluoromethane | R3057680 | J3 |
| | WG806472 | SAMP | Methyl tert-butyl ether | R3057680 | J4 |
| | WG806411 | SAMP | Beryllium | R3056162 | J |
| | WG806411 | SAMP | Cadmium | R3056162 | J |
| | WG806411 | SAMP | Silver | R3056162 | J |
| L779930-25 | WG807206 | SAMP | Acenaphthene | R3059002 | J |
| | WG807206 | SAMP | Acenaphthylene | R3059002 | J |
| | WG807206 | SAMP | Fluorene | R3059002 | J |
| | WG807206 | SAMP | Naphthalene | R3059002 | J |
| | WG807206 | SAMP | 2-Methylnaphthalene | R3059002 | J |
| | WG806472 | SAMP | Acrylonitrile | R3057680 | J3 |
| | WG806472 | SAMP | 1,2-Dibromo-3-Chloropropane | R3057680 | J3 |
| | WG806472 | SAMP | Dichlorodifluoromethane | R3057680 | J3 |
| | WG806472 | SAMP | Methyl tert-butyl ether | R3057680 | J4 |
| | WG806411 | SAMP | Cadmium | R3056162 | J |
| L779930-26 | WG807206 | SAMP | Acenaphthene | R3059002 | J |
| | WG807206 | SAMP | Acenaphthylene | R3059002 | J |
| | WG807206 | SAMP | Fluorene | R3059002 | J |
| | WG807206 | SAMP | Naphthalene | R3059002 | J |
| | WG807206 | SAMP | 2-Methylnaphthalene | R3059002 | J |
| | WG806472 | SAMP | Acrylonitrile | R3057680 | J3 |
| | WG806472 | SAMP | 1,2-Dibromo-3-Chloropropane | R3057680 | J3 |
| | WG806472 | SAMP | Dichlorodifluoromethane | R3057680 | J3 |
| | WG806472 | SAMP | Methyl tert-butyl ether | R3057680 | J4 |
| | WG806411 | SAMP | Cadmium | R3056162 | J |

Attachment B
Explanation of QC Qualifier Codes

| Qualifier | Meaning |
|---|---|
| J | (EPA) - Estimated value below the lowest calibration point. Confidence correlates with concentration. |
| J2 | Surrogate recovery limits have been exceeded; values are outside lower control limits |
| J3 | The associated batch QC was outside the established quality control range for precision. |
| J4 | The associated batch QC was outside the established quality control range for accuracy. |
| J6 | The sample matrix interfered with the ability to make any accurate determination; spike value is low |
| J7 | Surrogate recovery cannot be used for control limit evaluation due to dilution. |
| V3 | (ESC) - Additional QC Info: The internal standard exhibited poor recovery due to sample matrix interference. The analytical results will be biased high. BDL results will be unaffected. |

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods,it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions

Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.

Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Differrence.

Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromotography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.

TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

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Tax I.D. 62-0814289

Est. 1970

Strata - ID
Andrew Provant
8653 W Hackamore Dr

Boise, ID 83709

Quality Assurance Report
Level II

L779930

August 11, 2015

Laboratory Blank

| Analyte | Result | Units | % Rec | Limit | Batch | Date Analyzed |
|---|---|---|---|---|---|---|
| Total Solids | < .1 | % | | | WG806373 | 08/02/15 09:50 |
| Total Solids | < .1 | % | | | WG806372 | 08/02/15 09:56 |
| Antimony | < 2 | mg/kg | | | WG806411 | 08/04/15 01:25 |
| Arsenic | < 2 | mg/kg | | | WG806411 | 08/04/15 01:25 |
| Beryllium | < .2 | mg/kg | | | WG806411 | 08/04/15 01:25 |
| Cadmium | < .5 | mg/kg | | | WG806411 | 08/04/15 01:25 |
| Chromium | < 1 | mg/kg | | | WG806411 | 08/04/15 01:25 |
| Copper | < 2 | mg/kg | | | WG806411 | 08/04/15 01:25 |
| Lead | < .5 | mg/kg | | | WG806411 | 08/04/15 01:25 |
| Nickel | < 2 | mg/kg | | | WG806411 | 08/04/15 01:25 |
| Selenium | < 2 | mg/kg | | | WG806411 | 08/04/15 01:25 |
| Silver | < 1 | mg/kg | | | WG806411 | 08/04/15 01:25 |
| Thallium | < 2 | mg/kg | | | WG806411 | 08/04/15 01:25 |
| Zinc | < 5 | mg/kg | | | WG806411 | 08/04/15 01:25 |
| Total Solids | < .1 | % | | | WG806371 | 08/04/15 09:40 |
| 1,1,1,2-Tetrachloroethane | < .001 | mg/l | | | WG806343 | 08/01/15 22:33 |
| 1,1,1-Trichloroethane | < .001 | mg/l | | | WG806343 | 08/01/15 22:33 |
| 1,1,2,2-Tetrachloroethane | < .001 | mg/l | | | WG806343 | 08/01/15 22:33 |
| 1,1,2-Trichloroethane | < .001 | mg/l | | | WG806343 | 08/01/15 22:33 |
| 1,1,2-Trichlorotrifluoroethane | < .001 | mg/l | | | WG806343 | 08/01/15 22:33 |
| 1,1-Dichloroethane | < .001 | mg/l | | | WG806343 | 08/01/15 22:33 |
| 1,1-Dichloroethene | < .001 | mg/l | | | WG806343 | 08/01/15 22:33 |
| 1,1-Dichloropropene | < .001 | mg/l | | | WG806343 | 08/01/15 22:33 |
| 1,2,3-Trichlorobenzene | < .001 | mg/l | | | WG806343 | 08/01/15 22:33 |
| 1,2,3-Trichloropropane | < .001 | mg/l | | | WG806343 | 08/01/15 22:33 |
| 1,2,3-Trimethylbenzene | < .001 | mg/l | | | WG806343 | 08/01/15 22:33 |
| 1,2,4-Trichlorobenzene | < .001 | mg/l | | | WG806343 | 08/01/15 22:33 |
| 1,2,4-Trimethylbenzene | < .001 | mg/l | | | WG806343 | 08/01/15 22:33 |
| 1,2-Dibromo-3-Chloropropane | < .005 | mg/l | | | WG806343 | 08/01/15 22:33 |
| 1,2-Dibromoethane | < .001 | mg/l | | | WG806343 | 08/01/15 22:33 |
| 1,2-Dichlorobenzene | < .001 | mg/l | | | WG806343 | 08/01/15 22:33 |
| 1,2-Dichloroethane | < .001 | mg/l | | | WG806343 | 08/01/15 22:33 |
| 1,2-Dichloropropane | < .001 | mg/l | | | WG806343 | 08/01/15 22:33 |
| 1,3,5-Trimethylbenzene | < .001 | mg/l | | | WG806343 | 08/01/15 22:33 |
| 1,3-Dichlorobenzene | < .001 | mg/l | | | WG806343 | 08/01/15 22:33 |
| 1,3-Dichloropropane | < .001 | mg/l | | | WG806343 | 08/01/15 22:33 |
| 1,4-Dichlorobenzene | < .001 | mg/l | | | WG806343 | 08/01/15 22:33 |
| 2,2-Dichloropropane | < .001 | mg/l | | | WG806343 | 08/01/15 22:33 |
| 2-Butanone (MEK) | < .01 | mg/l | | | WG806343 | 08/01/15 22:33 |
| 2-Chloroethyl vinyl ether | < .05 | mg/l | | | WG806343 | 08/01/15 22:33 |
| 2-Chlorotoluene | < .001 | mg/l | | | WG806343 | 08/01/15 22:33 |
| 4-Chlorotoluene | < .001 | mg/l | | | WG806343 | 08/01/15 22:33 |
| 4-Methyl-2-pentanone (MIBK) | < .01 | mg/l | | | WG806343 | 08/01/15 22:33 |
| Acetone | < .05 | mg/l | | | WG806343 | 08/01/15 22:33 |
| Acrolein | < .025 | mg/l | | | WG806343 | 08/01/15 22:33 |
| Acrylonitrile | < .01 | mg/l | | | WG806343 | 08/01/15 22:33 |
| Benzene | < .001 | mg/l | | | WG806343 | 08/01/15 22:33 |
| Bromobenzene | < .001 | mg/l | | | WG806343 | 08/01/15 22:33 |
| Bromodichloromethane | < .001 | mg/l | | | WG806343 | 08/01/15 22:33 |
| Bromoform | < .001 | mg/l | | | WG806343 | 08/01/15 22:33 |
| Bromomethane | < .005 | mg/l | | | WG806343 | 08/01/15 22:33 |

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Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Strata - ID
Andrew Provant
8653 W Hackamore Dr

Boise, ID 83709

Quality Assurance Report
Level II

L779930

August 11, 2015

Laboratory Blank

| Analyte | Result | Units | % Rec | Limit | Batch | Date Analyzed |
|---|---|---|---|---|---|---|
| Carbon tetrachloride | < .001 | mg/l | | | WG806343 | 08/01/15 22:33 |
| Chlorobenzene | < .001 | mg/l | | | WG806343 | 08/01/15 22:33 |
| Chlorodibromomethane | < .001 | mg/l | | | WG806343 | 08/01/15 22:33 |
| Chloroethane | < .005 | mg/l | | | WG806343 | 08/01/15 22:33 |
| Chloroform | < .005 | mg/l | | | WG806343 | 08/01/15 22:33 |
| Chloromethane | < .0025 | mg/l | | | WG806343 | 08/01/15 22:33 |
| cis-1,2-Dichloroethene | < .001 | mg/l | | | WG806343 | 08/01/15 22:33 |
| cis-1,3-Dichloropropene | < .001 | mg/l | | | WG806343 | 08/01/15 22:33 |
| Di-isopropyl ether | < .001 | mg/l | | | WG806343 | 08/01/15 22:33 |
| Dibromomethane | < .001 | mg/l | | | WG806343 | 08/01/15 22:33 |
| Dichlorodifluoromethane | < .005 | mg/l | | | WG806343 | 08/01/15 22:33 |
| Ethylbenzene | < .001 | mg/l | | | WG806343 | 08/01/15 22:33 |
| Hexachloro-1,3-butadiene | < .001 | mg/l | | | WG806343 | 08/01/15 22:33 |
| Isopropylbenzene | < .001 | mg/l | | | WG806343 | 08/01/15 22:33 |
| Methyl tert-butyl ether | < .001 | mg/l | | | WG806343 | 08/01/15 22:33 |
| Methylene Chloride | < .005 | mg/l | | | WG806343 | 08/01/15 22:33 |
| n-Butylbenzene | < .001 | mg/l | | | WG806343 | 08/01/15 22:33 |
| n-Propylbenzene | < .001 | mg/l | | | WG806343 | 08/01/15 22:33 |
| Naphthalene | < .005 | mg/l | | | WG806343 | 08/01/15 22:33 |
| p-Isopropyltoluene | < .001 | mg/l | | | WG806343 | 08/01/15 22:33 |
| sec-Butylbenzene | < .001 | mg/l | | | WG806343 | 08/01/15 22:33 |
| Styrene | < .001 | mg/l | | | WG806343 | 08/01/15 22:33 |
| tert-Butylbenzene | < .001 | mg/l | | | WG806343 | 08/01/15 22:33 |
| Tetrachloroethene | < .001 | mg/l | | | WG806343 | 08/01/15 22:33 |
| Toluene | < .005 | mg/l | | | WG806343 | 08/01/15 22:33 |
| trans-1,2-Dichloroethene | < .001 | mg/l | | | WG806343 | 08/01/15 22:33 |
| trans-1,3-Dichloropropene | < .001 | mg/l | | | WG806343 | 08/01/15 22:33 |
| Trichloroethene | < .001 | mg/l | | | WG806343 | 08/01/15 22:33 |
| Trichlorofluoromethane | < .005 | mg/l | | | WG806343 | 08/01/15 22:33 |
| Vinyl chloride | < .001 | mg/l | | | WG806343 | 08/01/15 22:33 |
| Xylenes, Total | < .003 | mg/l | | | WG806343 | 08/01/15 22:33 |
| 4-Bromofluorobenzene | | % Rec. | 95.80 | 80.1-120 | WG806343 | 08/01/15 22:33 |
| Dibromofluoromethane | | % Rec. | 91.00 | 79-121 | WG806343 | 08/01/15 22:33 |
| Toluene-d8 | | % Rec. | 95.30 | 90-115 | WG806343 | 08/01/15 22:33 |
| TPHGAK C6 to C10 | < .1 | mg/kg | | | WG806688 | 08/04/15 12:26 |
| a,a,a-Trifluorotoluene(FID) | | % Rec. | 90.90 | 59-128 | WG806688 | 08/04/15 12:26 |
| a,a,a-Trifluorotoluene(PID) | | % Rec. | 101.0 | 54-144 | WG806688 | 08/04/15 12:26 |
| Mercury | < .02 | mg/kg | | | WG806568 | 08/05/15 08:15 |
| 1,1,1,2-Tetrachloroethane | < .001 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| 1,1,1-Trichloroethane | < .001 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| 1,1,2,2-Tetrachloroethane | < .001 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| 1,1,2-Trichloroethane | < .001 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| 1,1,2-Trichlorotrifluoroethane | < .001 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| 1,1-Dichloroethane | < .001 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| 1,1-Dichloroethene | < .001 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| 1,1-Dichloropropene | < .001 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| 1,2,3-Trichlorobenzene | < .001 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| 1,2,3-Trichloropropane | < .0025 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| 1,2,3-Trimethylbenzene | < .001 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| 1,2,4-Trichlorobenzene | < .001 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| 1,2,4-Trimethylbenzene | < .001 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| 1,2-Dibromo-3-Chloropropane | < .005 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| 1,2-Dibromoethane | < .001 | mg/kg | | | WG806472 | 08/04/15 13:37 |

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Est. 1970

Strata - ID
Andrew Provant
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Boise, ID 83709

Quality Assurance Report
Level II

L779930

August 11, 2015

Laboratory Blank

| Analyte | Result | Units | % Rec | Limit | Batch | Date Analyzed |
|---|---|---|---|---|---|---|
| 1,2-Dichlorobenzene | < .001 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| 1,2-Dichloroethane | < .001 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| 1,2-Dichloropropane | < .001 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| 1,3,5-Trimethylbenzene | < .001 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| 1,3-Dichlorobenzene | < .001 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| 1,3-Dichloropropane | < .001 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| 1,4-Dichlorobenzene | < .001 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| 2,2-Dichloropropane | < .001 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| 2-Butanone (MEK) | < .01 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| 2-Chloroethyl vinyl ether | < .05 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| 2-Chlorotoluene | < .001 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| 4-Chlorotoluene | < .001 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| 4-Methyl-2-pentanone (MIBK) | < .01 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| Acetone | < .05 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| Acrylonitrile | < .01 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| Benzene | < .001 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| Bromobenzene | < .001 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| Bromodichloromethane | < .001 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| Bromoform | < .001 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| Bromomethane | < .005 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| Carbon tetrachloride | < .001 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| Chlorobenzene | < .001 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| Chlorodibromomethane | < .001 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| Chloroethane | < .005 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| Chloroform | < .005 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| Chloromethane | < .0025 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| cis-1,2-Dichloroethene | < .001 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| cis-1,3-Dichloropropene | < .001 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| Di-isopropyl ether | < .001 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| Dibromomethane | < .001 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| Dichlorodifluoromethane | < .005 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| Ethylbenzene | < .001 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| Hexachloro-1,3-butadiene | < .001 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| Isopropylbenzene | < .001 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| Methyl tert-butyl ether | < .001 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| Methylene Chloride | < .005 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| n-Butylbenzene | < .001 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| n-Propylbenzene | < .001 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| Naphthalene | < .005 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| p-Isopropyltoluene | < .001 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| sec-Butylbenzene | < .001 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| Styrene | < .001 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| tert-Butylbenzene | < .001 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| Tetrachloroethene | < .001 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| Toluene | < .005 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| trans-1,2-Dichloroethene | < .001 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| trans-1,3-Dichloropropene | < .001 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| Trichloroethene | < .001 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| Trichlorofluoromethane | < .005 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| Vinyl chloride | < .001 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| Xylenes, Total | < .003 | mg/kg | | | WG806472 | 08/04/15 13:37 |
| 4-Bromofluorobenzene | | % Rec. | 106.0 | 69.7-129 | WG806472 | 08/04/15 13:37 |
| Dibromofluoromethane | | % Rec. | 92.40 | 76.3-123 | WG806472 | 08/04/15 13:37 |
| Toluene-d8 | | % Rec. | 103.0 | 88.7-115 | WG806472 | 08/04/15 13:37 |
| 1,1,1,2-Tetrachloroethane | < .001 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| 1,1,1-Trichloroethane | < .001 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| 1,1,2,2-Tetrachloroethane | < .001 | mg/kg | | | WG806473 | 08/04/15 11:01 |

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Strata - ID
Andrew Provant
8653 W Hackamore Dr

Boise, ID 83709

Quality Assurance Report
Level II

L779930

August 11, 2015

Laboratory Blank

| Analyte | Result | Units | % Rec | Limit | Batch | Date Analyzed |
|---|---|---|---|---|---|---|
| 1,1,2-Trichloroethane | < .001 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| 1,1,2-Trichlorotrifluoroethane | < .001 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| 1,1-Dichloroethane | < .001 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| 1,1-Dichloroethene | < .001 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| 1,1-Dichloropropene | < .001 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| 1,2,3-Trichlorobenzene | < .001 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| 1,2,3-Trichloropropane | < .0025 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| 1,2,3-Trimethylbenzene | < .001 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| 1,2,4-Trichlorobenzene | < .001 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| 1,2,4-Trimethylbenzene | < .001 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| 1,2-Dibromo-3-Chloropropane | < .005 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| 1,2-Dibromoethane | < .001 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| 1,2-Dichlorobenzene | < .001 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| 1,2-Dichloroethane | < .001 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| 1,2-Dichloropropane | < .001 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| 1,3,5-Trimethylbenzene | < .001 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| 1,3-Dichlorobenzene | < .001 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| 1,3-Dichloropropane | < .001 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| 1,4-Dichlorobenzene | < .001 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| 2,2-Dichloropropane | < .001 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| 2-Butanone (MEK) | < .01 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| 2-Chloroethyl vinyl ether | < .05 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| 2-Chlorotoluene | < .001 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| 4-Chlorotoluene | < .001 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| 4-Methyl-2-pentanone (MIBK) | < .01 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| Acetone | < .05 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| Acrylonitrile | < .01 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| Benzene | < .001 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| Bromobenzene | < .001 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| Bromodichloromethane | < .001 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| Bromoform | < .001 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| Bromomethane | < .005 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| Carbon tetrachloride | < .001 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| Chlorobenzene | < .001 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| Chlorodibromomethane | < .001 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| Chloroethane | < .005 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| Chloroform | < .005 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| Chloromethane | < .0025 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| cis-1,2-Dichloroethene | < .001 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| cis-1,3-Dichloropropene | < .001 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| Di-isopropyl ether | < .001 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| Dibromomethane | < .001 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| Dichlorodifluoromethane | < .005 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| Ethylbenzene | < .001 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| Hexachloro-1,3-butadiene | < .001 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| Isopropylbenzene | < .001 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| Methyl tert-butyl ether | < .001 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| Methylene Chloride | < .005 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| n-Butylbenzene | < .001 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| n-Propylbenzene | < .001 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| Naphthalene | < .005 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| p-Isopropyltoluene | < .001 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| sec-Butylbenzene | < .001 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| Styrene | < .001 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| tert-Butylbenzene | < .001 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| Tetrachloroethene | < .001 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| Toluene | < .005 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| trans-1,2-Dichloroethene | < .001 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| trans-1,3-Dichloropropene | < .001 | mg/kg | | | WG806473 | 08/04/15 11:01 |

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12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Strata - ID
Andrew Provant
8653 W Hackamore Dr

Boise, ID 83709

Quality Assurance Report
Level II

L779930

August 11, 2015

Laboratory Blank

| Analyte | Result | Units | % Rec | Limit | Batch | Date Analyzed |
|---|---|---|---|---|---|---|
| Trichloroethene | < .001 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| Trichlorofluoromethane | < .005 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| Vinyl chloride | < .001 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| Xylenes, Total | < .003 | mg/kg | | | WG806473 | 08/04/15 11:01 |
| 4-Bromofluorobenzene | | % Rec. | 110.0 | 69.7-129 | WG806473 | 08/04/15 11:01 |
| Dibromofluoromethane | | % Rec. | 101.0 | 76.3-123 | WG806473 | 08/04/15 11:01 |
| Toluene-d8 | | % Rec. | 107.0 | 88.7-115 | WG806473 | 08/04/15 11:01 |
| Mercury | < .02 | mg/kg | | | WG806784 | 08/07/15 08:46 |
| Antimony | < 2 | mg/kg | | | WG807311 | 08/07/15 08:56 |
| Arsenic | < 2 | mg/kg | | | WG807311 | 08/07/15 08:56 |
| Beryllium | < .2 | mg/kg | | | WG807311 | 08/07/15 08:56 |
| Cadmium | < .5 | mg/kg | | | WG807311 | 08/07/15 08:56 |
| Chromium | < 1 | mg/kg | | | WG807311 | 08/07/15 08:56 |
| Copper | < 2 | mg/kg | | | WG807311 | 08/07/15 08:56 |
| Lead | < .5 | mg/kg | | | WG807311 | 08/07/15 08:56 |
| Nickel | < 2 | mg/kg | | | WG807311 | 08/07/15 08:56 |
| Selenium | < 2 | mg/kg | | | WG807311 | 08/07/15 08:56 |
| Silver | < 1 | mg/kg | | | WG807311 | 08/07/15 08:56 |
| Thallium | < 2 | mg/kg | | | WG807311 | 08/07/15 08:56 |
| Zinc | < 5 | mg/kg | | | WG807311 | 08/07/15 08:56 |
| 1-Methylnaphthalene | < .02 | mg/kg | | | WG807206 | 08/07/15 11:48 |
| 2-Chloronaphthalene | < .02 | mg/kg | | | WG807206 | 08/07/15 11:48 |
| 2-Methylnaphthalene | < .02 | mg/kg | | | WG807206 | 08/07/15 11:48 |
| Acenaphthene | < .006 | mg/kg | | | WG807206 | 08/07/15 11:48 |
| Acenaphthylene | < .006 | mg/kg | | | WG807206 | 08/07/15 11:48 |
| Anthracene | < .006 | mg/kg | | | WG807206 | 08/07/15 11:48 |
| Benzo(a)anthracene | < .006 | mg/kg | | | WG807206 | 08/07/15 11:48 |
| Benzo(a)pyrene | < .006 | mg/kg | | | WG807206 | 08/07/15 11:48 |
| Benzo(b)fluoranthene | < .006 | mg/kg | | | WG807206 | 08/07/15 11:48 |
| Benzo(g,h,i)perylene | < .006 | mg/kg | | | WG807206 | 08/07/15 11:48 |
| Benzo(k)fluoranthene | < .006 | mg/kg | | | WG807206 | 08/07/15 11:48 |
| Chrysene | < .006 | mg/kg | | | WG807206 | 08/07/15 11:48 |
| Dibenz(a,h)anthracene | < .006 | mg/kg | | | WG807206 | 08/07/15 11:48 |
| Fluoranthene | < .006 | mg/kg | | | WG807206 | 08/07/15 11:48 |
| Fluorene | < .006 | mg/kg | | | WG807206 | 08/07/15 11:48 |
| Indeno(1,2,3-cd)pyrene | < .006 | mg/kg | | | WG807206 | 08/07/15 11:48 |
| Naphthalene | < .02 | mg/kg | | | WG807206 | 08/07/15 11:48 |
| Phenanthrene | < .006 | mg/kg | | | WG807206 | 08/07/15 11:48 |
| Pyrene | < .006 | mg/kg | | | WG807206 | 08/07/15 11:48 |
| 2-Fluorobiphenyl | | % Rec. | 71.70 | 40.6-122 | WG807206 | 08/07/15 11:48 |
| Nitrobenzene-d5 | | % Rec. | 73.80 | 22.1-146 | WG807206 | 08/07/15 11:48 |
| p-Terphenyl-d14 | | % Rec. | 64.00 | 32.2-131 | WG807206 | 08/07/15 11:48 |
| 1-Methylnaphthalene | < .02 | mg/kg | | | WG807849 | 08/09/15 04:40 |
| 2-Chloronaphthalene | < .02 | mg/kg | | | WG807849 | 08/09/15 04:40 |
| 2-Methylnaphthalene | < .02 | mg/kg | | | WG807849 | 08/09/15 04:40 |
| Acenaphthene | < .006 | mg/kg | | | WG807849 | 08/09/15 04:40 |
| Acenaphthylene | < .006 | mg/kg | | | WG807849 | 08/09/15 04:40 |
| Anthracene | < .006 | mg/kg | | | WG807849 | 08/09/15 04:40 |
| Benzo(a)anthracene | < .006 | mg/kg | | | WG807849 | 08/09/15 04:40 |
| Benzo(a)pyrene | < .006 | mg/kg | | | WG807849 | 08/09/15 04:40 |
| Benzo(b)fluoranthene | < .006 | mg/kg | | | WG807849 | 08/09/15 04:40 |

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Boise, ID 83709

Quality Assurance Report
Level II

L779930

August 11, 2015

Laboratory Blank

| Analyte | Result | Units | % Rec | Limit | Batch | Date Analyzed |
|---|---|---|---|---|---|---|
| Benzo(g,h,i)perylene | < .006 | mg/kg | | | WG807849 | 08/09/15 04:40 |
| Benzo(k)fluoranthene | < .006 | mg/kg | | | WG807849 | 08/09/15 04:40 |
| Chrysene | < .006 | mg/kg | | | WG807849 | 08/09/15 04:40 |
| Dibenz(a,h)anthracene | < .006 | mg/kg | | | WG807849 | 08/09/15 04:40 |
| Fluoranthene | < .006 | mg/kg | | | WG807849 | 08/09/15 04:40 |
| Fluorene | < .006 | mg/kg | | | WG807849 | 08/09/15 04:40 |
| Indeno(1,2,3-cd)pyrene | < .006 | mg/kg | | | WG807849 | 08/09/15 04:40 |
| Naphthalene | < .02 | mg/kg | | | WG807849 | 08/09/15 04:40 |
| Phenanthrene | < .006 | mg/kg | | | WG807849 | 08/09/15 04:40 |
| Pyrene | < .006 | mg/kg | | | WG807849 | 08/09/15 04:40 |
| 2-Fluorobiphenyl | | % Rec. | 66.80 | 40.6-122 | WG807849 | 08/09/15 04:40 |
| Nitrobenzene-d5 | | % Rec. | 66.50 | 22.1-146 | WG807849 | 08/09/15 04:40 |
| p-Terphenyl-d14 | | % Rec. | 56.90 | 32.2-131 | WG807849 | 08/09/15 04:40 |

Duplicate

| Analyte | Units | Result | Duplicate | RPD | Limit | Ref Samp | Batch |
|---|---|---|---|---|---|---|---|
| Total Solids | % | 92.9 | 93.5 | 0.650 | 5 | L779930-26 | WG806373 |
| Total Solids | % | 78.1 | 79.8 | 2.24 | 5 | L779930-08 | WG806372 |
| Total Solids | % | 83.2 | 83.0 | 0.251 | 5 | L779930-01 | WG806371 |

Laboratory Control Sample

| Analyte | Units | Known Val | Result | % Rec | Limit | Batch |
|---|---|---|---|---|---|---|
| Total Solids | % | 50 | 50.0 | 100. | 85-115 | WG806373 |
| Total Solids | % | 50 | 50.0 | 100. | 85-115 | WG806372 |
| Antimony | mg/kg | 100 | 103. | 103. | 80-120 | WG806411 |
| Arsenic | mg/kg | 100 | 102. | 102. | 80-120 | WG806411 |
| Beryllium | mg/kg | 100 | 101. | 101. | 80-120 | WG806411 |
| Cadmium | mg/kg | 100 | 104. | 104. | 80-120 | WG806411 |
| Chromium | mg/kg | 100 | 102. | 102. | 80-120 | WG806411 |
| Copper | mg/kg | 100 | 102. | 102. | 80-120 | WG806411 |
| Lead | mg/kg | 100 | 104. | 104. | 80-120 | WG806411 |
| Nickel | mg/kg | 100 | 103. | 103. | 80-120 | WG806411 |
| Selenium | mg/kg | 100 | 106. | 106. | 80-120 | WG806411 |
| Silver | mg/kg | 100 | 99.7 | 100. | 80-120 | WG806411 |
| Thallium | mg/kg | 100 | 104. | 104. | 80-120 | WG806411 |
| Zinc | mg/kg | 100 | 101. | 101. | 80-120 | WG806411 |
| Total Solids | % | 50 | 50.0 | 100. | 85-115 | WG806371 |
| 1,1,1,2-Tetrachloroethane | mg/l | .025 | 0.0260 | 104. | 78.5-125 | WG806343 |
| 1,1,1-Trichloroethane | mg/l | .025 | 0.0237 | 94.8 | 71.1-129 | WG806343 |
| 1,1,2,2-Tetrachloroethane | mg/l | .025 | 0.0241 | 96.4 | 79.3-123 | WG806343 |
| 1,1,2-Trichloroethane | mg/l | .025 | 0.0237 | 94.6 | 81.6-120 | WG806343 |
| 1,1,2-Trichlorotrifluoroethane | mg/l | .025 | 0.0231 | 92.4 | 62-141 | WG806343 |
| 1,1-Dichloroethane | mg/l | .025 | 0.0230 | 92.0 | 71.7-127 | WG806343 |
| 1,1-Dichloroethene | mg/l | .025 | 0.0232 | 92.7 | 59.9-137 | WG806343 |
| 1,1-Dichloropropene | mg/l | .025 | 0.0223 | 89.4 | 72.5-127 | WG806343 |

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Quality Assurance Report
Level II

L779930

August 11, 2015

| Analyte | Units | Laboratory Control Sample Known Val | Result | % Rec | Limit | Batch |
|---|---|---|---|---|---|---|
| 1,2,3-Trichlorobenzene | mg/l | .025 | 0.0254 | 102. | 75.7-134 | WG806343 |
| 1,2,3-Trichloropropane | mg/l | .025 | 0.0239 | 95.7 | 74.9-124 | WG806343 |
| 1,2,3-Trimethylbenzene | mg/l | .025 | 0.0231 | 92.2 | 79.9-118 | WG806343 |
| 1,2,4-Trichlorobenzene | mg/l | .025 | 0.0269 | 108. | 76.1-136 | WG806343 |
| 1,2,4-Trimethylbenzene | mg/l | .025 | 0.0244 | 97.7 | 79-122 | WG806343 |
| 1,2-Dibromo-3-Chloropropane | mg/l | .025 | 0.0246 | 98.2 | 64.8-131 | WG806343 |
| 1,2-Dibromoethane | mg/l | .025 | 0.0241 | 96.3 | 79.8-122 | WG806343 |
| 1,2-Dichlorobenzene | mg/l | .025 | 0.0247 | 98.7 | 84.7-118 | WG806343 |
| 1,2-Dichloroethane | mg/l | .025 | 0.0237 | 95.0 | 65.3-126 | WG806343 |
| 1,2-Dichloropropane | mg/l | .025 | 0.0247 | 98.8 | 77.4-125 | WG806343 |
| 1,3,5-Trimethylbenzene | mg/l | .025 | 0.0242 | 96.7 | 81-123 | WG806343 |
| 1,3-Dichlorobenzene | mg/l | .025 | 0.0245 | 97.9 | 77.6-127 | WG806343 |
| 1,3-Dichloropropane | mg/l | .025 | 0.0239 | 95.6 | 80.6-115 | WG806343 |
| 1,4-Dichlorobenzene | mg/l | .025 | 0.0231 | 92.5 | 82.2-114 | WG806343 |
| 2,2-Dichloropropane | mg/l | .025 | 0.0247 | 98.8 | 61.3-134 | WG806343 |
| 2-Butanone (MEK) | mg/l | .125 | 0.125 | 99.8 | 46.4-155 | WG806343 |
| 2-Chloroethyl vinyl ether | mg/l | .125 | 0.0303 | 24.3 | 23.4-162 | WG806343 |
| 2-Chlorotoluene | mg/l | .025 | 0.0237 | 94.8 | 76.4-125 | WG806343 |
| 4-Chlorotoluene | mg/l | .025 | 0.0240 | 96.0 | 81.5-121 | WG806343 |
| 4-Methyl-2-pentanone (MIBK) | mg/l | .125 | 0.139 | 111. | 63.3-138 | WG806343 |
| Acetone | mg/l | .125 | 0.109 | 86.9 | 28.7-175 | WG806343 |
| Acrolein | mg/l | .125 | 0.126 | 101. | 40.4-172 | WG806343 |
| Acrylonitrile | mg/l | .125 | 0.125 | 99.8 | 58.2-145 | WG806343 |
| Benzene | mg/l | .025 | 0.0216 | 86.4 | 73-122 | WG806343 |
| Bromobenzene | mg/l | .025 | 0.0234 | 93.6 | 81.5-115 | WG806343 |
| Bromodichloromethane | mg/l | .025 | 0.0254 | 102. | 75.5-121 | WG806343 |
| Bromoform | mg/l | .025 | 0.0268 | 107. | 71.5-131 | WG806343 |
| Bromomethane | mg/l | .025 | 0.0310 | 124. | 22.4-187 | WG806343 |
| Carbon tetrachloride | mg/l | .025 | 0.0233 | 93.1 | 70.9-129 | WG806343 |
| Chlorobenzene | mg/l | .025 | 0.0243 | 97.2 | 79.7-122 | WG806343 |
| Chlorodibromomethane | mg/l | .025 | 0.0251 | 100. | 78.2-124 | WG806343 |
| Chloroethane | mg/l | .025 | 0.0222 | 89.0 | 41.2-153 | WG806343 |
| Chloroform | mg/l | .025 | 0.0231 | 92.4 | 73.2-125 | WG806343 |
| Chloromethane | mg/l | .025 | 0.0210 | 84.1 | 55.8-134 | WG806343 |
| cis-1,2-Dichloroethene | mg/l | .025 | 0.0224 | 89.7 | 77.3-122 | WG806343 |
| cis-1,3-Dichloropropene | mg/l | .025 | 0.0257 | 103. | 77.7-124 | WG806343 |
| Di-isopropyl ether | mg/l | .025 | 0.0242 | 96.7 | 65.1-135 | WG806343 |
| Dibromomethane | mg/l | .025 | 0.0243 | 97.1 | 79.5-118 | WG806343 |
| Dichlorodifluoromethane | mg/l | .025 | 0.0206 | 82.4 | 56-134 | WG806343 |
| Ethylbenzene | mg/l | .025 | 0.0245 | 97.9 | 80.9-121 | WG806343 |
| Hexachloro-1,3-butadiene | mg/l | .025 | 0.0256 | 102. | 73.7-133 | WG806343 |
| Isopropylbenzene | mg/l | .025 | 0.0237 | 94.8 | 81.6-124 | WG806343 |
| Methyl tert-butyl ether | mg/l | .025 | 0.0226 | 90.3 | 70.1-125 | WG806343 |
| Methylene Chloride | mg/l | .025 | 0.0215 | 86.1 | 69.5-120 | WG806343 |
| n-Butylbenzene | mg/l | .025 | 0.0243 | 97.4 | 75.9-134 | WG806343 |
| n-Propylbenzene | mg/l | .025 | 0.0239 | 95.4 | 81.9-122 | WG806343 |
| Naphthalene | mg/l | .025 | 0.0251 | 100. | 69.7-134 | WG806343 |
| p-Isopropyltoluene | mg/l | .025 | 0.0248 | 99.2 | 77.6-129 | WG806343 |
| sec-Butylbenzene | mg/l | .025 | 0.0244 | 97.6 | 80.6-126 | WG806343 |
| Styrene | mg/l | .025 | 0.0259 | 104. | 79.9-124 | WG806343 |
| tert-Butylbenzene | mg/l | .025 | 0.0244 | 97.5 | 79.3-127 | WG806343 |
| Tetrachloroethene | mg/l | .025 | 0.0255 | 102. | 73.5-130 | WG806343 |
| Toluene | mg/l | .025 | 0.0230 | 91.9 | 77.9-116 | WG806343 |
| trans-1,2-Dichloroethene | mg/l | .025 | 0.0220 | 88.1 | 72.6-125 | WG806343 |
| trans-1,3-Dichloropropene | mg/l | .025 | 0.0269 | 107. | 73.5-127 | WG806343 |
| Trichloroethene | mg/l | .025 | 0.0240 | 96.2 | 79.5-121 | WG806343 |
| Trichlorofluoromethane | mg/l | .025 | 0.0239 | 95.6 | 49.1-157 | WG806343 |
| Vinyl chloride | mg/l | .025 | 0.0207 | 82.9 | 61.5-134 | WG806343 |
| Xylenes, Total | mg/l | .075 | 0.0730 | 97.4 | 79.2-122 | WG806343 |

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Strata - ID
Andrew Provant
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Boise, ID 83709

Quality Assurance Report
Level II

L779930

August 11, 2015

| Analyte | Units | Laboratory Control Sample Known Val | Result | % Rec | Limit | Batch |
|---|---|---|---|---|---|---|
| 4-Bromofluorobenzene | | | | 95.80 | 80.1-120 | |
| Dibromofluoromethane | | | | 91.40 | 79-121 | |
| Toluene-d8 | | | | 97.10 | 90-115 | |
| TPHGAK C6 to C10 | mg/kg | 5.5 | 5.92 | 108. | 70-130 | WG806688 |
| a,a,a-Trifluorotoluene(FID) | | | | 100.0 | 59-128 | WG806688 |
| a,a,a-Trifluorotoluene(PID) | | | | 114.0 | 54-144 | WG806688 |
| Mercury | mg/kg | .3 | 0.291 | 97.0 | 80-120 | WG806568 |
| 1,1,1,2-Tetrachloroethane | mg/kg | .025 | 0.0254 | 101. | 76.7-127 | WG806472 |
| 1,1,1-Trichloroethane | mg/kg | .025 | 0.0212 | 85.0 | 69.9-127 | WG806472 |
| 1,1,2,2-Tetrachloroethane | mg/kg | .025 | 0.0252 | 101. | 78.8-124 | WG806472 |
| 1,1,2-Trichloroethane | mg/kg | .025 | 0.0239 | 95.5 | 81.9-119 | WG806472 |
| 1,1,2-Trichlorotrifluoroethane | mg/kg | .025 | 0.0223 | 89.3 | 62.6-138 | WG806472 |
| 1,1-Dichloroethane | mg/kg | .025 | 0.0221 | 88.4 | 71.7-125 | WG806472 |
| 1,1-Dichloroethene | mg/kg | .025 | 0.0221 | 88.4 | 60.6-133 | WG806472 |
| 1,1-Dichloropropene | mg/kg | .025 | 0.0215 | 86.1 | 71.2-126 | WG806472 |
| 1,2,3-Trichlorobenzene | mg/kg | .025 | 0.0256 | 102. | 72.5-137 | WG806472 |
| 1,2,3-Trichloropropane | mg/kg | .025 | 0.0253 | 101. | 74-124 | WG806472 |
| 1,2,3-Trimethylbenzene | mg/kg | .025 | 0.0267 | 107. | 79.4-118 | WG806472 |
| 1,2,4-Trichlorobenzene | mg/kg | .025 | 0.0257 | 103. | 74-137 | WG806472 |
| 1,2,4-Trimethylbenzene | mg/kg | .025 | 0.0264 | 106. | 77.1-124 | WG806472 |
| 1,2-Dibromo-3-Chloropropane | mg/kg | .025 | 0.0224 | 89.6 | 64.9-131 | WG806472 |
| 1,2-Dibromoethane | mg/kg | .025 | 0.0248 | 99.1 | 78.7-123 | WG806472 |
| 1,2-Dichlorobenzene | mg/kg | .025 | 0.0260 | 104. | 83.6-119 | WG806472 |
| 1,2-Dichloroethane | mg/kg | .025 | 0.0220 | 87.8 | 67.2-121 | WG806472 |
| 1,2-Dichloropropane | mg/kg | .025 | 0.0248 | 99.4 | 76.9-123 | WG806472 |
| 1,3,5-Trimethylbenzene | mg/kg | .025 | 0.0255 | 102. | 79-125 | WG806472 |
| 1,3-Dichlorobenzene | mg/kg | .025 | 0.0257 | 103. | 75.9-129 | WG806472 |
| 1,3-Dichloropropane | mg/kg | .025 | 0.0254 | 101. | 80.3-114 | WG806472 |
| 1,4-Dichlorobenzene | mg/kg | .025 | 0.0255 | 102. | 81-115 | WG806472 |
| 2,2-Dichloropropane | mg/kg | .025 | 0.0203 | 81.2 | 61.9-132 | WG806472 |
| 2-Butanone (MEK) | mg/kg | .125 | 0.120 | 96.2 | 44.5-154 | WG806472 |
| 2-Chloroethyl vinyl ether | mg/kg | .125 | 0.0532 | 42.6 | 16.7-162 | WG806472 |
| 2-Chlorotoluene | mg/kg | .025 | 0.0255 | 102. | 74.6-127 | WG806472 |
| 4-Chlorotoluene | mg/kg | .025 | 0.0251 | 100. | 79.5-123 | WG806472 |
| 4-Methyl-2-pentanone (MIBK) | mg/kg | .125 | 0.124 | 99.0 | 61.1-138 | WG806472 |
| Acetone | mg/kg | .125 | 0.117 | 93.4 | 25.3-178 | WG806472 |
| Acrylonitrile | mg/kg | .125 | 0.112 | 89.3 | 57.8-143 | WG806472 |
| Benzene | mg/kg | .025 | 0.0224 | 89.4 | 72.6-120 | WG806472 |
| Bromobenzene | mg/kg | .025 | 0.0246 | 98.6 | 80.3-115 | WG806472 |
| Bromodichloromethane | mg/kg | .025 | 0.0227 | 90.9 | 75.3-119 | WG806472 |
| Bromoform | mg/kg | .025 | 0.0227 | 90.9 | 69.1-135 | WG806472 |
| Bromomethane | mg/kg | .025 | 0.0163 | 65.2 | 23-191 | WG806472 |
| Carbon tetrachloride | mg/kg | .025 | 0.0211 | 84.4 | 69.4-129 | WG806472 |
| Chlorobenzene | mg/kg | .025 | 0.0258 | 103. | 78.9-122 | WG806472 |
| Chlorodibromomethane | mg/kg | .025 | 0.0251 | 100. | 76.4-126 | WG806472 |
| Chloroethane | mg/kg | .025 | 0.0193 | 77.1 | 47.2-147 | WG806472 |
| Chloroform | mg/kg | .025 | 0.0208 | 83.2 | 73.3-122 | WG806472 |
| Chloromethane | mg/kg | .025 | 0.0184 | 73.6 | 53.1-135 | WG806472 |
| cis-1,2-Dichloroethene | mg/kg | .025 | 0.0217 | 86.6 | 76.1-121 | WG806472 |
| cis-1,3-Dichloropropene | mg/kg | .025 | 0.0249 | 99.8 | 77.3-123 | WG806472 |
| Di-isopropyl ether | mg/kg | .025 | 0.0216 | 86.5 | 67.2-131 | WG806472 |
| Dibromomethane | mg/kg | .025 | 0.0246 | 98.4 | 78.5-117 | WG806472 |
| Dichlorodifluoromethane | mg/kg | .025 | 0.0188 | 75.2 | 50.9-139 | WG806472 |
| Ethylbenzene | mg/kg | .025 | 0.0253 | 101. | 78.6-124 | WG806472 |
| Hexachloro-1,3-butadiene | mg/kg | .025 | 0.0229 | 91.5 | 69.2-136 | WG806472 |

* Performance of this Analyte is outside of established criteria.
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Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Strata - ID
Andrew Provant
8653 W Hackamore Dr

Boise, ID 83709

Quality Assurance Report
Level II

L779930

August 11, 2015

| Analyte | Units | Laboratory Control Sample Known Val | Result | % Rec | Limit | Batch |
|---|---|---|---|---|---|---|
| Isopropylbenzene | mg/kg | .025 | 0.0237 | 95.0 | 79.4-126 | WG806472 |
| Methyl tert-butyl ether | mg/kg | .025 | 0.0163 | 65.2* | 70.2-122 | WG806472 |
| Methylene Chloride | mg/kg | .025 | 0.0217 | 87.0 | 68.2-119 | WG806472 |
| n-Butylbenzene | mg/kg | .025 | 0.0265 | 106. | 74.2-134 | WG806472 |
| n-Propylbenzene | mg/kg | .025 | 0.0251 | 100. | 80.2-124 | WG806472 |
| Naphthalene | mg/kg | .025 | 0.0267 | 107. | 69.9-132 | WG806472 |
| p-Isopropyltoluene | mg/kg | .025 | 0.0254 | 102. | 75.4-132 | WG806472 |
| sec-Butylbenzene | mg/kg | .025 | 0.0251 | 101. | 77.8-129 | WG806472 |
| Styrene | mg/kg | .025 | 0.0248 | 99.3 | 79.4-124 | WG806472 |
| tert-Butylbenzene | mg/kg | .025 | 0.0244 | 97.8 | 77.2-129 | WG806472 |
| Tetrachloroethene | mg/kg | .025 | 0.0230 | 92.0 | 71.1-133 | WG806472 |
| Toluene | mg/kg | .025 | 0.0233 | 93.3 | 76.7-116 | WG806472 |
| trans-1,2-Dichloroethene | mg/kg | .025 | 0.0217 | 86.7 | 70.7-124 | WG806472 |
| trans-1,3-Dichloropropene | mg/kg | .025 | 0.0243 | 97.1 | 73-127 | WG806472 |
| Trichloroethene | mg/kg | .025 | 0.0233 | 93.0 | 77.2-122 | WG806472 |
| Trichlorofluoromethane | mg/kg | .025 | 0.0218 | 87.1 | 51.5-151 | WG806472 |
| Vinyl chloride | mg/kg | .025 | 0.0217 | 86.7 | 58.4-134 | WG806472 |
| Xylenes, Total | mg/kg | .075 | 0.0752 | 100. | 78.1-123 | WG806472 |
| 4-Bromofluorobenzene | | | | 107.0 | 69.7-129 | WG806472 |
| Dibromofluoromethane | | | | 93.50 | 76.3-123 | WG806472 |
| Toluene-d8 | | | | 107.0 | 88.7-115 | WG806472 |
| | | | | | | |
| 1,1,1,2-Tetrachloroethane | mg/kg | .025 | 0.0260 | 104. | 76.7-127 | WG806473 |
| 1,1,1-Trichloroethane | mg/kg | .025 | 0.0259 | 104. | 69.9-127 | WG806473 |
| 1,1,2,2-Tetrachloroethane | mg/kg | .025 | 0.0267 | 107. | 78.8-124 | WG806473 |
| 1,1,2-Trichloroethane | mg/kg | .025 | 0.0260 | 104. | 81.9-119 | WG806473 |
| 1,1,2-Trichlorotrifluoroethane | mg/kg | .025 | 0.0272 | 109. | 62.6-138 | WG806473 |
| 1,1-Dichloroethane | mg/kg | .025 | 0.0259 | 104. | 71.7-125 | WG806473 |
| 1,1-Dichloroethene | mg/kg | .025 | 0.0254 | 101. | 60.6-133 | WG806473 |
| 1,1-Dichloropropene | mg/kg | .025 | 0.0267 | 107. | 71.2-126 | WG806473 |
| 1,2,3-Trichlorobenzene | mg/kg | .025 | 0.0174 | 69.5* | 72.5-137 | WG806473 |
| 1,2,3-Trichloropropane | mg/kg | .025 | 0.0251 | 100. | 74-124 | WG806473 |
| 1,2,3-Trimethylbenzene | mg/kg | .025 | 0.0266 | 106. | 79.4-118 | WG806473 |
| 1,2,4-Trichlorobenzene | mg/kg | .025 | 0.0204 | 81.5 | 74-137 | WG806473 |
| 1,2,4-Trimethylbenzene | mg/kg | .025 | 0.0284 | 114. | 77.1-124 | WG806473 |
| 1,2-Dibromo-3-Chloropropane | mg/kg | .025 | 0.0210 | 84.1 | 64.9-131 | WG806473 |
| 1,2-Dibromoethane | mg/kg | .025 | 0.0258 | 103. | 78.7-123 | WG806473 |
| 1,2-Dichlorobenzene | mg/kg | .025 | 0.0259 | 104. | 83.6-119 | WG806473 |
| 1,2-Dichloroethane | mg/kg | .025 | 0.0251 | 100. | 67.2-121 | WG806473 |
| 1,2-Dichloropropane | mg/kg | .025 | 0.0266 | 106. | 76.9-123 | WG806473 |
| 1,3,5-Trimethylbenzene | mg/kg | .025 | 0.0278 | 111. | 79-125 | WG806473 |
| 1,3-Dichlorobenzene | mg/kg | .025 | 0.0273 | 109. | 75.9-129 | WG806473 |
| 1,3-Dichloropropane | mg/kg | .025 | 0.0249 | 99.8 | 80.3-114 | WG806473 |
| 1,4-Dichlorobenzene | mg/kg | .025 | 0.0263 | 105. | 81-115 | WG806473 |
| 2,2-Dichloropropane | mg/kg | .025 | 0.0253 | 101. | 61.9-132 | WG806473 |
| 2-Butanone (MEK) | mg/kg | .125 | 0.124 | 99.3 | 44.5-154 | WG806473 |
| 2-Chloroethyl vinyl ether | mg/kg | .125 | 0.118 | 94.5 | 16.7-162 | WG806473 |
| 2-Chlorotoluene | mg/kg | .025 | 0.0275 | 110. | 74.6-127 | WG806473 |
| 4-Chlorotoluene | mg/kg | .025 | 0.0268 | 107. | 79.5-123 | WG806473 |
| 4-Methyl-2-pentanone (MIBK) | mg/kg | .125 | 0.124 | 99.0 | 61.1-138 | WG806473 |
| Acetone | mg/kg | .125 | 0.121 | 96.8 | 25.3-178 | WG806473 |
| Acrylonitrile | mg/kg | .125 | 0.132 | 105. | 57.8-143 | WG806473 |
| Benzene | mg/kg | .025 | 0.0262 | 105. | 72.6-120 | WG806473 |
| Bromobenzene | mg/kg | .025 | 0.0268 | 107. | 80.3-115 | WG806473 |
| Bromodichloromethane | mg/kg | .025 | 0.0251 | 101. | 75.3-119 | WG806473 |
| Bromoform | mg/kg | .025 | 0.0251 | 100. | 69.1-135 | WG806473 |
| Bromomethane | mg/kg | .025 | 0.0249 | 99.6 | 23-191 | WG806473 |
| Carbon tetrachloride | mg/kg | .025 | 0.0258 | 103. | 69.4-129 | WG806473 |

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Strata - ID
Andrew Provant
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Boise, ID 83709

Quality Assurance Report
Level II

L779930

August 11, 2015

| Analyte | Units | Laboratory Control Sample Known Val | Result | % Rec | Limit | Batch |
|---|---|---|---|---|---|---|
| Chlorobenzene | mg/kg | .025 | 0.0270 | 108. | 78.9-122 | WG806473 |
| Chlorodibromomethane | mg/kg | .025 | 0.0248 | 99.3 | 76.4-126 | WG806473 |
| Chloroethane | mg/kg | .025 | 0.0236 | 94.4 | 47.2-147 | WG806473 |
| Chloroform | mg/kg | .025 | 0.0257 | 103. | 73.3-122 | WG806473 |
| Chloromethane | mg/kg | .025 | 0.0243 | 97.1 | 53.1-135 | WG806473 |
| cis-1,2-Dichloroethene | mg/kg | .025 | 0.0269 | 107. | 76.1-121 | WG806473 |
| cis-1,3-Dichloropropene | mg/kg | .025 | 0.0263 | 105. | 77.3-123 | WG806473 |
| Di-isopropyl ether | mg/kg | .025 | 0.0254 | 102. | 67.2-131 | WG806473 |
| Dibromomethane | mg/kg | .025 | 0.0257 | 103. | 78.5-117 | WG806473 |
| Dichlorodifluoromethane | mg/kg | .025 | 0.0219 | 87.6 | 50.9-139 | WG806473 |
| Ethylbenzene | mg/kg | .025 | 0.0270 | 108. | 78.6-124 | WG806473 |
| Hexachloro-1,3-butadiene | mg/kg | .025 | 0.0216 | 86.5 | 69.2-136 | WG806473 |
| Isopropylbenzene | mg/kg | .025 | 0.0275 | 110. | 79.4-126 | WG806473 |
| Methyl tert-butyl ether | mg/kg | .025 | 0.0263 | 105. | 70.2-122 | WG806473 |
| Methylene Chloride | mg/kg | .025 | 0.0236 | 94.5 | 68.2-119 | WG806473 |
| n-Butylbenzene | mg/kg | .025 | 0.0275 | 110. | 74.2-134 | WG806473 |
| n-Propylbenzene | mg/kg | .025 | 0.0280 | 112. | 80.2-124 | WG806473 |
| Naphthalene | mg/kg | .025 | 0.0182 | 72.9 | 69.9-132 | WG806473 |
| p-Isopropyltoluene | mg/kg | .025 | 0.0278 | 111. | 75.4-132 | WG806473 |
| sec-Butylbenzene | mg/kg | .025 | 0.0280 | 112. | 77.8-129 | WG806473 |
| Styrene | mg/kg | .025 | 0.0273 | 109. | 79.4-124 | WG806473 |
| tert-Butylbenzene | mg/kg | .025 | 0.0279 | 112. | 77.2-129 | WG806473 |
| Tetrachloroethene | mg/kg | .025 | 0.0256 | 103. | 71.1-133 | WG806473 |
| Toluene | mg/kg | .025 | 0.0263 | 105. | 76.7-116 | WG806473 |
| trans-1,2-Dichloroethene | mg/kg | .025 | 0.0269 | 108. | 70.7-124 | WG806473 |
| trans-1,3-Dichloropropene | mg/kg | .025 | 0.0238 | 95.1 | 73-127 | WG806473 |
| Trichloroethene | mg/kg | .025 | 0.0260 | 104. | 77.2-122 | WG806473 |
| Trichlorofluoromethane | mg/kg | .025 | 0.0240 | 95.8 | 51.5-151 | WG806473 |
| Vinyl chloride | mg/kg | .025 | 0.0234 | 93.8 | 58.4-134 | WG806473 |
| Xylenes, Total | mg/kg | .075 | 0.0811 | 108. | 78.1-123 | WG806473 |
| 4-Bromofluorobenzene | | | | 108.0 | 69.7-129 | WG806473 |
| Dibromofluoromethane | | | | 102.0 | 76.3-123 | WG806473 |
| Toluene-d8 | | | | 107.0 | 88.7-115 | WG806473 |
| Mercury | mg/kg | .3 | 0.271 | 90.0 | 80-120 | WG806784 |
| Antimony | mg/kg | 100 | 95.8 | 96.0 | 80-120 | WG807311 |
| Arsenic | mg/kg | 100 | 94.8 | 95.0 | 80-120 | WG807311 |
| Beryllium | mg/kg | 100 | 101. | 101. | 80-120 | WG807311 |
| Cadmium | mg/kg | 100 | 96.5 | 97.0 | 80-120 | WG807311 |
| Chromium | mg/kg | 100 | 98.2 | 98.0 | 80-120 | WG807311 |
| Copper | mg/kg | 100 | 97.5 | 98.0 | 80-120 | WG807311 |
| Lead | mg/kg | 100 | 97.1 | 97.0 | 80-120 | WG807311 |
| Nickel | mg/kg | 100 | 96.5 | 96.0 | 80-120 | WG807311 |
| Selenium | mg/kg | 100 | 97.7 | 98.0 | 80-120 | WG807311 |
| Silver | mg/kg | 100 | 95.2 | 95.0 | 80-120 | WG807311 |
| Thallium | mg/kg | 100 | 96.1 | 96.0 | 80-120 | WG807311 |
| Zinc | mg/kg | 100 | 96.7 | 97.0 | 80-120 | WG807311 |
| 1-Methylnaphthalene | mg/kg | .08 | 0.0607 | 75.9 | 50.6-122 | WG807206 |
| 2-Chloronaphthalene | mg/kg | .08 | 0.0596 | 74.5 | 53.9-121 | WG807206 |
| 2-Methylnaphthalene | mg/kg | .08 | 0.0586 | 73.2 | 50.4-120 | WG807206 |
| Acenaphthene | mg/kg | .08 | 0.0585 | 73.2 | 52.4-120 | WG807206 |
| Acenaphthylene | mg/kg | .08 | 0.0593 | 74.2 | 49.6-120 | WG807206 |
| Anthracene | mg/kg | .08 | 0.0603 | 75.4 | 50.3-130 | WG807206 |
| Benzo(a)anthracene | mg/kg | .08 | 0.0572 | 71.4 | 46.7-125 | WG807206 |

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Strata - ID
Andrew Provant
8653 W Hackamore Dr

Boise, ID 83709

Quality Assurance Report
Level II

L779930

August 11, 2015

| Analyte | Units | Laboratory Control Sample Known Val | Result | % Rec | Limit | Batch |
|---|---|---|---|---|---|---|
| Benzo(a)pyrene | mg/kg | .08 | 0.0556 | 69.5 | 42.3-119 | WG807206 |
| Benzo(b)fluoranthene | mg/kg | .08 | 0.0558 | 69.8 | 43.6-124 | WG807206 |
| Benzo(g,h,i)perylene | mg/kg | .08 | 0.0594 | 74.3 | 45.1-132 | WG807206 |
| Benzo(k)fluoranthene | mg/kg | .08 | 0.0573 | 71.6 | 46.1-131 | WG807206 |
| Chrysene | mg/kg | .08 | 0.0570 | 71.3 | 49.5-131 | WG807206 |
| Dibenz(a,h)anthracene | mg/kg | .08 | 0.0598 | 74.7 | 44.8-133 | WG807206 |
| Fluoranthene | mg/kg | .08 | 0.0604 | 75.5 | 49.3-128 | WG807206 |
| Fluorene | mg/kg | .08 | 0.0604 | 75.5 | 50.6-121 | WG807206 |
| Indeno(1,2,3-cd)pyrene | mg/kg | .08 | 0.0612 | 76.5 | 46.1-135 | WG807206 |
| Naphthalene | mg/kg | .08 | 0.0568 | 71.0 | 49.6-115 | WG807206 |
| Phenanthrene | mg/kg | .08 | 0.0593 | 74.1 | 48.8-121 | WG807206 |
| Pyrene | mg/kg | .08 | 0.0657 | 82.2 | 44.7-130 | WG807206 |
| 2-Fluorobiphenyl | | | | 76.00 | 40.6-122 | WG807206 |
| Nitrobenzene-d5 | | | | 84.90 | 22.1-146 | WG807206 |
| p-Terphenyl-d14 | | | | 65.10 | 32.2-131 | WG807206 |
| 1-Methylnaphthalene | mg/kg | .08 | 0.0501 | 62.6 | 50.6-122 | WG807849 |
| 2-Chloronaphthalene | mg/kg | .08 | 0.0456 | 56.9 | 53.9-121 | WG807849 |
| 2-Methylnaphthalene | mg/kg | .08 | 0.0476 | 59.5 | 50.4-120 | WG807849 |
| Acenaphthene | mg/kg | .08 | 0.0456 | 56.9 | 52.4-120 | WG807849 |
| Acenaphthylene | mg/kg | .08 | 0.0454 | 56.7 | 49.6-120 | WG807849 |
| Anthracene | mg/kg | .08 | 0.0464 | 58.0 | 50.3-130 | WG807849 |
| Benzo(a)anthracene | mg/kg | .08 | 0.0398 | 49.7 | 46.7-125 | WG807849 |
| Benzo(a)pyrene | mg/kg | .08 | 0.0401 | 50.1 | 42.3-119 | WG807849 |
| Benzo(b)fluoranthene | mg/kg | .08 | 0.0362 | 45.3 | 43.6-124 | WG807849 |
| Benzo(g,h,i)perylene | mg/kg | .08 | 0.0402 | 50.3 | 45.1-132 | WG807849 |
| Benzo(k)fluoranthene | mg/kg | .08 | 0.0436 | 54.5 | 46.1-131 | WG807849 |
| Chrysene | mg/kg | .08 | 0.0430 | 53.7 | 49.5-131 | WG807849 |
| Dibenz(a,h)anthracene | mg/kg | .08 | 0.0391 | 48.9 | 44.8-133 | WG807849 |
| Fluoranthene | mg/kg | .08 | 0.0452 | 56.5 | 49.3-128 | WG807849 |
| Fluorene | mg/kg | .08 | 0.0450 | 56.2 | 50.6-121 | WG807849 |
| Indeno(1,2,3-cd)pyrene | mg/kg | .08 | 0.0400 | 50.0 | 46.1-135 | WG807849 |
| Naphthalene | mg/kg | .08 | 0.0467 | 58.4 | 49.6-115 | WG807849 |
| Phenanthrene | mg/kg | .08 | 0.0421 | 52.6 | 48.8-121 | WG807849 |
| Pyrene | mg/kg | .08 | 0.0468 | 58.4 | 44.7-130 | WG807849 |
| 2-Fluorobiphenyl | | | | 57.40 | 40.6-122 | WG807849 |
| Nitrobenzene-d5 | | | | 55.40 | 22.1-146 | WG807849 |
| p-Terphenyl-d14 | | | | 48.80 | 32.2-131 | WG807849 |

| Analyte | Units | Laboratory Control Sample Duplicate Result | Ref | %Rec | Limit | RPD | Limit | Batch |
|---|---|---|---|---|---|---|---|---|
| Antimony | mg/kg | 99.2 | 103. | 99.0 | 80-120 | 4.00 | 20 | WG806411 |
| Arsenic | mg/kg | 98.3 | 102. | 98.0 | 80-120 | 4.00 | 20 | WG806411 |
| Beryllium | mg/kg | 97.2 | 101. | 97.0 | 80-120 | 4.00 | 20 | WG806411 |
| Cadmium | mg/kg | 99.5 | 104. | 100. | 80-120 | 4.00 | 20 | WG806411 |
| Chromium | mg/kg | 98.1 | 102. | 98.0 | 80-120 | 4.00 | 20 | WG806411 |
| Copper | mg/kg | 98.4 | 102. | 98.0 | 80-120 | 4.00 | 20 | WG806411 |
| Lead | mg/kg | 100. | 104. | 100. | 80-120 | 4.00 | 20 | WG806411 |
| Nickel | mg/kg | 98.8 | 103. | 99.0 | 80-120 | 4.00 | 20 | WG806411 |
| Selenium | mg/kg | 102. | 106. | 102. | 80-120 | 4.00 | 20 | WG806411 |
| Silver | mg/kg | 95.7 | 99.7 | 96.0 | 80-120 | 4.00 | 20 | WG806411 |
| Thallium | mg/kg | 100. | 104. | 100. | 80-120 | 4.00 | 20 | WG806411 |
| Zinc | mg/kg | 97.0 | 101. | 97.0 | 80-120 | 4.00 | 20 | WG806411 |
| 1,1,1,2-Tetrachloroethane | mg/l | 0.0240 | 0.0260 | 96.0 | 78.5-125 | 8.04 | 20 | WG806343 |
| 1,1,1-Trichloroethane | mg/l | 0.0207 | 0.0237 | 83.0 | 71.1-129 | 13.6 | 20 | WG806343 |

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Quality Assurance Report
Level II

L779930

August 11, 2015

| | | Laboratory Control Sample Duplicate | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Analyte | Units | Result | Ref | %Rec | Limit | RPD | Limit | Batch |
| 1,1,2,2-Tetrachloroethane | mg/l | 0.0227 | 0.0241 | 91.0 | 79.3-123 | 5.95 | 20 | WG806343 |
| 1,1,2-Trichloroethane | mg/l | 0.0218 | 0.0237 | 87.0 | 81.6-120 | 8.15 | 20 | WG806343 |
| 1,1,2-Trichlorotrifluoroethane | mg/l | 0.0204 | 0.0231 | 82.0 | 62-141 | 12.5 | 20 | WG806343 |
| 1,1-Dichloroethane | mg/l | 0.0206 | 0.0230 | 82.0 | 71.7-127 | 11.1 | 20 | WG806343 |
| 1,1-Dichloroethene | mg/l | 0.0206 | 0.0232 | 82.0 | 59.9-137 | 11.6 | 20 | WG806343 |
| 1,1-Dichloropropene | mg/l | 0.0204 | 0.0223 | 82.0 | 72.5-127 | 9.01 | 20 | WG806343 |
| 1,2,3-Trichlorobenzene | mg/l | 0.0258 | 0.0254 | 103. | 75.7-134 | 1.25 | 20 | WG806343 |
| 1,2,3-Trichloropropane | mg/l | 0.0222 | 0.0239 | 89.0 | 74.9-124 | 7.34 | 20 | WG806343 |
| 1,2,3-Trimethylbenzene | mg/l | 0.0223 | 0.0231 | 89.0 | 79.9-118 | 3.46 | 20 | WG806343 |
| 1,2,4-Trichlorobenzene | mg/l | 0.0267 | 0.0269 | 107. | 76.1-136 | 0.690 | 20 | WG806343 |
| 1,2,4-Trimethylbenzene | mg/l | 0.0233 | 0.0244 | 93.0 | 79-122 | 4.58 | 20 | WG806343 |
| 1,2-Dibromo-3-Chloropropane | mg/l | 0.0228 | 0.0246 | 91.0 | 64.8-131 | 7.60 | 20 | WG806343 |
| 1,2-Dibromoethane | mg/l | 0.0231 | 0.0241 | 92.0 | 79.8-122 | 4.05 | 20 | WG806343 |
| 1,2-Dichlorobenzene | mg/l | 0.0239 | 0.0247 | 95.0 | 84.7-118 | 3.37 | 20 | WG806343 |
| 1,2-Dichloroethane | mg/l | 0.0226 | 0.0237 | 90.0 | 65.3-126 | 4.94 | 20 | WG806343 |
| 1,2-Dichloropropane | mg/l | 0.0229 | 0.0247 | 91.0 | 77.4-125 | 7.67 | 20 | WG806343 |
| 1,3,5-Trimethylbenzene | mg/l | 0.0226 | 0.0242 | 90.0 | 81-123 | 6.78 | 20 | WG806343 |
| 1,3-Dichlorobenzene | mg/l | 0.0239 | 0.0245 | 95.0 | 77.6-127 | 2.59 | 20 | WG806343 |
| 1,3-Dichloropropane | mg/l | 0.0226 | 0.0239 | 90.0 | 80.6-115 | 5.48 | 20 | WG806343 |
| 1,4-Dichlorobenzene | mg/l | 0.0226 | 0.0231 | 90.0 | 82.2-114 | 2.47 | 20 | WG806343 |
| 2,2-Dichloropropane | mg/l | 0.0225 | 0.0247 | 90.0 | 61.3-134 | 9.19 | 20 | WG806343 |
| 2-Butanone (MEK) | mg/l | 0.114 | 0.125 | 91.0 | 46.4-155 | 8.97 | 20 | WG806343 |
| 2-Chloroethyl vinyl ether | mg/l | 0.0282 | 0.0303 | 22* | 23.4-162 | 7.38 | 23.5 | WG806343 |
| 2-Chlorotoluene | mg/l | 0.0225 | 0.0237 | 90.0 | 76.4-125 | 5.02 | 20 | WG806343 |
| 4-Chlorotoluene | mg/l | 0.0230 | 0.0240 | 92.0 | 81.5-121 | 4.44 | 20 | WG806343 |
| 4-Methyl-2-pentanone (MIBK) | mg/l | 0.128 | 0.139 | 103. | 63.3-138 | 8.08 | 20 | WG806343 |
| Acetone | mg/l | 0.0997 | 0.109 | 80.0 | 28.7-175 | 8.50 | 20.9 | WG806343 |
| Acrolein | mg/l | 0.113 | 0.126 | 90.0 | 40.4-172 | 10.8 | 20 | WG806343 |
| Acrylonitrile | mg/l | 0.112 | 0.125 | 90.0 | 58.2-145 | 10.5 | 20 | WG806343 |
| Benzene | mg/l | 0.0198 | 0.0216 | 79.0 | 73-122 | 8.63 | 20 | WG806343 |
| Bromobenzene | mg/l | 0.0226 | 0.0234 | 90.0 | 81.5-115 | 3.35 | 20 | WG806343 |
| Bromodichloromethane | mg/l | 0.0239 | 0.0254 | 96.0 | 75.5-121 | 6.13 | 20 | WG806343 |
| Bromoform | mg/l | 0.0247 | 0.0268 | 99.0 | 71.5-131 | 8.31 | 20 | WG806343 |
| Bromomethane | mg/l | 0.0274 | 0.0310 | 110. | 22.4-187 | 12.4 | 20 | WG806343 |
| Carbon tetrachloride | mg/l | 0.0204 | 0.0233 | 82.0 | 70.9-129 | 13.2 | 20 | WG806343 |
| Chlorobenzene | mg/l | 0.0230 | 0.0243 | 92.0 | 79.7-122 | 5.41 | 20 | WG806343 |
| Chlorodibromomethane | mg/l | 0.0241 | 0.0251 | 96.0 | 78.2-124 | 4.22 | 20 | WG806343 |
| Chloroethane | mg/l | 0.0203 | 0.0222 | 81.0 | 41.2-153 | 9.25 | 20 | WG806343 |
| Chloroform | mg/l | 0.0209 | 0.0231 | 84.0 | 73.2-125 | 9.94 | 20 | WG806343 |
| Chloromethane | mg/l | 0.0187 | 0.0210 | 75.0 | 55.8-134 | 11.5 | 20 | WG806343 |
| cis-1,2-Dichloroethene | mg/l | 0.0207 | 0.0224 | 83.0 | 77.3-122 | 7.80 | 20 | WG806343 |
| cis-1,3-Dichloropropene | mg/l | 0.0239 | 0.0257 | 96.0 | 77.7-124 | 7.20 | 20 | WG806343 |
| Di-isopropyl ether | mg/l | 0.0226 | 0.0242 | 90.0 | 65.1-135 | 6.56 | 20 | WG806343 |
| Dibromomethane | mg/l | 0.0230 | 0.0243 | 92.0 | 79.5-118 | 5.45 | 20 | WG806343 |
| Dichlorodifluoromethane | mg/l | 0.0195 | 0.0206 | 78.0 | 56-134 | 5.43 | 20 | WG806343 |
| Ethylbenzene | mg/l | 0.0229 | 0.0245 | 91.0 | 80.9-121 | 6.83 | 20 | WG806343 |
| Hexachloro-1,3-butadiene | mg/l | 0.0239 | 0.0256 | 96.0 | 73.7-133 | 6.70 | 20 | WG806343 |
| Isopropylbenzene | mg/l | 0.0224 | 0.0237 | 90.0 | 81.6-124 | 5.77 | 20 | WG806343 |
| Methyl tert-butyl ether | mg/l | 0.0213 | 0.0226 | 85.0 | 70.1-125 | 5.88 | 20 | WG806343 |
| Methylene Chloride | mg/l | 0.0206 | 0.0215 | 82.0 | 69.5-120 | 4.58 | 20 | WG806343 |
| n-Butylbenzene | mg/l | 0.0229 | 0.0243 | 92.0 | 75.9-134 | 6.02 | 20 | WG806343 |
| n-Propylbenzene | mg/l | 0.0226 | 0.0239 | 90.0 | 81.9-122 | 5.50 | 20 | WG806343 |
| Naphthalene | mg/l | 0.0230 | 0.0251 | 92.0 | 69.7-134 | 8.65 | 20 | WG806343 |
| p-Isopropyltoluene | mg/l | 0.0235 | 0.0248 | 94.0 | 77.6-129 | 5.30 | 20 | WG806343 |
| sec-Butylbenzene | mg/l | 0.0225 | 0.0244 | 90.0 | 80.6-126 | 8.20 | 20 | WG806343 |
| Styrene | mg/l | 0.0244 | 0.0259 | 98.0 | 79.9-124 | 5.98 | 20 | WG806343 |
| tert-Butylbenzene | mg/l | 0.0229 | 0.0244 | 92.0 | 79.3-127 | 6.28 | 20 | WG806343 |
| Tetrachloroethene | mg/l | 0.0233 | 0.0255 | 93.0 | 73.5-130 | 9.10 | 20 | WG806343 |
| Toluene | mg/l | 0.0212 | 0.0230 | 85.0 | 77.9-116 | 8.05 | 20 | WG806343 |

* Performance of this Analyte is outside of established criteria.
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Tax I.D. 62-0814289

Est. 1970

Strata - ID
Andrew Provant
8653 W Hackamore Dr

Boise, ID 83709

Quality Assurance Report
Level II

L779930

August 11, 2015

| Analyte | Units | Laboratory Control Sample Duplicate Result | Ref | %Rec | Limit | RPD | Limit | Batch |
|---|---|---|---|---|---|---|---|---|
| trans-1,2-Dichloroethene | mg/l | 0.0201 | 0.0220 | 80.0 | 72.6-125 | 9.35 | 20 | WG806343 |
| trans-1,3-Dichloropropene | mg/l | 0.0247 | 0.0269 | 99.0 | 73.5-127 | 8.42 | 20 | WG806343 |
| Trichloroethene | mg/l | 0.0223 | 0.0240 | 89.0 | 79.5-121 | 7.58 | 20 | WG806343 |
| Trichlorofluoromethane | mg/l | 0.0206 | 0.0239 | 82.0 | 49.1-157 | 14.7 | 20 | WG806343 |
| Vinyl chloride | mg/l | 0.0187 | 0.0207 | 75.0 | 61.5-134 | 10.5 | 20 | WG806343 |
| Xylenes, Total | mg/l | 0.0667 | 0.0730 | 89.0 | 79.2-122 | 9.08 | 20 | WG806343 |
| 4-Bromofluorobenzene | | | | 97.10 | 80.1-120 | | | WG806343 |
| Dibromofluoromethane | | | | 90.00 | 79-121 | | | WG806343 |
| Toluene-d8 | | | | 98.60 | 90-115 | | | WG806343 |
| TPHGAK C6 to C10 | mg/kg | 5.73 | 5.92 | 104. | 70-130 | 3.23 | 20 | WG806688 |
| a,a,a-Trifluorotoluene(FID) | | | | 99.60 | 59-128 | | | WG806688 |
| a,a,a-Trifluorotoluene(PID) | | | | 113.0 | 54-144 | | | WG806688 |
| Mercury | mg/kg | 0.296 | 0.291 | 99.0 | 80-120 | 2.00 | 20 | WG806568 |
| 1,1,1,2-Tetrachloroethane | mg/kg | 0.0274 | 0.0254 | 109. | 76.7-127 | 7.56 | 20 | WG806472 |
| 1,1,1-Trichloroethane | mg/kg | 0.0239 | 0.0212 | 96.0 | 69.9-127 | 11.9 | 20 | WG806472 |
| 1,1,2,2-Tetrachloroethane | mg/kg | 0.0278 | 0.0252 | 111. | 78.8-124 | 9.92 | 20 | WG806472 |
| 1,1,2-Trichloroethane | mg/kg | 0.0269 | 0.0239 | 107. | 81.9-119 | 11.8 | 20 | WG806472 |
| 1,1,2-Trichlorotrifluoroethane | mg/kg | 0.0252 | 0.0223 | 101. | 62.6-138 | 12.2 | 20 | WG806472 |
| 1,1-Dichloroethane | mg/kg | 0.0248 | 0.0221 | 99.0 | 71.7-125 | 11.3 | 20 | WG806472 |
| 1,1-Dichloroethene | mg/kg | 0.0256 | 0.0221 | 102. | 60.6-133 | 14.6 | 20 | WG806472 |
| 1,1-Dichloropropene | mg/kg | 0.0254 | 0.0215 | 102. | 71.2-126 | 16.5 | 20 | WG806472 |
| 1,2,3-Trichlorobenzene | mg/kg | 0.0293 | 0.0256 | 117. | 72.5-137 | 13.3 | 20 | WG806472 |
| 1,2,3-Trichloropropane | mg/kg | 0.0291 | 0.0253 | 116. | 74-124 | 13.8 | 20 | WG806472 |
| 1,2,3-Trimethylbenzene | mg/kg | 0.0292 | 0.0267 | 117. | 79.4-118 | 8.80 | 20 | WG806472 |
| 1,2,4-Trichlorobenzene | mg/kg | 0.0292 | 0.0257 | 117. | 74-137 | 12.8 | 20 | WG806472 |
| 1,2,4-Trimethylbenzene | mg/kg | 0.0295 | 0.0264 | 118. | 77.1-124 | 11.0 | 20 | WG806472 |
| 1,2-Dibromo-3-Chloropropane | mg/kg | 0.0287 | 0.0224 | 115. | 64.9-131 | 24.6* | 20 | WG806472 |
| 1,2-Dibromoethane | mg/kg | 0.0277 | 0.0248 | 111. | 78.7-123 | 11.1 | 20 | WG806472 |
| 1,2-Dichlorobenzene | mg/kg | 0.0286 | 0.0260 | 114. | 83.6-119 | 9.54 | 20 | WG806472 |
| 1,2-Dichloroethane | mg/kg | 0.0251 | 0.0220 | 100. | 67.2-121 | 13.5 | 20 | WG806472 |
| 1,2-Dichloropropane | mg/kg | 0.0267 | 0.0248 | 107. | 76.9-123 | 7.40 | 20 | WG806472 |
| 1,3,5-Trimethylbenzene | mg/kg | 0.0279 | 0.0255 | 112. | 79-125 | 8.96 | 20 | WG806472 |
| 1,3-Dichlorobenzene | mg/kg | 0.0282 | 0.0257 | 113. | 75.9-129 | 9.40 | 20 | WG806472 |
| 1,3-Dichloropropane | mg/kg | 0.0286 | 0.0254 | 114. | 80.3-114 | 12.1 | 20 | WG806472 |
| 1,4-Dichlorobenzene | mg/kg | 0.0284 | 0.0255 | 114. | 81-115 | 10.6 | 20 | WG806472 |
| 2,2-Dichloropropane | mg/kg | 0.0225 | 0.0203 | 90.0 | 61.9-132 | 10.2 | 20 | WG806472 |
| 2-Butanone (MEK) | mg/kg | 0.146 | 0.120 | 117. | 44.5-154 | 19.3 | 21.3 | WG806472 |
| 2-Chloroethyl vinyl ether | mg/kg | 0.0660 | 0.0532 | 53.0 | 16.7-162 | 21.4 | 23.7 | WG806472 |
| 2-Chlorotoluene | mg/kg | 0.0280 | 0.0255 | 112. | 74.6-127 | 9.46 | 20 | WG806472 |
| 4-Chlorotoluene | mg/kg | 0.0278 | 0.0251 | 111. | 79.5-123 | 10.4 | 20 | WG806472 |
| 4-Methyl-2-pentanone (MIBK) | mg/kg | 0.148 | 0.124 | 118. | 61.1-138 | 18.0 | 20 | WG806472 |
| Acetone | mg/kg | 0.137 | 0.117 | 110. | 25.3-178 | 16.2 | 22.9 | WG806472 |
| Acrylonitrile | mg/kg | 0.138 | 0.112 | 110. | 57.8-143 | 20.8* | 20 | WG806472 |
| Benzene | mg/kg | 0.0254 | 0.0224 | 102. | 72.6-120 | 12.7 | 20 | WG806472 |
| Bromobenzene | mg/kg | 0.0277 | 0.0246 | 111. | 80.3-115 | 11.6 | 20 | WG806472 |
| Bromodichloromethane | mg/kg | 0.0241 | 0.0227 | 96.0 | 75.3-119 | 5.66 | 20 | WG806472 |
| Bromoform | mg/kg | 0.0270 | 0.0227 | 108. | 69.1-135 | 17.3 | 20 | WG806472 |
| Bromomethane | mg/kg | 0.0193 | 0.0163 | 77.0 | 23-191 | 16.9 | 20 | WG806472 |
| Carbon tetrachloride | mg/kg | 0.0244 | 0.0211 | 98.0 | 69.4-129 | 14.5 | 20 | WG806472 |
| Chlorobenzene | mg/kg | 0.0285 | 0.0258 | 114. | 78.9-122 | 9.96 | 20 | WG806472 |
| Chlorodibromomethane | mg/kg | 0.0273 | 0.0251 | 109. | 76.4-126 | 8.41 | 20 | WG806472 |
| Chloroethane | mg/kg | 0.0219 | 0.0193 | 88.0 | 47.2-147 | 12.9 | 20 | WG806472 |
| Chloroform | mg/kg | 0.0230 | 0.0208 | 92.0 | 73.3-122 | 10.0 | 20 | WG806472 |

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Est. 1970

Strata - ID
Andrew Provant
8653 W Hackamore Dr

Boise, ID 83709

Quality Assurance Report
Level II

L779930

August 11, 2015

| Analyte | Units | Laboratory Control Sample Duplicate Result | Ref | %Rec | Limit | RPD | Limit | Batch |
|---|---|---|---|---|---|---|---|---|
| Chloromethane | mg/kg | 0.0218 | 0.0184 | 87.0 | 53.1-135 | 17.1 | 20 | WG806472 |
| cis-1,2-Dichloroethene | mg/kg | 0.0254 | 0.0217 | 101. | 76.1-121 | 15.8 | 20 | WG806472 |
| cis-1,3-Dichloropropene | mg/kg | 0.0275 | 0.0249 | 110. | 77.3-123 | 9.88 | 20 | WG806472 |
| Di-isopropyl ether | mg/kg | 0.0247 | 0.0216 | 99.0 | 67.2-131 | 13.3 | 20 | WG806472 |
| Dibromomethane | mg/kg | 0.0277 | 0.0246 | 111. | 78.5-117 | 11.8 | 20 | WG806472 |
| Dichlorodifluoromethane | mg/kg | 0.0231 | 0.0188 | 92.0 | 50.9-139 | 20.4* | 20 | WG806472 |
| Ethylbenzene | mg/kg | 0.0287 | 0.0253 | 115. | 78.6-124 | 12.8 | 20 | WG806472 |
| Hexachloro-1,3-butadiene | mg/kg | 0.0267 | 0.0229 | 107. | 69.2-136 | 15.4 | 20 | WG806472 |
| Isopropylbenzene | mg/kg | 0.0272 | 0.0237 | 109. | 79.4-126 | 13.5 | 20 | WG806472 |
| Methyl tert-butyl ether | mg/kg | 0.0187 | 0.0163 | 75.0 | 70.2-122 | 13.8 | 20 | WG806472 |
| Methylene Chloride | mg/kg | 0.0244 | 0.0217 | 97.0 | 68.2-119 | 11.4 | 20 | WG806472 |
| n-Butylbenzene | mg/kg | 0.0311 | 0.0265 | 124. | 74.2-134 | 16.0 | 20 | WG806472 |
| n-Propylbenzene | mg/kg | 0.0281 | 0.0251 | 112. | 80.2-124 | 11.5 | 20 | WG806472 |
| Naphthalene | mg/kg | 0.0316 | 0.0267 | 126. | 69.9-132 | 17.0 | 20 | WG806472 |
| p-Isopropyltoluene | mg/kg | 0.0285 | 0.0254 | 114. | 75.4-132 | 11.5 | 20 | WG806472 |
| sec-Butylbenzene | mg/kg | 0.0280 | 0.0251 | 112. | 77.8-129 | 11.0 | 20 | WG806472 |
| Styrene | mg/kg | 0.0282 | 0.0248 | 113. | 79.4-124 | 12.9 | 20 | WG806472 |
| tert-Butylbenzene | mg/kg | 0.0273 | 0.0244 | 109. | 77.2-129 | 11.0 | 20 | WG806472 |
| Tetrachloroethene | mg/kg | 0.0260 | 0.0230 | 104. | 71.1-133 | 12.3 | 20 | WG806472 |
| Toluene | mg/kg | 0.0259 | 0.0233 | 104. | 76.7-116 | 10.5 | 20 | WG806472 |
| trans-1,2-Dichloroethene | mg/kg | 0.0260 | 0.0217 | 104. | 70.7-124 | 18.1 | 20 | WG806472 |
| trans-1,3-Dichloropropene | mg/kg | 0.0275 | 0.0243 | 110. | 73-127 | 12.4 | 20 | WG806472 |
| Trichloroethene | mg/kg | 0.0253 | 0.0233 | 101. | 77.2-122 | 8.33 | 20 | WG806472 |
| Trichlorofluoromethane | mg/kg | 0.0246 | 0.0218 | 98.0 | 51.5-151 | 12.3 | 20 | WG806472 |
| Vinyl chloride | mg/kg | 0.0255 | 0.0217 | 102. | 58.4-134 | 16.2 | 20 | WG806472 |
| Xylenes, Total | mg/kg | 0.0831 | 0.0752 | 111. | 78.1-123 | 9.97 | 20 | WG806472 |
| 4-Bromofluorobenzene | | | | 107.0 | 69.7-129 | | | WG806472 |
| Dibromofluoromethane | | | | 97.00 | 76.3-123 | | | WG806472 |
| Toluene-d8 | | | | 108.0 | 88.7-115 | | | WG806472 |
| 1,1,1,2-Tetrachloroethane | mg/kg | 0.0269 | 0.0260 | 107. | 76.7-127 | 3.27 | 20 | WG806473 |
| 1,1,1-Trichloroethane | mg/kg | 0.0270 | 0.0259 | 108. | 69.9-127 | 4.19 | 20 | WG806473 |
| 1,1,2,2-Tetrachloroethane | mg/kg | 0.0266 | 0.0267 | 106. | 78.8-124 | 0.170 | 20 | WG806473 |
| 1,1,2-Trichloroethane | mg/kg | 0.0264 | 0.0260 | 106. | 81.9-119 | 1.50 | 20 | WG806473 |
| 1,1,2-Trichlorotrifluoroethane | mg/kg | 0.0278 | 0.0272 | 111. | 62.6-138 | 2.27 | 20 | WG806473 |
| 1,1-Dichloroethane | mg/kg | 0.0267 | 0.0259 | 107. | 71.7-125 | 3.05 | 20 | WG806473 |
| 1,1-Dichloroethene | mg/kg | 0.0263 | 0.0254 | 105. | 60.6-133 | 3.65 | 20 | WG806473 |
| 1,1-Dichloropropene | mg/kg | 0.0278 | 0.0267 | 111. | 71.2-126 | 4.10 | 20 | WG806473 |
| 1,2,3-Trichlorobenzene | mg/kg | 0.0181 | 0.0174 | 72* | 72.5-137 | 3.80 | 20 | WG806473 |
| 1,2,3-Trichloropropane | mg/kg | 0.0260 | 0.0251 | 104. | 74-124 | 3.53 | 20 | WG806473 |
| 1,2,3-Trimethylbenzene | mg/kg | 0.0273 | 0.0266 | 109. | 79.4-118 | 2.56 | 20 | WG806473 |
| 1,2,4-Trichlorobenzene | mg/kg | 0.0223 | 0.0204 | 89.0 | 74-137 | 9.05 | 20 | WG806473 |
| 1,2,4-Trimethylbenzene | mg/kg | 0.0299 | 0.0284 | 120. | 77.1-124 | 5.18 | 20 | WG806473 |
| 1,2-Dibromo-3-Chloropropane | mg/kg | 0.0215 | 0.0210 | 86.0 | 64.9-131 | 2.11 | 20 | WG806473 |
| 1,2-Dibromoethane | mg/kg | 0.0265 | 0.0258 | 106. | 78.7-123 | 2.79 | 20 | WG806473 |
| 1,2-Dichlorobenzene | mg/kg | 0.0267 | 0.0259 | 107. | 83.6-119 | 3.12 | 20 | WG806473 |
| 1,2-Dichloroethane | mg/kg | 0.0254 | 0.0251 | 102. | 67.2-121 | 1.42 | 20 | WG806473 |
| 1,2-Dichloropropane | mg/kg | 0.0278 | 0.0266 | 111. | 76.9-123 | 4.56 | 20 | WG806473 |
| 1,3,5-Trimethylbenzene | mg/kg | 0.0294 | 0.0278 | 118. | 79-125 | 5.70 | 20 | WG806473 |
| 1,3-Dichlorobenzene | mg/kg | 0.0293 | 0.0273 | 117. | 75.9-129 | 6.86 | 20 | WG806473 |
| 1,3-Dichloropropane | mg/kg | 0.0251 | 0.0249 | 100. | 80.3-114 | 0.800 | 20 | WG806473 |
| 1,4-Dichlorobenzene | mg/kg | 0.0273 | 0.0263 | 109. | 81-115 | 3.77 | 20 | WG806473 |
| 2,2-Dichloropropane | mg/kg | 0.0253 | 0.0253 | 101. | 61.9-132 | 0.170 | 20 | WG806473 |
| 2-Butanone (MEK) | mg/kg | 0.127 | 0.124 | 101. | 44.5-154 | 1.96 | 21.3 | WG806473 |
| 2-Chloroethyl vinyl ether | mg/kg | 0.122 | 0.118 | 97.0 | 16.7-162 | 2.90 | 23.7 | WG806473 |
| 2-Chlorotoluene | mg/kg | 0.0289 | 0.0275 | 116. | 74.6-127 | 5.08 | 20 | WG806473 |
| 4-Chlorotoluene | mg/kg | 0.0285 | 0.0268 | 114. | 79.5-123 | 6.01 | 20 | WG806473 |
| 4-Methyl-2-pentanone (MIBK) | mg/kg | 0.121 | 0.124 | 97.0 | 61.1-138 | 2.21 | 20 | WG806473 |

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Est. 1970

Strata - ID
Andrew Provant
8653 W Hackamore Dr

Boise, ID 83709

Quality Assurance Report
Level II

L779930

August 11, 2015

| | | Laboratory Control Sample Duplicate | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Analyte | Units | Result | Ref | %Rec | Limit | RPD | Limit | Batch |
| Acetone | mg/kg | 0.137 | 0.121 | 110. | 25.3-178 | 12.5 | 22.9 | WG806473 |
| Acrylonitrile | mg/kg | 0.133 | 0.132 | 106. | 57.8-143 | 0.960 | 20 | WG806473 |
| Benzene | mg/kg | 0.0282 | 0.0262 | 113. | 72.6-120 | 7.29 | 20 | WG806473 |
| Bromobenzene | mg/kg | 0.0279 | 0.0268 | 111. | 80.3-115 | 4.02 | 20 | WG806473 |
| Bromodichloromethane | mg/kg | 0.0258 | 0.0251 | 103. | 75.3-119 | 2.59 | 20 | WG806473 |
| Bromoform | mg/kg | 0.0256 | 0.0251 | 102. | 69.1-135 | 2.14 | 20 | WG806473 |
| Bromomethane | mg/kg | 0.0265 | 0.0249 | 106. | 23-191 | 6.14 | 20 | WG806473 |
| Carbon tetrachloride | mg/kg | 0.0274 | 0.0258 | 110. | 69.4-129 | 5.85 | 20 | WG806473 |
| Chlorobenzene | mg/kg | 0.0281 | 0.0270 | 112. | 78.9-122 | 3.77 | 20 | WG806473 |
| Chlorodibromomethane | mg/kg | 0.0256 | 0.0248 | 102. | 76.4-126 | 3.19 | 20 | WG806473 |
| Chloroethane | mg/kg | 0.0250 | 0.0236 | 100. | 47.2-147 | 5.77 | 20 | WG806473 |
| Chloroform | mg/kg | 0.0261 | 0.0257 | 104. | 73.3-122 | 1.59 | 20 | WG806473 |
| Chloromethane | mg/kg | 0.0264 | 0.0243 | 106. | 53.1-135 | 8.33 | 20 | WG806473 |
| cis-1,2-Dichloroethene | mg/kg | 0.0273 | 0.0269 | 109. | 76.1-121 | 1.55 | 20 | WG806473 |
| cis-1,3-Dichloropropene | mg/kg | 0.0272 | 0.0263 | 109. | 77.3-123 | 3.31 | 20 | WG806473 |
| Di-isopropyl ether | mg/kg | 0.0258 | 0.0254 | 103. | 67.2-131 | 1.53 | 20 | WG806473 |
| Dibromomethane | mg/kg | 0.0263 | 0.0257 | 105. | 78.5-117 | 2.35 | 20 | WG806473 |
| Dichlorodifluoromethane | mg/kg | 0.0245 | 0.0219 | 98.0 | 50.9-139 | 11.2 | 20 | WG806473 |
| Ethylbenzene | mg/kg | 0.0280 | 0.0270 | 112. | 78.6-124 | 3.57 | 20 | WG806473 |
| Hexachloro-1,3-butadiene | mg/kg | 0.0233 | 0.0216 | 93.0 | 69.2-136 | 7.52 | 20 | WG806473 |
| Isopropylbenzene | mg/kg | 0.0285 | 0.0275 | 114. | 79.4-126 | 3.54 | 20 | WG806473 |
| Methyl tert-butyl ether | mg/kg | 0.0269 | 0.0263 | 108. | 70.2-122 | 2.26 | 20 | WG806473 |
| Methylene Chloride | mg/kg | 0.0243 | 0.0236 | 97.0 | 68.2-119 | 2.87 | 20 | WG806473 |
| n-Butylbenzene | mg/kg | 0.0290 | 0.0275 | 116. | 74.2-134 | 5.34 | 20 | WG806473 |
| n-Propylbenzene | mg/kg | 0.0294 | 0.0280 | 117. | 80.2-124 | 4.79 | 20 | WG806473 |
| Naphthalene | mg/kg | 0.0184 | 0.0182 | 74.0 | 69.9-132 | 0.910 | 20 | WG806473 |
| p-Isopropyltoluene | mg/kg | 0.0296 | 0.0278 | 118. | 75.4-132 | 6.25 | 20 | WG806473 |
| sec-Butylbenzene | mg/kg | 0.0294 | 0.0280 | 118. | 77.8-129 | 4.96 | 20 | WG806473 |
| Styrene | mg/kg | 0.0283 | 0.0273 | 113. | 79.4-124 | 3.44 | 20 | WG806473 |
| tert-Butylbenzene | mg/kg | 0.0289 | 0.0279 | 115. | 77.2-129 | 3.38 | 20 | WG806473 |
| Tetrachloroethene | mg/kg | 0.0262 | 0.0256 | 105. | 71.1-133 | 2.30 | 20 | WG806473 |
| Toluene | mg/kg | 0.0277 | 0.0263 | 111. | 76.7-116 | 4.98 | 20 | WG806473 |
| trans-1,2-Dichloroethene | mg/kg | 0.0280 | 0.0269 | 112. | 70.7-124 | 4.00 | 20 | WG806473 |
| trans-1,3-Dichloropropene | mg/kg | 0.0243 | 0.0238 | 97.0 | 73-127 | 2.29 | 20 | WG806473 |
| Trichloroethene | mg/kg | 0.0271 | 0.0260 | 108. | 77.2-122 | 4.28 | 20 | WG806473 |
| Trichlorofluoromethane | mg/kg | 0.0248 | 0.0240 | 99.0 | 51.5-151 | 3.56 | 20 | WG806473 |
| Vinyl chloride | mg/kg | 0.0255 | 0.0234 | 102. | 58.4-134 | 8.57 | 20 | WG806473 |
| Xylenes, Total | mg/kg | 0.0850 | 0.0811 | 113. | 78.1-123 | 4.72 | 20 | WG806473 |
| 4-Bromofluorobenzene | | | | 109.0 | 69.7-129 | | | WG806473 |
| Dibromofluoromethane | | | | 101.0 | 76.3-123 | | | WG806473 |
| Toluene-d8 | | | | 107.0 | 88.7-115 | | | WG806473 |
| Mercury | mg/kg | 0.279 | 0.271 | 93.0 | 80-120 | 3.00 | 20 | WG806784 |
| Antimony | mg/kg | 92.9 | 95.8 | 93.0 | 80-120 | 3.00 | 20 | WG807311 |
| Arsenic | mg/kg | 91.5 | 94.8 | 91.0 | 80-120 | 4.00 | 20 | WG807311 |
| Beryllium | mg/kg | 97.2 | 101. | 97.0 | 80-120 | 4.00 | 20 | WG807311 |
| Cadmium | mg/kg | 93.4 | 96.5 | 93.0 | 80-120 | 3.00 | 20 | WG807311 |
| Chromium | mg/kg | 94.6 | 98.2 | 94.0 | 80-120 | 4.00 | 20 | WG807311 |
| Copper | mg/kg | 94.7 | 97.5 | 95.0 | 80-120 | 3.00 | 20 | WG807311 |
| Lead | mg/kg | 93.7 | 97.1 | 94.0 | 80-120 | 4.00 | 20 | WG807311 |
| Nickel | mg/kg | 93.3 | 96.5 | 93.0 | 80-120 | 3.00 | 20 | WG807311 |
| Selenium | mg/kg | 94.2 | 97.7 | 94.0 | 80-120 | 4.00 | 20 | WG807311 |
| Silver | mg/kg | 92.1 | 95.2 | 92.0 | 80-120 | 3.00 | 20 | WG807311 |
| Thallium | mg/kg | 94.0 | 96.1 | 94.0 | 80-120 | 2.00 | 20 | WG807311 |
| Zinc | mg/kg | 93.2 | 96.7 | 93.0 | 80-120 | 4.00 | 20 | WG807311 |

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Tax I.D. 62-0814289

Est. 1970

Strata - ID
Andrew Provant
8653 W Hackamore Dr

Boise, ID 83709

Quality Assurance Report
Level II

L779930

August 11, 2015

| Analyte | Units | Laboratory Control Sample Duplicate Result | Ref | %Rec | Limit | RPD | Limit | Batch |
|---|---|---|---|---|---|---|---|---|
| 1-Methylnaphthalene | mg/kg | 0.0636 | 0.0607 | 79.0 | 50.6-122 | 4.64 | 20 | WG807206 |
| 2-Chloronaphthalene | mg/kg | 0.0616 | 0.0596 | 77.0 | 53.9-121 | 3.39 | 20 | WG807206 |
| 2-Methylnaphthalene | mg/kg | 0.0609 | 0.0586 | 76.0 | 50.4-120 | 3.97 | 20 | WG807206 |
| Acenaphthene | mg/kg | 0.0602 | 0.0585 | 75.0 | 52.4-120 | 2.90 | 20 | WG807206 |
| Acenaphthylene | mg/kg | 0.0610 | 0.0593 | 76.0 | 49.6-120 | 2.72 | 20 | WG807206 |
| Anthracene | mg/kg | 0.0603 | 0.0603 | 75.0 | 50.3-130 | 0.0400 | 20 | WG807206 |
| Benzo(a)anthracene | mg/kg | 0.0566 | 0.0572 | 71.0 | 46.7-125 | 0.960 | 20 | WG807206 |
| Benzo(a)pyrene | mg/kg | 0.0557 | 0.0556 | 70.0 | 42.3-119 | 0.200 | 20 | WG807206 |
| Benzo(b)fluoranthene | mg/kg | 0.0561 | 0.0558 | 70.0 | 43.6-124 | 0.450 | 20 | WG807206 |
| Benzo(g,h,i)perylene | mg/kg | 0.0582 | 0.0594 | 73.0 | 45.1-132 | 2.03 | 20 | WG807206 |
| Benzo(k)fluoranthene | mg/kg | 0.0555 | 0.0573 | 69.0 | 46.1-131 | 3.15 | 20 | WG807206 |
| Chrysene | mg/kg | 0.0570 | 0.0570 | 71.0 | 49.5-131 | 0.0100 | 20 | WG807206 |
| Dibenz(a,h)anthracene | mg/kg | 0.0586 | 0.0598 | 73.0 | 44.8-133 | 1.95 | 20 | WG807206 |
| Fluoranthene | mg/kg | 0.0598 | 0.0604 | 75.0 | 49.3-128 | 1.03 | 20 | WG807206 |
| Fluorene | mg/kg | 0.0606 | 0.0604 | 76.0 | 50.6-121 | 0.260 | 20 | WG807206 |
| Indeno(1,2,3-cd)pyrene | mg/kg | 0.0600 | 0.0612 | 75.0 | 46.1-135 | 2.00 | 20 | WG807206 |
| Naphthalene | mg/kg | 0.0596 | 0.0568 | 74.0 | 49.6-115 | 4.71 | 20 | WG807206 |
| Phenanthrene | mg/kg | 0.0589 | 0.0593 | 74.0 | 48.8-121 | 0.760 | 20 | WG807206 |
| Pyrene | mg/kg | 0.0651 | 0.0657 | 81.0 | 44.7-130 | 1.02 | 20 | WG807206 |
| 2-Fluorobiphenyl | | | | 77.70 | 40.6-122 | | | WG807206 |
| Nitrobenzene-d5 | | | | 82.40 | 22.1-146 | | | WG807206 |
| p-Terphenyl-d14 | | | | 66.80 | 32.2-131 | | | WG807206 |
| 1-Methylnaphthalene | mg/kg | 0.0528 | 0.0501 | 66.0 | 50.6-122 | 5.26 | 20 | WG807849 |
| 2-Chloronaphthalene | mg/kg | 0.0472 | 0.0456 | 59.0 | 53.9-121 | 3.60 | 20 | WG807849 |
| 2-Methylnaphthalene | mg/kg | 0.0498 | 0.0476 | 62.0 | 50.4-120 | 4.56 | 20 | WG807849 |
| Acenaphthene | mg/kg | 0.0475 | 0.0456 | 59.0 | 52.4-120 | 4.18 | 20 | WG807849 |
| Acenaphthylene | mg/kg | 0.0471 | 0.0454 | 59.0 | 49.6-120 | 3.77 | 20 | WG807849 |
| Anthracene | mg/kg | 0.0499 | 0.0464 | 62.0 | 50.3-130 | 7.23 | 20 | WG807849 |
| Benzo(a)anthracene | mg/kg | 0.0412 | 0.0398 | 51.0 | 46.7-125 | 3.49 | 20 | WG807849 |
| Benzo(a)pyrene | mg/kg | 0.0426 | 0.0401 | 53.0 | 42.3-119 | 6.01 | 20 | WG807849 |
| Benzo(b)fluoranthene | mg/kg | 0.0387 | 0.0362 | 48.0 | 43.6-124 | 6.63 | 20 | WG807849 |
| Benzo(g,h,i)perylene | mg/kg | 0.0426 | 0.0402 | 53.0 | 45.1-132 | 5.71 | 20 | WG807849 |
| Benzo(k)fluoranthene | mg/kg | 0.0450 | 0.0436 | 56.0 | 46.1-131 | 3.22 | 20 | WG807849 |
| Chrysene | mg/kg | 0.0454 | 0.0430 | 57.0 | 49.5-131 | 5.56 | 20 | WG807849 |
| Dibenz(a,h)anthracene | mg/kg | 0.0407 | 0.0391 | 51.0 | 44.8-133 | 3.92 | 20 | WG807849 |
| Fluoranthene | mg/kg | 0.0481 | 0.0452 | 60.0 | 49.3-128 | 6.20 | 20 | WG807849 |
| Fluorene | mg/kg | 0.0465 | 0.0450 | 58.0 | 50.6-121 | 3.28 | 20 | WG807849 |
| Indeno(1,2,3-cd)pyrene | mg/kg | 0.0418 | 0.0400 | 52.0 | 46.1-135 | 4.40 | 20 | WG807849 |
| Naphthalene | mg/kg | 0.0492 | 0.0467 | 61.0 | 49.6-115 | 5.09 | 20 | WG807849 |
| Phenanthrene | mg/kg | 0.0439 | 0.0421 | 55.0 | 48.8-121 | 4.20 | 20 | WG807849 |
| Pyrene | mg/kg | 0.0488 | 0.0468 | 61.0 | 44.7-130 | 4.20 | 20 | WG807849 |
| 2-Fluorobiphenyl | | | | 62.40 | 40.6-122 | | | WG807849 |
| Nitrobenzene-d5 | | | | 62.80 | 22.1-146 | | | WG807849 |
| p-Terphenyl-d14 | | | | 52.70 | 32.2-131 | | | WG807849 |

| Analyte | Units | Matrix Spike MS Res | Ref Res | TV | % Rec | Limit | Ref Samp | Batch |
|---|---|---|---|---|---|---|---|---|
| Antimony | mg/kg | 81.2 | -0.169 | 100 | 81.0 | 75-125 | L779930-21 | WG806411 |
| Arsenic | mg/kg | 111. | 7.09 | 100 | 100. | 75-125 | L779930-21 | WG806411 |
| Beryllium | mg/kg | 103. | 0.312 | 100 | 100. | 75-125 | L779930-21 | WG806411 |
| Cadmium | mg/kg | 106. | 0.384 | 100 | 100. | 75-125 | L779930-21 | WG806411 |
| Chromium | mg/kg | 113. | 10.5 | 100 | 100. | 75-125 | L779930-21 | WG806411 |
| Copper | mg/kg | 115. | 11.1 | 100 | 100. | 75-125 | L779930-21 | WG806411 |
| Lead | mg/kg | 146. | 34.1 | 100 | 110. | 75-125 | L779930-21 | WG806411 |
| Nickel | mg/kg | 116. | 7.19 | 100 | 110. | 75-125 | L779930-21 | WG806411 |

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Est. 1970

Strata - ID
Andrew Provant
8653 W Hackamore Dr

Boise, ID 83709

Quality Assurance Report
Level II

L779930

August 11, 2015

| Analyte | Units | MS Res | Matrix Spike Ref Res | TV | % Rec | Limit | Ref Samp | Batch |
|---|---|---|---|---|---|---|---|---|
| Selenium | mg/kg | 107. | -1.14 | 100 | 110. | 75-125 | L779930-21 | WG806411 |
| Silver | mg/kg | 101. | -0.260 | 100 | 100. | 75-125 | L779930-21 | WG806411 |
| Thallium | mg/kg | 103. | -2.39 | 100 | 100. | 75-125 | L779930-21 | WG806411 |
| Zinc | mg/kg | 249. | 131. | 100 | 120. | 75-125 | L779930-21 | WG806411 |
| 1,1,1,2-Tetrachloroethane | mg/l | 0.0270 | 0.0 | .025 | 110. | 70.5-132 | L779866-01 | WG806343 |
| 1,1,1-Trichloroethane | mg/l | 0.0250 | 0.0 | .025 | 100. | 58.7-134 | L779866-01 | WG806343 |
| 1,1,2,2-Tetrachloroethane | mg/l | 0.0255 | 0.0 | .025 | 100. | 64.9-145 | L779866-01 | WG806343 |
| 1,1,2-Trichloroethane | mg/l | 0.0248 | 0.0 | .025 | 99.0 | 74.1-130 | L779866-01 | WG806343 |
| 1,1,2-Trichlorotrifluoroethane | mg/l | 0.0251 | 0.0 | .025 | 100. | 53.7-150 | L779866-01 | WG806343 |
| 1,1-Dichloroethane | mg/l | 0.0239 | 0.0 | .025 | 96.0 | 64-134 | L779866-01 | WG806343 |
| 1,1-Dichloroethene | mg/l | 0.0249 | 0.0 | .025 | 100. | 48.8-144 | L779866-01 | WG806343 |
| 1,1-Dichloropropene | mg/l | 0.0248 | 0.0 | .025 | 99.0 | 61.5-136 | L779866-01 | WG806343 |
| 1,2,3-Trichlorobenzene | mg/l | 0.0209 | 0.0 | .025 | 84.0 | 65.7-143 | L779866-01 | WG806343 |
| 1,2,3-Trichloropropane | mg/l | 0.0264 | 0.0 | .025 | 100. | 71.5-134 | L779866-01 | WG806343 |
| 1,2,3-Trimethylbenzene | mg/l | 0.0245 | 0.0 | .025 | 98.0 | 62.7-133 | L779866-01 | WG806343 |
| 1,2,4-Trichlorobenzene | mg/l | 0.0218 | 0.0 | .025 | 87.0 | 67-146 | L779866-01 | WG806343 |
| 1,2,4-Trimethylbenzene | mg/l | 0.0243 | 0.0 | .025 | 97.0 | 60.5-137 | L779866-01 | WG806343 |
| 1,2-Dibromo-3-Chloropropane | mg/l | 0.0295 | 0.0 | .025 | 120. | 63.9-142 | L779866-01 | WG806343 |
| 1,2-Dibromoethane | mg/l | 0.0257 | 0.0 | .025 | 100. | 73.8-131 | L779866-01 | WG806343 |
| 1,2-Dichlorobenzene | mg/l | 0.0251 | 0.0 | .025 | 100. | 77.4-127 | L779866-01 | WG806343 |
| 1,2-Dichloroethane | mg/l | 0.0241 | 0.0 | .025 | 96.0 | 60.7-132 | L779866-01 | WG806343 |
| 1,2-Dichloropropane | mg/l | 0.0249 | 0.0 | .025 | 100. | 69.7-130 | L779866-01 | WG806343 |
| 1,3,5-Trimethylbenzene | mg/l | 0.0244 | 0.0 | .025 | 97.0 | 67.9-134 | L779866-01 | WG806343 |
| 1,3-Dichlorobenzene | mg/l | 0.0246 | 0.0 | .025 | 98.0 | 67.9-136 | L779866-01 | WG806343 |
| 1,3-Dichloropropane | mg/l | 0.0253 | 0.0 | .025 | 100. | 74.3-123 | L779866-01 | WG806343 |
| 1,4-Dichlorobenzene | mg/l | 0.0248 | 0.0 | .025 | 99.0 | 74.4-123 | L779866-01 | WG806343 |
| 2,2-Dichloropropane | mg/l | 0.0265 | 0.0 | .025 | 110. | 54.9-142 | L779866-01 | WG806343 |
| 2-Butanone (MEK) | mg/l | 0.116 | 0.00653 | .125 | 88.0 | 45-156 | L779866-01 | WG806343 |
| 2-Chloroethyl vinyl ether | mg/l | 0.000392 | 0.0 | .125 | 0.310* | 5-149 | L779866-01 | WG806343 |
| 2-Chlorotoluene | mg/l | 0.0247 | 0.0 | .025 | 99.0 | 66.9-134 | L779866-01 | WG806343 |
| 4-Chlorotoluene | mg/l | 0.0253 | 0.0 | .025 | 100. | 66.8-134 | L779866-01 | WG806343 |
| 4-Methyl-2-pentanone (MIBK) | mg/l | 0.145 | 0.0 | .125 | 120. | 60.7-150 | L779866-01 | WG806343 |
| Acetone | mg/l | 0.0752 | 0.0123 | .125 | 50.0 | 25-156 | L779866-01 | WG806343 |
| Acrolein | mg/l | 0.124 | 0.00101 | .125 | 99.0 | 34-194 | L779866-01 | WG806343 |
| Acrylonitrile | mg/l | 0.138 | 0.000512 | .125 | 110. | 55.9-161 | L779866-01 | WG806343 |
| Benzene | mg/l | 0.0231 | 0.0 | .025 | 92.0 | 58.6-133 | L779866-01 | WG806343 |
| Bromobenzene | mg/l | 0.0245 | 0.0 | .025 | 98.0 | 70.6-125 | L779866-01 | WG806343 |
| Bromodichloromethane | mg/l | 0.0274 | 0.00213 | .025 | 100. | 69.2-127 | L779866-01 | WG806343 |
| Bromoform | mg/l | 0.0272 | 0.0 | .025 | 110. | 66.3-140 | L779866-01 | WG806343 |
| Bromomethane | mg/l | 0.0336 | 0.0 | .025 | 130. | 16.6-183 | L779866-01 | WG806343 |
| Carbon tetrachloride | mg/l | 0.0254 | 0.0 | .025 | 100. | 60.6-139 | L779866-01 | WG806343 |
| Chlorobenzene | mg/l | 0.0268 | 0.0 | .025 | 110. | 70.1-130 | L779866-01 | WG806343 |
| Chlorodibromomethane | mg/l | 0.0271 | 0.00115 | .025 | 100. | 71.6-132 | L779866-01 | WG806343 |
| Chloroethane | mg/l | 0.0245 | 0.0 | .025 | 98.0 | 33.3-155 | L779866-01 | WG806343 |
| Chloroform | mg/l | 0.0296 | 0.00826 | .025 | 86.0 | 66.1-133 | L779866-01 | WG806343 |
| Chloromethane | mg/l | 0.0226 | 0.0 | .025 | 90.0 | 40.7-139 | L779866-01 | WG806343 |
| cis-1,2-Dichloroethene | mg/l | 0.0236 | 0.0 | .025 | 94.0 | 60.6-136 | L779866-01 | WG806343 |
| cis-1,3-Dichloropropene | mg/l | 0.0245 | 0.0 | .025 | 98.0 | 71.1-129 | L779866-01 | WG806343 |
| Di-isopropyl ether | mg/l | 0.0237 | 0.0 | .025 | 95.0 | 59.9-140 | L779866-01 | WG806343 |
| Dibromomethane | mg/l | 0.0238 | 0.0 | .025 | 95.0 | 72.8-127 | L779866-01 | WG806343 |
| Dichlorodifluoromethane | mg/l | 0.0233 | 0.0 | .025 | 93.0 | 42.2-146 | L779866-01 | WG806343 |
| Ethylbenzene | mg/l | 0.0259 | 0.0 | .025 | 100. | 62.7-136 | L779866-01 | WG806343 |
| Hexachloro-1,3-butadiene | mg/l | 0.0159 | 0.0 | .025 | 64.0 | 61.1-144 | L779866-01 | WG806343 |
| Isopropylbenzene | mg/l | 0.0258 | 0.0 | .025 | 100. | 67.4-136 | L779866-01 | WG806343 |
| Methyl tert-butyl ether | mg/l | 0.0218 | 0.0 | .025 | 87.0 | 61.4-136 | L779866-01 | WG806343 |
| Methylene Chloride | mg/l | 0.0225 | 0.0 | .025 | 90.0 | 61.5-125 | L779866-01 | WG806343 |
| n-Butylbenzene | mg/l | 0.0235 | 0.0 | .025 | 94.0 | 64.8-145 | L779866-01 | WG806343 |

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Quality Assurance Report
Level II

L779930

August 11, 2015

| Analyte | Units | MS Res | Matrix Spike Ref Res | TV | % Rec | Limit | Ref Samp | Batch |
|---|---|---|---|---|---|---|---|---|
| n-Propylbenzene | mg/l | 0.0250 | 0.0 | .025 | 100. | 63.2-139 | L779866-01 | WG806343 |
| Naphthalene | mg/l | 0.0230 | 0.0 | .025 | 92.0 | 61.8-143 | L779866-01 | WG806343 |
| p-Isopropyltoluene | mg/l | 0.0240 | 0.000689 | .025 | 93.0 | 62.8-143 | L779866-01 | WG806343 |
| sec-Butylbenzene | mg/l | 0.0230 | 0.0 | .025 | 92.0 | 66.8-139 | L779866-01 | WG806343 |
| Styrene | mg/l | 0.0274 | 0.0 | .025 | 110. | 68.2-133 | L779866-01 | WG806343 |
| tert-Butylbenzene | mg/l | 0.0243 | 0.0 | .025 | 97.0 | 67.1-138 | L779866-01 | WG806343 |
| Tetrachloroethene | mg/l | 0.0291 | 0.0 | .025 | 120. | 57.4-141 | L779866-01 | WG806343 |
| Toluene | mg/l | 0.0242 | 0.0 | .025 | 97.0 | 67.8-124 | L779866-01 | WG806343 |
| trans-1,2-Dichloroethene | mg/l | 0.0235 | 0.0 | .025 | 94.0 | 61-132 | L779866-01 | WG806343 |
| trans-1,3-Dichloropropene | mg/l | 0.0253 | 0.0 | .025 | 100. | 66.3-136 | L779866-01 | WG806343 |
| Trichloroethene | mg/l | 0.0261 | 0.0 | .025 | 100. | 48.9-148 | L779866-01 | WG806343 |
| Trichlorofluoromethane | mg/l | 0.0259 | 0.0 | .025 | 100. | 39.9-165 | L779866-01 | WG806343 |
| Vinyl chloride | mg/l | 0.0231 | 0.0 | .025 | 92.0 | 44.3-143 | L779866-01 | WG806343 |
| Xylenes, Total | mg/l | 0.0789 | 0.0 | .075 | 100. | 65.6-133 | L779866-01 | WG806343 |
| 4-Bromofluorobenzene | | | | | 93.50 | 80.1-120 | | WG806343 |
| Dibromofluoromethane | | | | | 90.30 | 79-121 | | WG806343 |
| Toluene-d8 | | | | | 95.80 | 90-115 | | WG806343 |
| TPHGAK C6 to C10 | mg/kg | 24.3 | 0.0 | 5.5 | 88.0 | 70-130 | L780291-03 | WG806688 |
| a,a,a-Trifluorotoluene(FID) | | | | | 100.0 | 59-128 | | WG806688 |
| a,a,a-Trifluorotoluene(PID) | | | | | 114.0 | 54-144 | | WG806688 |
| Mercury | mg/kg | 0.331 | 0.0383 | .3 | 98.0 | 75-125 | L779927-03 | WG806568 |
| 1,1,1,2-Tetrachloroethane | mg/kg | 0.0739 | 0.0 | .025 | 59.0 | 48.8-136 | L779943-01 | WG806472 |
| 1,1,1-Trichloroethane | mg/kg | 0.0835 | 0.0 | .025 | 67.0 | 49-138 | L779943-01 | WG806472 |
| 1,1,2,2-Tetrachloroethane | mg/kg | 0.0602 | 0.0 | .025 | 48.0 | 45.7-140 | L779943-01 | WG806472 |
| 1,1,2-Trichloroethane | mg/kg | 0.0815 | 0.0 | .025 | 65.0 | 52.3-132 | L779943-01 | WG806472 |
| 1,1,2-Trichlorotrifluoroethane | mg/kg | 0.0839 | 0.0 | .025 | 67.0 | 35.7-146 | L779943-01 | WG806472 |
| 1,1-Dichloroethane | mg/kg | 0.0909 | 0.0 | .025 | 73.0 | 49.1-136 | L779943-01 | WG806472 |
| 1,1-Dichloroethene | mg/kg | 0.0867 | 0.0 | .025 | 69.0 | 36.1-142 | L779943-01 | WG806472 |
| 1,1-Dichloropropene | mg/kg | 0.0714 | 0.0 | .025 | 57.0 | 43-137 | L779943-01 | WG806472 |
| 1,2,3-Trichlorobenzene | mg/kg | 0.0136 | 0.0 | .025 | 11.0 | 10-150 | L779943-01 | WG806472 |
| 1,2,3-Trichloropropane | mg/kg | 0.0684 | 0.0 | .025 | 55.0 | 44.4-138 | L779943-01 | WG806472 |
| 1,2,3-Trimethylbenzene | mg/kg | 0.0744 | 0.000988 | .025 | 59.0 | 41-133 | L779943-01 | WG806472 |
| 1,2,4-Trichlorobenzene | mg/kg | 0.0153 | 0.0 | .025 | 12.0 | 10-153 | L779943-01 | WG806472 |
| 1,2,4-Trimethylbenzene | mg/kg | 0.0589 | 0.00846 | .025 | 40.0 | 32.9-139 | L779943-01 | WG806472 |
| 1,2-Dibromo-3-Chloropropane | mg/kg | 0.0550 | 0.0 | .025 | 44.0 | 40.4-138 | L779943-01 | WG806472 |
| 1,2-Dibromoethane | mg/kg | 0.0703 | 0.0 | .025 | 56.0 | 50.2-133 | L779943-01 | WG806472 |
| 1,2-Dichlorobenzene | mg/kg | 0.0424 | 0.0 | .025 | 34.0* | 34.6-139 | L779943-01 | WG806472 |
| 1,2-Dichloroethane | mg/kg | 0.0867 | 0.0 | .025 | 69.0 | 47.1-129 | L779943-01 | WG806472 |
| 1,2-Dichloropropane | mg/kg | 0.0911 | 0.0 | .025 | 73.0 | 50.3-134 | L779943-01 | WG806472 |
| 1,3,5-Trimethylbenzene | mg/kg | 0.0513 | 0.0 | .025 | 41.0 | 37.1-138 | L779943-01 | WG806472 |
| 1,3-Dichlorobenzene | mg/kg | 0.0288 | 0.0 | .025 | 23.0* | 28.4-142 | L779943-01 | WG806472 |
| 1,3-Dichloropropane | mg/kg | 0.0760 | 0.0 | .025 | 61.0 | 51.4-127 | L779943-01 | WG806472 |
| 1,4-Dichlorobenzene | mg/kg | 0.0467 | 0.0 | .025 | 37.0 | 35-133 | L779943-01 | WG806472 |
| 2,2-Dichloropropane | mg/kg | 0.0793 | 0.0 | .025 | 63.0 | 45.2-141 | L779943-01 | WG806472 |
| 2-Butanone (MEK) | mg/kg | 0.607 | 0.0118 | .125 | 95.0 | 23.9-170 | L779943-01 | WG806472 |
| 2-Chloroethyl vinyl ether | mg/kg | 0.281 | 0.0 | .125 | 45.0 | 5-159 | L779943-01 | WG806472 |
| 2-Chlorotoluene | mg/kg | 0.0465 | 0.0 | .025 | 37.0 | 36.1-137 | L779943-01 | WG806472 |
| 4-Chlorotoluene | mg/kg | 0.0384 | 0.0 | .025 | 31.0* | 35.4-137 | L779943-01 | WG806472 |
| 4-Methyl-2-pentanone (MIBK) | mg/kg | 0.564 | 0.0 | .125 | 90.0 | 42.4-146 | L779943-01 | WG806472 |
| Acetone | mg/kg | 0.641 | 0.0367 | .125 | 97.0 | 10-130 | L779943-01 | WG806472 |
| Acrylonitrile | mg/kg | 0.560 | 0.0 | .125 | 90.0 | 39.3-152 | L779943-01 | WG806472 |
| Benzene | mg/kg | 0.0861 | 0.00407 | .025 | 66.0 | 47.8-131 | L779943-01 | WG806472 |
| Bromobenzene | mg/kg | 0.0412 | 0.0 | .025 | 33.0* | 40-130 | L779943-01 | WG806472 |

* Performance of this Analyte is outside of established criteria.
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Tax I.D. 62-0814289

Est. 1970

Strata - ID
Andrew Provant
8653 W Hackamore Dr

Boise, ID 83709

Quality Assurance Report
Level II

L779930

August 11, 2015

| Analyte | Units | MS Res | Matrix Spike Ref Res | TV | % Rec | Limit | Ref Samp | Batch |
|---|---|---|---|---|---|---|---|---|
| Bromodichloromethane | mg/kg | 0.0744 | 0.0 | .025 | 60.0 | 50.6-128 | L779943-01 | WG806472 |
| Bromoform | mg/kg | 0.0478 | 0.0 | .025 | 38.0* | 43.3-139 | L779943-01 | WG806472 |
| Bromomethane | mg/kg | 0.0691 | 0.0 | .025 | 55.0 | 5-189 | L779943-01 | WG806472 |
| Carbon tetrachloride | mg/kg | 0.0739 | 0.0 | .025 | 59.0 | 46-140 | L779943-01 | WG806472 |
| Chlorobenzene | mg/kg | 0.0607 | 0.0 | .025 | 48.0 | 44.1-134 | L779943-01 | WG806472 |
| Chlorodibromomethane | mg/kg | 0.0669 | 0.0 | .025 | 54.0 | 49.7-134 | L779943-01 | WG806472 |
| Chloroethane | mg/kg | 0.0892 | 0.0 | .025 | 71.0 | 5-164 | L779943-01 | WG806472 |
| Chloroform | mg/kg | 0.0855 | 0.0 | .025 | 68.0 | 51.2-133 | L779943-01 | WG806472 |
| Chloromethane | mg/kg | 0.0802 | 0.0 | .025 | 64.0 | 31.4-141 | L779943-01 | WG806472 |
| cis-1,2-Dichloroethene | mg/kg | 0.0859 | 0.0 | .025 | 69.0 | 50.6-133 | L779943-01 | WG806472 |
| cis-1,3-Dichloropropene | mg/kg | 0.0728 | 0.0 | .025 | 58.0 | 48.4-134 | L779943-01 | WG806472 |
| Di-isopropyl ether | mg/kg | 0.103 | 0.0 | .025 | 82.0 | 46.7-140 | L779943-01 | WG806472 |
| Dibromomethane | mg/kg | 0.0875 | 0.0 | .025 | 70.0 | 52.4-128 | L779943-01 | WG806472 |
| Dichlorodifluoromethane | mg/kg | 0.0849 | 0.0 | .025 | 68.0 | 31.2-144 | L779943-01 | WG806472 |
| Ethylbenzene | mg/kg | 0.0680 | 0.00251 | .025 | 52.0 | 44.8-135 | L779943-01 | WG806472 |
| Hexachloro-1,3-butadiene | mg/kg | 0.0349 | 0.0 | .025 | 28.0 | 10-149 | L779943-01 | WG806472 |
| Isopropylbenzene | mg/kg | 0.0613 | 0.00160 | .025 | 48.0 | 41.9-139 | L779943-01 | WG806472 |
| Methyl tert-butyl ether | mg/kg | 0.0893 | 0.000970 | .025 | 71.0 | 50.4-131 | L779943-01 | WG806472 |
| Methylene Chloride | mg/kg | 0.101 | 0.00136 | .025 | 80.0 | 46.7-125 | L779943-01 | WG806472 |
| n-Butylbenzene | mg/kg | 0.0499 | 0.00305 | .025 | 38.0 | 23.6-146 | L779943-01 | WG806472 |
| n-Propylbenzene | mg/kg | 0.0546 | 0.00399 | .025 | 40.0 | 35.2-139 | L779943-01 | WG806472 |
| Naphthalene | mg/kg | 0.0261 | 0.00147 | .025 | 20.0 | 18.4-145 | L779943-01 | WG806472 |
| p-Isopropyltoluene | mg/kg | 0.0472 | 0.00169 | .025 | 36.0 | 27.3-146 | L779943-01 | WG806472 |
| sec-Butylbenzene | mg/kg | 0.0496 | 0.00230 | .025 | 38.0 | 31-142 | L779943-01 | WG806472 |
| Styrene | mg/kg | 0.0506 | 0.0 | .025 | 40.0 | 39.7-137 | L779943-01 | WG806472 |
| tert-Butylbenzene | mg/kg | 0.0580 | 0.000302 | .025 | 46.0 | 36.9-142 | L779943-01 | WG806472 |
| Tetrachloroethene | mg/kg | 0.0758 | 0.0110 | .025 | 52.0 | 37.7-140 | L779943-01 | WG806472 |
| Toluene | mg/kg | 0.0748 | 0.00287 | .025 | 58.0 | 47.8-127 | L779943-01 | WG806472 |
| trans-1,2-Dichloroethene | mg/kg | 0.0836 | 0.0 | .025 | 67.0 | 43.8-135 | L779943-01 | WG806472 |
| trans-1,3-Dichloropropene | mg/kg | 0.0631 | 0.0 | .025 | 50.0 | 46.6-135 | L779943-01 | WG806472 |
| Trichloroethene | mg/kg | 0.0747 | 0.0 | .025 | 60.0 | 48-132 | L779943-01 | WG806472 |
| Trichlorofluoromethane | mg/kg | 0.0870 | 0.0 | .025 | 70.0 | 12.8-169 | L779943-01 | WG806472 |
| Vinyl chloride | mg/kg | 0.101 | 0.0 | .025 | 81.0 | 32-146 | L779943-01 | WG806472 |
| Xylenes, Total | mg/kg | 0.197 | 0.00258 | .075 | 52.0 | 42.7-135 | L779943-01 | WG806472 |
| 4-Bromofluorobenzene | | | | | 80.30 | 69.7-129 | | WG806472 |
| Dibromofluoromethane | | | | | 96.20 | 76.3-123 | | WG806472 |
| Toluene-d8 | | | | | 103.0 | 88.7-115 | | WG806472 |
| 1,1,1,2-Tetrachloroethane | mg/kg | 1.19 | 0.0 | .025 | 100. | 48.8-136 | L779930-03 | WG806473 |
| 1,1,1-Trichloroethane | mg/kg | 1.13 | 0.0 | .025 | 96.0 | 49-138 | L779930-03 | WG806473 |
| 1,1,2,2-Tetrachloroethane | mg/kg | 1.12 | 0.0 | .025 | 95.0 | 45.7-140 | L779930-03 | WG806473 |
| 1,1,2-Trichloroethane | mg/kg | 1.13 | 0.0 | .025 | 96.0 | 52.3-132 | L779930-03 | WG806473 |
| 1,1,2-Trichlorotrifluoroethane | mg/kg | 0.750 | 0.0 | .025 | 64.0 | 35.7-146 | L779930-03 | WG806473 |
| 1,1-Dichloroethane | mg/kg | 1.13 | 0.0 | .025 | 96.0 | 49.1-136 | L779930-03 | WG806473 |
| 1,1-Dichloroethene | mg/kg | 0.782 | 0.0 | .025 | 67.0 | 36.1-142 | L779930-03 | WG806473 |
| 1,1-Dichloropropene | mg/kg | 1.16 | 0.0 | .025 | 99.0 | 43-137 | L779930-03 | WG806473 |
| 1,2,3-Trichlorobenzene | mg/kg | 0.807 | 0.0 | .025 | 69.0 | 10-150 | L779930-03 | WG806473 |
| 1,2,3-Trichloropropane | mg/kg | 1.07 | 0.0 | .025 | 91.0 | 44.4-138 | L779930-03 | WG806473 |
| 1,2,3-Trimethylbenzene | mg/kg | 1.20 | 0.00263 | .025 | 100. | 41-133 | L779930-03 | WG806473 |
| 1,2,4-Trichlorobenzene | mg/kg | 0.948 | 0.0 | .025 | 81.0 | 10-153 | L779930-03 | WG806473 |
| 1,2,4-Trimethylbenzene | mg/kg | 1.23 | 0.00269 | .025 | 100. | 32.9-139 | L779930-03 | WG806473 |
| 1,2-Dibromo-3-Chloropropane | mg/kg | 0.942 | 0.0 | .025 | 80.0 | 40.4-138 | L779930-03 | WG806473 |
| 1,2-Dibromoethane | mg/kg | 1.13 | 0.0 | .025 | 96.0 | 50.2-133 | L779930-03 | WG806473 |
| 1,2-Dichlorobenzene | mg/kg | 1.14 | 0.0 | .025 | 97.0 | 34.6-139 | L779930-03 | WG806473 |
| 1,2-Dichloroethane | mg/kg | 1.05 | 0.0 | .025 | 90.0 | 47.1-129 | L779930-03 | WG806473 |
| 1,2-Dichloropropane | mg/kg | 1.18 | 0.0 | .025 | 100. | 50.3-134 | L779930-03 | WG806473 |
| 1,3,5-Trimethylbenzene | mg/kg | 1.23 | 0.00147 | .025 | 100. | 37.1-138 | L779930-03 | WG806473 |
| 1,3-Dichlorobenzene | mg/kg | 1.20 | 0.0 | .025 | 100. | 28.4-142 | L779930-03 | WG806473 |

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Est. 1970

Strata - ID
Andrew Provant
8653 W Hackamore Dr

Boise, ID 83709

Quality Assurance Report
Level II

L779930

August 11, 2015

| Analyte | Units | MS Res | Matrix Spike Ref Res | TV | % Rec | Limit | Ref Samp | Batch |
|---|---|---|---|---|---|---|---|---|
| 1,3-Dichloropropane | mg/kg | 1.13 | 0.0 | .025 | 96.0 | 51.4-127 | L779930-03 | WG806473 |
| 1,4-Dichlorobenzene | mg/kg | 1.20 | 0.0 | .025 | 100. | 35-133 | L779930-03 | WG806473 |
| 2,2-Dichloropropane | mg/kg | 1.01 | 0.0 | .025 | 86.0 | 45.2-141 | L779930-03 | WG806473 |
| 2-Butanone (MEK) | mg/kg | 4.26 | 0.0 | .125 | 72.0 | 23.9-170 | L779930-03 | WG806473 |
| 2-Chloroethyl vinyl ether | mg/kg | 5.01 | 0.0 | .125 | 85.0 | 5-159 | L779930-03 | WG806473 |
| 2-Chlorotoluene | mg/kg | 1.22 | 0.0 | .025 | 100. | 36.1-137 | L779930-03 | WG806473 |
| 4-Chlorotoluene | mg/kg | 1.21 | 0.0 | .025 | 100. | 35.4-137 | L779930-03 | WG806473 |
| 4-Methyl-2-pentanone (MIBK) | mg/kg | 5.00 | 0.0 | .125 | 85.0 | 42.4-146 | L779930-03 | WG806473 |
| Acetone | mg/kg | 3.83 | 0.0853 | .125 | 64.0 | 10-130 | L779930-03 | WG806473 |
| Acrylonitrile | mg/kg | 4.89 | 0.0 | .125 | 83.0 | 39.3-152 | L779930-03 | WG806473 |
| Benzene | mg/kg | 1.14 | 0.0 | .025 | 97.0 | 47.8-131 | L779930-03 | WG806473 |
| Bromobenzene | mg/kg | 1.19 | 0.0 | .025 | 100. | 40-130 | L779930-03 | WG806473 |
| Bromodichloromethane | mg/kg | 1.07 | 0.0 | .025 | 91.0 | 50.6-128 | L779930-03 | WG806473 |
| Bromoform | mg/kg | 1.03 | 0.0 | .025 | 88.0 | 43.3-139 | L779930-03 | WG806473 |
| Bromomethane | mg/kg | 0.592 | 0.0 | .025 | 50.0 | 5-189 | L779930-03 | WG806473 |
| Carbon tetrachloride | mg/kg | 1.13 | 0.0 | .025 | 96.0 | 46-140 | L779930-03 | WG806473 |
| Chlorobenzene | mg/kg | 1.25 | 0.0 | .025 | 110. | 44.1-134 | L779930-03 | WG806473 |
| Chlorodibromomethane | mg/kg | 1.10 | 0.0 | .025 | 93.0 | 49.7-134 | L779930-03 | WG806473 |
| Chloroethane | mg/kg | 0.420 | 0.0 | .025 | 36.0 | 5-164 | L779930-03 | WG806473 |
| Chloroform | mg/kg | 1.12 | 0.0 | .025 | 95.0 | 51.2-133 | L779930-03 | WG806473 |
| Chloromethane | mg/kg | 1.05 | 0.0 | .025 | 90.0 | 31.4-141 | L779930-03 | WG806473 |
| cis-1,2-Dichloroethene | mg/kg | 1.16 | 0.0 | .025 | 99.0 | 50.6-133 | L779930-03 | WG806473 |
| cis-1,3-Dichloropropene | mg/kg | 1.14 | 0.0 | .025 | 97.0 | 48.4-134 | L779930-03 | WG806473 |
| Di-isopropyl ether | mg/kg | 1.12 | 0.0 | .025 | 95.0 | 46.7-140 | L779930-03 | WG806473 |
| Dibromomethane | mg/kg | 1.08 | 0.0 | .025 | 92.0 | 52.4-128 | L779930-03 | WG806473 |
| Dichlorodifluoromethane | mg/kg | 0.922 | 0.0 | .025 | 78.0 | 31.2-144 | L779930-03 | WG806473 |
| Ethylbenzene | mg/kg | 1.23 | 0.0 | .025 | 100. | 44.8-135 | L779930-03 | WG806473 |
| Hexachloro-1,3-butadiene | mg/kg | 0.919 | 0.0 | .025 | 78.0 | 10-149 | L779930-03 | WG806473 |
| Isopropylbenzene | mg/kg | 1.23 | 0.0 | .025 | 100. | 41.9-139 | L779930-03 | WG806473 |
| Methyl tert-butyl ether | mg/kg | 1.11 | 0.0 | .025 | 94.0 | 50.4-131 | L779930-03 | WG806473 |
| Methylene Chloride | mg/kg | 1.03 | 0.0115 | .025 | 87.0 | 46.7-125 | L779930-03 | WG806473 |
| n-Butylbenzene | mg/kg | 1.19 | 0.00207 | .025 | 100. | 23.6-146 | L779930-03 | WG806473 |
| n-Propylbenzene | mg/kg | 1.25 | 0.00158 | .025 | 110. | 35.2-139 | L779930-03 | WG806473 |
| Naphthalene | mg/kg | 0.801 | 0.00896 | .025 | 67.0 | 18.4-145 | L779930-03 | WG806473 |
| p-Isopropyltoluene | mg/kg | 1.20 | 0.00181 | .025 | 100. | 27.3-146 | L779930-03 | WG806473 |
| sec-Butylbenzene | mg/kg | 1.21 | 0.00144 | .025 | 100. | 31-142 | L779930-03 | WG806473 |
| Styrene | mg/kg | 1.25 | 0.0 | .025 | 110. | 39.7-137 | L779930-03 | WG806473 |
| tert-Butylbenzene | mg/kg | 1.22 | 0.0 | .025 | 100. | 36.9-142 | L779930-03 | WG806473 |
| Tetrachloroethene | mg/kg | 1.15 | 0.0 | .025 | 98.0 | 37.7-140 | L779930-03 | WG806473 |
| Toluene | mg/kg | 1.17 | 0.00323 | .025 | 99.0 | 47.8-127 | L779930-03 | WG806473 |
| trans-1,2-Dichloroethene | mg/kg | 1.17 | 0.0 | .025 | 100. | 43.8-135 | L779930-03 | WG806473 |
| trans-1,3-Dichloropropene | mg/kg | 1.02 | 0.0 | .025 | 87.0 | 46.6-135 | L779930-03 | WG806473 |
| Trichloroethene | mg/kg | 1.17 | 0.0 | .025 | 99.0 | 48-132 | L779930-03 | WG806473 |
| Trichlorofluoromethane | mg/kg | 0.554 | 0.0 | .025 | 47.0 | 12.8-169 | L779930-03 | WG806473 |
| Vinyl chloride | mg/kg | 1.01 | 0.0 | .025 | 86.0 | 32-146 | L779930-03 | WG806473 |
| Xylenes, Total | mg/kg | 3.70 | 0.00815 | .075 | 100. | 42.7-135 | L779930-03 | WG806473 |
| 4-Bromofluorobenzene | | | | | 108.0 | 69.7-129 | | WG806473 |
| Dibromofluoromethane | | | | | 98.40 | 76.3-123 | | WG806473 |
| Toluene-d8 | | | | | 107.0 | 88.7-115 | | WG806473 |
| Mercury | mg/kg | 0.574 | 0.400 | .3 | 58.0* | 75-125 | L779930-03 | WG806784 |
| Antimony | mg/kg | 83.3 | 0.407 | 100 | 83.0 | 75-125 | L779930-03 | WG807311 |
| Arsenic | mg/kg | 94.9 | 9.26 | 100 | 86.0 | 75-125 | L779930-03 | WG807311 |
| Beryllium | mg/kg | 93.2 | 0.447 | 100 | 93.0 | 75-125 | L779930-03 | WG807311 |
| Cadmium | mg/kg | 90.6 | 0.295 | 100 | 90.0 | 75-125 | L779930-03 | WG807311 |
| Chromium | mg/kg | 95.2 | 7.42 | 100 | 88.0 | 75-125 | L779930-03 | WG807311 |

* Performance of this Analyte is outside of established criteria.
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Est. 1970

Strata - ID
Andrew Provant
8653 W Hackamore Dr

Boise, ID 83709

Quality Assurance Report
Level II

L779930

August 11, 2015

| Analyte | Units | MS Res | Matrix Spike Ref Res | TV | % Rec | Limit | Ref Samp | Batch |
|---|---|---|---|---|---|---|---|---|
| Copper | mg/kg | 101. | 8.28 | 100 | 92.0 | 75-125 | L779930-03 | WG807311 |
| Lead | mg/kg | 151. | 46.7 | 100 | 100. | 75-125 | L779930-03 | WG807311 |
| Nickel | mg/kg | 97.7 | 4.94 | 100 | 93.0 | 75-125 | L779930-03 | WG807311 |
| Selenium | mg/kg | 88.6 | 0.0825 | 100 | 89.0 | 75-125 | L779930-03 | WG807311 |
| Silver | mg/kg | 90.1 | 0.0122 | 100 | 90.0 | 75-125 | L779930-03 | WG807311 |
| Thallium | mg/kg | 88.8 | -0.272 | 100 | 89.0 | 75-125 | L779930-03 | WG807311 |
| Zinc | mg/kg | 211. | 106. | 100 | 100. | 75-125 | L779930-03 | WG807311 |
| 1-Methylnaphthalene | mg/kg | 0.0574 | 0.0 | .08 | 72.0 | 28.4-137 | L779930-22 | WG807206 |
| 2-Chloronaphthalene | mg/kg | 0.0541 | 0.0 | .08 | 68.0 | 38.6-126 | L779930-22 | WG807206 |
| 2-Methylnaphthalene | mg/kg | 0.0548 | 0.0 | .08 | 68.0 | 26.6-137 | L779930-22 | WG807206 |
| Acenaphthene | mg/kg | 0.0509 | 0.0 | .08 | 64.0 | 31.9-130 | L779930-22 | WG807206 |
| Acenaphthylene | mg/kg | 0.0555 | 0.0 | .08 | 69.0 | 33.7-129 | L779930-22 | WG807206 |
| Anthracene | mg/kg | 0.0456 | 0.0 | .08 | 57.0 | 26.5-141 | L779930-22 | WG807206 |
| Benzo(a)anthracene | mg/kg | 0.0403 | 0.0 | .08 | 50.0 | 18.3-136 | L779930-22 | WG807206 |
| Benzo(a)pyrene | mg/kg | 0.0402 | 0.0 | .08 | 50.0 | 16.9-135 | L779930-22 | WG807206 |
| Benzo(b)fluoranthene | mg/kg | 0.0323 | 0.0 | .08 | 40.0 | 10-134 | L779930-22 | WG807206 |
| Benzo(g,h,i)perylene | mg/kg | 0.0392 | 0.0 | .08 | 49.0 | 14.1-140 | L779930-22 | WG807206 |
| Benzo(k)fluoranthene | mg/kg | 0.0436 | 0.0 | .08 | 54.0 | 18.2-138 | L779930-22 | WG807206 |
| Chrysene | mg/kg | 0.0451 | 0.0 | .08 | 56.0 | 17.1-145 | L779930-22 | WG807206 |
| Dibenz(a,h)anthracene | mg/kg | 0.0452 | 0.0 | .08 | 56.0 | 18.5-138 | L779930-22 | WG807206 |
| Fluoranthene | mg/kg | 0.0382 | 0.000773 | .08 | 47.0 | 15.4-144 | L779930-22 | WG807206 |
| Fluorene | mg/kg | 0.0486 | 0.0 | .08 | 61.0 | 23.5-136 | L779930-22 | WG807206 |
| Indeno(1,2,3-cd)pyrene | mg/kg | 0.0413 | 0.0 | .08 | 52.0 | 14.5-142 | L779930-22 | WG807206 |
| Naphthalene | mg/kg | 0.0558 | 0.0 | .08 | 70.0 | 29.2-128 | L779930-22 | WG807206 |
| Phenanthrene | mg/kg | 0.0435 | 0.000747 | .08 | 54.0 | 20.1-134 | L779930-22 | WG807206 |
| Pyrene | mg/kg | 0.0412 | 0.000887 | .08 | 50.0 | 11-148 | L779930-22 | WG807206 |
| 2-Fluorobiphenyl | | | | | 80.50 | 40.6-122 | | WG807206 |
| Nitrobenzene-d5 | | | | | 88.30 | 22.1-146 | | WG807206 |
| p-Terphenyl-d14 | | | | | 62.40 | 32.2-131 | | WG807206 |

| Analyte | Units | MSD | Matrix Spike Duplicate Ref | %Rec | Limit | RPD | Limit | Ref Samp | Batch |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | mg/kg | 75.2 | 81.2 | 75.4 | 75-125 | 8.00 | 20 | L779930-21 | WG806411 |
| Arsenic | mg/kg | 103. | 111. | 95.8 | 75-125 | 8.00 | 20 | L779930-21 | WG806411 |
| Beryllium | mg/kg | 94.0 | 103. | 93.6 | 75-125 | 9.00 | 20 | L779930-21 | WG806411 |
| Cadmium | mg/kg | 96.9 | 106. | 96.5 | 75-125 | 9.00 | 20 | L779930-21 | WG806411 |
| Chromium | mg/kg | 105. | 113. | 94.1 | 75-125 | 8.00 | 20 | L779930-21 | WG806411 |
| Copper | mg/kg | 106. | 115. | 95.3 | 75-125 | 8.00 | 20 | L779930-21 | WG806411 |
| Lead | mg/kg | 135. | 146. | 101. | 75-125 | 8.00 | 20 | L779930-21 | WG806411 |
| Nickel | mg/kg | 108. | 116. | 100. | 75-125 | 8.00 | 20 | L779930-21 | WG806411 |
| Selenium | mg/kg | 97.8 | 107. | 98.9 | 75-125 | 9.00 | 20 | L779930-21 | WG806411 |
| Silver | mg/kg | 93.3 | 101. | 93.6 | 75-125 | 8.00 | 20 | L779930-21 | WG806411 |
| Thallium | mg/kg | 94.7 | 103. | 97.1 | 75-125 | 9.00 | 20 | L779930-21 | WG806411 |
| Zinc | mg/kg | 228. | 249. | 97.4 | 75-125 | 8.00 | 20 | L779930-21 | WG806411 |
| 1,1,1,2-Tetrachloroethane | mg/l | 0.0268 | 0.0270 | 107. | 70.5-132 | 1.04 | 20 | L779866-01 | WG806343 |
| 1,1,1-Trichloroethane | mg/l | 0.0254 | 0.0250 | 102. | 58.7-134 | 1.81 | 20 | L779866-01 | WG806343 |
| 1,1,2,2-Tetrachloroethane | mg/l | 0.0256 | 0.0255 | 102. | 64.9-145 | 0.500 | 20 | L779866-01 | WG806343 |
| 1,1,2-Trichloroethane | mg/l | 0.0246 | 0.0248 | 98.3 | 74.1-130 | 0.950 | 20 | L779866-01 | WG806343 |
| 1,1,2-Trichlorotrifluoroethane | mg/l | 0.0248 | 0.0251 | 99.0 | 53.7-150 | 1.56 | 20 | L779866-01 | WG806343 |
| 1,1-Dichloroethane | mg/l | 0.0240 | 0.0239 | 96.0 | 64-134 | 0.630 | 20 | L779866-01 | WG806343 |
| 1,1-Dichloroethene | mg/l | 0.0256 | 0.0249 | 102. | 48.8-144 | 2.68 | 20 | L779866-01 | WG806343 |
| 1,1-Dichloropropene | mg/l | 0.0244 | 0.0248 | 97.5 | 61.5-136 | 1.91 | 20 | L779866-01 | WG806343 |
| 1,2,3-Trichlorobenzene | mg/l | 0.0205 | 0.0209 | 82.0 | 65.7-143 | 1.86 | 20 | L779866-01 | WG806343 |
| 1,2,3-Trichloropropane | mg/l | 0.0266 | 0.0264 | 106. | 71.5-134 | 0.910 | 20 | L779866-01 | WG806343 |

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

12065 Lebanon Rd.
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(615) 758-5858
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Tax I.D. 62-0814289

Est. 1970

Strata - ID
Andrew Provant
8653 W Hackamore Dr

Boise, ID 83709

Quality Assurance Report
Level II

L779930

August 11, 2015

| Analyte | Units | MSD | Matrix Spike Duplicate Ref | %Rec | Limit | RPD | Limit | Ref Samp | Batch |
|---|---|---|---|---|---|---|---|---|---|
| 1,2,3-Trimethylbenzene | mg/l | 0.0247 | 0.0245 | 98.8 | 62.7-133 | 0.720 | 20 | L779866-01 | WG806343 |
| 1,2,4-Trichlorobenzene | mg/l | 0.0219 | 0.0218 | 87.5 | 67-146 | 0.170 | 20 | L779866-01 | WG806343 |
| 1,2,4-Trimethylbenzene | mg/l | 0.0242 | 0.0243 | 96.6 | 60.5-137 | 0.510 | 20 | L779866-01 | WG806343 |
| 1,2-Dibromo-3-Chloropropane | mg/l | 0.0286 | 0.0295 | 114. | 63.9-142 | 2.97 | 20.2 | L779866-01 | WG806343 |
| 1,2-Dibromoethane | mg/l | 0.0254 | 0.0257 | 102. | 73.8-131 | 1.08 | 20 | L779866-01 | WG806343 |
| 1,2-Dichlorobenzene | mg/l | 0.0254 | 0.0251 | 101. | 77.4-127 | 0.920 | 20 | L779866-01 | WG806343 |
| 1,2-Dichloroethane | mg/l | 0.0238 | 0.0241 | 95.3 | 60.7-132 | 1.04 | 20 | L779866-01 | WG806343 |
| 1,2-Dichloropropane | mg/l | 0.0241 | 0.0249 | 96.5 | 69.7-130 | 3.35 | 20 | L779866-01 | WG806343 |
| 1,3,5-Trimethylbenzene | mg/l | 0.0238 | 0.0244 | 95.3 | 67.9-134 | 2.24 | 20 | L779866-01 | WG806343 |
| 1,3-Dichlorobenzene | mg/l | 0.0244 | 0.0246 | 97.4 | 67.9-136 | 1.04 | 20 | L779866-01 | WG806343 |
| 1,3-Dichloropropane | mg/l | 0.0246 | 0.0253 | 98.4 | 74.3-123 | 2.81 | 20 | L779866-01 | WG806343 |
| 1,4-Dichlorobenzene | mg/l | 0.0251 | 0.0248 | 100. | 74.4-123 | 1.24 | 20 | L779866-01 | WG806343 |
| 2,2-Dichloropropane | mg/l | 0.0263 | 0.0265 | 105. | 54.9-142 | 1.09 | 20 | L779866-01 | WG806343 |
| 2-Butanone (MEK) | mg/l | 0.118 | 0.116 | 88.8 | 45-156 | 1.27 | 20.8 | L779866-01 | WG806343 |
| 2-Chloroethyl vinyl ether | mg/l | 0.000370 | 0.000392 | 0.296* | 5-149 | 5.85 | 40 | L779866-01 | WG806343 |
| 2-Chlorotoluene | mg/l | 0.0250 | 0.0247 | 100. | 66.9-134 | 1.03 | 20 | L779866-01 | WG806343 |
| 4-Chlorotoluene | mg/l | 0.0249 | 0.0253 | 99.6 | 66.8-134 | 1.55 | 20 | L779866-01 | WG806343 |
| 4-Methyl-2-pentanone (MIBK) | mg/l | 0.145 | 0.145 | 116. | 60.7-150 | 0.0400 | 20 | L779866-01 | WG806343 |
| Acetone | mg/l | 0.0759 | 0.0752 | 50.9 | 25-156 | 0.880 | 21.5 | L779866-01 | WG806343 |
| Acrolein | mg/l | 0.127 | 0.124 | 101. | 34-194 | 2.31 | 21.5 | L779866-01 | WG806343 |
| Acrylonitrile | mg/l | 0.141 | 0.138 | 112. | 55.9-161 | 1.59 | 20 | L779866-01 | WG806343 |
| Benzene | mg/l | 0.0228 | 0.0231 | 91.3 | 58.6-133 | 1.21 | 20 | L779866-01 | WG806343 |
| Bromobenzene | mg/l | 0.0239 | 0.0245 | 95.7 | 70.6-125 | 2.28 | 20 | L779866-01 | WG806343 |
| Bromodichloromethane | mg/l | 0.0267 | 0.0274 | 98.4 | 69.2-127 | 2.50 | 20 | L779866-01 | WG806343 |
| Bromoform | mg/l | 0.0276 | 0.0272 | 110. | 66.3-140 | 1.52 | 20 | L779866-01 | WG806343 |
| Bromomethane | mg/l | 0.0340 | 0.0336 | 136. | 16.6-183 | 1.15 | 20.5 | L779866-01 | WG806343 |
| Carbon tetrachloride | mg/l | 0.0251 | 0.0254 | 100. | 60.6-139 | 1.12 | 20 | L779866-01 | WG806343 |
| Chlorobenzene | mg/l | 0.0261 | 0.0268 | 104. | 70.1-130 | 2.42 | 20 | L779866-01 | WG806343 |
| Chlorodibromomethane | mg/l | 0.0261 | 0.0271 | 100. | 71.6-132 | 3.61 | 20 | L779866-01 | WG806343 |
| Chloroethane | mg/l | 0.0243 | 0.0245 | 97.0 | 33.3-155 | 0.850 | 20 | L779866-01 | WG806343 |
| Chloroform | mg/l | 0.0299 | 0.0296 | 86.7 | 66.1-133 | 1.01 | 20 | L779866-01 | WG806343 |
| Chloromethane | mg/l | 0.0226 | 0.0226 | 90.6 | 40.7-139 | 0.190 | 20 | L779866-01 | WG806343 |
| cis-1,2-Dichloroethene | mg/l | 0.0231 | 0.0236 | 92.4 | 60.6-136 | 2.21 | 20 | L779866-01 | WG806343 |
| cis-1,3-Dichloropropene | mg/l | 0.0248 | 0.0245 | 99.1 | 71.1-129 | 1.14 | 20 | L779866-01 | WG806343 |
| Di-isopropyl ether | mg/l | 0.0234 | 0.0237 | 93.4 | 59.9-140 | 1.57 | 20 | L779866-01 | WG806343 |
| Dibromomethane | mg/l | 0.0236 | 0.0238 | 94.3 | 72.8-127 | 0.750 | 20 | L779866-01 | WG806343 |
| Dichlorodifluoromethane | mg/l | 0.0238 | 0.0233 | 95.2 | 42.2-146 | 2.10 | 20 | L779866-01 | WG806343 |
| Ethylbenzene | mg/l | 0.0261 | 0.0259 | 104. | 62.7-136 | 0.750 | 20 | L779866-01 | WG806343 |
| Hexachloro-1,3-butadiene | mg/l | 0.0158 | 0.0159 | 63.1 | 61.1-144 | 0.680 | 20.1 | L779866-01 | WG806343 |
| Isopropylbenzene | mg/l | 0.0246 | 0.0258 | 98.3 | 67.4-136 | 4.79 | 20 | L779866-01 | WG806343 |
| Methyl tert-butyl ether | mg/l | 0.0216 | 0.0218 | 86.5 | 61.4-136 | 0.620 | 20 | L779866-01 | WG806343 |
| Methylene Chloride | mg/l | 0.0224 | 0.0225 | 89.6 | 61.5-125 | 0.700 | 20 | L779866-01 | WG806343 |
| n-Butylbenzene | mg/l | 0.0231 | 0.0235 | 92.6 | 64.8-145 | 1.34 | 20 | L779866-01 | WG806343 |
| n-Propylbenzene | mg/l | 0.0248 | 0.0250 | 99.3 | 63.2-139 | 0.690 | 20 | L779866-01 | WG806343 |
| Naphthalene | mg/l | 0.0237 | 0.0230 | 94.9 | 61.8-143 | 3.32 | 20 | L779866-01 | WG806343 |
| p-Isopropyltoluene | mg/l | 0.0238 | 0.0240 | 92.5 | 62.8-143 | 0.900 | 20 | L779866-01 | WG806343 |
| sec-Butylbenzene | mg/l | 0.0230 | 0.0230 | 91.8 | 66.8-139 | 0.0400 | 20 | L779866-01 | WG806343 |
| Styrene | mg/l | 0.0268 | 0.0274 | 107. | 68.2-133 | 2.06 | 20 | L779866-01 | WG806343 |
| tert-Butylbenzene | mg/l | 0.0232 | 0.0243 | 93.0 | 67.1-138 | 4.57 | 20 | L779866-01 | WG806343 |
| Tetrachloroethene | mg/l | 0.0285 | 0.0291 | 114. | 57.4-141 | 2.04 | 20 | L779866-01 | WG806343 |
| Toluene | mg/l | 0.0243 | 0.0242 | 97.2 | 67.8-124 | 0.300 | 20 | L779866-01 | WG806343 |
| trans-1,2-Dichloroethene | mg/l | 0.0235 | 0.0235 | 94.1 | 61-132 | 0.190 | 20 | L779866-01 | WG806343 |
| trans-1,3-Dichloropropene | mg/l | 0.0247 | 0.0253 | 98.8 | 66.3-136 | 2.47 | 20 | L779866-01 | WG806343 |
| Trichloroethene | mg/l | 0.0257 | 0.0261 | 103. | 48.9-148 | 1.42 | 20 | L779866-01 | WG806343 |
| Trichlorofluoromethane | mg/l | 0.0256 | 0.0259 | 102. | 39.9-165 | 0.790 | 20 | L779866-01 | WG806343 |
| Vinyl chloride | mg/l | 0.0230 | 0.0231 | 92.1 | 44.3-143 | 0.190 | 20 | L779866-01 | WG806343 |
| Xylenes, Total | mg/l | 0.0770 | 0.0789 | 103. | 65.6-133 | 2.44 | 20 | L779866-01 | WG806343 |
| 4-Bromofluorobenzene | | | | 91.70 | 80.1-120 | | | | WG806343 |
| Dibromofluoromethane | | | | 90.60 | 79-121 | | | | WG806343 |

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

12065 Lebanon Rd.
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Tax I.D. 62-0814289

Est. 1970

Strata - ID
Andrew Provant
8653 W Hackamore Dr

Boise, ID 83709

Quality Assurance Report
Level II

L779930

August 11, 2015

| Analyte | Units | MSD | Matrix Spike Duplicate Ref | %Rec | Limit | RPD | Limit | Ref Samp | Batch |
|---|---|---|---|---|---|---|---|---|---|
| Toluene-d8 | | | | 95.70 | 90-115 | | | | |
| TPHGAK C6 to C10 | mg/kg | 22.3 | 24.3 | 81.2 | 70-130 | 8.36 | 20 | L780291-03 | WG806688 |
| a,a,a-Trifluorotoluene(FID) | | | | 99.60 | 59-128 | | | | WG806688 |
| a,a,a-Trifluorotoluene(PID) | | | | 113.0 | 54-144 | | | | WG806688 |
| Mercury | mg/kg | 0.306 | 0.331 | 89.2 | 75-125 | 8.00 | 20 | L779927-03 | WG806568 |
| 1,1,1,2-Tetrachloroethane | mg/kg | 0.0839 | 0.0739 | 67.1 | 48.8-136 | 12.6 | 25.5 | L779943-01 | WG806472 |
| 1,1,1-Trichloroethane | mg/kg | 0.0887 | 0.0835 | 70.9 | 49-138 | 5.99 | 25.3 | L779943-01 | WG806472 |
| 1,1,2,2-Tetrachloroethane | mg/kg | 0.0699 | 0.0602 | 55.9 | 45.7-140 | 14.9 | 26.4 | L779943-01 | WG806472 |
| 1,1,2-Trichloroethane | mg/kg | 0.0944 | 0.0815 | 75.5 | 52.3-132 | 14.7 | 23.4 | L779943-01 | WG806472 |
| 1,1,2-Trichlorotrifluoroethane | mg/kg | 0.0886 | 0.0839 | 70.9 | 35.7-146 | 5.44 | 28.8 | L779943-01 | WG806472 |
| 1,1-Dichloroethane | mg/kg | 0.0946 | 0.0909 | 75.7 | 49.1-136 | 3.94 | 22.9 | L779943-01 | WG806472 |
| 1,1-Dichloroethene | mg/kg | 0.0908 | 0.0867 | 72.6 | 36.1-142 | 4.51 | 25.6 | L779943-01 | WG806472 |
| 1,1-Dichloropropene | mg/kg | 0.0750 | 0.0714 | 60.0 | 43-137 | 4.89 | 26.4 | L779943-01 | WG806472 |
| 1,2,3-Trichlorobenzene | mg/kg | 0.0187 | 0.0136 | 15.0 | 10-150 | 32.0 | 38.5 | L779943-01 | WG806472 |
| 1,2,3-Trichloropropane | mg/kg | 0.0769 | 0.0684 | 61.5 | 44.4-138 | 11.7 | 26.3 | L779943-01 | WG806472 |
| 1,2,3-Trimethylbenzene | mg/kg | 0.0949 | 0.0744 | 75.1 | 41-133 | 24.2 | 27.6 | L779943-01 | WG806472 |
| 1,2,4-Trichlorobenzene | mg/kg | 0.0203 | 0.0153 | 16.2 | 10-153 | 28.0 | 39.3 | L779943-01 | WG806472 |
| 1,2,4-Trimethylbenzene | mg/kg | 0.0669 | 0.0589 | 46.8 | 32.9-139 | 12.9 | 30.6 | L779943-01 | WG806472 |
| 1,2-Dibromo-3-Chloropropane | mg/kg | 0.0870 | 0.0550 | 69.6 | 40.4-138 | 45.1* | 30.8 | L779943-01 | WG806472 |
| 1,2-Dibromoethane | mg/kg | 0.0809 | 0.0703 | 64.7 | 50.2-133 | 14.0 | 23.6 | L779943-01 | WG806472 |
| 1,2-Dichlorobenzene | mg/kg | 0.0539 | 0.0424 | 43.2 | 34.6-139 | 24.0 | 29.9 | L779943-01 | WG806472 |
| 1,2-Dichloroethane | mg/kg | 0.0916 | 0.0867 | 73.2 | 47.1-129 | 5.48 | 22.7 | L779943-01 | WG806472 |
| 1,2-Dichloropropane | mg/kg | 0.0969 | 0.0911 | 77.6 | 50.3-134 | 6.26 | 22.7 | L779943-01 | WG806472 |
| 1,3,5-Trimethylbenzene | mg/kg | 0.0549 | 0.0513 | 43.9 | 37.1-138 | 6.79 | 30.6 | L779943-01 | WG806472 |
| 1,3-Dichlorobenzene | mg/kg | 0.0341 | 0.0288 | 27.3* | 28.4-142 | 17.0 | 31.2 | L779943-01 | WG806472 |
| 1,3-Dichloropropane | mg/kg | 0.0869 | 0.0760 | 69.5 | 51.4-127 | 13.3 | 23.1 | L779943-01 | WG806472 |
| 1,4-Dichlorobenzene | mg/kg | 0.0588 | 0.0467 | 47.0 | 35-133 | 22.9 | 31.1 | L779943-01 | WG806472 |
| 2,2-Dichloropropane | mg/kg | 0.0780 | 0.0793 | 62.4 | 45.2-141 | 1.64 | 26.6 | L779943-01 | WG806472 |
| 2-Butanone (MEK) | mg/kg | 0.644 | 0.607 | 101. | 23.9-170 | 5.97 | 28.3 | L779943-01 | WG806472 |
| 2-Chloroethyl vinyl ether | mg/kg | 0.261 | 0.281 | 41.7 | 5-159 | 7.47 | 40 | L779943-01 | WG806472 |
| 2-Chlorotoluene | mg/kg | 0.0518 | 0.0465 | 41.4 | 36.1-137 | 10.7 | 28.9 | L779943-01 | WG806472 |
| 4-Chlorotoluene | mg/kg | 0.0455 | 0.0384 | 36.4 | 35.4-137 | 16.9 | 29.8 | L779943-01 | WG806472 |
| 4-Methyl-2-pentanone (MIBK) | mg/kg | 0.608 | 0.564 | 97.2 | 42.4-146 | 7.36 | 26.7 | L779943-01 | WG806472 |
| Acetone | mg/kg | 0.646 | 0.641 | 97.4 | 10-130 | 0.670 | 31.5 | L779943-01 | WG806472 |
| Acrylonitrile | mg/kg | 0.574 | 0.560 | 91.8 | 39.3-152 | 2.43 | 27.2 | L779943-01 | WG806472 |
| Benzene | mg/kg | 0.0930 | 0.0861 | 71.1 | 47.8-131 | 7.69 | 22.8 | L779943-01 | WG806472 |
| Bromobenzene | mg/kg | 0.0502 | 0.0412 | 40.2 | 40-130 | 19.8 | 27.4 | L779943-01 | WG806472 |
| Bromodichloromethane | mg/kg | 0.0826 | 0.0744 | 66.1 | 50.6-128 | 10.5 | 22.8 | L779943-01 | WG806472 |
| Bromoform | mg/kg | 0.0589 | 0.0478 | 47.1 | 43.3-139 | 20.7 | 25.9 | L779943-01 | WG806472 |
| Bromomethane | mg/kg | 0.0760 | 0.0691 | 60.8 | 5-189 | 9.58 | 26.7 | L779943-01 | WG806472 |
| Carbon tetrachloride | mg/kg | 0.0812 | 0.0739 | 65.0 | 46-140 | 9.51 | 27.2 | L779943-01 | WG806472 |
| Chlorobenzene | mg/kg | 0.0707 | 0.0607 | 56.5 | 44.1-134 | 15.2 | 25.7 | L779943-01 | WG806472 |
| Chlorodibromomethane | mg/kg | 0.0768 | 0.0669 | 61.4 | 49.7-134 | 13.7 | 24 | L779943-01 | WG806472 |
| Chloroethane | mg/kg | 0.0915 | 0.0892 | 73.2 | 5-164 | 2.50 | 28.4 | L779943-01 | WG806472 |
| Chloroform | mg/kg | 0.0882 | 0.0855 | 70.5 | 51.2-133 | 3.11 | 22.8 | L779943-01 | WG806472 |
| Chloromethane | mg/kg | 0.0820 | 0.0802 | 65.6 | 31.4-141 | 2.28 | 24.6 | L779943-01 | WG806472 |
| cis-1,2-Dichloroethene | mg/kg | 0.0896 | 0.0859 | 71.7 | 50.6-133 | 4.21 | 23 | L779943-01 | WG806472 |
| cis-1,3-Dichloropropene | mg/kg | 0.0829 | 0.0728 | 66.3 | 48.4-134 | 13.0 | 23.6 | L779943-01 | WG806472 |
| Di-isopropyl ether | mg/kg | 0.104 | 0.103 | 83.0 | 46.7-140 | 0.570 | 23.5 | L779943-01 | WG806472 |
| Dibromomethane | mg/kg | 0.0939 | 0.0875 | 75.1 | 52.4-128 | 7.03 | 23 | L779943-01 | WG806472 |
| Dichlorodifluoromethane | mg/kg | 0.0843 | 0.0849 | 67.4 | 31.2-144 | 0.780 | 30.2 | L779943-01 | WG806472 |
| Ethylbenzene | mg/kg | 0.0775 | 0.0680 | 60.0 | 44.8-135 | 13.1 | 26.9 | L779943-01 | WG806472 |
| Hexachloro-1,3-butadiene | mg/kg | 0.0384 | 0.0349 | 30.7 | 10-149 | 9.46 | 40 | L779943-01 | WG806472 |
| Isopropylbenzene | mg/kg | 0.0681 | 0.0613 | 53.2 | 41.9-139 | 10.4 | 29.3 | L779943-01 | WG806472 |
| Methyl tert-butyl ether | mg/kg | 0.0798 | 0.0893 | 63.1 | 50.4-131 | 11.2 | 24.8 | L779943-01 | WG806472 |

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Est. 1970

Strata - ID
Andrew Provant
8653 W Hackamore Dr

Boise, ID 83709

Quality Assurance Report
Level II

L779930

August 11, 2015

| Analyte | Units | MSD | Matrix Spike Duplicate Ref | %Rec | Limit | RPD | Limit | Ref Samp | Batch |
|---|---|---|---|---|---|---|---|---|---|
| Methylene Chloride | mg/kg | 0.0987 | 0.101 | 77.9 | 46.7-125 | 2.07 | 22.2 | L779943-01 | WG806472 |
| n-Butylbenzene | mg/kg | 0.0579 | 0.0499 | 43.9 | 23.6-146 | 14.8 | 39.2 | L779943-01 | WG806472 |
| n-Propylbenzene | mg/kg | 0.0621 | 0.0546 | 46.5 | 35.2-139 | 12.9 | 31.9 | L779943-01 | WG806472 |
| Naphthalene | mg/kg | 0.0381 | 0.0261 | 29.3 | 18.4-145 | 37.3* | 34 | L779943-01 | WG806472 |
| p-Isopropyltoluene | mg/kg | 0.0501 | 0.0472 | 38.7 | 27.3-146 | 5.94 | 35.1 | L779943-01 | WG806472 |
| sec-Butylbenzene | mg/kg | 0.0561 | 0.0496 | 43.0 | 31-142 | 12.2 | 34.7 | L779943-01 | WG806472 |
| Styrene | mg/kg | 0.0594 | 0.0506 | 47.5 | 39.7-137 | 16.0 | 28.2 | L779943-01 | WG806472 |
| tert-Butylbenzene | mg/kg | 0.0643 | 0.0580 | 51.2 | 36.9-142 | 10.4 | 31.7 | L779943-01 | WG806472 |
| Tetrachloroethene | mg/kg | 0.0847 | 0.0758 | 58.9 | 37.7-140 | 11.1 | 29.2 | L779943-01 | WG806472 |
| Toluene | mg/kg | 0.0833 | 0.0748 | 64.3 | 47.8-127 | 10.8 | 24.3 | L779943-01 | WG806472 |
| trans-1,2-Dichloroethene | mg/kg | 0.0866 | 0.0836 | 69.3 | 43.8-135 | 3.55 | 24.8 | L779943-01 | WG806472 |
| trans-1,3-Dichloropropene | mg/kg | 0.0731 | 0.0631 | 58.5 | 46.6-135 | 14.7 | 25.3 | L779943-01 | WG806472 |
| Trichloroethene | mg/kg | 0.0787 | 0.0747 | 63.0 | 48-132 | 5.25 | 24.8 | L779943-01 | WG806472 |
| Trichlorofluoromethane | mg/kg | 0.0894 | 0.0870 | 71.6 | 12.8-169 | 2.81 | 29.7 | L779943-01 | WG806472 |
| Vinyl chloride | mg/kg | 0.0954 | 0.101 | 76.3 | 32-146 | 5.38 | 26.3 | L779943-01 | WG806472 |
| Xylenes, Total | mg/kg | 0.221 | 0.197 | 58.2 | 42.7-135 | 11.4 | 26.6 | L779943-01 | WG806472 |
| 4-Bromofluorobenzene | | | | 79.20 | 69.7-129 | | | | WG806472 |
| Dibromofluoromethane | | | | 95.30 | 76.3-123 | | | | WG806472 |
| Toluene-d8 | | | | 101.0 | 88.7-115 | | | | WG806472 |
| 1,1,1,2-Tetrachloroethane | mg/kg | 1.20 | 1.19 | 102. | 48.8-136 | 0.620 | 25.5 | L779930-03 | WG806473 |
| 1,1,1-Trichloroethane | mg/kg | 1.21 | 1.13 | 103. | 49-138 | 6.70 | 25.3 | L779930-03 | WG806473 |
| 1,1,2,2-Tetrachloroethane | mg/kg | 1.15 | 1.12 | 97.8 | 45.7-140 | 2.95 | 26.4 | L779930-03 | WG806473 |
| 1,1,2-Trichloroethane | mg/kg | 1.19 | 1.13 | 102. | 52.3-132 | 5.73 | 23.4 | L779930-03 | WG806473 |
| 1,1,2-Trichlorotrifluoroethane | mg/kg | 0.809 | 0.750 | 68.8 | 35.7-146 | 7.50 | 28.8 | L779930-03 | WG806473 |
| 1,1-Dichloroethane | mg/kg | 1.20 | 1.13 | 102. | 49.1-136 | 6.08 | 22.9 | L779930-03 | WG806473 |
| 1,1-Dichloroethene | mg/kg | 0.853 | 0.782 | 72.6 | 36.1-142 | 8.67 | 25.6 | L779930-03 | WG806473 |
| 1,1-Dichloropropene | mg/kg | 1.23 | 1.16 | 104. | 43-137 | 5.62 | 26.4 | L779930-03 | WG806473 |
| 1,2,3-Trichlorobenzene | mg/kg | 0.776 | 0.807 | 66.1 | 10-150 | 3.86 | 38.5 | L779930-03 | WG806473 |
| 1,2,3-Trichloropropane | mg/kg | 1.11 | 1.07 | 94.6 | 44.4-138 | 3.50 | 26.3 | L779930-03 | WG806473 |
| 1,2,3-Trimethylbenzene | mg/kg | 1.23 | 1.20 | 105. | 41-133 | 2.80 | 27.6 | L779930-03 | WG806473 |
| 1,2,4-Trichlorobenzene | mg/kg | 0.900 | 0.948 | 76.6 | 10-153 | 5.15 | 39.3 | L779930-03 | WG806473 |
| 1,2,4-Trimethylbenzene | mg/kg | 1.24 | 1.23 | 105. | 32.9-139 | 0.250 | 30.6 | L779930-03 | WG806473 |
| 1,2-Dibromo-3-Chloropropane | mg/kg | 1.01 | 0.942 | 85.7 | 40.4-138 | 6.67 | 30.8 | L779930-03 | WG806473 |
| 1,2-Dibromoethane | mg/kg | 1.16 | 1.13 | 98.9 | 50.2-133 | 2.62 | 23.6 | L779930-03 | WG806473 |
| 1,2-Dichlorobenzene | mg/kg | 1.19 | 1.14 | 101. | 34.6-139 | 4.57 | 29.9 | L779930-03 | WG806473 |
| 1,2-Dichloroethane | mg/kg | 1.13 | 1.05 | 95.8 | 47.1-129 | 6.72 | 22.7 | L779930-03 | WG806473 |
| 1,2-Dichloropropane | mg/kg | 1.25 | 1.18 | 106. | 50.3-134 | 5.39 | 22.7 | L779930-03 | WG806473 |
| 1,3,5-Trimethylbenzene | mg/kg | 1.23 | 1.23 | 104. | 37.1-138 | 0.200 | 30.6 | L779930-03 | WG806473 |
| 1,3-Dichlorobenzene | mg/kg | 1.22 | 1.20 | 104. | 28.4-142 | 1.80 | 31.2 | L779930-03 | WG806473 |
| 1,3-Dichloropropane | mg/kg | 1.15 | 1.13 | 98.2 | 51.4-127 | 2.47 | 23.1 | L779930-03 | WG806473 |
| 1,4-Dichlorobenzene | mg/kg | 1.26 | 1.20 | 107. | 35-133 | 4.61 | 31.1 | L779930-03 | WG806473 |
| 2,2-Dichloropropane | mg/kg | 1.08 | 1.01 | 91.8 | 45.2-141 | 6.17 | 26.6 | L779930-03 | WG806473 |
| 2-Butanone (MEK) | mg/kg | 4.93 | 4.26 | 84.0 | 23.9-170 | 14.6 | 28.3 | L779930-03 | WG806473 |
| 2-Chloroethyl vinyl ether | mg/kg | 5.33 | 5.01 | 90.7 | 5-159 | 6.05 | 40 | L779930-03 | WG806473 |
| 2-Chlorotoluene | mg/kg | 1.23 | 1.22 | 105. | 36.1-137 | 1.42 | 28.9 | L779930-03 | WG806473 |
| 4-Chlorotoluene | mg/kg | 1.22 | 1.21 | 104. | 35.4-137 | 0.760 | 29.8 | L779930-03 | WG806473 |
| 4-Methyl-2-pentanone (MIBK) | mg/kg | 5.33 | 5.00 | 90.7 | 42.4-146 | 6.28 | 26.7 | L779930-03 | WG806473 |
| Acetone | mg/kg | 4.73 | 3.83 | 79.1 | 10-130 | 21.0 | 31.5 | L779930-03 | WG806473 |
| Acrylonitrile | mg/kg | 5.62 | 4.89 | 95.7 | 39.3-152 | 13.8 | 27.2 | L779930-03 | WG806473 |
| Benzene | mg/kg | 1.20 | 1.14 | 102. | 47.8-131 | 4.95 | 22.8 | L779930-03 | WG806473 |
| Bromobenzene | mg/kg | 1.21 | 1.19 | 103. | 40-130 | 1.78 | 27.4 | L779930-03 | WG806473 |
| Bromodichloromethane | mg/kg | 1.14 | 1.07 | 97.0 | 50.6-128 | 5.99 | 22.8 | L779930-03 | WG806473 |
| Bromoform | mg/kg | 1.07 | 1.03 | 91.4 | 43.3-139 | 4.20 | 25.9 | L779930-03 | WG806473 |
| Bromomethane | mg/kg | 0.505 | 0.592 | 43.0 | 5-189 | 15.8 | 26.7 | L779930-03 | WG806473 |
| Carbon tetrachloride | mg/kg | 1.19 | 1.13 | 101. | 46-140 | 5.71 | 27.2 | L779930-03 | WG806473 |
| Chlorobenzene | mg/kg | 1.26 | 1.25 | 107. | 44.1-134 | 1.10 | 25.7 | L779930-03 | WG806473 |
| Chlorodibromomethane | mg/kg | 1.12 | 1.10 | 95.7 | 49.7-134 | 2.43 | 24 | L779930-03 | WG806473 |

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Strata - ID
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Quality Assurance Report
Level II

L779930

August 11, 2015

| Analyte | Units | MSD | Matrix Spike Duplicate Ref | %Rec | Limit | RPD | Limit | Ref Samp | Batch |
|---|---|---|---|---|---|---|---|---|---|
| Chloroethane | mg/kg | 0.449 | 0.420 | 38.2 | 5-164 | 6.84 | 28.4 | L779930-03 | WG806473 |
| Chloroform | mg/kg | 1.17 | 1.12 | 99.6 | 51.2-133 | 4.35 | 22.8 | L779930-03 | WG806473 |
| Chloromethane | mg/kg | 1.09 | 1.05 | 92.8 | 31.4-141 | 3.34 | 24.6 | L779930-03 | WG806473 |
| cis-1,2-Dichloroethene | mg/kg | 1.23 | 1.16 | 104. | 50.6-133 | 5.55 | 23 | L779930-03 | WG806473 |
| cis-1,3-Dichloropropene | mg/kg | 1.21 | 1.14 | 103. | 48.4-134 | 6.17 | 23.6 | L779930-03 | WG806473 |
| Di-isopropyl ether | mg/kg | 1.19 | 1.12 | 102. | 46.7-140 | 6.73 | 23.5 | L779930-03 | WG806473 |
| Dibromomethane | mg/kg | 1.14 | 1.08 | 97.4 | 52.4-128 | 5.38 | 23 | L779930-03 | WG806473 |
| Dichlorodifluoromethane | mg/kg | 0.973 | 0.922 | 82.8 | 31.2-144 | 5.36 | 30.2 | L779930-03 | WG806473 |
| Ethylbenzene | mg/kg | 1.25 | 1.23 | 106. | 44.8-135 | 2.11 | 26.9 | L779930-03 | WG806473 |
| Hexachloro-1,3-butadiene | mg/kg | 0.918 | 0.919 | 78.1 | 10-149 | 0.0700 | 40 | L779930-03 | WG806473 |
| Isopropylbenzene | mg/kg | 1.25 | 1.23 | 106. | 41.9-139 | 1.71 | 29.3 | L779930-03 | WG806473 |
| Methyl tert-butyl ether | mg/kg | 1.18 | 1.11 | 100. | 50.4-131 | 6.44 | 24.8 | L779930-03 | WG806473 |
| Methylene Chloride | mg/kg | 1.09 | 1.03 | 91.5 | 46.7-125 | 5.31 | 22.2 | L779930-03 | WG806473 |
| n-Butylbenzene | mg/kg | 1.24 | 1.19 | 105. | 23.6-146 | 4.33 | 39.2 | L779930-03 | WG806473 |
| n-Propylbenzene | mg/kg | 1.26 | 1.25 | 107. | 35.2-139 | 0.280 | 31.9 | L779930-03 | WG806473 |
| Naphthalene | mg/kg | 0.798 | 0.801 | 67.1 | 18.4-145 | 0.380 | 34 | L779930-03 | WG806473 |
| p-Isopropyltoluene | mg/kg | 1.21 | 1.20 | 103. | 27.3-146 | 0.770 | 35.1 | L779930-03 | WG806473 |
| sec-Butylbenzene | mg/kg | 1.23 | 1.21 | 104. | 31-142 | 1.55 | 34.7 | L779930-03 | WG806473 |
| Styrene | mg/kg | 1.26 | 1.25 | 107. | 39.7-137 | 0.910 | 28.2 | L779930-03 | WG806473 |
| tert-Butylbenzene | mg/kg | 1.22 | 1.22 | 104. | 36.9-142 | 0.490 | 31.7 | L779930-03 | WG806473 |
| Tetrachloroethene | mg/kg | 1.16 | 1.15 | 98.5 | 37.7-140 | 0.390 | 29.2 | L779930-03 | WG806473 |
| Toluene | mg/kg | 1.23 | 1.17 | 105. | 47.8-127 | 5.78 | 24.3 | L779930-03 | WG806473 |
| trans-1,2-Dichloroethene | mg/kg | 1.22 | 1.17 | 104. | 43.8-135 | 4.23 | 24.8 | L779930-03 | WG806473 |
| trans-1,3-Dichloropropene | mg/kg | 1.08 | 1.02 | 91.8 | 46.6-135 | 5.29 | 25.3 | L779930-03 | WG806473 |
| Trichloroethene | mg/kg | 1.21 | 1.17 | 103. | 48-132 | 3.87 | 24.8 | L779930-03 | WG806473 |
| Trichlorofluoromethane | mg/kg | 0.568 | 0.554 | 48.3 | 12.8-169 | 2.45 | 29.7 | L779930-03 | WG806473 |
| Vinyl chloride | mg/kg | 1.05 | 1.01 | 89.2 | 32-146 | 3.88 | 26.3 | L779930-03 | WG806473 |
| Xylenes, Total | mg/kg | 3.76 | 3.70 | 106. | 42.7-135 | 1.51 | 26.6 | L779930-03 | WG806473 |
| 4-Bromofluorobenzene | | | | 105.0 | 69.7-129 | | | | WG806473 |
| Dibromofluoromethane | | | | 99.00 | 76.3-123 | | | | WG806473 |
| Toluene-d8 | | | | 106.0 | 88.7-115 | | | | WG806473 |
| Mercury | mg/kg | 0.534 | 0.574 | 44.6* | 75-125 | 7.00 | 20 | L779930-03 | WG806784 |
| Antimony | mg/kg | 81.4 | 83.3 | 81.0 | 75-125 | 2.00 | 20 | L779930-03 | WG807311 |
| Arsenic | mg/kg | 95.2 | 94.9 | 85.9 | 75-125 | 0.0 | 20 | L779930-03 | WG807311 |
| Beryllium | mg/kg | 93.3 | 93.2 | 92.8 | 75-125 | 0.0 | 20 | L779930-03 | WG807311 |
| Cadmium | mg/kg | 89.9 | 90.6 | 89.6 | 75-125 | 1.00 | 20 | L779930-03 | WG807311 |
| Chromium | mg/kg | 93.2 | 95.2 | 85.7 | 75-125 | 2.00 | 20 | L779930-03 | WG807311 |
| Copper | mg/kg | 98.3 | 101. | 90.0 | 75-125 | 3.00 | 20 | L779930-03 | WG807311 |
| Lead | mg/kg | 141. | 151. | 94.1 | 75-125 | 7.00 | 20 | L779930-03 | WG807311 |
| Nickel | mg/kg | 98.9 | 97.7 | 94.0 | 75-125 | 1.00 | 20 | L779930-03 | WG807311 |
| Selenium | mg/kg | 87.1 | 88.6 | 87.0 | 75-125 | 2.00 | 20 | L779930-03 | WG807311 |
| Silver | mg/kg | 87.4 | 90.1 | 87.4 | 75-125 | 3.00 | 20 | L779930-03 | WG807311 |
| Thallium | mg/kg | 89.4 | 88.8 | 89.7 | 75-125 | 1.00 | 20 | L779930-03 | WG807311 |
| Zinc | mg/kg | 164. | 211. | 57.5* | 75-125 | 26.0* | 20 | L779930-03 | WG807311 |
| 1-Methylnaphthalene | mg/kg | 0.0535 | 0.0574 | 66.9 | 28.4-137 | 7.06 | 20 | L779930-22 | WG807206 |
| 2-Chloronaphthalene | mg/kg | 0.0517 | 0.0541 | 64.6 | 38.6-126 | 4.56 | 20 | L779930-22 | WG807206 |
| 2-Methylnaphthalene | mg/kg | 0.0513 | 0.0548 | 64.1 | 26.6-137 | 6.62 | 20 | L779930-22 | WG807206 |
| Acenaphthene | mg/kg | 0.0490 | 0.0509 | 61.2 | 31.9-130 | 3.92 | 20 | L779930-22 | WG807206 |
| Acenaphthylene | mg/kg | 0.0530 | 0.0555 | 66.3 | 33.7-129 | 4.51 | 20 | L779930-22 | WG807206 |
| Anthracene | mg/kg | 0.0449 | 0.0456 | 56.2 | 26.5-141 | 1.39 | 21.2 | L779930-22 | WG807206 |
| Benzo(a)anthracene | mg/kg | 0.0397 | 0.0403 | 49.6 | 18.3-136 | 1.55 | 24.6 | L779930-22 | WG807206 |
| Benzo(a)pyrene | mg/kg | 0.0391 | 0.0402 | 48.9 | 16.9-135 | 2.59 | 25.2 | L779930-22 | WG807206 |
| Benzo(b)fluoranthene | mg/kg | 0.0323 | 0.0323 | 40.4 | 10-134 | 0.130 | 30.9 | L779930-22 | WG807206 |

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Quality Assurance Report
Level II

L779930

August 11, 2015

| | | Matrix Spike Duplicate | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Analyte | Units | MSD | Ref | %Rec | Limit | RPD | Limit | Ref Samp | Batch |
| Benzo(g,h,i)perylene | mg/kg | 0.0379 | 0.0392 | 47.4 | 14.1-140 | 3.47 | 25.5 | L779930-22 | WG807206 |
| Benzo(k)fluoranthene | mg/kg | 0.0419 | 0.0436 | 52.4 | 18.2-138 | 3.92 | 25.6 | L779930-22 | WG807206 |
| Chrysene | mg/kg | 0.0446 | 0.0451 | 55.7 | 17.1-145 | 1.18 | 24.2 | L779930-22 | WG807206 |
| Dibenz(a,h)anthracene | mg/kg | 0.0440 | 0.0452 | 55.0 | 18.5-138 | 2.50 | 24.3 | L779930-22 | WG807206 |
| Fluoranthene | mg/kg | 0.0378 | 0.0382 | 46.3 | 15.4-144 | 1.11 | 27.1 | L779930-22 | WG807206 |
| Fluorene | mg/kg | 0.0470 | 0.0486 | 58.8 | 23.5-136 | 3.26 | 20 | L779930-22 | WG807206 |
| Indeno(1,2,3-cd)pyrene | mg/kg | 0.0398 | 0.0413 | 49.8 | 14.5-142 | 3.66 | 25.8 | L779930-22 | WG807206 |
| Naphthalene | mg/kg | 0.0519 | 0.0558 | 64.9 | 29.2-128 | 7.22 | 20 | L779930-22 | WG807206 |
| Phenanthrene | mg/kg | 0.0421 | 0.0435 | 51.7 | 20.1-134 | 3.37 | 23.6 | L779930-22 | WG807206 |
| Pyrene | mg/kg | 0.0409 | 0.0412 | 50.1 | 11-148 | 0.640 | 26.1 | L779930-22 | WG807206 |
| 2-Fluorobiphenyl | | | | 77.60 | 40.6-122 | | | | WG807206 |
| Nitrobenzene-d5 | | | | 85.60 | 22.1-146 | | | | WG807206 |
| p-Terphenyl-d14 | | | | 63.20 | 32.2-131 | | | | WG807206 |

Post Spike

Serial Dilution

* Performance of this Analyte is outside of established criteria.
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Quality Assurance Report
Level II

L779930

August 11, 2015

## Serial Dilution

Batch number /Run number / Sample number cross reference

WG806373: R3055520: L779930-16 18 19 20 21 22 23 24 25 26
WG806372: R3055521: L779930-06 07 08 09 10 11 12 13 14 15
WG806411: R3056162 R3056280: L779930-21 22 23 24 25 26
WG806371: R3056251: L779930-01 02 03 04 05
WG806343: R3056401: L779930-17
WG806688: R3056669: L779930-01 02 03 04 05 06 07
WG806568: R3056738: L779930-21 22 23 24 25 26
WG806472: R3057680: L779930-21 22 23 24 25 26
WG806473: R3057730: L779930-01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 18 19 20
WG806784: R3058281: L779930-01 02 03 04 05 06 07 09 10 11 12 13 14 15 16 18 19 20
WG807311: R3058282: L779930-01 02 03 04 05 06 07 09 10 11 12 13 14 15 16 18 19 20
WG807206: R3059002: L779930-22 23 24 25 26
WG807849: R3059008 R3059146 R3059587: L779930-01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 18 19 20 21

* * Calculations are performed prior to rounding of reported values.
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Quality Assurance Report
Level II

L779930

August 11, 2015

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

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Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

# Report Summary

Friday August 07, 2015

Report Number: L780238
Samples Received: 08/01/15
Client Project: BO15086C

Description: 620 S. 9th Street

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By: _____

Jarred Willis , ESC Representative

*Laboratory Certification Numbers*

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197, FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1, TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364, EPA - TN002

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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 07, 2015

ESC Sample # : L780238-01

Date Received : August 01, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : TW-1

Project # : BO15086C

Collected By : A. Provant
Collection Date : 07/31/15 11:00

| Parameter | Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Antimony | 0.00034 | 0.00021 | 0.0020 | mg/l | J | 6020 | 08/06/15 | 1 |
| Arsenic | 0.0018 | 0.00025 | 0.0020 | mg/l | J | 6020 | 08/06/15 | 1 |
| Lead | U | 0.00024 | 0.0020 | mg/l | | 6020 | 08/06/15 | 1 |
| Thallium | U | 0.00019 | 0.0020 | mg/l | | 6020 | 08/06/15 | 1 |
| Mercury | U | 0.000049 | 0.00020 | mg/l | | 7470A | 08/05/15 | 1 |
| Beryllium | U | 0.00070 | 0.0020 | mg/l | | 6010B | 08/04/15 | 1 |
| Cadmium | U | 0.00070 | 0.0020 | mg/l | | 6010B | 08/04/15 | 1 |
| Chromium | U | 0.0014 | 0.010 | mg/l | | 6010B | 08/04/15 | 1 |
| Copper | U | 0.0053 | 0.010 | mg/l | | 6010B | 08/04/15 | 1 |
| Nickel | U | 0.0049 | 0.010 | mg/l | | 6010B | 08/04/15 | 1 |
| Selenium | U | 0.0074 | 0.010 | mg/l | | 6010B | 08/04/15 | 1 |
| Silver | U | 0.0028 | 0.0050 | mg/l | | 6010B | 08/04/15 | 1 |
| Zinc | U | 0.0059 | 0.050 | mg/l | | 6010B | 08/04/15 | 1 |
| Volatile Organics | | | | | | | | |
| Acetone | U | 0.010 | 0.050 | mg/l | | 8260B | 08/02/15 | 1 |
| Acrolein | U | 0.0089 | 0.050 | mg/l | | 8260B | 08/02/15 | 1 |
| Acrylonitrile | U | 0.0019 | 0.010 | mg/l | | 8260B | 08/02/15 | 1 |
| Benzene | U | 0.00033 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Bromobenzene | U | 0.00035 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Bromodichloromethane | U | 0.00038 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Bromoform | U | 0.00047 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Bromomethane | U | 0.00087 | 0.0050 | mg/l | | 8260B | 08/02/15 | 1 |
| n-Butylbenzene | U | 0.00036 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| sec-Butylbenzene | U | 0.00036 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| tert-Butylbenzene | U | 0.00040 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Carbon tetrachloride | U | 0.00038 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Chlorobenzene | U | 0.00035 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Chlorodibromomethane | U | 0.00033 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Chloroethane | U | 0.00045 | 0.0050 | mg/l | | 8260B | 08/02/15 | 1 |
| 2-Chloroethyl vinyl ether | U | 0.0030 | 0.050 | mg/l | | 8260B | 08/02/15 | 1 |
| Chloroform | U | 0.00032 | 0.0050 | mg/l | | 8260B | 08/02/15 | 1 |
| Chloromethane | U | 0.00028 | 0.0025 | mg/l | | 8260B | 08/02/15 | 1 |
| 2-Chlorotoluene | U | 0.00038 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 4-Chlorotoluene | U | 0.00035 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,2-Dibromo-3-Chloropropane | U | 0.0013 | 0.0050 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,2-Dibromoethane | U | 0.00038 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Dibromomethane | U | 0.00035 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,2-Dichlorobenzene | U | 0.00035 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,3-Dichlorobenzene | U | 0.00022 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,4-Dichlorobenzene | U | 0.00027 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |

U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 07, 2015

ESC Sample # : L780238-01

Date Received : August 01, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : TW-1

Project # : BO15086C

Collected By : A. Provant
Collection Date : 07/31/15 11:00

| Parameter | Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | U | 0.00055 | 0.0050 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,1-Dichloroethane | U | 0.00026 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,2-Dichloroethane | U | 0.00036 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,1-Dichloroethene | U | 0.00040 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| cis-1,2-Dichloroethene | U | 0.00026 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| trans-1,2-Dichloroethene | U | 0.00040 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,2-Dichloropropane | U | 0.00031 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,1-Dichloropropene | U | 0.00035 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,3-Dichloropropane | U | 0.00037 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| cis-1,3-Dichloropropene | U | 0.00042 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| trans-1,3-Dichloropropene | U | 0.00042 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 2,2-Dichloropropane | U | 0.00032 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Di-isopropyl ether | U | 0.00032 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Ethylbenzene | U | 0.00038 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Hexachloro-1,3-butadiene | U | 0.00026 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Isopropylbenzene | U | 0.00033 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| p-Isopropyltoluene | U | 0.00035 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 2-Butanone (MEK) | U | 0.0039 | 0.010 | mg/l | | 8260B | 08/02/15 | 1 |
| Methylene Chloride | U | 0.0010 | 0.0050 | mg/l | | 8260B | 08/02/15 | 1 |
| 4-Methyl-2-pentanone (MIBK) | U | 0.0021 | 0.010 | mg/l | | 8260B | 08/02/15 | 1 |
| Methyl tert-butyl ether | U | 0.00037 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Naphthalene | U | 0.0010 | 0.0050 | mg/l | | 8260B | 08/02/15 | 1 |
| n-Propylbenzene | U | 0.00035 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Styrene | U | 0.00031 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,1,1,2-Tetrachloroethane | U | 0.00038 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,1,2,2-Tetrachloroethane | U | 0.00013 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,1,2-Trichlorotrifluoroethane | U | 0.00030 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Tetrachloroethene | U | 0.00037 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Toluene | U | 0.00078 | 0.0050 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,2,3-Trichlorobenzene | U | 0.00023 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,2,4-Trichlorobenzene | U | 0.00036 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,1,1-Trichloroethane | U | 0.00032 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,1,2-Trichloroethane | U | 0.00038 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Trichloroethene | U | 0.00040 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Trichlorofluoromethane | U | 0.0012 | 0.0050 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,2,3-Trichloropropane | U | 0.00081 | 0.0025 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,2,4-Trimethylbenzene | U | 0.00037 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,2,3-Trimethylbenzene | U | 0.00032 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,3,5-Trimethylbenzene | U | 0.00039 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Vinyl chloride | U | 0.00026 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Xylenes, Total | U | 0.0011 | 0.0030 | mg/l | | 8260B | 08/02/15 | 1 |
| Surrogate Recovery | | | | | | | | |
| Toluene-d8 | 105. | | | % Rec. | | 8260B | 08/02/15 | 1 |

U = ND (Not Detected)
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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 07, 2015

ESC Sample # : L780238-01

Date Received : August 01, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : TW-1

Project # : BO15086C

Collected By : A. Provant
Collection Date : 07/31/15 11:00

| Parameter | Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Dibromofluoromethane | 102. | | | % Rec. | | 8260B | 08/02/15 | 1 |
| 4-Bromofluorobenzene | 106. | | | % Rec. | | 8260B | 08/02/15 | 1 |
| Polynuclear Aromatic Hydrocarbons | | | | | | | | |
| Anthracene | U | 0.000014 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Acenaphthene | U | 0.000010 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Acenaphthylene | U | 0.000012 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Benzo(a)anthracene | 0.0000055 | 0.0000041 | 0.000050 | mg/l | J | 8270C-S | 08/07/15 | 1 |
| Benzo(a)pyrene | U | 0.000012 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Benzo(b)fluoranthene | 0.0000023 | 0.0000021 | 0.000050 | mg/l | J | 8270C-S | 08/07/15 | 1 |
| Benzo(g,h,i)perylene | U | 0.0000023 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Benzo(k)fluoranthene | U | 0.000014 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Chrysene | U | 0.000011 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Dibenz(a,h)anthracene | U | 0.0000040 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Fluoranthene | U | 0.000016 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Fluorene | U | 0.0000085 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Indeno(1,2,3-cd)pyrene | U | 0.000015 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Naphthalene | U | 0.000020 | 0.00025 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Phenanthrene | U | 0.0000082 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Pyrene | U | 0.000012 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| 1-Methylnaphthalene | U | 0.0000082 | 0.00025 | mg/l | | 8270C-S | 08/07/15 | 1 |
| 2-Methylnaphthalene | 0.0000094 | 0.0000090 | 0.00025 | mg/l | J | 8270C-S | 08/07/15 | 1 |
| 2-Chloronaphthalene | U | 0.0000065 | 0.00025 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Surrogate Recovery | | | | | | | | |
| Nitrobenzene-d5 | 139. | | | % Rec. | | 8270C-S | 08/07/15 | 1 |
| 2-Fluorobiphenyl | 114. | | | % Rec. | | 8270C-S | 08/07/15 | 1 |
| p-Terphenyl-d14 | 108. | | | % Rec. | | 8270C-S | 08/07/15 | 1 |
| Ethylene Dibromide | U | 0.0000024 | 0.000010 | mg/l | | 8011 | 08/04/15 | 1 |
| 1,2-Dibromo-3-Chloropropane | U | 0.0000043 | 0.000020 | mg/l | | 8011 | 08/04/15 | 1 |

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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 07, 2015

ESC Sample # : L780238-02

Date Received : August 01, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : TW-2

Project # : BO15086C

Collected By : A. Provant
Collection Date : 07/31/15 11:55

| Parameter | Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Antimony | 0.00068 | 0.00021 | 0.0020 | mg/l | J | 6020 | 08/06/15 | 1 |
| Arsenic | 0.0023 | 0.00025 | 0.0020 | mg/l | | 6020 | 08/06/15 | 1 |
| Lead | 0.0014 | 0.00024 | 0.0020 | mg/l | J | 6020 | 08/06/15 | 1 |
| Thallium | U | 0.00019 | 0.0020 | mg/l | | 6020 | 08/06/15 | 1 |
| Mercury | U | 0.000049 | 0.00020 | mg/l | | 7470A | 08/05/15 | 1 |
| Beryllium | U | 0.00070 | 0.0020 | mg/l | | 6010B | 08/04/15 | 1 |
| Cadmium | U | 0.00070 | 0.0020 | mg/l | | 6010B | 08/04/15 | 1 |
| Chromium | 0.0022 | 0.0014 | 0.010 | mg/l | J | 6010B | 08/04/15 | 1 |
| Copper | U | 0.0053 | 0.010 | mg/l | | 6010B | 08/04/15 | 1 |
| Nickel | U | 0.0049 | 0.010 | mg/l | | 6010B | 08/04/15 | 1 |
| Selenium | U | 0.0074 | 0.010 | mg/l | | 6010B | 08/04/15 | 1 |
| Silver | U | 0.0028 | 0.0050 | mg/l | | 6010B | 08/04/15 | 1 |
| Zinc | U | 0.0059 | 0.050 | mg/l | | 6010B | 08/04/15 | 1 |
| Volatile Organics | | | | | | | | |
| Acetone | U | 0.010 | 0.050 | mg/l | | 8260B | 08/02/15 | 1 |
| Acrolein | U | 0.0089 | 0.050 | mg/l | | 8260B | 08/02/15 | 1 |
| Acrylonitrile | U | 0.0019 | 0.010 | mg/l | | 8260B | 08/02/15 | 1 |
| Benzene | U | 0.00033 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Bromobenzene | U | 0.00035 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Bromodichloromethane | U | 0.00038 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Bromoform | U | 0.00047 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Bromomethane | U | 0.00087 | 0.0050 | mg/l | | 8260B | 08/02/15 | 1 |
| n-Butylbenzene | U | 0.00036 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| sec-Butylbenzene | U | 0.00036 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| tert-Butylbenzene | U | 0.00040 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Carbon tetrachloride | U | 0.00038 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Chlorobenzene | U | 0.00035 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Chlorodibromomethane | U | 0.00033 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Chloroethane | U | 0.00045 | 0.0050 | mg/l | | 8260B | 08/02/15 | 1 |
| 2-Chloroethyl vinyl ether | U | 0.0030 | 0.050 | mg/l | | 8260B | 08/02/15 | 1 |
| Chloroform | U | 0.00032 | 0.0050 | mg/l | | 8260B | 08/02/15 | 1 |
| Chloromethane | U | 0.00028 | 0.0025 | mg/l | | 8260B | 08/02/15 | 1 |
| 2-Chlorotoluene | U | 0.00038 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 4-Chlorotoluene | U | 0.00035 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,2-Dibromo-3-Chloropropane | U | 0.0013 | 0.0050 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,2-Dibromoethane | U | 0.00038 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Dibromomethane | U | 0.00035 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,2-Dichlorobenzene | U | 0.00035 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,3-Dichlorobenzene | U | 0.00022 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,4-Dichlorobenzene | U | 0.00027 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |

U = ND (Not Detected)
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RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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Tax I.D. 62-0814289

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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 07, 2015

ESC Sample # : L780238-02

Date Received : August 01, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : TW-2

Project # : BO15086C

Collected By : A. Provant
Collection Date : 07/31/15 11:55

| Parameter | Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | U | 0.00055 | 0.0050 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,1-Dichloroethane | U | 0.00026 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,2-Dichloroethane | U | 0.00036 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,1-Dichloroethene | U | 0.00040 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| cis-1,2-Dichloroethene | U | 0.00026 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| trans-1,2-Dichloroethene | U | 0.00040 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,2-Dichloropropane | U | 0.00031 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,1-Dichloropropene | U | 0.00035 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,3-Dichloropropane | U | 0.00037 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| cis-1,3-Dichloropropene | U | 0.00042 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| trans-1,3-Dichloropropene | U | 0.00042 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 2,2-Dichloropropane | U | 0.00032 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Di-isopropyl ether | U | 0.00032 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Ethylbenzene | U | 0.00038 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Hexachloro-1,3-butadiene | U | 0.00026 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Isopropylbenzene | U | 0.00033 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| p-Isopropyltoluene | U | 0.00035 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 2-Butanone (MEK) | U | 0.0039 | 0.010 | mg/l | | 8260B | 08/02/15 | 1 |
| Methylene Chloride | U | 0.0010 | 0.0050 | mg/l | | 8260B | 08/02/15 | 1 |
| 4-Methyl-2-pentanone (MIBK) | U | 0.0021 | 0.010 | mg/l | | 8260B | 08/02/15 | 1 |
| Methyl tert-butyl ether | U | 0.00037 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Naphthalene | U | 0.0010 | 0.0050 | mg/l | | 8260B | 08/02/15 | 1 |
| n-Propylbenzene | U | 0.00035 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Styrene | U | 0.00031 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,1,1,2-Tetrachloroethane | U | 0.00038 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,1,2,2-Tetrachloroethane | U | 0.00013 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,1,2-Trichlorotrifluoroethane | U | 0.00030 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Tetrachloroethene | U | 0.00037 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Toluene | U | 0.00078 | 0.0050 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,2,3-Trichlorobenzene | U | 0.00023 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,2,4-Trichlorobenzene | U | 0.00036 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,1,1-Trichloroethane | U | 0.00032 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,1,2-Trichloroethane | U | 0.00038 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Trichloroethene | U | 0.00040 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Trichlorofluoromethane | U | 0.0012 | 0.0050 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,2,3-Trichloropropane | U | 0.00081 | 0.0025 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,2,4-Trimethylbenzene | U | 0.00037 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,2,3-Trimethylbenzene | U | 0.00032 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,3,5-Trimethylbenzene | U | 0.00039 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Vinyl chloride | U | 0.00026 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Xylenes, Total | U | 0.0011 | 0.0030 | mg/l | | 8260B | 08/02/15 | 1 |
| Surrogate Recovery | | | | | | | | |
| Toluene-d8 | 104. | | | % Rec. | | 8260B | 08/02/15 | 1 |

U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 07, 2015

ESC Sample # : L780238-02

Date Received : August 01, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : TW-2

Project # : BO15086C

Collected By : A. Provant
Collection Date : 07/31/15 11:55

| Parameter | Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Dibromofluoromethane | 98.4 | | | % Rec. | | 8260B | 08/02/15 | 1 |
| 4-Bromofluorobenzene | 103. | | | % Rec. | | 8260B | 08/02/15 | 1 |
| Polynuclear Aromatic Hydrocarbons | | | | | | | | |
| Anthracene | U | 0.000014 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Acenaphthene | U | 0.000010 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Acenaphthylene | U | 0.000012 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Benzo(a)anthracene | 0.0000050 | 0.0000041 | 0.000050 | mg/l | J | 8270C-S | 08/07/15 | 1 |
| Benzo(a)pyrene | U | 0.000012 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Benzo(b)fluoranthene | U | 0.0000021 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Benzo(g,h,i)perylene | U | 0.0000023 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Benzo(k)fluoranthene | U | 0.000014 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Chrysene | U | 0.000011 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Dibenz(a,h)anthracene | U | 0.0000040 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Fluoranthene | U | 0.000016 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Fluorene | U | 0.0000085 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Indeno(1,2,3-cd)pyrene | U | 0.000015 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Naphthalene | U | 0.000020 | 0.00025 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Phenanthrene | 0.0000089 | 0.0000082 | 0.000050 | mg/l | J | 8270C-S | 08/07/15 | 1 |
| Pyrene | U | 0.000012 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| 1-Methylnaphthalene | U | 0.0000082 | 0.00025 | mg/l | | 8270C-S | 08/07/15 | 1 |
| 2-Methylnaphthalene | 0.000012 | 0.0000090 | 0.00025 | mg/l | J | 8270C-S | 08/07/15 | 1 |
| 2-Chloronaphthalene | U | 0.0000065 | 0.00025 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Surrogate Recovery | | | | | | | | |
| Nitrobenzene-d5 | 130. | | | % Rec. | | 8270C-S | 08/07/15 | 1 |
| 2-Fluorobiphenyl | 122. | | | % Rec. | | 8270C-S | 08/07/15 | 1 |
| p-Terphenyl-d14 | 107. | | | % Rec. | | 8270C-S | 08/07/15 | 1 |
| Ethylene Dibromide | U | 0.0000024 | 0.000010 | mg/l | | 8011 | 08/04/15 | 1 |
| 1,2-Dibromo-3-Chloropropane | U | 0.0000043 | 0.000020 | mg/l | | 8011 | 08/04/15 | 1 |

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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 07, 2015

ESC Sample # : L780238-03

Date Received : August 01, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : TW-3

Project # : BO15086C

Collected By : A. Provant
Collection Date : 07/31/15 10:05

| Parameter | Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Antimony | 0.00050 | 0.00021 | 0.0020 | mg/l | J | 6020 | 08/06/15 | 1 |
| Arsenic | 0.0013 | 0.00025 | 0.0020 | mg/l | J | 6020 | 08/06/15 | 1 |
| Lead | U | 0.00024 | 0.0020 | mg/l | | 6020 | 08/06/15 | 1 |
| Thallium | U | 0.00019 | 0.0020 | mg/l | | 6020 | 08/06/15 | 1 |
| Mercury | U | 0.000049 | 0.00020 | mg/l | | 7470A | 08/05/15 | 1 |
| Beryllium | U | 0.00070 | 0.0020 | mg/l | | 6010B | 08/04/15 | 1 |
| Cadmium | U | 0.00070 | 0.0020 | mg/l | | 6010B | 08/04/15 | 1 |
| Chromium | U | 0.0014 | 0.010 | mg/l | | 6010B | 08/04/15 | 1 |
| Copper | U | 0.0053 | 0.010 | mg/l | | 6010B | 08/04/15 | 1 |
| Nickel | U | 0.0049 | 0.010 | mg/l | | 6010B | 08/04/15 | 1 |
| Selenium | U | 0.0074 | 0.010 | mg/l | | 6010B | 08/04/15 | 1 |
| Silver | U | 0.0028 | 0.0050 | mg/l | | 6010B | 08/04/15 | 1 |
| Zinc | 0.0073 | 0.0059 | 0.050 | mg/l | J | 6010B | 08/04/15 | 1 |
| Volatile Organics | | | | | | | | |
| Acetone | U | 0.010 | 0.050 | mg/l | | 8260B | 08/02/15 | 1 |
| Acrolein | U | 0.0089 | 0.050 | mg/l | | 8260B | 08/02/15 | 1 |
| Acrylonitrile | U | 0.0019 | 0.010 | mg/l | | 8260B | 08/02/15 | 1 |
| Benzene | U | 0.00033 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Bromobenzene | U | 0.00035 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Bromodichloromethane | U | 0.00038 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Bromoform | U | 0.00047 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Bromomethane | U | 0.00087 | 0.0050 | mg/l | | 8260B | 08/02/15 | 1 |
| n-Butylbenzene | U | 0.00036 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| sec-Butylbenzene | U | 0.00036 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| tert-Butylbenzene | U | 0.00040 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Carbon tetrachloride | U | 0.00038 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Chlorobenzene | U | 0.00035 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Chlorodibromomethane | U | 0.00033 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Chloroethane | U | 0.00045 | 0.0050 | mg/l | | 8260B | 08/02/15 | 1 |
| 2-Chloroethyl vinyl ether | U | 0.0030 | 0.050 | mg/l | | 8260B | 08/02/15 | 1 |
| Chloroform | U | 0.00032 | 0.0050 | mg/l | | 8260B | 08/02/15 | 1 |
| Chloromethane | U | 0.00028 | 0.0025 | mg/l | | 8260B | 08/02/15 | 1 |
| 2-Chlorotoluene | U | 0.00038 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 4-Chlorotoluene | U | 0.00035 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,2-Dibromo-3-Chloropropane | U | 0.0013 | 0.0050 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,2-Dibromoethane | U | 0.00038 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Dibromomethane | U | 0.00035 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,2-Dichlorobenzene | U | 0.00035 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,3-Dichlorobenzene | U | 0.00022 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,4-Dichlorobenzene | U | 0.00027 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |

U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
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Tax I.D. 62-0814289

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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 07, 2015

ESC Sample # : L780238-03

Date Received : August 01, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : TW-3

Project # : BO15086C

Collected By : A. Provant
Collection Date : 07/31/15 10:05

| Parameter | Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | U | 0.00055 | 0.0050 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,1-Dichloroethane | U | 0.00026 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,2-Dichloroethane | U | 0.00036 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,1-Dichloroethene | U | 0.00040 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| cis-1,2-Dichloroethene | U | 0.00026 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| trans-1,2-Dichloroethene | U | 0.00040 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,2-Dichloropropane | U | 0.00031 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,1-Dichloropropene | U | 0.00035 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,3-Dichloropropane | U | 0.00037 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| cis-1,3-Dichloropropene | U | 0.00042 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| trans-1,3-Dichloropropene | U | 0.00042 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 2,2-Dichloropropane | U | 0.00032 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Di-isopropyl ether | U | 0.00032 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Ethylbenzene | U | 0.00038 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Hexachloro-1,3-butadiene | U | 0.00026 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Isopropylbenzene | U | 0.00033 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| p-Isopropyltoluene | U | 0.00035 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 2-Butanone (MEK) | U | 0.0039 | 0.010 | mg/l | | 8260B | 08/02/15 | 1 |
| Methylene Chloride | U | 0.0010 | 0.0050 | mg/l | | 8260B | 08/02/15 | 1 |
| 4-Methyl-2-pentanone (MIBK) | U | 0.0021 | 0.010 | mg/l | | 8260B | 08/02/15 | 1 |
| Methyl tert-butyl ether | U | 0.00037 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Naphthalene | U | 0.0010 | 0.0050 | mg/l | | 8260B | 08/02/15 | 1 |
| n-Propylbenzene | U | 0.00035 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Styrene | U | 0.00031 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,1,1,2-Tetrachloroethane | U | 0.00038 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,1,2,2-Tetrachloroethane | U | 0.00013 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,1,2-Trichlorotrifluoroethane | U | 0.00030 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Tetrachloroethene | U | 0.00037 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Toluene | U | 0.00078 | 0.0050 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,2,3-Trichlorobenzene | U | 0.00023 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,2,4-Trichlorobenzene | U | 0.00036 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,1,1-Trichloroethane | U | 0.00032 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,1,2-Trichloroethane | U | 0.00038 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Trichloroethene | U | 0.00040 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Trichlorofluoromethane | U | 0.0012 | 0.0050 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,2,3-Trichloropropane | U | 0.00081 | 0.0025 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,2,4-Trimethylbenzene | U | 0.00037 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,2,3-Trimethylbenzene | U | 0.00032 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,3,5-Trimethylbenzene | U | 0.00039 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Vinyl chloride | U | 0.00026 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Xylenes, Total | U | 0.0011 | 0.0030 | mg/l | | 8260B | 08/02/15 | 1 |
| Surrogate Recovery | | | | | | | | |
| Toluene-d8 | 104. | | | % Rec. | | 8260B | 08/02/15 | 1 |

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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 07, 2015

ESC Sample # : L780238-03

Date Received : August 01, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : TW-3

Project # : BO15086C

Collected By : A. Provant
Collection Date : 07/31/15 10:05

| Parameter | Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Dibromofluoromethane | 101. | | | % Rec. | | 8260B | 08/02/15 | 1 |
| 4-Bromofluorobenzene | 104. | | | % Rec. | | 8260B | 08/02/15 | 1 |
| Polynuclear Aromatic Hydrocarbons | | | | | | | | |
| Anthracene | U | 0.000014 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Acenaphthene | U | 0.000010 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Acenaphthylene | U | 0.000012 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Benzo(a)anthracene | 0.000010 | 0.0000041 | 0.000050 | mg/l | J | 8270C-S | 08/07/15 | 1 |
| Benzo(a)pyrene | U | 0.000012 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Benzo(b)fluoranthene | U | 0.0000021 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Benzo(g,h,i)perylene | U | 0.0000023 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Benzo(k)fluoranthene | U | 0.000014 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Chrysene | U | 0.000011 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Dibenz(a,h)anthracene | U | 0.0000040 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Fluoranthene | U | 0.000016 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Fluorene | U | 0.0000085 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Indeno(1,2,3-cd)pyrene | U | 0.000015 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Naphthalene | 0.000023 | 0.000020 | 0.00025 | mg/l | J | 8270C-S | 08/07/15 | 1 |
| Phenanthrene | U | 0.0000082 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Pyrene | 0.000070 | 0.000012 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| 1-Methylnaphthalene | 0.0000092 | 0.0000082 | 0.00025 | mg/l | J | 8270C-S | 08/07/15 | 1 |
| 2-Methylnaphthalene | 0.0000097 | 0.0000090 | 0.00025 | mg/l | J | 8270C-S | 08/07/15 | 1 |
| 2-Chloronaphthalene | U | 0.0000065 | 0.00025 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Surrogate Recovery | | | | | | | | |
| Nitrobenzene-d5 | 141. | | | % Rec. | | 8270C-S | 08/07/15 | 1 |
| 2-Fluorobiphenyl | 120. | | | % Rec. | | 8270C-S | 08/07/15 | 1 |
| p-Terphenyl-d14 | 108. | | | % Rec. | | 8270C-S | 08/07/15 | 1 |
| Ethylene Dibromide | U | 0.0000024 | 0.000010 | mg/l | | 8011 | 08/04/15 | 1 |
| 1,2-Dibromo-3-Chloropropane | U | 0.0000043 | 0.000020 | mg/l | | 8011 | 08/04/15 | 1 |

U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 07, 2015

ESC Sample # : L780238-04

Date Received : August 01, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : TW-4

Project # : BO15086C

Collected By : A. Provant
Collection Date : 07/31/15 08:45

| Parameter | Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Antimony | 0.00084 | 0.00021 | 0.0020 | mg/l | J | 6020 | 08/06/15 | 1 |
| Arsenic | 0.0018 | 0.00025 | 0.0020 | mg/l | J | 6020 | 08/06/15 | 1 |
| Lead | 0.0064 | 0.00024 | 0.0020 | mg/l | | 6020 | 08/06/15 | 1 |
| Thallium | U | 0.00019 | 0.0020 | mg/l | | 6020 | 08/06/15 | 1 |
| Mercury | 0.000068 | 0.000049 | 0.00020 | mg/l | J | 7470A | 08/05/15 | 1 |
| Beryllium | U | 0.00070 | 0.0020 | mg/l | | 6010B | 08/04/15 | 1 |
| Cadmium | U | 0.00070 | 0.0020 | mg/l | | 6010B | 08/04/15 | 1 |
| Chromium | 0.0056 | 0.0014 | 0.010 | mg/l | J | 6010B | 08/04/15 | 1 |
| Copper | 0.0062 | 0.0053 | 0.010 | mg/l | J | 6010B | 08/04/15 | 1 |
| Nickel | U | 0.0049 | 0.010 | mg/l | | 6010B | 08/04/15 | 1 |
| Selenium | U | 0.0074 | 0.010 | mg/l | | 6010B | 08/04/15 | 1 |
| Silver | U | 0.0028 | 0.0050 | mg/l | | 6010B | 08/04/15 | 1 |
| Zinc | 0.015 | 0.0059 | 0.050 | mg/l | J | 6010B | 08/04/15 | 1 |
| Volatile Organics | | | | | | | | |
| Acetone | U | 0.010 | 0.050 | mg/l | | 8260B | 08/03/15 | 1 |
| Acrolein | U | 0.0089 | 0.050 | mg/l | | 8260B | 08/03/15 | 1 |
| Acrylonitrile | U | 0.0019 | 0.010 | mg/l | | 8260B | 08/03/15 | 1 |
| Benzene | U | 0.00033 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| Bromobenzene | U | 0.00035 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| Bromodichloromethane | U | 0.00038 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| Bromoform | U | 0.00047 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| Bromomethane | U | 0.00087 | 0.0050 | mg/l | | 8260B | 08/03/15 | 1 |
| n-Butylbenzene | U | 0.00036 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| sec-Butylbenzene | U | 0.00036 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| tert-Butylbenzene | U | 0.00040 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| Carbon tetrachloride | U | 0.00038 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| Chlorobenzene | U | 0.00035 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| Chlorodibromomethane | U | 0.00033 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| Chloroethane | U | 0.00045 | 0.0050 | mg/l | | 8260B | 08/03/15 | 1 |
| 2-Chloroethyl vinyl ether | U | 0.0030 | 0.050 | mg/l | | 8260B | 08/03/15 | 1 |
| Chloroform | U | 0.00032 | 0.0050 | mg/l | | 8260B | 08/03/15 | 1 |
| Chloromethane | U | 0.00028 | 0.0025 | mg/l | | 8260B | 08/03/15 | 1 |
| 2-Chlorotoluene | U | 0.00038 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| 4-Chlorotoluene | U | 0.00035 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| 1,2-Dibromo-3-Chloropropane | U | 0.0013 | 0.0050 | mg/l | | 8260B | 08/03/15 | 1 |
| 1,2-Dibromoethane | U | 0.00038 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| Dibromomethane | U | 0.00035 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| 1,2-Dichlorobenzene | U | 0.00035 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| 1,3-Dichlorobenzene | U | 0.00022 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| 1,4-Dichlorobenzene | U | 0.00027 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |

U = ND (Not Detected)
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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 07, 2015

ESC Sample # : L780238-04

Date Received : August 01, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : TW-4

Project # : BO15086C

Collected By : A. Provant
Collection Date : 07/31/15 08:45

| Parameter | Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | U | 0.00055 | 0.0050 | mg/l | | 8260B | 08/03/15 | 1 |
| 1,1-Dichloroethane | U | 0.00026 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| 1,2-Dichloroethane | U | 0.00036 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| 1,1-Dichloroethene | U | 0.00040 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| cis-1,2-Dichloroethene | U | 0.00026 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| trans-1,2-Dichloroethene | U | 0.00040 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| 1,2-Dichloropropane | U | 0.00031 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| 1,1-Dichloropropene | U | 0.00035 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| 1,3-Dichloropropane | U | 0.00037 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| cis-1,3-Dichloropropene | U | 0.00042 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| trans-1,3-Dichloropropene | U | 0.00042 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| 2,2-Dichloropropane | U | 0.00032 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| Di-isopropyl ether | U | 0.00032 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| Ethylbenzene | U | 0.00038 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| Hexachloro-1,3-butadiene | U | 0.00026 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| Isopropylbenzene | U | 0.00033 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| p-Isopropyltoluene | U | 0.00035 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| 2-Butanone (MEK) | U | 0.0039 | 0.010 | mg/l | | 8260B | 08/03/15 | 1 |
| Methylene Chloride | U | 0.0010 | 0.0050 | mg/l | | 8260B | 08/03/15 | 1 |
| 4-Methyl-2-pentanone (MIBK) | U | 0.0021 | 0.010 | mg/l | | 8260B | 08/03/15 | 1 |
| Methyl tert-butyl ether | U | 0.00037 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| Naphthalene | U | 0.0010 | 0.0050 | mg/l | | 8260B | 08/03/15 | 1 |
| n-Propylbenzene | U | 0.00035 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| Styrene | U | 0.00031 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| 1,1,1,2-Tetrachloroethane | U | 0.00038 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| 1,1,2,2-Tetrachloroethane | U | 0.00013 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| 1,1,2-Trichlorotrifluoroethane | U | 0.00030 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| Tetrachloroethene | U | 0.00037 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| Toluene | U | 0.00078 | 0.0050 | mg/l | | 8260B | 08/03/15 | 1 |
| 1,2,3-Trichlorobenzene | U | 0.00023 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| 1,2,4-Trichlorobenzene | U | 0.00036 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| 1,1,1-Trichloroethane | 0.00042 | 0.00032 | 0.0010 | mg/l | J | 8260B | 08/03/15 | 1 |
| 1,1,2-Trichloroethane | U | 0.00038 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| Trichloroethene | U | 0.00040 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| Trichlorofluoromethane | 0.0084 | 0.0012 | 0.0050 | mg/l | | 8260B | 08/03/15 | 1 |
| 1,2,3-Trichloropropane | U | 0.00081 | 0.0025 | mg/l | | 8260B | 08/03/15 | 1 |
| 1,2,4-Trimethylbenzene | U | 0.00037 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| 1,2,3-Trimethylbenzene | U | 0.00032 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| 1,3,5-Trimethylbenzene | U | 0.00039 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| Vinyl chloride | U | 0.00026 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| Xylenes, Total | U | 0.0011 | 0.0030 | mg/l | | 8260B | 08/03/15 | 1 |
| Surrogate Recovery | | | | | | | | |
| Toluene-d8 | 105. | | | % Rec. | | 8260B | 08/03/15 | 1 |

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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 07, 2015

ESC Sample # : L780238-04

Date Received : August 01, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : TW-4

Project # : BO15086C

Collected By : A. Provant
Collection Date : 07/31/15 08:45

| Parameter | Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Dibromofluoromethane | 99.7 | | | % Rec. | | 8260B | 08/03/15 | 1 |
| 4-Bromofluorobenzene | 103. | | | % Rec. | | 8260B | 08/03/15 | 1 |
| Polynuclear Aromatic Hydrocarbons | | | | | | | | |
| Anthracene | U | 0.000014 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Acenaphthene | U | 0.000010 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Acenaphthylene | U | 0.000012 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Benzo(a)anthracene | 0.0000061 | 0.0000041 | 0.000050 | mg/l | J | 8270C-S | 08/07/15 | 1 |
| Benzo(a)pyrene | U | 0.000012 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Benzo(b)fluoranthene | U | 0.0000021 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Benzo(g,h,i)perylene | U | 0.0000023 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Benzo(k)fluoranthene | U | 0.000014 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Chrysene | U | 0.000011 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Dibenz(a,h)anthracene | U | 0.0000040 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Fluoranthene | U | 0.000016 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Fluorene | U | 0.0000085 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Indeno(1,2,3-cd)pyrene | U | 0.000015 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Naphthalene | U | 0.000020 | 0.00025 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Phenanthrene | 0.000016 | 0.0000082 | 0.000050 | mg/l | J | 8270C-S | 08/07/15 | 1 |
| Pyrene | U | 0.000012 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| 1-Methylnaphthalene | U | 0.0000082 | 0.00025 | mg/l | | 8270C-S | 08/07/15 | 1 |
| 2-Methylnaphthalene | 0.000010 | 0.0000090 | 0.00025 | mg/l | J | 8270C-S | 08/07/15 | 1 |
| 2-Chloronaphthalene | U | 0.0000065 | 0.00025 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Surrogate Recovery | | | | | | | | |
| Nitrobenzene-d5 | 147. | | | % Rec. | | 8270C-S | 08/07/15 | 1 |
| 2-Fluorobiphenyl | 120. | | | % Rec. | | 8270C-S | 08/07/15 | 1 |
| p-Terphenyl-d14 | 106. | | | % Rec. | | 8270C-S | 08/07/15 | 1 |
| Ethylene Dibromide | U | 0.0000024 | 0.000010 | mg/l | | 8011 | 08/04/15 | 1 |
| 1,2-Dibromo-3-Chloropropane | U | 0.0000043 | 0.000020 | mg/l | | 8011 | 08/04/15 | 1 |

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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 07, 2015

ESC Sample # : L780238-05

Date Received : August 01, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : TW-4D

Project # : BO15086C

Collected By : A. Provant
Collection Date : 07/31/15 08:45

| Parameter | Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Antimony | 0.0011 | 0.00021 | 0.0020 | mg/l | J | 6020 | 08/06/15 | 1 |
| Arsenic | 0.0020 | 0.00025 | 0.0020 | mg/l | | 6020 | 08/06/15 | 1 |
| Lead | 0.0078 | 0.00024 | 0.0020 | mg/l | | 6020 | 08/06/15 | 1 |
| Thallium | U | 0.00019 | 0.0020 | mg/l | | 6020 | 08/06/15 | 1 |
| Mercury | 0.000072 | 0.000049 | 0.00020 | mg/l | J | 7470A | 08/05/15 | 1 |
| Beryllium | U | 0.00070 | 0.0020 | mg/l | | 6010B | 08/04/15 | 1 |
| Cadmium | U | 0.00070 | 0.0020 | mg/l | | 6010B | 08/04/15 | 1 |
| Chromium | 0.0055 | 0.0014 | 0.010 | mg/l | J | 6010B | 08/04/15 | 1 |
| Copper | 0.0081 | 0.0053 | 0.010 | mg/l | J | 6010B | 08/04/15 | 1 |
| Nickel | U | 0.0049 | 0.010 | mg/l | | 6010B | 08/04/15 | 1 |
| Selenium | U | 0.0074 | 0.010 | mg/l | | 6010B | 08/04/15 | 1 |
| Silver | U | 0.0028 | 0.0050 | mg/l | | 6010B | 08/04/15 | 1 |
| Zinc | 0.015 | 0.0059 | 0.050 | mg/l | J | 6010B | 08/04/15 | 1 |
| Volatile Organics | | | | | | | | |
| Acetone | U | 0.010 | 0.050 | mg/l | | 8260B | 08/03/15 | 1 |
| Acrolein | U | 0.0089 | 0.050 | mg/l | | 8260B | 08/03/15 | 1 |
| Acrylonitrile | U | 0.0019 | 0.010 | mg/l | | 8260B | 08/03/15 | 1 |
| Benzene | U | 0.00033 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| Bromobenzene | U | 0.00035 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| Bromodichloromethane | U | 0.00038 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| Bromoform | U | 0.00047 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| Bromomethane | U | 0.00087 | 0.0050 | mg/l | | 8260B | 08/03/15 | 1 |
| n-Butylbenzene | U | 0.00036 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| sec-Butylbenzene | U | 0.00036 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| tert-Butylbenzene | U | 0.00040 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| Carbon tetrachloride | U | 0.00038 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| Chlorobenzene | U | 0.00035 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| Chlorodibromomethane | U | 0.00033 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| Chloroethane | U | 0.00045 | 0.0050 | mg/l | | 8260B | 08/03/15 | 1 |
| 2-Chloroethyl vinyl ether | U | 0.0030 | 0.050 | mg/l | | 8260B | 08/03/15 | 1 |
| Chloroform | U | 0.00032 | 0.0050 | mg/l | | 8260B | 08/03/15 | 1 |
| Chloromethane | U | 0.00028 | 0.0025 | mg/l | | 8260B | 08/03/15 | 1 |
| 2-Chlorotoluene | U | 0.00038 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| 4-Chlorotoluene | U | 0.00035 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| 1,2-Dibromo-3-Chloropropane | U | 0.0013 | 0.0050 | mg/l | | 8260B | 08/03/15 | 1 |
| 1,2-Dibromoethane | U | 0.00038 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| Dibromomethane | U | 0.00035 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| 1,2-Dichlorobenzene | U | 0.00035 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| 1,3-Dichlorobenzene | U | 0.00022 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| 1,4-Dichlorobenzene | U | 0.00027 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 07, 2015

ESC Sample # : L780238-05

Date Received : August 01, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : TW-4D

Project # : BO15086C

Collected By : A. Provant
Collection Date : 07/31/15 08:45

| Parameter | Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | U | 0.00055 | 0.0050 | mg/l | | 8260B | 08/03/15 | 1 |
| 1,1-Dichloroethane | U | 0.00026 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| 1,2-Dichloroethane | U | 0.00036 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| 1,1-Dichloroethene | U | 0.00040 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| cis-1,2-Dichloroethene | U | 0.00026 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| trans-1,2-Dichloroethene | U | 0.00040 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| 1,2-Dichloropropane | U | 0.00031 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| 1,1-Dichloropropene | U | 0.00035 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| 1,3-Dichloropropane | U | 0.00037 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| cis-1,3-Dichloropropene | U | 0.00042 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| trans-1,3-Dichloropropene | U | 0.00042 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| 2,2-Dichloropropane | U | 0.00032 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| Di-isopropyl ether | U | 0.00032 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| Ethylbenzene | U | 0.00038 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| Hexachloro-1,3-butadiene | U | 0.00026 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| Isopropylbenzene | U | 0.00033 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| p-Isopropyltoluene | U | 0.00035 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| 2-Butanone (MEK) | U | 0.0039 | 0.010 | mg/l | | 8260B | 08/03/15 | 1 |
| Methylene Chloride | U | 0.0010 | 0.0050 | mg/l | | 8260B | 08/03/15 | 1 |
| 4-Methyl-2-pentanone (MIBK) | U | 0.0021 | 0.010 | mg/l | | 8260B | 08/03/15 | 1 |
| Methyl tert-butyl ether | U | 0.00037 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| Naphthalene | U | 0.0010 | 0.0050 | mg/l | | 8260B | 08/03/15 | 1 |
| n-Propylbenzene | U | 0.00035 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| Styrene | U | 0.00031 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| 1,1,1,2-Tetrachloroethane | U | 0.00038 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| 1,1,2,2-Tetrachloroethane | U | 0.00013 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| 1,1,2-Trichlorotrifluoroethane | U | 0.00030 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| Tetrachloroethene | U | 0.00037 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| Toluene | U | 0.00078 | 0.0050 | mg/l | | 8260B | 08/03/15 | 1 |
| 1,2,3-Trichlorobenzene | U | 0.00023 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| 1,2,4-Trichlorobenzene | U | 0.00036 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| 1,1,1-Trichloroethane | 0.00040 | 0.00032 | 0.0010 | mg/l | J | 8260B | 08/03/15 | 1 |
| 1,1,2-Trichloroethane | U | 0.00038 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| Trichloroethene | U | 0.00040 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| Trichlorofluoromethane | 0.0080 | 0.0012 | 0.0050 | mg/l | | 8260B | 08/03/15 | 1 |
| 1,2,3-Trichloropropane | U | 0.00081 | 0.0025 | mg/l | | 8260B | 08/03/15 | 1 |
| 1,2,4-Trimethylbenzene | U | 0.00037 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| 1,2,3-Trimethylbenzene | U | 0.00032 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| 1,3,5-Trimethylbenzene | U | 0.00039 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| Vinyl chloride | U | 0.00026 | 0.0010 | mg/l | | 8260B | 08/03/15 | 1 |
| Xylenes, Total | U | 0.0011 | 0.0030 | mg/l | | 8260B | 08/03/15 | 1 |
| Surrogate Recovery | | | | | | | | |
| Toluene-d8 | 104. | | | % Rec. | | 8260B | 08/03/15 | 1 |

U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 07, 2015

ESC Sample # : L780238-05

Date Received : August 01, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : TW-4D

Project # : BO15086C

Collected By : A. Provant
Collection Date : 07/31/15 08:45

| Parameter | Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Dibromofluoromethane | 99.5 | | | % Rec. | | 8260B | 08/03/15 | 1 |
| 4-Bromofluorobenzene | 106. | | | % Rec. | | 8260B | 08/03/15 | 1 |
| Polynuclear Aromatic Hydrocarbons | | | | | | | | |
| Anthracene | U | 0.000014 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Acenaphthene | U | 0.000010 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Acenaphthylene | U | 0.000012 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Benzo(a)anthracene | 0.0000066 | 0.0000041 | 0.000050 | mg/l | J | 8270C-S | 08/07/15 | 1 |
| Benzo(a)pyrene | U | 0.000012 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Benzo(b)fluoranthene | U | 0.0000021 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Benzo(g,h,i)perylene | U | 0.0000023 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Benzo(k)fluoranthene | U | 0.000014 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Chrysene | U | 0.000011 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Dibenz(a,h)anthracene | U | 0.0000040 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Fluoranthene | U | 0.000016 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Fluorene | U | 0.0000085 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Indeno(1,2,3-cd)pyrene | U | 0.000015 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Naphthalene | U | 0.000020 | 0.00025 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Phenanthrene | 0.000016 | 0.0000082 | 0.000050 | mg/l | J | 8270C-S | 08/07/15 | 1 |
| Pyrene | U | 0.000012 | 0.000050 | mg/l | | 8270C-S | 08/07/15 | 1 |
| 1-Methylnaphthalene | U | 0.0000082 | 0.00025 | mg/l | | 8270C-S | 08/07/15 | 1 |
| 2-Methylnaphthalene | 0.000010 | 0.0000090 | 0.00025 | mg/l | J | 8270C-S | 08/07/15 | 1 |
| 2-Chloronaphthalene | U | 0.0000065 | 0.00025 | mg/l | | 8270C-S | 08/07/15 | 1 |
| Surrogate Recovery | | | | | | | | |
| Nitrobenzene-d5 | 130. | | | % Rec. | | 8270C-S | 08/07/15 | 1 |
| 2-Fluorobiphenyl | 123. | | | % Rec. | | 8270C-S | 08/07/15 | 1 |
| p-Terphenyl-d14 | 107. | | | % Rec. | | 8270C-S | 08/07/15 | 1 |
| Ethylene Dibromide | U | 0.0000024 | 0.000010 | mg/l | | 8011 | 08/04/15 | 1 |
| 1,2-Dibromo-3-Chloropropane | U | 0.0000043 | 0.000020 | mg/l | | 8011 | 08/04/15 | 1 |

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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 07, 2015

ESC Sample # : L780238-06

Date Received : August 01, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : TRIP BLANK

Project # : BO15086C

Collected By : A. Provant
Collection Date : 07/31/15 00:00

| Parameter | Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics | | | | | | | | |
| Acetone | U | 0.010 | 0.050 | mg/l | | 8260B | 08/02/15 | 1 |
| Acrolein | U | 0.0089 | 0.050 | mg/l | | 8260B | 08/02/15 | 1 |
| Acrylonitrile | U | 0.0019 | 0.010 | mg/l | | 8260B | 08/02/15 | 1 |
| Benzene | U | 0.00033 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Bromobenzene | U | 0.00035 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Bromodichloromethane | U | 0.00038 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Bromoform | U | 0.00047 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Bromomethane | U | 0.00087 | 0.0050 | mg/l | | 8260B | 08/02/15 | 1 |
| n-Butylbenzene | U | 0.00036 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| sec-Butylbenzene | U | 0.00036 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| tert-Butylbenzene | U | 0.00040 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Carbon tetrachloride | U | 0.00038 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Chlorobenzene | U | 0.00035 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Chlorodibromomethane | U | 0.00033 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Chloroethane | U | 0.00045 | 0.0050 | mg/l | | 8260B | 08/02/15 | 1 |
| 2-Chloroethyl vinyl ether | U | 0.0030 | 0.050 | mg/l | | 8260B | 08/02/15 | 1 |
| Chloroform | U | 0.00032 | 0.0050 | mg/l | | 8260B | 08/02/15 | 1 |
| Chloromethane | U | 0.00028 | 0.0025 | mg/l | | 8260B | 08/02/15 | 1 |
| 2-Chlorotoluene | U | 0.00038 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 4-Chlorotoluene | U | 0.00035 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,2-Dibromo-3-Chloropropane | U | 0.0013 | 0.0050 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,2-Dibromoethane | U | 0.00038 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Dibromomethane | U | 0.00035 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,2-Dichlorobenzene | U | 0.00035 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,3-Dichlorobenzene | U | 0.00022 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,4-Dichlorobenzene | U | 0.00027 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Dichlorodifluoromethane | U | 0.00055 | 0.0050 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,1-Dichloroethane | U | 0.00026 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,2-Dichloroethane | U | 0.00036 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,1-Dichloroethene | U | 0.00040 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| cis-1,2-Dichloroethene | U | 0.00026 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| trans-1,2-Dichloroethene | U | 0.00040 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,2-Dichloropropane | U | 0.00031 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,1-Dichloropropene | U | 0.00035 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,3-Dichloropropane | U | 0.00037 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| cis-1,3-Dichloropropene | U | 0.00042 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| trans-1,3-Dichloropropene | U | 0.00042 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 2,2-Dichloropropane | U | 0.00032 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Di-isopropyl ether | U | 0.00032 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Ethylbenzene | U | 0.00038 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Hexachloro-1,3-butadiene | U | 0.00026 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Isopropylbenzene | U | 0.00033 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |

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REPORT OF ANALYSIS

Andrew Provant
Strata - ID
8653 W Hackamore Dr
Boise, ID 83709

August 07, 2015

ESC Sample # : L780238-06

Date Received : August 01, 2015
Description : 620 S. 9th Street

Site ID : 620 S. 9TH STREET

Sample ID : TRIP BLANK

Project # : BO15086C

Collected By : A. Provant
Collection Date : 07/31/15 00:00

| Parameter | Result | MDL | RDL | Units | Qualifier | Method | Date | Dil. |
|---|---|---|---|---|---|---|---|---|
| p-Isopropyltoluene | U | 0.00035 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 2-Butanone (MEK) | U | 0.0039 | 0.010 | mg/l | | 8260B | 08/02/15 | 1 |
| Methylene Chloride | U | 0.0010 | 0.0050 | mg/l | | 8260B | 08/02/15 | 1 |
| 4-Methyl-2-pentanone (MIBK) | U | 0.0021 | 0.010 | mg/l | | 8260B | 08/02/15 | 1 |
| Methyl tert-butyl ether | U | 0.00037 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Naphthalene | U | 0.0010 | 0.0050 | mg/l | | 8260B | 08/02/15 | 1 |
| n-Propylbenzene | U | 0.00035 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Styrene | U | 0.00031 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,1,1,2-Tetrachloroethane | U | 0.00038 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,1,2,2-Tetrachloroethane | U | 0.00013 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,1,2-Trichlorotrifluoroethane | U | 0.00030 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Tetrachloroethene | U | 0.00037 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Toluene | U | 0.00078 | 0.0050 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,2,3-Trichlorobenzene | U | 0.00023 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,2,4-Trichlorobenzene | U | 0.00036 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,1,1-Trichloroethane | U | 0.00032 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,1,2-Trichloroethane | U | 0.00038 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Trichloroethene | U | 0.00040 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Trichlorofluoromethane | U | 0.0012 | 0.0050 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,2,3-Trichloropropane | U | 0.00081 | 0.0025 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,2,4-Trimethylbenzene | U | 0.00037 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,2,3-Trimethylbenzene | U | 0.00032 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| 1,3,5-Trimethylbenzene | U | 0.00039 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Vinyl chloride | U | 0.00026 | 0.0010 | mg/l | | 8260B | 08/02/15 | 1 |
| Xylenes, Total | U | 0.0011 | 0.0030 | mg/l | | 8260B | 08/02/15 | 1 |
| Surrogate Recovery | | | | | | | | |
| Toluene-d8 | 104. | | | % Rec. | | 8260B | 08/02/15 | 1 |
| Dibromofluoromethane | 99.8 | | | % Rec. | | 8260B | 08/02/15 | 1 |
| 4-Bromofluorobenzene | 104. | | | % Rec. | | 8260B | 08/02/15 | 1 |

U = ND (Not Detected)
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Attachment A
List of Analytes with QC Qualifiers

| Sample Number | Work Group | Sample Type | Analyte | Run ID | Qualifier |
|---|---|---|---|---|---|
| L780238-01 | WG806610 | SAMP | Antimony | R3057321 | J |
| | WG806610 | SAMP | Arsenic | R3057321 | J |
| | WG807514 | SAMP | Benzo(a)anthracene | R3058060 | J |
| | WG807514 | SAMP | Benzo(b)fluoranthene | R3058060 | J |
| | WG807514 | SAMP | 2-Methylnaphthalene | R3058060 | J |
| L780238-02 | WG806610 | SAMP | Antimony | R3057321 | J |
| | WG806610 | SAMP | Lead | R3057321 | J |
| | WG807514 | SAMP | Benzo(a)anthracene | R3058060 | J |
| | WG807514 | SAMP | Phenanthrene | R3058060 | J |
| | WG807514 | SAMP | 2-Methylnaphthalene | R3058060 | J |
| | WG806623 | SAMP | Chromium | R3056430 | J |
| L780238-03 | WG806610 | SAMP | Antimony | R3057321 | J |
| | WG806610 | SAMP | Arsenic | R3057321 | J |
| | WG807514 | SAMP | Benzo(a)anthracene | R3058060 | J |
| | WG807514 | SAMP | Naphthalene | R3058060 | J |
| | WG807514 | SAMP | 1-Methylnaphthalene | R3058060 | J |
| | WG807514 | SAMP | 2-Methylnaphthalene | R3058060 | J |
| | WG806623 | SAMP | Zinc | R3056430 | J |
| L780238-04 | WG806501 | SAMP | 1,1,1-Trichloroethane | R3056025 | J |
| | WG806610 | SAMP | Antimony | R3057321 | J |
| | WG806610 | SAMP | Arsenic | R3057321 | J |
| | WG807514 | SAMP | Benzo(a)anthracene | R3058060 | J |
| | WG807514 | SAMP | Phenanthrene | R3058060 | J |
| | WG807514 | SAMP | 2-Methylnaphthalene | R3058060 | J |
| | WG806571 | SAMP | Mercury | R3057020 | J |
| | WG806623 | SAMP | Chromium | R3056430 | J |
| | WG806623 | SAMP | Copper | R3056430 | J |
| | WG806623 | SAMP | Zinc | R3056430 | J |
| L780238-05 | WG806501 | SAMP | 1,1,1-Trichloroethane | R3056025 | J |
| | WG806610 | SAMP | Antimony | R3057321 | J |
| | WG807514 | SAMP | Benzo(a)anthracene | R3058060 | J |
| | WG807514 | SAMP | Phenanthrene | R3058060 | J |
| | WG807514 | SAMP | 2-Methylnaphthalene | R3058060 | J |
| | WG806571 | SAMP | Mercury | R3057020 | J |
| | WG806623 | SAMP | Chromium | R3056430 | J |
| | WG806623 | SAMP | Copper | R3056430 | J |
| | WG806623 | SAMP | Zinc | R3056430 | J |

Attachment B
Explanation of QC Qualifier Codes

| Qualifier | Meaning |
|---|---|
| J | (EPA) - Estimated value below the lowest calibration point. Confidence correlates with concentration. |

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods,it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions

Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.

Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Differrence.

Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromotography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.

TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

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Tax I.D. 62-0814289

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Strata - ID
Andrew Provant
8653 W Hackamore Dr

Boise, ID 83709

Quality Assurance Report
Level II

L780238

August 07, 2015

Laboratory Blank

| Analyte | Result | Units | % Rec | Limit | Batch | Date Analyzed |
|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | < .001 | mg/l | | | WG806501 | 08/02/15 16:21 |
| 1,1,1-Trichloroethane | < .001 | mg/l | | | WG806501 | 08/02/15 16:21 |
| 1,1,2,2-Tetrachloroethane | < .001 | mg/l | | | WG806501 | 08/02/15 16:21 |
| 1,1,2-Trichloroethane | < .001 | mg/l | | | WG806501 | 08/02/15 16:21 |
| 1,1,2-Trichlorotrifluoroethane | < .001 | mg/l | | | WG806501 | 08/02/15 16:21 |
| 1,1-Dichloroethane | < .001 | mg/l | | | WG806501 | 08/02/15 16:21 |
| 1,1-Dichloroethene | < .001 | mg/l | | | WG806501 | 08/02/15 16:21 |
| 1,1-Dichloropropene | < .001 | mg/l | | | WG806501 | 08/02/15 16:21 |
| 1,2,3-Trichlorobenzene | < .001 | mg/l | | | WG806501 | 08/02/15 16:21 |
| 1,2,3-Trichloropropane | < .001 | mg/l | | | WG806501 | 08/02/15 16:21 |
| 1,2,3-Trimethylbenzene | < .001 | mg/l | | | WG806501 | 08/02/15 16:21 |
| 1,2,4-Trichlorobenzene | < .001 | mg/l | | | WG806501 | 08/02/15 16:21 |
| 1,2,4-Trimethylbenzene | < .001 | mg/l | | | WG806501 | 08/02/15 16:21 |
| 1,2-Dibromo-3-Chloropropane | < .005 | mg/l | | | WG806501 | 08/02/15 16:21 |
| 1,2-Dibromoethane | < .001 | mg/l | | | WG806501 | 08/02/15 16:21 |
| 1,2-Dichlorobenzene | < .001 | mg/l | | | WG806501 | 08/02/15 16:21 |
| 1,2-Dichloroethane | < .001 | mg/l | | | WG806501 | 08/02/15 16:21 |
| 1,2-Dichloropropane | < .001 | mg/l | | | WG806501 | 08/02/15 16:21 |
| 1,3,5-Trimethylbenzene | < .001 | mg/l | | | WG806501 | 08/02/15 16:21 |
| 1,3-Dichlorobenzene | < .001 | mg/l | | | WG806501 | 08/02/15 16:21 |
| 1,3-Dichloropropane | < .001 | mg/l | | | WG806501 | 08/02/15 16:21 |
| 1,4-Dichlorobenzene | < .001 | mg/l | | | WG806501 | 08/02/15 16:21 |
| 2,2-Dichloropropane | < .001 | mg/l | | | WG806501 | 08/02/15 16:21 |
| 2-Butanone (MEK) | < .01 | mg/l | | | WG806501 | 08/02/15 16:21 |
| 2-Chloroethyl vinyl ether | < .05 | mg/l | | | WG806501 | 08/02/15 16:21 |
| 2-Chlorotoluene | < .001 | mg/l | | | WG806501 | 08/02/15 16:21 |
| 4-Chlorotoluene | < .001 | mg/l | | | WG806501 | 08/02/15 16:21 |
| 4-Methyl-2-pentanone (MIBK) | < .01 | mg/l | | | WG806501 | 08/02/15 16:21 |
| Acetone | < .05 | mg/l | | | WG806501 | 08/02/15 16:21 |
| Acrolein | < .025 | mg/l | | | WG806501 | 08/02/15 16:21 |
| Acrylonitrile | < .01 | mg/l | | | WG806501 | 08/02/15 16:21 |
| Benzene | < .001 | mg/l | | | WG806501 | 08/02/15 16:21 |
| Bromobenzene | < .001 | mg/l | | | WG806501 | 08/02/15 16:21 |
| Bromodichloromethane | < .001 | mg/l | | | WG806501 | 08/02/15 16:21 |
| Bromoform | < .001 | mg/l | | | WG806501 | 08/02/15 16:21 |
| Bromomethane | < .005 | mg/l | | | WG806501 | 08/02/15 16:21 |
| Carbon tetrachloride | < .001 | mg/l | | | WG806501 | 08/02/15 16:21 |
| Chlorobenzene | < .001 | mg/l | | | WG806501 | 08/02/15 16:21 |
| Chlorodibromomethane | < .001 | mg/l | | | WG806501 | 08/02/15 16:21 |
| Chloroethane | < .005 | mg/l | | | WG806501 | 08/02/15 16:21 |
| Chloroform | < .005 | mg/l | | | WG806501 | 08/02/15 16:21 |
| Chloromethane | < .0025 | mg/l | | | WG806501 | 08/02/15 16:21 |
| cis-1,2-Dichloroethene | < .001 | mg/l | | | WG806501 | 08/02/15 16:21 |
| cis-1,3-Dichloropropene | < .001 | mg/l | | | WG806501 | 08/02/15 16:21 |
| Di-isopropyl ether | < .001 | mg/l | | | WG806501 | 08/02/15 16:21 |
| Dibromomethane | < .001 | mg/l | | | WG806501 | 08/02/15 16:21 |
| Dichlorodifluoromethane | < .005 | mg/l | | | WG806501 | 08/02/15 16:21 |
| Ethylbenzene | < .001 | mg/l | | | WG806501 | 08/02/15 16:21 |
| Hexachloro-1,3-butadiene | < .001 | mg/l | | | WG806501 | 08/02/15 16:21 |
| Isopropylbenzene | < .001 | mg/l | | | WG806501 | 08/02/15 16:21 |
| Methyl tert-butyl ether | < .001 | mg/l | | | WG806501 | 08/02/15 16:21 |
| Methylene Chloride | < .005 | mg/l | | | WG806501 | 08/02/15 16:21 |
| n-Butylbenzene | < .001 | mg/l | | | WG806501 | 08/02/15 16:21 |
| n-Propylbenzene | < .001 | mg/l | | | WG806501 | 08/02/15 16:21 |
| Naphthalene | < .005 | mg/l | | | WG806501 | 08/02/15 16:21 |
| p-Isopropyltoluene | < .001 | mg/l | | | WG806501 | 08/02/15 16:21 |
| sec-Butylbenzene | < .001 | mg/l | | | WG806501 | 08/02/15 16:21 |
| Styrene | < .001 | mg/l | | | WG806501 | 08/02/15 16:21 |
| tert-Butylbenzene | < .001 | mg/l | | | WG806501 | 08/02/15 16:21 |

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Est. 1970

Strata - ID
Andrew Provant
8653 W Hackamore Dr

Boise, ID 83709

Quality Assurance Report
Level II

L780238

August 07, 2015

Laboratory Blank

| Analyte | Result | Units | % Rec | Limit | Batch | Date Analyzed |
|---|---|---|---|---|---|---|
| Tetrachloroethene | < .001 | mg/l | | | WG806501 | 08/02/15 16:21 |
| Toluene | < .005 | mg/l | | | WG806501 | 08/02/15 16:21 |
| trans-1,2-Dichloroethene | < .001 | mg/l | | | WG806501 | 08/02/15 16:21 |
| trans-1,3-Dichloropropene | < .001 | mg/l | | | WG806501 | 08/02/15 16:21 |
| Trichloroethene | < .001 | mg/l | | | WG806501 | 08/02/15 16:21 |
| Trichlorofluoromethane | < .005 | mg/l | | | WG806501 | 08/02/15 16:21 |
| Vinyl chloride | < .001 | mg/l | | | WG806501 | 08/02/15 16:21 |
| Xylenes, Total | < .003 | mg/l | | | WG806501 | 08/02/15 16:21 |
| 4-Bromofluorobenzene | | % Rec. | 105.0 | 71-126 | WG806501 | 08/02/15 16:21 |
| Dibromofluoromethane | | % Rec. | 98.30 | 78.3-121 | WG806501 | 08/02/15 16:21 |
| Toluene-d8 | | % Rec. | 103.0 | 88.5-111 | WG806501 | 08/02/15 16:21 |
| Beryllium | < .002 | mg/l | | | WG806623 | 08/04/15 11:42 |
| Cadmium | < .002 | mg/l | | | WG806623 | 08/04/15 11:42 |
| Chromium | < .01 | mg/l | | | WG806623 | 08/04/15 11:42 |
| Copper | < .01 | mg/l | | | WG806623 | 08/04/15 11:42 |
| Nickel | < .01 | mg/l | | | WG806623 | 08/04/15 11:42 |
| Selenium | < .01 | mg/l | | | WG806623 | 08/04/15 11:42 |
| Silver | < .005 | mg/l | | | WG806623 | 08/04/15 11:42 |
| Zinc | < .05 | mg/l | | | WG806623 | 08/04/15 11:42 |
| 1,2-Dibromo-3-Chloropropane | < .00002 | mg/l | | | WG806564 | 08/04/15 13:25 |
| Ethylene Dibromide | < .00001 | mg/l | | | WG806564 | 08/04/15 13:25 |
| Mercury | < .0002 | mg/l | | | WG806571 | 08/05/15 09:48 |
| Antimony | < .002 | mg/l | | | WG806610 | 08/06/15 03:24 |
| Arsenic | < .002 | mg/l | | | WG806610 | 08/06/15 03:24 |
| Lead | < .002 | mg/l | | | WG806610 | 08/06/15 03:24 |
| Thallium | < .002 | mg/l | | | WG806610 | 08/06/15 03:24 |
| 1-Methylnaphthalene | < .00025 | mg/l | | | WG807514 | 08/07/15 05:20 |
| 2-Chloronaphthalene | < .00005 | mg/l | | | WG807514 | 08/07/15 05:20 |
| 2-Methylnaphthalene | < .00025 | mg/l | | | WG807514 | 08/07/15 05:20 |
| Acenaphthene | < .00005 | mg/l | | | WG807514 | 08/07/15 05:20 |
| Acenaphthylene | < .00005 | mg/l | | | WG807514 | 08/07/15 05:20 |
| Anthracene | < .00005 | mg/l | | | WG807514 | 08/07/15 05:20 |
| Benzo(a)anthracene | < .00005 | mg/l | | | WG807514 | 08/07/15 05:20 |
| Benzo(a)pyrene | < .00005 | mg/l | | | WG807514 | 08/07/15 05:20 |
| Benzo(b)fluoranthene | < .00005 | mg/l | | | WG807514 | 08/07/15 05:20 |
| Benzo(g,h,i)perylene | < .00005 | mg/l | | | WG807514 | 08/07/15 05:20 |
| Benzo(k)fluoranthene | < .00005 | mg/l | | | WG807514 | 08/07/15 05:20 |
| Chrysene | < .00005 | mg/l | | | WG807514 | 08/07/15 05:20 |
| Dibenz(a,h)anthracene | < .00005 | mg/l | | | WG807514 | 08/07/15 05:20 |
| Fluoranthene | < .00005 | mg/l | | | WG807514 | 08/07/15 05:20 |
| Fluorene | < .00005 | mg/l | | | WG807514 | 08/07/15 05:20 |
| Indeno(1,2,3-cd)pyrene | < .00005 | mg/l | | | WG807514 | 08/07/15 05:20 |
| Naphthalene | < .00025 | mg/l | | | WG807514 | 08/07/15 05:20 |
| Phenanthrene | < .00005 | mg/l | | | WG807514 | 08/07/15 05:20 |
| Pyrene | < .00005 | mg/l | | | WG807514 | 08/07/15 05:20 |
| 2-Fluorobiphenyl | | % Rec. | 119.0 | 55.5-150 | WG807514 | 08/07/15 05:20 |
| Nitrobenzene-d5 | | % Rec. | 127.0 | 33.8-179 | WG807514 | 08/07/15 05:20 |
| p-Terphenyl-d14 | | % Rec. | 105.0 | 46.2-163 | WG807514 | 08/07/15 05:20 |

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Strata - ID
Andrew Provant
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Boise, ID 83709

Quality Assurance Report
Level II

L780238

August 07, 2015

| Analyte | Units | Result | Duplicate | RPD | Limit | Ref Samp | Batch |
|---|---|---|---|---|---|---|---|
| | | | Duplicate | | | | |
| 1,2-Dibromo-3-Chloropropane | mg/l | 0.0 | 0.0 | 0.0 | 20 | L780238-05 | WG806564 |
| Ethylene Dibromide | mg/l | 0.0 | 0.0 | 0.0 | 20 | L780238-05 | WG806564 |

| Analyte | Units | Known Val | Result | % Rec | Limit | Batch |
|---|---|---|---|---|---|---|
| | | | Laboratory Control Sample | | | |
| 1,1,1,2-Tetrachloroethane | mg/l | .025 | 0.0258 | 103. | 74.2-124 | WG806501 |
| 1,1,1-Trichloroethane | mg/l | .025 | 0.0252 | 101. | 73.2-123 | WG806501 |
| 1,1,2,2-Tetrachloroethane | mg/l | .025 | 0.0271 | 109. | 70.7-122 | WG806501 |
| 1,1,2-Trichloroethane | mg/l | .025 | 0.0255 | 102. | 77.7-118 | WG806501 |
| 1,1,2-Trichlorotrifluoroethane | mg/l | .025 | 0.0279 | 111. | 62-141 | WG806501 |
| 1,1-Dichloroethane | mg/l | .025 | 0.0260 | 104. | 70.7-126 | WG806501 |
| 1,1-Dichloroethene | mg/l | .025 | 0.0276 | 110. | 67.8-129 | WG806501 |
| 1,1-Dichloropropene | mg/l | .025 | 0.0248 | 99.3 | 73.1-125 | WG806501 |
| 1,2,3-Trichlorobenzene | mg/l | .025 | 0.0281 | 112. | 75.7-134 | WG806501 |
| 1,2,3-Trichloropropane | mg/l | .025 | 0.0280 | 112. | 71.8-121 | WG806501 |
| 1,2,3-Trimethylbenzene | mg/l | .025 | 0.0266 | 106. | 79.9-118 | WG806501 |
| 1,2,4-Trichlorobenzene | mg/l | .025 | 0.0281 | 112. | 76.1-136 | WG806501 |
| 1,2,4-Trimethylbenzene | mg/l | .025 | 0.0267 | 107. | 79-122 | WG806501 |
| 1,2-Dibromo-3-Chloropropane | mg/l | .025 | 0.0252 | 101. | 65.4-128 | WG806501 |
| 1,2-Dibromoethane | mg/l | .025 | 0.0262 | 105. | 79.8-122 | WG806501 |
| 1,2-Dichlorobenzene | mg/l | .025 | 0.0262 | 105. | 78.4-117 | WG806501 |
| 1,2-Dichloroethane | mg/l | .025 | 0.0266 | 107. | 68.8-124 | WG806501 |
| 1,2-Dichloropropane | mg/l | .025 | 0.0274 | 110. | 76.5-119 | WG806501 |
| 1,3,5-Trimethylbenzene | mg/l | .025 | 0.0269 | 108. | 81-123 | WG806501 |
| 1,3-Dichlorobenzene | mg/l | .025 | 0.0273 | 109. | 70.8-128 | WG806501 |
| 1,3-Dichloropropane | mg/l | .025 | 0.0258 | 103. | 77.4-117 | WG806501 |
| 1,4-Dichlorobenzene | mg/l | .025 | 0.0263 | 105. | 78.8-115 | WG806501 |
| 2,2-Dichloropropane | mg/l | .025 | 0.0274 | 110. | 62.4-133 | WG806501 |
| 2-Butanone (MEK) | mg/l | .125 | 0.134 | 108. | 55-149 | WG806501 |
| 2-Chloroethyl vinyl ether | mg/l | .125 | 0.143 | 114. | 43.8-150 | WG806501 |
| 2-Chlorotoluene | mg/l | .025 | 0.0273 | 109. | 74.7-122 | WG806501 |
| 4-Chlorotoluene | mg/l | .025 | 0.0266 | 106. | 77.5-120 | WG806501 |
| 4-Methyl-2-pentanone (MIBK) | mg/l | .125 | 0.141 | 113. | 70.5-133 | WG806501 |
| Acetone | mg/l | .125 | 0.138 | 110. | 28.7-175 | WG806501 |
| Acrolein | mg/l | .125 | 0.183 | 146.* | 88-118 | WG806501 |
| Acrylonitrile | mg/l | .125 | 0.136 | 109. | 71-135 | WG806501 |
| Benzene | mg/l | .025 | 0.0242 | 96.8 | 74.8-121 | WG806501 |
| Bromobenzene | mg/l | .025 | 0.0271 | 108. | 77.5-116 | WG806501 |
| Bromodichloromethane | mg/l | .025 | 0.0269 | 107. | 75.1-116 | WG806501 |
| Bromoform | mg/l | .025 | 0.0263 | 105. | 67.5-130 | WG806501 |
| Bromomethane | mg/l | .025 | 0.0248 | 99.1 | 49.9-162 | WG806501 |
| Carbon tetrachloride | mg/l | .025 | 0.0258 | 103. | 70.2-123 | WG806501 |
| Chlorobenzene | mg/l | .025 | 0.0264 | 106. | 78.1-119 | WG806501 |
| Chlorodibromomethane | mg/l | .025 | 0.0265 | 106. | 74-121 | WG806501 |
| Chloroethane | mg/l | .025 | 0.0253 | 101. | 61.7-135 | WG806501 |
| Chloroform | mg/l | .025 | 0.0255 | 102. | 76-121 | WG806501 |
| Chloromethane | mg/l | .025 | 0.0214 | 85.6 | 61.5-129 | WG806501 |
| cis-1,2-Dichloroethene | mg/l | .025 | 0.0245 | 98.1 | 76-119 | WG806501 |
| cis-1,3-Dichloropropene | mg/l | .025 | 0.0269 | 108. | 78.2-120 | WG806501 |
| Di-isopropyl ether | mg/l | .025 | 0.0256 | 102. | 65.1-135 | WG806501 |
| Dibromomethane | mg/l | .025 | 0.0271 | 108. | 79.5-118 | WG806501 |
| Dichlorodifluoromethane | mg/l | .025 | 0.0238 | 95.4 | 54.8-135 | WG806501 |
| Ethylbenzene | mg/l | .025 | 0.0256 | 102. | 78.8-122 | WG806501 |
| Hexachloro-1,3-butadiene | mg/l | .025 | 0.0268 | 107. | 64.7-129 | WG806501 |
| Isopropylbenzene | mg/l | .025 | 0.0268 | 107. | 78.6-132 | WG806501 |
| Methyl tert-butyl ether | mg/l | .025 | 0.0265 | 106. | 70.1-125 | WG806501 |
| Methylene Chloride | mg/l | .025 | 0.0239 | 95.7 | 70.3-120 | WG806501 |
| n-Butylbenzene | mg/l | .025 | 0.0287 | 115. | 75.9-134 | WG806501 |

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Strata - ID
Andrew Provant
8653 W Hackamore Dr

Boise, ID 83709

Quality Assurance Report
Level II

L780238

August 07, 2015

| Analyte | Units | Laboratory Control Sample Known Val | Result | % Rec | Limit | Batch |
|---|---|---|---|---|---|---|
| n-Propylbenzene | mg/l | .025 | 0.0271 | 108. | 81.9-122 | WG806501 |
| Naphthalene | mg/l | .025 | 0.0274 | 110. | 69.7-134 | WG806501 |
| p-Isopropyltoluene | mg/l | .025 | 0.0278 | 111. | 77.6-129 | WG806501 |
| sec-Butylbenzene | mg/l | .025 | 0.0277 | 111. | 80.6-126 | WG806501 |
| Styrene | mg/l | .025 | 0.0259 | 103. | 80.4-126 | WG806501 |
| tert-Butylbenzene | mg/l | .025 | 0.0273 | 109. | 79.3-127 | WG806501 |
| Tetrachloroethene | mg/l | .025 | 0.0244 | 97.5 | 72.6-126 | WG806501 |
| Toluene | mg/l | .025 | 0.0255 | 102. | 79.7-116 | WG806501 |
| trans-1,2-Dichloroethene | mg/l | .025 | 0.0239 | 95.4 | 72.6-121 | WG806501 |
| trans-1,3-Dichloropropene | mg/l | .025 | 0.0282 | 113. | 74.3-123 | WG806501 |
| Trichloroethene | mg/l | .025 | 0.0254 | 102. | 77.7-118 | WG806501 |
| Trichlorofluoromethane | mg/l | .025 | 0.0285 | 114. | 63.5-135 | WG806501 |
| Vinyl chloride | mg/l | .025 | 0.0251 | 100. | 65.9-128 | WG806501 |
| Xylenes, Total | mg/l | .075 | 0.0772 | 103. | 78.7-121 | WG806501 |
| 4-Bromofluorobenzene | | | | 101.0 | 71-126 | WG806501 |
| Dibromofluoromethane | | | | 96.60 | 78.3-121 | WG806501 |
| Toluene-d8 | | | | 104.0 | 88.5-111 | WG806501 |
| Beryllium | mg/l | 1 | 1.09 | 109. | 80-120 | WG806623 |
| Cadmium | mg/l | 1 | 1.06 | 106. | 80-120 | WG806623 |
| Chromium | mg/l | 1 | 1.06 | 106. | 80-120 | WG806623 |
| Copper | mg/l | 1 | 1.04 | 104. | 80-120 | WG806623 |
| Nickel | mg/l | 1 | 1.02 | 102. | 80-120 | WG806623 |
| Selenium | mg/l | 1 | 1.19 | 119. | 80-120 | WG806623 |
| Silver | mg/l | 1 | 1.03 | 103. | 80-120 | WG806623 |
| Zinc | mg/l | 1 | 1.01 | 101. | 80-120 | WG806623 |
| 1,2-Dibromo-3-Chloropropane | mg/l | .00025 | 0.000241 | 96.3 | 60-140 | WG806564 |
| Ethylene Dibromide | mg/l | .00025 | 0.000263 | 105. | 60-140 | WG806564 |
| Mercury | mg/l | .003 | 0.00290 | 97.0 | 80-120 | WG806571 |
| Antimony | mg/l | .05 | 0.0525 | 105. | 80-120 | WG806610 |
| Arsenic | mg/l | .05 | 0.0458 | 92.0 | 80-120 | WG806610 |
| Lead | mg/l | .05 | 0.0490 | 98.0 | 80-120 | WG806610 |
| Thallium | mg/l | .05 | 0.0477 | 95.0 | 80-120 | WG806610 |
| 1-Methylnaphthalene | mg/l | .002 | 0.00230 | 115. | 68.3-144 | WG807514 |
| 2-Chloronaphthalene | mg/l | .002 | 0.00247 | 123. | 69.7-140 | WG807514 |
| 2-Methylnaphthalene | mg/l | .002 | 0.00228 | 114. | 67.6-143 | WG807514 |
| Acenaphthene | mg/l | .002 | 0.00250 | 125. | 67.7-153 | WG807514 |
| Acenaphthylene | mg/l | .002 | 0.00249 | 125. | 66.9-141 | WG807514 |
| Anthracene | mg/l | .002 | 0.00244 | 122. | 68.9-153 | WG807514 |
| Benzo(a)anthracene | mg/l | .002 | 0.00201 | 101. | 63.1-147 | WG807514 |
| Benzo(a)pyrene | mg/l | .002 | 0.00221 | 111. | 62.2-150 | WG807514 |
| Benzo(b)fluoranthene | mg/l | .002 | 0.00207 | 104. | 58.4-148 | WG807514 |
| Benzo(g,h,i)perylene | mg/l | .002 | 0.00205 | 103. | 57.4-152 | WG807514 |
| Benzo(k)fluoranthene | mg/l | .002 | 0.00239 | 120. | 60.5-154 | WG807514 |
| Chrysene | mg/l | .002 | 0.00237 | 118. | 64.8-155 | WG807514 |
| Dibenz(a,h)anthracene | mg/l | .002 | 0.00224 | 112. | 53.5-153 | WG807514 |
| Fluoranthene | mg/l | .002 | 0.00242 | 121. | 68.6-153 | WG807514 |
| Fluorene | mg/l | .002 | 0.00220 | 110. | 67.3-141 | WG807514 |
| Indeno(1,2,3-cd)pyrene | mg/l | .002 | 0.00222 | 111. | 57-155 | WG807514 |
| Naphthalene | mg/l | .002 | 0.00242 | 121. | 66.7-135 | WG807514 |

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8653 W Hackamore Dr

Boise, ID 83709

Quality Assurance Report
Level II

L780238

August 07, 2015

| Analyte | Units | Laboratory Control Sample Known Val | Result | % Rec | Limit | Batch |
|---|---|---|---|---|---|---|
| Phenanthrene | mg/l | .002 | 0.00214 | 107. | 64.3-143 | WG807514 |
| Pyrene | mg/l | .002 | 0.00233 | 116. | 60.2-154 | WG807514 |
| 2-Fluorobiphenyl | | | | 122.0 | 55.5-150 | WG807514 |
| Nitrobenzene-d5 | | | | 131.0 | 33.8-179 | WG807514 |
| p-Terphenyl-d14 | | | | 107.0 | 46.2-163 | WG807514 |

| Analyte | Units | Laboratory Control Sample Duplicate Result | Ref | %Rec | Limit | RPD | Limit | Batch |
|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | mg/l | 0.0265 | 0.0258 | 106. | 74.2-124 | 2.92 | 20 | WG806501 |
| 1,1,1-Trichloroethane | mg/l | 0.0262 | 0.0252 | 105. | 73.2-123 | 3.99 | 20 | WG806501 |
| 1,1,2,2-Tetrachloroethane | mg/l | 0.0283 | 0.0271 | 113. | 70.7-122 | 4.09 | 20 | WG806501 |
| 1,1,2-Trichloroethane | mg/l | 0.0267 | 0.0255 | 107. | 77.7-118 | 4.39 | 20 | WG806501 |
| 1,1,2-Trichlorotrifluoroethane | mg/l | 0.0286 | 0.0279 | 114. | 62-141 | 2.71 | 20 | WG806501 |
| 1,1-Dichloroethane | mg/l | 0.0270 | 0.0260 | 108. | 70.7-126 | 3.73 | 20 | WG806501 |
| 1,1-Dichloroethene | mg/l | 0.0284 | 0.0276 | 114. | 67.8-129 | 2.90 | 20 | WG806501 |
| 1,1-Dichloropropene | mg/l | 0.0260 | 0.0248 | 104. | 73.1-125 | 4.65 | 20 | WG806501 |
| 1,2,3-Trichlorobenzene | mg/l | 0.0282 | 0.0281 | 113. | 75.7-134 | 0.590 | 20 | WG806501 |
| 1,2,3-Trichloropropane | mg/l | 0.0280 | 0.0280 | 112. | 71.8-121 | 0.290 | 20 | WG806501 |
| 1,2,3-Trimethylbenzene | mg/l | 0.0279 | 0.0266 | 112. | 79.9-118 | 5.04 | 20 | WG806501 |
| 1,2,4-Trichlorobenzene | mg/l | 0.0286 | 0.0281 | 114. | 76.1-136 | 1.78 | 20 | WG806501 |
| 1,2,4-Trimethylbenzene | mg/l | 0.0277 | 0.0267 | 111. | 79-122 | 3.55 | 20 | WG806501 |
| 1,2-Dibromo-3-Chloropropane | mg/l | 0.0254 | 0.0252 | 101. | 65.4-128 | 0.590 | 20 | WG806501 |
| 1,2-Dibromoethane | mg/l | 0.0269 | 0.0262 | 108. | 79.8-122 | 2.71 | 20 | WG806501 |
| 1,2-Dichlorobenzene | mg/l | 0.0273 | 0.0262 | 109. | 78.4-117 | 4.05 | 20 | WG806501 |
| 1,2-Dichloroethane | mg/l | 0.0278 | 0.0266 | 111. | 68.8-124 | 4.15 | 20 | WG806501 |
| 1,2-Dichloropropane | mg/l | 0.0278 | 0.0274 | 111. | 76.5-119 | 1.27 | 20 | WG806501 |
| 1,3,5-Trimethylbenzene | mg/l | 0.0282 | 0.0269 | 113. | 81-123 | 4.52 | 20 | WG806501 |
| 1,3-Dichlorobenzene | mg/l | 0.0283 | 0.0273 | 113. | 70.8-128 | 3.57 | 20 | WG806501 |
| 1,3-Dichloropropane | mg/l | 0.0267 | 0.0258 | 107. | 77.4-117 | 3.19 | 20 | WG806501 |
| 1,4-Dichlorobenzene | mg/l | 0.0268 | 0.0263 | 107. | 78.8-115 | 1.80 | 20 | WG806501 |
| 2,2-Dichloropropane | mg/l | 0.0270 | 0.0274 | 108. | 62.4-133 | 1.66 | 20 | WG806501 |
| 2-Butanone (MEK) | mg/l | 0.132 | 0.134 | 106. | 55-149 | 1.73 | 20 | WG806501 |
| 2-Chloroethyl vinyl ether | mg/l | 0.144 | 0.143 | 115. | 43.8-150 | 0.620 | 20 | WG806501 |
| 2-Chlorotoluene | mg/l | 0.0281 | 0.0273 | 112. | 74.7-122 | 2.92 | 20 | WG806501 |
| 4-Chlorotoluene | mg/l | 0.0277 | 0.0266 | 111. | 77.5-120 | 4.23 | 20 | WG806501 |
| 4-Methyl-2-pentanone (MIBK) | mg/l | 0.143 | 0.141 | 114. | 70.5-133 | 1.23 | 20 | WG806501 |
| Acetone | mg/l | 0.121 | 0.138 | 97.0 | 28.7-175 | 12.8 | 20.9 | WG806501 |
| Acrolein | mg/l | 0.182 | 0.183 | 145* | 88-118 | 0.690 | 28.1 | WG806501 |
| Acrylonitrile | mg/l | 0.132 | 0.136 | 105. | 71-135 | 3.17 | 20 | WG806501 |
| Benzene | mg/l | 0.0254 | 0.0242 | 102. | 74.8-121 | 4.75 | 20 | WG806501 |
| Bromobenzene | mg/l | 0.0280 | 0.0271 | 112. | 77.5-116 | 3.33 | 20 | WG806501 |
| Bromodichloromethane | mg/l | 0.0269 | 0.0269 | 107. | 75.1-116 | 0.0100 | 20 | WG806501 |
| Bromoform | mg/l | 0.0274 | 0.0263 | 110. | 67.5-130 | 4.10 | 20 | WG806501 |
| Bromomethane | mg/l | 0.0261 | 0.0248 | 104. | 49.9-162 | 5.13 | 20 | WG806501 |
| Carbon tetrachloride | mg/l | 0.0266 | 0.0258 | 106. | 70.2-123 | 2.88 | 20 | WG806501 |
| Chlorobenzene | mg/l | 0.0274 | 0.0264 | 110. | 78.1-119 | 3.90 | 20 | WG806501 |
| Chlorodibromomethane | mg/l | 0.0274 | 0.0265 | 110. | 74-121 | 3.40 | 20 | WG806501 |
| Chloroethane | mg/l | 0.0272 | 0.0253 | 109. | 61.7-135 | 7.19 | 20 | WG806501 |
| Chloroform | mg/l | 0.0268 | 0.0255 | 107. | 76-121 | 4.91 | 20 | WG806501 |
| Chloromethane | mg/l | 0.0221 | 0.0214 | 88.0 | 61.5-129 | 3.14 | 20 | WG806501 |
| cis-1,2-Dichloroethene | mg/l | 0.0257 | 0.0245 | 103. | 76-119 | 4.63 | 20 | WG806501 |
| cis-1,3-Dichloropropene | mg/l | 0.0275 | 0.0269 | 110. | 78.2-120 | 1.94 | 20 | WG806501 |
| Di-isopropyl ether | mg/l | 0.0264 | 0.0256 | 105. | 65.1-135 | 2.95 | 20 | WG806501 |
| Dibromomethane | mg/l | 0.0274 | 0.0271 | 110. | 79.5-118 | 1.37 | 20 | WG806501 |
| Dichlorodifluoromethane | mg/l | 0.0249 | 0.0238 | 99.0 | 54.8-135 | 4.18 | 20 | WG806501 |
| Ethylbenzene | mg/l | 0.0268 | 0.0256 | 107. | 78.8-122 | 4.53 | 20 | WG806501 |
| Hexachloro-1,3-butadiene | mg/l | 0.0270 | 0.0268 | 108. | 64.7-129 | 0.540 | 20 | WG806501 |
| Isopropylbenzene | mg/l | 0.0278 | 0.0268 | 111. | 78.6-132 | 3.50 | 20 | WG806501 |

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
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Tax I.D. 62-0814289

Est. 1970

Strata - ID
Andrew Provant
8653 W Hackamore Dr

Boise, ID 83709

Quality Assurance Report
Level II

L780238

August 07, 2015

| Analyte | Units | Laboratory Control Sample Duplicate Result | Ref | %Rec | Limit | RPD | Limit | Batch |
|---|---|---|---|---|---|---|---|---|
| Methyl tert-butyl ether | mg/l | 0.0266 | 0.0265 | 106. | 70.1-125 | 0.380 | 20 | WG806501 |
| Methylene Chloride | mg/l | 0.0249 | 0.0239 | 100. | 70.3-120 | 4.07 | 20 | WG806501 |
| n-Butylbenzene | mg/l | 0.0291 | 0.0287 | 116. | 75.9-134 | 1.57 | 20 | WG806501 |
| n-Propylbenzene | mg/l | 0.0281 | 0.0271 | 112. | 81.9-122 | 3.47 | 20 | WG806501 |
| Naphthalene | mg/l | 0.0278 | 0.0274 | 111. | 69.7-134 | 1.35 | 20 | WG806501 |
| p-Isopropyltoluene | mg/l | 0.0288 | 0.0278 | 115. | 77.6-129 | 3.53 | 20 | WG806501 |
| sec-Butylbenzene | mg/l | 0.0290 | 0.0277 | 116. | 80.6-126 | 4.38 | 20 | WG806501 |
| Styrene | mg/l | 0.0265 | 0.0259 | 106. | 80.4-126 | 2.43 | 20 | WG806501 |
| tert-Butylbenzene | mg/l | 0.0280 | 0.0273 | 112. | 79.3-127 | 2.73 | 20 | WG806501 |
| Tetrachloroethene | mg/l | 0.0257 | 0.0244 | 103. | 72.6-126 | 5.32 | 20 | WG806501 |
| Toluene | mg/l | 0.0257 | 0.0255 | 103. | 79.7-116 | 0.730 | 20 | WG806501 |
| trans-1,2-Dichloroethene | mg/l | 0.0250 | 0.0239 | 100. | 72.6-121 | 4.64 | 20 | WG806501 |
| trans-1,3-Dichloropropene | mg/l | 0.0286 | 0.0282 | 114. | 74.3-123 | 1.40 | 20 | WG806501 |
| Trichloroethene | mg/l | 0.0256 | 0.0254 | 102. | 77.7-118 | 0.610 | 20 | WG806501 |
| Trichlorofluoromethane | mg/l | 0.0294 | 0.0285 | 118. | 63.5-135 | 3.38 | 20 | WG806501 |
| Vinyl chloride | mg/l | 0.0258 | 0.0251 | 103. | 65.9-128 | 2.79 | 20 | WG806501 |
| Xylenes, Total | mg/l | 0.0807 | 0.0772 | 108. | 78.7-121 | 4.43 | 20 | WG806501 |
| 4-Bromofluorobenzene | | | | 103.0 | 71-126 | | | WG806501 |
| Dibromofluoromethane | | | | 98.10 | 78.3-121 | | | WG806501 |
| Toluene-d8 | | | | 103.0 | 88.5-111 | | | WG806501 |
| Beryllium | mg/l | 1.10 | 1.09 | 110. | 80-120 | 1.00 | 20 | WG806623 |
| Cadmium | mg/l | 1.07 | 1.06 | 107. | 80-120 | 1.00 | 20 | WG806623 |
| Chromium | mg/l | 1.06 | 1.06 | 106. | 80-120 | 0.0 | 20 | WG806623 |
| Copper | mg/l | 1.05 | 1.04 | 105. | 80-120 | 1.00 | 20 | WG806623 |
| Nickel | mg/l | 1.03 | 1.02 | 102. | 80-120 | 1.00 | 20 | WG806623 |
| Selenium | mg/l | 1.20 | 1.19 | 120. | 80-120 | 1.00 | 20 | WG806623 |
| Silver | mg/l | 1.04 | 1.03 | 104. | 80-120 | 1.00 | 20 | WG806623 |
| Zinc | mg/l | 1.02 | 1.01 | 102. | 80-120 | 1.00 | 20 | WG806623 |
| 1,2-Dibromo-3-Chloropropane | mg/l | 0.000247 | 0.000241 | 99.0 | 60-140 | 2.44 | 20 | WG806564 |
| Ethylene Dibromide | mg/l | 0.000267 | 0.000263 | 107. | 60-140 | 1.60 | 20 | WG806564 |
| Mercury | mg/l | 0.00280 | 0.00290 | 93.0 | 80-120 | 3.00 | 20 | WG806571 |
| Antimony | mg/l | 0.0523 | 0.0525 | 105. | 80-120 | 0.0 | 20 | WG806610 |
| Arsenic | mg/l | 0.0482 | 0.0458 | 96.0 | 80-120 | 5.00 | 20 | WG806610 |
| Lead | mg/l | 0.0488 | 0.0490 | 98.0 | 80-120 | 0.0 | 20 | WG806610 |
| Thallium | mg/l | 0.0473 | 0.0477 | 95.0 | 80-120 | 1.00 | 20 | WG806610 |
| 1-Methylnaphthalene | mg/l | 0.00227 | 0.00230 | 114. | 68.3-144 | 1.37 | 20 | WG807514 |
| 2-Chloronaphthalene | mg/l | 0.00239 | 0.00247 | 119. | 69.7-140 | 3.30 | 20 | WG807514 |
| 2-Methylnaphthalene | mg/l | 0.00222 | 0.00228 | 111. | 67.6-143 | 2.55 | 20 | WG807514 |
| Acenaphthene | mg/l | 0.00241 | 0.00250 | 120. | 67.7-153 | 3.55 | 20 | WG807514 |
| Acenaphthylene | mg/l | 0.00243 | 0.00249 | 121. | 66.9-141 | 2.55 | 20 | WG807514 |
| Anthracene | mg/l | 0.00236 | 0.00244 | 118. | 68.9-153 | 3.39 | 20 | WG807514 |
| Benzo(a)anthracene | mg/l | 0.00199 | 0.00201 | 100. | 63.1-147 | 0.980 | 20 | WG807514 |
| Benzo(a)pyrene | mg/l | 0.00218 | 0.00221 | 109. | 62.2-150 | 1.31 | 20 | WG807514 |
| Benzo(b)fluoranthene | mg/l | 0.00213 | 0.00207 | 106. | 58.4-148 | 2.61 | 20 | WG807514 |
| Benzo(g,h,i)perylene | mg/l | 0.00203 | 0.00205 | 101. | 57.4-152 | 1.30 | 20 | WG807514 |
| Benzo(k)fluoranthene | mg/l | 0.00225 | 0.00239 | 112. | 60.5-154 | 6.13 | 20 | WG807514 |
| Chrysene | mg/l | 0.00232 | 0.00237 | 116. | 64.8-155 | 1.98 | 20 | WG807514 |
| Dibenz(a,h)anthracene | mg/l | 0.00221 | 0.00224 | 111. | 53.5-153 | 1.35 | 20 | WG807514 |
| Fluoranthene | mg/l | 0.00235 | 0.00242 | 117. | 68.6-153 | 3.21 | 20 | WG807514 |

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Est. 1970

Strata - ID
Andrew Provant
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Boise, ID 83709

Quality Assurance Report
Level II

L780238

August 07, 2015

| Analyte | Units | Laboratory Control Sample Duplicate Result | Ref | %Rec | Limit | RPD | Limit | Batch |
|---|---|---|---|---|---|---|---|---|
| Fluorene | mg/l | 0.00212 | 0.00220 | 106. | 67.3-141 | 3.86 | 20 | WG807514 |
| Indeno(1,2,3-cd)pyrene | mg/l | 0.00220 | 0.00222 | 110. | 57-155 | 0.830 | 20 | WG807514 |
| Naphthalene | mg/l | 0.00236 | 0.00242 | 118. | 66.7-135 | 2.49 | 20 | WG807514 |
| Phenanthrene | mg/l | 0.00209 | 0.00214 | 105. | 64.3-143 | 2.20 | 20 | WG807514 |
| Pyrene | mg/l | 0.00228 | 0.00233 | 114. | 60.2-154 | 2.15 | 20 | WG807514 |
| 2-Fluorobiphenyl | | | | 116.0 | 55.5-150 | | | WG807514 |
| Nitrobenzene-d5 | | | | 127.0 | 33.8-179 | | | WG807514 |
| p-Terphenyl-d14 | | | | 104.0 | 46.2-163 | | | WG807514 |

| Analyte | Units | Matrix Spike MS Res | Ref Res | TV | % Rec | Limit | Ref Samp | Batch |
|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | mg/l | 0.0252 | 0.0 | .025 | 100. | 64-128 | L780215-01 | WG806501 |
| 1,1,1-Trichloroethane | mg/l | 0.0287 | 0.0 | .025 | 120. | 58.7-134 | L780215-01 | WG806501 |
| 1,1,2,2-Tetrachloroethane | mg/l | 0.0289 | 0.0 | .025 | 120. | 56-132 | L780215-01 | WG806501 |
| 1,1,2-Trichloroethane | mg/l | 0.0271 | 0.0 | .025 | 110. | 66.3-125 | L780215-01 | WG806501 |
| 1,1,2-Trichlorotrifluoroethane | mg/l | 0.0334 | 0.0 | .025 | 130. | 53.7-150 | L780215-01 | WG806501 |
| 1,1-Dichloroethane | mg/l | 0.0289 | 0.0 | .025 | 120. | 58.5-132 | L780215-01 | WG806501 |
| 1,1-Dichloroethene | mg/l | 0.0349 | 0.0 | .025 | 140. | 51.1-140 | L780215-01 | WG806501 |
| 1,1-Dichloropropene | mg/l | 0.0297 | 0.0 | .025 | 120. | 57.3-136 | L780215-01 | WG806501 |
| 1,2,3-Trichlorobenzene | mg/l | 0.0228 | 0.0 | .025 | 91.0 | 65.7-143 | L780215-01 | WG806501 |
| 1,2,3-Trichloropropane | mg/l | 0.0288 | 0.0 | .025 | 120. | 61.4-128 | L780215-01 | WG806501 |
| 1,2,3-Trimethylbenzene | mg/l | 0.352 | 0.338 | .025 | 56.0* | 62.7-133 | L780215-01 | WG806501 |
| 1,2,4-Trichlorobenzene | mg/l | 0.0228 | 0.0 | .025 | 91.0 | 67-146 | L780215-01 | WG806501 |
| 1,2,4-Trimethylbenzene | mg/l | 0.0475 | 0.849 | .025 | 0.0* | 60.5-137 | L780215-01 | WG806501 |
| 1,2-Dibromo-3-Chloropropane | mg/l | 0.0250 | 0.0 | .025 | 100. | 57.3-136 | L780215-01 | WG806501 |
| 1,2-Dibromoethane | mg/l | 0.0269 | 0.0 | .025 | 110. | 73.8-131 | L780215-01 | WG806501 |
| 1,2-Dichlorobenzene | mg/l | 0.0272 | 0.0 | .025 | 110. | 68.2-123 | L780215-01 | WG806501 |
| 1,2-Dichloroethane | mg/l | 0.0315 | 0.0 | .025 | 130. | 60-126 | L780215-01 | WG806501 |
| 1,2-Dichloropropane | mg/l | 0.0313 | 0.0 | .025 | 120.* | 64.2-123 | L780215-01 | WG806501 |
| 1,3,5-Trimethylbenzene | mg/l | 0.412 | 0.381 | .025 | 120. | 67.9-134 | L780215-01 | WG806501 |
| 1,3-Dichlorobenzene | mg/l | 0.0244 | 0.0 | .025 | 97.0 | 63.1-131 | L780215-01 | WG806501 |
| 1,3-Dichloropropane | mg/l | 0.0265 | 0.0 | .025 | 110. | 67.9-121 | L780215-01 | WG806501 |
| 1,4-Dichlorobenzene | mg/l | 0.0280 | 0.0 | .025 | 110. | 68.6-123 | L780215-01 | WG806501 |
| 2,2-Dichloropropane | mg/l | 0.0273 | 0.0 | .025 | 110. | 50.5-144 | L780215-01 | WG806501 |
| 2-Butanone (MEK) | mg/l | 0.142 | 0.0 | .125 | 110. | 22.4-138 | L780215-01 | WG806501 |
| 2-Chloroethyl vinyl ether | mg/l | 0.000325 | 0.0 | .125 | 0.260* | 10-155 | L780215-01 | WG806501 |
| 2-Chlorotoluene | mg/l | 0.0276 | 0.0 | .025 | 110. | 63.6-128 | L780215-01 | WG806501 |
| 4-Chlorotoluene | mg/l | 0.0248 | 0.0 | .025 | 99.0 | 65.7-127 | L780215-01 | WG806501 |
| 4-Methyl-2-pentanone (MIBK) | mg/l | 0.166 | 0.0 | .125 | 130. | 60.8-140 | L780215-01 | WG806501 |
| Acetone | mg/l | 0.118 | 0.0 | .125 | 94.0 | 25-156 | L780215-01 | WG806501 |
| Acrolein | mg/l | 0.641 | 0.0 | .125 | 510.* | 10-200 | L780215-01 | WG806501 |
| Acrylonitrile | mg/l | 0.185 | 0.0 | .125 | 150.* | 49.4-133 | L780215-01 | WG806501 |
| Benzene | mg/l | 0.0286 | 0.0 | .025 | 110. | 54.3-133 | L780215-01 | WG806501 |
| Bromobenzene | mg/l | 0.0488 | 0.0 | .025 | 200.* | 63.9-124 | L780215-01 | WG806501 |
| Bromodichloromethane | mg/l | 0.0300 | 0.0 | .025 | 120. | 63.9-121 | L780215-01 | WG806501 |
| Bromoform | mg/l | 0.0271 | 0.0 | .025 | 110. | 59.5-134 | L780215-01 | WG806501 |
| Bromomethane | mg/l | 0.0317 | 0.0 | .025 | 130. | 41.7-155 | L780215-01 | WG806501 |
| Carbon tetrachloride | mg/l | 0.0292 | 0.0 | .025 | 120. | 55.7-134 | L780215-01 | WG806501 |
| Chlorobenzene | mg/l | 0.0280 | 0.0 | .025 | 110. | 67-125 | L780215-01 | WG806501 |
| Chlorodibromomethane | mg/l | 0.0267 | 0.0 | .025 | 110. | 64.3-125 | L780215-01 | WG806501 |
| Chloroethane | mg/l | 0.0317 | 0.0 | .025 | 130. | 51.5-136 | L780215-01 | WG806501 |
| Chloroform | mg/l | 0.0314 | 0.0 | .025 | 130. | 63-129 | L780215-01 | WG806501 |
| Chloromethane | mg/l | 0.0267 | 0.0 | .025 | 110. | 42.4-135 | L780215-01 | WG806501 |
| cis-1,2-Dichloroethene | mg/l | 0.0291 | 0.0 | .025 | 120. | 59.2-129 | L780215-01 | WG806501 |
| cis-1,3-Dichloropropene | mg/l | 0.0301 | 0.0 | .025 | 120. | 66.4-125 | L780215-01 | WG806501 |
| Di-isopropyl ether | mg/l | 0.0287 | 0.0 | .025 | 120. | 59.9-140 | L780215-01 | WG806501 |
| Dibromomethane | mg/l | 0.0319 | 0.0 | .025 | 130.* | 72.8-127 | L780215-01 | WG806501 |
| Dichlorodifluoromethane | mg/l | 0.0286 | 0.0 | .025 | 110. | 40.6-144 | L780215-01 | WG806501 |

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Est. 1970

Strata - ID
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Quality Assurance Report
Level II

L780238

August 07, 2015

| Analyte | Units | Matrix Spike MS Res | Ref Res | TV | % Rec | Limit | Ref Samp | Batch |
|---|---|---|---|---|---|---|---|---|
| Ethylbenzene | mg/l | 0.374 | 0.367 | .025 | 30.0* | 61.4-133 | L780215-01 | WG806501 |
| Hexachloro-1,3-butadiene | mg/l | 0.0213 | 0.0 | .025 | 85.0 | 55.1-136 | L780215-01 | WG806501 |
| Isopropylbenzene | mg/l | 0.0961 | 0.0710 | .025 | 100. | 66.8-141 | L780215-01 | WG806501 |
| Methyl tert-butyl ether | mg/l | 0.0294 | 0.0 | .025 | 120. | 61.4-136 | L780215-01 | WG806501 |
| Methylene Chloride | mg/l | 0.0279 | 0.0 | .025 | 110. | 58.1-122 | L780215-01 | WG806501 |
| n-Butylbenzene | mg/l | 0.0556 | 0.0313 | .025 | 97.0 | 64.8-145 | L780215-01 | WG806501 |
| n-Propylbenzene | mg/l | 0.221 | 0.197 | .025 | 99.0 | 63.2-139 | L780215-01 | WG806501 |
| Naphthalene | mg/l | 0.286 | 0.275 | .025 | 42.0* | 61.8-143 | L780215-01 | WG806501 |
| p-Isopropyltoluene | mg/l | 0.0303 | 0.00831 | .025 | 88.0 | 62.8-143 | L780215-01 | WG806501 |
| sec-Butylbenzene | mg/l | 0.0354 | 0.0130 | .025 | 90.0 | 66.8-139 | L780215-01 | WG806501 |
| Styrene | mg/l | 0.0284 | 0.0 | .025 | 110. | 66.8-133 | L780215-01 | WG806501 |
| tert-Butylbenzene | mg/l | 0.0223 | 0.0 | .025 | 89.0 | 67.1-138 | L780215-01 | WG806501 |
| Tetrachloroethene | mg/l | 0.0267 | 0.00139 | .025 | 100. | 53-139 | L780215-01 | WG806501 |
| Toluene | mg/l | 0.0416 | 0.0132 | .025 | 110. | 61.4-130 | L780215-01 | WG806501 |
| trans-1,2-Dichloroethene | mg/l | 0.0282 | 0.0 | .025 | 110. | 56.5-129 | L780215-01 | WG806501 |
| trans-1,3-Dichloropropene | mg/l | 0.0318 | 0.0 | .025 | 130. | 64.1-128 | L780215-01 | WG806501 |
| Trichloroethene | mg/l | 0.0353 | 0.00726 | .025 | 110. | 44.1-149 | L780215-01 | WG806501 |
| Trichlorofluoromethane | mg/l | 0.0343 | 0.0 | .025 | 140. | 49.6-145 | L780215-01 | WG806501 |
| Vinyl chloride | mg/l | 0.0312 | 0.0 | .025 | 120. | 47.8-137 | L780215-01 | WG806501 |
| Xylenes, Total | mg/l | 1.39 | 1.35 | .075 | 48.0* | 63.3-131 | L780215-01 | WG806501 |
| 4-Bromofluorobenzene | | | | | 90.90 | 71-126 | | WG806501 |
| Dibromofluoromethane | | | | | 102.0 | 78.3-121 | | WG806501 |
| Toluene-d8 | | | | | 106.0 | 88.5-111 | | WG806501 |
| Beryllium | mg/l | 1.10 | -0.000044 | 1 | 110. | 75-125 | L780241-01 | WG806623 |
| Cadmium | mg/l | 1.09 | -0.00146 | 1 | 110. | 75-125 | L780241-01 | WG806623 |
| Chromium | mg/l | 1.05 | 0.000311 | 1 | 100. | 75-125 | L780241-01 | WG806623 |
| Copper | mg/l | 1.30 | 0.239 | 1 | 110. | 75-125 | L780241-01 | WG806623 |
| Nickel | mg/l | 1.01 | -0.00366 | 1 | 100. | 75-125 | L780241-01 | WG806623 |
| Selenium | mg/l | 1.21 | -0.00838 | 1 | 120. | 75-125 | L780241-01 | WG806623 |
| Silver | mg/l | 1.20 | -0.000749 | 1 | 120. | 75-125 | L780241-01 | WG806623 |
| Zinc | mg/l | 1.32 | 0.346 | 1 | 98.0 | 75-125 | L780241-01 | WG806623 |
| 1,2-Dibromo-3-Chloropropane | mg/l | 0.000103 | 0.0 | .0001 | 100. | 60-140 | L780238-04 | WG806564 |
| Ethylene Dibromide | mg/l | 0.000116 | 0.0 | .0001 | 120. | 60-140 | L780238-04 | WG806564 |
| Mercury | mg/l | 0.00291 | -0.000029 | .003 | 97.0 | 75-125 | L780238-01 | WG806571 |
| Antimony | mg/l | 0.0536 | 0.000336 | .05 | 110. | 75-125 | L780238-01 | WG806610 |
| Arsenic | mg/l | 0.0494 | 0.00178 | .05 | 95.0 | 75-125 | L780238-01 | WG806610 |
| Lead | mg/l | 0.0487 | 0.0000390 | .05 | 97.0 | 75-125 | L780238-01 | WG806610 |
| Thallium | mg/l | 0.0483 | 0.0000362 | .05 | 97.0 | 75-125 | L780238-01 | WG806610 |

| Analyte | Units | Matrix Spike Duplicate MSD | Ref | %Rec | Limit | RPD | Limit | Ref Samp | Batch |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | mg/l | 0.0231 | 0.0252 | 92.3 | 64-128 | 8.85 | 20 | L780215-01 | WG806501 |
| 1,1,1-Trichloroethane | mg/l | 0.0278 | 0.0287 | 111. | 58.7-134 | 3.01 | 20 | L780215-01 | WG806501 |
| 1,1,2,2-Tetrachloroethane | mg/l | 0.0244 | 0.0289 | 97.5 | 56-132 | 16.8 | 22.2 | L780215-01 | WG806501 |
| 1,1,2-Trichloroethane | mg/l | 0.0275 | 0.0271 | 110. | 66.3-125 | 1.21 | 20 | L780215-01 | WG806501 |
| 1,1,2-Trichlorotrifluoroethane | mg/l | 0.0320 | 0.0334 | 128. | 53.7-150 | 4.27 | 20 | L780215-01 | WG806501 |
| 1,1-Dichloroethane | mg/l | 0.0299 | 0.0289 | 120. | 58.5-132 | 3.44 | 20 | L780215-01 | WG806501 |
| 1,1-Dichloroethene | mg/l | 0.0333 | 0.0349 | 133. | 51.1-140 | 4.58 | 20.2 | L780215-01 | WG806501 |
| 1,1-Dichloropropene | mg/l | 0.0298 | 0.0297 | 119. | 57.3-136 | 0.430 | 20 | L780215-01 | WG806501 |
| 1,2,3-Trichlorobenzene | mg/l | 0.0233 | 0.0228 | 93.3 | 65.7-143 | 2.30 | 20 | L780215-01 | WG806501 |

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Est. 1970

Strata - ID
Andrew Provant
8653 W Hackamore Dr

Boise, ID 83709

Quality Assurance Report
Level II

L780238

August 07, 2015

| Analyte | Units | Matrix Spike Duplicate MSD | Ref | %Rec | Limit | RPD | Limit | Ref Samp | Batch |
|---|---|---|---|---|---|---|---|---|---|
| 1,2,3-Trichloropropane | mg/l | 0.0250 | 0.0288 | 99.9 | 61.4-128 | 14.4 | 22.4 | L780215-01 | WG806501 |
| 1,2,3-Trimethylbenzene | mg/l | 0.354 | 0.352 | 62.3* | 62.7-133 | 0.470 | 20 | L780215-01 | WG806501 |
| 1,2,4-Trichlorobenzene | mg/l | 0.0227 | 0.0228 | 90.9 | 67-146 | 0.380 | 20 | L780215-01 | WG806501 |
| 1,2,4-Trimethylbenzene | mg/l | 0.0395 | 0.0475 | 0* | 60.5-137 | 18.3 | 20 | L780215-01 | WG806501 |
| 1,2-Dibromo-3-Chloropropane | mg/l | 0.0249 | 0.0250 | 99.5 | 57.3-136 | 0.400 | 27 | L780215-01 | WG806501 |
| 1,2-Dibromoethane | mg/l | 0.0265 | 0.0269 | 106. | 73.8-131 | 1.19 | 20 | L780215-01 | WG806501 |
| 1,2-Dichlorobenzene | mg/l | 0.0268 | 0.0272 | 107. | 68.2-123 | 1.45 | 20 | L780215-01 | WG806501 |
| 1,2-Dichloroethane | mg/l | 0.0306 | 0.0315 | 122. | 60-126 | 2.93 | 20 | L780215-01 | WG806501 |
| 1,2-Dichloropropane | mg/l | 0.0306 | 0.0313 | 122. | 64.2-123 | 2.18 | 20 | L780215-01 | WG806501 |
| 1,3,5-Trimethylbenzene | mg/l | 0.347 | 0.412 | 0* | 67.9-134 | 17.0 | 20 | L780215-01 | WG806501 |
| 1,3-Dichlorobenzene | mg/l | 0.0207 | 0.0244 | 82.6 | 63.1-131 | 16.4 | 20 | L780215-01 | WG806501 |
| 1,3-Dichloropropane | mg/l | 0.0268 | 0.0265 | 107. | 67.9-121 | 1.34 | 20 | L780215-01 | WG806501 |
| 1,4-Dichlorobenzene | mg/l | 0.0281 | 0.0280 | 112. | 68.6-123 | 0.320 | 20 | L780215-01 | WG806501 |
| 2,2-Dichloropropane | mg/l | 0.0258 | 0.0273 | 103. | 50.5-144 | 5.84 | 21.9 | L780215-01 | WG806501 |
| 2-Butanone (MEK) | mg/l | 0.139 | 0.142 | 111. | 22.4-138 | 2.05 | 27 | L780215-01 | WG806501 |
| 2-Chloroethyl vinyl ether | mg/l | 0.000414 | 0.000325 | 0.331* | 10-155 | 24.0* | 20 | L780215-01 | WG806501 |
| 2-Chlorotoluene | mg/l | 0.0227 | 0.0276 | 90.7 | 63.6-128 | 19.5 | 20 | L780215-01 | WG806501 |
| 4-Chlorotoluene | mg/l | 0.0217 | 0.0248 | 86.6 | 65.7-127 | 13.7 | 20 | L780215-01 | WG806501 |
| 4-Methyl-2-pentanone (MIBK) | mg/l | 0.157 | 0.166 | 126. | 60.8-140 | 5.36 | 25.1 | L780215-01 | WG806501 |
| Acetone | mg/l | 0.105 | 0.118 | 84.3 | 25-156 | 10.9 | 21.5 | L780215-01 | WG806501 |
| Acrolein | mg/l | 0.665 | 0.641 | 532.* | 10-200 | 3.68 | 27.7 | L780215-01 | WG806501 |
| Acrylonitrile | mg/l | 0.179 | 0.185 | 143.* | 49.4-133 | 3.69 | 25.3 | L780215-01 | WG806501 |
| Benzene | mg/l | 0.0282 | 0.0286 | 113. | 54.3-133 | 1.27 | 20 | L780215-01 | WG806501 |
| Bromobenzene | mg/l | 0.0424 | 0.0488 | 170.* | 63.9-124 | 13.9 | 20 | L780215-01 | WG806501 |
| Bromodichloromethane | mg/l | 0.0286 | 0.0300 | 114. | 63.9-121 | 4.66 | 20 | L780215-01 | WG806501 |
| Bromoform | mg/l | 0.0249 | 0.0271 | 99.5 | 59.5-134 | 8.69 | 20.5 | L780215-01 | WG806501 |
| Bromomethane | mg/l | 0.0301 | 0.0317 | 120. | 41.7-155 | 5.21 | 21.9 | L780215-01 | WG806501 |
| Carbon tetrachloride | mg/l | 0.0289 | 0.0292 | 115. | 55.7-134 | 1.19 | 20 | L780215-01 | WG806501 |
| Chlorobenzene | mg/l | 0.0265 | 0.0280 | 106. | 67-125 | 5.44 | 20 | L780215-01 | WG806501 |
| Chlorodibromomethane | mg/l | 0.0267 | 0.0267 | 107. | 64.3-125 | 0.0600 | 20.8 | L780215-01 | WG806501 |
| Chloroethane | mg/l | 0.0302 | 0.0317 | 121. | 51.5-136 | 4.92 | 40 | L780215-01 | WG806501 |
| Chloroform | mg/l | 0.0311 | 0.0314 | 124. | 63-129 | 1.22 | 20 | L780215-01 | WG806501 |
| Chloromethane | mg/l | 0.0264 | 0.0267 | 106. | 42.4-135 | 1.04 | 20 | L780215-01 | WG806501 |
| cis-1,2-Dichloroethene | mg/l | 0.0293 | 0.0291 | 117. | 59.2-129 | 0.450 | 20 | L780215-01 | WG806501 |
| cis-1,3-Dichloropropene | mg/l | 0.0292 | 0.0301 | 117. | 66.4-125 | 3.16 | 20 | L780215-01 | WG806501 |
| Di-isopropyl ether | mg/l | 0.0282 | 0.0287 | 113. | 59.9-140 | 1.65 | 20 | L780215-01 | WG806501 |
| Dibromomethane | mg/l | 0.0317 | 0.0319 | 127. | 72.8-127 | 0.480 | 20 | L780215-01 | WG806501 |
| Dichlorodifluoromethane | mg/l | 0.0275 | 0.0286 | 110. | 40.6-144 | 3.88 | 20.2 | L780215-01 | WG806501 |
| Ethylbenzene | mg/l | 0.356 | 0.374 | 0* | 61.4-133 | 4.92 | 20 | L780215-01 | WG806501 |
| Hexachloro-1,3-butadiene | mg/l | 0.0224 | 0.0213 | 89.4 | 55.1-136 | 5.04 | 23.6 | L780215-01 | WG806501 |
| Isopropylbenzene | mg/l | 0.0820 | 0.0961 | 44.3* | 66.8-141 | 15.8 | 20 | L780215-01 | WG806501 |
| Methyl tert-butyl ether | mg/l | 0.0291 | 0.0294 | 116. | 61.4-136 | 1.23 | 20 | L780215-01 | WG806501 |
| Methylene Chloride | mg/l | 0.0281 | 0.0279 | 112. | 58.1-122 | 0.580 | 20 | L780215-01 | WG806501 |
| n-Butylbenzene | mg/l | 0.0545 | 0.0556 | 92.9 | 64.8-145 | 1.99 | 20 | L780215-01 | WG806501 |
| n-Propylbenzene | mg/l | 0.191 | 0.221 | 0* | 63.2-139 | 14.8 | 20 | L780215-01 | WG806501 |
| Naphthalene | mg/l | 0.290 | 0.286 | 57.4* | 61.8-143 | 1.35 | 20 | L780215-01 | WG806501 |
| p-Isopropyltoluene | mg/l | 0.0248 | 0.0303 | 66.0 | 62.8-143 | 19.9 | 20 | L780215-01 | WG806501 |
| sec-Butylbenzene | mg/l | 0.0295 | 0.0354 | 66.1* | 66.8-139 | 18.3 | 20 | L780215-01 | WG806501 |
| Styrene | mg/l | 0.0261 | 0.0284 | 104. | 66.8-133 | 8.38 | 20 | L780215-01 | WG806501 |
| tert-Butylbenzene | mg/l | 0.0188 | 0.0223 | 75.3 | 67.1-138 | 17.0 | 20 | L780215-01 | WG806501 |
| Tetrachloroethene | mg/l | 0.0269 | 0.0267 | 102. | 53-139 | 0.560 | 20 | L780215-01 | WG806501 |
| Toluene | mg/l | 0.0402 | 0.0416 | 108. | 61.4-130 | 3.35 | 20 | L780215-01 | WG806501 |
| trans-1,2-Dichloroethene | mg/l | 0.0288 | 0.0282 | 115. | 56.5-129 | 2.20 | 20 | L780215-01 | WG806501 |
| trans-1,3-Dichloropropene | mg/l | 0.0303 | 0.0318 | 121. | 64.1-128 | 5.02 | 20 | L780215-01 | WG806501 |
| Trichloroethene | mg/l | 0.0350 | 0.0353 | 111. | 44.1-149 | 0.880 | 20 | L780215-01 | WG806501 |
| Trichlorofluoromethane | mg/l | 0.0322 | 0.0343 | 129. | 49.6-145 | 6.37 | 21.2 | L780215-01 | WG806501 |
| Vinyl chloride | mg/l | 0.0309 | 0.0312 | 123. | 47.8-137 | 1.14 | 20 | L780215-01 | WG806501 |
| Xylenes, Total | mg/l | 1.31 | 1.39 | 0* | 63.3-131 | 5.84 | 20 | L780215-01 | WG806501 |
| 4-Bromofluorobenzene | | | | 82.00 | 71-126 | | | | WG806501 |

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

12065 Lebanon Rd.
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Tax I.D. 62-0814289

Est. 1970

Strata - ID
Andrew Provant
8653 W Hackamore Dr

Boise, ID 83709

Quality Assurance Report
Level II

L780238

August 07, 2015

Matrix Spike Duplicate

| Analyte | Units | MSD | Ref | %Rec | Limit | RPD | Limit | Ref Samp | Batch |
|---|---|---|---|---|---|---|---|---|---|
| Dibromofluoromethane | | | | 99.30 | 78.3-121 | | | | |
| Toluene-d8 | | | | 101.0 | 88.5-111 | | | | |
| Beryllium | mg/l | 1.09 | 1.10 | 109. | 75-125 | 1.00 | 20 | L780241-01 | WG806623 |
| Cadmium | mg/l | 1.09 | 1.09 | 109. | 75-125 | 0.0 | 20 | L780241-01 | WG806623 |
| Chromium | mg/l | 1.04 | 1.05 | 104. | 75-125 | 0.0 | 20 | L780241-01 | WG806623 |
| Copper | mg/l | 1.28 | 1.30 | 104. | 75-125 | 1.00 | 20 | L780241-01 | WG806623 |
| Nickel | mg/l | 1.00 | 1.01 | 101. | 75-125 | 0.0 | 20 | L780241-01 | WG806623 |
| Selenium | mg/l | 1.21 | 1.21 | 122. | 75-125 | 0.0 | 20 | L780241-01 | WG806623 |
| Silver | mg/l | 1.08 | 1.20 | 108. | 75-125 | 10.0 | 20 | L780241-01 | WG806623 |
| Zinc | mg/l | 1.32 | 1.32 | 97.8 | 75-125 | 0.0 | 20 | L780241-01 | WG806623 |
| Mercury | mg/l | 0.00287 | 0.00291 | 96.7 | 75-125 | 1.00 | 20 | L780238-01 | WG806571 |
| Antimony | mg/l | 0.0536 | 0.0536 | 106. | 75-125 | 0.0 | 20 | L780238-01 | WG806610 |
| Arsenic | mg/l | 0.0493 | 0.0494 | 95.1 | 75-125 | 0.0 | 20 | L780238-01 | WG806610 |
| Lead | mg/l | 0.0480 | 0.0487 | 96.0 | 75-125 | 1.00 | 20 | L780238-01 | WG806610 |
| Thallium | mg/l | 0.0472 | 0.0483 | 94.4 | 75-125 | 2.00 | 20 | L780238-01 | WG806610 |

Serial Dilution

Batch number /Run number / Sample number cross reference

WG806501: R3056025: L780238-01 02 03 04 05 06
WG806623: R3056430: L780238-01 02 03 04 05
WG806564: R3056766: L780238-01 02 03 04 05
WG806571: R3057020: L780238-01 02 03 04 05
WG806610: R3057321: L780238-01 02 03 04 05
WG807514: R3058060 R3058442: L780238-01 02 03 04 05

* * Calculations are performed prior to rounding of reported values.
* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Boise, ID 83709

Quality Assurance Report
Level II

L780238

August 07, 2015

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

# ANALYTICAL REPORT

August 21, 2015

## Strata - ID

| | |
|---|---|
| Sample Delivery Group: | L782986 |
| Samples Received: | 07/31/2015 |
| Project Number: | BO15086C |
| Description: | 620 S. 9th Street |
| Site: | 620 S. 9TH STREET |
| Report To: | Andrew Provant<br>8653 W Hackamore Dr<br>Boise, ID 83709 |

Entire Report Reviewed By:

Jarred Willis
Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

# TABLE OF CONTENTS


[1]Cp: Cover Page 1

[2]Tc: Table of Contents 2

[3]Ss: Sample Summary 3

[4]Cn: Case Narrative 4

[5]Sr: Sample Results 5

DU 3 S-2 L782986-01 5

DU 3 S-3 L782986-02 6

[6]Qc: Quality Control Summary 7

Metals (ICP) by Method 6010B 7

[7]Gl: Glossary of Terms 9

[8]Al: Accreditations & Locations 10

[9]Sc: Chain of Custody 11

## DU 3 S-2 L782986-01 Waste

| Collected by | Collected date/time | Received date/time |
|---|---|---|
| Andrew Provant | 07/30/15 15:40 | 07/31/15 09:00 |

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analysis Analyst |
|---|---|---|---|---|---|
| Metals (ICP) by Method 6010B | WG810354 | 1 | 08/20/15 09:13 | 08/20/15 12:44 | JDG |
| Preparation by Method 1311 | WG810040 | 1 | 08/19/15 13:55 | 08/19/15 13:56 | BG |

## DU 3 S-3 L782986-02 Waste

| Collected by | Collected date/time | Received date/time |
|---|---|---|
| Andrew Provant | 07/30/15 16:00 | 07/31/15 09:00 |

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analysis Analyst |
|---|---|---|---|---|---|
| Metals (ICP) by Method 6010B | WG810354 | 1 | 08/20/15 09:13 | 08/20/15 12:47 | JDG |
| Preparation by Method 1311 | WG810040 | 1 | 08/19/15 13:55 | 08/19/15 13:56 | BG |

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the

Jarred Willis
Technical Service Representative

## Preparation by Method 1311

| Analyte | Result | Qualifier | Prep date / time | Batch |
|---|---|---|---|---|
| TCLP Extraction | - | | 8/19/2015 1:55:45 PM | WG810040 |

## Metals (ICP) by Method 6010B

| Analyte | Result mg/l | Qualifier | RDL mg/l | Limit mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| Lead | ND | | 0.450 | 5 | 1 | 08/20/2015 12:44 | WG810354 |

## Preparation by Method 1311

| Analyte | Result | Qualifier | Prep date / time | Batch |
|---|---|---|---|---|
| TCLP Extraction | - | | 8/19/2015 1:55:45 PM | WG810040 |

## Metals (ICP) by Method 6010B

| Analyte | Result mg/l | Qualifier | RDL mg/l | Limit mg/l | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| Lead | ND | | 0.450 | 5 | 1 | 08/20/2015 12:47 | WG810354 |

# QUALITY CONTROL SUMMARY

L782986-01,02



## Method Blank (MB)

(MB) 08/20/15 11:57

| Analyte | MB Result mg/l | MB Qualifier | MB RDL mg/l |
|---|---|---|---|
| Lead | ND | | 0.450 |

## Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 08/20/15 11:59 • (LCSD) 08/20/15 12:02

| Analyte | Spike Amount mg/l | LCS Result mg/l | LCSD Result mg/l | LCS Rec. % | LCSD Rec. % | Rec. Limits % | LCS Qualifier | LCSD Qualifier | RPD % | RPD Limits % |
|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 9.00 | 9.05 | 9.07 | 101 | 101 | 80-120 | | | 0 | 20 |

## L782935-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 08/20/15 12:05 • (MS) 08/20/15 12:11 • (MSD) 08/20/15 12:14

| Analyte | Spike Amount mg/l | Original Result mg/l | MS Result mg/l | MSD Result mg/l | MS Rec. % | MSD Rec. % | Dilution | Rec. Limits % | MS Qualifier | MSD Qualifier | RPD % | RPD Limits % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 9.00 | 0.0286 | 9.13 | 9.10 | 101 | 101 | 1 | 75-125 | | | 0 | 20 |

## L782875-01 Original Sample (OS) • Matrix Spike (MS)

(OS) 08/20/15 12:17 • (MS) 08/20/15 12:20

| Analyte | Spike Amount mg/l | Original Result mg/l | MS Result mg/l | MS Rec. % | Dilution | Rec. Limits % | MS Qualifier |
|---|---|---|---|---|---|---|---|
| Lead | 9.00 | 0.0226 | 9.00 | 100 | 1 | 75-125 | |

## L783295-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 08/20/15 12:56 • (MS) 08/20/15 12:59 • (MSD) 08/20/15 13:08

| Analyte | Spike Amount mg/l | Original Result mg/l | MS Result mg/l | MSD Result mg/l | MS Rec. % | MSD Rec. % | Dilution | Rec. Limits % | MS Qualifier | MSD Qualifier | RPD % | RPD Limits % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 9.00 | 0.0236 | 8.94 | 9.04 | 99 | 100 | 1 | 75-125 | | | 1 | 20 |

## L782938-02 Original Sample (OS) • Matrix Spike (MS)

(OS) 08/20/15 12:35 • (MS) 08/20/15 16:39

| Analyte | Spike Amount mg/l | Original Result mg/l | MS Result mg/l | MS Rec. % | Dilution | Rec. Limits % | MS Qualifier |
|---|---|---|---|---|---|---|---|

| | | | | | | |
|---|---|---|---|---|---|---|
| Lead | 9.00 | 0.0401 | 9.30 | 103 | 1 | 75-125 |

## Abbreviations and Definitions

| | |
|---|---|
| SDG | Sample Delivery Group. |
| MDL | Method Detection Limit. |
| RDL | Reported Detection Limit. |
| ND,U | Not detected at the Reporting Limit (or MDL where applicable). |
| RPD | Relative Percent Difference. |
| (dry) | Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils]. |
| Original Sample | The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG. |
| (S) | Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media. |
| Rec. | Recovery. |
| SDL | Sample Detection Limit. |
| MQL | Method Quantitation Limit. |
| Unadj. MQL | Unadjusted Method Quantitation Limit. |

| Qualifier | Description |
|---|---|
| | The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG. |

# ACCREDITATIONS & LOCATIONS

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ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE.**



## State Accreditations

| | |
|---|---|
| Alabama | 40660 |
| Alaska | UST-080 |
| Arizona | AZ0612 |
| Arkansas | 88-0469 |
| California | 01157CA |
| Colorado | TN00003 |
| Conneticut | PH-0197 |
| Florida | E87487 |
| Georgia | NELAP |
| Georgia [1] | 923 |
| Idaho | TN00003 |
| Illinois | 200008 |
| Indiana | C-TN-01 |
| Iowa | 364 |
| Kansas | E-10277 |
| Kentucky [1] | 90010 |
| Kentucky [2] | 16 |
| Louisiana | AI30792 |
| Maine | TN0002 |
| Maryland | 324 |
| Massachusetts | M-TN003 |
| Michigan | 9958 |
| Minnesota | 047-999-395 |
| Mississippi | TN00003 |
| Missouri | 340 |
| Montana | CERT0086 |
| Nebraska | NE-OS-15-05 |
| Nevada | TN-03-2002-34 |
| New Hampshire | 2975 |
| New Jersey–NELAP | TN002 |
| New Mexico | TN00003 |
| New York | 11742 |
| North Carolina | Env375 |
| North Carolina [1] | DW21704 |
| North Carolina [2] | 41 |
| North Dakota | R-140 |
| Ohio–VAP | CL0069 |
| Oklahoma | 9915 |
| Oregon | TN200002 |
| Pennsylvania | 68-02979 |
| Rhode Island | 221 |
| South Carolina | 84004 |
| South Dakota | n/a |
| Tennessee [1 4] | 2006 |
| Texas | T 104704245-07-TX |
| Texas [5] | LAB0152 |
| Utah | 6157585858 |
| Vermont | VT2006 |
| Virginia | 109 |
| Washington | C1915 |
| West Virginia | 233 |
| Wisconsin | 9980939910 |
| Wyoming | A2LA |

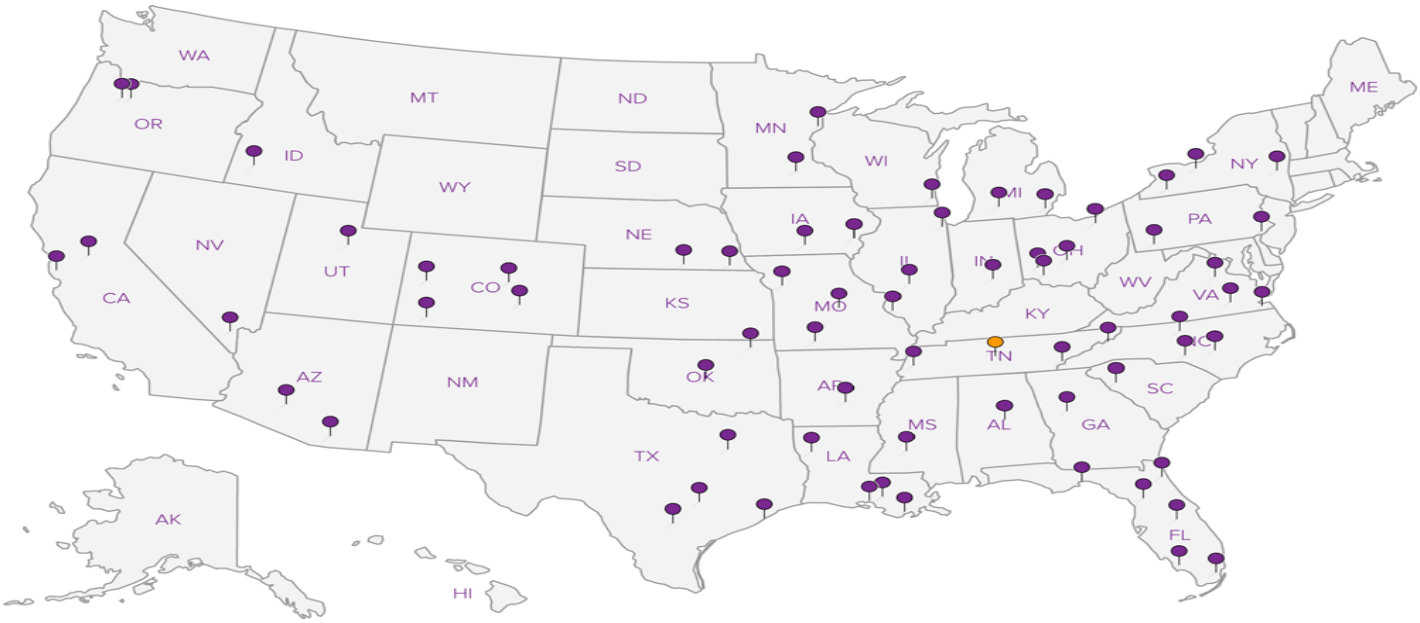
[1.] Drinking Water [2.] Underground Storage Tanks [3.] Aquatic Toxicity [4.] Chemical/Microbiological [5.] Mold [n/a] Accreditation not applicable

## Third Party & Federal Accreditations

| | |
|---|---|
| A2LA – ISO 17025 | 1461.01 |
| Canada | 1461.01 |
| EPA–Crypto | TN00003 |
| AIHA | 100789 |
| DOD | 1461.01 |
| USDA | S-67674 |

## Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



L782886

Chain of Custody Page 2 of 3

ESC LABS SCIENCES

YOUR LAB OF CHOICE

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
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Fax: 615-758-5859

**Strata - ID**
8653 W Hackamore Dr
Boise, ID 83709

Billing Information:
Accounts Payable - Terrelyn Roark
8653 W Hackamore Dr
Boise, ID 83709

Report to: Andrew Provant
Email To: aprovant@stratageotech.com; cbrischler@stratageotech.com

Project Description: 620 S. 9th Street
City/State Collected: Boise, ID
Phone: 208-376-8200
Fax: 208-376-8201
Client Project #: BO15086B
Lab Project #: STRENVID-BO15086B
Collected by (print): Andrew Provant
Site/Facility ID #: 620 S. 9TH STREET
P.O. #:
Collected by (signature):
Immediately Packed on Ice N ___ Y ✓
Rush? (Lab MUST Be Notified)
___ Same Day ....200%
___ Next Day ....100%
___ Two Day ....50%
___ Three Day ....25%
Date Results Needed
Email? ___No X__Yes
FAX? ___No ___Yes

L# L779930
Table #
Acctnum: STRENVID
Template: T104047
Prelogin: P517399
TSR: 358 - Jarred Willis
PB: 7-14-15 AP
Shipped Via: FedEx Ground

Analysis / Container / Preservative

| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | No. of Cntrs | AK101(GRO) / V8260 60mlAmb/MeOH/Syr | PAHSIMLVI 40mlAmb-NoPres-WT | PP Metals 2ozClr-NoPres | PP Metals 500mlHDPE-HNO3 | SV8011 40mlClr-NaThio | SV8270PAHSIM / TS 4ozClr-NoPres | V8260 40ml/NaHSO4/Syr/MeOH | V8260 40mlAmb-HCl | V8260- Trip Blank 40mlAmb-HCl-Blk | VOC Screen 2ozClr-NoPres | Rem./Contaminant | Sample # (lab only) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B-3 | G | SS | 1.5' | 7-29-15 | 1520 | 6 | | | X | | | X | X | | | X | | -11 |
| B-4 | G | SS | 1.5' | 7-29-15 | 1525 | 6 | | | X | | | X | X | | | X | | -12 |
| B-6 | G | SS | 1.5' | 7-29-15 | 1005 | 6 | | NO | X | NO | NO | X | X | NO | | X | | -13 |
| DU#3 S-2 | C | ~~SS~~ GW | 1.5' | 7-30-15 | 1540 | 6 | | X | X | X | X | X | X | X | | X | | -01 -14 |
| DU#3 S-3 | C | ~~SS~~ GW | 1.5' | 7-30-15 | 1600 | 6 | | X | X | X | X | X | X | X | | X | | 0215 |
| DU#3 S-4 | C | ~~SS~~ GW | 1.5' | 7-30-15 | 1610 | 6 | | X | X | X | X | X | X | X | | X | | -16 |
| ~~TRIP BLANK DU#3 T-1~~ | | ~~SS~~ GW | | | | ~~1~~ | | | X | | | X | X | | ~~X~~ | X | NO | |
| TRIP BLANK | | GW | | | | 1 | | | | | | | | | X | | | -17 |

NO

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other_____

Remarks:

pH _____ Temp _____
Flow _____ Other _____

6443135 9 7217

Hold #

| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) |
|---|---|---|---|
| | 7-30-15 | 1700 | |
| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) |
| | | | |
| Relinquished by : (Signature) | Date: | Time: | Received for lab by: (Signature) |
| | | | |

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ ____
Temp: 3.4 °C Bottles Received: 113
Date: 7/31/15 Time: 0900

Condition: (lab use only) JWS
COC Seal Intact: ____Y ____N ____NA
pH Checked: NCF:

L782986

**Jeremy W. Watkins**

**From:** Jarred Willis
**Sent:** Thursday, August 13, 2015 5:04 PM
**To:** Login
**Subject:** L779930-14, -15 - STRENVID - relog for TCLP Pb

Please relog L779930-14 and -15 from ***STRENVID*** for TCLP Pb. Relog to a new L# on standard TAT.

Thanks,
Jarred

---

**From:** Andrew P. Provant [mailto:aprovant@stratageotech.com]
**Sent:** Thursday, August 13, 2015 4:49 PM
**To:** Jarred Willis
**Subject:** L779930 Report

Jarred –

Do you still have the soil samples from L779930 (620 S. 9th Street)? If so I would like to have TCLP lead run for samples L779930-14 and -15.

What is the standard TAT for this analysis?

Thanks

**Andrew Provant, PG, RG, CEM**
**Strata, A Professional Services Corporation (STRATA)**
**Email** aprovant@stratageotech.com I **Web** www.StrataGeoTech.com
**Boise** - 8653 W.Hackamore Drive, Boise, Idaho 83709-1667
**Office** 208.376.8200 I **Fax** 208.376.8201

# APPENDIX F

## QAQC Report

# APPENDIX F

# LABORATORY DATA QUALITY ASSURANCE REVIEW

## 1. Sample and Analytical Methods Summary

Strata, A Professional Services Corporation (STRATA) has completed our laboratory data quality assurance review referencing EPA's ***Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use, EPA, January 13, 2009***, based on regulatory requirements, laboratory data qualification, and project-specific data quality objectives. Soil, groundwater, and soil vapor samples were collected from the proposed 'The Afton' site located at 620 S. 9th Street in Boise, Idaho on July 2015, based on the Quality Assurance Project Plan developed and approved to guide the data collection and analysis (STRATA, 2015). Attached Table F-1 identifies the samples collected, analytical laboratory, sample collection, and date(s) analyzed; Attached Tables F-2A through F-2C summarize analytical methods and compares laboratory/method detection limits to regulatory target concentrations.

The soil practical quantification limit (PQL) and method detection limit (MDL) for the following analytes are greater than the Idaho Department of Environmental Quality (DEQ) Petroleum Residential Use Screening Levels (RUSLs) or DEQ Initial Default Target Levels (IDTLs).

**Table F-3. PQL/MDL Exceedances**

| Column 1 | Column 2 |
|---|---|
| PQL exceeds RUSL/IDTL | PQL and MDL exceed RUSL/IDTL |
| Chloroform (soil/GW) | Acrylonitrile (soil/GW) |
| Benzene (AK Method 101)(soil) | 1,2-dibromoethane (EDB)(soil) |
| 1,1,2,2-Tetrachloroethane (soil/GW) | 1,2,3-Trichloropropane (soil/GW) |
| Dibenz(a,h)anthracene (GW) | 1,2-Dibromo-3-chloropropane (soil) |
| cis-1,3-dichloropropene (GW) | Acrolein (GW) |
| trans-1,3-dichloropropene (GW) | |
| Hexachlor-1,3-butadiene (GW) | |
| Chlorodibromoethane (GW) | |
| 1,2-Dibromo-3-chloropropane (GW) | |
| Bromodichloromethane (GW) | |
| Arsenic (soil) | |
| Silver (soil) | |

Note: Please refer to Tables F-2A through F-2C for values

The groundwater PQL for the analytes in Table F-3 Column 1 exceed the RUSLs or IDTLs; however, the MDL is below the RUSL or IDTLs. Any Column 1 analyte detections above the MDL will warrant evaluating risk as though the RUSL or IDTL is exceeded. The soil and groundwater PQL and MDL for the analytes in Table F-3 Column 2 exceed the RUSLs or IDTLs. The Column 2 analytes were identified in the QAPP as exceeding the RUSLs or IDTLs due to analytical instrumentation deficiencies, and are not considered chemicals of concern with respect to the site.


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### *1.1 Sampling Methods, Preservation, and Holding Times*

The following summarizes field quality assurance and quality control methods, preservation, and sample condition upon laboratory receipt. Soil and groundwater samples were collected in containers supplied by ESC with the proper preservative and stored in an insulated cooler with ice. Soil vapor samples were collected in containers supplied by Eurofins Air Toxics with the proper pressurization. Samples were submitted and analyzed within the required holding times referenced in Table F-4 per the sample collection and analytical dates in Table F-1. Laboratory chain of custody records illustrate the soil samples were received by ESC in good condition at 3.4 degrees Celsius, below the 4 degrees Celsius target. ESC received the groundwater samples in good condition at 3.4 degrees Celsius.

**Table F-4: Sample Containers, Preservation, and Holding Times**

| Parameter | EPA Method Number | Sample Size/Container | Preservation | Extraction Holding Time | Analysis Holding Time |
|---|---|---|---|---|---|
| VOCs[1] | EPA 8260B (GW)[2] | 3 x 40ml amber VOA[3] vial, PFTE[4] septa cap | 4°C, pH <2 with HCl[5] or 4 mg[6] $NH_4CL$ | NA[7] | 14 days |
| | EPA 8011 (GW) | 3 x 40ml clear VOA vial, PFTE septa cap | 3 mg Sodium Thiosulfate | 7 days | 14 days |
| | EPA 5035/8260B (Soil) | 3 x 40ml amber VOA vial, 2 oz. glass jar | Sodium Bisulfate/methanol 0-4°C | NA | 14 days |
| | TO-15 Low Level | 1 x 1-Liter Summa | None | NA | 15 days |
| PAHs[8] | EPA 8270C-SIM (GW) | 3 x 40ml amber VOA vial, PFTE septa cap | Cooled to 4°C | 7 days | 40 days |
| | EPA 8270C-SIM (Soil) | 2 x 100mL amber glass jars | 0-4ºC | 14 days | 40 days |
| PPMs[9] | EPA 6010/7470 (Soil) | 4 oz. glass jar | 0-4ºC | NA | 6 months/ 28 days (Hg[10]) |
| | EPA 6010/7471 (GW) | 500-ml polyethylene | 0-4ºC | NA | 6 months/ 28 days (Hg) |

Notes:

1. VOCs – Volatile Organic Compounds
2. GW – Groundwater
3. VOA – Volatile organic analyses
4. PFTE – Polytetrafluoroethylene
5. HCL – Hydrochloric acid
6. mg - milligrams
7. NA – Not applicable
8. PAHs – Polycyclic aromatic hydrocarbons
9. PPMs – Priority pollutant metals
10. Hg - Mercury

#### 1.1.1 Sample Identification

Sample labels were securely affixed to each sample container. Sample labels included the following information:

- Project Number;


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- Sample Identification Number; and
- Date and time the sample was collected.

### *1.2 Completeness*

Upon reviewing the requested and reported analyses, laboratory documentation, data qualifiers, reporting limits relative to regulatory target concentrations, sample preservation and condition upon laboratory receipt; the data is complete. Data supporting completeness such as: chain-of-custody forms, laboratory analytical, and quality assurance data are provided in report Appendix E.

## 2. Laboratory Quality Control

The selected analytical laboratory performed the requested analyses and provided analytical results in both electronic and hard copy formats with the original laboratory data qualifiers and definitions per ***SW-846*** and ***CWA*** methods. Data validation qualifiers for individual analyte results were applied by assessing reported results above and below the PQL or Reported Detection Limit (RDL), as well as laboratory quality control recoveries, relative to regulatory criteria.

STRATA requests the laboratory report analytical data in PQL/MDL format. The PQL is the lowest standard on the calibration curve and the lowest level that can be reliably achieved within the established limits of precision and accuracy. The MDL is the minimum concentration of a substance that can be analyzed with 99 percent confidence that the analyte concentration is greater than zero. The advantage of reporting in this format is that RUSLs for some analytes are below the PQL, and the MDL provides a lower concentration for comparison. Samples reported below the PQL, but above the MDL receive the data qualifier 'J.'

### *2.1 Data Qualifiers*

The following qualifiers were used to modify the data quality and usefulness of individual analytical results.

**Table F-5: Data Qualifiers**

| | |
|---|---|
| J | Estimated value below the lowest calibration point. Confidence correlates with concentration. |
| J2 | Surrogate recovery limits have been exceeded; values are outside lower control limit. |
| J3 | The associated batch QC was outside the established quality control range for precision. |
| J4 | The associated batch QC was outside the established quality control range for accuracy. |
| J6 | The sample matrix interfered with the ability to make any accurate determination; spike value is low. |
| J7 | Surrogate recovery cannot be used for control limit evaluation due to dilution. |
| Q | (Eurofins) Exceeds quality control limits |
| V/V3 | (ESC) – Additional QC info: The internal standard exhibited poor recovery due to sample matrix interference. The analytical results will be biased high. BDL results will be unaffected. |


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## 2.2 SOIL LABORATORY CONTROL SAMPLES

### 2.2.1 Laboratory Blank Sample Analysis

Soil analytes were not detected in laboratory blank samples above the method blank reporting limit.

### 2.2.2 Laboratory Control and Laboratory Control Duplicate Samples

Methyl tert butyl ether and 1,2,3-trichlorobenzene percent recoveries were below the established limit and received a 'J4' qualifier indicating the associated batch quality control was outside the established quality control range for accuracy. The low recovery did not affect the control sample and control sample duplicate Relative Percent Differences (RPDs), which were within the required limit. The data was not rejected. Additionally, 1,2-dibromo-3-chloropropane, acrylonitrile, and dichlorodifluoromethane RPDs exceeded the established limits and received a 'J3' qualifier. The 'J3' qualifier indicates the associated batch quality control was outside the established quality control range for precision. The analytes were not detected in the samples, and are not considered target contaminants for the site; the data was not rejected.

The remaining soil analytes were detected in laboratory control and laboratory control duplicate samples within established criteria.

### 2.2.3 Laboratory Matrix Spike and Matrix Spike Duplicate Samples

The laboratory performed a matrix spike analysis on laboratory sample number L779930-03 (Sample ID DU1 S-3). Matrix spike and matrix spike duplicate mercury and zinc percent recoveries were below established criteria. The analytes received the 'J6' qualifier indicating the sample matrix interfered with the ability to make an accurate analytical determination; spike value is low. Low percent recoveries may be influenced by matrix-influenced low bias. Mercury and zinc were both detected above the MDLs/PQLs in DU1 S-3, thus the data was not rejected.

### 2.2.4 Dilution

The tables below identify VOC and PAH soil samples diluted due to matrix interferences, elevating the detection limits.


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**Table F-6. Method 8260 Sample Dilution**

| Dilution Factor | Laboratory Sample No. | STRATA Sample No. | PQL Exceeds RUSL | MDL Exceeds RUSL |
|---|---|---|---|---|
| >20 | L779930-02<br>L779930-03<br>L779930-04<br>L779930-14<br>L779930-15<br>L779930-16<br>L779930-11<br>L779930-12<br>L779930-22<br>L779930-24 | DU2 S-2<br>DU2 S-3<br>DU3 S-1<br>DU3 S-2<br>DU3 S-3<br>DU3 S-4<br>B-3<br>B-4<br>B-10<br>B-12 | Acrylonitrile<br>Benzene<br>Bromodichloromethane<br>Bromomethane<br>Carbon tetrachloride<br>Chloroethane<br>Chloroform<br>Chloromethane<br>1,2-Dibromo-3-chloropropane<br>1,2-Dibromoethane (EDB)<br>1,2-Dichloroethane (EDC)<br>1,2-Dichloropropane<br>cis-1,3-dichloropropene,<br>trans-1,3-dichloropropene<br>Methylene chloride<br>Naphthalene<br>1,1,2,2-tetrachloroethane<br>1,1,2-trichloroethane<br>Trichloroethene<br>1,2,3-trichloropropane<br>Vinyl chloride | Acrylonitrile<br>Bromodichloromethane<br>1,2-Dibromo-3-chloropropane<br>EDB<br>1,1,2,2-tetrachloroethane<br>1,2,3-trichloropropane |
| >30 | L779930-01<br>L779930-09<br>L779930-23<br>L779930-25 | DU1 S-1<br>B-1<br>B-11<br>B-13 | **Analytes listed above plus**:<br>Tetrachlorethene | **Analytes listed above plus**:<br>Chloroform<br>1,2-Dichloropropane<br>cis-1,3-dichloropropene,<br>trans-1,3-dichloropropene<br>Methylene chloride<br>Trichloroethene<br>Vinyl chloride |
| >40 | L779930-02<br>L779930-03<br>L779930-10 | DU1 S-2<br>DU1 S-3<br>B-2 | **Analytes listed above plus**:<br>1,1-Dichloroethane | **Analytes listed above plus**:<br>Bromomethane<br>Carbon tetrachloride |
| >50 | L779930--04 | DU2 S-1 | **Analytes listed above plus**<br>Hexachloro-1,3-butadiene, | **Analytes listed above plus**<br>EDC<br>1,1,2-Trichloroethane, |

Based on the table above, analyte PQLs elevated above the regulatory levels remain within the MDL evaluation range and were not rejected. Those analytes with elevated PQLs and MDLs exceeding the regulatory levels due to deficiencies in instrumentation technology, such as acrylonitrile, EDB, 1,2,3-trichloropropane, 1,2-dibromo-3-chloropropane were identified in the QAPP and were not considered COCs with respect to the site, based on previous site investigation analytical results. For those analytes with elevated PQLs and MDLs exceeding the regulatory levels and not identified in the QAPP, the increased uncertainty related to the data is lessened due to non-detection of a listed analyte in a comparable soil matrix and/or duplicate. Though there is uncertainty in the data and cannon be used for comparison with regulatory levels, it was not rejected for risk evaluation use.


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**Table F-6A. Method 8270 Sample Dilution**

| Dilution Factor | Laboratory Sample No. | STRATA Sample No. | PQL Exceeds RUSL | MDL Exceeds RUSL |
|---|---|---|---|---|
| 2 | L779930-25<br>L779930-26 | B-13<br>B-13D | None | None |
| 5 | L779930-10<br>L779930-13<br>L779930-14<br>L779930-20<br>L779930-21<br>L779930-23 | B-2<br>B-6<br>DU3 S-2<br>B-9<br>TW-3-1<br>B-11 | Benzo(a)pyrene | None |
| 10 | L779930-15<br>L779930-16 | DU3 S-3<br>DU3 S-4 | Benzo(a)pyrene,<br>Dibenz(a,h)anthracene<br>Naphthalene | None |
| 20 | L779930-01<br>L779930-02<br>L779930-03<br>L779930-04<br>L779930-05<br>L779930-06<br>L779930-07<br>L779930-09 | DU1 S-1<br>DU1 S-2<br>DU1 S-3<br>DU2 S-1<br>DU2 S-2<br>DU2 S-3<br>DU3 S-1<br>B-1 | Benzo(a)anthracene,<br>Benzo(a)pyrene,<br>Dibenz(a,h)anthracene<br>Naphthalene | None |

The diluted EPA Method 8270C-SIM detection limits did not elevate the MDLs above the RUSLs or IDTLs, and the data was not rejected.

### 2.2.5 Surrogate Recovery

VOC and PAH surrogate analyte recoveries were diluted due to matrix interferences and the detection limits were elevated.

**Table F-7: Surrogate Recovery**

| Laboratory Sample ID | STRATA Sample ID | EPA Method | Surrogate | Laboratory Qualifier |
|---|---|---|---|---|
| L779930-13 | B-6 | 8260B | 4-bromofluorobenzene | J2 |
| L779930-01 | DU1 S-1 | 8270C-SIM | Nitrobenzene-d5<br>2-fluorobiphenyl<br>p-terphenyl-d14 | J7 |
| L779930-02 | DU1 S-2 | | | |
| L779930-03 | DU1 S-3 | | | |
| L779930-04 | DU2 S-1 | | | |
| L779930-05 | DU2 S-2 | | | |
| L779930-06 | DU2 S-3 | | | |
| L779930-07 | DU3 S-1 | | | |
| L779930-09 | B-1 | | | |
| L779930-08 | B-TW-1 | 8270C-SIM | 2-fluorobiphenyl | J2 |

The EPA Method 8260 surrogate 4-bromofluorobenzene and 8270C-SIM surrogate 2-fluorobiphenyl recovery limits were low, and values were below the lower control limits. Low surrogate recovery suggests matrix-influenced low bias. The surrogates received a 'J2' qualifier, and the datum could be used for risk evaluation purposes despite the low bias; the datum was not rejected


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The 'J7' qualifier indicates the sample dilution influenced surrogate recovery and the data cannot be used for control limit evaluation.

## 2.3 GROUNDWATER LABORATORY CONTROL SAMPLES

### 2.3.1 Laboratory Blank Sample Analysis

Groundwater analytes were not detected in laboratory blank samples above the method blank reporting limit.

### 2.3.2 Laboratory Control and Laboratory Control Duplicate Samples

Laboratory work group number WG806501 laboratory control sample acrolein percent recovery exceeded established criteria. The analyte received the 'J4' qualifier indicating the laboratory control sample concentration was outside established control limits for precision. The analyte was not detected and despite potential imprecision, the datum was not rejected for risk evaluation.

### 2.3.3 Laboratory Matrix Spike and Matrix Spike Duplicate Samples

The laboratory matrix spike and matrix spike duplicate samples were within established criteria.

### 2.3.4 Dilution

The samples were not diluted for analysis.

### 2.3.5 Surrogate Recovery

Groundwater surrogate analyte recoveries were within established criteria.

## 2.4 SOIL VAPOR LABORATORY CONTROL SAMPLES

### 2.4.1 Laboratory Blank

Soil vapor analytes were not detected in the laboratory blank sample above method blank reporting limits.

### 2.4.2 Continuing Calibration Verification

Calibration verification for soil vapor analytes was within established criteria as modified for the TO-15 LL application, with the exception of alpha-Chlorotoluene, which exceeded the quality control limit. Alpha-Chlorotoluene was not detected in the sample and is not considered a target analyte for the site. The data was not rejected for risk evaluation purposes.

### 2.4.3 Laboratory Control and Laboratory Control Duplicate VOCs Soil Vapor Samples

Chloromethane, vinyl chloride, chloroethane, ethanol, acetone, 2-propanol, methylene chloride, 4-methyl-2-pentanone, and 2-hexanone percent recovery in laboratory control and


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laboratory control duplicate samples were outside established criteria, and received a 'Q' qualifier. The high recoveries represent high bias for the reported analytes; despite the high bias the analytes were not detected in the samples. High recovery in the laboratory control sample and duplicate sample is not considered detrimental to data quality when sample compounds are non-detect. The data was not rejected for use in risk evaluation.

#### 2.4.4 Dilution

The soil vapor samples had a dilution factor ranging between 12.9 and 21.6, above the anticipated laboratory dilution factor of 2.64. Dilution was performed due to the presence of high level target analytes (i.e. Freon 11/trichlorofluoromethane). Sample dilution elevated the MDLs above the VISLs and EPA RSLs in the following analytes:

| | |
|---|---|
| Vinyl chloride | Dibromochloromethane |
| 1,3-Butadiene | 1,2-Dibromoethane (EDB) |
| 1,1-Dichloroethane | Ethylbenzene |
| Chloroform | Naphthalene |
| Carbon Tetrachloride | Bromoform |
| Benzene | 1,1,2,2-Tetrachloroethane |
| 1,2-Dichloroethane (EDC) | 1,4-Dichlorobenzene |
| Trichloroethene | 1,2,4-Trichlorobenzene |
| 1,2-Dichloropropane | Hexachlorobutadiene |
| 1,4-Dioxane | cis-1,3-dichloropropane |
| Bromodichloromethane | 1,1,2-Trichloroethane |

The elevated detection levels exceed the VISLs and RSLs by, in most cases, orders of magnitude. The analytes were not detected in the samples. Due to this, evaluating whether the analytes are present in the soil vapor sample and comparable to regulatory screening levels is not attainable. The data was rejected.

## 3. FIELD CONTROL SAMPLES

### *3.1 TRIP BLANK*

A trip blank water sample was transported with field soil and groundwater samples and submitted for analysis. VOC analytes were not detected in the trip blank samples.

### *3.2 DUPLICATE SAMPLES*

Duplicate soil samples were collected from DU#1, DU#2, DU#3 MI samples, and discrete soil borehole B-13. A groundwater duplicate was collected from sample location TW-4, and a soil vapor duplicate was collected from sample location VP-1. Analyte concentrations highlighted gray in the tables below (F-8 through F-13) were non-detect, 'J' qualified, and/or less than 5 times the PQL, and RPDs cannot be accurately evaluated (***EPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review, October, 2004***).


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**Table F-8: Field Duplicates RPD[1] – Soil Sample DU1 S-1 and S-3**

| Analyte | DU1 S-1 (mg/kg)[2] | DU1 S-3 (mg/kg) | RPD | RUSL/IDTL[3] (mg/kg) |
|---|---|---|---|---|
| Arsenic | 7.5 | 10 | 28.5% | 0.391 |
| Beryllium | 0.52 | 0.50 | 3.9% | 1.63 |
| Cadmium | 0.67 | 0.34(J) | 65.3% | 1.35 |
| Chromium | 8.1 | 8.3 | 2.4% | 2,130 |
| Copper | 8.6 | 9.3 | 7.8% | 921 |
| Lead | 52 | 53 | 1.9% | 49.6 |
| Mercury | 0.38 | 0.45 | 16.8% | 0.00509 |
| Nickel | 4.9 | 5.5 | 11.5% | 59.1 |
| Zinc | 190 | 120 | 45.1% | 886 |
| Anthracene | 0.067(J) | 0.26 | 118% | 3,200 |
| Acenaphthene | <0.012 | 0.022(J) | 58.8% | 200 |
| Benzo(a)anthracene | 0.014(J) | 0.29 | 181% | 0.09 |
| Benzo(a)pyrene | 0.12(J) | 0.25 | 70.2% | 0.02 |
| Benzo(b)fluoranthene | 0.17 | 0.40 | 80.7% | 0.19 |
| Benzo(g,h,i)perylene | 0.094(J) | 0.18 | 62.7% | 1,180 |
| Benzo(k)fluoranthene | 0.075(J) | 0.11 | 37.8% | 1.9 |
| Chrysene | 0.18 | 0.42 | 80% | 9.5 |
| Dibenz(a,h)anthracene | 0.022(J) | 0.042 | 62.5% | 0.0422 |
| Fluoranthene | 0.30 | 0.72 | 82.3% | 1,400 |
| Fluorene | <0.012 | 0.028 | 80% | 240 |
| Indeno(1,2,3-cd)pyrene | 0.078(J) | 0.16 | 68.9% | 0.422 |
| Phenanthrene | 0.16 | 0.37 | 79.2% | 79 |
| Pyrene | 0.35 | 0.86 | 84.3% | 1,000 |

Notes: 1. RPD – Relative Percent Difference
2. mg/kg – milligrams per kilogram
3. RUSL/IDTL – DEQ Residential Use Screening Level/Initial Default Target Level
4. PQL – Practical Quantitative Limit
5. NC – Not calculated
#.### - Concentrations is 'non-detect' or 'J' qualified.

Duplicate soil sample DU1 S-1 and S-3 RPDs were below 50% for arsenic, beryllium, chromium, copper, lead, mercury, nickel, zinc, and benzo(k)fluoranthene, an acceptable level of precision per the project QAPP. The remaining listed duplicate analyte RPDs exceeded 50%; however, most of the reported concentrations are either non-detect or 'J' qualified. 'J'-qualified data is reported below the PQL/RDL and is an estimate. Estimated data may not be relied upon for precision or accuracy, and therefore does not support RPD evaluation. The data may be used to evaluate site risk. Fluoranthene concentrations exceeded 50% and are not 'non-detect' or 'J' qualified. The discrepancy in the duplicate RPD results suggests a high degree of heterogeneity in the sample matrix; however, the majority of the analyte duplicate RPDs in this sample are within established parameters which suggest a homogenous matrix. Additionally, the sample concentrations for this analyte are within the same order of magnitude. Though


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there is uncertainty for this analyte resulting from the RPD exceedance, this data is accepted for use.

**Table F-9: Field Duplicates RPD – Soil Sample DU2 S-1 and S-3**

| Analyte | DU2 S-1 (mg/kg)[2] | DU2 S-3 (mg/kg) | RPD | RUSL/IDTL (mg/kg) |
|---|---|---|---|---|
| Naphthalene (8260) | 0.070(J) | 0.036(J) | 64.1% | 11.8 |
| Toluene | 0.027(J) | <0.011 | 84.2% | 6.6 |
| 1,2,4-Trimethylbenzene | 0.026(J) | 0.0076(J) | 109% | 0.193 |
| 1,2,3-Trimethylbenzene | 0.023(J) | <0.0076 | 100% | 63 |
| Total Xylenes | 0.054(J) | <0.018 | 100% | 27 |
| Arsenic | 7.3 | 5.8 | 22.9% | 0.391 |
| Beryllium | 0.52 | 0.48 | 8.0% | 1.63 |
| Cadmium | 0.47(J) | 0.54(J) | 13.8% | 1.35 |
| Chromium | 9.4 | 7.7 | 19.8% | 2,130 |
| Copper | 21 | 21 | 0% | 921 |
| Lead | 120 | 150 | 22.2% | 49.6 |
| Mercury | 0.24 | 0.24 | 0% | 0.00509 |
| Nickel | 6.8 | 5.4 | 22.9% | 59.1 |
| Zinc | 170 | 210 | 21.0% | 886 |
| Anthracene | 0.017(J) | 0.023(J) | 30% | 3,200 |
| Benzo(a)anthracene | 0.072(J) | 0.095(J) | 27.5% | 0.09 |
| Benzo(a)pyrene | 0.091(J) | 0.12(J) | 27.4% | 0.02 |
| Benzo(b)fluoranthene | 0.11(J) | 0.14 | 24% | 0.19 |
| Benzo(g,h,i)perylene | 0.081(J) | 0.096(J) | 16.9% | 1,180 |
| Benzo(k)fluoranthene | 0.046(J) | 0.045(J) | 2.2% | 1.9 |
| Chrysene | 0.096(J) | 0.12(J) | 22.2% | 9.5 |
| Dibenz(a,h)anthracene | 0.016(J) | 0.016(J) | 0% | 0.0422 |
| Fluoranthene | 0.13(J) | 0.22 | 51.4% | 1,400 |
| Indeno(1,2,3-cd)pyrene | 0.062(J) | 0.072(J) | 14.9% | 0.422 |
| Phenanthrene | 0.076(J) | 0.13(J) | 52.4% | 79 |
| Pyrene | 0.15 | 0.24 | 46.1% | 1,000 |


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Duplicate soil sample DU2 S-1 and S-3 RPDs were below 50% for arsenic, beryllium, cadmium, chromium, copper, lead, mercury, nickel, zinc, anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, dibenz(a,h)pyrene, indeno(1,2,3-cd)pyrene, and pyrene, an acceptable level of precision per the project QAPP. The remaining listed duplicate analyte RPDs exceeded 50%; however, the reported concentrations are either non-detect or 'J' qualified. The data may be used to evaluate site risk.

**Table F-10: Field Duplicates RPD – Soil Sample DU3 S-1 and S-4**

| Analyte | DU3 S-1 (mg/kg) | DU3 S-4 (mg/kg) | RPD | RUSL/IDTL (mg/kg) | 5x DU3 S-1 & S-4 PQL |
|---|---|---|---|---|---|
| Naphthalene (8260) | 0.036(J) | <0.026 | 32.2% | 0.12 | NC |
| 1,2,4-Trimethylbenzene | 0.0076(J) | <0.0054 | 33.8% | 0.193 | NC |
| Antimony | 1.4(J) | 3.5 | 85.7% | 4.77 | NC |
| Arsenic | 8.6 | 11 | 24.4% | 0.391 | NC |
| Beryllium | 0.36 | 0.32 | 11.7% | 1.63 | NC |
| Cadmium | 0.51(J) | 0.76 | 39.3% | 1.35 | NC |
| Chromium | 6.8 | 10 | 38.1% | 2,130 | NC |
| Copper | 170 | 510 | 100% | 921 | 11 |
| Lead | 110 | 220 | 66% | 49.6 | 2.8 |
| Mercury | 0.33 | 1.0 | 100.7% | 0.00509 | 0.11 |
| Nickel | 8.3 | 10 | 18.5% | 59.1 | NC |
| Zinc | 110 | 220 | 66.6% | 886 | 28 |
| Anthracene | 0.16 | 0.15 | 6.4% | 3,200 | NC |
| Acenaphthene | 0.040(J) | 0.041(J) | 2.4% | 200 | NC |
| Benzo(a)anthracene | 1.3 | 1.3 | 0% | 0.09 | NC |
| Benzo(a)pyrene | 2.0 | 1.6 | 22.2% | 0.02 | NC |
| Benzo(b)fluoranthene | 3.1 | 2.2 | 33.9% | 0.19 | NC |
| Benzo(g,h,i)perylene | 2.0 | 1.3 | 42.4% | 1,180 | NC |
| Benzo(k)fluoranthene | 0.93 | 0.62 | 40% | 1.9 | NC |
| Chrysene | 1.8 | 1.5 | 18.1% | 9.5 | NC |
| Dibenz(a,h)anthracene | 0.48 | 0.32 | 40% | 0.0422 | NC |
| Fluoranthene | 1.9 | 2.1 | 10% | 1,400 | NC |
| Fluorene | 0.041(J) | 0.036(J) | 12.9% | 240 | NC |
| Indeno(1,2,3-cd)pyrene | 1.6 | 1.0 | 46.1% | 0.422 | NC |
| Naphthalene | 0.067(J) | 0.040(J) | 50.4% | 0.12 | NC |
| Phenanthrene | 0.54 | 0.73 | 29.9% | 79 | NC |
| Pyrene | 2.0 | 2.1 | 4.8% | 1,000 | NC |
| 1-Methylnaphthalene | <0.040 | 0.024(J) | 50% | 18 | NC |
| 2-Methylnaphthalene | <0.040 | 0.029(J) | 31.8% | 3.31 | NC |

Duplicate soil sample DU3 S-1 and S-4 RPDs were below 50% for naphthalene, 1,2,4-trimethylbenzene, arsenic, beryllium, chromium, nickel, anthracene, acenaphthene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, fluoranthene, fluorene, indeno(1,2,3-


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cd)pyrene, phenanthrene, pyrene, and 2-methylnaphthalene, an acceptable level of precision per the project QAPP. The remaining listed duplicate analyte RPDs exceeded 50%; however, most of the reported concentrations are either non-detect or 'J' qualified. The data may be used to evaluate site risk. Copper, lead, mercury, and zinc concentrations exceeded 50% and are not 'non-detect' or 'J' qualified. The discrepancy in the duplicate RPD results suggests a high degree of heterogeneity in the sample matrix; however, the majority of the analyte duplicate RPDs in this sample are within established parameters which suggest a homogenous matrix. Though there is uncertainty for these four analytes resulting from the RPD exceedance, this data is accepted for use.

**Table F-11: Field Duplicates RPD – Soil Sample B-13/13D**

| Analyte | B-13 (mg/kg) | B-13D (mg/kg) | RPD | RUSL/IDTL (mg/kg) |
|---|---|---|---|---|
| Arsenic | 8.7 | 10 | 13.9% | 0.391 |
| Beryllium | 0.61 | 0.35 | 54.1% | 1.63 |
| Cadmium | 0.33(J) | 0.34(J) | 2.9% | 1.35 |
| Chromium | 17 | 15 | 12.5% | 2,130 |
| Copper | 22 | 17 | 25.6% | 921 |
| Lead | 44 | 44 | 0% | 49.6 |
| Mercury | 0.060 | 0.070 | 15.3% | 0.00509 |
| Nickel | 14 | 11 | 24% | 59.1 |
| Zinc | 100 | 95 | 5.1% | 886 |
| Anthracene | 0.02 | 0.02 | 0% | 3,200 |
| Acenaphthene | 0.0021(J) | 0.0026(J) | 21.2% | 200 |
| Acenaphthylene | 0.0018(J) | 0.0014(J) | 25% | 78 |
| Benzo(a)anthracene | 0.094 | 0.082 | 13.6% | 0.09 |
| Benzo(a)pyrene | 0.20 | 0.17 | 16.2% | 0.02 |
| Benzo(b)fluoranthene | 0.21 | 0.19 | 10% | 0.19 |
| Benzo(g,h,i)perylene | 0.18 | 0.15 | 18.1% | 1,180 |
| Benzo(k)fluoranthene | 0.058 | 0.049 | 16.8% | 1.9 |
| Chrysene | 0.13 | 0.12 | 8% | 9.5 |
| Dibenz(a,h)anthracene | 0.038 | 0.033 | 14% | 0.0422 |
| Fluoranthene | 0.15 | 0.0051(J) | 186% | 1400 |
| Fluorene | 0.0041(J) | 0.13 | 187% | 240 |
| Indeno(1,2,3-cd)pyrene | 0.15 | 0.017(J) | 159% | 0.422 |
| Naphthalene | 0.020(J) | 0.017 | 16.2% | 0.12 |
| Phenanthrene | 0.036 | 0.043 | 17.7% | 79 |
| Pyrene | 0.22 | 0.21 | 4.6% | 1,000 |
| 2-Methylnaphthalene | 0.0063(J) | 0.0061(J) | 3.2% | 3.31 |

Duplicate soil sample B-13/B-13D RPDs were below 50% for arsenic, cadmium, chromium, lead, mercury, nickel, zinc, anthracene, acenaphthene, acenaphthylene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene,


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benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, naphthalene, phenanthrene, pyrene, and 2-methylnaphthalene; an acceptable level of precision per the project QAPP. The remaining listed duplicate analyte RPDs exceeded 50%; however, most of the reported concentrations are either non-detect or 'J' qualified, and may be used to evaluate site risk. Beryllium concentrations exceeded 50% and are not 'non-detect' or 'J' qualified. The discrepancy in the duplicate RPD results suggests a high degree of heterogeneity in the sample matrix; however, the majority of the analyte duplicate RPDs in this sample are within established parameters which suggest a homogenous matrix. Though there is uncertainty for this analyte resulting from the RPD exceedance, this data is accepted for use.

**Table F-12: Field Duplicates RPD[1] – Groundwater**

| Analyte | MW-4 (mg/l)[2] | MW-4D (mg/l) | RPD | RUSL/IDTL[3] (mg/l) |
|---|---|---|---|---|
| Antimony | 0.00084(J) | 0.0011(J) | 26.8% | 0.006 |
| Arsenic | 0.0018(J) | 0.0020 | 10.5% | 0.01 |
| Chromium | 0.0056(J) | 0.0055(J) | 1.8% | 0.1 |
| Copper | 0.0062(J) | 0.0081(J) | 26.5% | 1.3 |
| Lead | 0.0064 | 0.0078 | 19.7% | 0.015 |
| Mercury | 0.000068(J) | 0.000072(J) | 5.7% | 0.002 |
| Zinc | 0.015(J) | 0.015(J) | 0% | 3.13 |
| 1,1,1-Trichlorethane | 0.00042(J) | 0.00040(J) | 4.8% | 0.2 |
| Trichlorofluoromethane | 0.0084 | 0.0080 | 4.8% | 2.05 |
| Benzo(a)anthracene | 0.0000061(J) | 0.0000066(J) | 7.8% | 0.00003 |
| Phenanthrene | 0.000016(J) | 0.000016(J) | 0% | 0.313 |
| 2-Methylnaphthalene | 0.000010(J) | 0.000010(J) | 0% | 0.00104 |

Notes:
1. RPD – Relative Percent Difference
2. mg/l – milligrams per liter
3. RUSL – Residential Use Screening Level/Initial Default Target Level
4. PQL – Practical Quantitative Limit in mg/l.
5. NE – Not established

Gray – Values are 'J' qualified.

Duplicate groundwater sample RPDs for were below 20 percent, an acceptable level of precision per the project QAPP; with the exception of antimony and copper which exceeded 20 percent. However, the reported antimony and copper concentrations are 'J'-qualified. 'J'-qualified data is reported below the PQL/RDL and is an estimate. Estimated data may not be relied upon for precision or accuracy, and therefore does not support RPD evaluation. The data may be used to evaluate site risk.

**Table F-13: Field Duplicates RPD – Soil Vapor**

| Analyte | VP-1 (µg/m$^3$) | VP-1D (µg/m$^3$) | RPD | EPA RSL |
|---|---|---|---|---|
| Freon 11 | 210,000 | 200,000 | 4.8% | NE |

Duplicate soil vapor sample RPDs for Freon 11 were below 20 percent, an acceptable level of precision per the project QAPP.


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## 4. DATA ASSESSMENT

Data review was performed by STRATA's Project Quality Assurance Manager independent of the analytical laboratory and not directly involved in the project. This is to certify I have examined the analytical data referencing the STRATA QAPP (STRATA, 2015), and Stage 2A Validation Electronic and Manual, S2AVEM per ***Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use, EPA, January 13, 2009***, and based on the information provided to me by the laboratory, in my professional judgment, the data are acceptable for use.

Travis J. Wambeke, P.E. P.G.
Project Quality Assurance Manager

## 5. References

EPA, 2009. Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use (540-R-08-005), January 2009.

STRATA, 2015, Quality Assurance Project Plan, Site Investigation and Sampling Analysis, Proposed 'The Afton' Development, 620 S. 9th Street, Boise, Idaho, July 23, 2015. Authorized by DEQ on July 23, 2015.


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# Table F-1: Sample Summary

| Matrix | Field Sample Identification | Laboratory Sample Identification | Date Collected | Date Analyzed | Analytical Laboratory |
|---|---|---|---|---|---|
| Soil | DU1 S-1 | L779930-01 | 07/29/15 | 08/04/15, 08/07/15, 0810/15 | Environmental Science Corporation 12065 Lebanon Road Mt. Juliet, Tennessee |
| | DU1 S-2 | L779930-02 | 07/29/15 | 08/04/15, 08/07/15, 0810/15 | |
| | DU1 S-3 | L779930-03 | 07/29/15 | 08/04/15, 08/07/15, 0810/15 | |
| | DU2 S-1 | L779930-04 | 07/29/15 | 08/04/15, 08/07/15, 0810/15 | |
| | DU2 S-2 | L779930-05 | 07/29/15 | 08/04/15, 08/07/15, 0810/15 | |
| | DU2 S-3 | L779930-06 | 07/29/15 | 08/04/15, 08/07/15, 0810/15 | |
| | DU3 S-1 | L779930-07 | 07/30/15 | 08/02/15, 08/04/15, 08/07/15, 0810/15 | |
| | DU3 S-2 | L779930-14 | 07/30/15 | 08/02/15, 08/05/15, 08/07/15, 08/10/15 | |
| | DU3 S-3 | L779930-15 | 07/30/15 | 08/02/15, 08/05/15, 08/07/15, 08/10/15 | |
| | DU3 S-4 | L779930-14 | 07/30/15 | 08/02/15, 08/05/15, 08/07/15, 08/10/15 | |
| | B-TW-1 | L779930-08 | 07/27/15 | 08/02/15, 08/04/15, 08/09/15, 08/10/15 | |
| | B-1 | L779930-09 | 07/29/15 | 08/02/15, 08/04/15, 08/07/15, 08/10/15 | |
| | B-2 | L779930-10 | 07/29/15 | 08/02/15, 08/05/15, 08/07/15, 08/10/15 | |
| | B-3 | L779930-11 | 07/29/15 | 08/02/15, 08/05/15, 08/07/15, 08/09/15 | |
| | B-4 | L779930-12 | 07/29/15 | 08/02/15, 08/05/15, 08/07/15, 08/09/15 | |
| | TW-3-1 | L779930-21 | 07/29/15 | 08/02/15, 08/04/15, 08/05/15, 08/10/15 | |
| | B-6 | L779930-13 | 07/29/15 | 08/02/15, 08/05/15, 08/07/15, 08/10/15 | |
| | B-7 | L779930-18 | 07/29/15 | 08/02/15, 08/05/15, 08/07/15, 08/09/15 | |
| | B-8 | L779930-19 | 07/29/15 | 08/02/15, 08/05/15, 08/07/15, 08/09/15 | |
| | B-9 | L779930-20 | 07/29/15 | 08/02/15, 08/05/15, 08/07/15, 08/10/15 | |
| | B-10 | L779930-22 | 07/29/15 | 08/02/15, 08/04/15, 08/05/15, 08/07/15 | |
| | B-11 | L779930-23 | 07/29/15 | 08/02/15, 08/04/15, 08/05/15, 08/07/15 | |
| | B-12 | L779930-24 | 07/29/15 | 08/02/15, 08/04/15, 08/05/15, 08/07/15 | |
| | B-13 | L779930-25 | 07/29/15 | 08/02/15, 08/04/15, 08/05/15, 08/07/15 | |
| | B-13D | L779930-26 | 07/29/15 | 08/02/15, 08/04/15, 08/05/15, 08/07/15 | |

| Matrix | Field Sample Identification | Laboratory Sample Identification | Date Collected | Date Analyzed | Analytical Laboratory |
|---|---|---|---|---|---|
| Groundwater | TW-1 | L780238-01 | 07/31/15 | 08/02/15, 08/04/15, 08/05/15, 08/06/15, 08/07/15 | Environmental Science Corporation 12065 Lebanon Road Mt. Juliet, Tennessee |
| | TW-2 | L780238-02 | 07/31/15 | 08/02/15, 08/04/15, 08/05/15, 08/06/15, 08/07/15 | |
| | TW-3 | L780238-03 | 07/31/15 | 08/02/15, 08/04/15, 08/05/15, 08/06/15, 08/07/15 | |
| | TW-4 | L780238-04 | 07/31/15 | 08/03/15, 08/04/15, 08/05/15, 08/06/15, 08/07/15 | |
| | TW-4D | L780238-05 | 07/31/15 | 08/03/15, 08/04/15, 08/05/15, 08/06/15, 08/07/15 | |
| Soil Vapor | VP-1 | 1507528-01A | 07/29/15 | 8/12/15 | Eurofins/Air Toxics 150 Blue Ravine Road, Suite B Folsom, California |
| | VP-1D | 1507528-02A | 07/29/15 | 08/12/15 | |
| | VP-2 | 1507528-03A | 07/29/15 | 08/11/15 | |

**TABLE F-2**
**Laboratory Reporting Limits**
**Soil Samples**

Preferred Laboratory: ESC, 12065 Lebanon Road, Mt. Juliet, TN, 37122

| Matrix | Parameter | Method | Technique | Parameter | MDL[1] | PQL[2] | RUSL/IDTL[3] | ReportingUnits |
|---|---|---|---|---|---|---|---|---|
| Soil | VOC[4] | EPA 8260B | Purge & Trap Gas Chromatograph/ Mass Spectrometry (GC/MS) | Dichlorodifluoromethane | 0.00043 | 0.0058 | 2.96 | mg/kg[5] |
| Soil | VOC | EPA 8260B | | Chloromethane | 0.001 | 0.0029 | 0.0231 | mg/kg |
| Soil | VOC | EPA 8260B | | Vinyl chloride | 0.00052 | 0.0012 | 0.00963 | mg/kg |
| Soil | VOC | EPA 8260B | | Bromomethane | 0.0016 | 0.0058 | 0.0501 | mg/kg |
| Soil | VOC | EPA 8260B | | Chloroethane | 0.002 | 0.0058 | 0.0533 | mg/kg |
| Soil | VOC | EPA 8260B | | Trichlorofluoromethane | 0.0007 | 0.0058 | 10.4 | mg/kg |
| Soil | VOC | EPA 8260B | | 1,1-Dichloroethene | 0.00053 | 0.0012 | 0.0388 | mg/kg |
| Soil | VOC | EPA 8260B | | 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.00085 | 0.0012 | NE[6] | mg/kg |
| Soil | VOC | EPA 8260B | | Acetone | 0.01 | 0.058 | 17.4 | mg/kg |
| Soil | VOC | EPA 8260B | | Methylene chloride | 0.00049 | 0.0058 | 0.0169 | mg/kg |
| Soil | VOC | EPA 8260B | | Acrylonitrile | 0.0026 | 0.012 | 0.000194 | mg/kg |
| Soil | VOC | EPA 8260B | | trans-1,2-Dichloroethene | 0.00042 | 0.0012 | 0.365 | mg/kg |
| Soil | VOC | EPA 8260B | | Methyl tert butyl ether (MTBE) | 0.00036 | 0.0012 | 0.08 | mg/kg |
| Soil | VOC | EPA 8260B | | 1,1-Dichloroethane | 0.00043 | 0.0012 | 3.48 | mg/kg |
| Soil | VOC | EPA 8260B | | Di Isopropy ether | 0.00036 | 0.0012 | NE | mg/kg |
| Soil | VOC | EPA 8260B | | 2,2-Dichloropropane | 0.00036 | 0.0012 | NE | mg/kg |
| Soil | VOC | EPA 8260B | | cis-1,2-Dichloroethene | 0.0003 | 0.0012 | 0.193 | mg/kg |
| Soil | VOC | EPA 8260B | | 2-Butanone (MEK) | 0.0043 | 0.012 | 17.6 | mg/kg |
| Soil | VOC | EPA 8260B | | Chloroform | 0.00043 | 0.0058 | 0.00564 | mg/kg |
| Soil | VOC | EPA 8260B | | 1,1,1-Trichloroethane | 0.00047 | 0.0012 | 2 | mg/kg |
| Soil | VOC | EPA 8260B | | Carbon tetrachloride | 0.00042 | 0.0012 | 0.0114 | mg/kg |
| Soil | VOC | EPA 8260B | | 1,1-Dichloropropene | 0.00034 | 0.0012 | NE | mg/kg |
| Soil | VOC | EPA 8260B | | Benzene | 0.00042 | 0.0012 | 0.025 | mg/kg |
| Soil | VOC | AK 101 | | Benzene | 0.007 | 0.05 | 0.025 | mg/kg |
| Soil | VOC | EPA 8260B | | 1,2-Dichloroethane (EDC) | 0.00038 | 0.0012 | 0.013 | mg/kg |
| Soil | VOC | EPA 8260B | | Trichloroethene | 0.00034 | 0.0012 | 0.00288 | mg/kg |
| Soil | VOC | EPA 8260B | | 1,2-Dichloropropane | 0.0006 | 0.0012 | 0.0089 | mg/kg |
| Soil | VOC | EPA 8260B | | Dibromomethane | 0.00045 | 0.0012 | NE | mg/kg |
| Soil | VOC | EPA 8260B | | Bromodichloromethane | 0.00034 | 0.0012 | 0.00268 | mg/kg |
| Soil | VOC | EPA 8260B | | 2-Chloroethylvinyl ether | 0.018 | 0.058 | NE | mg/kg |
| Soil | VOC | EPA 8260B | | cis-1,3-Dichloropropene | 0.0003 | 0.0012 | 0.00245 | mg/kg |
| Soil | VOC | EPA 8260B | | 4-Methyl-2-pentanone (MIBK) | 0.0023 | 0.012 | 17.6 | mg/kg |
| Soil | VOC | EPA 8260B | | Toluene | 0.00033 | 0.0058 | 6.6 | mg/kg |
| Soil | VOC | AK 101 | | Toluene | 0.007 | 0.05 | 6.6 | mg/kg |
| Soil | VOC | EPA 8260B | | trans-1,3-Dichloropropene | 0.0004 | 0.0012 | 0.00245 | mg/kg |
| Soil | VOC | EPA 8260B | | 1,1,1,2-Trichloroethane | 0.00041 | 0.0012 | 0.0141 | mg/kg |

**TABLE F-2**
**Laboratory Reporting Limits**
**Soil Samples**

Preferred Laboratory: ESC, 12065 Lebanon Road, Mt. Juliet, TN, 37122

| Matrix | Parameter | Method | Technique | Parameter | MDL[1] | PQL[2] | RUSL/IDTL[3] | ReportingUnits |
|---|---|---|---|---|---|---|---|---|
| Soil | VOC | EPA 8260B | Purge & Trap GC/MS | Tetrachloroethene | 0.00044 | 0.0012 | 0.0288 | mg/kg |
| Soil | VOC | EPA 8260B | | 1,3-Dichloropropane | 0.00038 | 0.0012 | NE | mg/kg |
| Soil | VOC | EPA 8260B | | Chlorodibromomethane | 0.00031 | 0.0012 | 0.00202 | mg/kg |
| Soil | VOC | EPA 8260B | | 1,2-Dibromoethane (EDB) | 0.00031 | 0.0012 | 0.0001 | mg/kg |
| Soil | VOC | EPA 8260B | | Chlorobenzene | 0.00033 | 0.0012 | 0.618 | mg/kg |
| Soil | VOC | EPA 8260B | | 1,1,2-Trichloroethane | 0.00054 | 0.0012 | 0.0141 | mg/kg |
| Soil | VOC | EPA 8260B | | Ethylbenzene | 0.00032 | 0.0012 | 0.25 | mg/kg |
| Soil | VOC | AK 101 | | Ethylbenzene | 0.007 | 0.05 | 0.25 | mg/kg |
| Soil | VOC | EPA 8260B | | Total xylene | 0.00046 | 0.0035 | 27 | mg/kg |
| Soil | VOC | AK 101 | | Total xylene | 0.007 | 0.05 | 27 | mg/kg |
| Soil | VOC | EPA 8260B | | Styrene | 0.00024 | 0.0012 | 1.83 | mg/kg |
| Soil | VOC | EPA 8260B | | Bromoform | 0.00033 | 0.0012 | 0.0292 | mg/kg |
| Soil | VOC | EPA 8260B | | Isopropylbenzene | 0.00033 | 0.0012 | 3.46 | mg/kg |
| Soil | VOC | EPA 8260B | | Bromobenzene | 0.0003 | 0.0012 | NE | mg/kg |
| Soil | VOC | EPA 8260B | | 1,1,2,2-Tetrachloroethane | 0.00029 | 0.0012 | 0.000915 | mg/kg |
| Soil | VOC | EPA 8260B | | 1,2,3-Trichloropropane | 0.00068 | 0.0029 | 0.000245 | mg/kg |
| Soil | VOC | EPA 8260B | | n-Propylbenzene | 0.00032 | 0.0012 | NE | mg/kg |
| Soil | VOC | EPA 8260B | | 2-Chlorotoluene | 0.00032 | 0.0012 | 1.56 | mg/kg |
| Soil | VOC | EPA 8260B | | 4-Chlorotoluene | 0.0003 | 0.0012 | NE | mg/kg |
| Soil | VOC | EPA 8260B | | 1,3,5-Trimethylbenzene | 0.0003 | 0.0012 | 0.145 | mg/kg |
| Soil | VOC | EPA 8260B | | tert-Butylbenzene | 0.00027 | 0.0012 | 0.852 | mg/kg |
| Soil | VOC | EPA 8260B | | 1,2,4-Trimethylbenzene | 0.00033 | 0.0012 | 0.193 | mg/kg |
| Soil | VOC | EPA 8260B | | sec-Butylbenzene | 0.00031 | 0.0012 | 1.17 | mg/kg |
| Soil | VOC | EPA 8260B | | 1,3-Dichlorobenzene | 0.00029 | 0.0012 | 0.229 | mg/kg |
| Soil | VOC | EPA 8260B | | p-Isopropyltoluene | 0.00031 | 0.0012 | NE | mg/kg |
| Soil | VOC | EPA 8260B | | 1,4-Dichlorobenzene | 0.00035 | 0.0012 | 0.0755 | mg/kg |
| Soil | VOC | EPA 8260B | | 1,2,3-Trimethylbenzene | 0.00033 | 0.0012 | NE | mg/kg |
| Soil | VOC | EPA 8260B | | 1,2-Dichlorobenzene | 0.00031 | 0.0012 | 5.25 | mg/kg |
| Soil | VOC | EPA 8260B | | n-Butylbenzene | 0.00034 | 0.0012 | NE | mg/kg |
| Soil | VOC | EPA 8260B | | 1,2-Dibromo-3-chloropropane | 0.0011 | 0.0058 | 0.000975 | mg/kg |
| Soil | VOC | EPA 8260B | | 1,2,4-Trimethylbenzene | 0.00033 | 0.0012 | 0.692 | mg/kg |
| Soil | VOC | EPA 8260B | | Hexachlorbutadiene | 0.00035 | 0.0012 | NE | mg/kg |
| Soil | VOC | EPA 8260B | | Naphthalene | 0.00028 | 0.0058 | 0.12 | mg/kg |
| Soil | VOC | EPA 8260B | | 1,2,3-Trichlorobenzene | 0.0003 | 0.0012 | NE | mg/kg |

**TABLE F-2**
**Laboratory Reporting Limits**
**Soil Samples**

Preferred Laboratory: ESC, 12065 Lebanon Road, Mt. Juliet, TN, 37122

| Matrix | Parameter | Method | Technique | Parameter | MDL[1] | PQL[2] | RUSL/IDTL[3] | ReportingUnits |
|---|---|---|---|---|---|---|---|---|
| Soil | PAH[7] | EPA 8270C-SIM | High-Performance Liquid Chromatograpy (HPLC) | 1-Methylnaphthalene | 0.002 | 0.02 | NE | mg/kg |
| Soil | PAH | EPA 8270C-SIM | | 2-Methylnaphthalene | 0.002 | 0.02 | 3.31 | mg/kg |
| Soil | PAH | EPA 8270C-SIM | | 2-Chloronaphthalene | 0.002 | 0.02 | 128 | mg/kg |
| Soil | PAH | EPA 8270C-SIM | | Acenaphthene | 0.0006 | 0.006 | 200 | mg/kg |
| Soil | PAH | EPA 8270C-SIM | | Acenaphthylene | 0.0006 | 0.006 | 78 | mg/kg |
| Soil | PAH | EPA 8270C-SIM | | Anthracene | 0.0006 | 0.006 | 3,200 | mg/kg |
| Soil | PAH | EPA 8270C-SIM | | Benzo(a)anthracene | 0.0006 | 0.006 | 0.09 | mg/kg |
| Soil | PAH | EPA 8270C-SIM | | Benzo(a)pyrene | 0.0006 | 0.006 | 0.02 | mg/kg |
| Soil | PAH | EPA 8270C-SIM | | Benzo(b)fluoranthene | 0.0006 | 0.006 | 0.2 | mg/kg |
| Soil | PAH | EPA 8270C-SIM | | Benzo(g,h,i)perylene | 0.0006 | 0.006 | 1,180 | mg/kg |
| Soil | PAH | EPA 8270C-SIM | | Benzo(k)fluoranthene | 0.0006 | 0.006 | 1.9 | mg/kg |
| Soil | PAH | EPA 8270C-SIM | | Chrysene | 0.0006 | 0.006 | 9.5 | mg/kg |
| Soil | PAH | EPA 8270C-SIM | | Dibenz(a,h)anthracene | 0.0006 | 0.006 | 0.0422 | mg/kg |
| Soil | PAH | EPA 8270C-SIM | | Fluoranthene | 0.0006 | 0.006 | 1,400 | mg/kg |
| Soil | PAH | EPA 8270C-SIM | | Fluorene | 0.0006 | 0.006 | 240 | mg/kg |
| Soil | PAH | EPA 8270C-SIM | | Indeno(1,2,3-cd) pyrene | 0.0006 | 0.006 | 0.422 | mg/kg |
| Soil | PAH | EPA 8270C-SIM | | Naphthalene | 0.002 | 0.02 | 0.12 | mg/kg |
| Soil | PAH | EPA 8270C-SIM | | Phenanthrene | 0.0006 | 0.006 | 79 | mg/kg |
| Soil | PAH | EPA 8270C-SIM | | Pyrene | 0.0006 | 0.006 | 1,000 | mg/kg |
| Soil | PPM[8] | EPA 6010B | Inductively Coupled Plasma-Atomic Emission Spectoscopy (ICP-AES) | Antimony | 0.33 | 1.2 | 4.77 | mg/kg |
| Soil | PPM | EPA 6010B | | Arsenic | 0.32 | 1.2 | 0.391 | mg/kg |
| Soil | PPM | EPA 6010B | | Beryllium | 0.015 | 0.12 | 1.63 | mg/kg |
| Soil | PPM | EPA 6010B | | Cadmium | 0.04 | 0.3 | 1.35 | mg/kg |
| Soil | PPM | EPA 6010B | | Chromium | 0.085 | 0.6 | 2,134 | mg/kg |
| Soil | PPM | EPA 6010B | | Copper | 0.21 | 1.2 | 921 | mg/kg |
| Soil | PPM | EPA 6010B | | Lead | 0.09 | 0.3 | 49.6 | mg/kg |
| Soil | PPM | EPA 7471 | | Mercury | 0.0015 | 0.024 | 0.391 | mg/kg |
| Soil | PPM | EPA 6010B | | Nickel | 0.26 | 1.2 | 59.1 | mg/kg |
| Soil | PPM | EPA 6010B | | Selenium | 0.32 | 1.2 | 2.03 | mg/kg |
| Soil | PPM | EPA 6010B | | Silver | 0.16 | 0.6 | 0.189 | mg/kg |
| Soil | PPM | EPA 6010B | | Thallium | 0.4 | 1.2 | 1.55 | mg/kg |
| Soil | PPM | EPA 6010B | | Zinc | 0.34 | 1.8 | 886 | mg/kg |

Notes:

1. MDL - Minimum Detection Limit
2. PQL - Practical Quantitative Limit
3. RUSL/IDTL - Residential Use Screening Level/Initial Default Target Level

**TABLE F-2**
**Laboratory Reporting Limits**
**Soil Samples**

Preferred Laboratory: ESC, 12065 Lebanon Road, Mt. Juliet, TN, 37122

| Matrix | Parameter | Method | Technique | Parameter | MDL[1] | PQL[2] | RUSL/IDTL[3] | ReportingUnits |
|---|---|---|---|---|---|---|---|---|

4. VOC - Volatile organic compound
5. mg/kg - milligrams per kilogram
6. NE - Not established
7. PAH - Polycyclic aromatic hydrocarbon
8. PPM - Priority pollutant metal

#.#### - RUSL/IDTL below PQL
#.#### - RUSL/IDTL below PQL and MDL

**TABLE F-2A**
**Laboratory Reporting Limits**
**Soil Samples**

Preferred Laboratory: ESC, 12065 Lebanon Road, Mt. Juliet, TN, 37122

| Matrix | Parameter | Method | Technique | Parameter | MDL[1] | PQL[2] | RUSL/IDTL[3] | ReportingUnits |
|---|---|---|---|---|---|---|---|---|
| Soil | VOC[4] | EPA 8260B | Purge & Trap Gas Chromatograph/ Mass Spectrometry (GC/MS) | Dichlorodifluoromethane | 0.00043 | 0.0058 | 2.96 | mg/kg[5] |
| Soil | VOC | EPA 8260B | | Chloromethane | 0.001 | 0.0029 | 0.0231 | mg/kg |
| Soil | VOC | EPA 8260B | | Vinyl chloride | 0.00052 | 0.0012 | 0.00963 | mg/kg |
| Soil | VOC | EPA 8260B | | Bromomethane | 0.0016 | 0.0058 | 0.0501 | mg/kg |
| Soil | VOC | EPA 8260B | | Chloroethane | 0.002 | 0.0058 | 0.0533 | mg/kg |
| Soil | VOC | EPA 8260B | | Trichlorofluoromethane | 0.0007 | 0.0058 | 10.4 | mg/kg |
| Soil | VOC | EPA 8260B | | 1,1-Dichloroethene | 0.00053 | 0.0012 | 0.0388 | mg/kg |
| Soil | VOC | EPA 8260B | | 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.00085 | 0.0012 | NE[6] | mg/kg |
| Soil | VOC | EPA 8260B | | Acetone | 0.01 | 0.058 | 17.4 | mg/kg |
| Soil | VOC | EPA 8260B | | Methylene chloride | 0.00049 | 0.0058 | 0.0169 | mg/kg |
| Soil | VOC | EPA 8260B | | Acrylonitrile | 0.0026 | 0.012 | 0.000194 | mg/kg |
| Soil | VOC | EPA 8260B | | trans-1,2-Dichloroethene | 0.00042 | 0.0012 | 0.365 | mg/kg |
| Soil | VOC | EPA 8260B | | Methyl tert butyl ether (MTBE) | 0.00036 | 0.0012 | 0.08 | mg/kg |
| Soil | VOC | EPA 8260B | | 1,1-Dichloroethane | 0.00043 | 0.0012 | 3.48 | mg/kg |
| Soil | VOC | EPA 8260B | | Di Isopropy ether | 0.00036 | 0.0012 | NE | mg/kg |
| Soil | VOC | EPA 8260B | | 2,2-Dichloropropane | 0.00036 | 0.0012 | NE | mg/kg |
| Soil | VOC | EPA 8260B | | cis-1,2-Dichloroethene | 0.0003 | 0.0012 | 0.193 | mg/kg |
| Soil | VOC | EPA 8260B | | 2-Butanone (MEK) | 0.0043 | 0.012 | 17.6 | mg/kg |
| Soil | VOC | EPA 8260B | | Chloroform | 0.00043 | 0.0058 | 0.00564 | mg/kg |
| Soil | VOC | EPA 8260B | | 1,1,1-Trichloroethane | 0.00047 | 0.0012 | 2 | mg/kg |
| Soil | VOC | EPA 8260B | | Carbon tetrachloride | 0.00042 | 0.0012 | 0.0114 | mg/kg |
| Soil | VOC | EPA 8260B | | 1,1-Dichloropropene | 0.00034 | 0.0012 | NE | mg/kg |
| Soil | VOC | EPA 8260B | | Benzene | 0.00042 | 0.0012 | 0.025 | mg/kg |
| Soil | VOC | AK 101 | | Benzene | 0.007 | 0.05 | 0.025 | mg/kg |
| Soil | VOC | EPA 8260B | | 1,2-Dichloroethane (EDC) | 0.00038 | 0.0012 | 0.013 | mg/kg |
| Soil | VOC | EPA 8260B | | Trichloroethene | 0.00034 | 0.0012 | 0.00288 | mg/kg |
| Soil | VOC | EPA 8260B | | 1,2-Dichloropropane | 0.0006 | 0.0012 | 0.0089 | mg/kg |
| Soil | VOC | EPA 8260B | | Dibromomethane | 0.00045 | 0.0012 | NE | mg/kg |
| Soil | VOC | EPA 8260B | | Bromodichloromethane | 0.00034 | 0.0012 | 0.00268 | mg/kg |
| Soil | VOC | EPA 8260B | | 2-Chloroethylvinyl ether | 0.018 | 0.058 | NE | mg/kg |
| Soil | VOC | EPA 8260B | | cis-1,3-Dichloropropene | 0.0003 | 0.0012 | 0.00245 | mg/kg |
| Soil | VOC | EPA 8260B | | 4-Methyl-2-pentanone (MIBK) | 0.0023 | 0.012 | 17.6 | mg/kg |
| Soil | VOC | EPA 8260B | | Toluene | 0.00033 | 0.0058 | 6.6 | mg/kg |
| Soil | VOC | AK 101 | | Toluene | 0.007 | 0.05 | 6.6 | mg/kg |
| Soil | VOC | EPA 8260B | | trans-1,3-Dichloropropene | 0.0004 | 0.0012 | 0.00245 | mg/kg |
| Soil | VOC | EPA 8260B | | 1,1,1,2-Trichloroethane | 0.00041 | 0.0012 | 0.0141 | mg/kg |

**TABLE F-2A**
**Laboratory Reporting Limits**
**Soil Samples**

Preferred Laboratory: ESC, 12065 Lebanon Road, Mt. Juliet, TN, 37122

| Matrix | Parameter | Method | Technique | Parameter | MDL[1] | PQL[2] | RUSL/IDTL[3] | ReportingUnits |
|---|---|---|---|---|---|---|---|---|
| Soil | VOC | EPA 8260B | Purge & Trap GC/MS | Tetrachloroethene | 0.00044 | 0.0012 | 0.0288 | mg/kg |
| Soil | VOC | EPA 8260B | | 1,3-Dichloropropane | 0.00038 | 0.0012 | NE | mg/kg |
| Soil | VOC | EPA 8260B | | Chlorodibromomethane | 0.00031 | 0.0012 | 0.00202 | mg/kg |
| Soil | VOC | EPA 8260B | | 1,2-Dibromoethane (EDB) | 0.00031 | 0.0012 | 0.0001 | mg/kg |
| Soil | VOC | EPA 8260B | | Chlorobenzene | 0.00033 | 0.0012 | 0.618 | mg/kg |
| Soil | VOC | EPA 8260B | | 1,1,2-Trichloroethane | 0.00054 | 0.0012 | 0.0141 | mg/kg |
| Soil | VOC | EPA 8260B | | Ethylbenzene | 0.00032 | 0.0012 | 0.25 | mg/kg |
| Soil | VOC | AK 101 | | Ethylbenzene | 0.007 | 0.05 | 0.25 | mg/kg |
| Soil | VOC | EPA 8260B | | Total xylene | 0.00046 | 0.0035 | 27 | mg/kg |
| Soil | VOC | AK 101 | | Total xylene | 0.007 | 0.05 | 27 | mg/kg |
| Soil | VOC | EPA 8260B | | Styrene | 0.00024 | 0.0012 | 1.83 | mg/kg |
| Soil | VOC | EPA 8260B | | Bromoform | 0.00033 | 0.0012 | 0.0292 | mg/kg |
| Soil | VOC | EPA 8260B | | Isopropylbenzene | 0.00033 | 0.0012 | 3.46 | mg/kg |
| Soil | VOC | EPA 8260B | | Bromobenzene | 0.0003 | 0.0012 | NE | mg/kg |
| Soil | VOC | EPA 8260B | | 1,1,2,2-Tetrachloroethane | 0.00029 | 0.0012 | 0.000915 | mg/kg |
| Soil | VOC | EPA 8260B | | 1,2,3-Trichloropropane | 0.00068 | 0.0029 | 0.000245 | mg/kg |
| Soil | VOC | EPA 8260B | | n-Propylbenzene | 0.00032 | 0.0012 | NE | mg/kg |
| Soil | VOC | EPA 8260B | | 2-Chlorotoluene | 0.00032 | 0.0012 | 1.56 | mg/kg |
| Soil | VOC | EPA 8260B | | 4-Chlorotoluene | 0.0003 | 0.0012 | NE | mg/kg |
| Soil | VOC | EPA 8260B | | 1,3,5-Trimethylbenzene | 0.0003 | 0.0012 | 0.145 | mg/kg |
| Soil | VOC | EPA 8260B | | tert-Butylbenzene | 0.00027 | 0.0012 | 0.852 | mg/kg |
| Soil | VOC | EPA 8260B | | 1,2,4-Trimethylbenzene | 0.00033 | 0.0012 | 0.193 | mg/kg |
| Soil | VOC | EPA 8260B | | sec-Butylbenzene | 0.00031 | 0.0012 | 1.17 | mg/kg |
| Soil | VOC | EPA 8260B | | 1,3-Dichlorobenzene | 0.00029 | 0.0012 | 0.229 | mg/kg |
| Soil | VOC | EPA 8260B | | p-Isopropyltoluene | 0.00031 | 0.0012 | NE | mg/kg |
| Soil | VOC | EPA 8260B | | 1,4-Dichlorobenzene | 0.00035 | 0.0012 | 0.0755 | mg/kg |
| Soil | VOC | EPA 8260B | | 1,2,3-Trimethylbenzene | 0.00033 | 0.0012 | NE | mg/kg |
| Soil | VOC | EPA 8260B | | 1,2-Dichlorobenzene | 0.00031 | 0.0012 | 5.25 | mg/kg |
| Soil | VOC | EPA 8260B | | n-Butylbenzene | 0.00034 | 0.0012 | NE | mg/kg |
| Soil | VOC | EPA 8260B | | 1,2-Dibromo-3-chloropropane | 0.0011 | 0.0058 | 0.000975 | mg/kg |
| Soil | VOC | EPA 8260B | | 1,2,4-Trimethylbenzene | 0.00033 | 0.0012 | 0.692 | mg/kg |
| Soil | VOC | EPA 8260B | | Hexachlorbutadiene | 0.00035 | 0.0012 | NE | mg/kg |
| Soil | VOC | EPA 8260B | | Naphthalene | 0.00028 | 0.0058 | 0.12 | mg/kg |
| Soil | VOC | EPA 8260B | | 1,2,3-Trichlorobenzene | 0.0003 | 0.0012 | NE | mg/kg |

**TABLE F-2A**
**Laboratory Reporting Limits**
**Soil Samples**

Preferred Laboratory: ESC, 12065 Lebanon Road, Mt. Juliet, TN, 37122

| Matrix | Parameter | Method | Technique | Parameter | MDL[1] | PQL[2] | RUSL/IDTL[3] | ReportingUnits |
|---|---|---|---|---|---|---|---|---|
| Soil | PAH[7] | EPA 8270C-SIM | High-Performance Liquid Chromatograpy (HPLC) | 1-Methylnaphthalene | 0.002 | 0.02 | NE | mg/kg |
| Soil | PAH | EPA 8270C-SIM | | 2-Methylnaphthalene | 0.002 | 0.02 | 3.31 | mg/kg |
| Soil | PAH | EPA 8270C-SIM | | 2-Chloronaphthalene | 0.002 | 0.02 | 128 | mg/kg |
| Soil | PAH | EPA 8270C-SIM | | Acenaphthene | 0.0006 | 0.006 | 200 | mg/kg |
| Soil | PAH | EPA 8270C-SIM | | Acenaphthylene | 0.0006 | 0.006 | 78 | mg/kg |
| Soil | PAH | EPA 8270C-SIM | | Anthracene | 0.0006 | 0.006 | 3,200 | mg/kg |
| Soil | PAH | EPA 8270C-SIM | | Benzo(a)anthracene | 0.0006 | 0.006 | 0.09 | mg/kg |
| Soil | PAH | EPA 8270C-SIM | | Benzo(a)pyrene | 0.0006 | 0.006 | 0.02 | mg/kg |
| Soil | PAH | EPA 8270C-SIM | | Benzo(b)fluoranthene | 0.0006 | 0.006 | 0.2 | mg/kg |
| Soil | PAH | EPA 8270C-SIM | | Benzo(g,h,i)perylene | 0.0006 | 0.006 | 1,180 | mg/kg |
| Soil | PAH | EPA 8270C-SIM | | Benzo(k)fluoranthene | 0.0006 | 0.006 | 1.9 | mg/kg |
| Soil | PAH | EPA 8270C-SIM | | Chrysene | 0.0006 | 0.006 | 9.5 | mg/kg |
| Soil | PAH | EPA 8270C-SIM | | Dibenz(a,h)anthracene | 0.0006 | 0.006 | 0.0422 | mg/kg |
| Soil | PAH | EPA 8270C-SIM | | Fluoranthene | 0.0006 | 0.006 | 1,400 | mg/kg |
| Soil | PAH | EPA 8270C-SIM | | Fluorene | 0.0006 | 0.006 | 240 | mg/kg |
| Soil | PAH | EPA 8270C-SIM | | Indeno(1,2,3-cd) pyrene | 0.0006 | 0.006 | 0.422 | mg/kg |
| Soil | PAH | EPA 8270C-SIM | | Naphthalene | 0.002 | 0.02 | 0.12 | mg/kg |
| Soil | PAH | EPA 8270C-SIM | | Phenanthrene | 0.0006 | 0.006 | 79 | mg/kg |
| Soil | PAH | EPA 8270C-SIM | | Pyrene | 0.0006 | 0.006 | 1,000 | mg/kg |
| Soil | PPM[8] | EPA 6010B | Inductively Coupled Plasma-Atomic Emission Spectoscopy (ICP-AES) | Antimony | 0.33 | 1.2 | 4.77 | mg/kg |
| Soil | PPM | EPA 6010B | | Arsenic | 0.32 | 1.2 | 0.391 | mg/kg |
| Soil | PPM | EPA 6010B | | Beryllium | 0.015 | 0.12 | 1.63 | mg/kg |
| Soil | PPM | EPA 6010B | | Cadmium | 0.04 | 0.3 | 1.35 | mg/kg |
| Soil | PPM | EPA 6010B | | Chromium | 0.085 | 0.6 | 2,134 | mg/kg |
| Soil | PPM | EPA 6010B | | Copper | 0.21 | 1.2 | 921 | mg/kg |
| Soil | PPM | EPA 6010B | | Lead | 0.09 | 0.3 | 49.6 | mg/kg |
| Soil | PPM | EPA 7471 | | Mercury | 0.0015 | 0.024 | 0.391 | mg/kg |
| Soil | PPM | EPA 6010B | | Nickel | 0.26 | 1.2 | 59.1 | mg/kg |
| Soil | PPM | EPA 6010B | | Selenium | 0.32 | 1.2 | 2.03 | mg/kg |
| Soil | PPM | EPA 6010B | | Silver | 0.16 | 0.6 | 0.189 | mg/kg |
| Soil | PPM | EPA 6010B | | Thallium | 0.4 | 1.2 | 1.55 | mg/kg |
| Soil | PPM | EPA 6010B | | Zinc | 0.34 | 1.8 | 886 | mg/kg |

Notes:

1. MDL - Minimum Detection Limit
2. PQL - Practical Quantitative Limit
3. RUSL/IDTL - Residential Use Screening Level/Initial Default Target Level

**TABLE F-2A**
**Laboratory Reporting Limits**
**Soil Samples**

Preferred Laboratory: ESC, 12065 Lebanon Road, Mt. Juliet, TN, 37122

| Matrix | Parameter | Method | Technique | Parameter | MDL[1] | PQL[2] | RUSL/IDTL[3] | ReportingUnits |
|---|---|---|---|---|---|---|---|---|

4. VOC - Volatile organic compound
5. mg/kg - milligrams per kilogram
6. NE - Not established
7. PAH - Polycyclic aromatic hydrocarbon
8. PPM - Priority pollutant metal

#.#### - RUSL/IDTL below PQL
#.#### - RUSL/IDTL below PQL and MDL

**TABLEF-2B**
**Laboratory Reporting Limits**
**Groundwater Samples**

Laboratory: ESC, 12065 Lebanon Road, Mt. Juliet, TN, 37122

| Matrix | Parameter | Method | Technique | Parameter | MDL[1] | PQL[2] | RUSL/IDTL[3] | Reporting Units |
|---|---|---|---|---|---|---|---|---|
| GW | VOC[4] | EPA 8260B | Purge & Trap Gas Chromatograph/ Mass Spectrometry (GC/MS) | Acetone | 0.00892 | 0.05 | 9.39 | mg/l[5] |
| GW | VOC | EPA 8260B | | Acrolein | 0.01417 | 0.05 | 0.00521 | mg/l |
| GW | VOC | EPA 8260B | | Acrylonitrile | 0.00171 | 0.01 | 0.000103 | mg/l |
| GW | VOC | EPA 8260B | | Benzene | 0.000288 | 0.001 | 0.005 | mg/l |
| GW | VOC | EPA 8260B | | Bromobenzene | 0.000243 | 0.001 | NE[6] | mg/l |
| GW | VOC | EPA 8260B | | Bromodichloromethane | 0.00037 | 0.001 | 0.000901 | mg/l |
| GW | VOC | EPA 8260B | | Bromoform | 0.00051 | 0.001 | 0.00707 | mg/l |
| GW | VOC | EPA 8260B | | Bromomethane | 0.00089 | 0.005 | 0.0146 | mg/l |
| GW | VOC | EPA 8260B | | n-Butylbenzene | 0.000227 | 0.001 | NE | mg/l |
| GW | VOC | EPA 8260B | | sec-Butylbenzene | 0.00022 | 0.001 | 0.104 | mg/l |
| GW | VOC | EPA 8260B | | tert-Butylbenzene | 0.000196 | 0.001 | 0.104 | mg/l |
| GW | VOC | EPA 8260B | | Carbon tetrachloride | 0.00031 | 0.001 | 0.00456 | mg/l |
| GW | VOC | EPA 8260B | | Chlorobenzene | 0.00026 | 0.001 | 0.1 | mg/l |
| GW | VOC | EPA 8260B | | Chlorodibromomethane | 0.00042 | 0.001 | 0.000665 | mg/l |
| GW | VOC | EPA 8260B | | Chloroethane | 0.000856 | 0.005 | 0.0193 | mg/l |
| GW | VOC | EPA 8260B | | 2-Chloroethylvinyl ether | 0.00145 | 0.05 | NE | mg/l |
| GW | VOC | EPA 8260B | | Chloroform | 0.00033 | 0.005 | 0.0018 | mg/l |
| GW | VOC | EPA 8260B | | Chloromethane | 0.000251 | 0.0025 | 0.0043 | mg/l |
| GW | VOC | EPA 8260B | | 2-Chlorotoluene | 0.00022 | 0.001 | 0.209 | mg/l |
| GW | VOC | EPA 8260B | | 4-Chlorotoluene | 0.000164 | 0.001 | NE | mg/l |
| GW | VOC | EPA 8011 | | 1,2-Dibromo-3-chloropropane | 0.0000043 | 0.00002 | 0.0002 | mg/l |
| GW | VOC | EPA 8011 | | 1,2-Dibromoethane (EDB) | 0.0000024 | 0.00001 | 0.00005 | mg/l |
| GW | VOC | EPA 8260B | | Dibromomethane | 0.000279 | 0.001 | NE | mg/l |
| GW | VOC | EPA 8260B | | 1,2-Dichlorobenzene | 0.00029 | 0.001 | 0.6 | mg/l |
| GW | VOC | EPA 8260B | | 1,3-Dichlorobenzene | 0.000189 | 0.001 | 0.00939 | mg/l |
| GW | VOC | EPA 8260B | | 1,4-Dichlorobenzene | 0.0003 | 0.001 | 0.075 | mg/l |
| GW | VOC | EPA 8260B | | Dichlorodifluoromethane | 0.000541 | 0.005 | 0.195 | mg/l |
| GW | VOC | EPA 8260B | | 1,1-Dichloroethane | 0.00031 | 0.001 | 1.04 | mg/l |
| GW | VOC | EPA 8260B | | 1,2-Dichloroethane | 0.000274 | 0.001 | 0.005 | mg/l |
| GW | VOC | EPA 8260B | | 1,1-Dichloroethene | 0.000495 | 0.001 | 0.007 | mg/l |
| GW | VOC | EPA 8260B | | cis-1,2-Dichloroethene | 0.00038 | 0.001 | 0.07 | mg/l |
| GW | VOC | EPA 8260B | | trans-1,2-Dichloroethene | 0.0003 | 0.001 | 0.1 | mg/l |
| GW | VOC | EPA 8260B | | 1,2-Dichloropropane | 0.00052 | 0.001 | 0.005 | mg/l |
| GW | VOC | EPA 8260B | | 1,1-Dichloropropene | 0.00022 | 0.001 | NE | mg/l |
| GW | VOC | EPA 8260B | | 1,3-Dichloropropane | 0.00023 | 0.001 | NE | mg/l |

**TABLEF-2B**
**Laboratory Reporting Limits**
**Groundwater Samples**

Laboratory: ESC, 12065 Lebanon Road, Mt. Juliet, TN, 37122

| Matrix | Parameter | Method | Technique | Parameter | MDL[1] | PQL[2] | RUSL/IDTL[3] | Reporting Units |
|---|---|---|---|---|---|---|---|---|
| GW | VOC | EPA 8260B | Purge & Trap GC/MS | cis-1,3-Dichloropropene | 0.00026 | 0.001 | 0.000559 | mg/l |
| GW | VOC | EPA 8260B | | trans-1,3-Dichloropropene | 0.00024 | 0.001 | 0.000559 | mg/l |
| GW | VOC | EPA 8260B | | 2,2-Dichloropropane | 0.000247 | 0.001 | NE | mg/l |
| GW | VOC | EPA 8260B | | Di Isopropy ether | 0.000254 | 0.001 | NE | mg/l |
| GW | VOC | EPA 8260B | | Ethylbenzene | 0.000222 | 0.001 | 0.05 | mg/l |
| GW | VOC | EPA 8260B | | Hexachlor-1,3-butadiene | 0.00049 | 0.001 | 0.000716 | mg/l |
| GW | VOC | EPA 8260B | | Isopropylbenzene | 0.000189 | 0.001 | 1.04 | mg/l |
| GW | VOC | EPA 8260B | | p-Isopropyltoluene | 0.000213 | 0.001 | NE | mg/l |
| GW | VOC | EPA 8260B | | 2-Butanone (MEK) | 0.00453 | 0.01 | 6.26 | mg/l |
| GW | VOC | EPA 8260B | | Methylene chloride | 0.000295 | 0.005 | 0.00745 | mg/l |
| GW | VOC | EPA 8260B | | 4-Methyl-2-pentanone (MIBK) | 0.00142 | 0.01 | 8.97 | mg/l |
| GW | VOC | EPA 8260B | | Methyl tert butyl ether | 0.000193 | 0.001 | 0.04 | mg/l |
| GW | VOC | EPA 8260B | | Naphthalene | 0.000167 | 0.005 | 0.07 | mg/l |
| GW | VOC | EPA 8260B | | n-Propylbenzene | 0.00022 | 0.001 | NE | mg/l |
| GW | VOC | EPA 8260B | | Styrene | 0.00038 | 0.001 | 0.1 | mg/l |
| GW | VOC | EPA 8260B | | 1,1,1,2-Tetrachloroethane | 0.00038 | 0.001 | 0.00215 | mg/l |
| GW | VOC | EPA 8260B | | 1,1,2,2-Tetrachloroethane | 0.00022 | 0.001 | 0.000279 | mg/l |
| GW | VOC | EPA 8260B | | 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.000217 | 0.001 | NE | mg/l |
| GW | VOC | EPA 8260B | | Tetrachloroethene | 0.000293 | 0.001 | 0.005 | mg/l |
| GW | VOC | EPA 8260B | | Toluene | 0.000269 | 0.005 | 1 | mg/l |
| GW | VOC | EPA 8260B | | 1,2,3-Trimethylbenzene | 0.00022 | 0.001 | NE | mg/l |
| GW | VOC | EPA 8260B | | 1,2,4-Trichlorobenzene | 0.000265 | 0.001 | 0.07 | mg/l |
| GW | VOC | EPA 8260B | | 1,1,1-Trichlorethane | 0.00027 | 0.001 | 0.2 | mg/l |
| GW | VOC | EPA 8260B | | 1,1,2-Trichloroethane | 0.000451 | 0.001 | 0.005 | mg/l |
| GW | VOC | EPA 8260B | | Trichloroethene | 0.00037 | 0.001 | 0.00332 | mg/l |
| GW | VOC | EPA 8260B | | Trichlorofluoromethane | 0.000286 | 0.005 | 2.05 | mg/l |
| GW | VOC | EPA 8260B | | 1,2,3-Trichloropropane | 0.00036 | 0.001 | 0.0000279 | mg/l |
| GW | VOC | EPA 8260B | | 1,2,4-Trimethylbenzene | 0.000198 | 0.001 | 0.439 | mg/l |
| GW | VOC | EPA 8260B | | 1,2,3-Trichlorobenzene | 0.00024 | 0.001 | NE | mg/l |
| GW | VOC | EPA 8260B | | 1,3,5-Trimethylbenzene | 0.000196 | 0.001 | 0.304 | mg/l |
| GW | VOC | EPA 8260B | | Vinyl chloride | 0.000273 | 0.001 | 0.002 | mg/l |
| GW | VOC | EPA 8260B | | Total xylene | 0.00086 | 0.003 | 8.7 | mg/l |

**TABLEF-2B**
**Laboratory Reporting Limits**
**Groundwater Samples**

Laboratory: ESC, 12065 Lebanon Road, Mt. Juliet, TN, 37122

| Matrix | Parameter | Method | Technique | Parameter | MDL[1] | PQL[2] | RUSL/IDTL[3] | Reporting Units |
|---|---|---|---|---|---|---|---|---|
| GW | PAH[7] | EPA 8270C-SIM | High-Performance Liquid Chromatograpy (HPLC) | 1-Methylnaphthalene | 0.00025 | 0.0000189 | 0.07 | mg/l |
| GW | PAH | EPA 8270C-SIM | | 2-Methylnaphthalene | 0.00025 | 0.0000155 | 0.00104 | mg/l |
| GW | PAH | EPA 8270C-SIM | | 2-Chloronaphthalene | 0.00025 | 0.0000165 | 0.834 | mg/l |
| GW | PAH | EPA 8270C-SIM | | Acenaphthene | 0.00005 | 0.00000823 | 2.2 | mg/l |
| GW | PAH | EPA 8270C-SIM | | Acenaphthylene | 0.00005 | 0.0000109 | 0.626 | mg/l |
| GW | PAH | EPA 8270C-SIM | | Anthracene | 0.00005 | 0.0000131 | 11 | mg/l |
| GW | PAH | EPA 8270C-SIM | | Benzo(a)anthracene | 0.00005 | 0.0000124 | 0.00003 | mg/l |
| GW | PAH | EPA 8270C-SIM | | Benzo(a)pyrene | 0.00005 | 0.0000158 | 0.0002 | mg/l |
| GW | PAH | EPA 8270C-SIM | | Benzo(b)fluoranthene | 0.00005 | 0.0000192 | 0.00003 | mg/l |
| GW | PAH | EPA 8270C-SIM | | Benzo(g,h,i)perylene | 0.00005 | 0.0000157 | 0.313 | mg/l |
| GW | PAH | EPA 8270C-SIM | | Benzo(k)fluoranthene | 0.00005 | 0.0000255 | 0.0003 | mg/l |
| GW | PAH | EPA 8270C-SIM | | Chrysene | 0.00005 | 0.0000144 | 0.003 | mg/l |
| GW | PAH | EPA 8270C-SIM | | Dibenz(a,h)anthracene | 0.00005 | 0.00000454 | 0.00000765 | mg/l |
| GW | PAH | EPA 8270C-SIM | | Fluoranthene | 0.00005 | 0.0000165 | 1.5 | mg/l |
| GW | PAH | EPA 8270C-SIM | | Fluorene | 0.00005 | 0.00000898 | 1.5 | mg/l |
| GW | PAH | EPA 8270C-SIM | | Indeno(1,2,3-cd) pyrene | 0.00005 | 0.00000739 | 0.0000765 | mg/l |
| GW | PAH | EPA 8270C-SIM | | Naphthalene | 0.00005 | 0.000012 | 0.07 | mg/l |
| GW | PAH | EPA 8270C-SIM | | Phenanthrene | 0.00005 | 0.0000184 | 0.313 | mg/l |
| GW | PAH | EPA 8270C-SIM | | Pyrene | 0.00005 | 0.0000155 | 1.1 | mg/l |
| GW | PPM[8] | EPA 6010B | Inductively Coupled Plasma-Atomic Emission Spectoscopy (ICP-AES) | Antimony | 0.00029 | 0.001 | 0.006 | mg/l |
| GW | PPM | EPA 6010B | | Arsenic | 0.00022 | 0.001 | 0.01 | mg/l |
| GW | PPM | EPA 6010B | | Beryllium | 0.00075 | 0.002 | 0.004 | mg/l |
| GW | PPM | EPA 6010B | | Cadmium | 0.00074 | 0.005 | 0.005 | mg/l |
| GW | PPM | EPA 6010B | | Chromium | 0.00197 | 0.01 | 0.1 | mg/l |
| GW | PPM | EPA 6010B | | Copper | 0.006 | 0.02 | 1.3 | mg/l |
| GW | PPM | EPA 6010B | | Lead | 0.00191 | 0.005 | 0.015 | mg/l |
| GW | PPM | EPA 7471 | | Mercury | 0.0000439 | 0.0002 | 0.002 | mg/l |
| GW | PPM | EAP 6010B | | Nickel | 0.00984 | 0.02 | 0.209 | mg/l |
| GW | PPM | EPA 6010B | | Selenium | 0.00654 | 0.02 | 0.05 | mg/l |
| GW | PPM | EPA 6010B | | Silver | 0.00325 | 0.01 | 0.0521 | mg/l |
| GW | PPM | EPA 6010B | | Thallium | 0.00022 | 0.001 | 0.002 | mg/l |
| GW | PPM | EPA 6010B | | Zinc | 0.0088 | 0.03 | 3.13 | mg/l |

Notes:

1. MDL - Minimum Detection Limit
2. PQL - Practical Quantitative Limit

**TABLEF-2B**
**Laboratory Reporting Limits**
**Groundwater Samples**

Laboratory: ESC, 12065 Lebanon Road, Mt. Juliet, TN, 37122

| Matrix | Parameter | Method | Technique | Parameter | MDL[1] | PQL[2] | RUSL/IDTL[3] | Reporting Units |
|---|---|---|---|---|---|---|---|---|

3. RUSL/IDTL - Residential Use Screening Level/Initial Default Target Level
4. VOC - Volatile organic compound
5. mg/l - milligrams per liter
6. NE - Not established
7. PAH - Polycyclic aromatic hydrocarbons
8. PPM - Priority pollutant metal

#.### - RUSL/IDTL below PQL
#.### - RUSL/IDTL below PQL and MDL

**TABLE F-2C**
**Laboratory Reporting Limits**
**Soil Vapor Samples**

Laboratory: Eurofins Air Toxics, 180 Blue Ravine Road, Suite B, Folsom, CA 95630

| Matrix | Parameter | Method | Technique | Parameter | MDL[1] | VISL[2]/RSL[3] | Units |
|---|---|---|---|---|---|---|---|
| Soil Vapor | VOC[4] | TO-15 LL[5] | Purge & Trap Gas Chromatograph/Mass Spectrometry (GC/MS) | Freon 12 | 0.183 | NE | µg/m$^3$ |
| Soil Vapor | VOC | TO-15 LL | | Freon 114 | 0.112 | NE | µg/m$^3$ |
| Soil Vapor | VOC | TO-15 LL | | Chloromethane | 0.171 | 9,400 | µg/m$^3$ |
| Soil Vapor | VOC | TO-15 LL | | Vinyl chloride | 0.072 | 17 | µg/m$^3$ |
| Soil Vapor | VOC | TO-15 LL | | 1,3-Butadiene | 0.064 | 9.4 | µg/m$^3$ |
| Soil Vapor | VOC | TO-15 LL | | Bromomethane | 0.365 | 520 | µg/m$^3$ |
| Soil Vapor | VOC | TO-15 LL | | Chloroethane | 0.367 | NE | µg/m$^3$ |
| Soil Vapor | VOC | TO-15 LL | | Freon 11 | 0.157 | NE | µg/m$^3$ |
| Soil Vapor | VOC | TO-15 LL | | Ethanol | 0.288 | NE | µg/m$^3$ |
| Soil Vapor | VOC | TO-15 LL | | Freon 113 | 0.153 | NE | µg/m$^3$ |
| Soil Vapor | VOC | TO-15 LL | | 1,1-Dichloroethene | 0.155 | 21,000 | µg/m$^3$ |
| Soil Vapor | VOC | TO-15 LL | | Acetone | 0.233 | 3,200,000 | µg/m$^3$ |
| Soil Vapor | VOC | TO-15 LL | | 2-Propanol | 0.182 | NE | µg/m$^3$ |
| Soil Vapor | VOC | TO-15 LL | | Carbon Disulfide | 0.153 | 73,000 | µg/m$^3$ |
| Soil Vapor | VOC | TO-15 LL | | 3-Chloropropene | 0.338 | NE | µg/m$^3$ |
| Soil Vapor | VOC | TO-15 LL | | Methylene chloride | 0.118 | 10,000 | µg/m$^3$ |
| Soil Vapor | VOC | TO-15 LL | | Methy tert-butyl ether | 0.409 | 940 | µg/m$^3$ |
| Soil Vapor | VOC | TO-15 LL | | trans-1,2-Dichloroethene | 0.107 | NE | µg/m$^3$ |
| Soil Vapor | VOC | TO-15 LL | | Hexane | 0.123 | NE | µg/m$^3$ |
| Soil Vapor | VOC | TO-15 LL | | 1,1-Dichloroethane | 0.109 | 180 | µg/m$^3$ |
| Soil Vapor | VOC | TO-15 LL | | cis-1,2-Dichloroethene | 0.206 | NE | µg/m$^3$ |
| Soil Vapor | VOC | TO-15 LL | | Tetrahydrofuran | 0.251 | 210,000 | µg/m$^3$ |
| Soil Vapor | VOC | TO-15 LL | | Chloroform | 0.093 | 12 | µg/m$^3$ |
| Soil Vapor | VOC | TO-15 LL | | 1,1,1-Trichloroethane | 0.218 | 520,000 | µg/m$^3$ |
| Soil Vapor | VOC | TO-15 LL | | Cyclohexane | 0.12 | 630,000 | µg/m$^3$ |
| Soil Vapor | VOC | TO-15 LL | | Carbon Tetrachloride | 0.208 | 47 | µg/m$^3$ |
| Soil Vapor | VOC | TO-15 LL | | 2,2,4-Trimethylpentane | 0.234 | NE | µg/m$^3$ |

| Matrix | Parameter | Method | Technique | Parameter | MDL[1] | VISL[2]/RSL[3] | Units |
|---|---|---|---|---|---|---|---|
| Soil Vapor | VOC | TO-15 LL | Purge & Trap GC/MS | Heptane | 0.111 | NE | µg/m$^3$ |
| Soil Vapor | VOC | TO-15 LL | | Benzene | 0.269 | 31 | µg/m$^3$ |
| Soil Vapor | VOC | TO-15 LL | | 1,2-Dichloroethane (EDC) | 0.449 | 9 | µg/m$^3$ |
| Soil Vapor | VOC | TO-15 LL | | Trichloroethene | 0.129 | 48 | µg/m$^3$ |
| Soil Vapor | VOC | TO-15 LL | | 1,2-Dichloropropane | 0.129 | 28 | µg/m$^3$ |
| Soil Vapor | VOC | TO-15 LL | | 1,4-Dioxane | 0.213 | 56 | µg/m$^3$ |
| Soil Vapor | VOC | TO-15 LL | | Bromodichloromethane | 0.268 | 7.6 | µg/m$^3$ |
| Soil Vapor | VOC | TO-15 LL | | cis-1,3-Dichloropropene | 0.113 | 70 | µg/m$^3$ |
| Soil Vapor | VOC | TO-15 LL | | 4-Methyl-2-pentanone | 0.135 | 310,000 | µg/m$^3$ |
| Soil Vapor | VOC | TO-15 LL | | Toluene | 0.079 | 520,000 | µg/m$^3$ |
| Soil Vapor | VOC | TO-15 LL | | trans-1,3-Dichloropropene | 0.209 | NE | µg/m$^3$ |
| Soil Vapor | VOC | TO-15 LL | | 1,1,2-Trichloroethane | 0.175 | 18 | µg/m$^3$ |
| Soil Vapor | VOC | TO-15 LL | | Tetrachloroethene | 0.122 | 1,100 | µg/m$^3$ |
| Soil Vapor | VOC | TO-15 LL | | 2-Hexanone | 0.315 | 3,100 | µg/m$^3$ |
| Soil Vapor | VOC | TO-15 LL | | Dibromochlormethane | 0.179 | 10 | µg/m$^3$ |
| Soil Vapor | VOC | TO-15 LL | | 1,2-Dibromoethane (EDB) | 0.17 | 0.4 | µg/m$^3$ |
| Soil Vapor | VOC | TO-15 LL | | Chlorobenzene | 0.06 | 5,200 | µg/m$^3$ |
| Soil Vapor | VOC | TO-15 LL | | Ethylbenzene | 0.1 | 97 | µg/m$^3$ |
| Soil Vapor | VOC | TO-15 LL | | m,p-Xylene | 0.109 | 10,000 | µg/m$^3$ |
| Soil Vapor | VOC | TO-15 LL | | o-Xylene | 0.104 | 10,000 | µg/m$^3$ |
| Soil Vapor | VOC | TO-15 LL | | 2-Butanone (MEK) | 0.927 | NE | µg/m$^3$ |
| Soil Vapor | VOC | TO-15 LL | | Naphthalene | 0.886 | 7 | µg/m$^3$ |
| Soil Vapor | VOC | TO-15 LL | | Styrene | 0.077 | 100,000 | µg/m$^3$ |
| Soil Vapor | VOC | TO-15 LL | | Bromoform | 0.145 | 260 | µg/m$^3$ |
| Soil Vapor | VOC | TO-15 LL | | Cumene | 0.108 | 42,000 | µg/m$^3$ |
| Soil Vapor | VOC | TO-15 LL | | 1,1,2,2-Tetrachloroethane | 0.179 | 48 | µg/m$^3$ |
| Soil Vapor | VOC | TO-15 LL | | Propylbenzene | 0.108 | 100,000 | µg/m$^3$ |
| Soil Vapor | VOC | TO-15 LL | | 4-Ethyltoluene | 0.157 | NE | µg/m$^3$ |
| Soil Vapor | VOC | TO-15 LL | | 1,3,5-Trimethylbenzene | 0.206 | NE | µg/m$^3$ |
| Soil Vapor | VOC | TO-15 LL | | 1,2,4-Trimethylbenzene | 0.172 | 730 | µg/m$^3$ |
| Soil Vapor | VOC | TO-15 LL | | 1,3-Dichlorobenzene | 0.192 | NE | µg/m$^3$ |
| Soil Vapor | VOC | TO-15 LL | | 1,4-Dichlorobenzene | 0.078 | 26 | µg/m$^3$ |

| Matrix | Parameter | Method | Technique | Parameter | MDL[1] | VISL[2]/RSL[3] | Units |
|---|---|---|---|---|---|---|---|
| Soil Vapor | VOC | TO-15 LL | Purge & Trap GC/MS | alpha-Chlorotoluene | 0.155 | NE | µg/m$^3$ |
| Soil Vapor | VOC | TO-15 LL | | 1,2-Dichlorobenzene | 0.253 | 21,000 | µg/m$^3$ |
| Soil Vapor | VOC | TO-15 LL | | 1,2,4-Trichlorobenzene | 0.172 | 210 | µg/m$^3$ |
| Soil Vapor | VOC | TO-15 LL | | Hexachlorobutadiene | 0.971 | 13 | µg/m$^3$ |

Notes:

1. MDL - Method Detection Limit (Does not take into account sample dilution due to canister pressurization.
2. VISL - DEQ Vapor Intrusion Screening Level from Table 2 of the Risk Evaluation Manual for Petroleum Release, August 2011
3. RSL - U.S. EPA June 2015 Regional Screening Level for Residential Air x 100
4. VOC - Volatile organic compound
5. µg/m$^3$ - micrograms per cubic meter

#.### - VISL/RSL below RL

# APPENDIX C

# REM AND PETROREM

# DATA SHEETS

## LIST OF SELECTED CHEMICALS

| Chemicals of Interest | CAS Number |
|---|---|
| Acenaphthene | 83-32-9 |
| Anthracene | 120-12-7 |
| Benzene | 71-43-2 |
| Benzo(a)anthracene | 56-55-3 |
| Benzo(a)pyrene | 50-32-8 |
| Benzo(b)fluoranthene | 205-99-2 |
| Benzo(k)fluoranthene | 207-08-9 |
| Chrysene | 218-01-9 |
| Fluoranthene | 206-44-0 |
| Fluorene | 86-73-7 |
| Naphthalene | 91-20-3 |
| Pyrene | 129-00-0 |
| Toluene | 108-88-3 |
| Total Xylenes | 1330-20-7 |

**Notes:**

# PHYSICAL AND CHEMICAL PROPERTIES OF SELECTED CHEMICALS

| | Molecular Weight | Water Solubility | Henry's Law Constant | Org. Carbon Ads. Coef. | Soil-Water Sorp. Coeff. | Diffusion Coefficient: in air | Diffusion Coefficient: in water |
|---|---|---|---|---|---|---|---|
| | (g/g-mol) | (mg/L) | (L-water/L-air) | Koc (mL/g) | Kd (mL-water /g-soil) | ($cm^2/s$) | ($cm^2/s$) |
| Acenaphthene | 1.54E+02 | 3.90E+00 | 7.50E-03 | 5.03E+03 | 5.03E+00 | 5.10E-02 | 8.30E-06 |
| Anthracene | 1.78E+02 | 4.34E-02 | 2.30E-03 | 1.64E+04 | 1.64E+01 | 3.90E-02 | 7.90E-06 |
| Benzene | 7.81E+01 | 1.79E+03 | 2.30E-01 | 1.46E+02 | 1.46E-01 | 9.00E-02 | 1.00E-05 |
| Benzo(a)anthracene | 2.28E+02 | 9.40E-03 | 4.90E-04 | 1.77E+05 | 1.77E+02 | 5.10E-02 | 5.90E-06 |
| Benzo(a)pyrene | 2.52E+02 | 1.60E-03 | 1.90E-05 | 5.87E+05 | 5.87E+02 | 4.80E-02 | 5.60E-06 |
| Benzo(b)fluoranthene | 2.52E+02 | 1.50E-03 | 2.70E-05 | 5.99E+05 | 5.99E+02 | 4.80E-02 | 5.60E-06 |
| Benzo(k)fluoranthene | 2.52E+02 | 8.00E-04 | 2.40E-05 | 5.87E+05 | 5.87E+02 | 4.80E-02 | 5.60E-06 |
| Chrysene | 2.28E+02 | 2.00E-03 | 2.10E-04 | 1.81E+05 | 1.81E+02 | 2.60E-02 | 6.70E-06 |
| Fluoranthene | 2.02E+02 | 2.60E-01 | 3.60E-04 | 5.55E+04 | 5.55E+01 | 2.80E-02 | 7.20E-06 |
| Fluorene | 1.66E+02 | 1.69E+00 | 3.90E-03 | 9.16E+03 | 9.16E+00 | 4.40E-02 | 7.90E-06 |
| Naphthalene | 1.28E+02 | 3.10E+01 | 1.80E-02 | 1.54E+03 | 1.54E+00 | 6.00E-02 | 8.40E-06 |
| Pyrene | 2.02E+02 | 1.35E-01 | 4.90E-04 | 5.43E+04 | 5.43E+01 | 2.80E-02 | 7.20E-06 |
| Toluene | 9.21E+01 | 5.26E+02 | 2.70E-01 | 2.34E+02 | 2.34E-01 | 7.80E-02 | 9.20E-06 |
| Total Xylenes | 1.06E+02 | 1.06E+02 | 2.10E-01 | 3.83E+02 | 3.83E-01 | 8.50E-02 | 9.90E-06 |

**Notes:**

**NA: Not applicable or available**

## TOXICOLOGICAL PROPERTIES OF SELECTED CHEMICALS

| | Carcinogenic Effects | | Non-Carcinogenic Effects | | Oral Relative Absorption Factor (RAFo) | Dermal Relative Absorption Factor (RAFd) | Maximum Contaminant Level (MCL) | Aquatic Life Criterion | | Human Health Risk from Consumption of: | | Early Childhood Mutagen? 1=Yes 0=No |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Oral Slope Factor (SFo) | Inhalation Slope Factor (SFi) | Oral Reference Dose (RfDo) | Inhalation Reference Dose (RfDi) | | | | Acute Criteria (B1) | Chronic Criteria (B2) | Water and Organisms (D1) | Organisms Only (D2) | |
| | $[mg/kg\text{-}day]^{-1}$ | $[ug/m^3]^{-1}$ | (mg/kg-day) | $(mg/m^3)$ | [-] | [-] | [mg/L] | [µg/L] | [µg/L] | [µg/L] | [µg/L] | |
| Acenaphthene | NA | NA | 0.06 | NA | 1 | 0.13 | NA | NA | NA | 670 | 990 | NA |
| Anthracene | NA | NA | 0.3 | NA | 1 | 0.13 | NA | NA | NA | 8300 | 40000 | NA |
| Benzene | 0.055 | 0.0000078 | 0.004 | 0.03 | 1 | 0 | 0.005 | NA | NA | 2.2 | 51 | 0 |
| Benzo(a)anthracene | 0.73 | 0.00011 | NA | NA | 1 | 0.13 | NA | NA | NA | 0.0038 | 0.018 | 1 |
| Benzo(a)pyrene | 7.3 | 0.0011 | NA | NA | 1 | 0.13 | 0.0002 | NA | NA | 0.0038 | 0.018 | 1 |
| Benzo(b)fluoranthene | 0.73 | 0.00011 | NA | NA | 1 | 0.13 | NA | NA | NA | 0.0038 | 0.018 | 1 |
| Benzo(k)fluoranthene | 0.073 | 0.00011 | NA | NA | 1 | 0.13 | NA | NA | NA | 0.0038 | 0.018 | 1 |
| Chrysene | 0.0073 | 0.000011 | NA | NA | 1 | 0.13 | NA | NA | NA | 0.0038 | 0.018 | 1 |
| Fluoranthene | NA | NA | 0.04 | NA | 1 | 0.13 | NA | NA | NA | 130 | 140 | NA |
| Fluorene | NA | NA | 0.04 | NA | 1 | 0.13 | NA | NA | NA | 1100 | 5300 | NA |
| Naphthalene | NA | 0.000034 | 0.02 | 0.003 | 1 | 0.13 | NA | NA | NA | NA | NA | 0 |
| Pyrene | NA | NA | 0.03 | NA | 1 | 0.13 | NA | NA | NA | 830 | 4000 | NA |
| Toluene | NA | NA | 0.08 | 5 | 1 | 0 | 1 | NA | NA | 1300 | 15000 | NA |
| Total Xylenes | NA | NA | 0.2 | 0.1 | 1 | 0 | 10 | NA | NA | NA | NA | NA |

**Notes:**

**NA: Not applicable or available**

# RECEPTOR(S) AND ROUTE(S) OF EXPOSURE

**(Select by clicking the checkboxes)**

| SOURCE AND ROUTES OF EXPOSURES | RECEPTOR | | |
|---|---|---|---|
| | RESIDENT | NON-RESIDENTIAL | CONSTRUCTION WORKER |
| **Direct Contact Soil**<br>Ingestion of Soil, Outdoor Inhalation of Vapor Emissions and Particulates, and Dermal Contact with Soil | ☑ | ☑ | ☑ |
| **Subsurface Soil**<br>Indoor Inhalation of Vapor Emissions | ☑ | ☑ | |
| **Groundwater**<br>Indoor Inhalation of Vapor Emissions | ☑ | ☑ | |
| **Soil-Vapor**<br>Indoor Inhalation of Vapor Emissions | ☐ | ☐ | |

Exposure Point Concentratio for Construction Worker Direct Contact Represents Expected Depth of Construction

☑ **Groundwater Protection** ☐

The Maximum Contaminant Levels (MCLs) are used as the target concentrations at the POE. For chemicals without MCLs, risk-based ingestion standards are calculated.

☑ **Surface Water Protection**

**If a surface water body is impacted or threatened, complete the following:**

| | |
|---|---|
| Designated for use as drinking water supply or water quality is appropriate for drinking water supplies? | ☐ |
| Surface water supports aquatic life? | ☐ |
| Surface water is used for recreational activities? | ☐ |

# EXPOSURE FACTORS

*(Page 1 of 2)*

| Parameter | Symbol | Unit | Default Value | Value Used | Comment |
|---|---|---|---|---|---|
| Averaging Time for Carcinogens | $AT_c$ | year | 70 | 70 | *Default* |
| Averaging Time for Noncarcingens | $AT_{nc}$ | year | =ED | =ED | *Default* |
| **Body Weight:** | | | | | |
| Resident Child | $BW_c$ | kg | 15 | 15 | *Default* |
| Resident Adult | $BW_a$ | kg | 70 | 70 | *Default* |
| Non-residential | $BW_{com}$ | kg | 70 | 70 | *Default* |
| Construction Worker | $BW_{con}$ | kg | 70 | 70 | *Default* |
| **Exposure Duration:** | | | | | |
| Resident Child | $ED_c$ | year | 6 | 6 | *Default* |
| Resident Adult | $ED_a$ | year | 30 | 30 | *Default* |
| Resident Age Adjusted Adult | $ED_{aa}$ | year | 24 | 24 | *Default* |
| Non-residential | $ED_{com}$ | year | 25 | 25 | *Default* |
| Construction Worker | $ED_{con}$ | year | 1 | 1 | *Default* |
| **Exposure Frequency for Indirect Pathways:** | | | | | |
| Resident Child | $EF_c$ | day/year | 350 | 350 | *Default* |
| Resident Adult | $EF_a$ | day/year | 350 | 350 | *Default* |
| Non-residential | $EF_{com}$ | day/year | 250 | 250 | *Default* |
| Construction Worker | $EF_{con}$ | day/year | 30 | 30 | *Default* |
| Exposure Frequency for Direct Contact Pathways | | | | | |
| Resident Child | $EF_{dc}$ | day/year | 270 | 270 | *Default* |
| Resident Adult | $EF_{da}$ | day/year | 270 | 270 | *Default* |
| Non-residential | $EF_{dcom}$ | day/year | 180 | 180 | *Default* |
| Construction Worker | $EF_{dcon}$ | day/year | 30 | 30 | *Default* |
| **Indoor Exposure Time:** | | | | | |
| Resident Child | $ET_{i\text{-}c}$ | hrs/day | 24 | 24 | *Default* |
| Resident Adult | $ET_{i\text{-}a}$ | hrs/day | 24 | 24 | *Default* |
| Non-residential | $ET_{i\text{-}com}$ | hrs/day | 8 | 8 | *Default* |
| **Outdoor Exposure Time:** | | | | | |
| Resident Child | $ET_{o\text{-}c}$ | hrs/day | 2 | 2 | *Default* |
| Resident Adult | $ET_{o\text{-}a}$ | hrs/day | 2 | 2 | *Default* |
| Non-residential | $ET_{o\text{-}com}$ | hrs/day | 6 | 6 | *Default* |
| Construction Worker | $ET_{o\text{-}con}$ | hrs/day | 10 | 10 | *Default* |
| **Soil Ingestion Rate:** | | | | | |
| Resident Child | $IR_{s\text{-}c}$ | mg/day | 200 | 200 | *Default* |
| Resident Adult | $IR_{s\text{-}a}$ | mg/day | 100 | 100 | *Default* |
| **Age-adjusted** | **$IR_{s\text{-}aa}$** | **mg-yr/kg-day** | **114** | **114** | ***Default*** |
| Age-Adjusted Mutagenic Chemicals | **Irsaam** | **mg-yr/kg-day** | **490** | **490** | ***Default*** |
| Non-residential | $IR_{s\text{-}com}$ | mg/day | 100 | 100 | *Default* |
| Construction Worker | $IR_{s\text{-}con}$ | mg/day | 330 | 330 | *Default* |
| **Groundwater Ingestion Rate:** | | | | | |
| Resident Child | $IR_{w\text{-}c}$ | L/day | 1 | 1 | *Default* |
| Resident Adult | $IR_{w\text{-}a}$ | L/day | 2 | 2 | *Default* |
| **Age-adjusted** | **$IR_{w\text{-}aa}$** | **L-yr/kg-day** | **1.09** | **1.09** | *Default* |
| Age-Adjusted Mutagenic Chemicals | **IRwaam** | **L-yr/kg-day** | **3.39** | **3.39** | *Default* |
| Non-residential | $IR_{w\text{-}com}$ | L/day | 1 | 1 | *Default* |

# EXPOSURE FACTORS

*(Page 2 of 2)*

| Parameter | Symbol | Unit | Default Value | Value Used | Comment |
|---|---|---|---|---|---|
| | | | | | |
| **Skin Surface Area:** | | | | | |
| Resident Child | $SA_c$ | $cm^2$/day | 2800 | 2800 | *Default* |
| Resident Adult | $SA_a$ | $cm^2$/day | 5700 | 5700 | *Default* |
| **Age-adjusted** | **$SA_{aa}$** | **mg-yr/kg-day** | **360.8** | **360.8** | ***Default*** |
| **Age-Adjusted Mutagenic Dermal** | **SAaam** | **mg-yr/kg-day** | **1445.5** | **1445.5** | ***Default*** |
| Non-residential | $SA_{com}$ | $cm^2$/day | 3300 | 3300 | *Default* |
| Construction Worker | $SA_{con}$ | $cm^2$/day | 3300 | 3300 | *Default* |
| **Soil to Skin Adherence Factor:** | | | | | |
| Resident Child | $M_c$ | $mg/cm^2$ | 0.2 | 0.2 | *Default* |
| Resident Adult | $M_a$ | $mg/cm^2$ | 0.07 | 0.07 | *Default* |
| Non-residential | $M_{com}$ | $mg/cm^2$ | 0.2 | 0.2 | *Default* |
| Construction Worker | $M_{con}$ | $mg/cm^2$ | 0.3 | 0.3 | *Default* |
| **Averaging Time for Vapor Flux:** | | | | | |
| Resident Child | $\tau$ | s | 1.89E+08 | **1.89E+08** | ***Calculated*** |
| Resident Adult | $\tau$ | s | 9.46E+08 | **9.46E+08** | ***Calculated*** |
| Age-adjusted Resident | $\tau$ | s | 7.57E+08 | **7.57E+08** | ***Calculated*** |
| Commercial Worker | $\tau$ | s | 7.88E+08 | **7.88E+08** | ***Calculated*** |
| Construction Worker | $\tau$ | s | 3.15E+07 | **3.15E+07** | ***Calculated*** |
| **Target Site Risk** | TR | -- | 1.00E-05 | 1.00E-05 | *Default* |
| **Target Site Hazard Quotient** | THI | -- | 1 | 1 | *Default* |

# FATE AND TRANSPORT PARAMETERS

*(Page 1 of 3)*

| Parameter | Symbol | Unit | Default Value | Value Used | Comment |
|---|---|---|---|---|---|
| **SOIL PARAMETERS:** | | | | | |
| Top of source to bottom of building separation distance | $L_{TS}$ | cm | 30 | 30 | *Default* |
| Bottom of source to bottom of building separation distance | $L_{TS-B}$ | cm | 183 | 183 | *Default* |
| Number of distinct soil strata between the top of the source zone and the bottom of the building floor slab | $n_S$ | - | 1 | 1 | *Default* |
| **SOIL-VAPOR PARAMETERS:** | | | | | |
| Depth to sample from the bottom of the building | $L_{TSV}$ | cm | 91 | 91 | *Default* |
| **GROUNDWATER PARAMETERS:** | | | | | |
| Top of groundwater to bottom of building separation distance (excluding the capillary fringe) | $L_{TGW}$ | cm | 30 | 30 | *Default* |
| Number of distinct soil strata between the capillary fringe and the bottom of the building floor slab | $n_{GW}$ | - | 1 | 1 | *Default* |
| **AIR PARAMETERS:** | | | | | |
| Viscosity of air | $\mu$ | g/cm-s | 1.80E-04 | 1.80E-04 | *Default* |
| **ENCLOSED SPACE PARAMETERS:** | | | | | |
| **Area of the enclosed space below grade:** | | | | | |
| Residential | $A_B$ | $cm^2$ | 1488400 | **1488400** | ***Calculated*** |
| Non-residential | $A_B$ | $cm^2$ | 4652649 | **4652649** | ***Calculated*** |
| **Enclosed Space Foundation/Wall Thickness:** | | | | | |
| Residential | $L_{crack}$ | cm | 15 | 15 | *Default* |
| Non-residential | $L_{crack}$ | cm | 15 | 15 | *Default* |
| **Total area of cracks:** | | | | | |
| Residential | $A_{crack}$ | $cm^2$ | 744 | **744** | ***Calculated*** |
| Non-residential | $A_{crack}$ | $cm^2$ | 2326 | **2326** | ***Calculated*** |
| **Number of air exchanges per hour:** | | | | | |
| Residential | ER | 1/hr | 1.0E+00 | 1.0E+00 | *Default* |
| Non-residential | ER | 1/hr | 1.0E+00 | 1.0E+00 | *Default* |
| **Depth below grade to bottom of enclosed space floor:** | | | | | |
| Residential | $L_B$ | cm | 15 | 15 | *Default* |
| Non-residential | $L_B$ | cm | 15 | 15 | *Default* |
| **Length of enclosed space:** | | | | | |
| Residential | $L_B$ | cm | 1220 | 1220 | *Default* |
| Non-residential | $L_B$ | cm | 2157 | 2157 | *Default* |
| **Width of enclosed space:** | | | | | |
| Residential | $W_B$ | cm | 1220 | 1220 | *Default* |
| Non-residential | $W_B$ | cm | 2157 | 2157 | *Default* |
| **Height of enclosed space:** | | | | | |
| Residential | $H_B$ | cm | 244 | 244 | *Default* |
| Non-residential | $H_B$ | cm | 244 | 244 | *Default* |
| **Floor-wall seam perimeter:** | | | | | |
| Residential | $X_{crack}$ | $cm^2/cm^2$ | 4880 | **4880** | ***Calculated*** |
| Non-residential | $X_{crack}$ | $cm^2/cm^2$ | 8628 | **8628** | ***Calculated*** |
| **Crack Depth Below Grade:** | | | | | |
| Residential | $Z_{crack}$ | cm | 15 | **15** | ***Calculated*** |
| Non-residential | $Z_{crack}$ | cm | 15 | **15** | ***Calculated*** |
| **Building Crack Ratio** | | | | | |
| Residential | n | - | min of 0.0005 | **0.0005** | ***Calculated*** |
| Non-residential | n | - | min of 0.0005 | **0.0005** | ***Calculated*** |
| **Equivalent Crack Width** | | | | | |
| Residential | $r_{crack}$ | cm | 0.1 | **0.1** | *Fixed* |
| Non-Residential | $r_{crack}$ | cm | 0.1 | **0.1** | *Fixed* |
| **Pressure differential between enclosed space and soil surface beneath** | $\Delta P$ | $g/cm\text{-}s^2$ | 40 | 40 | *Default* |
| **Building ventilation rate:** | | | | | |
| Residential | $Q_{building}$ | $cm^3/s$ | 1.01E+05 | **1.01E+05** | ***Calculated*** |
| Non-residential | $Q_{building}$ | $cm^3/s$ | 3.15E+05 | **3.15E+05** | ***Calculated*** |
| **Volumetric flow rate of soil gas into the enclosed space:** | | | | | |
| Residential | $Q_{soil}$ | $cm^3/s$ | max of 170 | **6.0E+00** | ***Calculated*** |
| Non-residential | $Q_{soil}$ | $cm^3/s$ | max of 522 | **1.1E+01** | ***Calculated*** |
| **COWHERD PARTICULATE EMISSION MODEL:** | | | | | |
| Inverse of mean concentration in the middle of a sqaure source | **Q/C** | **$[g/m^2\text{-}s]/[kg/m^3]$** | **69.41** | **69.41** | ***Calculated*** |
| Fraction of Vegetative Cover | V | $m^2/m^2$ | 0.5 | 0.5 | *Default* |
| Mean Annual Wind Speed | $U_m$ | m/s | 3.98 | 3.98 | *Default* |
| Equivalent Threshold Value of Windspeed at 7m | $U_t$ | m/s | 11.32 | 11.32 | *Default* |
| Windspeed Distribution Function from Cowherd et. al, 1985 | F(x) | -- | 0.0495 | 0.0495 | *Default* |

# FATE AND TRANSPORT PARAMETERS

*(Page 2 of 3)*

| Parameter | Symbol | Unit | Default Value | Value Used | Comment |
|---|---|---|---|---|---|
| **GROUNDWATER PROTECTION PARAMETERS:** | | | | | |
| Groundwater Darcy Velocity | $U_{gw}$ | cm/year | 3340 | 3340 | *Default* |
| Groundwater Mixing Zone Length | $L_{mz}$ | cm | 1220 | 1220 | *Default* |
| Groundwater Mixing Zone Thickness | $\delta_{gw}$ | cm | 153 | 153 | *Default* |
| Groundwater Mixing Zone Width | $W_{gw}$ | cm | 1220 | 1220 | *Default* |
| Infiltration Rate | I | cm/year | 25 | 25 | *Default* |
| **Source Zone Soil Properties:** | | | | | |
| Dry Soil Bulk Density of the source zone soil | $\rho_s$ | $g/cm^3$ | 1.64 | 1.64 | *Default* |
| Fractional Organic Carbon Content in the source zone soil | foc | g-C/g-soil | 0.001 | 0.001 | *Default* |
| Total Soil Porosity of the source zone soil | $\theta_T$ | $cm^3/cm^3$-soil | 0.39 | 0.39 | *Default* |
| Volumetric Water Content in the source zone soil | $\theta_{ws}$ | $cm^3/cm^3$ | 0.17 | 0.17 | *Default* |
| Volumetric Air Content in the source zone soil | $\theta_{as}$ | $cm^3/cm^3$ | 0.22 | **0.22** | ***Calculated*** |
| **Saturated Zone Soil Properties:** | | | | | |
| Dry Soil Bulk Density of the saturated zone soil | $\rho_{ss}$ | $g/cm^3$ | 1.64 | 1.64 | *Default* |
| Fractional Organic Carbon Content in the saturated zone soil | focs | g-C/g-soil | 0.001 | 0.001 | *Default* |
| Total Soil Porosity in the saturated zone soil | $\theta_{Ts}$ | $cm^3/cm^3$-soil | 0.39 | 0.39 | *Default* |
| Distance to the Point of Exposure (Xpoe) | Xpoe,gw | ft | variable | 0 | *User-Defined* |
| Longitudinal dispersivity | $\alpha_x$ | **ft** | **variable** | **0.000** | ***Calculated*** |
| Transverse dispersivity | $\alpha_y$ | **ft** | **variable** | **0.000** | ***Calculated*** |
| Vertical dispersivity | $\alpha_z$ | **ft** | **variable** | **0.000** | ***Calculated*** |
| Distance to the Point of Compliance (Xpoc) | Xpoc,gw | ft | variable | 0 | *User-Defined* |
| Longitudinal dispersivity | $\alpha_x$ | **ft** | **variable** | **0.000** | ***Calculated*** |
| Transverse dispersivity | $\alpha_y$ | **ft** | **variable** | **0.000** | ***Calculated*** |
| Vertical dispersivity | $\alpha_z$ | **ft** | **variable** | **0.000** | ***Calculated*** |
| **SURFACE WATER PROTECTION PARAMETERS:** | | | | | |
| Distance to the Point of Exposure (Xpoe) | Xpoe,sw | ft | variable | 0 | *User-Defined* |
| Longitudinal dispersivity | $\alpha_x$ | **ft** | **variable** | **0.000** | ***Calculated*** |
| Transverse dispersivity | $\alpha_y$ | **ft** | **variable** | **0.000** | ***Calculated*** |
| Vertical dispersivity | $\alpha_z$ | **ft** | **variable** | **0.000** | ***Calculated*** |
| Distance to the Point of Compliance (Xpoc) | Xpoc,sw | ft | variable | 0 | *User-Defined* |
| Longitudinal dispersivity | $\alpha_x$ | **ft** | **variable** | **0.000** | ***Calculated*** |
| Transverse dispersivity | $\alpha_y$ | **ft** | **variable** | **0.000** | ***Calculated*** |
| Vertical dispersivity | $\alpha_z$ | **ft** | **variable** | **0.000** | ***Calculated*** |

# FATE AND TRANSPORT PARAMETERS

*(Page 3 of 3)*

| Parameter | Symbol | Unit | Default Value | Value Used | Comment |
|---|---|---|---|---|---|
| **Thickness of Soil Strata Between the Source and the Bottom of the Building:** | | | | | |
| Stratum A (Immediately below the building) | $h_A$ | cm | 30 | 30 | *Default* |
| Stratum B | $h_B$ | cm | 0 | 0 | *Default* |
| Stratum C | $h_C$ | cm | 0 | 0 | *Default* |
| Total thickness (should equal top of source to bottom of building seperation distance from page 1) | $L_{TS}$ | cm | 30 | **30** | |
| **Thickness of Soil Strata Between Groundwater and the Bottom of the Building:** | | | | | |
| Stratum A (Immediately below the building) | $h_A$ | cm | 5 | 5 | *Default* |
| Stratum B | $h_B$ | cm | 0 | 0 | *Default* |
| Stratum C | $h_C$ | cm | 0 | 0 | *Default* |
| Stratum D (Capillary fringe) | $h_{cap}$ | cm | 25 | **25** | ***Calculated*** |
| Total thickness (should equal top of groundwater surface, excluding the capillary fringe, to bottom of building seperation distance from page 1) | $L_{TGW}$ | cm | 30 | **30** | |
| **Stratum-Specific Properties:** | | | | | |
| **Stratum A (Immediately below the building):** | | | | | |
| Vapor permeability | $k_v$ | $cm^2$ | 5.00E-09 | 5.00E-09 | *Default* |
| Dry Soil Bulk Density | $\rho_{sA}$ | $g/cm^3$ | 1.64 | 1.64 | *Default* |
| Fractional Organic Carbon Content | $foc_A$ | g-C/g-soil | 0.001 | 0.001 | *Default* |
| Total Soil Porosity | $\theta_{TA}$ | $cm^3/cm^3$-soil | 0.39 | 0.39 | *Default* |
| Volumetric Water Content in Stratum A | $\theta_{wsA}$ | $cm^3/cm^3$ | 0.17 | 0.17 | *Default* |
| Volumetric Air Content in Stratum A | $\theta_{asA}$ | $cm^3/cm^3$ | 0.22 | **0.22** | ***Calculated*** |
| **Stratum B:** | | | | | |
| Dry Soil Bulk Density | $\rho_{sB}$ | $g/cm^3$ | 1.64 | 1.64 | *Default* |
| Fractional Organic Carbon Content | $foc_B$ | g-C/g-soil | 0.001 | 0.001 | *Default* |
| Total Soil Porosity | $\theta_{TB}$ | $cm^3/cm^3$-soil | 0.39 | 0.39 | *Default* |
| Volumetric Water Content in Stratum B | $\theta_{wsB}$ | $cm^3/cm^3$ | 0.17 | 0.17 | *Default* |
| Volumetric Air Content in Stratum B | $\theta_{asB}$ | $cm^3/cm^3$ | 0.22 | **0.22** | ***Calculated*** |
| **Stratum C:** | | | | | |
| Dry Soil Bulk Density | $\rho_{sC}$ | $g/cm^3$ | 1.64 | 1.64 | *Default* |
| Fractional Organic Carbon Content | $foc_C$ | g-C/g-soil | 0.001 | 0.001 | *Default* |
| Total Soil Porosity | $\theta_{TC}$ | $cm^3/cm^3$-soil | 0.39 | 0.39 | *Default* |
| Volumetric Water Content in Stratum C | $\theta_{wsC}$ | $cm^3/cm^3$ | 0.17 | 0.17 | *Default* |
| Volumetric Air Content in Stratum C | $\theta_{asC}$ | $cm^3/cm^3$ | 0.22 | **0.22** | ***Calculated*** |
| **Stratum D (Capillary fringe):** | | | | | |
| Mean particle diameter | D | cm | 0.03 | 0.03 | *Default* |
| van Genuchten curve shape factor | N | - | 1.449 | 1.449 | *Default* |
| Dry Soil Bulk Density | $\rho_{sF}$ | $g/cm^3$ | 1.64 | 1.64 | *Default* |
| Fractional Organic Carbon Content | $foc_F$ | g-C/g-soil | 0.001 | 0.001 | *Default* |
| Total Soil Porosity | $\theta_{Tcap}$ | $cm^3/cm^3$-soil | 0.39 | 0.39 | *Default* |
| Residual water content in capillary fringe soil | $\theta_{rcap}$ | $cm^3/cm^3$ | 0.039 | 0.039 | *Default* |
| Volumetric Water Content in capillary fringe | $\theta_{wcap}$ | $cm^3/cm^3$ | 0.322 | **0.322** | ***Calculated*** |
| Volumetric Air Content in capillary fringe | $\theta_{acap}$ | $cm^3/cm^3$ | 0.068 | 0.068 | ***Calculated*** |

## EXPOSURE POINT CONCENTRATIONS FOR RESIDENTIAL RECEPTORS

| | SURFICIAL SOIL | SUB-SURFACE SOIL | GROUNDWATER | SOIL-VAPOR | GROUNDWATER AND/OR SURFACE WATER PROTECTION | | |
|---|---|---|---|---|---|---|---|
| | Inhalation of Vapors and Particulates, Dermal Contact, and Accidental Ingestion | Indoor Inhalation of Vapor Emissions | Indoor Inhalation of Vapor Emissions | Indoor Inhalation of Vapor Emissions | Representative Groundwater Concentration at the Source [mg/L] | Representative Soil Concentration at the Source [mg/kg] | Representative Groundwater Concentration at the POC [mg/L] |
| | Representative Concentration [mg/kg] | Representative Concentration [mg/kg] | Representative Concentration [mg/L] | NOT REQUIRED-DATA UNAVAILABLE | | NOT USED IN CALCULATIONS | |
| Acenaphthene | 5.70E-02 | 5.70E-02 | 1.00E-05 | | 1.00E-05 | | |
| Anthracene | 1.90E-01 | 1.90E-01 | 1.40E-05 | | 1.40E-05 | | |
| Benzene | 1.00E-02 | 1.00E-02 | 3.31E-04 | | 3.31E-04 | | |
| Benzo(a)anthracene | 1.30E+00 | 1.30E+00 | 4.10E-06 | | 4.10E-06 | | |
| Benzo(a)pyrene | 2.00E+00 | 2.00E+00 | 1.16E-05 | | 1.16E-05 | | |
| Benzo(b)fluoranthene | 3.10E+00 | 3.10E+00 | 2.12E-06 | | 2.12E-06 | | |
| Benzo(k)fluoranthene | 9.30E-01 | 9.30E-01 | 1.36E-05 | | 1.36E-05 | | |
| Chrysene | 1.80E+00 | 1.80E+00 | 1.08E-05 | | 1.08E-05 | | |
| Fluoranthene | 2.10E+00 | 2.10E+00 | 1.57E-05 | | 1.57E-05 | | |
| Fluorene | 4.30E-02 | 4.30E-02 | 8.50E-06 | | 8.50E-06 | | |
| Naphthalene | 1.30E-01 | 1.30E-01 | 1.03E-04 | | 1.03E-04 | | |
| Pyrene | 2.20E+00 | 2.20E+00 | 1.17E-05 | | 1.17E-05 | | |
| Toluene | 3.70E-03 | 3.70E-03 | 7.80E-04 | | 7.80E-04 | | |
| Total Xylenes | 1.60E-03 | 1.60E-03 | 1.06E-03 | | 1.06E-03 | | |

**Notes:**

## EXPOSURE POINT CONCENTRATIONS FOR NON-RESIDENTIAL RECEPTORS

| | SURFICIAL SOIL | SUB-SURFACE SOIL | GROUNDWATER | SOIL-VAPOR |
|---|---|---|---|---|
| | Inhalation of Vapors and Particulates, Dermal Contact, and Accidental Ingestion | Indoor Inhalation of Vapor Emissions | Indoor Inhalation of Vapor Emissions | Indoor Inhalation of Vapor Emissions |
| | Representative Concentration [mg/kg] | Representative Concentration [mg/kg] | Representative Concentration [mg/L] | NOT REQUIRED-ROE NOT SELECTED |
| Acenaphthene | 5.70E-02 | 5.70E-02 | 1.00E-05 | |
| Anthracene | 1.90E-01 | 1.90E-01 | 1.40E-05 | |
| Benzene | 1.00E-02 | 1.00E-02 | 3.31E-04 | |
| Benzo(a)anthracene | 1.30E+00 | 1.30E+00 | 4.10E-06 | |
| Benzo(a)pyrene | 2.00E+00 | 2.00E+00 | 1.16E-05 | |
| Benzo(b)fluoranthene | 3.10E+00 | 3.10E+00 | 2.12E-06 | |
| Benzo(k)fluoranthene | 9.30E-01 | 9.30E-01 | 1.36E-05 | |
| Chrysene | 1.80E+00 | 1.80E+00 | 1.08E-05 | |
| Fluoranthene | 2.10E+00 | 2.10E+00 | 1.57E-05 | |
| Fluorene | 4.30E-02 | 4.30E-02 | 8.50E-06 | |
| Naphthalene | 1.30E-01 | 1.30E-01 | 1.03E-04 | |
| Pyrene | 2.20E+00 | 2.20E+00 | 1.17E-05 | |
| Toluene | 3.70E-03 | 3.70E-03 | 7.80E-04 | |
| Total Xylenes | 1.60E-03 | 1.60E-03 | 1.06E-03 | |

**Note:**

## EXPOSURE POINT CONCENTRATIONS FOR CONSTRUCTION WORKER

| | SOIL TO TYPICAL DEPTH OF CONSTRUCTION |
|---|---|
| | Inhalation of Vapors and Particulates, Dermal Contact, and Accidental Ingestion |
| | Representative Concentration [mg/kg] |
| Acenaphthene | 5.70E-02 |
| Anthracene | 1.90E-01 |
| Benzene | 1.00E-02 |
| Benzo(a)anthracene | 1.30E+00 |
| Benzo(a)pyrene | 2.00E+00 |
| Benzo(b)fluoranthene | 3.10E+00 |
| Benzo(k)fluoranthene | 9.30E-01 |
| Chrysene | 1.80E+00 |
| Fluoranthene | 2.10E+00 |
| Fluorene | 4.30E-02 |
| Naphthalene | 1.30E-01 |
| Pyrene | 2.20E+00 |
| Toluene | 1.70E-02 |
| Total Xylenes | 2.70E-02 |

**Note:**

## DECAY RATE AND UNSATURATED ZONE DAF

| | First-Order Decay Rate [$day^{-1}$] | Unsaturated Zone DAF [--] |
|---|---|---|
| Acenaphthene | 0.00E+00 | 1 |
| Anthracene | 0.00E+00 | 1 |
| Benzene | 0.00E+00 | 1 |
| Benzo(a)anthracene | 0.00E+00 | 1 |
| Benzo(a)pyrene | 0.00E+00 | 1 |
| Benzo(b)fluoranthene | 0.00E+00 | 1 |
| Benzo(k)fluoranthene | 0.00E+00 | 1 |
| Chrysene | 0.00E+00 | 1 |
| Fluoranthene | 0.00E+00 | 1 |
| Fluorene | 0.00E+00 | 1 |
| Naphthalene | 0.00E+00 | 1 |
| Pyrene | 0.00E+00 | 1 |
| Toluene | 0.00E+00 | 1 |
| Total Xylenes | 0.00E+00 | 1 |

**Notes:**

**NA: Not available**

## RISK/HAZARD QUOTIENT FOR RESIDENTIAL RECEPTORS

| | SURFICIAL SOIL | | SUB-SURFACE SOIL | | GROUNDWATER | | SOIL-VAPOR | |
|---|---|---|---|---|---|---|---|---|
| | Inhalation of Vapors and Particulates, Dermal Contact, and Accidental Ingestion | | Indoor Inhalation of Vapor Emissions | | Indoor Inhalation of Vapor Emissions | | Indoor Inhalation of Vapor Emissions | |
| | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ |
| Acenaphthene | NTOX | 1.28E-05 | NTOX | NTOX | NTOX | NTOX | | |
| Anthracene | NTOX | 8.52E-06 | NTOX | NTOX | NTOX | NTOX | | |
| Benzene | 1.21E-09 | 3.01E-05 | 1.25E-07 | 1.25E-03 | 1.40E-08 | 1.40E-04 | | |
| Benzo(a)anthracene | 6.80E-06 | NTOX | 2.32E-08 | NTOX | 1.30E-11 | NTOX | | |
| Benzo(a)pyrene | 1.05E-04 | NTOX | 4.32E-09 | NTOX | 1.47E-11 | NTOX | | |
| Benzo(b)fluoranthene | 1.62E-05 | NTOX | 9.27E-10 | NTOX | 3.80E-13 | NTOX | | |
| Benzo(k)fluoranthene | 4.87E-07 | NTOX | 2.53E-10 | NTOX | 2.17E-12 | NTOX | | |
| Chrysene | 9.46E-08 | NTOX | 1.32E-09 | NTOX | 1.43E-12 | NTOX | | |
| Fluoranthene | NTOX | 7.06E-04 | NTOX | NTOX | NTOX | NTOX | | |
| Fluorene | NTOX | 1.45E-05 | NTOX | NTOX | NTOX | NTOX | | |
| Naphthalene | 2.98E-09 | 1.56E-04 | 1.10E-06 | 2.52E-02 | 1.46E-09 | 3.35E-05 | | |
| Pyrene | NTOX | 9.87E-04 | NTOX | NTOX | NTOX | NTOX | | |
| Toluene | NTOX | 4.67E-07 | NTOX | 2.78E-06 | NTOX | 2.31E-06 | | |
| Total Xylenes | NTOX | 2.59E-07 | NTOX | 6.00E-05 | NTOX | 1.22E-04 | | |

**Notes:**

**NPCP: A physical-chemical parameter, required in the calculation of the value, is not available.**

**NTOX: The toxicity parameter(s) required in the calculation of the value, is not available.**

**NCOC: The chemical is not a COC for the pathway because it was selected, but no representative concentration was entered.**

## RISK/HAZARD QUOTIENT FOR NON-RESIDENTIAL RECEPTORS

| | SURFICIAL SOIL | | SUB-SURFACE SOIL | | GROUNDWATER | | SOIL-VAPOR | |
|---|---|---|---|---|---|---|---|---|
| | Inhalation of Vapors and Particulates, Dermal Contact, and Accidental Ingestion | | Indoor Inhalation of Vapor Emissions | | Indoor Inhalation of Vapor Emissions | | Indoor Inhalation of Vapor Emissions | |
| | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ |
| Acenaphthene | NTOX | 1.24E-06 | NTOX | NTOX | NTOX | NTOX | | |
| Anthracene | NTOX | 8.29E-07 | NTOX | NTOX | NTOX | NTOX | | |
| Benzene | 1.13E-09 | 1.36E-05 | 2.99E-08 | 3.57E-04 | 1.59E-09 | 1.91E-05 | | |
| Benzo(a)anthracene | 4.47E-07 | NTOX | 1.05E-09 | NTOX | 5.87E-13 | NTOX | | |
| Benzo(a)pyrene | 6.84E-06 | NTOX | 1.93E-10 | NTOX | 6.56E-13 | NTOX | | |
| Benzo(b)fluoranthene | 1.06E-06 | NTOX | 4.14E-11 | NTOX | 1.70E-14 | NTOX | | |
| Benzo(k)fluoranthene | 3.24E-08 | NTOX | 1.13E-11 | NTOX | 9.70E-14 | NTOX | | |
| Chrysene | 6.43E-09 | NTOX | 6.04E-11 | NTOX | 6.55E-14 | NTOX | | |
| Fluoranthene | NTOX | 6.87E-05 | NTOX | NTOX | NTOX | NTOX | | |
| Fluorene | NTOX | 1.41E-06 | NTOX | NTOX | NTOX | NTOX | | |
| Naphthalene | 5.44E-09 | 1.58E-04 | 1.28E-07 | 3.50E-03 | 1.68E-10 | 4.60E-06 | | |
| Pyrene | NTOX | 9.60E-05 | NTOX | NTOX | NTOX | NTOX | | |
| Toluene | NTOX | 5.57E-08 | NTOX | 7.93E-07 | NTOX | 3.16E-07 | | |
| Total Xylenes | NTOX | 4.00E-07 | NTOX | 1.72E-05 | NTOX | 1.67E-05 | | |

**Notes:**

**NPCP: A physical-chemical parameter, required in the calculation of the value, is not available.**

**NTOX: The toxicity parameter(s) required in the calculation of the value, is not available.**

**NCOC: The chemical is not a COC for the pathway because it was selected, but no representative concentration was entered.**

## RISK/HAZARD QUOTIENT FOR CONSTRUCTION WORKERS

| | SURFICIAL SOIL | |
|---|---|---|
| | Inhalation of Vapors and Particulates, Dermal Contact, and Accidental Ingestion | |
| | Risk | HQ |
| Acenaphthene | NTOX | 5.12E-07 |
| Anthracene | NTOX | 3.41E-07 |
| Benzene | 5.80E-11 | 1.74E-05 |
| Benzo(a)anthracene | 7.47E-09 | NTOX |
| Benzo(a)pyrene | 1.13E-07 | NTOX |
| Benzo(b)fluoranthene | 1.75E-08 | NTOX |
| Benzo(k)fluoranthene | 5.59E-10 | NTOX |
| Chrysene | 1.17E-10 | NTOX |
| Fluoranthene | NTOX | 2.83E-05 |
| Fluorene | NTOX | 5.79E-07 |
| Naphthalene | 3.02E-10 | 2.11E-04 |
| Pyrene | NTOX | 3.95E-05 |
| Toluene | NTOX | 2.30E-07 |
| Total Xylenes | NTOX | 9.31E-06 |

**Notes:**
**NPCP: A physical-chemical parameter, required in the calculation of the value, is not available.**

**NTOX: The toxicity parameter(s) required in the calculation of the value, is not available.**
**NCOC: The chemical is not a COC for the pathway because it was selected, but no representative concentration was entered.**

# SUMMARY OF CUMULATIVE RISK AND HAZARD INDEX

| Routes of Exposure | RECEPTOR | | | | | |
|---|---|---|---|---|---|---|
| | RESIDENTIAL | | NON-RESIDENTIAL | | CONSTRUCTION WORKER | |
| | Risk | Hazard Index | Risk | Hazard Index | Risk | Hazard Index |
| **Direct Contact:** Inhalation of Vapors and Particulates, Dermal Contact, and Accidental Ingestion | 1.28E-04 | 1.92E-03 | 8.39E-06 | 3.40E-04 | 1.39E-07 | 3.07E-04 |
| **Subsurface Soil:** Indoor Inhalation of Vapor Emissions | 1.26E-06 | 2.65E-02 | 1.59E-07 | 3.88E-03 | Not Applicable | Not Applicable |
| **Groundwater:** Indoor Inhalation of Vapor Emissions | 1.55E-08 | 2.98E-04 | 1.76E-09 | 4.07E-05 | Not Applicable | Not Applicable |
| **Soil-Vapor:** Indoor Inhalation of Vapor Emissions from Soil and/or Groundwater | NA | NA | NA | NA | Not Applicable | Not Applicable |
| **Site Risk** | **1.29E-04** | | **8.55E-06** | | **1.39E-07** | |
| **Site Hazard Index** | | **2.87E-02** | | **4.26E-03** | | **3.07E-04** |
| **Target Site Risk/HI Exceeded?** | YES | NO | NO | NO | NO | NO |

**Notes:**
**NA: Not applicable because the chemical is not a COC for the pathway (no representative concentration entered) or its properties (toxicity and/or physical-chemical) are not available.**

# RATL FOR RESIDENTIAL RECEPTORS

| | SURFICIAL SOIL | SUB-SURFACE SOIL | GROUNDWATER | SOIL-VAPOR |
|---|---|---|---|---|
| | Inhalation of Vapors and Particulates, Dermal Contact, and Accidental Ingestion | Indoor Inhalation of Vapor Emissions | Indoor Inhalation of Vapor Emissions | Indoor Inhalation of Vapor Emissions |
| | [mg/kg] | [mg/kg] | [mg/L] | [ug/m3] |
| Acenaphthene | 2.62E+02 | NA | NA | NA |
| Anthracene | 1.31E+03 | NA | NA | NA |
| Benzene | 3.95E+00 | 3.80E-02 | 1.13E-02 | NA |
| Benzo(a)anthracene | 9.10E-02 | 2.67E+01 | 1.51E-01 | NA |
| Benzo(a)pyrene | 9.11E-03 | 2.21E+02 | 3.76E-01 | NA |
| Benzo(b)fluoranthene | 9.11E-02 | 1.59E+03 | 2.66E+00 | NA |
| Benzo(k)fluoranthene | 9.09E-01 | 1.75E+03 | 2.98E+00 | NA |
| Chrysene | 9.06E+00 | 6.47E+02 | 3.58E+00 | NA |
| Fluoranthene | 1.75E+02 | NA | NA | NA |
| Fluorene | 1.75E+02 | NA | NA | NA |
| Naphthalene | 2.08E+01 | 5.62E-02 | 3.35E-02 | NA |
| Pyrene | 1.31E+02 | NA | NA | NA |
| Toluene | 4.66E+02 | 7.84E+01 | 1.99E+01 | NA |
| Total Xylenes | 3.63E+02 | 1.57E+00 | 5.10E-01 | NA |

**Notes:**

**NA: Not applicable because the chemical is not a COC for the pathway (no representative concentration entered) or its properties (toxicity and/or physical-chemical) are not available.**

## RATL FOR NON-RESIDENTIAL RECEPTORS

**RATLs NOT REQUIRED**

| | SURFICIAL SOIL | SUB-SURFACE SOIL | GROUNDWATER | SOIL-VAPOR |
|---|---|---|---|---|
| | Inhalation of Vapors and Particulates, Dermal Contact, and Accidental Ingestion | Indoor Inhalation of Vapor Emissions | Indoor Inhalation of Vapor Emissions | Indoor Inhalation of Vapor Emissions |
| | [mg/kg] | [mg/kg] | [mg/L] | [$\mu g/m^3$] |
| Acenaphthene | 2.70E+03 | NA | NA | NA |
| Anthracene | 1.35E+04 | NA | NA | NA |
| Benzene | 4.22E+00 | 1.59E-01 | 9.89E-02 | NA |
| Benzo(a)anthracene | 1.39E+00 | 5.89E+02 | 3.33E+00 | NA |
| Benzo(a)pyrene | 1.39E-01 | 4.95E+03 | 8.42E+00 | NA |
| Benzo(b)fluoranthene | 1.39E+00 | 3.56E+04 | 5.94E+01 | NA |
| Benzo(k)fluoranthene | 1.37E+01 | 3.92E+04 | 6.68E+01 | NA |
| Chrysene | 1.33E+02 | 1.42E+04 | 7.86E+01 | NA |
| Fluoranthene | 1.80E+03 | NA | NA | NA |
| Fluorene | 1.80E+03 | NA | NA | NA |
| Naphthalene | 1.14E+01 | 4.85E-01 | 2.93E-01 | NA |
| Pyrene | 1.35E+03 | NA | NA | NA |
| Toluene | 3.90E+03 | 2.74E+02 | 1.45E+02 | NA |
| Total Xylenes | 2.35E+02 | 5.49E+00 | 3.73E+00 | NA |

**Notes:**

**NA: Not applicable because the chemical is not a COI for the pathway (no representative concentration entered) or its properties (toxicity and/or physical-chemical) are not available.**

## RATL FOR CONSTRUCTION WORKERS

**RATLs NOT REQUIRED**

| | **SURFICIAL SOIL** |
|---|---|
| | Inhalation of Vapors and Particulates, Dermal Contact, and Accidental Ingestion |
| | [mg/kg] |
| Acenaphthene | 1.24E+04 |
| Anthracene | 6.19E+04 |
| Benzene | 6.38E+01 |
| Benzo(a)anthracene | 2.49E+02 |
| Benzo(a)pyrene | 2.53E+01 |
| Benzo(b)fluoranthene | 2.53E+02 |
| Benzo(k)fluoranthene | 2.38E+03 |
| Chrysene | 2.19E+04 |
| Fluoranthene | 8.25E+03 |
| Fluorene | 8.25E+03 |
| Naphthalene | 6.84E+01 |
| Pyrene | 6.19E+03 |
| Toluene | 8.21E+03 |
| Total Xylenes | 3.22E+02 |

**Notes:**
**NA: Not applicable because the chemical is not a COI for the pathway (no representative concentration entered) or its properties (toxicity and/or physical-chemical) are not available.**

## GROUNDWATER PROTECTION

| | Groundwater Standard [mg/L] | First-Order Decay Rate [day$^{-1}$] | Saturated Zone Retardation | Unsaturated Zone DAF [--] | Mixing Zone DAF [--] | Saturated Zone DAF at POC [--] | Saturated Zone DAF at POE [--] | Overall DAF at POC [--] | Overall DAF at POE [--] | Allowable Groundwater concentration [mg/L] protective of POE: AT POC | Allowable Groundwater concentration [mg/L] protective of POE: AT SOURCE | Soil concentration directly beneath the source protective of GW at POE [mg/kg] | Predicted Groundwater Concentration at POC [mg/L] | Predicted Groundwater Concentration at POE [mg/L] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 2.19E+00 | 0.00E+00 | 2.21E+01 | 1 | 1.78E+01 | 1.00E+00 | 1.00E+00 | 1.78E+01 | 1.78E+01 | 2.19E+00 | 2.19E+00 | 2.00E+02 | 1.00E-05 | 1.00E-05 |
| Anthracene | 1.10E+01 | 0.00E+00 | 6.98E+01 | 1 | 1.78E+01 | 1.00E+00 | 1.00E+00 | 1.78E+01 | 1.78E+01 | 1.10E+01 | 1.10E+01 | 3.20E+03 | 1.40E-05 | 1.40E-05 |
| Benzene | 5.00E-03 | 0.00E+00 | 1.61E+00 | 1 | 1.78E+01 | 1.00E+00 | 1.00E+00 | 1.78E+01 | 1.78E+01 | 5.00E-03 | 5.00E-03 | 2.49E-02 | 3.31E-04 | 3.31E-04 |
| Benzo(a)anthracene | 2.95E-05 | 0.00E+00 | 7.45E+02 | 1 | 1.78E+01 | 1.00E+00 | 1.00E+00 | 1.78E+01 | 1.78E+01 | 2.95E-05 | 2.95E-05 | 9.27E-02 | 4.10E-06 | 4.10E-06 |
| Benzo(a)pyrene | 2.00E-04 | 0.00E+00 | 2.47E+03 | 1 | 1.78E+01 | 1.00E+00 | 1.00E+00 | 1.78E+01 | 1.78E+01 | 2.00E-04 | 2.00E-04 | 2.09E+00 | 1.16E-05 | 1.16E-05 |
| Benzo(b)fluoranthene | 2.95E-05 | 0.00E+00 | 2.52E+03 | 1 | 1.78E+01 | 1.00E+00 | 1.00E+00 | 1.78E+01 | 1.78E+01 | 2.95E-05 | 2.95E-05 | 3.14E-01 | 2.12E-06 | 2.12E-06 |
| Benzo(k)fluoranthene | 2.95E-04 | 0.00E+00 | 2.47E+03 | 1 | 1.78E+01 | 1.00E+00 | 1.00E+00 | 1.78E+01 | 1.78E+01 | 2.95E-04 | 2.95E-04 | 3.08E+00 | 1.36E-05 | 1.36E-05 |
| Chrysene | 2.95E-03 | 0.00E+00 | 7.60E+02 | 1 | 1.78E+01 | 1.00E+00 | 1.00E+00 | 1.78E+01 | 1.78E+01 | 2.95E-03 | 2.95E-03 | 9.46E+00 | 1.08E-05 | 1.08E-05 |
| Fluoranthene | 1.46E+00 | 0.00E+00 | 2.34E+02 | 1 | 1.78E+01 | 1.00E+00 | 1.00E+00 | 1.78E+01 | 1.78E+01 | 1.46E+00 | 1.46E+00 | 1.44E+03 | 1.57E-05 | 1.57E-05 |
| Fluorene | 1.46E+00 | 0.00E+00 | 3.95E+01 | 1 | 1.78E+01 | 1.00E+00 | 1.00E+00 | 1.78E+01 | 1.78E+01 | 1.46E+00 | 1.46E+00 | 2.40E+02 | 8.50E-06 | 8.50E-06 |
| Naphthalene | 7.30E-01 | 0.00E+00 | 7.49E+00 | 1 | 1.78E+01 | 1.00E+00 | 1.00E+00 | 1.78E+01 | 1.78E+01 | 7.30E-01 | 7.30E-01 | 2.14E+01 | 1.03E-04 | 1.03E-04 |
| Pyrene | 1.10E+00 | 0.00E+00 | 2.30E+02 | 1 | 1.78E+01 | 1.00E+00 | 1.00E+00 | 1.78E+01 | 1.78E+01 | 1.10E+00 | 1.10E+00 | 1.06E+03 | 1.17E-05 | 1.17E-05 |
| Toluene | 1.00E+00 | 0.00E+00 | 1.98E+00 | 1 | 1.78E+01 | 1.00E+00 | 1.00E+00 | 1.78E+01 | 1.78E+01 | 1.00E+00 | 1.00E+00 | 6.64E+00 | 7.80E-04 | 7.80E-04 |
| Total Xylenes | 1.00E+01 | 0.00E+00 | 2.61E+00 | 1 | 1.78E+01 | 1.00E+00 | 1.00E+00 | 1.78E+01 | 1.78E+01 | 1.00E+01 | 1.00E+01 | 9.14E+01 | 1.06E-03 | 1.06E-03 |

**Notes:**

**NGWSTD: No groundwater standard is available or calculated for the chemical**

## LIST OF SELECTED CHEMICALS

| Chemicals of Concern | CAS Number |
|---|---|
| 1,1,1-Trichloroethane | 71-55-6 |
| 1,2,4-Trimethylbenzene (pseudoc | 95-63-6 |
| 2-Butanone (Methyl Ethyl Ketone | 78-93-3 |
| 2-Methylnaphthalene | 91-57-6 |
| Acenaphthylene | 208-96-8 |
| Acetone | 67-64-1 |
| Antimony | 7440-36-0 |
| Arsenic | 7440-38-2 |
| Barium | 7440-39-3 |
| Benzo(g,h,i)perylene | 191-24-2 |
| Beryllium | 7440-41-7 |
| Cadmium | 7440-43-9 |
| Chloroform | 67-66-3 |
| Chromium (III) total Cr | 7440-47-3 |
| Copper | 7440-50-8 |
| Dibenzo(a,h)anthracene | 53-70-3 |
| Indeno(1,2,3-cd)pyrene | 193-39-5 |
| Lead | 7439-92-1 |
| Mercury | 7439-97-6 |
| Nickel | 7440-02-0 |
| Phenanthrene | 85-01-8 |
| Silver | 7440-22-4 |
| Tetrachloroethene | 127-18-4 |
| Trichlorofluoromethane | 75-69-4 |
| Zinc | 7440-66-6 |

**Notes:**

# PHYSICAL AND CHEMICAL PROPERTIES OF SELECTED CHEMICALS

| CHEMICALS OF CONCERN | Molecular Weight | Water Solubility | Henry's Law Constant | Org. Carbon Ads. Coef. | Soil-Water Sorp. Coeff. | Soil-Water Sorp. Coeff. | Site-Specifc | Diffusion Coefficient: in air | Diffusion Coefficient: in water |
|---|---|---|---|---|---|---|---|---|---|
| | (g/g-mol) | (mg/L) | (L-water/L-air) | Koc (mL/g) | Kd (mL-water /g-soil) | Kd for Metals (mL/g) | Kd for Metals (mL/g) | ($cm^2/s$) | ($cm^2/s$) |
| 1,1,1-Trichloroethane | 1.33E+02 | 1.33E+03 | 7.05E-01 | 1.35E+02 | 1.35E-01 | NA | | 7.80E-02 | 8.80E-06 |
| 1,2,4-Trimethylbenzene (pseudocum | 1.20E+02 | 5.68E+01 | 1.84E-01 | 9.33E+02 | 9.33E-01 | NA | | 6.22E-02 | 7.28E-06 |
| 2-Butanone (Methyl Ethyl Ketone) | 7.21E+01 | 2.40E+05 | 1.94E-03 | 1.90E+00 | 1.90E-03 | NA | | 8.08E-02 | 9.80E-06 |
| 2-Methylnaphthalene | 1.42E+02 | 2.54E+01 | 1.85E-02 | 4.37E+03 | 4.37E+00 | NA | | 6.29E-02 | 7.20E-06 |
| Acenaphthylene | 1.54E+02 | 3.93E+00 | 4.74E-03 | 6.92E+03 | 6.92E+00 | NA | | 4.39E-02 | 7.07E-06 |
| Acetone | 5.88E+01 | 1.00E+06 | 1.59E-03 | 5.75E-01 | 5.75E-04 | NA | | 1.24E-01 | 1.14E-05 |
| Antimony | 1.22E+02 | NA | NA | NA | 4.47E+01 | 4.47E+01 | | NA | NA |
| Arsenic | 7.49E+01 | NA | NA | NA | 2.51E+01 | 2.51E+01 | | NA | NA |
| Barium | 1.37E+02 | NA | NA | NA | 2.51E+01 | 2.51E+01 | | NA | NA |
| Benzo(g,h,i)perylene | 2.76E+02 | 2.60E-04 | 5.70E-06 | 1.58E+06 | 1.58E+03 | NA | | 4.90E-02 | 5.65E-05 |
| Beryllium | 9.01E+00 | NA | NA | NA | 2.29E+01 | 2.29E+01 | | NA | NA |
| Cadmium | 1.12E+02 | NA | NA | NA | 1.51E+01 | 1.51E+01 | | NA | NA |
| Chloroform | 1.19E+02 | 7.92E+03 | 1.50E-01 | 5.25E+01 | 5.25E-02 | NA | | 1.04E-01 | 1.00E-05 |
| Chromium (III) total Cr | 5.20E+01 | NA | NA | NA | 1.20E+03 | 1.20E+03 | | NA | NA |
| Copper | 6.36E+01 | NA | NA | NA | 3.98E+01 | 3.98E+01 | | NA | NA |
| Dibenzo(a,h)anthracene | 2.78E+02 | 2.49E-04 | 6.03E-07 | 1.91E+06 | 1.91E+03 | NA | | 2.02E-02 | 5.18E-06 |
| Indeno(1,2,3-cd)pyrene | 2.76E+02 | 2.20E-05 | 6.56E-05 | 3.47E+06 | 3.47E+03 | NA | | 1.90E-02 | 5.66E-06 |
| Lead | 2.07E+02 | NA | NA | NA | 1.86E+02 | 1.86E+02 | | NA | NA |
| Mercury | 2.01E+02 | 3.00E-02 | NA | NA | 3.98E-02 | 3.98E-02 | | NA | NA |
| Nickel | 5.87E+01 | NA | NA | NA | 1.58E+01 | 1.58E+01 | | NA | NA |
| Phenanthrene | 1.78E+02 | 9.94E-01 | 5.40E-03 | 1.41E+04 | 1.41E+01 | NA | | 3.33E-02 | 7.47E-06 |
| Silver | 1.08E+02 | NA | NA | NA | 1.00E-01 | 1.00E-01 | | NA | NA |
| Tetrachloroethene | 1.66E+02 | 2.00E+02 | 7.54E-01 | 1.54E+02 | 1.54E-01 | NA | | 7.20E-02 | 8.20E-06 |
| Trichlorofluoromethane | 1.37E+02 | 1.10E+03 | 4.03E+00 | 1.59E+02 | 1.59E-01 | NA | | 8.70E-02 | 9.70E-06 |
| Zinc | 6.54E+01 | NA | NA | NA | 1.58E+01 | 1.58E+01 | | NA | NA |

**Notes:**

**NA: Not applicable or available**

## TOXICOLOGICAL PROPERTIES OF SELECTED CHEMICALS

| CHEMICALS OF CONCERN | Carcinogenic Effects | | Non-Carcinogenic Effects | | Oral Relative Absorption Factor (RAFo) | Dermal Relative Absorption Factor (RAFd) | Maximum Contaminant Level (MCL) | Aquatic Life Criterion | | Human Health Risk from Consumption of: | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Oral Slope Factor (SFo) | Inhalation Slope Factor (SFi) | Oral Reference Dose (RfDo) | Inhalation Reference Dose (RfDi) | | | | | | | |
| | [mg/kg-day]$^{-1}$ | [mg/kg-day]$^{-1}$ | (mg/kg-day) | (mg/kg-day) | [-] | [-] | [mg/L] | [µg/L] | [µg/L] | [µg/L] | [µg/L] |
| 1,1,1-Trichloroethane | NA | NA | 0.28 | 0.63 | 1 | 0.0005 | 0.2 | NA | NA | NA | NA |
| 1,2,4-Trimethylbenzene (pseudocu | NA | NA | 0.05 | 0.0017 | 1 | 0.03 | NA | NA | NA | NA | NA |
| 2-Butanone (Methyl Ethyl Ketone | NA | NA | 0.6 | 0.29 | 1 | 0.03 | NA | NA | NA | NA | NA |
| 2-Methylnaphthalene | NA | NA | 0.004 | 0.004 | 1 | 0.03 | NA | NA | NA | NA | NA |
| Acenaphthylene | NA | NA | 0.06 | NA | 1 | 0.13 | NA | NA | NA | NA | NA |
| Acetone | NA | NA | 0.9 | 0.9 | 1 | 0.0005 | NA | NA | NA | NA | NA |
| Antimony | NA | NA | 0.0004 | NA | 1 | 0.01 | 0.006 | NA | NA | 14 | 4300 |
| Arsenic | 1.5 | 15 | 0.0003 | NA | 1 | 0.03 | 0.01 | 360 | 190 | NA | NA |
| Barium | NA | NA | 0.07 | 0.00014 | 1 | 0.01 | 2 | NA | NA | NA | NA |
| Benzo(g,h,i)perylene | NA | NA | 0.03 | NA | 1 | 0.13 | NA | NA | NA | NA | NA |
| Beryllium | NA | 8.4 | 0.002 | 0.0000057 | 1 | 0.01 | 0.004 | NA | NA | NA | NA |
| Cadmium | NA | 6.3 | 0.0005 | NA | 1 | 0.001 | 0.005 | 0.822744649 | 0.369318897 | NA | NA |
| Chloroform | 0.031 | 0.019 | 0.01 | 0.00086 | 1 | 0.0005 | NA | NA | NA | 5.7 | 470 |
| Chromium (III) total Cr | NA | NA | 1.5 | NA | 1 | 0.01 | 0.1 | 176.3104277 | 57.19328011 | NA | NA |
| Copper | NA | NA | 0.037 | NA | 1 | 0.01 | 1.3 | 4.608962639 | 3.47191876 | NA | NA |
| Dibenzo(a,h)anthracene | 7.3 | 7.3 | NA | NA | 1 | 0.13 | NA | NA | NA | 0.0028 | 0.031 |
| Indeno(1,2,3-cd)pyrene | 0.73 | 0.73 | NA | NA | 1 | 0.13 | NA | NA | NA | 0.0028 | 0.031 |
| Lead | NA | NA | NA | NA | 1 | 0.01 | 0.015 | 13.88217279 | 0.540968344 | NA | NA |
| Mercury | NA | NA | 0.0003 | 0.000086 | 1 | 0.01 | 0.002 | 2.1 | 0.012 | 0.14 | 0.15 |
| Nickel | NA | NA | 0.02 | NA | 1 | 0.01 | NA | 438.064844 | 48.65061446 | 610 | 4600 |
| Phenanthrene | NA | NA | 0.03 | NA | 1 | 0.13 | NA | NA | NA | NA | NA |
| Silver | NA | NA | 0.005 | NA | 1 | 0.01 | NA | 0.31788916 | NA | NA | NA |
| Tetrachloroethene | 0.54 | 0.021 | 0.01 | 0.17 | 1 | 0.03 | 0.005 | NA | NA | 0.8 | 8.85 |
| Trichlorofluoromethane | NA | NA | 0.3 | 0.2 | 1 | 0.0005 | NA | NA | NA | NA | NA |
| Zinc | NA | NA | 0.3 | NA | 1 | 0.01 | NA | 35.35740607 | 32.28667357 | NA | NA |

**Notes:**

**NA: Not applicable or available**

## RECEPTOR(S) AND ROUTE(S) OF EXPOSURE

**(Select by clicking the checkboxes)**

| SOURCE AND ROUTES OF EXPOSURES | RECEPTOR | | | |
|---|---|---|---|---|
| | RESIDENT | | NON-RESIDENTIAL | CONSTRUCTION WORKER |
| | CHILD | AGE-ADJUSTED | | |
| **Surficial Soil**<br>Ingestion of Soil, Outdoor Inhalation of Vapor Emissions and Particulates, and Dermal Contact with Soil | ☑ | ☑ | ☑ | ☑ |
| **Subsurface Soil**<br>Indoor Inhalation of Vapor Emissions | ☑ | ☑ | ☑ | |
| **Groundwater**<br>Indoor Inhalation of Vapor Emissions | ☑ | ☑ | ☑ | |
| **Soil-Vapor ( RE-2 only)**<br>Indoor Inhalation of Vapor Emissions | ☐ | ☐ | ☐ | |

☑ **Groundwater Protection**

☑ **Option 1.** **Groundwater with Current Use or High Probability of Future Use as Drinking Water**: The Maximum Contaminant Levels (MCLs) are used as the target concentrations at the POE. For chemicals without MCLs, risk-based ingestion standard for an age-adjusted adult is used.

☐ **Option 2.** **Groundwater with Low Probability of Future Use as Drinking Water**: Groundwater concentrations protective of off-site receptors resulting from exposure via pathways other than direct ingestion. These pathways include but are not limited to volatilization to indoor air, irrigation water use with crop uptake and ingestion, and irrigation water use without crop uptake.

☐ **Surface Water Protection**

**If a surface water body is impacted or threatened, complete the following:**

| | |
|---|---|
| Surface water is used for drinking/water quality is appropriate for drinking water supplies? | ☐ |
| Surface water supports aquatic life? | ☐ |
| Surface water is used for recreational activities? | ☐ |

**If Ammonia is a potential COC for surface water, complete the following:**

| | |
|---|---|
| Surface water supports cold water aquatic species? | ☐ |
| Surface water supports warm water aquatic species? | ☐ |

# RE-1 EXPOSURE FACTORS

*(Page 1 of 2)*

| Parameter | Symbol | Unit | Default Value | Value Used | Comment |
|---|---|---|---|---|---|
| | $AT_c$ | year | 70 | 70 | *Default* |
| | $AT_{nc}$ | year | =ED | =ED | *Default* |
| **Body Weight:** | | | | | |
| Resident Child | $BW_c$ | kg | 15 | 15 | *Default* |
| Resident Adolescent | $BW_{as}$ | kg | 55 | 55 | *Default* |
| Resident Adult | $BW_a$ | kg | 70 | 70 | *Default* |
| Non-residential | $BW_{com}$ | kg | 70 | 70 | *Default* |
| Construction Worker | $BW_{con}$ | kg | 70 | 70 | *Default* |
| **Exposure Duration:** | | | | | |
| Resident Child | $ED_c$ | year | 6 | 6 | *Default* |
| Resident Adolescent | $ED_{as}$ | year | 9 | 9 | *Default* |
| Resident Adult | $ED_a$ | year | 15 | 15 | *Default* |
| Age-adjusted Resident | $ED_{aa}$ | year | 30 | 30 | *Default* |
| Non-residential | $ED_{com}$ | year | 6.6 | 6.6 | *Default* |
| Construction Worker | $ED_{con}$ | year | 1 | 1 | *Default* |
| **Exposure Frequency for Indirect Pathways:** | | | | | |
| Resident Child | $EF_c$ | day/year | 350 | 350 | *Default* |
| Resident Adolescent | $EF_{as}$ | day/year | 350 | 350 | *Default* |
| Resident Adult | $EF_a$ | day/year | 350 | 350 | *Default* |
| Non-residential | $EF_{com}$ | day/year | 250 | 250 | *Default* |
| Construction Worker | $EF_{con}$ | day/year | 30 | 30 | *Default* |
| Exposure Frequency for Direct Contact Pathways | | | | | |
| Resident Child | $EF_{dc}$ | day/year | 270 | 270 | *Default* |
| Resident Adolescent | $EF_{das}$ | day/year | 270 | 270 | *Default* |
| Resident Adult | $EF_{da}$ | day/year | 270 | 270 | *Default* |
| Non-residential | $EF_{dcom}$ | day/year | 180 | 180 | *Default* |
| Construction Worker | $EF_{dcon}$ | day/year | 30 | 30 | *Default* |
| **Indoor Exposure Time:** | | | | | |
| Resident Child | $ET_{i\text{-}c}$ | hrs/day | 21 | 21 | *Default* |
| Resident Adolescent | $ET_{i\text{-}as}$ | hrs/day | 15.8 | 15.8 | *Default* |
| Resident Adult | $ET_{i\text{-}a}$ | hrs/day | 15 | 15 | *Default* |
| Non-residential | $ET_{i\text{-}com}$ | hrs/day | 7.5 | 7.5 | *Default* |
| **Outdoor Exposure Time:** | | | | | |
| Resident Child | $ET_{o\text{-}c}$ | hrs/day | 2 | 2 | *Default* |
| Resident Adolescent | $ET_{o\text{-}as}$ | hrs/day | 2 | 2 | *Default* |
| Resident Adult | $ET_{o\text{-}a}$ | hrs/day | 2 | 2 | *Default* |
| Non-residential | $ET_{o\text{-}com}$ | hrs/day | 6 | 6 | *Default* |
| Construction Worker | $ET_{o\text{-}con}$ | hrs/day | 10 | 10 | *Default* |
| **Soil Ingestion Rate:** | | | | | |
| Resident Child | $IR_{s\text{-}c}$ | mg/day | 200 | 200 | *Default* |
| Resident Adolescent | $IR_{s\text{-}as}$ | mg/day | 100 | 100 | *Default* |
| Resident Adult | $IR_{s\text{-}a}$ | mg/day | 100 | 100 | *Default* |
| **Age-adjusted** | $IR_{s\text{-}aa}$ | **mg/kg** | **31804** | **31804** | ***Default*** |
| Non-residential | $IR_{s\text{-}com}$ | mg/day | 100 | 100 | *Default* |
| Construction Worker | $IR_{s\text{-}con}$ | mg/day | 480 | 480 | *Default* |
| **Groundwater Ingestion Rate:** | | | | | |
| Resident Child | $IR_{w\text{-}c}$ | L/day | 1.5 | 1.5 | *Default* |
| Resident Adolescent | $IR_{w\text{-}as}$ | L/day | 1.7 | 1.7 | *Default* |
| Resident Adult | $IR_{w\text{-}a}$ | L/day | 2 | 2 | *Default* |
| **Age-adjusted** | $IR_{w\text{-}aa}$ | **L/kg** | **457.36** | **457.36** | ***Default*** |
| Non-residential | $IR_{w\text{-}com}$ | L/day | 1 | 1 | *Default* |
| **Hourly Indoor Inhalation Rate:** | | | | | |
| Resident Child | $IR_{ai\text{-}c}$ | $m^3$/hr | 0.7 | 0.7 | *Default* |
| Resident Adolescent | $IR_{ai\text{-}as}$ | $m^3$/hr | 0.7 | 0.7 | *Default* |
| Resident Adult | $IR_{ai\text{-}a}$ | $m^3$/hr | 0.7 | 0.7 | *Default* |
| Non-residential | $IR_{ai\text{-}com}$ | $m^3$/hr | 1 | 1 | *Default* |
| **Hourly Outdoor Inhalation Rate:** | | | | | |
| Resident Child | $IR_{ao\text{-}c}$ | $m^3$/hr | 1.1 | 1.1 | *Default* |
| Resident Adolescent | $IR_{ao\text{-}as}$ | $m^3$/hr | 1.3 | 1.3 | *Default* |
| Resident Adult | $IR_{ao\text{-}a}$ | $m^3$/hr | 1.3 | 1.3 | *Default* |
| Non-residential | $IR_{ao\text{-}com}$ | $m^3$/hr | 1.6 | 1.6 | *Default* |
| Construction Worker | $IR_{ao\text{-}con}$ | $m^3$/hr | 2.4 | 2.4 | *Default* |
| **Indoor Inhalation Rate:** | | | | | |
| Resident Child | $IR_{ai\text{-}c}$ | $m^3$/day | 14.7 | 14.7 | *Default* |
| Resident Adolescent | $IR_{ai\text{-}as}$ | $m^3$/day | 11.1 | 11.1 | *Default* |

| | | | | | |
|---|---|---|---|---|---|
| Resident Adult | $IR_{ai\text{-}a}$ | $m^3$/day | 10.5 | 10.5 | *Default* |
| **Age-adjusted (calculated)** | **$IR_{ai\text{-}aa}$** | **$m^3$/kg** | **3478.9** | **3478.9** | ***Default*** |
| Commercial Worker | $IR_{ai\text{-}com}$ | $m^3$/day | 7.5 | 7.5 | *Default* |

# EXPOSURE FACTORS

*(Page 2 of 2)*

| Parameter | Symbol | Unit | Default Value | Value Used | Comment |
|---|---|---|---|---|---|
| **Outdoor Inhalation Rate:** | | | | | |
| Resident Child | $IR_{ao-c}$ | $m^3$/day | 2.2 | 2.2 | *Default* |
| Resident Adolescent | $IR_{ao-as}$ | $m^3$/day | 2.6 | 2.6 | *Default* |
| Resident Adult | $IR_{ao-a}$ | $m^3$/day | 2.6 | 2.6 | *Default* |
| **Age-adjusted** | **$IR_{ao-aa}$** | **$m^3$/kg** | **502.9** | **502.9** | ***Default*** |
| Non-residential | $IR_{ao-com}$ | $m^3$/day | 9.6 | 9.6 | *Default* |
| Construction Worker | $IR_{ao-con}$ | $m^3$/day | 24 | 24 | *Default* |
| **Skin Surface Area:** | | | | | |
| Resident Child | $SA_c$ | $cm^2$/day | 2434 | 2434 | *Default* |
| Resident Adolescent | $SA_{as}$ | $cm^2$/day | 2434 | 2434 | *Default* |
| Resident Adult | $SA_a$ | $cm^2$/day | 5657 | 5657 | *Default* |
| **Age-adjusted** | **$SA_{aa}$** | **mg/kg** | **393322.9** | **393322.9** | ***Default*** |
| Non-residential | $SA_{com}$ | $cm^2$/day | 3477 | 3477 | *Default* |
| Construction Worker | $SA_{con}$ | $cm^2$/day | 3477 | 3477 | *Default* |
| **Soil to Skin Adherence Factor:** | | | | | |
| Resident Child | $M_c$ | $mg/cm^2$ | 1 | 1 | *Default* |
| Resident Adolescent | $M_{as}$ | $mg/cm^1$ | 0.3 | 0.3 | *Default* |
| Resident Adult | $M_a$ | $mg/cm^2$ | 0.3 | 0.3 | *Default* |
| Non-residential | $M_{com}$ | $mg/cm^2$ | 0.1 | 0.1 | *Default* |
| Construction Worker | $M_{con}$ | $mg/cm^2$ | 0.5 | 0.5 | *Default* |
| **Averaging Time for Vapor Flux:** | | | | | |
| Resident Child | $\tau$ | s | 1.89E+08 | **1.89E+08** | ***Calculated*** |
| Resident Adolescent | $\tau$ | s | 2.84E+08 | **2.84E+08** | ***Calculated*** |
| Resident Adult | $\tau$ | s | 4.73E+08 | **4.73E+08** | ***Calculated*** |
| Age-adjusted Resident | $\tau$ | s | 9.46E+08 | **9.46E+08** | ***Calculated*** |
| Commercial Worker | $\tau$ | s | 2.08E+08 | **2.08E+08** | ***Calculated*** |
| Construction Worker | $\tau$ | s | 3.15E+07 | **3.15E+07** | ***Calculated*** |
| **Target Site Risk** | TR | -- | 1.00E-05 | 1.00E-05 | *Default* |
| **Target Site Hazard Quotient** | THI | -- | 1 | 1 | *Default* |

# RE-1 FATE AND TRANSPORT PARAMETERS

*(Page 1 of 3)*

| Parameter | Symbol | Unit | Default Value | Value Used | Comment |
|---|---|---|---|---|---|
| **SOIL PARAMETERS:** | | | | | |
| Source-building separation | $L_{TS}$ | cm | 30 | 30 | *Default* |
| Source-bottom-building separation | $L_{TS-B}$ | cm | 183 | 183 | *Default* |
| Number of distinct soil strata between the top of the source zone and the building foundation | $n_S$ | - | 1 | 1 | *Default* |
| **SOIL-VAPOR PARAMETERS:** | | | | | |
| Depth to sample from the bottom of the building | $L_{TSV}$ | cm | 91 | 91 | *Default* |
| **GROUNDWATER PARAMETERS:** | | | | | |
| Groundwater-building separation | $L_{TGW}$ | cm | 30 | 30 | *Default* |
| Number of distinct soil strata between the capillary fringe and the building foundation | $n_{GW}$ | - | 1 | 1 | *Default* |
| **AIR PARAMETERS:** | | | | | |
| Viscosity of air | $\mu$ | g/cm-s | 1.80E-04 | 1.80E-04 | *Default* |
| **ENCLOSED SPACE PARAMETERS:** | | | | | |
| **Area of the enclosed space below grade:** | | | | | |
| Residential | $A_B$ | $cm^2$ | 1561600 | 1561600 | *Default* |
| Non-residential | $A_B$ | $cm^2$ | 4782069 | 4782069 | *Default* |
| **Enclosed Space Foundation/Wall Thickness:** | | | | | |
| Residential | $L_{crack}$ | cm | 15 | 15 | *Default* |
| Non-residential | $L_{crack}$ | cm | 15 | 15 | *Default* |
| **Total area of cracks:** | | | | | |
| Residential | $A_{crack}$ | $cm^2$ | 484 | 484 | *Default* |
| Non-residential | $A_{crack}$ | $cm^2$ | 861 | 861 | *Default* |
| **Number of air exchanges per second:** | | | | | |
| Residential | ER | 1/sec | 2.78E-04 | 2.78E-04 | *Default* |
| Non-residential | ER | 1/sec | 5.56E-04 | 5.56E-04 | *Default* |
| **Length of enclosed space:** | | | | | |
| Residential | $L_B$ | cm | 1220 | 1220 | *Default* |
| Non-residential | $L_B$ | cm | 2157 | 2157 | *Default* |
| **Width of enclosed space:** | | | | | |
| Residential | $W_B$ | cm | 1220 | 1220 | *Default* |
| Non-residential | $W_B$ | cm | 2157 | 2157 | *Default* |
| **Height of enclosed space:** | | | | | |
| Residential | $H_B$ | cm | 244 | 244 | *Default* |
| Non-residential | $H_B$ | cm | 244 | 244 | *Default* |
| **Floor-wall seam perimeter:** | | | | | |
| Residential | $X_{crack}$ | $cm^2/cm^2$ | 4880 | 4880 | *Default* |
| Non-residential | $X_{crack}$ | $cm^2/cm^2$ | 8628 | 8628 | *Default* |
| Crack depth below grade | $Z_{crack}$ | cm | 15 | 15 | *Default* |
| Equivalent crack radius | $r_{crack}$ | cm | 0.1 | 0.1 | *Default* |
| Pressure differential between enclosed space and soil surface beneath | $\Delta P$ | $g/cm\text{-}s^2$ | 40 | 40 | *Default* |
| **Building ventilation rate:** | | | | | |
| Residential | $Q_{building}$ | $cm^3/s$ | 1.01E+05 | **1.01E+05** | ***Calculated*** |
| Non-residential | $Q_{building}$ | $cm^3/s$ | 6.31E+05 | **6.31E+05** | ***Calculated*** |
| **Volumetric flow rate of soil gas into the enclosed space:** | | | | | |
| Residential | $Q_{soil}$ | $cm^3/s$ | 6.0E+00 | **6.0E+00** | ***Calculated*** |
| Non-residential | $Q_{soil}$ | $cm^3/s$ | 1.1E+01 | **1.1E+01** | ***Calculated*** |
| **COWHERD PARTICULATE EMISSION MODEL:** | | | | | |
| Inverse of mean concentration in the middle of a sqaure source | **Q/C** | **$[g/m^2\text{-}s]/[kg/m^3]$** | **69.41** | **69.41** | ***Calculated*** |
| Fraction of Vegetative Cover | V | $m^2/m^2$ | 0.5 | 0.5 | *Default* |
| Mean Annual Wind Speed | $U_m$ | m/s | 3.98 | 3.98 | *Default* |
| Equivalent Threshold Value of Windspeed at 7m | $U_t$ | m/s | 11.32 | 11.32 | *Default* |

| | | | | | |
|---|---|---|---|---|---|
| Windspeed Distribution Function from Cowherd et. al, 1985 | F(x) | -- | 0.0495 | 0.0495 | *Default* |

# FATE AND TRANSPORT PARAMETERS

*(Page 2 of 3)*

| Parameter | Symbol | Unit | Default Value | Value Used | Comment |
|---|---|---|---|---|---|
| **GROUNDWATER PROTECTION PARAMETERS:** | | | | | |
| Groundwater Darcy Velocity | $U_{gw}$ | cm/year | 3340 | 3340 | *Default* |
| Groundwater Mixing Zone Length | $L_{mz}$ | cm | 1220 | 1220 | *Default* |
| Groundwater Mixing Zone Thickness | $\delta_{gw}$ | cm | 153 | 153 | *Default* |
| Groundwater Mixing Zone Width | $W_{gw}$ | cm | 1220 | 1220 | *Default* |
| Infiltration Rate | I | cm/year | 25 | 25 | *Default* |
| **Source Zone Soil Properties:** | | | | | |
| Dry Soil Bulk Density of the source zone soil | $\rho_s$ | $g/cm^3$ | 1.64 | 1.64 | *Default* |
| Fractional Organic Carbon Content in the source zone soil | foc | g-C/g-soil | 0.001 | 0.001 | *Default* |
| Total Soil Porosity of the source zone soil | $\theta_T$ | $cm^3/cm^3$-soil | 0.39 | 0.39 | *Default* |
| Volumetric Water Content in the source zone soil | $\theta_{ws}$ | $cm^3/cm^3$ | 0.17 | 0.17 | *Default* |
| Volumetric Air Content in the source zone soil | $\theta_{as}$ | $cm^3/cm^3$ | 0.22 | **0.22** | ***Calculated*** |
| **Saturated Zone Soil Properties:** | | | | | |
| Dry Soil Bulk Density of the saturated zone soil | $\rho_{ss}$ | $g/cm^3$ | 1.64 | 1.64 | *Default* |
| Fractional Organic Carbon Content in the saturated zone soil | focs | g-C/g-soil | 0.001 | 0.001 | *Default* |
| Total Soil Porosity in the saturated zone soil | $\theta_{Ts}$ | $cm^3/cm^3$-soil | 0.39 | 0.39 | *Default* |
| Distance to the Point of Exposure (Xpoe) | Xpoe,gw | ft | variable | 0 | *User-Defined* |
| Longitudinal dispersivity | $\alpha_x$ | **ft** | **variable** | **0.000** | ***Calculated*** |
| Transverse dispersivity | $\alpha_y$ | **ft** | **variable** | **0.000** | ***Calculated*** |
| Vertical dispersivity | $\alpha_z$ | **ft** | **variable** | **0.000** | ***Calculated*** |
| Distance to the Point of Compliance (Xpoc) | Xpoc,gw | ft | variable | 0 | *User-Defined* |
| Longitudinal dispersivity | $\alpha_x$ | **ft** | **variable** | **0.000** | ***Calculated*** |
| Transverse dispersivity | $\alpha_y$ | **ft** | **variable** | **0.000** | ***Calculated*** |
| Vertical dispersivity | $\alpha_z$ | **ft** | **variable** | **0.000** | ***Calculated*** |
| **SURFACE WATER PROTECTION PARAMETERS:** | | | | | |
| pH of the receiving surface water | pH | -- | 7 | 7 | *Default* |
| Temperature of the receiving surface water | T | $^0C$ | 15 | 15 | *Default* |
| Hardness of the receiving surface water | H | mg/L (as $CaCO_3$) | 25 | 25 | *Default* |
| Distance to the Point of Exposure (Xpoe) | Xpoe,sw | ft | variable | 0 | *User-Defined* |
| Longitudinal dispersivity | $\alpha_x$ | **ft** | **variable** | **0.000** | ***Calculated*** |
| Transverse dispersivity | $\alpha_y$ | **ft** | **variable** | **0.000** | ***Calculated*** |
| Vertical dispersivity | $\alpha_z$ | **ft** | **variable** | **0.000** | ***Calculated*** |
| Distance to the Point of Compliance (Xpoc) | Xpoc,sw | ft | variable | 0 | *User-Defined* |
| Longitudinal dispersivity | $\alpha_x$ | **ft** | **variable** | **0.000** | ***Calculated*** |
| Transverse dispersivity | $\alpha_y$ | **ft** | **variable** | **0.000** | ***Calculated*** |
| Vertical dispersivity | $\alpha_z$ | **ft** | **variable** | **0.000** | ***Calculated*** |

# RE-1 FATE AND TRANSPORT PARAMETERS

*(Page 3 of 3)*

| Parameter | Symbol | Unit | Default Value | Value Used | Comment |
|---|---|---|---|---|---|
| **Thickness of Soil Strata Between the Source and the Bottom of the Building:** | | | | | |
| Stratum A (Immediately below the building) | $h_A$ | cm | 30 | 30 | *Default* |
| Stratum B | $h_B$ | cm | 0 | 0 | *Default* |
| Stratum C | $h_C$ | cm | 0 | 0 | *Default* |
| Total thickness (should equal the source-building separation) | $L_{TS}$ | cm | 30 | **30** | |
| **Thickness of Soil Strata Between Groundwater and the Bottom of the Building:** | | | | | |
| Stratum A (Immediately below the building) | $h_A$ | cm | 5 | 5 | *Default* |
| Stratum B | $h_B$ | cm | 0 | 0 | *Default* |
| Stratum C | $h_C$ | cm | 0 | 0 | *Default* |
| Stratum D (Capillary fringe) | $h_{cap}$ | cm | 25 | **25** | ***Calculated*** |
| Total thickness (should equal the water table-building separation) | $L_{TGW}$ | cm | 30 | **30** | |
| **Stratum-Specific Properties:** | | | | | |
| **Stratum A (Immediately below the building):** | | | | | |
| Vapor permeability | $k_v$ | $cm^2$ | 5.00E-09 | 5.00E-09 | *Default* |
| Dry Soil Bulk Density | $\rho_{sA}$ | $g/cm^3$ | 1.64 | 1.64 | *Default* |
| Fractional Organic Carbon Content | $foc_A$ | g-C/g-soil | 0.001 | 0.001 | *Default* |
| Total Soil Porosity | $\theta_{TA}$ | $cm^3/cm^3$-soil | 0.39 | 0.39 | *Default* |
| Volumetric Water Content in Stratum A | $\theta_{wsA}$ | $cm^3/cm^3$ | 0.17 | 0.17 | *Default* |
| Volumetric Air Content in Stratum A | $\theta_{asA}$ | $cm^3/cm^3$ | 0.22 | **0.22** | ***Calculated*** |
| **Stratum B:** | | | | | |
| Dry Soil Bulk Density | $\rho_{sB}$ | $g/cm^3$ | 1.64 | 1.64 | *Default* |
| Fractional Organic Carbon Content | $foc_B$ | g-C/g-soil | 0.001 | 0.001 | *Default* |
| Total Soil Porosity | $\theta_{TB}$ | $cm^3/cm^3$-soil | 0.39 | 0.39 | *Default* |
| Volumetric Water Content in Stratum B | $\theta_{wsB}$ | $cm^3/cm^3$ | 0.17 | 0.17 | *Default* |
| Volumetric Air Content in Stratum B | $\theta_{asB}$ | $cm^3/cm^3$ | 0.22 | **0.22** | ***Calculated*** |
| **Stratum C:** | | | | | |
| Dry Soil Bulk Density | $\rho_{sC}$ | $g/cm^3$ | 1.64 | 1.64 | *Default* |
| Fractional Organic Carbon Content | $foc_C$ | g-C/g-soil | 0.001 | 0.001 | *Default* |
| Total Soil Porosity | $\theta_{TC}$ | $cm^3/cm^3$-soil | 0.39 | 0.39 | *Default* |
| Volumetric Water Content in Stratum C | $\theta_{wsC}$ | $cm^3/cm^3$ | 0.17 | 0.17 | *Default* |
| Volumetric Air Content in Stratum C | $\theta_{asC}$ | $cm^3/cm^3$ | 0.22 | **0.22** | ***Calculated*** |
| **Stratum D (Capillary fringe):** | | | | | |
| Mean particle diameter | D | cm | 0.03 | 0.03 | *Default* |
| van Genuchten curve shape factor | N | - | 1.449 | 1.449 | *Default* |
| Dry Soil Bulk Density | $\rho_{sF}$ | $g/cm^3$ | 1.64 | 1.64 | *Default* |
| Fractional Organic Carbon Content | $foc_F$ | g-C/g-soil | 0.001 | 0.001 | *Default* |
| Total Soil Porosity | $\theta_{Tcap}$ | $cm^3/cm^3$-soil | 0.39 | 0.39 | *Default* |
| Residual water content in capillary fringe soil | $\theta_{rcap}$ | $cm^3/cm^3$ | 0.039 | 0.039 | *Default* |
| Volumetric Water Content in capillary fringe | $\theta_{wcap}$ | $cm^3/cm^3$ | 0.322 | **0.322** | ***Calculated*** |
| Volumetric Air Content in capillary fringe | $\theta_{acap}$ | $cm^3/cm^3$ | 0.068 | 0.068 | ***Calculated*** |

## RE-1 REPRESENTATIVE CONCENTRATIONS FOR RESIDENTIAL RECEPTORS

| CHEMICALS OF CONCERN | SURFICIAL SOIL | SUB-SURFACE SOIL | GROUNDWATER | SOIL-VAPOR | GROUNDWATER AND/OR SURFACE WATER PROTECTION | | |
|---|---|---|---|---|---|---|---|
| | Inhalation of Vapors and Particulates, Dermal Contact, and Accidental Ingestion | Indoor Inhalation of Vapor Emissions | Indoor Inhalation of Vapor Emissions | Indoor Inhalation of Vapor Emissions | Representative Groundwater Concentration at the Source [mg/L] | Representative Soil Concentration at the Source [mg/kg] | Representative Groundwater Concentration at the POC [mg/L] |
| | Representative Concentration [mg/kg] | Representative Concentration [mg/kg] | Representative Concentration [mg/L] | USE OF SOIL-VAPOR DATA IS NOT ALLOWED UNDER RE-1 | | NOT USED IN CALCULATIONS | |
| 1,1,1-Trichloroethane | 7.40E-03 | 7.40E-03 | 3.19E-04 | | 3.19E-04 | | |
| 1,2,4-Trimethylbenzene (pseudocumene) | 7.60E-03 | 7.60E-03 | 3.73E-04 | | 3.73E-04 | | |
| 2-Butanone (Methyl Ethyl Ketone) | 9.90E-03 | 9.90E-03 | 3.93E-03 | | 3.93E-03 | | |
| 2-Methylnaphthalene | 1.30E-01 | 1.30E-01 | 3.26E-05 | | 3.26E-05 | | |
| Acenaphthylene | 1.30E-01 | 1.30E-01 | 1.20E-05 | | 1.20E-05 | | |
| Acetone | 6.80E-02 | 6.80E-02 | 1.00E-02 | | 1.00E-02 | | |
| Antimony | 1.00E+01 | 1.00E+01 | 1.14E-03 | | 1.14E-03 | | |
| Arsenic | 1.20E+01 | 1.20E+01 | 4.82E-04 | | 4.82E-04 | | |
| Barium | 1.09E+02 | 1.09E+02 | 7.28E-02 | | 7.28E-02 | | |
| Benzo(g,h,i)perylene | 2.00E+00 | 2.00E+00 | 3.43E-06 | | 3.43E-06 | | |
| Beryllium | 6.10E-01 | 6.10E-01 | 1.20E-04 | | 1.20E-04 | | |
| Cadmium | 7.60E-01 | 7.60E-01 | 1.60E-04 | | 1.60E-04 | | |
| Chloroform | 8.80E-03 | 8.80E-03 | 4.75E-04 | | 4.75E-04 | | |
| Chromium (III) total Cr | 1.70E+01 | 1.70E+01 | 2.14E-03 | | 2.14E-03 | | |
| Copper | 4.40E+03 | 4.40E+03 | 8.10E-03 | | 4.00E-06 | | |
| Dibenzo(a,h)anthracene | 4.80E-01 | 4.80E-01 | 3.96E-06 | | 3.96E-06 | | |
| Indeno(1,2,3-cd)pyrene | 1.60E+00 | 1.60E+00 | 1.48E-05 | | 1.48E-05 | | |
| Lead | 4.20E+02 | 4.20E+02 | 4.06E-04 | | 4.06E-04 | | |
| Mercury | 3.40E+00 | 3.40E+00 | 7.66E-05 | | 7.66E-05 | | |
| Nickel | 2.50E+01 | 2.50E+01 | 2.10E-03 | | 2.10E-03 | | |
| Phenanthrene | 7.30E-01 | 7.30E-01 | 9.32E-06 | | 9.32E-06 | | |
| Silver | 1.10E+00 | 1.10E+00 | 3.10E-04 | | 3.10E-04 | | |
| Tetrachloroethene | 1.40E-03 | 1.40E-03 | 3.72E-04 | | 3.72E-04 | | |
| Trichlorofluoromethane | 9.90E-03 | 9.90E-03 | 1.20E-03 | | 1.50E-02 | | |
| Zinc | 3.40E+02 | 3.40E+02 | 2.56E-03 | | 2.56E-03 | | |

**Notes:**

## RE-1 REPRESENTATIVE CONCENTRATIONS FOR NON-RESIDENTIAL RECEPTORS

| CHEMICALS OF CONCERN | SURFICIAL SOIL | SUB-SURFACE SOIL | GROUNDWATER | SOIL-VAPOR |
|---|---|---|---|---|
| | Inhalation of Vapors and Particulates, Dermal Contact, and Accidental Ingestion | Indoor Inhalation of Vapor Emissions | Indoor Inhalation of Vapor Emissions | Indoor Inhalation of Vapor Emissions |
| | Representative Concentration [mg/kg] | Representative Concentration [mg/kg] | Representative Concentration [mg/L] | USE OF SOIL-VAPOR DATA IS NOT ALLOWED UNDER RE-1 |
| 1,1,1-Trichloroethane | 7.40E-03 | 7.40E-03 | 3.19E-04 | |
| 1,2,4-Trimethylbenzene (pseudocumene) | 7.60E-03 | 7.60E-03 | 3.73E-04 | |
| 2-Butanone (Methyl Ethyl Ketone) | 9.90E-03 | 9.90E-03 | 3.93E-03 | |
| 2-Methylnaphthalene | 1.30E-01 | 1.30E-01 | 3.26E-05 | |
| Acenaphthylene | 1.30E-01 | 1.30E-01 | 1.20E-05 | |
| Acetone | 6.80E-02 | 6.80E-02 | 1.00E-02 | |
| Antimony | 1.00E+01 | 1.00E+01 | 1.14E-03 | |
| Arsenic | 1.20E+01 | 1.20E+01 | 4.82E-04 | |
| Barium | 1.09E+02 | 1.09E+02 | 7.28E-02 | |
| Benzo(g,h,i)perylene | 2.00E+00 | 2.00E+00 | 3.43E-06 | |
| Beryllium | 6.10E-01 | 6.10E-01 | 1.30E-04 | |
| Cadmium | 7.60E-01 | 7.60E-01 | 1.60E-04 | |
| Chloroform | 8.80E-03 | 8.80E-03 | 4.75E-04 | |
| Chromium (III) total Cr | 1.70E+01 | 1.70E+01 | 2.14E-03 | |
| Copper | 4.40E+03 | 4.40E+03 | 8.10E-03 | |
| Dibenzo(a,h)anthracene | 4.80E-01 | 4.80E-01 | 3.96E-06 | |
| Indeno(1,2,3-cd)pyrene | 1.60E+00 | 1.60E+00 | 1.48E-05 | |
| Lead | 4.20E+02 | 4.20E+02 | 4.06E-04 | |
| Mercury | 3.40E+00 | 3.40E+00 | 7.66E-05 | |
| Nickel | 2.50E+01 | 2.50E+01 | 2.10E-03 | |
| Phenanthrene | 7.30E-01 | 7.30E-01 | 9.32E-06 | |
| Silver | 1.10E+00 | 1.10E+00 | 3.10E-04 | |
| Tetrachloroethene | 1.40E-03 | 1.40E-03 | 3.72E-04 | |
| Trichlorofluoromethane | 9.90E-03 | 9.90E-03 | 1.50E-03 | |
| Zinc | 3.40E+02 | 3.40E+02 | 2.56E-03 | |

**Note:**

## RE-1 REPRESENTATIVE CONCENTRATIONS FOR CONSTRUCTION WORKER

| CHEMICALS OF CONCERN | SOIL TO TYPICAL DEPTH OF CONSTRUCTION |
|---|---|
| | Inhalation of Vapors and Particulates, Dermal Contact, and Accidental Ingestion |
| | Representative Concentration [mg/kg] |
| 1,1,1-Trichloroethane | 7.40E-03 |
| 1,2,4-Trimethylbenzene (pseudocumene) | 7.60E-03 |
| 2-Butanone (Methyl Ethyl Ketone) | 9.90E-03 |
| 2-Methylnaphthalene | 1.30E-01 |
| Acenaphthylene | 1.30E-01 |
| Acetone | 6.80E-02 |
| Antimony | 1.00E+01 |
| Arsenic | 1.20E+01 |
| Barium | 1.09E+02 |
| Benzo(g,h,i)perylene | 2.00E+00 |
| Beryllium | 6.10E-01 |
| Cadmium | 7.60E-01 |
| Chloroform | 8.80E-03 |
| Chromium (III) total Cr | 1.70E+01 |
| Copper | 4.40E+03 |
| Dibenzo(a,h)anthracene | 4.80E-01 |
| Indeno(1,2,3-cd)pyrene | 1.60E+00 |
| Lead | 4.20E+02 |
| Mercury | 3.40E+00 |
| Nickel | 2.50E+01 |
| Phenanthrene | 7.30E-01 |
| Silver | 1.10E+00 |
| Tetrachloroethene | 1.40E-03 |
| Trichlorofluoromethane | 9.90E-03 |
| Zinc | 3.40E+02 |

**Note:**

## RE-1 DECAY RATE AND UNSATURATED ZONE DAF

| CHEMICALS OF CONCERN | First-Order Decay Rate [$day^{-1}$] | Unsaturated Zone DAF [--] |
|---|---|---|
| 1,1,1-Trichloroethane | 0.00E+00 | 1 |
| 1,2,4-Trimethylbenzene (pseudocume | 0.00E+00 | 1 |
| 2-Butanone (Methyl Ethyl Ketone) | 0.00E+00 | 1 |
| 2-Methylnaphthalene | 0.00E+00 | 1 |
| Acenaphthylene | 0.00E+00 | 1 |
| Acetone | 0.00E+00 | 1 |
| Antimony | 0.00E+00 | 1 |
| Arsenic | 0.00E+00 | 1 |
| Barium | 0.00E+00 | 1 |
| Benzo(g,h,i)perylene | 0.00E+00 | 1 |
| Beryllium | 0.00E+00 | 1 |
| Cadmium | 0.00E+00 | 1 |
| Chloroform | 0.00E+00 | 1 |
| Chromium (III) total Cr | 0.00E+00 | 1 |
| Copper | 0.00E+00 | 1 |
| Dibenzo(a,h)anthracene | 0.00E+00 | 1 |
| Indeno(1,2,3-cd)pyrene | 0.00E+00 | 1 |
| Lead | 0.00E+00 | 1 |
| Mercury | 0.00E+00 | 1 |
| Nickel | 0.00E+00 | 1 |
| Phenanthrene | 0.00E+00 | 1 |
| Silver | 0.00E+00 | 1 |
| Tetrachloroethene | 0.00E+00 | 1 |
| Trichlorofluoromethane | 0.00E+00 | 1 |
| Zinc | 0.00E+00 | 1 |

**Notes:**

**NA: Not available**

## RE-1 RISK/HAZARD QUOTIENT FOR RESIDENTIAL RECEPTORS

| CHEMICALS OF CONCERN | CHILD | | | | | | | | AGE-ADJUSTED | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | SURFICIAL SOIL | | SUB-SURFACE SOIL | | GROUNDWATER | | SOIL-VAPOR | | SURFICIAL SOIL | | SUB-SURFACE SOIL | | GROUNDWATER | | SOIL-VAPOR | |
| | Inhalation of Vapors and Particulates, Dermal Contact, and Accidental Ingestion | | Indoor Inhalation of Vapor Emissions | | Indoor Inhalation of Vapor Emissions | | Indoor Inhalation of Vapor Emissions | | Inhalation of Vapors and Particulates, Dermal Contact, and Accidental Ingestion | | Indoor Inhalation of Vapor Emissions | | Indoor Inhalation of Vapor Emissions | | Indoor Inhalation of Vapor Emissions | |
| | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ |
| 1,1,1-Trichloroethane | NTOX | 1.88E-06 | NTOX | 2.26E-04 | NTOX | 8.21E-06 | | | NTOX | 3.83E-07 | NTOX | 1.53E-05 | NTOX | 2.78E-06 | | |
| 1,2,4-Trimethylbenzene (pseudocumene) | NTOX | 1.59E-04 | NTOX | 3.94E-02 | NTOX | 8.50E-04 | | | NTOX | 3.04E-05 | NTOX | 5.83E-03 | NTOX | 2.87E-04 | | |
| 2-Butanone (Methyl Ethyl Ketone) | NTOX | 5.24E-07 | NTOX | 3.36E-05 | NTOX | 1.30E-06 | | | NTOX | 1.23E-07 | NTOX | 1.12E-05 | NTOX | 4.41E-07 | | |
| 2-Methylnaphthalene | NTOX | 5.65E-04 | NTOX | 7.16E-03 | NTOX | 4.50E-06 | | | NTOX | 1.54E-04 | NTOX | 2.41E-03 | NTOX | 1.52E-06 | | |
| Acenaphthylene | NTOX | 5.52E-05 | NTOX | NTOX | NTOX | NTOX | | | NTOX | 1.64E-05 | NTOX | NTOX | NTOX | NTOX | | |
| Acetone | NTOX | 1.50E-06 | NTOX | 6.25E-05 | NTOX | 9.06E-07 | | | NTOX | 3.63E-07 | NTOX | 2.09E-05 | NTOX | 3.06E-07 | | |
| Antimony | NTOX | 2.77E-01 | NTOX | NTOX | NPCP | NPCP | | | NTOX | 8.16E-02 | NTOX | NTOX | NPCP | NPCP | | |
| Arsenic | 2.08E-05 | 5.39E-01 | NPCP | NTOX | NPCP | NPCP | | | 3.07E-05 | 1.59E-01 | NPCP | NTOX | NPCP | NPCP | | |
| Barium | NTOX | 1.72E-02 | NTOX | NPCP | NPCP | NPCP | | | NTOX | 5.08E-03 | NTOX | NPCP | NPCP | NPCP | | |
| Benzo(g,h,i)perylene | NTOX | 1.70E-03 | NTOX | NTOX | NTOX | NTOX | | | NTOX | 5.05E-04 | NTOX | NTOX | NTOX | NTOX | | |
| Beryllium | 7.38E-12 | 3.38E-03 | NPCP | NPCP | NPCP | NPCP | | | NTOX | 9.95E-04 | NPCP | NPCP | NPCP | NPCP | | |
| Cadmium | 6.90E-12 | 1.52E-02 | NPCP | NTOX | NPCP | NPCP | | | NTOX | 4.47E-03 | NPCP | NTOX | NPCP | NPCP | | |
| Chloroform | 1.21E-09 | 7.07E-04 | 2.76E-07 | 1.97E-01 | 3.26E-09 | 2.33E-03 | | | 1.27E-09 | 1.35E-04 | 9.34E-08 | 1.33E-02 | 5.51E-09 | 7.86E-04 | | |
| Chromium (III) total Cr | NTOX | 1.25E-04 | NTOX | NTOX | NPCP | NPCP | | | NTOX | 3.70E-05 | NTOX | NTOX | NPCP | NPCP | | |
| Copper | NTOX | 1.32E+00 | NTOX | NTOX | NPCP | NPCP | | | NTOX | 3.88E-01 | NTOX | NTOX | NPCP | NPCP | | |
| Dibenzo(a,h)anthracene | 7.65E-06 | NTOX | 7.58E-12 | NTOX | 1.19E-13 | NTOX | | | 1.14E-05 | NTOX | 1.28E-11 | NTOX | 2.02E-13 | NTOX | | |
| Indeno(1,2,3-cd)pyrene | 2.55E-06 | NTOX | 1.00E-10 | NTOX | 3.33E-12 | NTOX | | | 3.79E-06 | NTOX | 1.70E-10 | NTOX | 5.62E-12 | NTOX | | |
| Lead | NTOX | NTOX | NTOX | NTOX | NPCP | NPCP | | | NTOX | NTOX | NTOX | NTOX | NPCP | NPCP | | |
| Mercury | NTOX | 1.25E-01 | NTOX | NPCP | NPCP | NPCP | | | NTOX | 3.70E-02 | NTOX | NPCP | NPCP | NPCP | | |
| Nickel | NTOX | 1.38E-02 | NTOX | NTOX | NPCP | NPCP | | | NTOX | 4.08E-03 | NTOX | NTOX | NPCP | NPCP | | |
| Phenanthrene | NTOX | 6.20E-04 | NTOX | NTOX | NTOX | NTOX | | | NTOX | 1.84E-04 | NTOX | NTOX | NTOX | NTOX | | |
| Silver | NTOX | 2.43E-03 | NTOX | NTOX | NPCP | NPCP | | | NTOX | 7.18E-04 | NTOX | NTOX | NPCP | NPCP | | |
| Tetrachloroethene | 1.11E-09 | 2.65E-06 | 4.86E-08 | 1.59E-04 | 1.11E-08 | 3.62E-05 | | | 1.51E-09 | 7.03E-07 | 1.64E-08 | 1.07E-05 | 1.87E-08 | 1.22E-05 | | |
| Trichlorofluoromethane | NTOX | 8.65E-06 | NTOX | 9.54E-04 | NTOX | 5.85E-04 | | | NTOX | 1.67E-06 | NTOX | 6.45E-05 | NTOX | 1.98E-04 | | |
| Zinc | NTOX | 1.25E-02 | NTOX | NTOX | NPCP | NPCP | | | NTOX | 3.70E-03 | NTOX | NTOX | NPCP | NPCP | | |

**Notes:**

**NPCP: A physical-chemical parameter, required in the calculation of the value, is not available.**

**NTOX: The toxicity parameter(s) required in the calculation of the value, is not available.**

**NCOC: The chemical is not a COC for the pathway because it was selected, but no representative concentration was entered.**

## RE-1 RISK/HAZARD QUOTIENT FOR NON-RESIDENTIAL RECEPTORS

| CHEMICALS OF CONCERN | SURFICIAL SOIL | | SUB-SURFACE SOIL | | GROUNDWATER | | SOIL-VAPOR | |
|---|---|---|---|---|---|---|---|---|
| | Inhalation of Vapors and Particulates, Dermal Contact, and Accidental Ingestion | | Indoor Inhalation of Vapor Emissions | | Indoor Inhalation of Vapor Emissions | | Indoor Inhalation of Vapor Emissions | |
| | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ |
| 1,1,1-Trichloroethane | NTOX | 9.79E-07 | NTOX | 7.87E-06 | NTOX | 2.41E-07 | | |
| 1,2,4-Trimethylbenzene (pseudocumene) | NTOX | 9.35E-05 | NTOX | 9.11E-04 | NTOX | 2.55E-05 | | |
| 2-Butanone (Methyl Ethyl Ketone) | NTOX | 1.92E-07 | NTOX | 7.53E-07 | NTOX | 3.02E-08 | | |
| 2-Methylnaphthalene | NTOX | 1.01E-04 | NTOX | 1.61E-04 | NTOX | 1.24E-07 | | |
| Acenaphthylene | NTOX | 2.22E-06 | NTOX | NTOX | NTOX | NTOX | | |
| Acetone | NTOX | 4.99E-07 | NTOX | 1.39E-06 | NTOX | 2.07E-08 | | |
| Antimony | NTOX | 1.82E-02 | NTOX | NTOX | NPCP | NPCP | | |
| Arsenic | 1.32E-06 | 3.11E-02 | NPCP | NTOX | NPCP | NPCP | | |
| Barium | NTOX | 1.14E-03 | NTOX | NPCP | NPCP | NPCP | | |
| Benzo(g,h,i)perylene | NTOX | 6.82E-05 | NTOX | NTOX | NTOX | NTOX | | |
| Beryllium | 5.06E-12 | 2.23E-04 | NPCP | NPCP | NPCP | NPCP | | |
| Cadmium | 4.73E-12 | 1.07E-03 | NPCP | NTOX | NPCP | NPCP | | |
| Chloroform | 6.57E-10 | 4.16E-04 | 1.06E-08 | 6.86E-03 | 1.00E-10 | 6.50E-05 | | |
| Chromium (III) total Cr | NTOX | 8.26E-06 | NTOX | NTOX | NPCP | NPCP | | |
| Copper | NTOX | 8.67E-02 | NTOX | NTOX | NPCP | NPCP | | |
| Dibenzo(a,h)anthracene | 3.41E-07 | NTOX | 1.85E-13 | NTOX | 2.91E-15 | NTOX | | |
| Indeno(1,2,3-cd)pyrene | 1.14E-07 | NTOX | 2.49E-12 | NTOX | 8.13E-14 | NTOX | | |
| Lead | NTOX | NTOX | NTOX | NTOX | NPCP | NPCP | | |
| Mercury | NTOX | 8.26E-03 | NTOX | NPCP | NPCP | NPCP | | |
| Nickel | NTOX | 9.11E-04 | NTOX | NTOX | NPCP | NPCP | | |
| Phenanthrene | NTOX | 2.49E-05 | NTOX | NTOX | NTOX | NTOX | | |
| Silver | NTOX | 1.60E-04 | NTOX | NTOX | NPCP | NPCP | | |
| Tetrachloroethene | 2.10E-10 | 5.67E-07 | 1.86E-09 | 5.52E-06 | 3.61E-10 | 1.07E-06 | | |
| Trichlorofluoromethane | NTOX | 4.97E-06 | NTOX | 3.32E-05 | NTOX | 2.12E-05 | | |
| Zinc | NTOX | 8.26E-04 | NTOX | NTOX | NPCP | NPCP | | |

**Notes:**

**NPCP: A physical-chemical parameter, required in the calculation of the value, is not available.**

**NTOX: The toxicity parameter(s) required in the calculation of the value, is not available.**

**NCOC: The chemical is not a COC for the pathway because it was selected, but no representative concentration was entered.**

## RE-1 RISK/HAZARD QUOTIENT FOR CONSTRUCTION WORKERS

| CHEMICALS OF CONCERN | SURFICIAL SOIL | |
|---|---|---|
| | Inhalation of Vapors and Particulates, Dermal Contact, and Accidental Ingestion | |
| | Risk | HQ |
| 1,1,1-Trichloroethane | NTOX | 1.04E-06 |
| 1,2,4-Trimethylbenzene (pseudocumene) | NTOX | 1.00E-04 |
| 2-Butanone (Methyl Ethyl Ketone) | NTOX | 2.02E-07 |
| 2-Methylnaphthalene | NTOX | 1.01E-04 |
| Acenaphthylene | NTOX | 1.80E-06 |
| Acetone | NTOX | 5.20E-07 |
| Antimony | NTOX | 1.46E-02 |
| Arsenic | 1.61E-07 | 2.50E-02 |
| Barium | NTOX | 9.13E-04 |
| Benzo(g,h,i)perylene | NTOX | 5.53E-05 |
| Beryllium | 3.20E-13 | 1.79E-04 |
| Cadmium | 2.99E-13 | 8.60E-04 |
| Chloroform | 1.06E-10 | 4.45E-04 |
| Chromium (III) total Cr | NTOX | 6.62E-06 |
| Copper | NTOX | 6.95E-02 |
| Dibenzo(a,h)anthracene | 4.20E-08 | NTOX |
| Indeno(1,2,3-cd)pyrene | 1.40E-08 | NTOX |
| Lead | NTOX | NTOX |
| Mercury | NTOX | 6.62E-03 |
| Nickel | NTOX | 7.30E-04 |
| Phenanthrene | NTOX | 2.02E-05 |
| Silver | NTOX | 1.28E-04 |
| Tetrachloroethene | 3.17E-11 | 5.77E-07 |
| Trichlorofluoromethane | NTOX | 5.31E-06 |
| Zinc | NTOX | 6.62E-04 |

**Notes:**
**NPCP: A physical-chemical parameter, required in the calculation of the value, is not available.**

**NTOX: The toxicity parameter(s) required in the calculation of the value, is not available.**
**NCOC: The chemical is not a COC for the pathway because it was selected, but no representative concentration was entered.**

# RE-1 SUMMARY OF CUMULATIVE RISK AND HAZARD INDEX

| Routes of Exposure | RECEPTOR | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | RESIDENTIAL | | | | NON-RESIDENTIAL | | CONSTRUCTION WORKER | |
| | CHILD | | AGE-ADJUSTED | | | | | |
| | Risk | Hazard Index | Risk | Hazard Index | Risk | Hazard Index | Risk | Hazard Index |
| **Surface Soil:** Inhalation of Vapors and Particulates, Dermal Contact, and Accidental Ingestion | 3.10E-05 | 2.32E+00 | 4.59E-05 | 6.86E-01 | 1.78E-06 | 1.49E-01 | 2.17E-07 | 1.20E-01 |
| **Subsurface Soil:** Indoor Inhalation of Vapor Emissions | 3.25E-07 | 2.45E-01 | 1.10E-07 | 2.17E-02 | 1.24E-08 | 7.98E-03 | Not Applicable | Not Applicable |
| **Groundwater:** Indoor Inhalation of Vapor Emissions | 1.43E-08 | 3.81E-03 | 2.42E-08 | 1.29E-03 | 4.61E-10 | 1.13E-04 | Not Applicable | Not Applicable |
| **Soil-Vapor:** Indoor Inhalation of Vapor Emissions from Soil and/or Groundwater | NA | NA | NA | NA | NA | NA | Not Applicable | Not Applicable |
| **Site Risk** | **3.13E-05** | | **4.60E-05** | | **1.79E-06** | | **2.17E-07** | |
| **Site Hazard Index** | | **2.57E+00** | | **7.09E-01** | | **1.57E-01** | | **1.20E-01** |
| RATL-1/RATL-2 Required? | YES | YES | YES | NO | NO | NO | NO | NO |

**Notes:**

**NA: Not applicable because the chemical is not a COC for the pathway (no representative concentration entered) or its properties (toxicity and/or physical-chemical) are not available.**

## RATL-1 FOR RESIDENTIAL RECEPTORS

| CHEMICALS OF CONCERN | CHILD | | | | AGE-ADJUSTED | | | |
|---|---|---|---|---|---|---|---|---|
| | SURFICIAL SOIL | SUB-SURFACE SOIL | GROUNDWATER | SOIL-VAPOR | SURFICIAL SOIL | SUB-SURFACE SOIL | GROUNDWATER | SOIL-VAPOR |
| | Inhalation of Vapors and Particulates, Dermal Contact, and Accidental Ingestion | Indoor Inhalation of Vapor Emissions | Indoor Inhalation of Vapor Emissions | Indoor Inhalation of Vapor Emissions | Inhalation of Vapors and Particulates, Dermal Contact, and Accidental Ingestion | Indoor Inhalation of Vapor Emissions | Indoor Inhalation of Vapor Emissions | Indoor Inhalation of Vapor Emissions |
| | [mg/kg] | [mg/kg] | [mg/L] | [ug/m3] | [mg/kg] | [mg/kg] | [mg/L] | [$\mu g/m^3$] |
| 1,1,1-Trichloroethane | 1.04E+02 | 8.60E-01 | 1.02E+00 | NA | 5.08E+02 | 1.27E+01 | 3.02E+00 | NA |
| 1,2,4-Trimethylbenzene (pseudocumene) | 1.26E+00 | 5.08E-03 | 1.15E-02 | NA | 6.59E+00 | 3.43E-02 | 3.42E-02 | NA |
| 2-Butanone (Methyl Ethyl Ketone) | 4.97E+02 | 7.76E+00 | 7.93E+01 | NA | 2.12E+03 | 2.33E+01 | 2.34E+02 | NA |
| 2-Methylnaphthalene | 6.06E+00 | 4.78E-01 | 1.90E-01 | NA | 2.23E+01 | 1.42E+00 | 5.63E-01 | NA |
| Acenaphthylene | 6.20E+01 | NA | NA | NA | 2.08E+02 | NA | NA | NA |
| Acetone | 1.19E+03 | 2.86E+01 | 2.90E+02 | NA | 4.93E+03 | 8.55E+01 | 8.59E+02 | NA |
| Antimony | 9.51E-01 | NA | NA | NA | 3.23E+00 | NA | NA | NA |
| Arsenic | 3.85E-01 | NA | NA | NA | 3.00E-01 | NA | NA | NA |
| Barium | 1.66E+02 | NA | NA | NA | 5.64E+02 | NA | NA | NA |
| Benzo(g,h,i)perylene | 3.10E+01 | NA | NA | NA | 1.04E+02 | NA | NA | NA |
| Beryllium | 4.75E+00 | NA | NA | NA | 1.61E+01 | NA | NA | NA |
| Cadmium | 1.32E+00 | NA | NA | NA | 4.47E+00 | NA | NA | NA |
| Chloroform | 3.28E-01 | 1.17E-03 | 5.37E-03 | NA | 1.72E+00 | 1.74E-02 | 1.59E-02 | NA |
| Chromium (III) total Cr | 3.57E+03 | NA | NA | NA | 1.21E+04 | NA | NA | NA |
| Copper | 8.80E+01 | NA | NA | NA | 2.98E+02 | NA | NA | NA |
| Dibenzo(a,h)anthracene | 4.18E-02 | 4.22E+04 | 2.21E+01 | NA | 3.24E-02 | 2.88E+04 | 1.51E+01 | NA |
| Indeno(1,2,3-cd)pyrene | 4.18E-01 | 1.06E+04 | 2.97E+00 | NA | 3.25E-01 | 7.25E+03 | 2.02E+00 | NA |
| Lead | NA | NA | NA | NA | NA | NA | NA | NA |
| Mercury | 7.14E-01 | NA | NA | NA | 2.42E+00 | NA | NA | NA |
| Nickel | 4.76E+01 | NA | NA | NA | 1.61E+02 | NA | NA | NA |
| Phenanthrene | 3.10E+01 | NA | NA | NA | 1.04E+02 | NA | NA | NA |
| Silver | 1.19E+01 | NA | NA | NA | 4.03E+01 | NA | NA | NA |
| Tetrachloroethene | 8.42E-01 | 1.92E-02 | 2.24E-02 | NA | 7.12E-01 | 6.56E-02 | 1.53E-02 | NA |
| Trichlorofluoromethane | 3.01E+01 | 2.73E-01 | 5.40E-02 | NA | 1.56E+02 | 4.04E+00 | 1.60E-01 | NA |
| Zinc | 7.14E+02 | NA | NA | NA | 2.42E+03 | NA | NA | NA |

**Notes:**
**NA: Not applicable because the chemical is not a COC for the pathway (no representative concentration entered) or its properties (toxicity and/or physical-chemical) are not available.**

## RATL-1 FOR NON-RESIDENTIAL RECEPTORS

**RATLs NOT REQUIRED**

| CHEMICALS OF CONCERN | SURFICIAL SOIL<br>Inhalation of Vapors and Particulates, Dermal Contact, and Accidental Ingestion<br>[mg/kg] | SUB-SURFACE SOIL<br>Indoor Inhalation of Vapor Emissions<br>[mg/kg] | GROUNDWATER<br>Indoor Inhalation of Vapor Emissions<br>[mg/L] | SOIL-VAPOR<br>Indoor Inhalation of Vapor Emissions<br>[$\mu g/m^3$] |
|---|---|---|---|---|
| 1,1,1-Trichloroethane | 1.99E+02 | 2.47E+01 | 3.48E+01 | NA |
| 1,2,4-Trimethylbenzene (pseudocumene) | 2.14E+00 | 2.20E-01 | 3.86E-01 | NA |
| 2-Butanone (Methyl Ethyl Ketone) | 1.36E+03 | 3.46E+02 | 3.43E+03 | NA |
| 2-Methylnaphthalene | 3.39E+01 | 2.12E+01 | 6.94E+00 | NA |
| Acenaphthylene | 1.54E+03 | NA | NA | NA |
| Acetone | 3.58E+03 | 1.28E+03 | 1.27E+04 | NA |
| Antimony | 1.44E+01 | NA | NA | NA |
| Arsenic | 6.06E+00 | NA | NA | NA |
| Barium | 2.51E+03 | NA | NA | NA |
| Benzo(g,h,i)perylene | 7.72E+02 | NA | NA | NA |
| Beryllium | 7.18E+01 | NA | NA | NA |
| Cadmium | 1.86E+01 | NA | NA | NA |
| Chloroform | 5.57E-01 | 3.38E-02 | 1.92E-01 | NA |
| Chromium (III) total Cr | 5.41E+04 | NA | NA | NA |
| Copper | 1.34E+03 | NA | NA | NA |
| Dibenzo(a,h)anthracene | 9.38E-01 | 1.73E+06 | 9.08E+02 | NA |
| Indeno(1,2,3-cd)pyrene | 9.40E+00 | 4.29E+05 | 1.21E+02 | NA |
| Lead | NA | NA | NA | NA |
| Mercury | 1.08E+01 | NA | NA | NA |
| Nickel | 7.22E+02 | NA | NA | NA |
| Phenanthrene | 7.72E+02 | NA | NA | NA |
| Silver | 1.80E+02 | NA | NA | NA |
| Tetrachloroethene | 4.45E+00 | 5.02E-01 | 6.86E-01 | NA |
| Trichlorofluoromethane | 5.25E+01 | 7.85E+00 | 1.86E+00 | NA |
| Zinc | 1.08E+04 | NA | NA | NA |

**Notes:**

**NA: Not applicable because the chemical is not a COC for the pathway (no representative concentration enetered) or its properties (toxicity and/or physical-chemical) are not available.**

## RATL-1 FOR CONSTRUCTION WORKERS

**RATLs NOT REQUIRED**

| CHEMICALS OF CONCERN | SURFICIAL SOIL<br>Inhalation of Vapors and Particulates, Dermal Contact, and Accidental Ingestion<br>[mg/kg] |
|---|---|
| 1,1,1-Trichloroethane | 3.23E+02 |
| 1,2,4-Trimethylbenzene (pseudocumene) | 3.45E+00 |
| 2-Butanone (Methyl Ethyl Ketone) | 2.22E+03 |
| 2-Methylnaphthalene | 5.83E+01 |
| Acenaphthylene | 3.29E+03 |
| Acetone | 5.94E+03 |
| Antimony | 3.11E+01 |
| Arsenic | 2.18E+01 |
| Barium | 5.43E+03 |
| Benzo(g,h,i)perylene | 1.64E+03 |
| Beryllium | 1.55E+02 |
| Cadmium | 4.02E+01 |
| Chloroform | 8.99E-01 |
| Chromium (III) total Cr | 1.17E+05 |
| Copper | 2.88E+03 |
| Dibenzo(a,h)anthracene | 1.63E+01 |
| Indeno(1,2,3-cd)pyrene | 1.64E+02 |
| Lead | NA |
| Mercury | 2.33E+01 |
| Nickel | 1.56E+03 |
| Phenanthrene | 1.64E+03 |
| Silver | 3.89E+02 |
| Tetrachloroethene | 6.30E+01 |
| Trichlorofluoromethane | 8.47E+01 |
| Zinc | 2.33E+04 |

**Notes:**

**NA: Not applicable because the chemical is not a COC for the pathway (no representative concentration enetered) or its properties (toxicity and/or physical-chemical) are not available.**

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## RE-1 GROUNDWATER PROTECTION

| CHEMICALS OF CONCERN | Groundwater Standard,Option 1 [mg/L] | First-Order Decay Rate [day$^{-1}$] | Saturated Zone Retardation | Unsaturated Zone DAF [--] | Mixing Zone DAF [--] | Saturated Zone DAF at POC [--] | Saturated Zone DAF at POE [--] | Overall DAF at POC [--] | Overall DAF at POE [--] | Allowable Groundwater concentration [mg/L] protective of POE: AT POC | Allowable Groundwater concentration [mg/L] protective of POE: AT SOURCE | Soil concentration directly beneath the source protective of GW at POE [mg/kg] | Predicted Groundwater Concentration at POC [mg/L] | Predicted Groundwater Concentration at POE [mg/L] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 2.00E-01 | 0.00E+00 | 1.57E+00 | 1 | 1.78E+01 | 1.00E+00 | 1.00E+00 | 1.78E+01 | 1.78E+01 | 2.00E-01 | 2.00E-01 | 1.18E+00 | 3.19E-04 | 3.19E-04 |
| 1,2,4-Trimethylbenzene (pseudocu | 5.21E-01 | 0.00E+00 | 4.92E+00 | 1 | 1.78E+01 | 1.00E+00 | 1.00E+00 | 1.78E+01 | 1.78E+01 | 5.21E-01 | 5.21E-01 | 9.83E+00 | 3.73E-04 | 3.73E-04 |
| 2-Butanone (Methyl Ethyl Ketone | 6.26E+00 | 0.00E+00 | 1.01E+00 | 1 | 1.78E+01 | 1.00E+00 | 1.00E+00 | 1.78E+01 | 1.78E+01 | 6.26E+00 | 6.26E+00 | 1.18E+01 | 3.93E-03 | 3.93E-03 |
| 2-Methylnaphthalene | 4.17E-02 | 0.00E+00 | 1.94E+01 | 1 | 1.78E+01 | 1.00E+00 | 1.00E+00 | 1.78E+01 | 1.78E+01 | 4.17E-02 | 4.17E-02 | 3.31E+00 | 3.26E-05 | 3.26E-05 |
| Acenaphthylene | 6.26E-01 | 0.00E+00 | 3.01E+01 | 1 | 1.78E+01 | 1.00E+00 | 1.00E+00 | 1.78E+01 | 1.78E+01 | 6.26E-01 | 6.26E-01 | 7.80E+01 | 1.20E-05 | 1.20E-05 |
| Acetone | 9.39E+00 | 0.00E+00 | 1.00E+00 | 1 | 1.78E+01 | 1.00E+00 | 1.00E+00 | 1.78E+01 | 1.78E+01 | 9.39E+00 | 9.39E+00 | 1.74E+01 | 1.00E-02 | 1.00E-02 |
| Antimony | 6.00E-03 | 0.00E+00 | #VALUE! | 1 | 1.78E+01 | 1.00E+00 | 1.00E+00 | 1.78E+01 | 1.78E+01 | 6.00E-03 | 6.00E-03 | 4.77E+00 | 1.14E-03 | 1.14E-03 |
| Arsenic | 1.00E-02 | 0.00E+00 | #VALUE! | 1 | 1.78E+01 | 1.00E+00 | 1.00E+00 | 1.78E+01 | 1.78E+01 | 1.00E-02 | 1.00E-02 | 4.48E+00 | 4.82E-04 | 4.82E-04 |
| Barium | 2.00E+00 | 0.00E+00 | #VALUE! | 1 | 1.78E+01 | 1.00E+00 | 1.00E+00 | 1.78E+01 | 1.78E+01 | 2.00E+00 | 2.00E+00 | 8.96E+02 | 7.28E-02 | 7.28E-02 |
| Benzo(g,h,i)perylene | 3.13E-01 | 0.00E+00 | 6.67E+03 | 1 | 1.78E+01 | 1.00E+00 | 1.00E+00 | 1.78E+01 | 1.78E+01 | 3.13E-01 | 3.13E-01 | 8.80E+03 | 3.43E-06 | 3.43E-06 |
| Beryllium | 4.00E-03 | 0.00E+00 | #VALUE! | 1 | 1.78E+01 | 1.00E+00 | 1.00E+00 | 1.78E+01 | 1.78E+01 | 4.00E-03 | 4.00E-03 | 1.63E+00 | 1.20E-04 | 1.20E-04 |
| Cadmium | 5.00E-03 | 0.00E+00 | #VALUE! | 1 | 1.78E+01 | 1.00E+00 | 1.00E+00 | 1.78E+01 | 1.78E+01 | 5.00E-03 | 5.00E-03 | 1.35E+00 | 1.60E-04 | 1.60E-04 |
| Chloroform | 1.80E-03 | 0.00E+00 | 1.22E+00 | 1 | 1.78E+01 | 1.00E+00 | 1.00E+00 | 1.78E+01 | 1.78E+01 | 1.80E-03 | 1.80E-03 | 5.64E-03 | 4.75E-04 | 4.75E-04 |
| Chromium (III) total Cr | 1.00E-01 | 0.00E+00 | #VALUE! | 1 | 1.78E+01 | 1.00E+00 | 1.00E+00 | 1.78E+01 | 1.78E+01 | 1.00E-01 | 1.00E-01 | 2.13E+03 | 2.14E-03 | 2.14E-03 |
| Copper | 1.30E+00 | 0.00E+00 | #VALUE! | 1 | 1.78E+01 | 1.00E+00 | 1.00E+00 | 1.78E+01 | 1.78E+01 | 1.30E+00 | 1.30E+00 | 9.21E+02 | 4.00E-06 | 4.00E-06 |
| Dibenzo(a,h)anthracene | 7.65E-06 | 0.00E+00 | 8.01E+03 | 1 | 1.78E+01 | 1.00E+00 | 1.00E+00 | 1.78E+01 | 1.78E+01 | 7.65E-06 | 7.65E-06 | 2.59E-01 | 3.96E-06 | 3.96E-06 |
| Indeno(1,2,3-cd)pyrene | 7.65E-05 | 0.00E+00 | 1.46E+04 | 1 | 1.78E+01 | 1.00E+00 | 1.00E+00 | 1.78E+01 | 1.78E+01 | 7.65E-05 | 7.65E-05 | 4.71E+00 | 1.48E-05 | 1.48E-05 |
| Lead | 1.50E-02 | 0.00E+00 | #VALUE! | 1 | 1.78E+01 | 1.00E+00 | 1.00E+00 | 1.78E+01 | 1.78E+01 | 1.50E-02 | 1.50E-02 | 4.96E+01 | 4.06E-04 | 4.06E-04 |
| Mercury | 2.00E-03 | 0.00E+00 | #VALUE! | 1 | 1.78E+01 | 1.00E+00 | 1.00E+00 | 1.78E+01 | 1.78E+01 | 2.00E-03 | 2.00E-03 | 5.09E-03 | 7.66E-05 | 7.66E-05 |
| Nickel | 2.09E-01 | 0.00E+00 | #VALUE! | 1 | 1.78E+01 | 1.00E+00 | 1.00E+00 | 1.78E+01 | 1.78E+01 | 2.09E-01 | 2.09E-01 | 5.91E+01 | 2.10E-03 | 2.10E-03 |
| Phenanthrene | 3.13E-01 | 0.00E+00 | 6.04E+01 | 1 | 1.78E+01 | 1.00E+00 | 1.00E+00 | 1.78E+01 | 1.78E+01 | 3.13E-01 | 3.13E-01 | 7.90E+01 | 9.32E-06 | 9.32E-06 |
| Silver | 5.21E-02 | 0.00E+00 | #VALUE! | 1 | 1.78E+01 | 1.00E+00 | 1.00E+00 | 1.78E+01 | 1.78E+01 | 5.21E-02 | 5.21E-02 | 1.89E-01 | 3.10E-04 | 3.10E-04 |
| Tetrachloroethene | 5.00E-03 | 0.00E+00 | 1.65E+00 | 1 | 1.78E+01 | 1.00E+00 | 1.00E+00 | 1.78E+01 | 1.78E+01 | 5.00E-03 | 5.00E-03 | 3.19E-02 | 3.72E-04 | 3.72E-04 |
| Trichlorofluoromethane | 3.13E+00 | 0.00E+00 | 1.67E+00 | 1 | 1.78E+01 | 1.00E+00 | 1.00E+00 | 1.78E+01 | 1.78E+01 | 3.13E+00 | 3.13E+00 | 4.46E+01 | 1.50E-02 | 1.50E-02 |
| Zinc | 3.13E+00 | 0.00E+00 | #VALUE! | 1 | 1.78E+01 | 1.00E+00 | 1.00E+00 | 1.78E+01 | 1.78E+01 | 3.13E+00 | 3.13E+00 | 8.86E+02 | 2.56E-03 | 2.56E-03 |

**Notes:**

**NGWSTD: No groundwater standard is available or calculated for the chemical**

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## RE-1 OPTION 2 GROUNDWATER STANDARD

| CHEMICALS OF CONCERN | Option 2 Groundwater Standard (mg/l) | Critical Pathway | Off-Site Receptor |
|---|---|---|---|
| 1,1,1-Trichloroethane | 9.90E+01 | Volatilization to Indoor Air | Residential |
| 1,2,4-Trimethylbenzene (pseudocumene) | 3.14E+00 | Volatilization to Indoor Air | Non-Residential |
| 2-Butanone (Methyl Ethyl Ketone) | 1.40E+01 | Volatilization to Indoor Air | Non-Residential |
| 2-Methylnaphthalene | 3.21E+02 | Volatilization to Indoor Air | Residential |
| Acenaphthylene | 3.21E+05 | Volatilization to Indoor Air | Residential |
| Acetone | 6.54E+02 | Irrigation-With Crop Uptake | Residential |
| Antimony | 5.60E+01 | Irrigation-With Crop Uptake | Residential |
| Arsenic | 2.16E+02 | Irrigation-With Crop Uptake | Residential |
| Barium | 6.00E+00 | Irrigation-With Crop Uptake | Residential |
| Benzo(g,h,i)perylene | 4.40E+01 | Irrigation-With Crop Uptake | Residential |
| Beryllium | 6.45E+03 | Irrigation-With Crop Uptake | Residential |
| Cadmium | 6.64E+02 | Irrigation-With Crop Uptake | Residential |
| Chloroform | 1.00E+02 | Irrigation-With Crop Uptake | Residential |
| Chromium (III) total Cr | | Irrigation-With Crop Uptake | Residential |
| Copper | | Irrigation-With Crop Uptake | Residential |
| Dibenzo(a,h)anthracene | | Irrigation-With Crop Uptake | Residential |
| Indeno(1,2,3-cd)pyrene | | Irrigation-With Crop Uptake | Residential |
| Lead | | Irrigation-With Crop Uptake | Residential |
| Mercury | | Irrigation-With Crop Uptake | Residential |
| Nickel | | Irrigation-With Crop Uptake | Residential |
| Phenanthrene | | Irrigation-With Crop Uptake | Residential |
| Silver | | Irrigation-With Crop Uptake | Residential |
| Tetrachloroethene | | Irrigation-With Crop Uptake | Residential |
| Trichlorofluoromethane | | Irrigation-With Crop Uptake | Residential |
| Zinc | | Irrigation-With Crop Uptake | Residential |
| | | Irrigation-With Crop Uptake | Residential |

**Notes:**
**NGWSTD: No groundwater standard is available or calculated for the chemical**

## LIST OF SELECTED CHEMICALS

| Chemicals of Concern | CAS Number |
|---|---|
| 1,1,1-Trichloroethane | 71-55-6 |
| Trichlorofluoromethane | 75-69-4 |

**Notes:**

# PHYSICAL AND CHEMICAL PROPERTIES OF SELECTED CHEMICALS

| CHEMICALS OF CONCERN | Molecular Weight | Water Solubility | Henry's Law Constant | Org. Carbon Ads. Coef. | Soil-Water Sorp. Coeff. | Soil-Water Sorp. Coeff. | Site-Specifc | Diffusion Coefficient: in air | Diffusion Coefficient: in water |
|---|---|---|---|---|---|---|---|---|---|
| | (g/g-mol) | (mg/L) | (L-water/L-air) | Koc (mL/g) | Kd (mL-water /g-soil) | Kd for Metals (mL/g) | Kd for Metals (mL/g) | ($cm^2/s$) | ($cm^2/s$) |
| 1,1,1-Trichloroethane | 1.33E+02 | 1.33E+03 | 7.05E-01 | 1.35E+02 | 1.35E-01 | NA | | 7.80E-02 | 8.80E-06 |
| Trichlorofluoromethane | 1.37E+02 | 1.10E+03 | 4.03E+00 | 1.59E+02 | 1.59E-01 | NA | | 8.70E-02 | 9.70E-06 |

**Notes:**

**NA: Not applicable or available**

## TOXICOLOGICAL PROPERTIES OF SELECTED CHEMICALS

| CHEMICALS OF CONCERN | Carcinogenic Effects | | Non-Carcinogenic Effects | | Oral Relative Absorption Factor (RAFo) | Dermal Relative Absorption Factor (RAFd) | Maximum Contaminant Level (MCL) | Aquatic Life Criterion | | Human Health Risk from Consumption of: | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Oral Slope Factor (SFo) | Inhalation Slope Factor (SFi) | Oral Reference Dose (RfDo) | Inhalation Reference Dose (RfDi) | | | | | | | |
| | [mg/kg-day]$^{-1}$ | [mg/kg-day]$^{-1}$ | (mg/kg-day) | (mg/kg-day) | [-] | [-] | [mg/L] | [µg/L] | [µg/L] | [µg/L] | [µg/L] |
| 1,1,1-Trichloroethane | NA | NA | 0.28 | 0.63 | 1 | 0.0005 | 0.2 | NA | NA | NA | NA |
| Trichlorofluoromethane | NA | NA | 0.3 | 0.2 | 1 | 0.0005 | NA | NA | NA | NA | NA |

**Notes:**

**NA: Not applicable or available**

## RECEPTOR(S) AND ROUTE(S) OF EXPOSURE

**(Select by clicking the checkboxes)**

| SOURCE AND ROUTES OF EXPOSURES | RECEPTOR | | | |
|---|---|---|---|---|
| | RESIDENT | | NON-RESIDENTIAL | CONSTRUCTION WORKER |
| | CHILD | AGE-ADJUSTED | | |
| **Surficial Soil**<br>Ingestion of Soil, Outdoor Inhalation of Vapor Emissions and Particulates, and Dermal Contact with Soil | ☐ | ☐ | ☐ | ☐ |
| **Subsurface Soil**<br>Indoor Inhalation of Vapor Emissions | ☐ | ☐ | ☐ | |
| **Groundwater**<br>Indoor Inhalation of Vapor Emissions | ☐ | ☐ | ☐ | |
| **Soil-Vapor ( RE-2 only)**<br>Indoor Inhalation of Vapor Emissions | ☑ | ☑ | ☑ | |

☐ **Groundwater Protection**

☐ **Option 1.** **Groundwater with Current Use or High Probability of Future Use as Drinking Wate**r: The Maximum Contaminant Levels (MCLs) are used as the target concentrations at the POE. For chemicals without MCLs, risk-based ingestion standard for an age-adjusted adult is used.

☐ **Option 2.** **Groundwater with Low Probability of Future Use as Drinking Wate**r: Groundwater concentrations protective of off-site receptors resulting from exposure via pathways other than direct ingestion. These pathways include but are not limited to volatilization to indoor air, irrigation water use with crop uptake and ingestion, and irrigation water use without crop uptake.

☐ **Surface Water Protection**

**If a surface water body is impacted or threatened, complete the following:**

| | |
|---|---|
| Surface water is used for drinking/water quality is appropriate for drinking water supplies? | ☐ |
| Surface water supports aquatic life? | ☐ |
| Surface water is used for recreational activities? | ☐ |

**If Ammonia is a potential COC for surface water, complete the following:**

| | |
|---|---|
| Surface water supports cold water aquatic species? | ☐ |
| Surface water supports warm water aquatic species? | ☐ |

# RE-2 EXPOSURE FACTORS

*(Page 1 of 2)*

| Parameter | Symbol | Unit | Default Value | Value Used | Comment |
|---|---|---|---|---|---|
| | $AT_c$ | year | 70 | 70 | *Default* |
| | $AT_{nc}$ | year | =ED | =ED | *Default* |
| **Body Weight:** | | | | | |
| Resident Child | $BW_c$ | kg | 15 | 15 | *Default* |
| Resident Adolescent | $BW_{as}$ | kg | 55 | 55 | *Default* |
| Resident Adult | $BW_a$ | kg | 70 | 70 | *Default* |
| Non-residential | $BW_{com}$ | kg | 70 | 70 | *Default* |
| Construction Worker | $BW_{con}$ | kg | 70 | 70 | *Default* |
| **Exposure Duration:** | | | | | |
| Resident Child | $ED_c$ | year | 6 | 6 | *Default* |
| Resident Adolescent | $ED_{as}$ | year | 9 | 9 | *Default* |
| Resident Adult | $ED_a$ | year | 15 | 15 | *Default* |
| Age-adjusted Resident | $ED_{aa}$ | year | 30 | 30 | *Default* |
| Non-residential | $ED_{com}$ | year | 6.6 | 6.6 | *Default* |
| Construction Worker | $ED_{con}$ | year | 1 | 1 | *Default* |
| **Exposure Frequency for Indirect Pathways:** | | | | | |
| Resident Child | $EF_c$ | day/year | 350 | 350 | *Default* |
| Resident Adolescent | $EF_{as}$ | day/year | 350 | 350 | *Default* |
| Resident Adult | $EF_a$ | day/year | 350 | 350 | *Default* |
| Non-residential | $EF_{com}$ | day/year | 250 | 250 | *Default* |
| Construction Worker | $EF_{con}$ | day/year | 30 | 30 | *Default* |
| Exposure Frequency for Direct Contact Pathways | | | | | |
| Resident Child | $EF_{dc}$ | day/year | 270 | 270 | *Default* |
| Resident Adolescent | $EF_{das}$ | day/year | 270 | 270 | *Default* |
| Resident Adult | $EF_{da}$ | day/year | 270 | 270 | *Default* |
| Non-residential | $EF_{dcom}$ | day/year | 180 | 180 | *Default* |
| Construction Worker | $EF_{dcon}$ | day/year | 30 | 30 | *Default* |
| **Indoor Exposure Time:** | | | | | |
| Resident Child | $ET_{i\text{-}c}$ | hrs/day | 21 | 21 | *Default* |
| Resident Adolescent | $ET_{i\text{-}as}$ | hrs/day | 15.8 | 15.8 | *Default* |
| Resident Adult | $ET_{i\text{-}a}$ | hrs/day | 15 | 15 | *Default* |
| Non-residential | $ET_{i\text{-}com}$ | hrs/day | 7.5 | 7.5 | *Default* |
| **Outdoor Exposure Time:** | | | | | |
| Resident Child | $ET_{o\text{-}c}$ | hrs/day | 2 | 2 | *Default* |
| Resident Adolescent | $ET_{o\text{-}as}$ | hrs/day | 2 | 2 | *Default* |
| Resident Adult | $ET_{o\text{-}a}$ | hrs/day | 2 | 2 | *Default* |
| Non-residential | $ET_{o\text{-}com}$ | hrs/day | 6 | 6 | *Default* |
| Construction Worker | $ET_{o\text{-}con}$ | hrs/day | 10 | 10 | *Default* |
| **Soil Ingestion Rate:** | | | | | |
| Resident Child | $IR_{s\text{-}c}$ | mg/day | 200 | 200 | *Default* |
| Resident Adolescent | $IR_{s\text{-}as}$ | mg/day | 100 | 100 | *Default* |
| Resident Adult | $IR_{s\text{-}a}$ | mg/day | 100 | 100 | *Default* |
| **Age-adjusted** | **$IR_{s\text{-}aa}$** | **mg/kg** | **31804** | **31804** | ***Default*** |
| Non-residential | $IR_{s\text{-}com}$ | mg/day | 100 | 100 | *Default* |
| Construction Worker | $IR_{s\text{-}con}$ | mg/day | 480 | 480 | *Default* |
| **Groundwater Ingestion Rate:** | | | | | |
| Resident Child | $IR_{w\text{-}c}$ | L/day | 1.5 | 1.5 | *Default* |
| Resident Adolescent | $IR_{w\text{-}as}$ | L/day | 1.7 | 1.7 | *Default* |
| Resident Adult | $IR_{w\text{-}a}$ | L/day | 2 | 2 | *Default* |
| **Age-adjusted** | **$IR_{w\text{-}aa}$** | **L/kg** | **457.36** | **457.36** | ***Default*** |
| Non-residential | $IR_{w\text{-}com}$ | L/day | 1 | 1 | *Default* |
| **Hourly Indoor Inhalation Rate:** | | | | | |
| Resident Child | $IR_{ai\text{-}c}$ | $m^3$/hr | 0.7 | 0.7 | *Default* |
| Resident Adolescent | $IR_{ai\text{-}as}$ | $m^3$/hr | 0.7 | 0.7 | *Default* |
| Resident Adult | $IR_{ai\text{-}a}$ | $m^3$/hr | 0.7 | 0.7 | *Default* |
| Non-residential | $IR_{ai\text{-}com}$ | $m^3$/hr | 1 | 1 | *Default* |
| **Hourly Outdoor Inhalation Rate:** | | | | | |
| Resident Child | $IR_{ao\text{-}c}$ | $m^3$/hr | 1.1 | 1.1 | *Default* |
| Resident Adolescent | $IR_{ao\text{-}as}$ | $m^3$/hr | 1.3 | 1.3 | *Default* |
| Resident Adult | $IR_{ao\text{-}a}$ | $m^3$/hr | 1.3 | 1.3 | *Default* |
| Non-residential | $IR_{ao\text{-}com}$ | $m^3$/hr | 1.6 | 1.6 | *Default* |
| Construction Worker | $IR_{ao\text{-}con}$ | $m^3$/hr | 2.4 | 2.4 | *Default* |
| **Indoor Inhalation Rate:** | | | | | |
| Resident Child | $IR_{ai\text{-}c}$ | $m^3$/day | 14.7 | 14.7 | *Default* |
| Resident Adolescent | $IR_{ai\text{-}as}$ | $m^3$/day | 11.1 | 11.1 | *Default* |

| | | | | | |
|---|---|---|---|---|---|
| Resident Adult | $IR_{ai\text{-}a}$ | $m^3$/day | 10.5 | 10.5 | *Default* |
| **Age-adjusted (calculated)** | **$IR_{ai\text{-}aa}$** | **$m^3$/kg** | **3478.9** | **3478.9** | ***Default*** |
| Commercial Worker | $IR_{ai\text{-}com}$ | $m^3$/day | 7.5 | 7.5 | *Default* |

## EXPOSURE FACTORS

*(Page 2 of 2)*

| Parameter | Symbol | Unit | Default Value | Value Used | Comment |
|---|---|---|---|---|---|
| **Outdoor Inhalation Rate:** | | | | | |
| Resident Child | $IR_{ao-c}$ | $m^3$/day | 2.2 | 2.2 | *Default* |
| Resident Adolescent | $IR_{ao-as}$ | $m^3$/day | 2.6 | 2.6 | *Default* |
| Resident Adult | $IR_{ao-a}$ | $m^3$/day | 2.6 | 2.6 | *Default* |
| **Age-adjusted** | **$IR_{ao-aa}$** | **$m^3$/kg** | **502.9** | **502.9** | ***Default*** |
| Non-residential | $IR_{ao-com}$ | $m^3$/day | 9.6 | 9.6 | *Default* |
| Construction Worker | $IR_{ao-con}$ | $m^3$/day | 24 | 24 | *Default* |
| **Skin Surface Area:** | | | | | |
| Resident Child | $SA_c$ | $cm^2$/day | 2434 | 2434 | *Default* |
| Resident Adolescent | $SA_{as}$ | $cm^2$/day | 2434 | 2434 | *Default* |
| Resident Adult | $SA_a$ | $cm^2$/day | 5657 | 5657 | *Default* |
| **Age-adjusted** | **$SA_{aa}$** | **mg/kg** | **393322.9** | **393322.9** | ***Default*** |
| Non-residential | $SA_{com}$ | $cm^2$/day | 3477 | 3477 | *Default* |
| Construction Worker | $SA_{con}$ | $cm^2$/day | 3477 | 3477 | *Default* |
| **Soil to Skin Adherence Factor:** | | | | | |
| Resident Child | $M_c$ | $mg/cm^2$ | 1 | 1 | *Default* |
| Resident Adolescent | $M_{as}$ | $mg/cm^1$ | 0.3 | 0.3 | *Default* |
| Resident Adult | $M_a$ | $mg/cm^2$ | 0.3 | 0.3 | *Default* |
| Non-residential | $M_{com}$ | $mg/cm^2$ | 0.1 | 0.1 | *Default* |
| Construction Worker | $M_{con}$ | $mg/cm^2$ | 0.5 | 0.5 | *Default* |
| **Averaging Time for Vapor Flux:** | | | | | |
| Resident Child | $\tau$ | s | 1.89E+08 | **1.89E+08** | ***Calculated*** |
| Resident Adolescent | $\tau$ | s | 2.84E+08 | **2.84E+08** | ***Calculated*** |
| Resident Adult | $\tau$ | s | 4.73E+08 | **4.73E+08** | ***Calculated*** |
| Age-adjusted Resident | $\tau$ | s | 9.46E+08 | **9.46E+08** | ***Calculated*** |
| Commercial Worker | $\tau$ | s | 2.08E+08 | **2.08E+08** | ***Calculated*** |
| Construction Worker | $\tau$ | s | 3.15E+07 | **3.15E+07** | ***Calculated*** |
| **Target Site Risk** | TR | -- | 1.00E-05 | 1.00E-05 | *Default* |
| **Target Site Hazard Quotient** | THI | -- | 1 | 1 | *Default* |

# RE-2 FATE AND TRANSPORT PARAMETERS

*(Page 1 of 3)*

| Parameter | Symbol | Unit | Default Value | Value Used | Comment |
|---|---|---|---|---|---|
| **SOIL PARAMETERS:** | | | | | |
| Source-building separation | $L_{TS}$ | cm | 30 | 30 | *Default* |
| Source-bottom-building separation | $L_{TS-B}$ | cm | 183 | 183 | *Default* |
| Number of distinct soil strata between the top of the source zone and the building foundation | $n_S$ | - | 1 | 1 | *Default* |
| **SOIL-VAPOR PARAMETERS:** | | | | | |
| Depth to sample from the bottom of the building | $L_{TSV}$ | cm | 91 | 152.4 | *Provide Justification* |
| **GROUNDWATER PARAMETERS:** | | | | | |
| Groundwater-building separation | $L_{TGW}$ | cm | 30 | 30 | *Default* |
| Number of distinct soil strata between the capillary fringe and the building foundation | $n_{GW}$ | - | 1 | 1 | *Default* |
| **AIR PARAMETERS:** | | | | | |
| Viscosity of air | $\mu$ | g/cm-s | 1.80E-04 | 1.80E-04 | *Default* |
| **ENCLOSED SPACE PARAMETERS:** | | | | | |
| **Area of the enclosed space below grade:** | | | | | |
| Residential | $A_B$ | $cm^2$ | 1561600 | 1561600 | *Default* |
| Non-residential | $A_B$ | $cm^2$ | 4782069 | 4782069 | *Default* |
| **Enclosed Space Foundation/Wall Thickness:** | | | | | |
| Residential | $L_{crack}$ | cm | 15 | 15 | *Default* |
| Non-residential | $L_{crack}$ | cm | 15 | 15 | *Default* |
| **Total area of cracks:** | | | | | |
| Residential | $A_{crack}$ | $cm^2$ | 484 | 484 | *Default* |
| Non-residential | $A_{crack}$ | $cm^2$ | 861 | 861 | *Default* |
| **Number of air exchanges per second:** | | | | | |
| Residential | ER | 1/sec | 2.78E-04 | 2.78E-04 | *Default* |
| Non-residential | ER | 1/sec | 5.56E-04 | 5.56E-04 | *Default* |
| **Length of enclosed space:** | | | | | |
| Residential | $L_B$ | cm | 1220 | 1220 | *Default* |
| Non-residential | $L_B$ | cm | 2157 | 2157 | *Default* |
| **Width of enclosed space:** | | | | | |
| Residential | $W_B$ | cm | 1220 | 1220 | *Default* |
| Non-residential | $W_B$ | cm | 2157 | 2157 | *Default* |
| **Height of enclosed space:** | | | | | |
| Residential | $H_B$ | cm | 244 | 244 | *Default* |
| Non-residential | $H_B$ | cm | 244 | 244 | *Default* |
| **Floor-wall seam perimeter:** | | | | | |
| Residential | $X_{crack}$ | $cm^2/cm^2$ | 4880 | 4880 | *Default* |
| Non-residential | $X_{crack}$ | $cm^2/cm^2$ | 8628 | 8628 | *Default* |
| Crack depth below grade | $Z_{crack}$ | cm | 15 | 15 | *Default* |
| Equivalent crack radius | $r_{crack}$ | cm | 0.1 | 0.1 | *Default* |
| Pressure differential between enclosed space and soil surface beneath | $\Delta P$ | $g/cm\text{-}s^2$ | 40 | 40 | *Default* |
| **Building ventilation rate:** | | | | | |
| Residential | $Q_{building}$ | $cm^3/s$ | 1.01E+05 | **1.01E+05** | ***Calculated*** |
| Non-residential | $Q_{building}$ | $cm^3/s$ | 6.31E+05 | **6.31E+05** | ***Calculated*** |
| **Volumetric flow rate of soil gas into the enclosed space:** | | | | | |
| Residential | $Q_{soil}$ | $cm^3/s$ | 6.0E+00 | **6.0E+00** | ***Calculated*** |
| Non-residential | $Q_{soil}$ | $cm^3/s$ | 1.1E+01 | **1.1E+01** | ***Calculated*** |
| **COWHERD PARTICULATE EMISSION MODEL:** | | | | | |
| Inverse of mean concentration in the middle of a sqaure source | **Q/C** | **$[g/m^2\text{-}s]/[kg/m^3]$** | **69.41** | **69.41** | ***Calculated*** |
| Fraction of Vegetative Cover | V | $m^2/m^2$ | 0.5 | 0.5 | *Default* |
| Mean Annual Wind Speed | $U_m$ | m/s | 3.98 | 3.98 | *Default* |
| Equivalent Threshold Value of Windspeed at 7m | $U_t$ | m/s | 11.32 | 11.32 | *Default* |

| | | | | | |
|---|---|---|---|---|---|
| Windspeed Distribution Function from Cowherd et. al, 1985 | F(x) | -- | 0.0495 | 0.0495 | *Default* |

# FATE AND TRANSPORT PARAMETERS

*(Page 2 of 3)*

| Parameter | Symbol | Unit | Default Value | Value Used | Comment |
|---|---|---|---|---|---|
| **GROUNDWATER PROTECTION PARAMETERS:** | | | | | |
| Groundwater Darcy Velocity | $U_{gw}$ | cm/year | 3340 | 3340 | *Default* |
| Groundwater Mixing Zone Length | $L_{mz}$ | cm | 1220 | 1220 | *Default* |
| Groundwater Mixing Zone Thickness | $\delta_{gw}$ | cm | 153 | 153 | *Default* |
| Groundwater Mixing Zone Width | $W_{gw}$ | cm | 1220 | 1220 | *Default* |
| Infiltration Rate | I | cm/year | 25 | 25 | *Default* |
| **Source Zone Soil Properties:** | | | | | |
| Dry Soil Bulk Density of the source zone soil | $\rho_s$ | $g/cm^3$ | 1.64 | 1.64 | *Default* |
| Fractional Organic Carbon Content in the source zone soil | foc | g-C/g-soil | 0.001 | 0.001 | *Default* |
| Total Soil Porosity of the source zone soil | $\theta_T$ | $cm^3/cm^3$-soil | 0.39 | 0.39 | *Default* |
| Volumetric Water Content in the source zone soil | $\theta_{ws}$ | $cm^3/cm^3$ | 0.17 | 0.17 | *Default* |
| Volumetric Air Content in the source zone soil | $\theta_{as}$ | $cm^3/cm^3$ | 0.22 | **0.22** | ***Calculated*** |
| **Saturated Zone Soil Properties:** | | | | | |
| Dry Soil Bulk Density of the saturated zone soil | $\rho_{ss}$ | $g/cm^3$ | 1.64 | 1.64 | *Default* |
| Fractional Organic Carbon Content in the saturated zone soil | focs | g-C/g-soil | 0.001 | 0.001 | *Default* |
| Total Soil Porosity in the saturated zone soil | $\theta_{Ts}$ | $cm^3/cm^3$-soil | 0.39 | 0.39 | *Default* |
| Distance to the Point of Exposure (Xpoe) | Xpoe,gw | ft | variable | 0 | *User-Defined* |
| Longitudinal dispersivity | $\alpha_x$ | **ft** | **variable** | **0.000** | ***Calculated*** |
| Transverse dispersivity | $\alpha_y$ | **ft** | **variable** | **0.000** | ***Calculated*** |
| Vertical dispersivity | $\alpha_z$ | **ft** | **variable** | **0.000** | ***Calculated*** |
| Distance to the Point of Compliance (Xpoc) | Xpoc,gw | ft | variable | 0 | *User-Defined* |
| Longitudinal dispersivity | $\alpha_x$ | **ft** | **variable** | **0.000** | ***Calculated*** |
| Transverse dispersivity | $\alpha_y$ | **ft** | **variable** | **0.000** | ***Calculated*** |
| Vertical dispersivity | $\alpha_z$ | **ft** | **variable** | **0.000** | ***Calculated*** |
| **SURFACE WATER PROTECTION PARAMETERS:** | | | | | |
| pH of the receiving surface water | pH | -- | 7 | 7 | *Default* |
| Temperature of the receiving surface water | T | $^0C$ | 15 | 15 | *Default* |
| Hardness of the receiving surface water | H | mg/L (as $CaCO_3$) | 25 | 25 | *Default* |
| Distance to the Point of Exposure (Xpoe) | Xpoe,sw | ft | variable | 0 | *User-Defined* |
| Longitudinal dispersivity | $\alpha_x$ | **ft** | **variable** | **0.000** | ***Calculated*** |
| Transverse dispersivity | $\alpha_y$ | **ft** | **variable** | **0.000** | ***Calculated*** |
| Vertical dispersivity | $\alpha_z$ | **ft** | **variable** | **0.000** | ***Calculated*** |
| Distance to the Point of Compliance (Xpoc) | Xpoc,sw | ft | variable | 0 | *User-Defined* |
| Longitudinal dispersivity | $\alpha_x$ | **ft** | **variable** | **0.000** | ***Calculated*** |
| Transverse dispersivity | $\alpha_y$ | **ft** | **variable** | **0.000** | ***Calculated*** |
| Vertical dispersivity | $\alpha_z$ | **ft** | **variable** | **0.000** | ***Calculated*** |

# RE-2 FATE AND TRANSPORT PARAMETERS

*(Page 3 of 3)*

| Parameter | Symbol | Unit | Default Value | Value Used | Comment |
|---|---|---|---|---|---|
| **Thickness of Soil Strata Between the Source and the Bottom of the Building:** | | | | | |
| Stratum A (Immediately below the building) | $h_A$ | cm | 30 | 30 | *Default* |
| Stratum B | $h_B$ | cm | 0 | 0 | *Default* |
| Stratum C | $h_C$ | cm | 0 | 0 | *Default* |
| Total thickness (should equal the source-building separation) | $L_{TS}$ | cm | 30 | **30** | |
| **Thickness of Soil Strata Between Groundwater and the Bottom of the Building:** | | | | | |
| Stratum A (Immediately below the building) | $h_A$ | cm | 5 | 5 | *Default* |
| Stratum B | $h_B$ | cm | 0 | 0 | *Default* |
| Stratum C | $h_C$ | cm | 0 | 0 | *Default* |
| Stratum D (Capillary fringe) | $h_{cap}$ | cm | 25 | **25** | ***Calculated*** |
| Total thickness (should equal the water table-building separation) | $L_{TGW}$ | cm | 30 | **30** | |
| **Stratum-Specific Properties:** | | | | | |
| **Stratum A (Immediately below the building):** | | | | | |
| Vapor permeability | $k_v$ | $cm^2$ | 5.00E-09 | 5.00E-09 | *Default* |
| Dry Soil Bulk Density | $\rho_{sA}$ | $g/cm^3$ | 1.64 | 1.64 | *Default* |
| Fractional Organic Carbon Content | $foc_A$ | g-C/g-soil | 0.001 | 0.001 | *Default* |
| Total Soil Porosity | $\theta_{TA}$ | $cm^3/cm^3$-soil | 0.39 | 0.39 | *Default* |
| Volumetric Water Content in Stratum A | $\theta_{wsA}$ | $cm^3/cm^3$ | 0.17 | 0.17 | *Default* |
| Volumetric Air Content in Stratum A | $\theta_{asA}$ | $cm^3/cm^3$ | 0.22 | **0.22** | ***Calculated*** |
| **Stratum B:** | | | | | |
| Dry Soil Bulk Density | $\rho_{sB}$ | $g/cm^3$ | 1.64 | 1.64 | *Default* |
| Fractional Organic Carbon Content | $foc_B$ | g-C/g-soil | 0.001 | 0.001 | *Default* |
| Total Soil Porosity | $\theta_{TB}$ | $cm^3/cm^3$-soil | 0.39 | 0.39 | *Default* |
| Volumetric Water Content in Stratum B | $\theta_{wsB}$ | $cm^3/cm^3$ | 0.17 | 0.17 | *Default* |
| Volumetric Air Content in Stratum B | $\theta_{asB}$ | $cm^3/cm^3$ | 0.22 | **0.22** | ***Calculated*** |
| **Stratum C:** | | | | | |
| Dry Soil Bulk Density | $\rho_{sC}$ | $g/cm^3$ | 1.64 | 1.64 | *Default* |
| Fractional Organic Carbon Content | $foc_C$ | g-C/g-soil | 0.001 | 0.001 | *Default* |
| Total Soil Porosity | $\theta_{TC}$ | $cm^3/cm^3$-soil | 0.39 | 0.39 | *Default* |
| Volumetric Water Content in Stratum C | $\theta_{wsC}$ | $cm^3/cm^3$ | 0.17 | 0.17 | *Default* |
| Volumetric Air Content in Stratum C | $\theta_{asC}$ | $cm^3/cm^3$ | 0.22 | **0.22** | ***Calculated*** |
| **Stratum D (Capillary fringe):** | | | | | |
| Mean particle diameter | D | cm | 0.03 | 0.03 | *Default* |
| van Genuchten curve shape factor | N | - | 1.449 | 1.449 | *Default* |
| Dry Soil Bulk Density | $\rho_{sF}$ | $g/cm^3$ | 1.64 | 1.64 | *Default* |
| Fractional Organic Carbon Content | $foc_F$ | g-C/g-soil | 0.001 | 0.001 | *Default* |
| Total Soil Porosity | $\theta_{Tcap}$ | $cm^3/cm^3$-soil | 0.39 | 0.39 | *Default* |
| Residual water content in capillary fringe soil | $\theta_{rcap}$ | $cm^3/cm^3$ | 0.039 | 0.039 | *Default* |
| Volumetric Water Content in capillary fringe | $\theta_{wcap}$ | $cm^3/cm^3$ | 0.322 | **0.322** | ***Calculated*** |
| Volumetric Air Content in capillary fringe | $\theta_{acap}$ | $cm^3/cm^3$ | 0.068 | 0.068 | ***Calculated*** |

## RE-2 REPRESENTATIVE CONCENTRATIONS FOR RESIDENTIAL RECEPTORS

| CHEMICALS OF CONCERN | SURFICIAL SOIL | SUB-SURFACE SOIL | GROUNDWATER | SOIL-VAPOR | GROUNDWATER AND/OR SURFACE WATER PROTECTION | | |
|---|---|---|---|---|---|---|---|
| | Inhalation of Vapors and Particulates, Dermal Contact, and Accidental Ingestion | Indoor Inhalation of Vapor Emissions | Indoor Inhalation of Vapor Emissions | Indoor Inhalation of Vapor Emissions | Representative Groundwater Concentration at the Source [mg/L] | Representative Soil Concentration at the Source [mg/kg] | Representative Groundwater Concentration at the POC [mg/L] |
| | NOT REQUIRED-PATHWAY NOT COMPLETE | NOT REQUIRED-USING SOIL VAPOR | NOT REQUIRED-USING SOIL VAPOR | Representative Concentration [ug/m3] | | NOT USED IN CALCULATIONS | |
| 1,1,1-Trichloroethane | | | | 3.00E+02 | | | |
| Trichlorofluoromethane | | | | 2.90E+04 | | | |

**Notes:**

## RE-2 REPRESENTATIVE CONCENTRATIONS FOR CONSTRUCTION WORKER

| CHEMICALS OF CONCERN | SOIL TO TYPICAL DEPTH OF CONSTRUCTION |
|---|---|
| | Inhalation of Vapors and Particulates, Dermal Contact, and Accidental Ingestion |
| | NOT REQUIRED-PATHWAY NOT COMPLETE |
| 1,1,1-Trichloroethane | |
| Trichlorofluoromethane | |

**Note:**

## RE-2 DECAY RATE AND UNSATURATED ZONE DAF

| CHEMICALS OF CONCERN | First-Order Decay Rate [$day^{-1}$] | Unsaturated Zone DAF [--] |
|---|---|---|
| 1,1,1-Trichloroethane | 0.00E+00 | 1 |
| Trichlorofluoromethane | 0.00E+00 | 1 |

**Notes:**

**NA: Not available**

## RE-2 RISK/HAZARD QUOTIENT FOR RESIDENTIAL RECEPTORS

| CHEMICALS OF CONCERN | CHILD | | | | | | | | AGE-ADJUSTED | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | SURFICIAL SOIL | | SUB-SURFACE SOIL | | GROUNDWATER | | SOIL-VAPOR | | SURFICIAL SOIL | | SUB-SURFACE SOIL | | GROUNDWATER | | SOIL-VAPOR | |
| | Inhalation of Vapors and Particulates, Dermal Contact, and Accidental Ingestion | | Indoor Inhalation of Vapor Emissions | | Indoor Inhalation of Vapor Emissions | | Indoor Inhalation of Vapor Emissions | | Inhalation of Vapors and Particulates, Dermal Contact, and Accidental Ingestion | | Indoor Inhalation of Vapor Emissions | | Indoor Inhalation of Vapor Emissions | | Indoor Inhalation of Vapor Emissions | |
| | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ |
| 1,1,1-Trichloroethane | | | | | | | NTOX | 2.25E-05 | | | | | | | NTOX | 7.61E-06 |
| Trichlorofluoromethane | | | | | | | NTOX | 6.96E-03 | | | | | | | NTOX | 2.35E-03 |

**Notes:**

**NPCP: A physical-chemical parameter, required in the calculation of the value, is not available.**

**NTOX: The toxicity parameter(s) required in the calculation of the value, is not available.**

**NCOC: The chemical is not a COC for the pathway because it was selected, but no representative concentration was entered.**

## RE-2 RISK/HAZARD QUOTIENT FOR NON-RESIDENTIAL RECEPTORS

| CHEMICALS OF CONCERN | SURFICIAL SOIL | | SUB-SURFACE SOIL | | GROUNDWATER | | SOIL-VAPOR | |
|---|---|---|---|---|---|---|---|---|
| | Inhalation of Vapors and Particulates, Dermal Contact, and Accidental Ingestion | | Indoor Inhalation of Vapor Emissions | | Indoor Inhalation of Vapor Emissions | | Indoor Inhalation of Vapor Emissions | |
| | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ |
| 1,1,1-Trichloroethane | | | | | | | NTOX | 5.31E-07 |
| Trichlorofluoromethane | | | | | | | NTOX | 1.63E-04 |

**Notes:**

**NPCP: A physical-chemical parameter, required in the calculation of the value, is not available.**

**NTOX: The toxicity parameter(s) required in the calculation of the value, is not available.**

**NCOC: The chemical is not a COC for the pathway because it was selected, but no representative concentration was entered.**

# RE-2 SUMMARY OF CUMULATIVE RISK AND HAZARD INDEX

| Routes of Exposure | RECEPTOR | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | RESIDENTIAL | | | | NON-RESIDENTIAL | | CONSTRUCTION WORKER | |
| | CHILD | | AGE-ADJUSTED | | | | | |
| | Risk | Hazard Index | Risk | Hazard Index | Risk | Hazard Index | Risk | Hazard Index |
| **Surface Soil:** Inhalation of Vapors and Particulates, Dermal Contact, and Accidental Ingestion | NA | NA | NA | NA | NA | NA | NA | NA |
| **Subsurface Soil:** Indoor Inhalation of Vapor Emissions | NA | NA | NA | NA | NA | NA | Not Applicable | Not Applicable |
| **Groundwater:** Indoor Inhalation of Vapor Emissions | NA | NA | NA | NA | NA | NA | Not Applicable | Not Applicable |
| **Soil-Vapor:** Indoor Inhalation of Vapor Emissions from Soil and/or Groundwater | NA | 6.99E-03 | NA | 2.36E-03 | NA | 1.64E-04 | Not Applicable | Not Applicable |
| **Site Risk** | **NA** | | **NA** | | **NA** | | **NA** | |
| **Site Hazard Index** | | **6.99E-03** | | **2.36E-03** | | **1.64E-04** | | **NA** |
| RATL-1/RATL-2 Required? | NA | NO | NA | NO | NA | NO | NA | NA |

**Notes:**
**NA: Not applicable because the chemical is not a COC for the pathway (no representative concentration entered) or its properties (toxicity and/or physical-chemical) are not available.**

## RE-2 RISK/HAZARD QUOTIENT BASED ON SOIL-VAPOR DATA

| CHEMICALS OF CONCERN | Predicted Indoor Air Concentration Residential | RESIDENTIAL | | | | Predicted Indoor Air Concentration Non-Residential | NON-RESIDENTIAL | |
|---|---|---|---|---|---|---|---|---|
| | | CHILD | | AGE-ADJUSTED | | | | |
| | | Risk | HQ | Risk | HQ | | Risk | HQ |
| | [mg/m$^3$] | | | | | [mg/m$^3$] | | |
| 1,1,1-Trichloroethane | 1.51E-05 | NTOX | 2.25E-05 | NTOX | 7.61E-06 | 4.56E-06 | NTOX | 5.31E-07 |
| Trichlorofluoromethane | 1.48E-03 | NTOX | 6.96E-03 | NTOX | 2.35E-03 | 4.45E-04 | NTOX | 1.63E-04 |

**Notes:**

**NPCP: A physical-chemical parameter, required in the calculation of the value, is not available.**

**NTOX: The toxicity parameter(s) required in the calculation of the value, is not available.**
**NCOC: The chemical is not a COC for the pathway because it was selected, but no representative concentration was entered.**

# RATL-2 FOR RESIDENTIAL RECEPTORS

**RATLs NOT REQUIRED**

| CHEMICALS OF CONCERN | CHILD - RATLs NOT REQUIRED | | | | AGE-ADJUSTED - RATLs NOT REQUIRED | | | |
|---|---|---|---|---|---|---|---|---|
| | SURFICIAL SOIL | SUB-SURFACE SOIL | GROUNDWATER | SOIL-VAPOR | SURFICIAL SOIL | SUB-SURFACE SOIL | GROUNDWATER | SOIL-VAPOR |
| | Inhalation of Vapors and Particulates, Dermal Contact, and Accidental Ingestion | Indoor Inhalation of Vapor Emissions | Indoor Inhalation of Vapor Emissions | Indoor Inhalation of Vapor Emissions | Inhalation of Vapors and Particulates, Dermal Contact, and Accidental Ingestion | Indoor Inhalation of Vapor Emissions | Indoor Inhalation of Vapor Emissions | Indoor Inhalation of Vapor Emissions |
| | [mg/kg] | [mg/kg] | [mg/L] | [ug/m3] | [mg/kg] | [mg/kg] | [mg/L] | [$\mu g/m^3$] |
| 1,1,1-Trichloroethane | NA | NA | NA | 6.66E+06 | NA | NA | NA | 1.97E+07 |
| Trichlorofluoromethane | NA | NA | NA | 2.08E+06 | NA | NA | NA | 6.16E+06 |

**Notes:**

**NA: Not applicable because the chemical is not a COC for the pathway (no representative concentration entered) or its properties (toxicity and/or physical-chemical) are not available.**

# RATL-2 FOR NON-RESIDENTIAL RECEPTORS

**RATLs NOT REQUIRED**

| CHEMICALS OF CONCERN | SURFICIAL SOIL | SUB-SURFACE SOIL | GROUNDWATER | SOIL-VAPOR |
|---|---|---|---|---|
| | Inhalation of Vapors and Particulates, Dermal Contact, and Accidental Ingestion | Indoor Inhalation of Vapor Emissions | Indoor Inhalation of Vapor Emissions | Indoor Inhalation of Vapor Emissions |
| | [mg/kg] | [mg/kg] | [mg/L] | [$\mu g/m^3$] |
| 1,1,1-Trichloroethane | NA | NA | NA | 2.83E+08 |
| Trichlorofluoromethane | NA | NA | NA | 8.89E+07 |

**Notes:**

**NA: Not applicable because the chemical is not a COC for the pathway (no representative concentration enetered) or its properties (toxicity and/or physical-chemical) are not available.**