

**Supplemental Cleanup Action Report  
City Parcel Site**

City Parcel Site  
Spokane, Washington

*for*  
**Washington State Department of Ecology**

December 31, 2015



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Spokane, Washington**

**File No. 0504-047-03**

**December 31, 2015**

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## EXECUTIVE SUMMARY

This Supplemental Cleanup Action Report documents supplemental site characterization and remediation of polychlorinated biphenyls (PCBs) at the City Parcel site (site), which includes the former City Parcel property located at 708 North Cook Street, portions of the adjacent Mr. Service property located at 728 North Cook Street and portions of the City of Spokane (City) right-of-way (ROW) within North Cook Street to the west of the site, and a vacated alley to the east of the Mr. Service property, in Spokane, Washington. The site was occupied by Spokane Transformer, Inc., an electrical transformer repair and recycling business, from approximately 1961 to 1979. Past business practices resulted in PCB leaks, spills or releases into former site structures and underlying soil.

A cleanup action was conducted at the City Parcel property and adjacent vacated alleyway to the east of the City Parcel property in 2009, which included excavation and off-site disposal of soil contaminated with PCBs. The Model Toxics Control Act (MTCA) Method A cleanup level for industrial use (10 milligrams per kilogram) was established as the target cleanup level for the 2009 cleanup action. Several soil confirmation samples collected from excavation sidewalls along the north and west property boundaries of the City Parcel property (adjoining the Mr. Service and City properties, respectively) contained PCBs at concentrations greater than the target regulatory cleanup level. In response, a supplemental site characterization and supplemental cleanup action was performed on the adjacent Mr. Service property and City ROW.

The supplemental cleanup action was completed in accordance with the Cleanup Action Plan and Engineering Design Report, conducted under the Model Toxics Control Act, Chapter 70.105D RCW, and led by the Washington State Department of Ecology. The supplemental site characterization activities were conducted in June 2014, and included excavating test pits and hand-auger borings on the Mr. Service property and vacated alley east of Mr. Service, and advancing direct-push borings and hand-auger explorations within the North Cook Street ROW, collecting soil samples and submitting them for analyses of PCBs. A target cleanup level of 1 milligram per kilogram (mg/kg), the MTCA Method A cleanup level for unrestricted land use, was established for the Mr. Service property. A target cleanup level of 10 mg/kg was established for the city ROW. Results of the supplemental site characterization indicated PCB-contaminated soil exceeding target cleanup levels extended into the southern portions of the Mr. Service property and the vacated alley to the east. PCB-contaminated soil exceeding target cleanup levels extended into the City ROW along North Cook Street.

Cleanup actions occurred in two phases, conducted in December 2014 and October 2015. The first phase included excavation and removal of PCB-contaminated soil at the Mr. Service property and the vacated alley west of Mr. Service. Approximately 493 tons of PCB-contaminated soil were excavated and disposed off-site at regulated landfill facilities. At the conclusion of the first phase, results of soil confirmation sampling indicated target cleanup levels had been achieved on the Mr. Service property and the vacated alley. The second phase included excavation and removal of approximately 126 tons of PCB-contaminated soil along the North Cook Street ROW. At the conclusion of the second phase, results of confirmation soil testing indicated PCB-contaminated soil exceeding the target cleanup level remained within the City ROW. However, the presence of existing pavement and sidewalks precluded extending the remedial excavation to remove the remaining PCB-contaminated soil.

Although conditions at the site meet the cleanup standards and are protective of human health and the environment, the presence of remnant PCB contamination in soil within the ROW of North Cook Street requires that a restrictive covenant be placed upon the conditions of usage for this property. These conditions include limiting the site to industrial use and protecting the integrity of the soil and hardscape cap. Conditions at the adjacent Mr. Service property meet the cleanup standards and do not require that an environmental covenant be placed upon the conditions of property usage.

**SUPPLEMENTAL CLEANUP ACTION REPORT  
CITY PARCEL SITE  
SPOKANE, WASHINGTON  
FOR  
WASHINGTON STATE DEPARTMENT OF ECOLOGY**

## **1.0 INTRODUCTION**

This report presents results of the supplemental investigation and cleanup action performed at the City Parcel site (site) located at 708 North Cook Street and adjoining property in Spokane, Washington. The supplemental investigation was conducted in general accordance with the Supplemental Remedial Investigation (RI) Work Plan (GeoEngineers, 2014). The cleanup action was conducted in accordance with the Cleanup Action Plan (Ecology, August 2004), which addressed removal and disposal of PCB-contaminated building materials and soil.

The Cleanup Action Plan was finalized after public comment in August 2004. The potentially liable persons (PLPs) were Richard Boyce, Jerry Overton, and Paul Gisselberg. Disagreements arose between the parties when Ecology asked the PLPs to implement the cleanup action, which resulted in Ecology taking legal action against the PLPs. A settlement agreement (three separate Consent Decrees) was reached between the parties in December 2007 and Ecology took the lead in implementing the cleanup action. The cleanup action was conducted under the Model Toxics Control Act (MTCA), Chapter 70.105D RCW and implemented under Chapter 173-340 WAC. The initial cleanup action was completed in 2009, which included demolishing the former building, removing USTs, and excavating PCB-contaminated soil. At the conclusion of the 2009 cleanup action, confirmation samples collected along the northern and western City Parcel property boundaries contained PCBs at concentrations exceeding regulatory cleanup levels.

## **2.0 SITE BACKGROUND**

For an in-depth description of the site, see “Final Cleanup Action Report, City Parcel Site” (GeoEngineers, 2009).

In 2009, GeoEngineers prepared the Engineering Design Report and developed plans and specifications to implement the cleanup action (GeoEngineers, April 2009). Ecology led the contractor bidding and selection process and awarded two contracts in May 2009: one for building demolition (to NRC Environmental Services [NRCES]) and one for soil removal and disposal (to Wyser Construction, Inc. [Wyser]).

Cleanup actions occurred in two phases conducted between June and August 2009. The first phase included removal and disposal of asbestos-containing materials, demolition of the former City Parcel building, and disposal of PCB-contaminated aboveground building materials at the Finley Buttes Landfill in Boardman, Oregon and Waste Management, Inc. (WMI) Subtitle D facility in Arlington, Oregon. The second phase included removal of the concrete building floor and foundation, excavation of PCB-contaminated soil, excavation and removal of drywells, floor drains and underground storage tanks, and backfilling with clean, import soil to approximate site grade. The second phase also included disposal of removed materials and soil at either the WMI Subtitle D facility or the WMI Subtitle C facility permitted to accept TSCA waste, both in Arlington, Oregon.

Approximately 1,050 tons of PCB-contaminated material were disposed at either Finley Buttes or the WMI Subtitle D facility, which included all of the aboveground building material (except asbestos-containing materials and miscellaneous trash) and most of the concrete floor and foundations. Approximately 7,182 tons of PCB-contaminated material (most of which designated as TSCA waste), including all excavated soil and portions of the concrete floor, were disposed at the WMI Subtitle C facility.

In general, the cleanup action conducted in 2009 met the conditions established in the Cleanup Action Plan. However, shallow sidewall samples (less than 4 feet below grade) along the north and west property limits exceeded the site-specific PCB cleanup criterion.

### **3.0 SUPPLEMENTAL SITE CHARACTERIZATION**

To address the remnant PCB contamination along the north and west property boundaries of the City Parcel property, a supplemental site characterization was conducted in June 2014. Supplemental site characterization activities were performed in general accordance with the Supplemental Remedial Investigation (RI) Work Plan (GeoEngineers, 2014). A detailed description of exploration and sampling methods, along with logs of subsurface explorations is presented in Appendix A, Field Procedures and Exploration Logs. Copies of the laboratory analytical reports and data validation documentation is presented in Appendix B, Data Validation Report and Chemical Analytical Laboratory Reports.

GeoEngineers completed soil borings along the west side of the site on June 26, 2014, using direct-push drilling techniques. The direct-push borings were advanced to depths of about 4 feet below existing grade (GP-2B and GP-3B) and about 8 feet below existing grade (GP-1, GP-2, GP-2A, GP-3 and GP-3A); see Site Plan, Figure 2 for boring locations. Soil samples were collected from borings GP-1, GP-2 and GP-3 and submitted to TestAmerica for PCB analysis using the Environmental Protection Agency (EPA) Method 8082. Soil generally consisted of gravel with variable silt and sand. Direct-push soil boring analytical results are summarized in Summary of Chemical Analytical Results – Direct Push, Table 1.

Fourteen test pits, ranging in depth from about 4 feet to 6 feet below existing grade, were excavated by Sandry Construction Company, Inc., (Sandry) of Spokane, Washington starting on June 26, 2014. Test pits were excavated within the Mr. Service property and the adjacent city of Spokane alley/right-of-way as shown on Figure 2. Soil samples were generally collected from the north and south ends of the test pits at 1-foot-depth intervals. Soil generally consisted of silty gravel with sand. Soil samples were submitted to TestAmerica Laboratory in Spokane for PCB analysis. Test pit sample analytical results are summarized in Summary of Chemical Analytical Results – Test Pits, Table 2.

Ecology completed hand-auger explorations within the Mr. Service property on July 18, 2014, and along the west side of the site on September 16, 2014. Soil samples were collected from the hand-auger explorations at depths of 1 and 2 feet below existing grade within the Mr. Service property and at ½ feet and 1½ feet below existing grade within the North Cook Street ROW. Soil samples were submitted to the TestAmerica Laboratory in Spokane for PCB analysis. Hand-auger explorations analytical results are summarized in Summary of Chemical Analytical Results – Hand-Auger Explorations, Table 3.

Ecology established a cleanup level of 1 mg/kg (the MTCA Method A cleanup level for unrestricted land use) for the Mr. Service property, and a cleanup level of 10 mg/kg (MTCA Method A cleanup level for industrial properties) for the City ROW. Results of the supplemental site characterization indicated PCB-



contaminated soil exceeding the target cleanup level extended into the southern portions of the Mr. Service property and the vacated alley east of Mr. Service. The estimated lateral extent ranged from about 3 feet to 25 feet north of the City Parcel/Mr. Service property line, and to depths of about 2 to 4 feet below site grade. Results of the supplemental site characterization also indicated PCB-contaminated soil exceeding the target cleanup level extended at least several feet to the west of the property boundary into the City ROW along North Cook Street, and at least 1 foot below site grade.

## **4.0 CLEANUP ACTION**

### **4.1. Mr. Service and Vacated City Alleyway**

Under a public works contract with Ecology, Engineering/Remediation Resources Group, Inc. (ERRG) began soil excavation within the Mr. Service property and vacated City alleyway adjacent to the site on December 4, 2014. The remedial excavations generally followed the excavation plan developed by Ecology based on the supplemental site investigation. ERRG removed soil from the site and an Ecology representative collected confirmation soil samples and submitted them to the TestAmerica Laboratory in Spokane, and compared the analytical results against the target cleanup levels of 1 mg/kg for the Mr. Service property and 10 mg/kg for the vacated alleyway.

If the confirmation sample failed to meet cleanup criteria, additional soil was removed from the area of non-compliance and additional confirmation samples were collected. This procedure was followed until the area met cleanup criteria. Five of the initial confirmation samples from the Mr. Service property (B2, B3, B4, W2 and W3) contained PCBs at concentrations exceeding the target cleanup level, which required extending portions of the remedial excavation either laterally or deeper. Follow-up confirmation samples from these areas contained detectable PCBs but at concentrations less than the target cleanup level. The confirmation samples collected from the vacated alleyway excavation also contained detectable PCBs, but at concentration less than both the industrial and unrestricted land use cleanup levels.

The final excavation depths ranged from about 2 to 8 feet below ground surface. The approximate horizontal limits and depths of the remedial excavation, as well as confirmation sample locations are shown on Limits of Excavation and Confirmation Sample Locations – Mr. Service, Figure 3. Confirmation sample results are summarized in Summary of Chemical Analytical Results, Mr. Service and Vacated Alleyway, Table 4. Copies of the laboratory analytical test reports are presented in Appendix B.

A total of about 493 tons of PCB-contaminated soil were excavated from the Mr. Service property and the vacated alleyway and disposed offsite. Approximately 95 tons of Toxic Substance Control Act (TSCA) regulated PCB-contaminated soil (concentrations exceeding 50 mg/kg) were transported to and disposed at Chemical Waste Management of the Northwest, Inc. (CWMI) located in Arlington, Oregon from December 5, 2014 to December 10, 2014. Approximately 398 tons of non-TSCA regulated PCB-contaminated soil (concentration less than 50 mg/kg, but greater than 1 mg/kg) were transported to and disposed at Greater Wenatchee Regional Landfill (GWRL) from December 4, 2014 to December 12, 2014. Appendix C, Disposal Records, includes copies of the disposal records.

ERRG imported a total of about 546 tons of gravel borrow material from Action Materials to be used as backfill for the remedial excavations located on the Mr. Service property and vacated alleyway. GeoEngineers performed multiple site visits to conduct in-place density testing on back fill material. Copies

of backfill material weight tickets, lab data and field reports are included in Appendix D, Backfill Materials and Testing.

#### **4.2. North Cook Street**

Anderson Environmental Contracting (AEC), under contract with Ecology, began soil excavation along the west side of the Site, within the North Cook Street ROW on October 27, 2015. During the summer of 2015, the City of Spokane repaved North Cook Street and constructed a new sidewalk along the east side of the street. The remedial excavation was extended as far west, and as deep, as possible without undermining the recently constructed sidewalk. Soil was initially excavated along an approximate 4-foot-wide, 170-foot long area between the west property line of the City Parcel property and the recently constructed sidewalk, to a depth of approximately 2 feet below site grade. Excavated soil was loaded directly into trucks and hauled offsite for disposal, or temporarily stockpiled on plastic sheeting pending analytical results. After analytical results were received, the material was disposed offsite at a permitted landfill facility.

After excavation was terminated, an Ecology representative collected confirmation samples from the excavation bottom and the west sidewall. Confirmation samples were collected from the bottom of the excavation approximately every 15 to 40 linear feet; confirmation samples were collected from the west sidewall approximately every 40 linear feet. The approximate lateral extent of the remedial excavation and confirmation sample locations are shown on Limits of Excavation and Confirmation Sample Locations, Figure 4. Confirmation sample results are summarized in Summary of Chemical Analytical Results – North Cook Street, Table 5.

Concentrations of PCBs in bottom sample EB-6 exceeded twice the target cleanup level. The northern approximate 70 feet of the remedial excavation was subsequently excavated approximately 1½ feet deeper. Two additional bottom confirmation samples (EB-7 and EB-8) were then collected from the bottom of the excavation. The concentration of PCBs in sample EB-8 exceeded the target cleanup level. However, the excavation could not be extended deeper without potentially undermining the recently constructed sidewalk.

A total of about 126 tons of PCB-contaminated soil was excavated from the North Cook Street ROW and disposed off-site at regulated landfill facilities. Approximately 29 tons of TSCA-regulated contaminated soil were transported to and disposed at CWMI on October 27, 2015. Approximately 97 tons of non-TSCA regulated contaminated soil were transported to and disposed at GWRL from October 27, 2015 to October 30, 2015. Appendix C includes copies of disposal records.

#### **5.0 CONCLUSIONS**

The cleanup action was completed in accordance with the Model Toxics Control Act, Chapter 70.105D RCW and led by Ecology. Cleanup actions occurred in two phases conducted in December 2014 and October 2015. The first phase was removal of PCB-contaminated material at the Mr. Service property and the vacated alleyway east of Mr. Service. The second phase included removal of PCB-contaminated material along the west side of the site within the North Cook Street ROW. Following soil removal, confirmation soil bottom and sidewall samples were collected from the excavations to evaluate if cleanup standards were met.

In general, the supplemental cleanup action met the conditions established in the Cleanup Action Plan.

PCB concentrations from confirmation sidewall and bottom samples for final limits of the remedial excavation on the Mr. Service property were less than 1 mg/kg. As such, conditions of the Mr. Service property meet the cleanup standards and do not require that an environmental covenant be placed upon the conditions of property usage.

PCB concentrations from confirmation sidewall and bottom samples from the final limits of the remedial excavation along North Cook Street were generally less than 10 mg/kg, with the exception of confirmation bottom sample EB-8. Evaluation of cleanup compliance for the City ROW was completed in accordance with MTCA 173-340-745(8) and 173-340-740(7). Specifically, the results of the confirmation sample results from the 2015 supplemental remedial action within City ROW were combined with the analytical results from the 2009 cleanup action (excluding sidewall sample results from the 2009 work that were excavated as part of the 2014 and 2015 activities) to evaluate if the 95 percent upper confidence level (UCL) for the total data set (City Parcel and City ROW) was less than the target cleanup level of 10 mg/kg.

A statistical analysis was completed using MTCA Stat 97 (developed by Ecology). The results of the nine 2015 confirmation samples collected from final excavation limits (EB-1 through EB-3, EB-7 through EB-8, and ES-1 through ES-4), and 64 confirmation samples from the 2009 remedial action were used as input. Results of the statistical analyses indicate the 95 percent UCL for the City Parcel and City ROW is approximately 7.9 mg/kg, which is less than 10 mg/kg. Results of MTCA Stat 97 analyses are presented in Appendix E. Additionally, none of the 2009 or 2015 confirmation samples at final excavation limits shallower than 15 feet exceeded two times the target cleanup level, and less than 10 percent of the final confirmation samples shallower than 15 feet (3 out of 73 samples) exceeded the target cleanup level. On this basis, cleanup criteria for North Cook Street ROW were met.

Although conditions at the Site meet the cleanup standards and are protective of human health and the environment, the presence of remnant PCB in soil exceeding the MTCA Method A cleanup level for unrestricted land use within the North Cook Street ROW requires that an environmental covenant be placed upon the conditions of property usage. These conditions include limiting the site to industrial use and protecting the integrity of the soil and hardscape cap.

## 6.0 REFERENCES

- GeoEngineers, Inc., 2009. "Engineering Design Report, City Parcel Site, Spokane Washington" GEI No. 0504-047-00. April 6.
- GeoEngineers, Inc., 2009. "Final Cleanup Action Report, City Parcel Site, Spokane Washington," GEI No. 0504-047-02. October 5.
- GeoEngineers Inc., 2014. "Work Plan, Supplemental Remedial Investigation, Spokane, Washington," GEI No. 0504-047-03. May 15.
- Washington State Department of Ecology, 2004. "Final Cleanup Action Plan, City Parcel Site, Spokane, Washington."



**Table 1**  
**Summary of Chemical Analytical Results - Direct-Push<sup>1,2</sup>**  
 City Parcel Site  
 Spokane, Washington

Sample Name (Depth in feet)	Date	PCB-Arochlor 1016 µg/Kg	PCB-Arochlor 1221 µg/Kg	PCB-Arochlor 1232 µg/Kg	PCB-Arochlor 1242 µg/Kg	PCB-Arochlor 1248 µg/Kg	PCB-Arochlor 1254 µg/Kg	PCB-aroclor 1260 µg/Kg	PCB-Arochlor 1268 µg/Kg
GP-1 (1-1.2)	06/26/2014	23.2 UJ	23.2 UJ	23.2 UJ	23.2 UJ	23.2 UJ	23.2 UJ	264 J	23.2 UJ
GP-1 (5-5.2)	06/26/2014	209 U	209 U	209 U	209 U	209 U	209 U	1,660	209 U
GP-2 (0.5-0.7)	06/26/2014	391 U	391 U	391 U	391 U	391 U	391 U	5,210	391 U
GP-2 (5-5.2)	06/26/2014	108 U	108 U	108 U	108 U	108 U	108 U	787	108 U
GP-3 (0.5-0.7)	06/26/2014	4,210 U	4,210 U	4,210 U	4,210 U	4,210 U	4,210 U	<b>25,100</b>	4,210 U
GP-3 (4-4.2)	06/26/2014	425 U	425 U	425 U	425 U	425 U	425 U	4,610	425 U

**Notes:**

<sup>1</sup>Polychlorinated biphenyls (PCBs) analyzed using Environmental Protection Agency Method 8082A by TestAmerica Laboratories Inc. located in Spokane Valley, Washington.

<sup>2</sup>Direct-push samples were compared to MTCA Method A for industrial properties cleanup level of 10,000 µg/kg for total PCBs. Direct-push borings were performed along N. Cook Street.

µg/Kg = micrograms per kilogram

U = Analyte was not detected at a concentration greater than the listed method reporting limit.

J = Result was qualified as estimated. Refer to data validation report in Appendix B for details.

**Bold** = Analyte was detected at a concentration greater than the method reporting limit.

  = Analyte was detected at a concentration greater than the MTCA Method A cleanup level.

**Table 2**  
**Summary of Chemical Analytical Results - Test Pits<sup>1,2</sup>**  
City Parcel Site  
Spokane, Washington

Sample Name	Sample Depth (feet)	Date	PCB-Arochlor 1016 µg/Kg	PCB-Arochlor 1221 µg/Kg	PCB-Arochlor 1232 µg/Kg	PCB-Arochlor 1242 µg/Kg	PCB-Arochlor 1248 µg/Kg	PCB-Arochlor 1254 µg/Kg	PCB-Arochlor 1260 µg/Kg	PCB-Arochlor 1268 µg/Kg	Total PCBs µg/Kg
TP-1-1-N	1	06/26/2014	20,400 U	20,400 U	20,400 U	20,400 U	20,400 U	20,400 U	46,400	20,400 U	46,400
TP-1-1-S	1	06/26/2014	5,740 U	5,740 U	5,740 U	5,740 U	5,740 U	5,740 U	12,600	5,740 U	12,600
TP-1-2-N	2	06/26/2014	5,450 U	5,450 U	5,450 U	5,450 U	5,450 U	5,450 U	9,940	5,450 U	9,940
TP-1-2-S	2	06/26/2014	574 U	574 U	574 U	574 U	574 U	574 U	1,170	574 U	1,170
TP-1-3-S	3	06/26/2014	26,700 U	26,700 U	26,700 U	26,700 U	26,700 U	26,700 U	58,500	26,700 U	58,500
TP-1-4-N	4	06/26/2014	259 U	259 U	259 U	259 U	259 U	259 U	484	259 U	484
TP-1-4-S	4	06/26/2014	50.9 U	50.9 U	50.9 U	50.9 U	50.9 U	50.9 U	50.9 U	50.9 U	-
TP-1-3-N	3	06/26/2014	10,400 U	10,400 U	10,400 U	10,400 U	10,400 U	10,400 U	24,500	10,400 U	24,500
TP-2-1-N	1	06/26/2014	50.6 U	50.6 U	50.6 U	50.6 U	50.6 U	50.6 U	50.6 U	50.6 U	-
TP-2-1-S	1	06/26/2014	54.3 U	54.3 U	54.3 U	54.3 U	54.3 U	54.3 U	54.3 U	54.3 U	-
TP-2-2-N	2	06/26/2014	542 U	542 U	542 U	542 U	542 U	542 U	1,680 J	542 U	1,680 J
TP-2-2-S	2	06/26/2014	1160	250 U	250 U	250 U	250 U	250 U	788	250 U	788
TP-2-3-N	3	06/26/2014	44.9 U	44.9 U	44.9 U	44.9 U	44.9 U	44.9 U	76.6	44.9 U	1236.6
TP-2-3-S	3	06/26/2014	2090 U	2,090 U	2,090 U	2,090 U	2,090 U	2,090 U	2,600	2,090 U	2,600
TP-2-4-N	4	06/26/2014	218 U	218 U	218 U	218 U	218 U	218 U	395	218 U	395
TP-2-4-S	4	06/26/2014	52.6 U	52.6 U	52.6 U	52.6 U	52.6 U	52.6 U	185	52.6 U	185
TP-3-1-N	1	06/26/2014	52.2 U	52.2 U	52.2 U	52.2 U	52.2 U	52.2 U	87.1	52.2 U	87.1
TP-3-1-S	1	06/26/2014	53.8 U	53.8 U	53.8 U	53.8 U	53.8 U	53.8 U	97.5	53.8 U	97.5
TP-3-2-N	2	06/26/2014	50.3 U	50.3 U	50.3 U	50.3 U	50.3 U	50.3 U	50.3 U	50.3 U	-
TP-3-2-S	2	06/26/2014	52.5 U	52.5 U	52.5 U	52.5 U	52.5 U	52.5 U	52.5 U	52.5 U	-
TP-3-3-N	3	06/26/2014	1,090 U	1,090 U	1,090 U	1,090 U	1,090 U	1,090 U	2,220	1,090 U	2,220
TP-3-3-S	3	06/26/2014	53.1 U	53.1 U	53.1 U	53.1 U	53.1 U	53.1 U	287	53.1 U	287
TP-3-4-N	4	06/26/2014	50.1 U	50.1 U	50.1 U	50.1 U	50.1 U	50.1 U	92.6	50.1 U	92.6
TP-3-4-S	4	06/26/2014	51.8 U	51.8 U	51.8 U	51.8 U	51.8 U	51.8 U	51.8 U	51.8 U	-
TP-4-1-S	1	06/26/2014	54.8 U	54.8 U	54.8 U	54.8 U	54.8 U	54.8 U	54.8 U	54.8 U	-
TP-4-2-S	2	06/26/2014	48.5 U	48.5 U	48.5 U	48.5 U	48.5 U	48.5 U	48.5 U	48.5 U	-
TP-4-3-S	3	06/26/2014	42.4 U	42.4 U	42.4 U	42.4 U	42.4 U	42.4 U	42.4 U	42.4 U	-
TP-4-4-S	4	06/26/2014	51.4 U	51.4 U	51.4 U	51.4 U	51.4 U	51.4 U	51.4 U	51.4 U	-
TP-5-1-N	1	06/26/2014	52.6 U	52.6 U	52.6 U	52.6 U	52.6 U	52.6 U	52.6 U	52.6 U	-
TP-5-1-S	1	06/26/2014	50.6 U	50.6 U	50.6 U	50.6 U	50.6 U	50.6 U	50.6 U	50.6 U	-
TP-5-2-N	2	06/26/2014	54.6 U	54.6 U	54.6 U	54.6 U	54.6 U	54.6 U	54.6 U	54.6 U	-
TP-5-2-S	2	06/26/2014	54.4 U	54.4 U	54.4 U	54.4 U	54.4 U	54.4 U	54.4 U	54.4 U	-
TP-5-3-N	3	06/26/2014	51.6 U	51.6 U	51.6 U	51.6 U	51.6 U	51.6 U	51.6 U	51.6 U	-
TP-5-3-S	3	06/26/2014	50.7 U	50.7 U	50.7 U	50.7 U	50.7 U	50.7 U	50.7 U	50.7 U	-
TP-5-4-N	4	06/26/2014	48.3 U	48.3 U	48.3 U	48.3 U	48.3 U	48.3 U	48.3 U	48.3 U	-
TP-5-4-S	4	06/26/2014	49.8 U	49.8 U	49.8 U	49.8 U	49.8 U	49.8 U	49.8 U	49.8 U	-
TP-5-5-N	5	06/26/2014	47.6 U	47.6 U	47.6 U	47.6 U	47.6 U	47.6 U	47.6 U	47.6 U	-
TP-5-5-S	5	06/26/2014	46.3 U	46.3 U	46.3 U	46.3 U	46.3 U	46.3 U	46.3 U	46.3 U	-
TP-6-1-S	1	06/26/2014	53.1 U	53.1 U	53.1 U	53.1 U	53.1 U	53.1 U	245	53.1 U	245
TP-6-2-S	2	06/26/2014	52.5 U	52.5 U	52.5 U	52.5 U	52.5 U	52.5 U	278	52.5 U	278
TP-6-3-S	3	06/26/2014	52.1 U	52.1 U	52.1 U	52.1 U	52.1 U	52.1 U	216	52.1 U	216
TP-6-4-S	4	06/26/2014	48.8 U	48.8 U	48.8 U	48.8 U	48.8 U	48.8 U	48.8 U	48.8 U	-
TP-7-1-N <sup>3</sup>	1	06/27/2014	54.0 U	54.0 U	54.0 U	54.0 U	54.0 U	54.0 U	217	54.0 U	217

Sample Name	Sample Depth (feet)	Date	PCB-Arochlor 1016 µg/Kg	PCB-Arochlor 1221 µg/Kg	PCB-Arochlor 1232 µg/Kg	PCB-Arochlor 1242 µg/Kg	PCB-Arochlor 1248 µg/Kg	PCB-Arochlor 1254 µg/Kg	PCB-Arochlor 1260 µg/Kg	PCB-Arochlor 1268 µg/Kg	Total PCBs µg/Kg
TP-7-1-S	1	06/27/2014	1290 U	1,290 U	1,290 U	1,290 U	1,290 U	1,290 U	1,770	1,290 U	1,770
TP-7-2-N	2	06/27/2014	44.9 U	44.9 U	44.9 U	44.9 U	44.9 U	44.9 U	97.2	44.9 U	97.2
TP-7-2-S	2	06/27/2014	43.9 U	43.9 U	43.9 U	43.9 U	43.9 U	43.9 U	279	43.9 U	279
TP-7-3-N	3	06/27/2014	44.4 U	44.4 U	44.4 U	44.4 U	44.4 U	44.4 U	44.4 U	44.4 U	-
TP-7-3-S	3	06/27/2014	45.1 U	45.1 U	45.1 U	45.1 U	45.1 U	45.1 U	147	45.1 U	147
TP-7-4-N	4	06/27/2014	51.4 U	51.4 U	51.4 U	51.4 U	51.4 U	51.4 U	117	51.4 U	117
TP-7-4-S	4	06/27/2014	225 U	225 U	225 U	225 U	225 U	225 U	633	225 U	633
TP-7-5-N	5	06/27/2014	54.7 U	54.7 U	54.7 U	54.7 U	54.7 U	54.7 U	54.7 U	54.7 U	-
TP-7-5-S	5	06/27/2014	39.7 UJ	39.7 UJ	39.7 UJ	39.7 UJ	39.7 UJ	39.7 UJ	41.5 J	39.7 UJ	41.5 J
TP-8-1-S	1	06/27/2014	49.9 U	49.9 U	49.9 U	49.9 U	49.9 U	49.9 U	49.9 U	49.9 U	-
TP-8-2-S	2	06/27/2014	50.9 U	50.9 U	50.9 U	50.9 U	50.9 U	50.9 U	50.9 U	50.9 U	-
TP-9-1-N	1	06/27/2014	53.8 U	53.8 U	53.8 U	53.8 U	53.8 U	53.8 U	221	53.8 U	221
TP-9-1-S	1	06/27/2014	54.5 U	54.5 U	54.5 U	54.5 U	54.5 U	54.5 U	81.2	54.5 U	81.2
TP-9-2-N	2	06/27/2014	52.8 U	52.8 U	52.8 U	52.8 U	52.8 U	52.8 U	168	52.8 U	168
TP-9-2-S	2	06/27/2014	50.3 U	50.3 U	50.3 U	50.3 U	50.3 U	50.3 U	50.3 U	50.3 U	-
TP-9-3-N	3	06/27/2014	48.9 U	48.9 U	48.9 U	48.9 U	48.9 U	48.9 U	48.9 U	48.9 U	-
TP-9-3-S	3	06/27/2014	52.3 U	52.3 U	52.3 U	52.3 U	52.3 U	52.3 U	52.3 U	52.3 U	-
TP-9-4-N	4	06/27/2014	53.6 U	53.6 U	53.6 U	53.6 U	53.6 U	53.6 U	53.6 U	53.6 U	-
TP-9-4-S	4	06/27/2014	50.5 U	50.5 U	50.5 U	50.5 U	50.5 U	50.5 U	50.5 U	50.5 U	-
TP-13-1-N <sup>3</sup>	1	06/27/2014	51.1 U	51.1 U	51.1 U	51.1 U	51.1 U	51.1 U	172	51.1 U	172
TP-13-1-S	1	06/27/2014	57.5 U	57.5 U	57.5 U	57.5 U	57.5 U	57.5 U	77.6	57.5 U	77.6
TP-13-2-N	2	06/27/2014	55.6 U	55.6 U	55.6 U	55.6 U	55.6 U	55.6 U	55.6 U	55.6 U	-
TP-13-2-S	2	06/27/2014	52.5 U	52.5 U	52.5 U	52.5 U	52.5 U	52.5 U	52.5 U	52.5 U	-
TP-14-1-N	1	06/27/2014	242 UJ	242 UJ	242 UJ	242 UJ	242 UJ	242 UJ	247 J	242 UJ	247 J
TP-14-1-S	1	06/27/2014	26,500 U	26,500 U	26,500 U	26,500 U	26,500 U	26,500 U	30,500	26,500 U	30,500
TP-14-2-N	2	06/27/2014	43.9 U	43.9 U	43.9 U	43.9 U	43.9 U	43.9 U	43.9 U	43.9 U	-
TP-14-2-S <sup>3</sup>	2	06/27/2014	48.4 U	48.4 U	48.4 U	48.4 U	48.4 U	48.4 U	127	48.4 U	127

Notes:

<sup>1</sup>Polychlorinated biphenyls (PCBs) analyzed using Environmental Protection Agency Method 8082A by TestAmerica Laboratories Inc. located in Spokane Valley, Washington.

<sup>2</sup>Test pit samples are compared to the MTCA Method A for unrestricted land use of 1,000 µg/kg for total PCBs. Tests pits were completed on the Mr. Service property.

<sup>3</sup>Reported values in summary table are from re-analysis. Initial sample results were labeled by the laboratory as do-not-report (DNR) and should not be used for any purpose.

µg/Kg = micrograms per kilogram

"-" = total PCBs are not calculated due to non-detect results.

U = Analyte was not detected at a concentration exceeding the listed method reporting limit.

J = Results from field samples are qualified as estimated.

**Bold** = Analyte was detected at a concentration greater than the method reporting limit.

= Method detection limit is greater than than the MTCA Method A cleanup level.

= Analyte was detected at a concentration greater than the MTCA Method A cleanup level.

**Table 3**

**Summary of Chemical Analytical Results - Hand Auger Explorations<sup>1</sup>**  
 City Parcel Site  
 Spokane, Washington

Sample Name	Depth (feet)	Date	PCB-Arochlor 1016 µg/Kg	PCB-Arochlor 1221 µg/Kg	PCB-Arochlor 1232 µg/Kg	PCB-Arochlor 1242 µg/Kg	PCB-Arochlor 1248 µg/Kg	PCB-Arochlor 1254 µg/Kg	PCB-Arochlor 1260 µg/Kg	PCB-Arochlor 1268 µg/Kg
<b>Mr. Service Hand Auger Explorations<sup>2</sup></b>										
HA-1-1	1	07/18/2014	259 UJ	259 UJ	259 UJ	259 UJ	259 UJ	259 UJ	<b>346 J</b>	259 U
HA-1-2	2	07/18/2014	54.2 U	54.2 U	54.2 U	54.2 U	54.2 U	54.2 U	54.2 U	54.2 U
HA-2-1	1	07/18/2014	10,100 U	10,100 U	10,100 U	10,100 U	10,100 U	10,100 U	<b>19,600</b>	10,100 U
HA-2-2	2	07/18/2014	55.6 U	55.6 U	55.6 U	55.6 U	55.6 U	55.6 U	<b>170</b>	55.6 U
<b>North Cook Street Hand Auger Explorations<sup>3</sup></b>										
HA-4-0.5	0.5	09/16/2014	9.95 U	9.95 U	9.95 U	9.95 U	9.95 U	9.95 U	<b>20.9</b>	9.95 U
HA-4-1.5	1.5	09/16/2014	10.7 U	10.7 U	10.7 U	10.7 U	10.7 U	10.7 U	10.7 U	10.7 U
HA-5-0.5	0.5	09/16/2014	452 U	452 U	452 U	452 U	452 U	452 U	<b>4,360</b>	452 U
HA-5-1.5	1.5	09/16/2014	2,060 U	2,060 U	2,060 U	2,060 U	2,060 U	2,060 U	<b>19,200</b>	2,060 U
HA-6-0.5	0.5	09/16/2014	50.6 U	50.6 U	50.6 U	50.6 U	50.6 U	50.6 U	<b>390</b>	50.6 U
HA-6-1.5	1.5	09/16/2014	12.0 U	12.0 U	12.0 U	12.0 U	12.0 U	12.0 U	<b>19.1</b>	12.0 U

**Notes:**

<sup>1</sup>Polychlorinated biphenyls (PCBs) analyzed using Environmental Protection Agency (EPA) Method 8082A by TestAmerica Laboratories Inc. located in Spokane Valley, Washington.

<sup>2</sup>Hand Auger Explorations located on the Mr. Service property are compared to the MTCA Method A for unrestricted land use of 1,000 µg/kg for total PCBs.

<sup>3</sup>Hand Auger Explorations located on North Cook Street are compared to the MTCA Method A for industrial properties of 10,000 µg/kg for total PCBs.

µg/Kg = micrograms per kilogram

U = Analyte was not detected at a concentration exceeding the listed method reporting limit.

**Bold** = Analyte was detected at a concentration exceeding the method reporting limit.

= Method detection limit is greater than the cleanup level.

= Analyte was detected at a concentration greater than the MTCA Method A cleanup level.



**Table 4**

**Summary of Chemical Analytical Results<sup>1</sup> - Confirmation Soil Sampling - Mr. Service and Vacated Alleyway**  
 City Parcel Site  
 Spokane, Washington

Sample Name	Depth (feet)	Date	Excavation Extended?	PCB-Arochlor 1016 µg/Kg	PCB-Arochlor 1221 µg/Kg	PCB-Arochlor 1232 µg/Kg	PCB-Arochlor 1242 µg/Kg	PCB-Arochlor 1248 µg/Kg	PCB-Arochlor 1254 µg/Kg	PCB-aroclor 1260 µg/Kg	PCB-Arochlor 1268 µg/Kg
<b>Vacated Alleyway<sup>2</sup></b>											
W1	1.5	12/04/2014	-	109 U	109 U	109 U	109 U	109 U	109 U	439	109 U
B1	2	12/04/2014	-	105 U	105 U	105 U	105 U	105 U	105 U	191	105 U
<b>Mr. Service Property<sup>3</sup></b>											
W2	1.5	12/04/2014	Extended 3 feet to the north	585 U	585 U	585 U	585 U	585 U	585 U	6,880	585 U
B2	2	12/04/2014	Extended 1 foot deeper	514 U	514 U	514 U	514 U	514 U	514 U	3,150	514 U
W3 <sup>4</sup>	1.5	12/04/2014	Extended 2 feet to the west	241 U	241 U	241 U	241 U	241 U	241 U	3,390	241 U
B3	4	12/04/2014	Extended 4 feet deeper	4,810 U	4,810 U	4,810 U	4,810 U	4,810 U	4,810 U	55,700	4,810 U
B4	4	12/05/2014	Extended 1.5 feet deeper	577 U	577 U	577 U	577 U	577 U	577 U	5,850	577 U
B5	4	12/05/2014		107 U	107 U	107 U	107 U	107 U	107 U	788	107 U
B6	3	12/05/2014		107 U	107 U	107 U	107 U	107 U	107 U	832	107 U
W4	1.5	12/05/2014	-	48.5 U	48.5 U	48.5 U	48.5 U	48.5 U	48.5 U	317	48.5 U
W2A	2	12/09/2014	-	10.1 U	10.1 U	10.1 U	10.1 U	10.1 U	10.1 U	11.8	10.1 U
B2A	3	12/09/2014	-	10.9 U	10.9 U	10.9 U	10.9 U	10.9 U	10.9 U	10.9	10.9 U
B4A	6	12/09/2014	-	10.1 U	10.1 U	10.1 U	10.1 U	10.1 U	10.1 U	20.6	10.1 U
W3A	1.5	12/10/2014	-	10.3 U	10.3 U	10.3 U	10.3 U	10.3 U	10.3 U	112	10.3 U
B3A	8	12/10/2014	-	10.2 U	10.2 U	10.2 U	10.2 U	10.2 U	10.2 U	10.2 U	10.2 U

**Notes:**

<sup>1</sup>Polychlorinated biphenyls (PCBs) analyzed using Environmental Protection Agency Method 8082A by TestAmerica Laboratories Inc. located in Spokane Valley, Washington.

<sup>2</sup>Samples are compared to the MTCA Method A cleanup level for industrial properties of 10,000 µg/kg for total PCBs.

<sup>3</sup>Samples are compared to the MTCA Method A cleanup level for unrestricted land use of 1,000 µg/kg for total PCBs.

<sup>4</sup>Reported values in summary table are from re-analysis. Initial sample results were labeled by the laboratory as do-not-report (DNR) and should not be used for any purpose.

µg/Kg = micrograms per kilogram

U = analyte has was not detected at a concentration exceeding the listed method reporting limit.

**Bold** = Analyte was detected at a concentration greater than the method reporting limit.

**Grey background** = Method detection limit is greater than than the MTCA Method A cleanup level for unrestricted land use (1,000 µg/kg).

**Red box** = Analyte was detected at a concentration greater than the MTCA Method A cleanup level for unrestricted land use (1,000 µg/kg).

"-" = PCB concentration in confirmation sample was less than the target cleanup level and the remedial excavation was completed at that sample location.

**Table 5**  
**Summary of Chemical Analytical Results<sup>1,2</sup> - Confirmation Soil Sampling - North Cook Street**  
 City Parcel Site  
 Spokane, Washington

Sample Name	Sample Depth (feet)	Date	Excavation Extended?	PCB-Arochlor 1016 µg/Kg	PCB-Arochlor 1221 µg/Kg	PCB-Arochlor 1232 µg/Kg	PCB-Arochlor 1242 µg/Kg	PCB-Arochlor 1248 µg/Kg	PCB-Arochlor 1254 µg/Kg	PCB-aroclor 1260 µg/Kg	PCB-aroclor 1262 µg/Kg	PCB-Arochlor 1268 µg/Kg
ES-1	1.5	10/27/2015	-	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U
ES-2	1.5	10/27/2015	-	11 U	11 U	11 U	11 U	11 U	11 U	4,900	11 U	11 U
ES-3	1.5	10/27/2015	-	11 U	11 U	11 U	11 U	11 U	11 U	790	11 U	11 U
ES-4	1.5	10/27/2015	-	11 U	11 U	11 U	11 U	11 U	11 U	190	11 U	11 U
EB-1	2	10/27/2015	-	11 U	11 U	11 U	11 U	11 U	11 U	16	20 U	11 U
EB-2	2	10/27/2015	-	20 U	20 U	20 U	20 U	20 U	20 U	390	11 U	20 U
EB-3	2	10/27/2015	-	11 U	11 U	11 U	11 U	11 U	11 U	1,400	11 U	11 U
EB-4	2	10/27/2015	Extended 1.5 feet deeper	210 U	210 U	210 U	210 U	210 U	210 U	5,500	210 U	210 U
EB-5	2	10/27/2015	Extended 1.5 feet deeper	21 U	21 U	21 U	21 U	21 U	21 U	7,400	21 U	21 U
EB-6	2	10/27/2015	Extended 1.5 feet deeper	220 U	220 U	220 U	220 U	220 U	220 U	24,000	220 U	220 U
EB-7	3.5	10/29/2015	-	11 U	11 U	11 U	11 U	11 U	11 U	120 J	11 U	11 U
EB-8	3.5	10/29/2015	-	10 U	10 U	10 U	10 U	10 U	10 U	17,000	10 U	10 U

**Notes:**

<sup>1</sup>Polychlorinated biphenyls (PCBs) analyzed using Environmental Protection Agency Method 8082A by TestAmerica Laboratories Inc. located in Spokane Valley, Washington.

<sup>2</sup>Confirmation samples were compared to MTCA Method A cleanup level for industrial properties of 10,000 µg/kg for total PCBs.

µg/Kg = micrograms per kilogram

U = Analyte was not detected at a concentration greater than the method reporting limit.

J = Result was qualified as estimated. Refer to the data validation report in Appendix B for details.

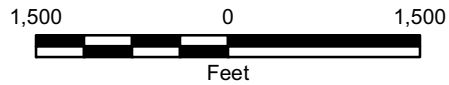
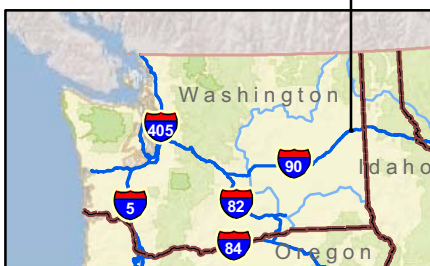
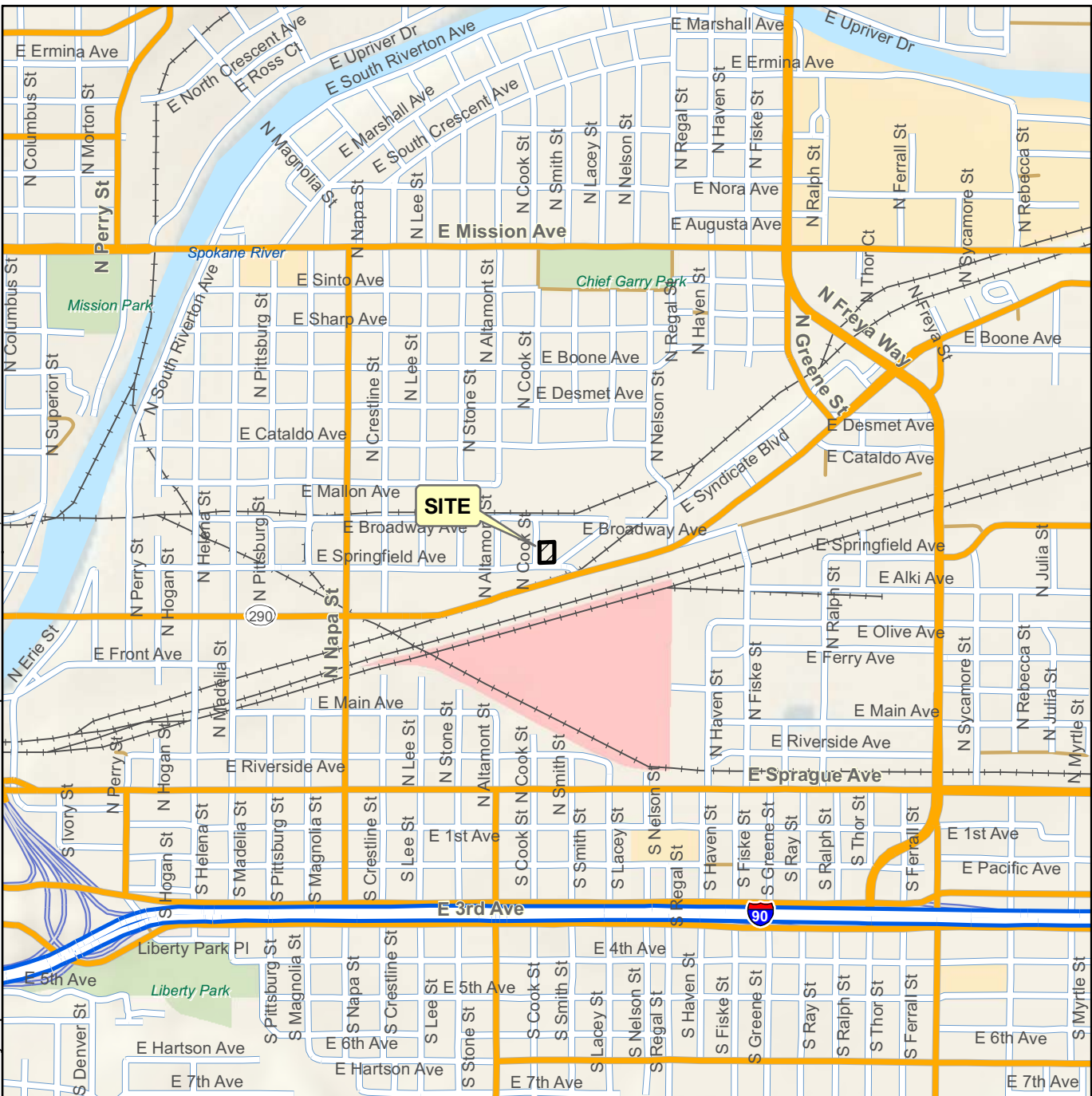
**Bold** = Analyte was detected at a concentration greater than the method reporting limit.

  = Analyte was detected at a concentration greater than the MTCA Method A cleanup level for industrial properties.

"-" = PCB concentration in confirmation sample was less than the target cleanup level and the remedial excavation was completed at that sample location.




Office: SPOK Path: P:\010504047\GIS\050404700\_Fig1\_VicinityMap.mxd KKS Map Revised: December 5, 2008

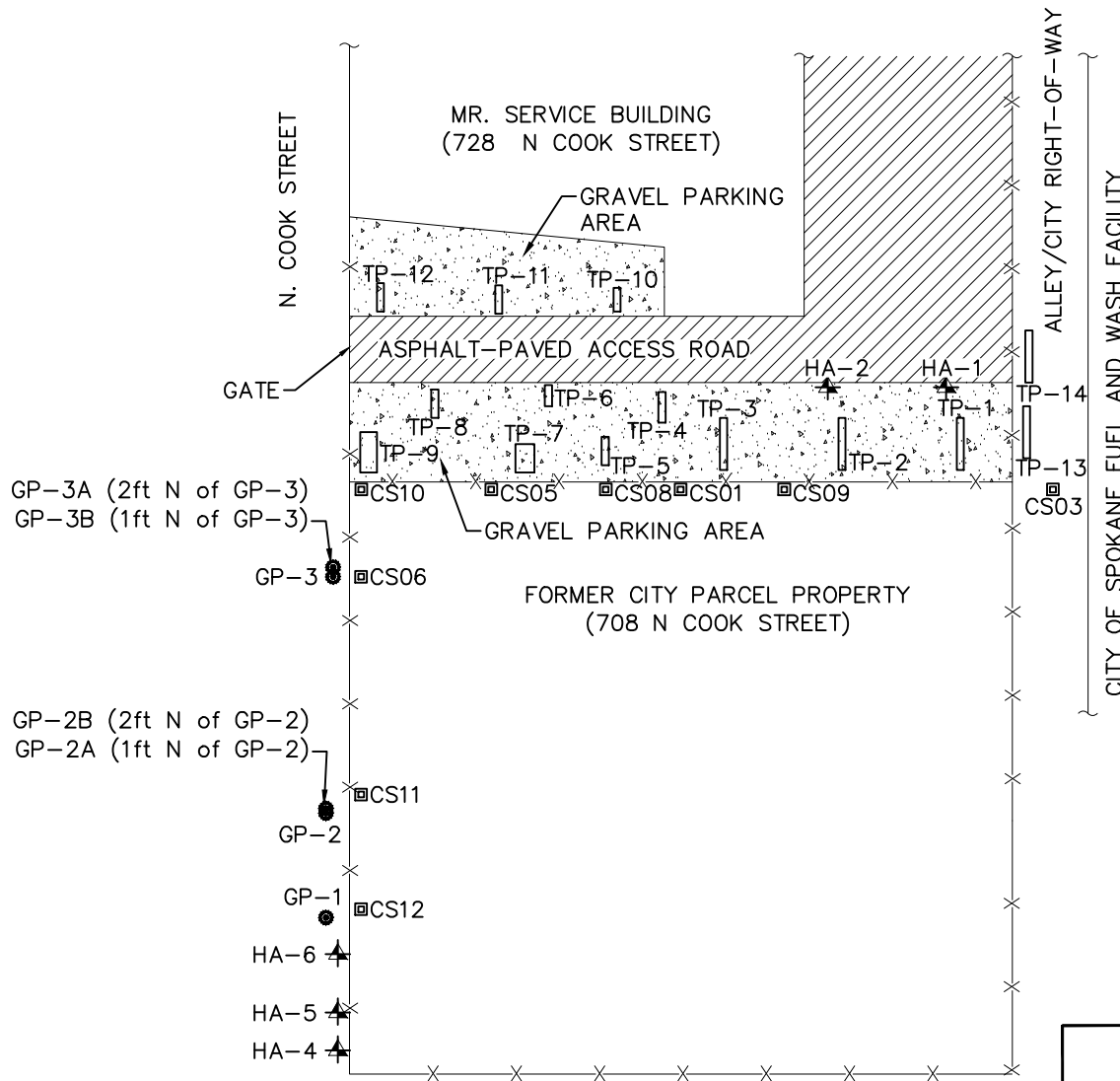


**Notes:**

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.
3. It is unlawful to copy or reproduce all or any part thereof, whether for personal use or resale, without permission.

Data Sources: ESRI Data & Maps, Street Maps 2005  
 Transverse Mercator, Zone 11 N North, North American Datum 1983  
 North arrow oriented to grid north

<b>Vicinity Map</b>	
City Parcel Site Spokane, Washington	
	<b>Figure 1</b>



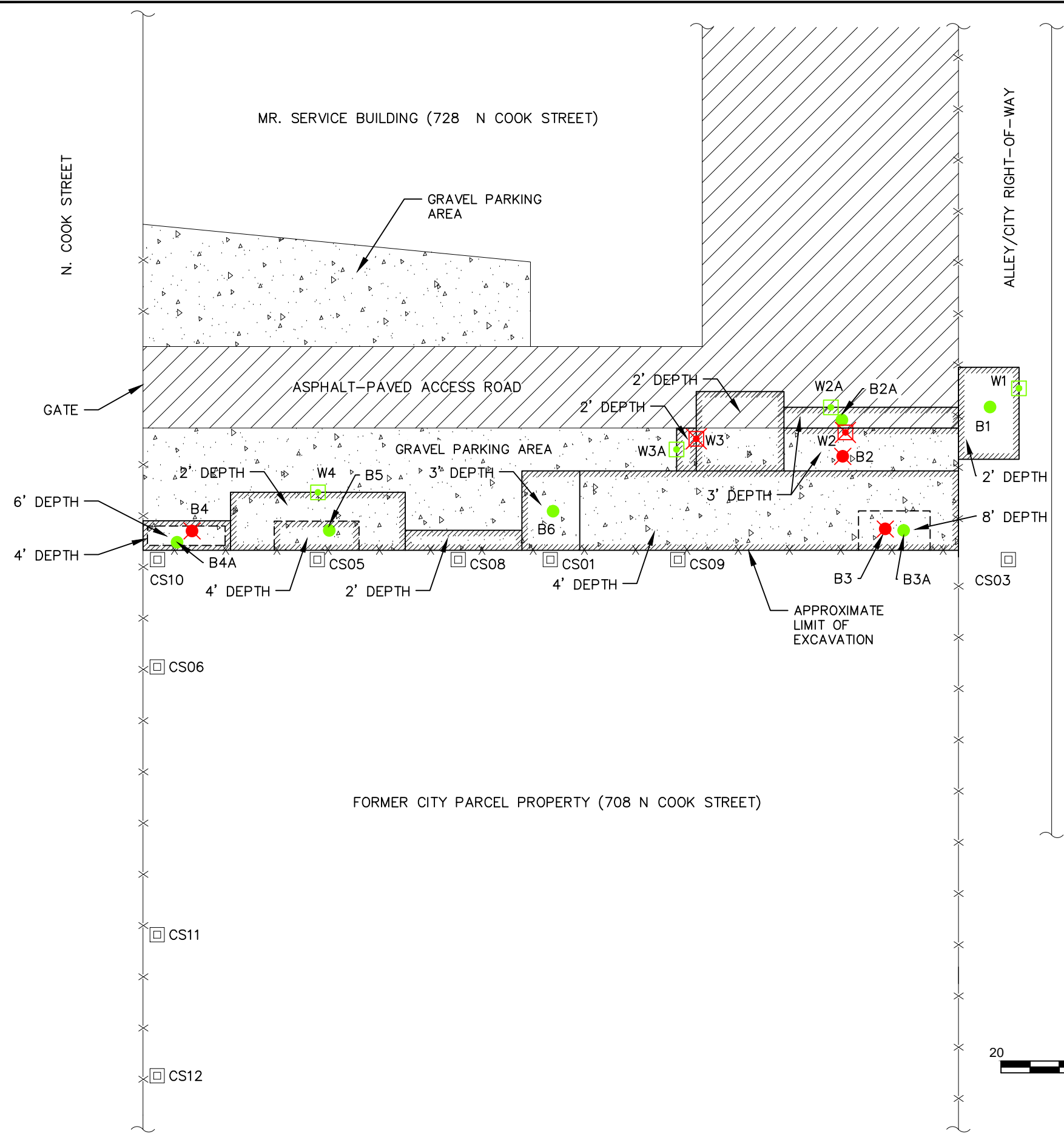
LEGEND:

- ▭ TEST PIT NUMBER, APPROXIMATE LOCATION AND DIMENSIONS
- GP-1 ● DIRECT-PUSH LOCATION, NUMBER AND APPROXIMATE LOCATION
- HA-1 ▲ HAND-AUGER EXPLORATION NUMBER AND APPROXIMATE LOCATION
- CS06 ◻ APPROXIMATE LOCATION OF PREVIOUS SIDEWALL CONFIRMATION SAMPLE EXCEEDING 1 mg/kg of PCBs

Notes

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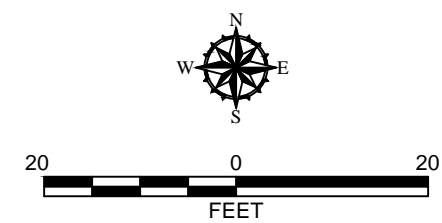
<b>Site Plan</b>	
City Parcel Site Spokane, Washington	
<b>GEOENGINEERS</b>	<b>Figure 2</b>



- LEGEND:**
- CS06 X APPROXIMATE LOCATION OF PREVIOUS SIDEWALL CONFIRMATION SAMPLE EXCEEDING 1 mg/kg of PCBs
  - W1 X APPROXIMATE LOCATION OF SIDEWALL CONFIRMATION SAMPLE WITH PCB CONCENTRATIONS LESS THAN 1 mg/kg
  - B1 ● APPROXIMATE LOCATION OF EXCAVATION BOTTOM CONFIRMATION SAMPLE WITH PCB CONCENTRATIONS LESS THAN 1 mg/kg
  - W2 X APPROXIMATE LOCATIONS OF SIDEWALL AND BOTTOM CONFIRMATION SAMPLES WITH PCB CONCENTRATIONS EXCEEDING 1 mg/kg
  - B2 ●

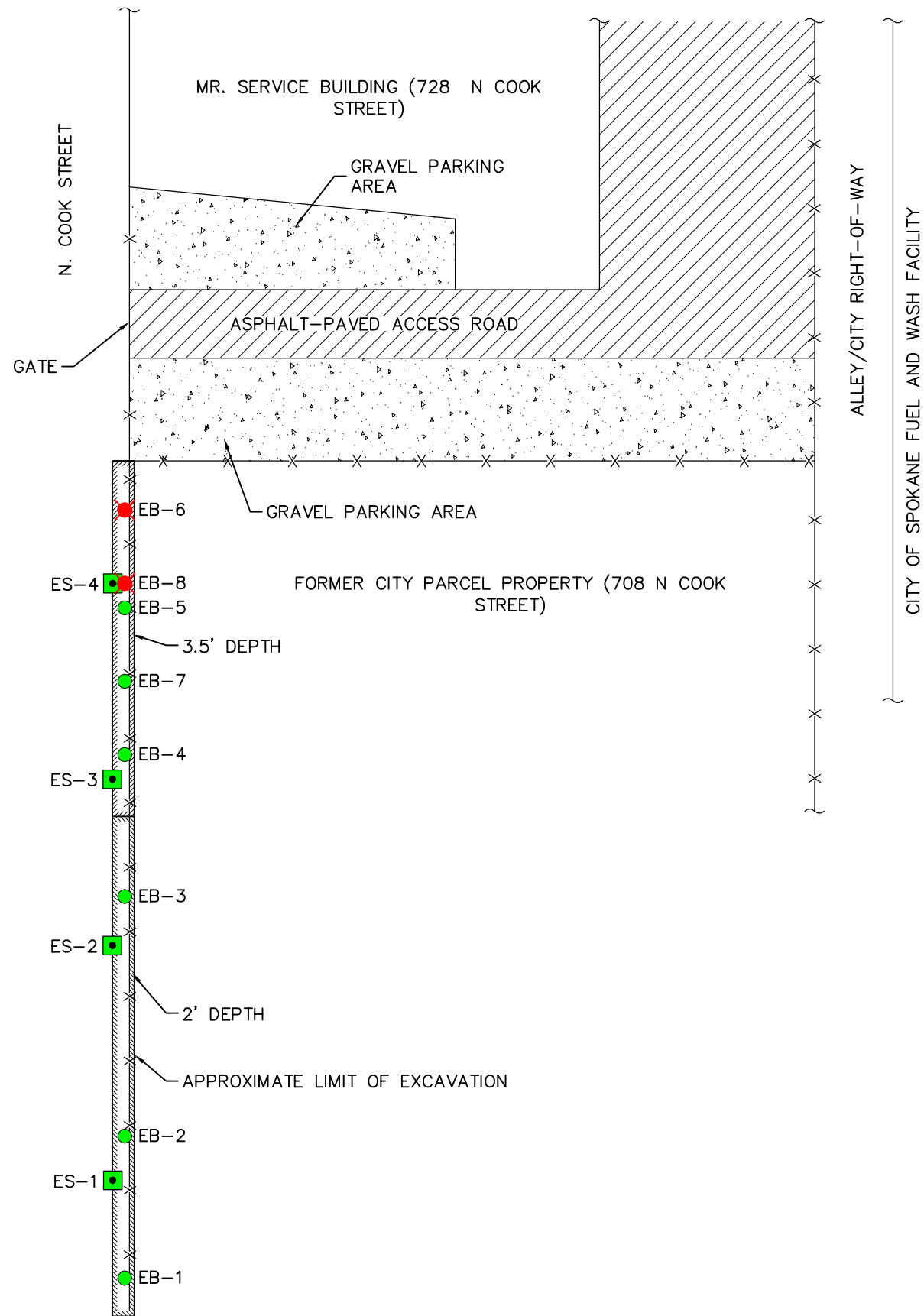
- SAMPLE NOTES:**
- W2: INITIAL EXCAVATION CONFIRMATION SAMPLE EXCEEDED CLEANUP LEVELS, EXCAVATION EXTENDED 3 FEET TO THE NORTH WITHIN INDICATED AREA.
  - W3: INITIAL EXCAVATION CONFIRMATION SAMPLE EXCEEDED CLEANUP LEVELS, EXCAVATION EXTENDED 2 FEET TO THE WEST WITHIN INDICATED AREA.
  - B2: INITIAL EXCAVATION CONFIRMATION SAMPLE EXCEEDED CLEANUP LEVELS, EXCAVATION EXTENDED 1 FOOT DEEPER (3 FEET DEEP OVERALL) WITHIN INDICATED AREA.
  - B3: INITIAL EXCAVATION CONFIRMATION SAMPLE EXCEEDED CLEANUP LEVELS, EXCAVATION EXTENDED 4 FEET DEEPER (8 FEET DEEP OVERALL) WITHIN INDICATED AREA.
  - B4: INITIAL EXCAVATION CONFIRMATION SAMPLE EXCEEDED CLEANUP LEVELS, EXCAVATION EXTENDED 2 FEET DEEPER (6 FEET DEEP OVERALL) WITHIN INDICATED AREA.

- Notes:**
1. The locations of all features shown are approximate.
  2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.
  3. Target cleanup level for Mr. Service property is MTCA Method A Unrestricted Land Use of 1 mg/kg for PCBs.



<b>Limits of Excavation and Confirmation Sample Locations - Mr. Service</b>	
City Parcel Site Spokane, Washington	
<b>GEOENGINEERS</b>	<b>Figure 3</b>

P:\0\_0504047\01\Cadd\DWG\050404701-F3.dwg TAB:F3 Date Exported: 12/28/15 - 14:45 by tmichaud



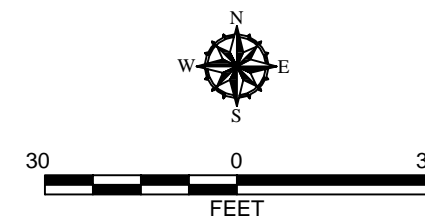
LEGEND:

- ES-1 ■ APPROXIMATE LOCATION OF SIDEWALL CONFIRMATION SAMPLE WITH PCB CONCENTRATIONS LESS THAN 10 mg/kg
- EB-1 ● APPROXIMATE LOCATION OF EXCAVATION BOTTOM CONFIRMATION SAMPLE WITH PCB CONCENTRATIONS LESS THAN 10 mg/kg
- EB-6 ✗ APPROXIMATE LOCATION OF EXCAVATION BOTTOM CONFIRMATION SAMPLE WITH PCB CONCENTRATIONS EXCEEDING 10 mg/kg

SAMPLE NOTES:

EB-6: INITIAL EXCAVATION CONFIRMATION SAMPLE EXCEEDED CLEANUP LEVELS, EXCAVATION EXTENDED 1.5 FEET DEEPER (3.5 FEET OVERALL) WITHIN INDICATED AREA.

- Notes:
1. The locations of all features shown are approximate.
  2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.
  3. Target cleanup level for North Cook Street is MTCA Method A Industrial Land Use of 10 mg/kg for PCBs.



Limits of Excavation and Confirmation Sample Locations - North Cook Street	
City Parcel Site Spokane, Washington	
<b>GEOENGINEERS</b> 	Figure 4





**APPENDIX A**  
**Field Procedures and Exploration Logs**

## **APPENDIX A**

### **FIELD PROCEDURES AND EXPLORATION LOGS**

Subsurface conditions were explored by GeoEngineers by advancing seven direct-push borings (GP-1, GP-2, GP-2A, GP-2B, GP-3, GP-3A and GP-3B), and by excavating fourteen test-pits (TP-1 through TP-14) at the approximate locations shown on Figure 2. The borings were advanced about 4 to 8 feet below existing site grade using a direct-push Geoprobe® drill rig owned and operated by GeoEngineers. The test pits were excavated by Sandry Construction, and extended to depths of about 2 to 4 feet below existing site grade.

The direct-push borings and test pits were continuously monitored by a representative from GeoEngineers who examined and classified the soil encountered and obtained representative soil samples. Soil encountered was classified in general accordance with ASTM International (ASTM) D 2488 (Visual-Manual procedure) and the classification chart listed in Key to Exploration Logs, Figure A-1. Logs of the direct-push borings are presented in Figures A-2 through A-8. Logs of the test pits are presented in Figures A-9 through A-22. The logs are based on interpretation of the field classification, and indicate the depth at which subsurface materials or their characteristics change, although these changes might be gradual.

Ecology representatives advanced six shallow hand-auger explorations (HA-1 through HA-6) at the approximate locations shown on Figure 2. Logs of the hand-auger explorations are not provided.

Exploration locations were established in the field using an iPad equipped with GPS, and by taping from known site features. Consequently, exploration locations should be considered accurate to the degree implied by the method used.

#### **General Soil Sampling Procedures**

Samples were obtained using disposable nitrile gloves, which were discarded after each use. Samples were placed in 4 or 9-ounce laboratory-supplied sample containers. Sample containers were filled to minimize headspace and labeled with a unique identification. Samples were temporarily stored in an iced cooler before transfer to TestAmerica Laboratories, Spokane Valley laboratory for analysis. Chain-of-custody protocols were followed.

#### **Decontamination Procedures**

The objective of the decontamination procedure was to minimize the potential for cross contamination between exploration locations and between individual samples within a specific exploration. A designated decontamination area was established for decontamination of drilling equipment and reusable sampling equipment. Drilling equipment was cleaned using pressure washing equipment.

Sampling or measurement equipment was decontaminated in accordance with the following procedures before each sampling attempt or measurement:

- Brush equipment with a wire brush, if necessary, to remove large particulate matter.
- Rinse with potable tap water.
- Wash with non-phosphate detergent solution (LiquiNox® and potable tap water).
- Rinse with potable tap water.
- Rinse with distilled water.

### **Handling of Investigation-Derived Waste (IDW)**

Disposable items, such as sample tubing, direct-push sampler acrylic sleeves, gloves and paper towels, etc., were placed in plastic bags after use and deposited in trash receptacles for disposal.

### **Laboratory Analytical Plan**

Method reporting limit (MRL) goals were based on Ecology MTCA soil cleanup criteria. EPA Method 8082 was used for the soil samples.

## SOIL CLASSIFICATION CHART

MAJOR DIVISIONS			SYMBOLS		TYPICAL DESCRIPTIONS
			GRAPH	LETTER	
COARSE GRAINED SOILS  MORE THAN 50% RETAINED ON NO. 200 SIEVE	GRAVEL AND GRAVELLY SOILS  MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	CLEAN GRAVELS  (LITTLE OR NO FINES)		<b>GW</b>	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES
		GRAVELS WITH FINES  (APPRECIABLE AMOUNT OF FINES)		<b>GP</b>	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES
		CLEAN SANDS  (LITTLE OR NO FINES)		<b>GM</b>	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES
		SANDS WITH FINES  (APPRECIABLE AMOUNT OF FINES)		<b>GC</b>	CLAYEY GRAVELS, GRAVEL - SAND - CLAY MIXTURES
	SAND AND SANDY SOILS  MORE THAN 50% OF COARSE FRACTION PASSING NO. 4 SIEVE	CLEAN SANDS  (LITTLE OR NO FINES)		<b>SW</b>	WELL-GRADED SANDS, GRAVELLY SANDS
		SANDS WITH FINES  (APPRECIABLE AMOUNT OF FINES)		<b>SP</b>	POORLY-GRADED SANDS, GRAVELLY SAND
		SANDS WITH FINES  (APPRECIABLE AMOUNT OF FINES)		<b>SM</b>	SILTY SANDS, SAND - SILT MIXTURES
		SANDS WITH FINES  (APPRECIABLE AMOUNT OF FINES)		<b>SC</b>	CLAYEY SANDS, SAND - CLAY MIXTURES
FINE GRAINED SOILS  MORE THAN 50% PASSING NO. 200 SIEVE	SILTS AND CLAYS  LIQUID LIMIT LESS THAN 50	INORGANIC SILTS, ROCK FLOUR, CLAYEY SILTS WITH SLIGHT PLASTICITY		<b>ML</b>	INORGANIC SILTS, ROCK FLOUR, CLAYEY SILTS WITH SLIGHT PLASTICITY
		INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS		<b>CL</b>	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
		ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY		<b>OL</b>	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
	SILTS AND CLAYS  LIQUID LIMIT GREATER THAN 50	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS SILTY SOILS		<b>MH</b>	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS SILTY SOILS
		INORGANIC CLAYS OF HIGH PLASTICITY		<b>CH</b>	INORGANIC CLAYS OF HIGH PLASTICITY
		ORGANIC CLAYS AND SILTS OF MEDIUM TO HIGH PLASTICITY		<b>OH</b>	ORGANIC CLAYS AND SILTS OF MEDIUM TO HIGH PLASTICITY
HIGHLY ORGANIC SOILS				<b>PT</b>	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

NOTE: Multiple symbols are used to indicate borderline or dual soil classifications

### Sampler Symbol Descriptions

	2.4-inch I.D. split barrel
	Standard Penetration Test (SPT)
	Shelby tube
	Piston
	Direct-Push
	Bulk or grab
	Continuous Coring

Blowcount is recorded for driven samplers as the number of blows required to advance sampler 12 inches (or distance noted). See exploration log for hammer weight and drop.

A "P" indicates sampler pushed using the weight of the drill rig.

## ADDITIONAL MATERIAL SYMBOLS

SYMBOLS		TYPICAL DESCRIPTIONS
GRAPH	LETTER	
	<b>AC</b>	Asphalt Concrete
	<b>CC</b>	Cement Concrete
	<b>CR</b>	Crushed Rock/ Quarry Spalls
	<b>TS</b>	Topsoil/ Forest Duff/Sod

### Groundwater Contact



Measured groundwater level in exploration, well, or piezometer



Measured free product in well or piezometer

### Graphic Log Contact



Distinct contact between soil strata or geologic units



Approximate location of soil strata change within a geologic soil unit

### Material Description Contact



Distinct contact between soil strata or geologic units



Approximate location of soil strata change within a geologic soil unit

### Laboratory / Field Tests

%F	Percent fines
AL	Atterberg limits
CA	Chemical analysis
CP	Laboratory compaction test
CS	Consolidation test
DS	Direct shear
HA	Hydrometer analysis
MC	Moisture content
MD	Moisture content and dry density
OC	Organic content
PM	Permeability or hydraulic conductivity
PI	Plasticity index
PP	Pocket penetrometer
PPM	Parts per million
SA	Sieve analysis
TX	Triaxial compression
UC	Unconfined compression
VS	Vane shear

### Sheen Classification

NS	No Visible Sheen
SS	Slight Sheen
MS	Moderate Sheen
HS	Heavy Sheen
NT	Not Tested

NOTE: The reader must refer to the discussion in the report text and the logs of explorations for a proper understanding of subsurface conditions. Descriptions on the logs apply only at the specific exploration locations and at the time the explorations were made; they are not warranted to be representative of subsurface conditions at other locations or times.

## KEY TO EXPLORATION LOGS

Start Drilled 6/26/2014	End 6/26/2014	Total Depth (ft) 8	Logged By Checked By JML DRL	Driller GeoEngineers, Inc.	Drilling Method Geoprobe
Surface Elevation (ft) Vertical Datum Undetermined			Hammer Data		Drilling Equipment Geoprobe DT 5400
Easting (X) Northing (Y)			System Datum		Groundwater Date Measured
Notes:					Depth to Water (ft)      Elevation (ft)

Depth (feet)	FIELD DATA					Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing							
0		24						GW	Approximately 4 inches coarse gravel (fill)			
								GP	Brown to gray fine to coarse gravel with trace silt and debris (brick, concrete pieces) (moist) (fill)		<1	
					GP-1 (1-1.2) CA					NS	<1	
		18									<1	
5					GP-1 (5-5.2) CA					NS	<1	

Notes: See Figure A-1 for explanation of symbols.  
The depths on the test pit logs are based on an average of measurements across the test pit and should be considered accurate to 0.5 foot.

### Log of Boring GP-1



Project: City Parcel Site  
Project Location: Spokane, Washington  
Project Number: 0504-047-03

Figure A-2  
Sheet 1 of 1

Start Drilled 6/26/2014	End 6/26/2014	Total Depth (ft) 8	Logged By Checked By JML DRL	Driller GeoEngineers, Inc.	Drilling Method Geoprobe
Surface Elevation (ft) Vertical Datum Undetermined			Hammer Data		Drilling Equipment Geoprobe DT 5400
Easting (X) Northing (Y)			System Datum		Groundwater Date Measured
Notes:					Depth to Water (ft)      Elevation (ft)

Depth (feet)	FIELD DATA					Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing							
0		15						GW	Approximately 4 inches coarse gravel		<1	
					GP-2 (0.5-0.7) CA			SP-SM	Black fine to coarse sand with silt and gravel (moist) (fill)		<1	
								GP	Brown fine to coarse gravel with sand and trace silt (moist)		<1	
		20									<1	
5					GP-2 (5-5.2) CA						<1	

Notes: See Figure A-1 for explanation of symbols.  
The depths on the test pit logs are based on an average of measurements across the test pit and should be considered accurate to 0.5 foot.

### Log of Boring GP-2



Project: City Parcel Site  
Project Location: Spokane, Washington  
Project Number: 0504-047-03

Figure A-3  
Sheet 1 of 1

Start Drilled 6/26/2014	End 6/26/2014	Total Depth (ft) 8	Logged By Checked By JML DRL	Driller GeoEngineers, Inc.	Drilling Method Geoprobe
Surface Elevation (ft) Vertical Datum Undetermined			Hammer Data		Drilling Equipment Geoprobe DT 5400
Easting (X) Northing (Y)			System Datum		Groundwater Date Measured
Notes:					Depth to Water (ft)      Elevation (ft)

Depth (feet)	FIELD DATA					Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing							
0		16					GW	Approximately 4 inches coarse gravel (fill)		<1		
				GP-2A (0.5-0.7)			SP-SM	Gray fine to coarse sand with silt and gravel (moist) (fill)		<1		
							GP	Brown fine to coarse gravel with sand and trace silt (moist)		<1		
		16								<1		
5				GP-2A (4.5-4.7)						<1		

GP-2A drilled approximately 1 foot north of GP-2

Notes: See Figure A-1 for explanation of symbols.  
The depths on the test pit logs are based on an average of measurements across the test pit and should be considered accurate to 0.5 foot.

### Log of Boring GP-2A



Project: City Parcel Site  
Project Location: Spokane, Washington  
Project Number: 0504-047-03

Figure A-4  
Sheet 1 of 1

Start Drilled 6/26/2014	End 6/26/2014	Total Depth (ft) 4	Logged By Checked By JML DRL	Driller GeoEngineers, Inc.	Drilling Method Geoprobe
Surface Elevation (ft) Vertical Datum Undetermined			Hammer Data		Drilling Equipment Geoprobe DT 5400
Easting (X) Northing (Y)			System Datum		Groundwater Date Measured
Notes:					Depth to Water (ft)      Elevation (ft)

Depth (feet)	FIELD DATA						MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing	Water Level				
0	6	<1		GP-2B (0-0.2)			SP			Gray fine to medium sand with gravel and trace silt (moist)

GP-2B drilled approximately 2 feet north of GP-2

Notes: See Figure A-1 for explanation of symbols.  
The depths on the test pit logs are based on an average of measurements across the test pit and should be considered accurate to 0.5 foot.

### Log of Boring GP-2B



Project: City Parcel Site  
Project Location: Spokane, Washington  
Project Number: 0504-047-03

Figure A-5  
Sheet 1 of 1



Start Drilled 6/26/2014	End 6/26/2014	Total Depth (ft) 8	Logged By Checked By JML DRL	Driller GeoEngineers, Inc.	Drilling Method Geoprobe
Surface Elevation (ft) Vertical Datum Undetermined			Hammer Data		Drilling Equipment Geoprobe DT 5400
Easting (X) Northing (Y)			System Datum		Groundwater Date Measured
Notes:					Depth to Water (ft)      Elevation (ft)

Depth (feet)	FIELD DATA					Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing							
0		14					GW	Approximately 4 inches coarse gravel (fill)		<1		
				GP-3 (0.5-0.7) CA			SP-SM	Gray fine to medium sand with gravel and silt (moist) (fill)		<1		
							GP-GM	Brown fine to coarse gravel with silt and sand (moist)		<1		
		6		GP-3 (4-4.2) CA						<1		
5												

Notes: See Figure A-1 for explanation of symbols.  
The depths on the test pit logs are based on an average of measurements across the test pit and should be considered accurate to 0.5 foot.

### Log of Boring GP-3



Project: City Parcel Site  
Project Location: Spokane, Washington  
Project Number: 0504-047-03

Start Drilled 6/26/2014	End 6/26/2014	Total Depth (ft) 8	Logged By Checked By JML DRL	Driller GeoEngineers, Inc.	Drilling Method Geoprobe
Surface Elevation (ft) Vertical Datum Undetermined			Hammer Data		Drilling Equipment Geoprobe DT 5400
Easting (X) Northing (Y)			System Datum		Groundwater Date Measured
Notes:					Depth to Water (ft) Elevation (ft)

Depth (feet)	FIELD DATA					Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing							
0		16					GW	Approximately 4 inches coarse gravel (fill)		<1		
				GP-3A (0.5-0.7)			GP-GM	Gray fine to medium sand with silt and gravel (moist) (fill)		<1		
							GP-GM	Brown fine to coarse gravel with silt and sand (moist)		<1		
		12								<1		
				GP-3A (4.5-4.7)						<1		
5												

GP-3A drilled approximately 2 feet north of GP-3

Notes: See Figure A-1 for explanation of symbols.  
The depths on the test pit logs are based on an average of measurements across the test pit and should be considered accurate to 0.5 foot.

### Log of Boring GP-3A



Project: City Parcel Site  
Project Location: Spokane, Washington  
Project Number: 0504-047-03

Figure A-7  
Sheet 1 of 1

Start Drilled 6/26/2014	End 6/26/2014	Total Depth (ft) 4	Logged By Checked By JML DRL	Driller GeoEngineers, Inc.	Drilling Method Geoprobe
Surface Elevation (ft) Vertical Datum Undetermined			Hammer Data		Drilling Equipment Geoprobe DT 5400
Easting (X) Northing (Y)			System Datum		Groundwater Date Measured
Notes:					Depth to Water (ft)      Elevation (ft)

Depth (feet)	FIELD DATA						MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing	Water Level				
0		14		GP-3B (0.5-0.7)			SP-SM		<1	

GP-3B drilled approximately 1 foot north of GP-3

Notes: See Figure A-1 for explanation of symbols.  
The depths on the test pit logs are based on an average of measurements across the test pit and should be considered accurate to 0.5 foot.

### Log of Boring GP-3B



Project: City Parcel Site  
Project Location: Spokane, Washington  
Project Number: 0504-047-03

Date Excavated: 6/26/2014

Logged By: JML

Equipment: John Deere 35D

Total Depth (ft) 4.0

Elevation (feet)	Depth (feet)	SAMPLE		Group Classification	Encountered Water	MATERIAL DESCRIPTION	Sheen	Headspace Vapor	Notes
		Testing Sample	Sample Name Testing						
				GW		Approximately 4 inches coarse gravel (fill)			
				SP-SM		Dark gray fine to medium sand with silt, gravel and debris (bricks, metal) (moist) (fill)			
	1		TP-1-1-N CA TP-1-1-S CA					^ ^	
	2		TP-1-2-N CA TP-1-2-S CA					^ ^	
	3		TP-1-3-N TP-1-3-S	GP-GM		Brown fine to coarse gravel with silt and sand (moist)		^ ^	
	4		TP-1-4-N TP-1-4-S					^ ^	

Test pit completed at approximately 4 foot depth  
 No groundwater seepage observed  
 No caving observed

Notes: See Figure A-1 for explanation of symbols.  
 The depths on the test pit logs are based on an average of measurements across the test pit and should be considered accurate to 0.5 foot.

### Log of Test Pit TP-1



Project: City Parcel Site  
 Project Location: Spokane, Washington  
 Project Number: 0504-047-03

Spokane: Date: 12/28/15 Path: P:\0504047\GINT\050404703.GPJ\DBT\template\lib\template\GEOENGINEERS\GDT\GEB\_TESTPIT\_IP\_ENV

Date Excavated: 6/26/2014

Logged By: JML

Equipment: John Deere 35D

Total Depth (ft) 4.0

Elevation (feet)	Depth (feet)	SAMPLE		Group Classification	Encountered Water	MATERIAL DESCRIPTION	Sheen	Headspace Vapor	Notes
		Testing Sample	Sample Name Testing						
				GW		Approximately 4 inches coarse gravel (fill)			
				SP-SM		Dark gray fine to medium sand with silt, gravel and debris (bricks, moist) (fill)			
	1		TP-2-1-N CA TP-2-1-S CA					△1	
	2		TP-2-2-N CA TP-2-2-S CA	GP-GM		Brown fine to coarse gravel with silt, sand, and cobbles (moist)		△1	
	3		TP-2-3-N TP-2-3-S					△1	
	4		TP-2-4-N TP-2-4-S					△1	

Test pit completed at approximately 4 foot depth  
 No groundwater seepage observed  
 No caving observed

Notes: See Figure A-1 for explanation of symbols.  
 The depths on the test pit logs are based on an average of measurements across the test pit and should be considered accurate to 0.5 foot.

**Log of Test Pit TP-2**



Project: City Parcel Site  
 Project Location: Spokane, Washington  
 Project Number: 0504-047-03

Spokane: Date: 12/28/15 Path: P:\0504047\GINT\050404703.GPJ DBT\template\lib\template\GEOENGINEERS\GDT\GEB\_TESTPIT\_IP\_ENV

Date Excavated: 6/26/2014

Logged By: JML

Equipment: John Deere 35D

Total Depth (ft) 4.0

Elevation (feet)	Depth (feet)	SAMPLE		Graphic Log	Group Classification	Encountered Water	MATERIAL DESCRIPTION	Sheen	Headspace Vapor	Notes
		Testing Sample	Sample Name Testing							
					GW		Approximately 4 inches coarse gravel (fill)			
					SP-SM		Dark gray fine to medium sand with silt, gravel and occasional debris (bricks) (moist) (fill)			
	1		TP-3-1-N CA TP-3-1-S CA		GP-GM		Brown fine to coarse gravel with silt and sand (moist)		△△	
	2		TP-3-2-N CA TP-3-2-S CA		GP-GM		Cobbles present		△△	
	3		TP-3-3-N CA TP-3-3-S CA		GP-GM				△△	
	4		TP-3-4-N CA TP-3-4-S CA		GP-GM				△△	

Test pit completed at approximately 4 foot depth  
 No groundwater seepage observed  
 No caving observed

Notes: See Figure A-1 for explanation of symbols.  
 The depths on the test pit logs are based on an average of measurements across the test pit and should be considered accurate to 0.5 foot.

### Log of Test Pit TP-3



Project: City Parcel Site  
 Project Location: Spokane, Washington  
 Project Number: 0504-047-03

Figure A-11  
 Sheet 1 of 1

Date Excavated: 6/26/2014

Logged By: JML

Equipment: John Deere 35D

Total Depth (ft) 4.0

Elevation (feet)	Depth (feet)	SAMPLE		Group Classification	Encountered Water	MATERIAL DESCRIPTION	Sheen	Headspace Vapor	Notes
		Testing Sample	Sample Name Testing						
				GW		Approximately 4 inches coarse gravel (fill)			
				SP-SM		Dark gray fine to medium sand with silt, gravel and debris (bricks, metal) (moist) (fill)			
	1		TP-4-1-N CA TP-4-1-S CA	GP-GM		Brown fine to coarse gravel with silt, sand and occasional cobbles (moist)		<1	
	2		TP-4-2-N TP-4-2-S					<1	
	3		TP-4-3-N TP-4-3-S	GP		Brown fine to coarse gravel with sand and trace silt (moist)		<1	
	4		TP-4-4-N TP-4-4-S					<1	

Test pit completed at approximately 4 foot depth  
 No groundwater seepage observed  
 No caving observed

Notes: See Figure A-1 for explanation of symbols.  
 The depths on the test pit logs are based on an average of measurements across the test pit and should be considered accurate to 0.5 foot.

### Log of Test Pit TP-4



Project: City Parcel Site  
 Project Location: Spokane, Washington  
 Project Number: 0504-047-03

Date Excavated: 6/26/2014

Logged By: JML

Equipment: John Deere 35D

Total Depth (ft) 6.0

Elevation (feet)	Depth (feet)	SAMPLE		Graphic Log	Group Classification	Encountered Water	MATERIAL DESCRIPTION	Sheen	Headspace Vapor	Notes	
		Testing Sample	Sample Name Testing								
					GW		Approximately 4 inches coarse gravel (fill)				
					SP-SM		Dark gray fine to medium sand with silt, gravel and debris (bricks) (moist) (fill)				
	1		TP-5-1-N CA TP-5-1-S CA		GP		Brown fine to coarse gravel with sand, cobbles and trace silt (moist)		^^		
	2		TP-5-2-N CA TP-5-2-S CA						^^		
	3		TP-5-3-N CA TP-5-3-S CA						^^		
	4		TP-5-4-N CA TP-5-4-S CA						^^		
	5		TP-5-5-N CA TP-5-5-S CA						^^		
	6		TP-5-6-N TP-5-6-S						^^		
							Test pit completed at approximately 6 foot depth No groundwater seepage observed Caving observed from approximately 1½ to 6 feet on west side				

Notes: See Figure A-1 for explanation of symbols.  
 The depths on the test pit logs are based on an average of measurements across the test pit and should be considered accurate to 0.5 foot.

### Log of Test Pit TP-5



Project: City Parcel Site  
 Project Location: Spokane, Washington  
 Project Number: 0504-047-03

Spokane: Date: 12/28/15 Path: P:\0504047\GINT\050404703.GPJ\DBT\template\lib\template\GEOENGINEERS\GDT\GEB\_TESTPIT\_TP\_ENV



Date Excavated: 6/26/2014

Logged By: JML

Equipment: John Deere 35D

Total Depth (ft) 6.0

Elevation (feet)	Depth (feet)	SAMPLE		Graphic Log	Group Classification	Encountered Water	MATERIAL DESCRIPTION	Sheen	Headspace Vapor	Notes	
		Testing Sample	Sample Name Testing								
					GW		Approximately 4 inches coarse gravel (fill)				
					SP-SM		Dark gray fine to medium sand with silt, gravel and debris (bricks) (moist) (fill)				
	1		TP-6-1-N TP-6-1-S CA						△△		
	2		TP-6-2-N TP-6-2-S CA		GP		Brown fine to coarse gravel with sand, cobbles and trace silt (moist)		△△		
	3		TP-6-3-N TP-6-3-S CA						△△		
	4		TP-6-4-N TP-6-4-S CA						△△		
	5		TP-6-5-N TP-6-5-S		GP		Brown fine to coarse gravel with trace sand and occasional cobbles (moist)		△△		
	6		TP-6-6-N TP-6-6-S						△△		
							Test pit completed at approximately 6 foot depth No groundwater seepage observed No caving observed				

Notes: See Figure A-1 for explanation of symbols.  
 The depths on the test pit logs are based on an average of measurements across the test pit and should be considered accurate to 0.5 foot.

**Log of Test Pit TP-6**



Project: City Parcel Site  
 Project Location: Spokane, Washington  
 Project Number: 0504-047-03

Figure A-14  
 Sheet 1 of 1

Spokane: Date: 12/28/15 Path: P:\0504047\GINT\050404703.GPJ\DBT\template\lib\template\GEOENGINEERS\GDT\GEB\_TESTPIT\_IP\_ENV

Date Excavated: 6/27/2014

Logged By: JML

Equipment: John Deere 35D

Total Depth (ft) 6.0

Elevation (feet)	Depth (feet)	SAMPLE		Graphic Log	Group Classification	Encountered Water	MATERIAL DESCRIPTION	Sheen	Headspace Vapor	Notes
		Testing Sample	Sample Name Testing							
					GW		Approximately 4 inches coarse gravel (fill)			
					SP-SM		Dark gray fine to medium sand with silt, gravel and debris (brick) (moist) (fill)			
1			TP-7-1-N CA TP-7-1-S CA						^^	
2			TP-7-2-N CA TP-7-2-S CA		GP-GM		Brown fine to coarse gravel with silt and sand (moist)		^^	
3			TP-7-3-N CA TP-7-3-S CA						^^	
4			TP-7-4-N CA TP-7-4-S CA		GP		Brown coarse gravel with trace sand (moist)		^^	
5			TP-7-5-N CA TP-7-5-S CA						^^	
6			TP-7-6-N TP-7-6-S						^^	

Test pit completed at approximately 6 foot depth  
 No groundwater seepage observed  
 Caving observed between approximately 1½ to 6 feet on east side

Notes: See Figure A-1 for explanation of symbols.  
 The depths on the test pit logs are based on an average of measurements across the test pit and should be considered accurate to 0.5 foot.

### Log of Test Pit TP-7



Project: City Parcel Site  
 Project Location: Spokane, Washington  
 Project Number: 0504-047-03

Figure A-15  
 Sheet 1 of 1

Spokane: Date: 12/28/15 Path: P:\0504047\GINT\050404703.GPJ\DBT\template\lib\template\GEOENGINEERS\GDT\GEB\_TESTPIT\_IP\_ENV

Date Excavated: 6/27/2014

Logged By: JML

Equipment: John Deere 35D

Total Depth (ft) 4.0

Elevation (feet)	Depth (feet)	SAMPLE		Group Classification	Encountered Water	MATERIAL DESCRIPTION	Sheen	Headspace Vapor	Notes
		Testing Sample	Sample Name Testing						
	1		TP-8-1-N TP-8-1-S CA	GW SP-SM		Approximately 4 inches gravel (fill) Dark gray fine to medium sand with silt, gravel and debris (brick, metal) (moist) (fill)		^1	
	2		TP-8-2-N TP-8-2-S CA	GP		Brown fine to coarse gravel with trace sand (moist)		^1	
	3		TP-8-3-N TP-8-3-S					^1	
	4		TP-8-4-N TP-8-4-S					^1	
<p>Test pit completed at approximately 4 foot depth            No groundwater seepage observed            No caving observed</p>									

Notes: See Figure A-1 for explanation of symbols.  
 The depths on the test pit logs are based on an average of measurements across the test pit and should be considered accurate to 0.5 foot.

### Log of Test Pit TP-8



Project: City Parcel Site  
 Project Location: Spokane, Washington  
 Project Number: 0504-047-03

Date Excavated: 6/27/2014

Logged By: JML

Equipment: John Deere 35D

Total Depth (ft) 5.0

Elevation (feet)	Depth (feet)	SAMPLE		Graphic Log	Group Classification	Encountered Water	MATERIAL DESCRIPTION	Sheen	Headspace Vapor	Notes
		Testing Sample	Sample Name Testing							
					GW		Approximately 4 inches coarse gravel (fill)			
					SP-SM		Dark gray fine to medium sand with silt and gravel (moist) (fill)			
	1		TP-9-1-N CA TP-9-1-S CA						△△	
	2		TP-9-2-N CA TP-9-2-S CA		GM		Brown silty fine to coarse gravel with sand (moist)		△△	
	3		TP-9-3-N CA TP-9-3-S CA		GP		Brown fine to coarse gravel with trace sand (moist)		△△	
	4		TP-9-4-N CA TP-9-4-S CA						△△	
	5		TP-9-5-N TP-9-5-S						△△	

Test pit completed at approximately 5 foot depth  
 No groundwater seepage observed  
 Caving observed between 1½ and 5 feet on the south/east walls

Notes: See Figure A-1 for explanation of symbols.  
 The depths on the test pit logs are based on an average of measurements across the test pit and should be considered accurate to 0.5 foot.

**Log of Test Pit TP-9**



Project: City Parcel Site  
 Project Location: Spokane, Washington  
 Project Number: 0504-047-03

Spokane: Date: 12/28/15 Path: P:\05050407\GINT\050404703.GPJ\DBT\template\lib\template\GEOENGINEERS\GDT\GEB8\_TESTPIT\_IP\_ENV

Date Excavated: 6/27/2014

Logged By: JML

Equipment: John Deere 35D

Total Depth (ft) 4.0

Elevation (feet)	Depth (feet)	SAMPLE		Group Classification	Encountered Water	MATERIAL DESCRIPTION	Sheen	Headspace Vapor	Notes
		Testing Sample	Sample Name Testing						
	1	TP-10-1-N TP-10-1-S		GW		Approximately 4 inches coarse gravel (fill)			
				SP-SM		Dark gray fine to medium sand with silt, gravel and debris (brick, metal) (moist) (fill)			
	2	TP-10-2-N TP-10-2-S		GP-GM		Brown fine to coarse gravel with silt, sand and occasional cobbles (moist)		^1	
	3	TP-10-3-N TP-10-3-S						^1	
	4	TP-10-4-N TP-10-4-S						^1	

Test pit completed at approximately 4 foot depth  
 No groundwater seepage observed  
 No caving observed

Notes: See Figure A-1 for explanation of symbols.  
 The depths on the test pit logs are based on an average of measurements across the test pit and should be considered accurate to 0.5 foot.

**Log of Test Pit TP-10**



Project: City Parcel Site  
 Project Location: Spokane, Washington  
 Project Number: 0504-047-03

Spokane: Date: 12/28/15 Path: P:\0504047\GINT\050404703.GPJ\DBT\template\lib\template\GEOENGINEERS\GDT\GEB\_TESTPIT\_IP\_ENV

Date Excavated: 6/27/2014

Logged By: JML

Equipment: John Deere 35D

Total Depth (ft) 4.0

Elevation (feet)	Depth (feet)	SAMPLE		Graphic Log	Group Classification	Encountered Water	MATERIAL DESCRIPTION	Sheen	Headspace Vapor	Notes
		Testing Sample	Sample Name Testing							
	1	TP-11-1-N TP-11-1-S			SP-SM		Approximately 4 inches coarse gravel (fill) Dark gray fine to medium sand with silt, gravel and debris (brick, conduit) (moist) (fill)		^1	
	2	TP-11-2-N TP-11-2-S			GP-GM		Brown fine to coarse gravel with silt and sand (moist)		^1	
	3	TP-11-3-N TP-11-3-S			GP		Brown fine to coarse gravel with trace sand and occasional cobbles (moist)		^1	
	4	TP-11-4-N TP-11-4-S							^1	

Test pit completed at approximately 4 foot depth  
No groundwater seepage observed  
No caving observed

Notes: See Figure A-1 for explanation of symbols.  
The depths on the test pit logs are based on an average of measurements across the test pit and should be considered accurate to 0.5 foot.

### Log of Test Pit TP-11



Project: City Parcel Site  
Project Location: Spokane, Washington  
Project Number: 0504-047-03

Date Excavated: 6/27/2014

Logged By: JML

Equipment: John Deere 35D

Total Depth (ft) 4.0

Elevation (feet)	Depth (feet)	SAMPLE		Group Classification	Encountered Water	MATERIAL DESCRIPTION	Sheen	Headspace Vapor	Notes
		Testing Sample	Sample Name Testing						
	1	TP-12-1-N TP-12-1-S		GW SP-SM		Approximately 4 inches coarse gravel (fill) Dark gray fine to medium sand with silt and gravel (moist) (fill)		^1 ^1	
	2	TP-12-2-N TP-12-2-S		GP-GM		Brown fine to coarse gravel with silt and sand (moist)		^1 ^1	
	3	TP-12-3-N TP-12-3-S		GP		Brown fine to coarse gravel with trace sand (moist)		^1 ^1	
	4	TP-12-4-N TP-12-4-S						^1 ^1	

Test pit completed at approximately 4 foot depth  
 No groundwater seepage observed  
 No caving observed

Notes: See Figure A-1 for explanation of symbols.  
 The depths on the test pit logs are based on an average of measurements across the test pit and should be considered accurate to 0.5 foot.

### Log of Test Pit TP-12



Project: City Parcel Site  
 Project Location: Spokane, Washington  
 Project Number: 0504-047-03

Spokane: Date: 12/28/15 Path: P:\0504047\GINT\050404703.GPJ\DBT\template\lib\template\GEOENGINEERS\GDT\GEB\_TESTPIT\_IP\_ENV

Date Excavated: 6/27/2014

Logged By: JML

Equipment: John Deere 35D

Total Depth (ft) 4.0

Elevation (feet)	Depth (feet)	SAMPLE		Graphic Log	Group Classification	Encountered Water	MATERIAL DESCRIPTION	Sheen	Headspace Vapor	Notes
		Testing Sample	Sample Name Testing							
					GW		Approximately 4 inches coarse gravel/topsoil (fill)			
	1		TP-13-1-N CA TP-13-1-S CA		SP-SM		Dark gray fine to medium sand with gravel, silt, and debris (large brick pieces) (moist) (fill)		△1	
	2		TP-13-2-N CA TP-13-2-S CA		GM		Brown silty fine to coarse gravel with sand and occasional cobbles (moist)		△1	
	3		TP-13-3-N TP-13-3-S						△1	
	4		TP-13-4-N TP-13-4-S						△1	

Test pit completed at approximately 4 foot depth  
 No groundwater seepage observed  
 No caving observed

Notes: See Figure A-1 for explanation of symbols.  
 The depths on the test pit logs are based on an average of measurements across the test pit and should be considered accurate to 0.5 foot.

### Log of Test Pit TP-13



Project: City Parcel Site  
 Project Location: Spokane, Washington  
 Project Number: 0504-047-03

Figure A-21  
 Sheet 1 of 1



Date Excavated: 6/27/2014

Logged By: JML

Equipment: John Deere 35D

Total Depth (ft) 4.0

Elevation (feet)	Depth (feet)	SAMPLE		Group Classification	Encountered Water	MATERIAL DESCRIPTION	Sheen	Headspace Vapor	Notes
		Testing Sample	Sample Name Testing						
				GW		Approximately 4 inches gravel/topsoil (fill)			
	1		TP-14-1-N TP-14-1-S CA	SP-SM		Dark gray fine to medium sand with silt, gravel and debris (large brick pieces) (moist) (fill)		△1	
	2		TP-14-2-N TP-14-2-S CA					△1	
	3		TP-14-3-N TP-14-3-S	GM		Brown silty fine to coarse gravel with sand (moist)		△1	
	4		TP-14-4-N TP-14-4-S					△1	

Test pit completed at approximately 4 foot depth  
 No groundwater seepage observed  
 No caving observed

Notes: See Figure A-1 for explanation of symbols.  
 The depths on the test pit logs are based on an average of measurements across the test pit and should be considered accurate to 0.5 foot.

### Log of Test Pit TP-14



Project: City Parcel Site  
 Project Location: Spokane, Washington  
 Project Number: 0504-047-03

Figure A-22  
 Sheet 1 of 1

**APPENDIX B**  
**Data Validation Report and Chemical Analytical  
Laboratory Results**

## **APPENDIX B DATA VALIDATION REPORT AND CHEMICAL ANALYTICAL LABORATORY RESULTS**

This report documents the results of a United States USEPA-defined Stage 2A data validation (EPA Document 540-R-08-005; EPA, 2009) of analytical data from the analyses of soil samples collected as part of the June, July, September and December 2014 and October 2015 sampling events, and the associated laboratory quality control (QC) samples. The samples were obtained from the City Parcel site, located at 708 North Cook Street in Spokane, Washington.

### **OBJECTIVE AND QUALITY CONTROL ELEMENTS**

GeoEngineers completed the data validation consistent with the EPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (EPA, 2008) (National Functional Guidelines) to determine if the laboratory analytical results meet the project objectives and are usable for their intended purpose. Data usability was assessed by determining if:

- The samples were analyzed using well-defined and acceptable methods that provide reporting limits below applicable regulatory criteria;
- The precision and accuracy of the data are well-defined and sufficient to provide defensible data; and
- The quality assurance/quality control (QA/QC) procedures utilized by the laboratory meet acceptable industry practices and standards.

In accordance with the Quality Assurance Project Plan (Appendix B of the Supplemental Remedial Investigation Work Plan (GeoEngineers, 2014), the data validation included review of the following QC elements:

- Data Package Completeness
- Chain-of-Custody Documentation
- Holding Times and Sample Preservation
- Surrogate Recoveries
- Method Blanks
- Matrix Spikes/Matrix Spike Duplicates
- Laboratory Control Samples/Laboratory Control Sample Duplicates
- Miscellaneous

### **VALIDATED SAMPLE DELIVERY GROUPS**

This data validation included review of the sample delivery groups (SDGs) listed below in Table B-1.

**TABLE B-1. SUMMARY OF VALIDATED SAMPLE DELIVERY GROUPS**

Laboratory SDG	Samples Validated
SXF0197 (September 2014)	GP-1 (1-1.2), GP-1 (5-5.2), GP-2 (0.5-0.7), GP-2 (5-5.2), GP-3 (0.5-0.7), GP-3 (4-4.2)
SXF0198 (June 2014)	TP-1-1-N, TP-1-1-S, TP-1-2-N, TP-1-2-S, TP-1-3-N, TP-1-3-S, TP-1-4-N, TP-1-4-S, TP-2-1-N, TP-2-1-S, TP-2-2-N, TP-2-2-S, TP-2-3-N, TP-2-3-S, TP-2-4-N, TP-2-4-S, TP-3-1-N, TP-3-1-S, TP-3-2-N, TP-3-2-S, TP-3-3-N, TP-3-3-S, TP-3-4-N, TP-3-4-S, TP-4-1-S, TP-4-2-S, TP-4-3-S, TP-4-4-S, TP-5-1-N, TP-5-1-S, TP-5-2-N, TP-5-2-S, TP-5-3-N, TP-5-3-S, TP-5-4-N, TP-5-4-S, TP-5-5-N, TP-5-5-S, TP-6-1-S, TP-6-2-S, TP-6-3-S, TP-6-4-S, TP-7-1-N, TP-7-1-S, TP-7-2-N, TP-7-2-S, TP-7-3-N, TP-7-3-S, TP-7-4-N, TP-7-4-S, TP-7-5-N, TP-7-5-S, TP-8-1-S, TP-8-2-S, TP-9-1-N, TP-9-1-S, TP-9-2-N, TP-9-2-S, TP-9-3-N, TP-9-3-S, TP-9-4-N, TP-9-4-S, TP-13-1-N, TP-13-1-S, TP-13-2-N, TP-13-2-S, TP-14-1-N, TP-14-1-S, TP-14-2-N, TP-14-2-S
SXG0130 (July 2014)	HA-1-1, HA-1-2, HA-2-1, HA-2-2
SXI0102 (September 2014)	HA-4-0.5, HA-4-1.5, HA-5-0.5, HA-5-1.5, HA-6-0.5, HA-6-1.5
SXL0029 (December 2014)	B1, B2, B3, W1, W2, W3
SXL0032 (December 2014)	B4, B5, B6, W4
SXL0054 (December 2014)	B2A, B4A, W2A
SXL0055 (December 2014)	B3A, W3A
590-2243-1 (October 2015)	EB-1, EB-2, EB-3, EB-4, EB-5, EB-6, ES-1, ES-2, ES-3, ES-4
590-2272-1 (October 2015)	EB-7, EB-8

Please note that SDGs SXF0198 and SXG0130 were validated on February 5, 2015, SDGs SXL0029, SXL0032, SXL0054, and SXL0055 were validated on March 30, 2015, and SDGs SXF0197, SXI0102, 590-2243-1, and 590-2272-1 were validation on December 22, 2015.

### CHEMICAL ANALYSIS PERFORMED

TestAmerica Laboratories, Inc. (TestAmerica), located in Spokane, Washington, performed laboratory analysis on the samples using the following method:

- Polychlorinated Biphenyls (PCBs) by Method SW8082 or SW8082A

## DATA VALIDATION SUMMARY

The results for each of the QC elements are summarized below.

### Data Package Completeness

TestAmerica provided the required deliverables for the data validation according to the National Functional Guidelines. The laboratory appears to have followed adequate corrective action processes; however, the laboratory analytical report does not contain a case narrative in SDGs SXF0197, SXF0198, SXG0130, SXI0102, SXL0029, SXL0032, SXL0054 and SXL0055.

### Chain-of-Custody Documentation

Chain-of-custody (COC) forms were provided with the laboratory analytical reports. The COCs were accurate and complete when submitted to the laboratory.

### Holding Times and Sample Preservation

The sample holding time is defined as the time that elapses between sample collection and sample analysis. Maximum holding time criteria exist for each analysis to help ensure that the analyte concentrations found at the time of analysis reflect the concentration present at the time of sample collection. Established holding times were met for each analysis. The sample coolers arrived at the laboratory within the appropriate temperatures of between 2 and 6 degrees Celsius, with the exceptions noted below.

**SDG SXG0130:** The sample cooler temperature recorded at the laboratory was 24.3 degrees Celsius. It was determined through professional judgment that since the samples were received at the laboratory the same day they were collected, this temperature should not affect the sample analytical results.

**SDG SXI0102:** The sample cooler temperature recorded at the laboratory was 21.8 degrees Celsius. It was determined through professional judgment that since the samples were received at the laboratory the same day they were collected, this temperature should not affect the sample analytical results.

**SDG SXL0054:** The sample cooler temperature recorded at the laboratory was 9.5 degrees Celsius. It was determined through professional judgment that since the samples were received at the laboratory the same day they were collected, this temperature should not affect the sample analytical results.

**SDG SXL0055:** The sample cooler temperature recorded at the laboratory was 9.8 degrees Celsius. It was determined through professional judgment that since the samples were received at the laboratory the same day they were collected, this temperature should not affect the sample analytical results.

**SDG 590-2243-1:** The sample cooler temperature recorded at the laboratory was 14.9 degrees Celsius. It was determined through professional judgment that since the samples were received at the laboratory the same day they were collected, this temperature should not affect the sample analytical results.

**SDG 590-2272-1:** The sample cooler temperature recorded at the laboratory was 19.4 degrees Celsius. It was determined through professional judgment that since the samples were received at the laboratory within 24 hours from sample collection, this temperature should not affect the sample analytical results.

## Surrogate Recoveries

A surrogate compound is a compound that is chemically similar to the organic analytes of interest, but unlikely to be found in any environmental sample. Surrogates are used for organic analyses and are added to the samples, standards, and blanks to serve as an accuracy and specificity check of each analysis. The surrogates are added to the samples at a known concentration and percent recoveries are calculated following analysis. The surrogate percent recoveries for field samples were within the laboratory control limits, with the following exceptions:

**SDG SXF0197:** (PCBs) The percent recoveries for surrogate decachlorobiphenyl in Samples GP-1 (5-5.2), GP-2 (0.5-0.7), and GP-3 (4-4.2) and the percent recoveries for surrogates TCX and decachlorobiphenyl in Sample GP-3 (0.5-0.7) were not recoverable or recovered outside of the control limits because of sample dilution, ranging from 20X to 400X. The surrogates are added to the sample when it is extracted. If the sample is diluted 10X or more, recovery of the surrogates is often not possible because it is also diluted below the linear calibration range of the instrument. No action was required for these outliers.

**SDG SXF0198:** (PCBs) The percent recoveries for surrogates TCX and decachlorobiphenyl in Samples TP-1-1-N, TP-1-1-S, TP-1-2-N, TP-1-3-N, TP-1-3-S, TP-2-3-S, TP-3-3-N, and TP-14-1-S were not recoverable or recovered outside of the control limits because of sample dilution, ranging from 20X to 500X. The surrogates are added to the sample when it is extracted. If the sample is diluted 10X or more, recovery of the surrogates is often not possible because it is also diluted below the linear calibration range of the instrument. No action was required for these outliers.

The percent recovery for surrogate decachlorobiphenyl was greater than the control limits in Sample TP-2-2-N. The positive result for PCB-1260 was qualified as estimated (J) in this sample.

The percent recovery for surrogate TCX was less than the control limits in Samples TP-7-5-S and TP-14-1-N. The positive results for PCB-1260 and the reporting limits for all other PCB target analytes were qualified as estimated (J/UJ) in these samples.

**SDG SXG0130:** (PCBs) The percent recoveries for surrogates TCX and decachlorobiphenyl in Sample HA-2-1 were not recoverable because of sample dilution (200X). The surrogates are added to the sample when it is extracted. If the sample is diluted 10X or more, recovery of the surrogates is often not possible because it is also diluted below the linear calibration range of the instrument. No action was required for these outliers.

**SDG SXI0102:** (PCBs) The percent recoveries for surrogates TCX and decachlorobiphenyl in Samples HA-5-0.5 and HA-5-1.5 were not recoverable because of sample dilution, 40X and 200X, respectively. The surrogates are added to the sample when it is extracted. If the sample is diluted 10X or more, recovery of the surrogates is often not possible because it is also diluted below the linear calibration range of the instrument. No action was required for these outliers.

**SDG SXL0029:** (PCBs) The percent recoveries for surrogate decachlorobiphenyl in Samples B2, W1, W2, and W3 and the percent recoveries for surrogates TCX and decachlorobiphenyl in Sample B3 were not recoverable or recovered outside of the control limits because of sample dilution, ranging from 10X to 400X. The surrogates are added to the sample when it is extracted. If the sample is diluted 10X or more, recovery

of the surrogates is often not possible because it is also diluted below the linear calibration range of the instrument. No action was required for these outliers.

**SDG SXL0032:** (PCBs) The percent recoveries for surrogate decachlorobiphenyl in Samples B4, B5 and B6 were not recoverable or recovered outside of the control limits because of sample dilution, ranging from 10X to 50X. The surrogates are added to the sample when it is extracted. If the sample is diluted 10X or more, recovery of the surrogates is often not possible because it is also diluted below the linear calibration range of the instrument. No action was required for these outliers.

**SDG 590-2243-1:** (PCBs) The percent recovery for surrogate decachlorobiphenyl in Sample EB-6 recovered outside of the control limits because of sample dilution (20X). The surrogates are added to the sample when it is extracted. If the sample is diluted 10X or more, recovery of the surrogates is often not possible because it is also diluted below the linear calibration range of the instrument. No action was required for this outlier.

**SDG 590-2272-1:** (PCBs) The percent recoveries for surrogates TCX and decachlorobiphenyl in Sample EB-8 were not recoverable because of sample dilution (400X). The surrogates are added to the sample when it is extracted. If the sample is diluted 10X or more, recovery of the surrogates is often not possible because it is also diluted below the linear calibration range of the instrument. No action was required for these outliers.

### Method Blanks

Method blanks are analyzed to ensure that laboratory procedures and reagents do not introduce measurable concentrations of the analytes of interest. A method blank was analyzed with each batch of samples, at a frequency of 1 per 20 samples. For each sample batch, method blanks for the applicable methods were analyzed at the required frequency. None of the analytes of interest were detected above the reporting limits in any of the method blanks.

### Matrix Spikes/Matrix Spike Duplicates

Since the actual analyte concentration in an environmental sample is not known, the accuracy of a particular analysis is usually inferred by performing a matrix spike (MS) analysis on one sample from the associated batch, known as the parent sample. One aliquot of the sample is analyzed in the normal manner and then a second aliquot of the sample is spiked with a known amount of analyte concentration and analyzed. From these analyses, a percent recovery is calculated. Matrix spike duplicate (MSD) analyses are generally performed for organic analyses as a precision check and analyzed in the same sequence as a matrix spike. Using the result values from the MS and MSD, the relative percent difference (RPD) is calculated. The percent recovery control limits for MS and MSD analyses are specified in the laboratory documents, as are the RPD control limits for MS/MSD sample sets.

One MS/MSD analysis should be performed for every analytical batch or every 20 field samples, whichever is more frequent. The frequency requirements were met for each analysis and the percent recovery and RPD values were within the proper control limits, with the following exceptions:

**SDG SXF0197:** (PCBs) The laboratory performed an MS/MSD sample set on Sample GP-1 (1-1.2). The percent recovery for PCB-1260 was less than the control limits in both the MS and MSD extracted on

9/11/2014. The positive result for PCB-1260 and the reporting limits for all other PCB target analytes were qualified as estimated (J) in Sample GP-1 (1-1.2).

**SDG SXF0198:** (PCBs) The laboratory performed an MS/MSD sample set on Sample TP-2-2-N. The percent recoveries for PCB-1260 were not recoverable due to high analyte concentration in the sample. The percent recoveries in the LCS were within the control limits. For this reason, no action was required for this outlier.

**SDG SXG0130:** (PCBs) The laboratory performed an MS/MSD sample set on Sample HA-1-1. The percent recoveries for PCB-1260 were less than the control limits in the MS/MSD extracted on 7/22/2014. The positive result for PCB-1260 and the reporting limits for all other PCB target analytes were qualified as estimated (J/UJ) in this sample.

**SDG 590-2272-1:** (PCBs) The laboratory performed an MS/MSD sample set on Sample EB-7. The percent recovery for PCB-1260 was greater than the control limits in the MS extracted on 11/11/2015. The percent recovery for this target analyte was within the control limits in the corresponding MSD; therefore, no action was required for this outlier. Additionally, in the same MS/MSD sample set, the RPD for PCB-1260 was greater than the control limit. The positive result for PCB-1260 was qualified as estimated (J) in Sample EB-7.

### **Laboratory Control Samples/Laboratory Control Sample Duplicates**

A laboratory control sample (LCS) is a blank sample that is spiked with a known amount of analyte and then analyzed. An LCS is similar to an MS, but without the possibility of matrix interference. Given that matrix interference is not an issue, the LCS/LCSD control limits for accuracy and precision are usually more rigorous than for MS/MSD analyses. Additionally, data qualification based on LCS/LCSD analyses would apply to all samples in the associated batch, instead of just the parent sample. The percent recovery control limits for LCS and LCSD analyses are specified in the laboratory documents, as are the RPD control limits for LCS/LCSD sample sets.

One LCS/LCSD analysis should be performed for every analytical batch or every 20 field samples, whichever is more frequent. The frequency requirements were met for each analysis and the percent recovery and RPD values were within the proper control limits.

### **MISCELLANEOUS**

**SDG SXF0198:** (PCBs) The laboratory reported two sets of results for Samples TP-7-1-N, TP-13-1-N, and TP-14-2-S, an initial and a re-analysis. The initial reported results for Samples TP-7-1-N, TP-13-1-N, and TP-14-2-S were labeled as do-not-report (DNR) and should not be used for any purpose.

**SDG SXL0029:** (PCBs) The laboratory reported two sets of results for Sample W3, an initial and a re-analysis. The initial reported results for Sample W3 were labeled as do-not-report (DNR) and should not be used for any purpose.

### **OVERALL ASSESSMENT**

As was determined by this data validation, the laboratory followed the specified analytical methods. Accuracy was acceptable, as demonstrated by the surrogate, LCS/LCSD, and MS/MSD percent recovery



values, with the exceptions noted above. Precision was acceptable, as demonstrated by the LCS/LCSD and MS/MSD RPD values.

The data are acceptable for the intended use, with the following qualifications listed below in Table B-2.

**TABLE B-2. SUMMARY OF QUALIFIED SAMPLES**

Sample ID	Analyte	Qualifier	Reason
EB-7	PCB-1260	J	MS/MSD % Recovery
GP-1 (1-1.2)	PCB-1016	UJ	MS/MSD % Recovery
	PCB-1221	UJ	MS/MSD % Recovery
	PCB-1232	UJ	MS/MSD % Recovery
	PCB-1242	UJ	MS/MSD % Recovery
	PCB-1248	UJ	MS/MSD % Recovery
	PCB-1254	UJ	MS/MSD % Recovery
	PCB-1260	J	MS/MSD % Recovery
	PCB-1268	UJ	MS/MSD % Recovery
HA-1-1	PCB-1016	UJ	MS/MSD % Recovery
	PCB-1221	UJ	MS/MSD % Recovery
	PCB-1232	UJ	MS/MSD % Recovery
	PCB-1242	UJ	MS/MSD % Recovery
	PCB-1248	UJ	MS/MSD % Recovery
	PCB-1254	UJ	MS/MSD % Recovery
	PCB-1260	J	MS/MSD % Recovery
	PCB-1268	UJ	MS/MSD % Recovery
TP-2-2-N	PCB-1260	J	Surrogate Recovery
TP-7-5-S	PCB-1016	UJ	Surrogate Recovery
	PCB-1221	UJ	Surrogate Recovery
	PCB-1232	UJ	Surrogate Recovery
	PCB-1242	UJ	Surrogate Recovery
	PCB-1248	UJ	Surrogate Recovery
	PCB-1254	UJ	Surrogate Recovery
	PCB-1260	J	Surrogate Recovery
	PCB-1268	UJ	Surrogate Recovery
TP-14-1-N	PCB-1016	UJ	Surrogate Recovery
	PCB-1221	UJ	Surrogate Recovery
	PCB-1232	UJ	Surrogate Recovery
	PCB-1242	UJ	Surrogate Recovery
	PCB-1248	UJ	Surrogate Recovery
	PCB-1254	UJ	Surrogate Recovery
	PCB-1260	J	Surrogate Recovery
	PCB-1268	UJ	Surrogate Recovery

Sample ID	Analyte	Qualifier	Reason
TP-7-1-N (initially analyzed 7/7/2014)	PCB-1016	DNR	Initial Analysis
	PCB-1221	DNR	Initial Analysis
	PCB-1232	DNR	Initial Analysis
	PCB-1242	DNR	Initial Analysis
	PCB-1248	DNR	Initial Analysis
	PCB-1254	DNR	Initial Analysis
	PCB-1260	DNR	Initial Analysis
	PCB-1268	DNR	Initial Analysis
TP-13-1-N (initially analyzed 7/8/2014)	PCB-1016	DNR	Initial Analysis
	PCB-1221	DNR	Initial Analysis
	PCB-1232	DNR	Initial Analysis
	PCB-1242	DNR	Initial Analysis
	PCB-1248	DNR	Initial Analysis
	PCB-1254	DNR	Initial Analysis
	PCB-1260	DNR	Initial Analysis
	PCB-1268	DNR	Initial Analysis
TP-14-2-S (initially analyzed 7/8/2014)	PCB-1016	DNR	Initial Analysis
	PCB-1221	DNR	Initial Analysis
	PCB-1232	DNR	Initial Analysis
	PCB-1242	DNR	Initial Analysis
	PCB-1248	DNR	Initial Analysis
	PCB-1254	DNR	Initial Analysis
	PCB-1260	DNR	Initial Analysis
	PCB-1268	DNR	Initial Analysis
W3 (initially analyzed 12/5/2014)	PCB-1016	DNR	Initial Analysis
	PCB-1221	DNR	Initial Analysis
	PCB-1232	DNR	Initial Analysis
	PCB-1242	DNR	Initial Analysis
	PCB-1248	DNR	Initial Analysis
	PCB-1254	DNR	Initial Analysis
	PCB-1260	DNR	Initial Analysis
	PCB-1268	DNR	Initial Analysis

## REFERENCES

GeoEngineers, Inc., 2014. "Work Plan, Supplemental Remedial Investigation," File No. 0504-047-03. May 15.

U.S. Environmental Protection Agency (EPA). 2008. "Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review," EPA-540-R-08-01. June.

U.S. Environmental Protection Agency (EPA). 2009. "Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use," EPA-540-R-08-005. January.

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.  
TestAmerica Spokane  
11922 East 1st. Avenue  
Spokane, WA 99206  
Tel: (509)924-9200

TestAmerica Job ID: SXF0197  
Client Project/Site: 0504-047-01  
Client Project Description: City Parcel

For:  
Geo Engineers - Spokane  
523 East Second Ave.  
Spokane, WA 99202

Attn: Dave Lauder



Authorized for release by:  
9/19/2014 3:40:38 PM

Randee Arrington, Project Manager  
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[Randee.Arrington@testamericainc.com](mailto:Randee.Arrington@testamericainc.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:  
[www.testamericainc.com](http://www.testamericainc.com)

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

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

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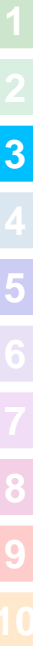
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# Sample Summary

Client: Geo Engineers - Spokane  
Project/Site: 0504-047-01

TestAmerica Job ID: SXF0197

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
SXF0197-01	GP-1 (1-1.2)	Soil	06/26/14 10:15	06/27/14 15:50
SXF0197-02	GP-1 (5-5.2)	Soil	06/26/14 10:25	06/27/14 15:50
SXF0197-03	GP-2 (0.5-0.7)	Soil	06/26/14 19:15	06/27/14 15:50
SXF0197-04	GP-2 (5-5.2)	Soil	06/26/14 19:25	06/27/14 15:50
SXF0197-05	GP-3 (0.5-0.7)	Soil	06/26/14 19:30	06/27/14 15:50
SXF0197-06	GP-3 (4-4.2)	Soil	06/26/14 19:35	06/27/14 15:50



# Definitions/Glossary

Client: Geo Engineers - Spokane  
Project/Site: 0504-047-01

TestAmerica Job ID: SXF0197

## Qualifiers

### Semivolatiles

Qualifier	Qualifier Description
M8	The MS and/or MSD were below the acceptance limits. See Blank Spike (LCS).
Z3	The sample required a dilution due to the nature of the sample matrix. Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

# Client Sample Results

Client: Geo Engineers - Spokane  
Project/Site: 0504-047-01

TestAmerica Job ID: SXF0197

## Client Sample ID: GP-1 (1-1.2)

Lab Sample ID: SXF0197-01

Date Collected: 06/26/14 10:15

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 89.4

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		23.2		ug/kg dry	☼	09/11/14 08:29	09/12/14 10:34	2.00
PCB-1221	ND		23.2		ug/kg dry	☼	09/11/14 08:29	09/12/14 10:34	2.00
PCB-1232	ND		23.2		ug/kg dry	☼	09/11/14 08:29	09/12/14 10:34	2.00
PCB-1242	ND		23.2		ug/kg dry	☼	09/11/14 08:29	09/12/14 10:34	2.00
PCB-1248	ND		23.2		ug/kg dry	☼	09/11/14 08:29	09/12/14 10:34	2.00
PCB-1254	ND		23.2		ug/kg dry	☼	09/11/14 08:29	09/12/14 10:34	2.00
<b>PCB-1260</b>	<b>264</b>		23.2		ug/kg dry	☼	09/11/14 08:29	09/12/14 10:34	2.00
PCB-1268	ND		23.2		ug/kg dry	☼	09/11/14 08:29	09/12/14 10:34	2.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
TCX	68.8		46.2 - 210				09/11/14 08:29	09/12/14 10:34	2.00
Decachlorobiphenyl	128		65.6 - 186				09/11/14 08:29	09/12/14 10:34	2.00

## Client Sample ID: GP-1 (5-5.2)

Lab Sample ID: SXF0197-02

Date Collected: 06/26/14 10:25

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 89.6

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		209		ug/kg dry	☼	09/11/14 08:29	09/12/14 10:55	20.0
PCB-1221	ND		209		ug/kg dry	☼	09/11/14 08:29	09/12/14 10:55	20.0
PCB-1232	ND		209		ug/kg dry	☼	09/11/14 08:29	09/12/14 10:55	20.0
PCB-1242	ND		209		ug/kg dry	☼	09/11/14 08:29	09/12/14 10:55	20.0
PCB-1248	ND		209		ug/kg dry	☼	09/11/14 08:29	09/12/14 10:55	20.0
PCB-1254	ND		209		ug/kg dry	☼	09/11/14 08:29	09/12/14 10:55	20.0
<b>PCB-1260</b>	<b>1660</b>		209		ug/kg dry	☼	09/11/14 08:29	09/12/14 10:55	20.0
PCB-1268	ND		209		ug/kg dry	☼	09/11/14 08:29	09/12/14 10:55	20.0
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
TCX	110		46.2 - 210				09/11/14 08:29	09/12/14 10:55	20.0
Decachlorobiphenyl	187	Z3	65.6 - 186				09/11/14 08:29	09/12/14 10:55	20.0

## Client Sample ID: GP-2 (0.5-0.7)

Lab Sample ID: SXF0197-03

Date Collected: 06/26/14 19:15

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 88.1

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		391		ug/kg dry	☼	09/11/14 08:29	09/12/14 11:14	40.0
PCB-1221	ND		391		ug/kg dry	☼	09/11/14 08:29	09/12/14 11:14	40.0
PCB-1232	ND		391		ug/kg dry	☼	09/11/14 08:29	09/12/14 11:14	40.0
PCB-1242	ND		391		ug/kg dry	☼	09/11/14 08:29	09/12/14 11:14	40.0
PCB-1248	ND		391		ug/kg dry	☼	09/11/14 08:29	09/12/14 11:14	40.0
PCB-1254	ND		391		ug/kg dry	☼	09/11/14 08:29	09/12/14 11:14	40.0
<b>PCB-1260</b>	<b>5210</b>		391		ug/kg dry	☼	09/11/14 08:29	09/12/14 11:14	40.0
PCB-1268	ND		391		ug/kg dry	☼	09/11/14 08:29	09/12/14 11:14	40.0
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
TCX	73.0		46.2 - 210				09/11/14 08:29	09/12/14 11:14	40.0
Decachlorobiphenyl	196	Z3	65.6 - 186				09/11/14 08:29	09/12/14 11:14	40.0

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# Client Sample Results

Client: Geo Engineers - Spokane  
Project/Site: 0504-047-01

TestAmerica Job ID: SXF0197

## Client Sample ID: GP-2 (5-5.2)

Lab Sample ID: SXF0197-04

Date Collected: 06/26/14 19:25

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 91.8

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		108		ug/kg dry	☼	09/11/14 08:29	09/12/14 11:34	10.0
PCB-1221	ND		108		ug/kg dry	☼	09/11/14 08:29	09/12/14 11:34	10.0
PCB-1232	ND		108		ug/kg dry	☼	09/11/14 08:29	09/12/14 11:34	10.0
PCB-1242	ND		108		ug/kg dry	☼	09/11/14 08:29	09/12/14 11:34	10.0
PCB-1248	ND		108		ug/kg dry	☼	09/11/14 08:29	09/12/14 11:34	10.0
PCB-1254	ND		108		ug/kg dry	☼	09/11/14 08:29	09/12/14 11:34	10.0
<b>PCB-1260</b>	<b>787</b>		108		ug/kg dry	☼	09/11/14 08:29	09/12/14 11:34	10.0
PCB-1268	ND		108		ug/kg dry	☼	09/11/14 08:29	09/12/14 11:34	10.0
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
TCX	101		46.2 - 210				09/11/14 08:29	09/12/14 11:34	10.0
Decachlorobiphenyl	149		65.6 - 186				09/11/14 08:29	09/12/14 11:34	10.0

## Client Sample ID: GP-3 (0.5-0.7)

Lab Sample ID: SXF0197-05

Date Collected: 06/26/14 19:30

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 93.3

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		4210		ug/kg dry	☼	09/11/14 08:29	09/12/14 14:16	400
PCB-1221	ND		4210		ug/kg dry	☼	09/11/14 08:29	09/12/14 14:16	400
PCB-1232	ND		4210		ug/kg dry	☼	09/11/14 08:29	09/12/14 14:16	400
PCB-1242	ND		4210		ug/kg dry	☼	09/11/14 08:29	09/12/14 14:16	400
PCB-1248	ND		4210		ug/kg dry	☼	09/11/14 08:29	09/12/14 14:16	400
PCB-1254	ND		4210		ug/kg dry	☼	09/11/14 08:29	09/12/14 14:16	400
<b>PCB-1260</b>	<b>25100</b>		4210		ug/kg dry	☼	09/11/14 08:29	09/12/14 14:16	400
PCB-1268	ND		4210		ug/kg dry	☼	09/11/14 08:29	09/12/14 14:16	400
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
TCX		Z3	46.2 - 210				09/11/14 08:29	09/12/14 14:16	400
Decachlorobiphenyl		Z3	65.6 - 186				09/11/14 08:29	09/12/14 14:16	400

## Client Sample ID: GP-3 (4-4.2)

Lab Sample ID: SXF0197-06

Date Collected: 06/26/14 19:35

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 90.7

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		425		ug/kg dry	☼	09/11/14 08:29	09/12/14 12:16	40.0
PCB-1221	ND		425		ug/kg dry	☼	09/11/14 08:29	09/12/14 12:16	40.0
PCB-1232	ND		425		ug/kg dry	☼	09/11/14 08:29	09/12/14 12:16	40.0
PCB-1242	ND		425		ug/kg dry	☼	09/11/14 08:29	09/12/14 12:16	40.0
PCB-1248	ND		425		ug/kg dry	☼	09/11/14 08:29	09/12/14 12:16	40.0
PCB-1254	ND		425		ug/kg dry	☼	09/11/14 08:29	09/12/14 12:16	40.0
<b>PCB-1260</b>	<b>4610</b>		425		ug/kg dry	☼	09/11/14 08:29	09/12/14 12:16	40.0
PCB-1268	ND		425		ug/kg dry	☼	09/11/14 08:29	09/12/14 12:16	40.0
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
TCX	108		46.2 - 210				09/11/14 08:29	09/12/14 12:16	40.0
Decachlorobiphenyl	204	Z3	65.6 - 186				09/11/14 08:29	09/12/14 12:16	40.0

TestAmerica Spokane

# QC Sample Results

Client: Geo Engineers - Spokane  
Project/Site: 0504-047-01

TestAmerica Job ID: SXF0197

## Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

**Lab Sample ID: 14I0062-BLK1**  
**Matrix: Soil**  
**Analysis Batch: 14I0062**

**Client Sample ID: Method Blank**  
**Prep Type: Total**  
**Prep Batch: 14I0062\_P**

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		10.0		ug/kg wet		09/11/14 08:29	09/12/14 09:09	1.00
PCB-1221	ND		10.0		ug/kg wet		09/11/14 08:29	09/12/14 09:09	1.00
PCB-1232	ND		10.0		ug/kg wet		09/11/14 08:29	09/12/14 09:09	1.00
PCB-1242	ND		10.0		ug/kg wet		09/11/14 08:29	09/12/14 09:09	1.00
PCB-1248	ND		10.0		ug/kg wet		09/11/14 08:29	09/12/14 09:09	1.00
PCB-1254	ND		10.0		ug/kg wet		09/11/14 08:29	09/12/14 09:09	1.00
PCB-1260	ND		10.0		ug/kg wet		09/11/14 08:29	09/12/14 09:09	1.00
PCB-1268	ND		10.0		ug/kg wet		09/11/14 08:29	09/12/14 09:09	1.00

Surrogate	Blank %Recovery	Blank Qualifier	Limits	Prepared	Analyzed	Dil Fac
TCX	90.5		46.2 - 210	09/11/14 08:29	09/12/14 09:09	1.00
Decachlorobiphenyl	114		65.6 - 186	09/11/14 08:29	09/12/14 09:09	1.00

**Lab Sample ID: 14I0062-BS1**  
**Matrix: Soil**  
**Analysis Batch: 14I0062**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total**  
**Prep Batch: 14I0062\_P**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
PCB-1016	33.3	36.4		ug/kg wet		109	44.4 - 180
PCB-1260	33.3	37.4		ug/kg wet		112	60.3 - 169

Surrogate	LCS %Recovery	LCS Qualifier	Limits
TCX	95.9		46.2 - 210
Decachlorobiphenyl	122		65.6 - 186

**Lab Sample ID: 14I0062-MS1**  
**Matrix: Soil**  
**Analysis Batch: 14I0062**

**Client Sample ID: GP-1 (1-1.2)**  
**Prep Type: Total**  
**Prep Batch: 14I0062\_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	%Rec	Limits
PCB-1016	ND		36.5	32.6		ug/kg dry	☼	89.5	50.6 - 145
PCB-1260	264		36.5	248	M8	ug/kg dry	☼	-44.5	57.6 - 120

Surrogate	Matrix Spike %Recovery	Matrix Spike Qualifier	Limits
TCX	71.8		46.2 - 210
Decachlorobiphenyl	130		65.6 - 186

**Lab Sample ID: 14I0062-MSD1**  
**Matrix: Soil**  
**Analysis Batch: 14I0062**

**Client Sample ID: GP-1 (1-1.2)**  
**Prep Type: Total**  
**Prep Batch: 14I0062\_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	%Rec	Limits	RPD	Limit
PCB-1016	ND		35.5	31.2		ug/kg dry	☼	87.8	50.6 - 145	4.60	40
PCB-1260	264		35.5	254	M8	ug/kg dry	☼	-28.0	57.6 - 120	2.50	27.4

Surrogate	Matrix Spike Dup %Recovery	Matrix Spike Dup Qualifier	Limits
TCX	69.6		46.2 - 210

TestAmerica Spokane

# QC Sample Results

Client: Geo Engineers - Spokane  
Project/Site: 0504-047-01

TestAmerica Job ID: SXF0197

## Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082 (Continued)

Lab Sample ID: 14I0062-MSD1

Matrix: Soil

Analysis Batch: 14I0062

Client Sample ID: GP-1 (1-1.2)

Prep Type: Total

Prep Batch: 14I0062\_P

<i>Surrogate</i>	<i>Matrix Spike Dup</i>	<i>Matrix Spike Dup</i>	<i>Limits</i>
	<i>%Recovery</i>	<i>Qualifier</i>	
Decachlorobiphenyl	126		65.6 - 186

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# Lab Chronicle

Client: Geo Engineers - Spokane  
Project/Site: 0504-047-01

TestAmerica Job ID: SXF0197

## Client Sample ID: GP-1 (1-1.2)

Lab Sample ID: SXF0197-01

Date Collected: 06/26/14 10:15

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 89.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		1.04	14I0062_P	09/11/14 08:29	IAB	TAL SPK
Total	Analysis	EPA 8082A		2.00	14I0062	09/12/14 10:34	NMI	TAL SPK
Total	Prep	Wet Chem		1.00	14I0097_P	09/11/14 10:45	MS	TAL SPK
Total	Analysis	TA SOP		1.00	14I0097	09/16/14 12:13	MS	TAL SPK

## Client Sample ID: GP-1 (5-5.2)

Lab Sample ID: SXF0197-02

Date Collected: 06/26/14 10:25

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 89.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.935	14I0062_P	09/11/14 08:29	IAB	TAL SPK
Total	Analysis	EPA 8082A		20.0	14I0062	09/12/14 10:55	NMI	TAL SPK

## Client Sample ID: GP-2 (0.5-0.7)

Lab Sample ID: SXF0197-03

Date Collected: 06/26/14 19:15

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 88.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.860	14I0062_P	09/11/14 08:29	IAB	TAL SPK
Total	Analysis	EPA 8082A		40.0	14I0062	09/12/14 11:14	NMI	TAL SPK

## Client Sample ID: GP-2 (5-5.2)

Lab Sample ID: SXF0197-04

Date Collected: 06/26/14 19:25

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 91.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.989	14I0062_P	09/11/14 08:29	IAB	TAL SPK
Total	Analysis	EPA 8082A		10.0	14I0062	09/12/14 11:34	NMI	TAL SPK

## Client Sample ID: GP-3 (0.5-0.7)

Lab Sample ID: SXF0197-05

Date Collected: 06/26/14 19:30

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 93.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.981	14I0062_P	09/11/14 08:29	IAB	TAL SPK
Total	Analysis	EPA 8082A		400	14I0062	09/12/14 14:16	NMI	TAL SPK
Total	Prep	Wet Chem		1.00	14I0128_P	09/19/14 11:15	MS	TAL SPK
Total	Analysis	TA SOP		1.00	14I0128	09/19/14 15:25	CBW	TAL SPK

# Lab Chronicle

Client: Geo Engineers - Spokane  
Project/Site: 0504-047-01

TestAmerica Job ID: SXF0197

**Client Sample ID: GP-3 (4-4.2)**

**Lab Sample ID: SXF0197-06**

**Date Collected: 06/26/14 19:35**

**Matrix: Soil**

**Date Received: 06/27/14 15:50**

**Percent Solids: 90.7**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.965	14I0062_P	09/11/14 08:29	IAB	TAL SPK
Total	Analysis	EPA 8082A		40.0	14I0062	09/12/14 12:16	NMI	TAL SPK

**Laboratory References:**

TAL SPK = TestAmerica Spokane, 11922 East 1st. Avenue, Spokane, WA 99206, TEL (509)924-9200



# Certification Summary

Client: Geo Engineers - Spokane  
Project/Site: 0504-047-01

TestAmerica Job ID: SXF0197

## Laboratory: TestAmerica Spokane

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-071	10-31-14
Washington	State Program	10	C569	01-06-15

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# Method Summary

Client: Geo Engineers - Spokane  
Project/Site: 0504-047-01

TestAmerica Job ID: SXF0197

Method	Method Description	Protocol	Laboratory
EPA 8082A	Polychlorinated Biphenyls by EPA Method 8082		TAL SPK
TA SOP	Conventional Chemistry Parameters by APHA/EPA Methods		TAL SPK

**Protocol References:**

**Laboratory References:**

TAL SPK = TestAmerica Spokane, 11922 East 1st. Avenue, Spokane, WA 99206, TEL (509)924-9200

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# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Geoprobe

Also Report to:

Huckleberry Palmer - hpal@hpal.com  
 Department of Ecology  
 4101 N. Monroe St  
 Spokane, WA 99205  
 509-328-3473

5755 8<sup>th</sup> Street East, Tacoma, WA 98424-1317  
 11922 E. First Ave., Spokane WA 99206-5302  
 9405 SW Nimbus Ave., Beaverton, OR 97008-7145  
 2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119

253-922-2310 FAX 922-5047  
 509-924-9200 FAX 924-9290  
 503-906-9200 FAX 906-9210  
 907-563-9200 FAX 563-9210

<input type="checkbox"/>
<input checked="" type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

## CHAIN OF CUSTODY REPORT

Work Order #: **SXF0197**

CLIENT: <b>GeoEngines</b>		INVOICE TO: <b>Huckleberry Palmer</b>		<b>TURNAROUND REQUEST</b> in Business Days * Organic & Inorganic Analyses <input type="checkbox"/> 10 <input type="checkbox"/> 7 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> <1 STD. Petroleum Hydrocarbon Analyses <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> <1 STD. <input type="checkbox"/> OTHER Specify: * Turnaround Requests less than standard may incur Rush Charges.							
REPORT TO: <b>DLANDERE@geoengines.com</b>		Department of Ecology									
ADDRESS: <b>523 E Second Ave Spokane, WA 99202</b>		4101 N. Monroe St Spokane, WA 99205									
PHONE: <b>509-363-7155</b> FAX:		P.O. NUMBER:									
PROJECT NAME: <b>City Parcel</b>		PRESERVATIVE									
PROJECT NUMBER: <b>0504-047-01</b>											
SAMPLED BY: <b>JML</b>		REQUESTED ANALYSES									
CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME							MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID
1 GP-1 (1-1.2)	6/26/2014 1015							S	2		
2 GP-1 (5-5.2)	6/26/2014 1025							}	}		
3 GP-2 (0.5-0.7)	1915										
4 GP-2 (5-5.2)	1925										
5 GP-3 (0.5-0.7)	1930										
6 GP-3 (4-4.2)	1935										
7 GP-2A (0.5-0.7)	1940										
8 GP-2A (4.5-4.7)	1945										
9 GP-3A (0.5-0.7)	1950										
10 GP-3A (4.5-4.7)	1955										
RELEASED BY: <b>Jen</b>	DATE: <b>6-27-14</b>	RECEIVED BY: <b>Randee Arington</b>	DATE: <b>6/27/14</b>								
PRINT NAME: <b>Huckleberry Palmer</b>	FIRM: <b>Ecology</b>	PRINT NAME: <b>Randee Arington</b>	FIRM: <b>TestAmerica</b>								
RELEASED BY:	DATE:	RECEIVED BY:	DATE:								
PRINT NAME:	FIRM:	PRINT NAME:	FIRM:								
ADDITIONAL REMARKS:			TEMP: <b>57</b>	PAGE <b>1</b> OF <b>2</b>							

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Geoprobe

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Also Report To:

Huckleberry Palmer - hp@huckleberry-wa.gov  
Department of Ecology  
4602 N. Monroe St  
Spokane, WA 99205  
509-328-3433

5755 8th Street East, Tacoma, WA 98424-1317  
11922 E. First Ave., Spokane WA 99206-5302  
9405 SW Nimbus Ave., Beaverton, OR 97008-7145  
2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119

253-922-2310 FAX 922-5047  
509-924-9200 FAX 924-9290  
503-906-9200 FAX 906-9210  
907-563-9200 FAX 563-9210

<input type="checkbox"/>
<input checked="" type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

## CHAIN OF CUSTODY REPORT

Work Order #: **SXFO197**

CLIENT: <b>Geo Services</b>		INVOICE TO: <b>Huckleberry Palmer</b>		<b>TURNAROUND REQUEST</b> in Business Days * Organic & Inorganic Analyses <input type="checkbox"/> 10 <input type="checkbox"/> 7 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> <1 <small>STD.</small> Petroleum Hydrocarbon Analyses <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> <1 <small>STD.</small> <input type="checkbox"/> OTHER Specify: <small>* Turnaround Requests less than standard may incur Rush Charges.</small>			
REPORT TO: <b>D Lander @ geoservices.com</b>		4602 N. Monroe St Spokane, WA 99205					
ADDRESS: <b>523 E Second Ave Spokane, WA 99202</b>		P.O. NUMBER:					
PHONE: <b>509-363-3125</b> FAX:							
PROJECT NAME: <b>City Parcel</b>		PRESERVATIVE					
PROJECT NUMBER: <b>0504-047-01</b>		REQUESTED ANALYSES					
SAMPLED BY: <b>JML</b>							
CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME						
1 GP-3B(05-07)	6/24/2014 2005						
2 GP-2B(0-0.2)	6/26/2014 2000						
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RELEASED BY: <b>[Signature]</b>	DATE: <b>6-22-14</b>	RECEIVED BY: <b>[Signature]</b>	DATE: <b>6-27-14</b>				
PRINT NAME: <b>Huckleberry Palmer</b>	TIME: <b>1200</b>	PRINT NAME: <b>Londre Armitage</b>	TIME: <b>1550</b>				
RELEASED BY:	DATE:	RECEIVED BY:	DATE:				
PRINT NAME:	TIME:	PRINT NAME:	TIME:				
ADDITIONAL REMARKS:				TEMP: <b>5.7</b>	PAGE 2 OF 2		

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TAL-1000 (0612)



**TestAmerica Spokane  
Sample Receipt Form**

Work Order #: <b>SXF0197</b>	Client: <b>Geo Engineers</b>	Project: <b>City Parcel</b>		
Date/Time Received: <b>6/20/14 1550</b>		By: <b>PA</b>		
Samples Delivered By: <input type="checkbox"/> Shipping Service <input type="checkbox"/> Courier <input checked="" type="checkbox"/> Client <input type="checkbox"/> Other:				
List Air Bill Number(s) or Attach a photocopy of the Air Bill:				
Receipt Phase	Yes	No	NA	Comments
Were samples received in a cooler:	X			
Custody Seals are present and intact:			X	
Are CoC documents present:	X			
Necessary signatures:	X			
Thermal Preservation Type: <input type="checkbox"/> Blue Ice <input type="checkbox"/> Gel Ice <input checked="" type="checkbox"/> Real Ice <input type="checkbox"/> Dry Ice <input type="checkbox"/> None <input type="checkbox"/> Other:				
Temperature: <b>5.7</b> °C Thermometer (Circle one Serial #122208348 Keyring IR Serial # 111874910 IR Gun 2) (acceptance criteria 0-6				
Temperature out of range: <input type="checkbox"/> Not enough ice <input type="checkbox"/> Ice melted <input type="checkbox"/> w/in 4hrs of collection <input type="checkbox"/> NA <input type="checkbox"/> Other:				
Log-In Phase	Yes	No	NA	Comments
Date/Time: <b>6/30/14 11:00</b>				By: <b>CS</b>
Are sample labels affixed and completed for each container	X			
Samples containers were received intact:	X			
Do sample IDs match the CoC	X			
Appropriate sample containers were received for tests requested	X			
Are sample volumes adequate for tests requested	X			
Appropriate preservatives were used for the tests requested	X			
pH of inorganic samples checked and is within method specification	X			
Are VOC samples free of bubbles >6mm (1/4" diameter)			X	
Are dissolved parameters field filtered			X	
Do any samples need to be filtered or preserved by the lab		X		
Does this project require quick turnaround analysis		X		
Are there any short hold time tests (see chart below)		X		
Are any samples within 2 days of or past expiration		X		
Was the CoC scanned	X			
Were there Non-conformance issues at login		X		
If yes, was a CAR generated #			X	

24 hours or less	48 hours	7 days
Coliform Bacteria	BOD, Color, MBAS	TDS, TSS, VDS, FDS
Chromium +6	Nitrate/Nitrite	Sulfide
	Orthophosphate	Aqueous Organic Prep

Form No. SP-FORM-SPL-002 12 December 2012

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# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.  
TestAmerica Spokane  
11922 East 1st. Avenue  
Spokane, WA 99206  
Tel: (509)924-9200

TestAmerica Job ID: SXF0198  
Client Project/Site: 0504-047-01  
Client Project Description: City Parcel

For:  
Geo Engineers - Spokane  
523 East Second Ave.  
Spokane, WA 99202

Attn: Dave Lauder



Authorized for release by:  
7/24/2014 2:26:31 PM

Randee Arrington, Project Manager  
(509)924-9200  
[Randee.Arrington@testamericainc.com](mailto:Randee.Arrington@testamericainc.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:  
[www.testamericainc.com](http://www.testamericainc.com)

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

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

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# Sample Summary

Client: Geo Engineers - Spokane  
Project/Site: 0504-047-01

TestAmerica Job ID: SXF0198

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
SXF0198-01	TP-1-1-N	Soil	06/26/14 08:45	06/27/14 15:50
SXF0198-02	TP-1-1-S	Soil	06/26/14 08:46	06/27/14 15:50
SXF0198-03	TP-1-2-N	Soil	06/26/14 08:55	06/27/14 15:50
SXF0198-04	TP-1-2-S	Soil	06/26/14 08:56	06/27/14 15:50
SXF0198-05	TP-1-3-N	Soil	06/26/14 09:10	06/27/14 15:50
SXF0198-06	TP-1-3-S	Soil	06/26/14 09:11	06/27/14 15:50
SXF0198-07	TP-1-4-N	Soil	06/26/14 09:20	06/27/14 15:50
SXF0198-08	TP-1-4-S	Soil	06/26/14 09:21	06/27/14 15:50
SXF0198-09	TP-2-1-N	Soil	06/26/14 10:50	06/27/14 15:50
SXF0198-10	TP-2-1-S	Soil	06/26/14 10:51	06/27/14 15:50
SXF0198-11	TP-2-2-N	Soil	06/26/14 11:01	06/27/14 15:50
SXF0198-12	TP-2-2-S	Soil	06/26/14 11:00	06/27/14 15:50
SXF0198-13	TP-2-3-N	Soil	06/26/14 11:11	06/27/14 15:50
SXF0198-14	TP-2-3-S	Soil	06/26/14 11:10	06/27/14 15:50
SXF0198-15	TP-2-4-N	Soil	06/26/14 11:16	06/27/14 15:50
SXF0198-16	TP-2-4-S	Soil	06/26/14 11:15	06/27/14 15:50
SXF0198-17	TP-3-1-N	Soil	06/26/14 12:01	06/27/14 15:50
SXF0198-18	TP-3-1-S	Soil	06/26/14 12:00	06/27/14 15:50
SXF0198-19	TP-3-2-N	Soil	06/26/14 12:11	06/27/14 15:50
SXF0198-20	TP-3-2-S	Soil	06/26/14 12:10	06/27/14 15:50
SXF0198-21	TP-3-3-N	Soil	06/26/14 12:21	06/27/14 15:50
SXF0198-22	TP-3-3-S	Soil	06/26/14 12:20	06/27/14 15:50
SXF0198-23	TP-3-4-N	Soil	06/26/14 12:30	06/27/14 15:50
SXF0198-24	TP-3-4-S	Soil	06/26/14 12:25	06/27/14 15:50
SXF0198-26	TP-4-1-S	Soil	06/26/14 14:01	06/27/14 15:50
SXF0198-28	TP-4-2-S	Soil	06/26/14 14:06	06/27/14 15:50
SXF0198-30	TP-4-3-S	Soil	06/26/14 14:16	06/27/14 15:50
SXF0198-32	TP-4-4-S	Soil	06/26/14 14:21	06/27/14 15:50
SXF0198-33	TP-5-1-N	Soil	06/26/14 14:56	06/27/14 15:50
SXF0198-34	TP-5-1-S	Soil	06/26/14 14:55	06/27/14 15:50
SXF0198-35	TP-5-2-N	Soil	06/26/14 15:01	06/27/14 15:50
SXF0198-36	TP-5-2-S	Soil	06/26/14 15:00	06/27/14 15:50
SXF0198-37	TP-5-3-N	Soil	06/26/14 15:06	06/27/14 15:50
SXF0198-38	TP-5-3-S	Soil	06/26/14 15:05	06/27/14 15:50
SXF0198-39	TP-5-4-N	Soil	06/26/14 15:11	06/27/14 15:50
SXF0198-40	TP-5-4-S	Soil	06/26/14 15:10	06/27/14 15:50
SXF0198-41	TP-5-5-N	Soil	06/26/14 15:16	06/27/14 15:50
SXF0198-42	TP-5-5-S	Soil	06/26/14 15:15	06/27/14 15:50
SXF0198-46	TP-6-1-S	Soil	06/26/14 16:10	06/27/14 15:50
SXF0198-48	TP-6-2-S	Soil	06/26/14 16:15	06/27/14 15:50
SXF0198-50	TP-6-3-S	Soil	06/26/14 16:20	06/27/14 15:50
SXF0198-52	TP-6-4-S	Soil	06/26/14 16:25	06/27/14 15:50
SXF0198-57	TP-7-2-N	Soil	06/27/14 08:15	06/27/14 15:50
SXF0198-58	TP-7-2-S	Soil	06/27/14 08:16	06/27/14 15:50
SXF0198-59	TP-7-3-N	Soil	06/27/14 08:20	06/27/14 15:50
SXF0198-60	TP-7-3-S	Soil	06/27/14 08:21	06/27/14 15:50
SXF0198-61	TP-7-4-N	Soil	06/27/14 08:30	06/27/14 15:50
SXF0198-62	TP-7-4-S	Soil	06/27/14 08:31	06/27/14 15:50
SXF0198-63	TP-7-5-N	Soil	06/27/14 08:40	06/27/14 15:50
SXF0198-64	TP-7-5-S	Soil	06/27/14 08:41	06/27/14 15:50
SXF0198-68	TP-8-1-S	Soil	06/27/14 07:15	06/27/14 15:50
SXF0198-70	TP-8-2-S	Soil	06/27/14 07:25	06/27/14 15:50
SXF0198-75	TP-7-1-N	Soil	06/27/14 08:11	06/27/14 15:50

TestAmerica Spokane

# Sample Summary

Client: Geo Engineers - Spokane  
Project/Site: 0504-047-01

TestAmerica Job ID: SXF0198

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
SXF0198-76	TP-7-1-S	Soil	06/27/14 08:10	06/27/14 15:50
SXF0198-77	TP-9-1-N	Soil	06/27/14 09:45	06/27/14 15:50
SXF0198-78	TP-9-1-S	Soil	06/27/14 09:46	06/27/14 15:50
SXF0198-79	TP-9-2-N	Soil	06/27/14 09:55	06/27/14 15:50
SXF0198-80	TP-9-2-S	Soil	06/27/14 09:56	06/27/14 15:50
SXF0198-81	TP-9-3-N	Soil	06/27/14 10:00	06/27/14 15:50
SXF0198-82	TP-9-3-S	Soil	06/27/14 10:01	06/27/14 15:50
SXF0198-83	TP-9-4-N	Soil	06/27/14 10:05	06/27/14 15:50
SXF0198-84	TP-9-4-S	Soil	06/27/14 10:06	06/27/14 15:50
SXF0198-AL	TP-13-1-N	Soil	06/27/14 13:30	06/27/14 15:50
SXF0198-AM	TP-13-1-S	Soil	06/27/14 13:31	06/27/14 15:50
SXF0198-AN	TP-13-2-N	Soil	06/27/14 13:35	06/27/14 15:50
SXF0198-AO	TP-13-2-S	Soil	06/27/14 13:36	06/27/14 15:50
SXF0198-AT	TP-14-1-N	Soil	06/27/14 14:00	06/27/14 15:50
SXF0198-AU	TP-14-1-S	Soil	06/27/14 14:01	06/27/14 15:50
SXF0198-AV	TP-14-2-N	Soil	06/27/14 14:05	06/27/14 15:50
SXF0198-AW	TP-14-2-S	Soil	06/27/14 14:06	06/27/14 15:50

TestAmerica Spokane

# Definitions/Glossary

Client: Geo Engineers - Spokane  
Project/Site: 0504-047-01

TestAmerica Job ID: SXF0198

## Qualifiers

### Semivolatiles

Qualifier	Qualifier Description
MHA	Due to high levels of analyte in the sample, the MS/MSD calculation does not provide useful spike recovery information. See Blank Spike (LCS).
M3	Results exceeded the linear range in the MS/MSD and therefore are not available for reporting. The batch was accepted based on acceptable recovery in the Blank Spike (LCS).
Z3	The sample required a dilution due to the nature of the sample matrix. Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.
Z1	Surrogate recovery was above acceptance limits.
Z	Due to sample matrix effects, the surrogate recovery was below the acceptance limits.
ZX	Due to sample matrix effects, the surrogate recovery was outside the acceptance limits.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

# Client Sample Results

Client: Geo Engineers - Spokane  
Project/Site: 0504-047-01

TestAmerica Job ID: SXF0198

## Client Sample ID: TP-1-1-N

Lab Sample ID: SXF0198-01

Date Collected: 06/26/14 08:45

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 92.6

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		20400		ug/kg dry	☼	06/30/14 14:00	07/01/14 11:01	400
PCB-1221	ND		20400		ug/kg dry	☼	06/30/14 14:00	07/01/14 11:01	400
PCB-1232	ND		20400		ug/kg dry	☼	06/30/14 14:00	07/01/14 11:01	400
PCB-1242	ND		20400		ug/kg dry	☼	06/30/14 14:00	07/01/14 11:01	400
PCB-1248	ND		20400		ug/kg dry	☼	06/30/14 14:00	07/01/14 11:01	400
PCB-1254	ND		20400		ug/kg dry	☼	06/30/14 14:00	07/01/14 11:01	400
<b>PCB-1260</b>	<b>46400</b>		20400		ug/kg dry	☼	06/30/14 14:00	07/01/14 11:01	400
PCB-1268	ND		20400		ug/kg dry	☼	06/30/14 14:00	07/01/14 11:01	400
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
TCX		Z3	46.2 - 210				06/30/14 14:00	07/01/14 11:01	400
Decachlorobiphenyl	1580000	Z3	65.6 - 186				06/30/14 14:00	07/01/14 11:01	400

## Client Sample ID: TP-1-1-S

Lab Sample ID: SXF0198-02

Date Collected: 06/26/14 08:46

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 81.6

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		5740		ug/kg dry	☼	06/30/14 14:00	07/01/14 10:13	100
PCB-1221	ND		5740		ug/kg dry	☼	06/30/14 14:00	07/01/14 10:13	100
PCB-1232	ND		5740		ug/kg dry	☼	06/30/14 14:00	07/01/14 10:13	100
PCB-1242	ND		5740		ug/kg dry	☼	06/30/14 14:00	07/01/14 10:13	100
PCB-1248	ND		5740		ug/kg dry	☼	06/30/14 14:00	07/01/14 10:13	100
PCB-1254	ND		5740		ug/kg dry	☼	06/30/14 14:00	07/01/14 10:13	100
<b>PCB-1260</b>	<b>12600</b>		5740		ug/kg dry	☼	06/30/14 14:00	07/01/14 10:13	100
PCB-1268	ND		5740		ug/kg dry	☼	06/30/14 14:00	07/01/14 10:13	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
TCX		Z3	46.2 - 210				06/30/14 14:00	07/01/14 10:13	100
Decachlorobiphenyl	936	Z3	65.6 - 186				06/30/14 14:00	07/01/14 10:13	100

## Client Sample ID: TP-1-2-N

Lab Sample ID: SXF0198-03

Date Collected: 06/26/14 08:55

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 91.4

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		5450		ug/kg dry	☼	06/30/14 14:00	07/01/14 10:29	100
PCB-1221	ND		5450		ug/kg dry	☼	06/30/14 14:00	07/01/14 10:29	100
PCB-1232	ND		5450		ug/kg dry	☼	06/30/14 14:00	07/01/14 10:29	100
PCB-1242	ND		5450		ug/kg dry	☼	06/30/14 14:00	07/01/14 10:29	100
PCB-1248	ND		5450		ug/kg dry	☼	06/30/14 14:00	07/01/14 10:29	100
PCB-1254	ND		5450		ug/kg dry	☼	06/30/14 14:00	07/01/14 10:29	100
<b>PCB-1260</b>	<b>9940</b>		4900		ug/kg dry	☼	06/30/14 14:00	07/01/14 10:29	100
PCB-1268	ND		5450		ug/kg dry	☼	06/30/14 14:00	07/01/14 10:29	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
TCX		Z3	46.2 - 210				06/30/14 14:00	07/01/14 10:29	100
Decachlorobiphenyl	396000	Z3	65.6 - 186				06/30/14 14:00	07/01/14 10:29	100

TestAmerica Spokane



# Client Sample Results

Client: Geo Engineers - Spokane  
Project/Site: 0504-047-01

TestAmerica Job ID: SXF0198

## Client Sample ID: TP-1-2-S

Lab Sample ID: SXF0198-04

Date Collected: 06/26/14 08:56

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 86.5

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		574		ug/kg dry	☼	06/30/14 14:00	07/01/14 10:45	10.0
PCB-1221	ND		574		ug/kg dry	☼	06/30/14 14:00	07/01/14 10:45	10.0
PCB-1232	ND		574		ug/kg dry	☼	06/30/14 14:00	07/01/14 10:45	10.0
PCB-1242	ND		574		ug/kg dry	☼	06/30/14 14:00	07/01/14 10:45	10.0
PCB-1248	ND		574		ug/kg dry	☼	06/30/14 14:00	07/01/14 10:45	10.0
PCB-1254	ND		574		ug/kg dry	☼	06/30/14 14:00	07/01/14 10:45	10.0
<b>PCB-1260</b>	<b>1170</b>		574		ug/kg dry	☼	06/30/14 14:00	07/01/14 10:45	10.0
PCB-1268	ND		574		ug/kg dry	☼	06/30/14 14:00	07/01/14 10:45	10.0
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
TCX	58.4		46.2 - 210				06/30/14 14:00	07/01/14 10:45	10.0
Decachlorobiphenyl	71.9		65.6 - 186				06/30/14 14:00	07/01/14 10:45	10.0

## Client Sample ID: TP-1-3-N

Lab Sample ID: SXF0198-05

Date Collected: 06/26/14 09:10

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 91.9

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		10400		ug/kg dry	☼	07/21/14 10:08	07/22/14 10:39	200
PCB-1221	ND		10400		ug/kg dry	☼	07/21/14 10:08	07/22/14 10:39	200
PCB-1232	ND		10400		ug/kg dry	☼	07/21/14 10:08	07/22/14 10:39	200
PCB-1242	ND		10400		ug/kg dry	☼	07/21/14 10:08	07/22/14 10:39	200
PCB-1248	ND		10400		ug/kg dry	☼	07/21/14 10:08	07/22/14 10:39	200
PCB-1254	ND		10400		ug/kg dry	☼	07/21/14 10:08	07/22/14 10:39	200
<b>PCB-1260</b>	<b>24500</b>		10400		ug/kg dry	☼	07/21/14 10:08	07/22/14 10:39	200
PCB-1268	ND		10400		ug/kg dry	☼	07/21/14 10:08	07/22/14 10:39	200
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
TCX		Z3	46.2 - 210				07/21/14 10:08	07/22/14 10:39	200
Decachlorobiphenyl		Z3	65.6 - 186				07/21/14 10:08	07/22/14 10:39	200

## Client Sample ID: TP-1-3-S

Lab Sample ID: SXF0198-06

Date Collected: 06/26/14 09:11

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 92.1

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		26700		ug/kg dry	☼	07/21/14 10:08	07/22/14 10:55	500
PCB-1221	ND		26700		ug/kg dry	☼	07/21/14 10:08	07/22/14 10:55	500
PCB-1232	ND		26700		ug/kg dry	☼	07/21/14 10:08	07/22/14 10:55	500
PCB-1242	ND		26700		ug/kg dry	☼	07/21/14 10:08	07/22/14 10:55	500
PCB-1248	ND		26700		ug/kg dry	☼	07/21/14 10:08	07/22/14 10:55	500
PCB-1254	ND		26700		ug/kg dry	☼	07/21/14 10:08	07/22/14 10:55	500
<b>PCB-1260</b>	<b>58500</b>		26700		ug/kg dry	☼	07/21/14 10:08	07/22/14 10:55	500
PCB-1268	ND		26700		ug/kg dry	☼	07/21/14 10:08	07/22/14 10:55	500
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
TCX		Z3	46.2 - 210				07/21/14 10:08	07/22/14 10:55	500
Decachlorobiphenyl	1780000	Z3	65.6 - 186				07/21/14 10:08	07/22/14 10:55	500

TestAmerica Spokane

# Client Sample Results

Client: Geo Engineers - Spokane  
Project/Site: 0504-047-01

TestAmerica Job ID: SXF0198

## Client Sample ID: TP-1-4-N

Lab Sample ID: SXF0198-07

Date Collected: 06/26/14 09:20

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 90.9

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		259		ug/kg dry	☼	07/21/14 10:08	07/22/14 11:10	5.00
PCB-1221	ND		259		ug/kg dry	☼	07/21/14 10:08	07/22/14 11:10	5.00
PCB-1232	ND		259		ug/kg dry	☼	07/21/14 10:08	07/22/14 11:10	5.00
PCB-1242	ND		259		ug/kg dry	☼	07/21/14 10:08	07/22/14 11:10	5.00
PCB-1248	ND		259		ug/kg dry	☼	07/21/14 10:08	07/22/14 11:10	5.00
PCB-1254	ND		259		ug/kg dry	☼	07/21/14 10:08	07/22/14 11:10	5.00
<b>PCB-1260</b>	<b>484</b>		259		ug/kg dry	☼	07/21/14 10:08	07/22/14 11:10	5.00
PCB-1268	ND		259		ug/kg dry	☼	07/21/14 10:08	07/22/14 11:10	5.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	77.3		46.2 - 210				07/21/14 10:08	07/22/14 11:10	5.00
Decachlorobiphenyl	80.8		65.6 - 186				07/21/14 10:08	07/22/14 11:10	5.00

## Client Sample ID: TP-1-4-S

Lab Sample ID: SXF0198-08

Date Collected: 06/26/14 09:21

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 95.2

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		50.9		ug/kg dry	☼	07/21/14 10:08	07/22/14 10:05	1.00
PCB-1221	ND		50.9		ug/kg dry	☼	07/21/14 10:08	07/22/14 10:05	1.00
PCB-1232	ND		50.9		ug/kg dry	☼	07/21/14 10:08	07/22/14 10:05	1.00
PCB-1242	ND		50.9		ug/kg dry	☼	07/21/14 10:08	07/22/14 10:05	1.00
PCB-1248	ND		50.9		ug/kg dry	☼	07/21/14 10:08	07/22/14 10:05	1.00
PCB-1254	ND		50.9		ug/kg dry	☼	07/21/14 10:08	07/22/14 10:05	1.00
PCB-1260	ND		50.9		ug/kg dry	☼	07/21/14 10:08	07/22/14 10:05	1.00
PCB-1268	ND		50.9		ug/kg dry	☼	07/21/14 10:08	07/22/14 10:05	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	88.7		46.2 - 210				07/21/14 10:08	07/22/14 10:05	1.00
Decachlorobiphenyl	83.8		65.6 - 186				07/21/14 10:08	07/22/14 10:05	1.00

## Client Sample ID: TP-2-1-N

Lab Sample ID: SXF0198-09

Date Collected: 06/26/14 10:50

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 90.9

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		50.6		ug/kg dry	☼	06/30/14 14:00	06/30/14 18:37	1.00
PCB-1221	ND		50.6		ug/kg dry	☼	06/30/14 14:00	06/30/14 18:37	1.00
PCB-1232	ND		50.6		ug/kg dry	☼	06/30/14 14:00	06/30/14 18:37	1.00
PCB-1242	ND		50.6		ug/kg dry	☼	06/30/14 14:00	06/30/14 18:37	1.00
PCB-1248	ND		50.6		ug/kg dry	☼	06/30/14 14:00	06/30/14 18:37	1.00
PCB-1254	ND		50.6		ug/kg dry	☼	06/30/14 14:00	06/30/14 18:37	1.00
PCB-1260	ND		50.6		ug/kg dry	☼	06/30/14 14:00	06/30/14 18:37	1.00
PCB-1268	ND		50.6		ug/kg dry	☼	06/30/14 14:00	06/30/14 18:37	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	91.7		46.2 - 210				06/30/14 14:00	06/30/14 18:37	1.00
Decachlorobiphenyl	104		65.6 - 186				06/30/14 14:00	06/30/14 18:37	1.00

TestAmerica Spokane

# Client Sample Results

Client: Geo Engineers - Spokane  
Project/Site: 0504-047-01

TestAmerica Job ID: SXF0198

## Client Sample ID: TP-2-1-S

Lab Sample ID: SXF0198-10

Date Collected: 06/26/14 10:51

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 88.9

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		54.3		ug/kg dry	☼	06/30/14 14:00	06/30/14 18:53	1.00
PCB-1221	ND		54.3		ug/kg dry	☼	06/30/14 14:00	06/30/14 18:53	1.00
PCB-1232	ND		54.3		ug/kg dry	☼	06/30/14 14:00	06/30/14 18:53	1.00
PCB-1242	ND		54.3		ug/kg dry	☼	06/30/14 14:00	06/30/14 18:53	1.00
PCB-1248	ND		54.3		ug/kg dry	☼	06/30/14 14:00	06/30/14 18:53	1.00
PCB-1254	ND		54.3		ug/kg dry	☼	06/30/14 14:00	06/30/14 18:53	1.00
PCB-1260	ND		54.3		ug/kg dry	☼	06/30/14 14:00	06/30/14 18:53	1.00
PCB-1268	ND		54.3		ug/kg dry	☼	06/30/14 14:00	06/30/14 18:53	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
TCX	87.8		46.2 - 210				06/30/14 14:00	06/30/14 18:53	1.00
Decachlorobiphenyl	105		65.6 - 186				06/30/14 14:00	06/30/14 18:53	1.00

## Client Sample ID: TP-2-2-N

Lab Sample ID: SXF0198-11

Date Collected: 06/26/14 11:01

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 90.5

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		542		ug/kg dry	☼	07/01/14 08:46	07/02/14 11:40	10.0
PCB-1221	ND		542		ug/kg dry	☼	07/01/14 08:46	07/02/14 11:40	10.0
PCB-1232	ND		542		ug/kg dry	☼	07/01/14 08:46	07/02/14 11:40	10.0
PCB-1242	ND		542		ug/kg dry	☼	07/01/14 08:46	07/02/14 11:40	10.0
PCB-1248	ND		542		ug/kg dry	☼	07/01/14 08:46	07/02/14 11:40	10.0
PCB-1254	ND		542		ug/kg dry	☼	07/01/14 08:46	07/02/14 11:40	10.0
<b>PCB-1260</b>	<b>1680</b>		542		ug/kg dry	☼	07/01/14 08:46	07/02/14 11:40	10.0
PCB-1268	ND		542		ug/kg dry	☼	07/01/14 08:46	07/02/14 11:40	10.0
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
TCX	125		46.2 - 210				07/01/14 08:46	07/02/14 11:40	10.0
Decachlorobiphenyl	190	Z1	65.6 - 186				07/01/14 08:46	07/02/14 11:40	10.0

## Client Sample ID: TP-2-2-S

Lab Sample ID: SXF0198-12

Date Collected: 06/26/14 11:00

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 88.1

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>PCB-1016</b>	<b>1160</b>		250		ug/kg dry	☼	07/01/14 08:46	07/02/14 10:48	5.00
PCB-1221	ND		250		ug/kg dry	☼	07/01/14 08:46	07/02/14 10:48	5.00
PCB-1232	ND		250		ug/kg dry	☼	07/01/14 08:46	07/02/14 10:48	5.00
PCB-1242	ND		250		ug/kg dry	☼	07/01/14 08:46	07/02/14 10:48	5.00
PCB-1248	ND		250		ug/kg dry	☼	07/01/14 08:46	07/02/14 10:48	5.00
PCB-1254	ND		250		ug/kg dry	☼	07/01/14 08:46	07/02/14 10:48	5.00
<b>PCB-1260</b>	<b>788</b>		250		ug/kg dry	☼	07/01/14 08:46	07/02/14 10:48	5.00
PCB-1268	ND		250		ug/kg dry	☼	07/01/14 08:46	07/02/14 10:48	5.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
TCX	81.7		46.2 - 210				07/01/14 08:46	07/02/14 10:48	5.00
Decachlorobiphenyl	116		65.6 - 186				07/01/14 08:46	07/02/14 10:48	5.00

TestAmerica Spokane

# Client Sample Results

Client: Geo Engineers - Spokane  
Project/Site: 0504-047-01

TestAmerica Job ID: SXF0198

**Client Sample ID: TP-2-3-N**

**Lab Sample ID: SXF0198-13**

Date Collected: 06/26/14 11:11

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 88.8

**Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		44.9		ug/kg dry	☼	07/21/14 10:08	07/22/14 12:42	1.00
PCB-1221	ND		44.9		ug/kg dry	☼	07/21/14 10:08	07/22/14 12:42	1.00
PCB-1232	ND		44.9		ug/kg dry	☼	07/21/14 10:08	07/22/14 12:42	1.00
PCB-1242	ND		44.9		ug/kg dry	☼	07/21/14 10:08	07/22/14 12:42	1.00
PCB-1248	ND		44.9		ug/kg dry	☼	07/21/14 10:08	07/22/14 12:42	1.00
PCB-1254	ND		44.9		ug/kg dry	☼	07/21/14 10:08	07/22/14 12:42	1.00
<b>PCB-1260</b>	<b>76.6</b>		44.9		ug/kg dry	☼	07/21/14 10:08	07/22/14 12:42	1.00
PCB-1268	ND		44.9		ug/kg dry	☼	07/21/14 10:08	07/22/14 12:42	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	152		46.2 - 210				07/21/14 10:08	07/22/14 12:42	1.00
Decachlorobiphenyl	149		65.6 - 186				07/21/14 10:08	07/22/14 12:42	1.00

**Client Sample ID: TP-2-3-S**

**Lab Sample ID: SXF0198-14**

Date Collected: 06/26/14 11:10

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 89.6

**Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		2090		ug/kg dry	☼	07/21/14 10:08	07/22/14 17:01	50.0
PCB-1221	ND		2090		ug/kg dry	☼	07/21/14 10:08	07/22/14 17:01	50.0
PCB-1232	ND		2090		ug/kg dry	☼	07/21/14 10:08	07/22/14 17:01	50.0
PCB-1242	ND		2090		ug/kg dry	☼	07/21/14 10:08	07/22/14 17:01	50.0
PCB-1248	ND		2090		ug/kg dry	☼	07/21/14 10:08	07/22/14 17:01	50.0
PCB-1254	ND		2090		ug/kg dry	☼	07/21/14 10:08	07/22/14 17:01	50.0
<b>PCB-1260</b>	<b>2600</b>		2090		ug/kg dry	☼	07/21/14 10:08	07/22/14 17:01	50.0
PCB-1268	ND		2090		ug/kg dry	☼	07/21/14 10:08	07/22/14 17:01	50.0
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	510	Z3	46.2 - 210				07/21/14 10:08	07/22/14 17:01	50.0
Decachlorobiphenyl	421	Z3	65.6 - 186				07/21/14 10:08	07/22/14 17:01	50.0

**Client Sample ID: TP-2-4-N**

**Lab Sample ID: SXF0198-15**

Date Collected: 06/26/14 11:16

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 91.7

**Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		218		ug/kg dry	☼	07/21/14 10:08	07/22/14 17:17	5.00
PCB-1221	ND		218		ug/kg dry	☼	07/21/14 10:08	07/22/14 17:17	5.00
PCB-1232	ND		218		ug/kg dry	☼	07/21/14 10:08	07/22/14 17:17	5.00
PCB-1242	ND		218		ug/kg dry	☼	07/21/14 10:08	07/22/14 17:17	5.00
PCB-1248	ND		218		ug/kg dry	☼	07/21/14 10:08	07/22/14 17:17	5.00
PCB-1254	ND		218		ug/kg dry	☼	07/21/14 10:08	07/22/14 17:17	5.00
<b>PCB-1260</b>	<b>395</b>		218		ug/kg dry	☼	07/21/14 10:08	07/22/14 17:17	5.00
PCB-1268	ND		218		ug/kg dry	☼	07/21/14 10:08	07/22/14 17:17	5.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	96.2		46.2 - 210				07/21/14 10:08	07/22/14 17:17	5.00
Decachlorobiphenyl	142		65.6 - 186				07/21/14 10:08	07/22/14 17:17	5.00

TestAmerica Spokane

# Client Sample Results

Client: Geo Engineers - Spokane  
Project/Site: 0504-047-01

TestAmerica Job ID: SXF0198

## Client Sample ID: TP-2-4-S

Lab Sample ID: SXF0198-16

Date Collected: 06/26/14 11:15

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 92

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		52.6		ug/kg dry	☼	07/21/14 10:08	07/22/14 15:10	1.00
PCB-1221	ND		52.6		ug/kg dry	☼	07/21/14 10:08	07/22/14 15:10	1.00
PCB-1232	ND		52.6		ug/kg dry	☼	07/21/14 10:08	07/22/14 15:10	1.00
PCB-1242	ND		52.6		ug/kg dry	☼	07/21/14 10:08	07/22/14 15:10	1.00
PCB-1248	ND		52.6		ug/kg dry	☼	07/21/14 10:08	07/22/14 15:10	1.00
PCB-1254	ND		52.6		ug/kg dry	☼	07/21/14 10:08	07/22/14 15:10	1.00
<b>PCB-1260</b>	<b>185</b>		52.6		ug/kg dry	☼	07/21/14 10:08	07/22/14 15:10	1.00
PCB-1268	ND		52.6		ug/kg dry	☼	07/21/14 10:08	07/22/14 15:10	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
TCX	99.5		46.2 - 210				07/21/14 10:08	07/22/14 15:10	1.00
Decachlorobiphenyl	124		65.6 - 186				07/21/14 10:08	07/22/14 15:10	1.00

## Client Sample ID: TP-3-1-N

Lab Sample ID: SXF0198-17

Date Collected: 06/26/14 12:01

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 91.7

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		52.2		ug/kg dry	☼	07/01/14 08:46	07/01/14 17:54	1.00
PCB-1221	ND		52.2		ug/kg dry	☼	07/01/14 08:46	07/01/14 17:54	1.00
PCB-1232	ND		52.2		ug/kg dry	☼	07/01/14 08:46	07/01/14 17:54	1.00
PCB-1242	ND		52.2		ug/kg dry	☼	07/01/14 08:46	07/01/14 17:54	1.00
PCB-1248	ND		52.2		ug/kg dry	☼	07/01/14 08:46	07/01/14 17:54	1.00
PCB-1254	ND		52.2		ug/kg dry	☼	07/01/14 08:46	07/01/14 17:54	1.00
<b>PCB-1260</b>	<b>87.1</b>		52.2		ug/kg dry	☼	07/01/14 08:46	07/01/14 17:54	1.00
PCB-1268	ND		52.2		ug/kg dry	☼	07/01/14 08:46	07/01/14 17:54	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
TCX	87.0		46.2 - 210				07/01/14 08:46	07/01/14 17:54	1.00
Decachlorobiphenyl	112		65.6 - 186				07/01/14 08:46	07/01/14 17:54	1.00

## Client Sample ID: TP-3-1-S

Lab Sample ID: SXF0198-18

Date Collected: 06/26/14 12:00

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 89.3

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		53.8		ug/kg dry	☼	07/01/14 08:46	07/01/14 18:10	1.00
PCB-1221	ND		53.8		ug/kg dry	☼	07/01/14 08:46	07/01/14 18:10	1.00
PCB-1232	ND		53.8		ug/kg dry	☼	07/01/14 08:46	07/01/14 18:10	1.00
PCB-1242	ND		53.8		ug/kg dry	☼	07/01/14 08:46	07/01/14 18:10	1.00
PCB-1248	ND		53.8		ug/kg dry	☼	07/01/14 08:46	07/01/14 18:10	1.00
PCB-1254	ND		53.8		ug/kg dry	☼	07/01/14 08:46	07/01/14 18:10	1.00
<b>PCB-1260</b>	<b>97.5</b>		53.8		ug/kg dry	☼	07/01/14 08:46	07/01/14 18:10	1.00
PCB-1268	ND		53.8		ug/kg dry	☼	07/01/14 08:46	07/01/14 18:10	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
TCX	65.5		46.2 - 210				07/01/14 08:46	07/01/14 18:10	1.00
Decachlorobiphenyl	104		65.6 - 186				07/01/14 08:46	07/01/14 18:10	1.00

TestAmerica Spokane

# Client Sample Results

Client: Geo Engineers - Spokane  
Project/Site: 0504-047-01

TestAmerica Job ID: SXF0198

## Client Sample ID: TP-3-2-N

Lab Sample ID: SXF0198-19

Date Collected: 06/26/14 12:11

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 90.6

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		50.3		ug/kg dry	☼	07/01/14 08:46	07/01/14 18:25	1.00
PCB-1221	ND		50.3		ug/kg dry	☼	07/01/14 08:46	07/01/14 18:25	1.00
PCB-1232	ND		50.3		ug/kg dry	☼	07/01/14 08:46	07/01/14 18:25	1.00
PCB-1242	ND		50.3		ug/kg dry	☼	07/01/14 08:46	07/01/14 18:25	1.00
PCB-1248	ND		50.3		ug/kg dry	☼	07/01/14 08:46	07/01/14 18:25	1.00
PCB-1254	ND		50.3		ug/kg dry	☼	07/01/14 08:46	07/01/14 18:25	1.00
PCB-1260	ND		50.3		ug/kg dry	☼	07/01/14 08:46	07/01/14 18:25	1.00
PCB-1268	ND		50.3		ug/kg dry	☼	07/01/14 08:46	07/01/14 18:25	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	85.5		46.2 - 210				07/01/14 08:46	07/01/14 18:25	1.00
Decachlorobiphenyl	112		65.6 - 186				07/01/14 08:46	07/01/14 18:25	1.00

## Client Sample ID: TP-3-2-S

Lab Sample ID: SXF0198-20

Date Collected: 06/26/14 12:10

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 89.1

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		52.5		ug/kg dry	☼	07/01/14 08:46	07/01/14 18:57	1.00
PCB-1221	ND		52.5		ug/kg dry	☼	07/01/14 08:46	07/01/14 18:57	1.00
PCB-1232	ND		52.5		ug/kg dry	☼	07/01/14 08:46	07/01/14 18:57	1.00
PCB-1242	ND		52.5		ug/kg dry	☼	07/01/14 08:46	07/01/14 18:57	1.00
PCB-1248	ND		52.5		ug/kg dry	☼	07/01/14 08:46	07/01/14 18:57	1.00
PCB-1254	ND		52.5		ug/kg dry	☼	07/01/14 08:46	07/01/14 18:57	1.00
PCB-1260	ND		52.5		ug/kg dry	☼	07/01/14 08:46	07/01/14 18:57	1.00
PCB-1268	ND		52.5		ug/kg dry	☼	07/01/14 08:46	07/01/14 18:57	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	86.6		46.2 - 210				07/01/14 08:46	07/01/14 18:57	1.00
Decachlorobiphenyl	109		65.6 - 186				07/01/14 08:46	07/01/14 18:57	1.00

## Client Sample ID: TP-3-3-N

Lab Sample ID: SXF0198-21

Date Collected: 06/26/14 12:21

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 87.4

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		1090		ug/kg dry	☼	07/01/14 08:46	07/02/14 11:24	20.0
PCB-1221	ND		1090		ug/kg dry	☼	07/01/14 08:46	07/02/14 11:24	20.0
PCB-1232	ND		1090		ug/kg dry	☼	07/01/14 08:46	07/02/14 11:24	20.0
PCB-1242	ND		1090		ug/kg dry	☼	07/01/14 08:46	07/02/14 11:24	20.0
PCB-1248	ND		1090		ug/kg dry	☼	07/01/14 08:46	07/02/14 11:24	20.0
PCB-1254	ND		1090		ug/kg dry	☼	07/01/14 08:46	07/02/14 11:24	20.0
<b>PCB-1260</b>	<b>2220</b>		1090		ug/kg dry	☼	07/01/14 08:46	07/02/14 11:24	20.0
PCB-1268	ND		1090		ug/kg dry	☼	07/01/14 08:46	07/02/14 11:24	20.0
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	31.5	Z3	46.2 - 210				07/01/14 08:46	07/02/14 11:24	20.0
Decachlorobiphenyl	6.00	Z3	65.6 - 186				07/01/14 08:46	07/02/14 11:24	20.0

TestAmerica Spokane

# Client Sample Results

Client: Geo Engineers - Spokane  
Project/Site: 0504-047-01

TestAmerica Job ID: SXF0198

## Client Sample ID: TP-3-3-S

Lab Sample ID: SXF0198-22

Date Collected: 06/26/14 12:20

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 88.9

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		53.1		ug/kg dry	☼	07/01/14 08:46	07/01/14 19:28	1.00
PCB-1221	ND		53.1		ug/kg dry	☼	07/01/14 08:46	07/01/14 19:28	1.00
PCB-1232	ND		53.1		ug/kg dry	☼	07/01/14 08:46	07/01/14 19:28	1.00
PCB-1242	ND		53.1		ug/kg dry	☼	07/01/14 08:46	07/01/14 19:28	1.00
PCB-1248	ND		53.1		ug/kg dry	☼	07/01/14 08:46	07/01/14 19:28	1.00
PCB-1254	ND		53.1		ug/kg dry	☼	07/01/14 08:46	07/01/14 19:28	1.00
<b>PCB-1260</b>	<b>287</b>		53.1		ug/kg dry	☼	07/01/14 08:46	07/01/14 19:28	1.00
PCB-1268	ND		53.1		ug/kg dry	☼	07/01/14 08:46	07/01/14 19:28	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	66.6		46.2 - 210				07/01/14 08:46	07/01/14 19:28	1.00
Decachlorobiphenyl	113		65.6 - 186				07/01/14 08:46	07/01/14 19:28	1.00

## Client Sample ID: TP-3-4-N

Lab Sample ID: SXF0198-23

Date Collected: 06/26/14 12:30

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 91.7

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		50.1		ug/kg dry	☼	07/01/14 08:46	07/01/14 19:44	1.00
PCB-1221	ND		50.1		ug/kg dry	☼	07/01/14 08:46	07/01/14 19:44	1.00
PCB-1232	ND		50.1		ug/kg dry	☼	07/01/14 08:46	07/01/14 19:44	1.00
PCB-1242	ND		50.1		ug/kg dry	☼	07/01/14 08:46	07/01/14 19:44	1.00
PCB-1248	ND		50.1		ug/kg dry	☼	07/01/14 08:46	07/01/14 19:44	1.00
PCB-1254	ND		50.1		ug/kg dry	☼	07/01/14 08:46	07/01/14 19:44	1.00
<b>PCB-1260</b>	<b>92.6</b>		50.1		ug/kg dry	☼	07/01/14 08:46	07/01/14 19:44	1.00
PCB-1268	ND		50.1		ug/kg dry	☼	07/01/14 08:46	07/01/14 19:44	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	88.7		46.2 - 210				07/01/14 08:46	07/01/14 19:44	1.00
Decachlorobiphenyl	114		65.6 - 186				07/01/14 08:46	07/01/14 19:44	1.00

## Client Sample ID: TP-3-4-S

Lab Sample ID: SXF0198-24

Date Collected: 06/26/14 12:25

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 92.5

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		51.8		ug/kg dry	☼	07/01/14 08:46	07/02/14 10:16	1.00
PCB-1221	ND		51.8		ug/kg dry	☼	07/01/14 08:46	07/02/14 10:16	1.00
PCB-1232	ND		51.8		ug/kg dry	☼	07/01/14 08:46	07/02/14 10:16	1.00
PCB-1242	ND		51.8		ug/kg dry	☼	07/01/14 08:46	07/02/14 10:16	1.00
PCB-1248	ND		51.8		ug/kg dry	☼	07/01/14 08:46	07/02/14 10:16	1.00
PCB-1254	ND		51.8		ug/kg dry	☼	07/01/14 08:46	07/02/14 10:16	1.00
PCB-1260	ND		51.8		ug/kg dry	☼	07/01/14 08:46	07/02/14 10:16	1.00
PCB-1268	ND		51.8		ug/kg dry	☼	07/01/14 08:46	07/02/14 10:16	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	88.4		46.2 - 210				07/01/14 08:46	07/02/14 10:16	1.00
Decachlorobiphenyl	116		65.6 - 186				07/01/14 08:46	07/02/14 10:16	1.00

TestAmerica Spokane

# Client Sample Results

Client: Geo Engineers - Spokane  
Project/Site: 0504-047-01

TestAmerica Job ID: SXF0198

## Client Sample ID: TP-4-1-S

Lab Sample ID: SXF0198-26

Date Collected: 06/26/14 14:01

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 88.8

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		54.8		ug/kg dry	☼	07/01/14 08:46	07/01/14 20:16	1.00
PCB-1221	ND		54.8		ug/kg dry	☼	07/01/14 08:46	07/01/14 20:16	1.00
PCB-1232	ND		54.8		ug/kg dry	☼	07/01/14 08:46	07/01/14 20:16	1.00
PCB-1242	ND		54.8		ug/kg dry	☼	07/01/14 08:46	07/01/14 20:16	1.00
PCB-1248	ND		54.8		ug/kg dry	☼	07/01/14 08:46	07/01/14 20:16	1.00
PCB-1254	ND		54.8		ug/kg dry	☼	07/01/14 08:46	07/01/14 20:16	1.00
PCB-1260	ND		54.8		ug/kg dry	☼	07/01/14 08:46	07/01/14 20:16	1.00
PCB-1268	ND		54.8		ug/kg dry	☼	07/01/14 08:46	07/01/14 20:16	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	86.0		46.2 - 210				07/01/14 08:46	07/01/14 20:16	1.00
Decachlorobiphenyl	109		65.6 - 186				07/01/14 08:46	07/01/14 20:16	1.00

## Client Sample ID: TP-4-2-S

Lab Sample ID: SXF0198-28

Date Collected: 06/26/14 14:06

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 90.7

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		48.5		ug/kg dry	☼	07/01/14 08:46	07/01/14 20:32	1.00
PCB-1221	ND		48.5		ug/kg dry	☼	07/01/14 08:46	07/01/14 20:32	1.00
PCB-1232	ND		48.5		ug/kg dry	☼	07/01/14 08:46	07/01/14 20:32	1.00
PCB-1242	ND		48.5		ug/kg dry	☼	07/01/14 08:46	07/01/14 20:32	1.00
PCB-1248	ND		48.5		ug/kg dry	☼	07/01/14 08:46	07/01/14 20:32	1.00
PCB-1254	ND		48.5		ug/kg dry	☼	07/01/14 08:46	07/01/14 20:32	1.00
PCB-1260	ND		48.5		ug/kg dry	☼	07/01/14 08:46	07/01/14 20:32	1.00
PCB-1268	ND		48.5		ug/kg dry	☼	07/01/14 08:46	07/01/14 20:32	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	96.9		46.2 - 210				07/01/14 08:46	07/01/14 20:32	1.00
Decachlorobiphenyl	116		65.6 - 186				07/01/14 08:46	07/01/14 20:32	1.00

## Client Sample ID: TP-4-3-S

Lab Sample ID: SXF0198-30

Date Collected: 06/26/14 14:16

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 93.6

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		42.4		ug/kg dry	☼	07/21/14 10:08	07/22/14 13:13	1.00
PCB-1221	ND		42.4		ug/kg dry	☼	07/21/14 10:08	07/22/14 13:13	1.00
PCB-1232	ND		42.4		ug/kg dry	☼	07/21/14 10:08	07/22/14 13:13	1.00
PCB-1242	ND		42.4		ug/kg dry	☼	07/21/14 10:08	07/22/14 13:13	1.00
PCB-1248	ND		42.4		ug/kg dry	☼	07/21/14 10:08	07/22/14 13:13	1.00
PCB-1254	ND		42.4		ug/kg dry	☼	07/21/14 10:08	07/22/14 13:13	1.00
PCB-1260	ND		42.4		ug/kg dry	☼	07/21/14 10:08	07/22/14 13:13	1.00
PCB-1268	ND		42.4		ug/kg dry	☼	07/21/14 10:08	07/22/14 13:13	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	92.2		46.2 - 210				07/21/14 10:08	07/22/14 13:13	1.00
Decachlorobiphenyl	102		65.6 - 186				07/21/14 10:08	07/22/14 13:13	1.00

TestAmerica Spokane



# Client Sample Results

Client: Geo Engineers - Spokane  
Project/Site: 0504-047-01

TestAmerica Job ID: SXF0198

## Client Sample ID: TP-4-4-S

Lab Sample ID: SXF0198-32

Date Collected: 06/26/14 14:21

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 94.6

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		51.4		ug/kg dry	☼	07/21/14 10:08	07/22/14 13:29	1.00
PCB-1221	ND		51.4		ug/kg dry	☼	07/21/14 10:08	07/22/14 13:29	1.00
PCB-1232	ND		51.4		ug/kg dry	☼	07/21/14 10:08	07/22/14 13:29	1.00
PCB-1242	ND		51.4		ug/kg dry	☼	07/21/14 10:08	07/22/14 13:29	1.00
PCB-1248	ND		51.4		ug/kg dry	☼	07/21/14 10:08	07/22/14 13:29	1.00
PCB-1254	ND		51.4		ug/kg dry	☼	07/21/14 10:08	07/22/14 13:29	1.00
PCB-1260	ND		51.4		ug/kg dry	☼	07/21/14 10:08	07/22/14 13:29	1.00
PCB-1268	ND		51.4		ug/kg dry	☼	07/21/14 10:08	07/22/14 13:29	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	94.5		46.2 - 210				07/21/14 10:08	07/22/14 13:29	1.00
Decachlorobiphenyl	104		65.6 - 186				07/21/14 10:08	07/22/14 13:29	1.00

## Client Sample ID: TP-5-1-N

Lab Sample ID: SXF0198-33

Date Collected: 06/26/14 14:56

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 92.6

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		52.6		ug/kg dry	☼	07/01/14 08:46	07/01/14 20:47	1.00
PCB-1221	ND		52.6		ug/kg dry	☼	07/01/14 08:46	07/01/14 20:47	1.00
PCB-1232	ND		52.6		ug/kg dry	☼	07/01/14 08:46	07/01/14 20:47	1.00
PCB-1242	ND		52.6		ug/kg dry	☼	07/01/14 08:46	07/01/14 20:47	1.00
PCB-1248	ND		52.6		ug/kg dry	☼	07/01/14 08:46	07/01/14 20:47	1.00
PCB-1254	ND		52.6		ug/kg dry	☼	07/01/14 08:46	07/01/14 20:47	1.00
PCB-1260	ND		52.6		ug/kg dry	☼	07/01/14 08:46	07/01/14 20:47	1.00
PCB-1268	ND		52.6		ug/kg dry	☼	07/01/14 08:46	07/01/14 20:47	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	69.4		46.2 - 210				07/01/14 08:46	07/01/14 20:47	1.00
Decachlorobiphenyl	107		65.6 - 186				07/01/14 08:46	07/01/14 20:47	1.00

## Client Sample ID: TP-5-1-S

Lab Sample ID: SXF0198-34

Date Collected: 06/26/14 14:55

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 89.3

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		50.6		ug/kg dry	☼	07/01/14 08:46	07/01/14 21:03	1.00
PCB-1221	ND		50.6		ug/kg dry	☼	07/01/14 08:46	07/01/14 21:03	1.00
PCB-1232	ND		50.6		ug/kg dry	☼	07/01/14 08:46	07/01/14 21:03	1.00
PCB-1242	ND		50.6		ug/kg dry	☼	07/01/14 08:46	07/01/14 21:03	1.00
PCB-1248	ND		50.6		ug/kg dry	☼	07/01/14 08:46	07/01/14 21:03	1.00
PCB-1254	ND		50.6		ug/kg dry	☼	07/01/14 08:46	07/01/14 21:03	1.00
PCB-1260	ND		50.6		ug/kg dry	☼	07/01/14 08:46	07/01/14 21:03	1.00
PCB-1268	ND		50.6		ug/kg dry	☼	07/01/14 08:46	07/01/14 21:03	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	47.7		46.2 - 210				07/01/14 08:46	07/01/14 21:03	1.00
Decachlorobiphenyl	87.2		65.6 - 186				07/01/14 08:46	07/01/14 21:03	1.00

TestAmerica Spokane

# Client Sample Results

Client: Geo Engineers - Spokane  
Project/Site: 0504-047-01

TestAmerica Job ID: SXF0198

## Client Sample ID: TP-5-2-N

Lab Sample ID: SXF0198-35

Date Collected: 06/26/14 15:01

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 89.5

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		54.6		ug/kg dry	☼	07/01/14 08:46	07/01/14 21:19	1.00
PCB-1221	ND		54.6		ug/kg dry	☼	07/01/14 08:46	07/01/14 21:19	1.00
PCB-1232	ND		54.6		ug/kg dry	☼	07/01/14 08:46	07/01/14 21:19	1.00
PCB-1242	ND		54.6		ug/kg dry	☼	07/01/14 08:46	07/01/14 21:19	1.00
PCB-1248	ND		54.6		ug/kg dry	☼	07/01/14 08:46	07/01/14 21:19	1.00
PCB-1254	ND		54.6		ug/kg dry	☼	07/01/14 08:46	07/01/14 21:19	1.00
PCB-1260	ND		54.6		ug/kg dry	☼	07/01/14 08:46	07/01/14 21:19	1.00
PCB-1268	ND		54.6		ug/kg dry	☼	07/01/14 08:46	07/01/14 21:19	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	61.6		46.2 - 210				07/01/14 08:46	07/01/14 21:19	1.00
Decachlorobiphenyl	100		65.6 - 186				07/01/14 08:46	07/01/14 21:19	1.00

## Client Sample ID: TP-5-2-S

Lab Sample ID: SXF0198-36

Date Collected: 06/26/14 15:00

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 88.8

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		54.4		ug/kg dry	☼	07/01/14 08:46	07/01/14 21:51	1.00
PCB-1221	ND		54.4		ug/kg dry	☼	07/01/14 08:46	07/01/14 21:51	1.00
PCB-1232	ND		54.4		ug/kg dry	☼	07/01/14 08:46	07/01/14 21:51	1.00
PCB-1242	ND		54.4		ug/kg dry	☼	07/01/14 08:46	07/01/14 21:51	1.00
PCB-1248	ND		54.4		ug/kg dry	☼	07/01/14 08:46	07/01/14 21:51	1.00
PCB-1254	ND		54.4		ug/kg dry	☼	07/01/14 08:46	07/01/14 21:51	1.00
PCB-1260	ND		54.4		ug/kg dry	☼	07/01/14 08:46	07/01/14 21:51	1.00
PCB-1268	ND		54.4		ug/kg dry	☼	07/01/14 08:46	07/01/14 21:51	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	77.7		46.2 - 210				07/01/14 08:46	07/01/14 21:51	1.00
Decachlorobiphenyl	110		65.6 - 186				07/01/14 08:46	07/01/14 21:51	1.00

## Client Sample ID: TP-5-3-N

Lab Sample ID: SXF0198-37

Date Collected: 06/26/14 15:06

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 90.6

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		51.6		ug/kg dry	☼	07/01/14 08:46	07/01/14 22:07	1.00
PCB-1221	ND		51.6		ug/kg dry	☼	07/01/14 08:46	07/01/14 22:07	1.00
PCB-1232	ND		51.6		ug/kg dry	☼	07/01/14 08:46	07/01/14 22:07	1.00
PCB-1242	ND		51.6		ug/kg dry	☼	07/01/14 08:46	07/01/14 22:07	1.00
PCB-1248	ND		51.6		ug/kg dry	☼	07/01/14 08:46	07/01/14 22:07	1.00
PCB-1254	ND		51.6		ug/kg dry	☼	07/01/14 08:46	07/01/14 22:07	1.00
PCB-1260	ND		51.6		ug/kg dry	☼	07/01/14 08:46	07/01/14 22:07	1.00
PCB-1268	ND		51.6		ug/kg dry	☼	07/01/14 08:46	07/01/14 22:07	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	65.9		46.2 - 210				07/01/14 08:46	07/01/14 22:07	1.00
Decachlorobiphenyl	94.1		65.6 - 186				07/01/14 08:46	07/01/14 22:07	1.00

TestAmerica Spokane

# Client Sample Results

Client: Geo Engineers - Spokane  
Project/Site: 0504-047-01

TestAmerica Job ID: SXF0198

## Client Sample ID: TP-5-3-S

Lab Sample ID: SXF0198-38

Date Collected: 06/26/14 15:05

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 89.6

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		50.7		ug/kg dry	☼	07/01/14 08:46	07/01/14 22:23	1.00
PCB-1221	ND		50.7		ug/kg dry	☼	07/01/14 08:46	07/01/14 22:23	1.00
PCB-1232	ND		50.7		ug/kg dry	☼	07/01/14 08:46	07/01/14 22:23	1.00
PCB-1242	ND		50.7		ug/kg dry	☼	07/01/14 08:46	07/01/14 22:23	1.00
PCB-1248	ND		50.7		ug/kg dry	☼	07/01/14 08:46	07/01/14 22:23	1.00
PCB-1254	ND		50.7		ug/kg dry	☼	07/01/14 08:46	07/01/14 22:23	1.00
PCB-1260	ND		50.7		ug/kg dry	☼	07/01/14 08:46	07/01/14 22:23	1.00
PCB-1268	ND		50.7		ug/kg dry	☼	07/01/14 08:46	07/01/14 22:23	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	91.2		46.2 - 210				07/01/14 08:46	07/01/14 22:23	1.00
Decachlorobiphenyl	114		65.6 - 186				07/01/14 08:46	07/01/14 22:23	1.00

## Client Sample ID: TP-5-4-N

Lab Sample ID: SXF0198-39

Date Collected: 06/26/14 15:11

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 92.6

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		48.3		ug/kg dry	☼	07/01/14 08:46	07/01/14 22:39	1.00
PCB-1221	ND		48.3		ug/kg dry	☼	07/01/14 08:46	07/01/14 22:39	1.00
PCB-1232	ND		48.3		ug/kg dry	☼	07/01/14 08:46	07/01/14 22:39	1.00
PCB-1242	ND		48.3		ug/kg dry	☼	07/01/14 08:46	07/01/14 22:39	1.00
PCB-1248	ND		48.3		ug/kg dry	☼	07/01/14 08:46	07/01/14 22:39	1.00
PCB-1254	ND		48.3		ug/kg dry	☼	07/01/14 08:46	07/01/14 22:39	1.00
PCB-1260	ND		48.3		ug/kg dry	☼	07/01/14 08:46	07/01/14 22:39	1.00
PCB-1268	ND		48.3		ug/kg dry	☼	07/01/14 08:46	07/01/14 22:39	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	86.2		46.2 - 210				07/01/14 08:46	07/01/14 22:39	1.00
Decachlorobiphenyl	117		65.6 - 186				07/01/14 08:46	07/01/14 22:39	1.00

## Client Sample ID: TP-5-4-S

Lab Sample ID: SXF0198-40

Date Collected: 06/26/14 15:10

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 94.3

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		49.8		ug/kg dry	☼	07/01/14 08:46	07/01/14 22:55	1.00
PCB-1221	ND		49.8		ug/kg dry	☼	07/01/14 08:46	07/01/14 22:55	1.00
PCB-1232	ND		49.8		ug/kg dry	☼	07/01/14 08:46	07/01/14 22:55	1.00
PCB-1242	ND		49.8		ug/kg dry	☼	07/01/14 08:46	07/01/14 22:55	1.00
PCB-1248	ND		49.8		ug/kg dry	☼	07/01/14 08:46	07/01/14 22:55	1.00
PCB-1254	ND		49.8		ug/kg dry	☼	07/01/14 08:46	07/01/14 22:55	1.00
PCB-1260	ND		49.8		ug/kg dry	☼	07/01/14 08:46	07/01/14 22:55	1.00
PCB-1268	ND		49.8		ug/kg dry	☼	07/01/14 08:46	07/01/14 22:55	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	73.5		46.2 - 210				07/01/14 08:46	07/01/14 22:55	1.00
Decachlorobiphenyl	107		65.6 - 186				07/01/14 08:46	07/01/14 22:55	1.00

TestAmerica Spokane

# Client Sample Results

Client: Geo Engineers - Spokane  
Project/Site: 0504-047-01

TestAmerica Job ID: SXF0198

## Client Sample ID: TP-5-5-N

Lab Sample ID: SXF0198-41

Date Collected: 06/26/14 15:16

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 94.5

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		47.6		ug/kg dry	☼	07/02/14 10:53	07/02/14 17:05	1.00
PCB-1221	ND		47.6		ug/kg dry	☼	07/02/14 10:53	07/02/14 17:05	1.00
PCB-1232	ND		47.6		ug/kg dry	☼	07/02/14 10:53	07/02/14 17:05	1.00
PCB-1242	ND		47.6		ug/kg dry	☼	07/02/14 10:53	07/02/14 17:05	1.00
PCB-1248	ND		47.6		ug/kg dry	☼	07/02/14 10:53	07/02/14 17:05	1.00
PCB-1254	ND		47.6		ug/kg dry	☼	07/02/14 10:53	07/02/14 17:05	1.00
PCB-1260	ND		47.6		ug/kg dry	☼	07/02/14 10:53	07/02/14 17:05	1.00
PCB-1268	ND		47.6		ug/kg dry	☼	07/02/14 10:53	07/02/14 17:05	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	83.5		46.2 - 210				07/02/14 10:53	07/02/14 17:05	1.00
Decachlorobiphenyl	113		65.6 - 186				07/02/14 10:53	07/02/14 17:05	1.00

## Client Sample ID: TP-5-5-S

Lab Sample ID: SXF0198-42

Date Collected: 06/26/14 15:15

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 93.9

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		46.3		ug/kg dry	☼	07/02/14 10:53	07/02/14 17:20	1.00
PCB-1221	ND		46.3		ug/kg dry	☼	07/02/14 10:53	07/02/14 17:20	1.00
PCB-1232	ND		46.3		ug/kg dry	☼	07/02/14 10:53	07/02/14 17:20	1.00
PCB-1242	ND		46.3		ug/kg dry	☼	07/02/14 10:53	07/02/14 17:20	1.00
PCB-1248	ND		46.3		ug/kg dry	☼	07/02/14 10:53	07/02/14 17:20	1.00
PCB-1254	ND		46.3		ug/kg dry	☼	07/02/14 10:53	07/02/14 17:20	1.00
PCB-1260	ND		46.3		ug/kg dry	☼	07/02/14 10:53	07/02/14 17:20	1.00
PCB-1268	ND		46.3		ug/kg dry	☼	07/02/14 10:53	07/02/14 17:20	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	103		46.2 - 210				07/02/14 10:53	07/02/14 17:20	1.00
Decachlorobiphenyl	125		65.6 - 186				07/02/14 10:53	07/02/14 17:20	1.00

## Client Sample ID: TP-6-1-S

Lab Sample ID: SXF0198-46

Date Collected: 06/26/14 16:10

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 90.3

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		53.1		ug/kg dry	☼	07/02/14 10:53	07/07/14 18:57	1.00
PCB-1221	ND		53.1		ug/kg dry	☼	07/02/14 10:53	07/07/14 18:57	1.00
PCB-1232	ND		53.1		ug/kg dry	☼	07/02/14 10:53	07/07/14 18:57	1.00
PCB-1242	ND		53.1		ug/kg dry	☼	07/02/14 10:53	07/07/14 18:57	1.00
PCB-1248	ND		53.1		ug/kg dry	☼	07/02/14 10:53	07/07/14 18:57	1.00
PCB-1254	ND		53.1		ug/kg dry	☼	07/02/14 10:53	07/07/14 18:57	1.00
<b>PCB-1260</b>	<b>245</b>		53.1		ug/kg dry	☼	07/02/14 10:53	07/07/14 18:57	1.00
PCB-1268	ND		53.1		ug/kg dry	☼	07/02/14 10:53	07/07/14 18:57	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	62.5		46.2 - 210				07/02/14 10:53	07/07/14 18:57	1.00
Decachlorobiphenyl	109		65.6 - 186				07/02/14 10:53	07/07/14 18:57	1.00

TestAmerica Spokane

# Client Sample Results

Client: Geo Engineers - Spokane  
Project/Site: 0504-047-01

TestAmerica Job ID: SXF0198

## Client Sample ID: TP-6-2-S

Lab Sample ID: SXF0198-48

Date Collected: 06/26/14 16:15

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 92.2

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		52.5		ug/kg dry	☼	07/02/14 10:53	07/02/14 17:52	1.00
PCB-1221	ND		52.5		ug/kg dry	☼	07/02/14 10:53	07/02/14 17:52	1.00
PCB-1232	ND		52.5		ug/kg dry	☼	07/02/14 10:53	07/02/14 17:52	1.00
PCB-1242	ND		52.5		ug/kg dry	☼	07/02/14 10:53	07/02/14 17:52	1.00
PCB-1248	ND		52.5		ug/kg dry	☼	07/02/14 10:53	07/02/14 17:52	1.00
PCB-1254	ND		52.5		ug/kg dry	☼	07/02/14 10:53	07/02/14 17:52	1.00
<b>PCB-1260</b>	<b>278</b>		52.5		ug/kg dry	☼	07/02/14 10:53	07/02/14 17:52	1.00
PCB-1268	ND		52.5		ug/kg dry	☼	07/02/14 10:53	07/02/14 17:52	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	64.2		46.2 - 210				07/02/14 10:53	07/02/14 17:52	1.00
Decachlorobiphenyl	85.0		65.6 - 186				07/02/14 10:53	07/02/14 17:52	1.00

## Client Sample ID: TP-6-3-S

Lab Sample ID: SXF0198-50

Date Collected: 06/26/14 16:20

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 92.3

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		52.1		ug/kg dry	☼	07/02/14 10:53	07/02/14 18:08	1.00
PCB-1221	ND		52.1		ug/kg dry	☼	07/02/14 10:53	07/02/14 18:08	1.00
PCB-1232	ND		52.1		ug/kg dry	☼	07/02/14 10:53	07/02/14 18:08	1.00
PCB-1242	ND		52.1		ug/kg dry	☼	07/02/14 10:53	07/02/14 18:08	1.00
PCB-1248	ND		52.1		ug/kg dry	☼	07/02/14 10:53	07/02/14 18:08	1.00
PCB-1254	ND		52.1		ug/kg dry	☼	07/02/14 10:53	07/02/14 18:08	1.00
<b>PCB-1260</b>	<b>216</b>		52.1		ug/kg dry	☼	07/02/14 10:53	07/02/14 18:08	1.00
PCB-1268	ND		52.1		ug/kg dry	☼	07/02/14 10:53	07/02/14 18:08	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	66.6		46.2 - 210				07/02/14 10:53	07/02/14 18:08	1.00
Decachlorobiphenyl	91.8		65.6 - 186				07/02/14 10:53	07/02/14 18:08	1.00

## Client Sample ID: TP-6-4-S

Lab Sample ID: SXF0198-52

Date Collected: 06/26/14 16:25

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 94.5

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		48.8		ug/kg dry	☼	07/02/14 10:53	07/02/14 18:24	1.00
PCB-1221	ND		48.8		ug/kg dry	☼	07/02/14 10:53	07/02/14 18:24	1.00
PCB-1232	ND		48.8		ug/kg dry	☼	07/02/14 10:53	07/02/14 18:24	1.00
PCB-1242	ND		48.8		ug/kg dry	☼	07/02/14 10:53	07/02/14 18:24	1.00
PCB-1248	ND		48.8		ug/kg dry	☼	07/02/14 10:53	07/02/14 18:24	1.00
PCB-1254	ND		48.8		ug/kg dry	☼	07/02/14 10:53	07/02/14 18:24	1.00
PCB-1260	ND		48.8		ug/kg dry	☼	07/02/14 10:53	07/02/14 18:24	1.00
PCB-1268	ND		48.8		ug/kg dry	☼	07/02/14 10:53	07/02/14 18:24	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	85.1		46.2 - 210				07/02/14 10:53	07/02/14 18:24	1.00
Decachlorobiphenyl	96.4		65.6 - 186				07/02/14 10:53	07/02/14 18:24	1.00

TestAmerica Spokane

# Client Sample Results

Client: Geo Engineers - Spokane  
Project/Site: 0504-047-01

TestAmerica Job ID: SXF0198

## Client Sample ID: TP-7-2-N

Lab Sample ID: SXF0198-57

Date Collected: 06/27/14 08:15

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 86.9

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		44.9		ug/kg dry	☼	07/02/14 10:53	07/02/14 18:55	1.00
PCB-1221	ND		44.9		ug/kg dry	☼	07/02/14 10:53	07/02/14 18:55	1.00
PCB-1232	ND		44.9		ug/kg dry	☼	07/02/14 10:53	07/02/14 18:55	1.00
PCB-1242	ND		44.9		ug/kg dry	☼	07/02/14 10:53	07/02/14 18:55	1.00
PCB-1248	ND		44.9		ug/kg dry	☼	07/02/14 10:53	07/02/14 18:55	1.00
PCB-1254	ND		44.9		ug/kg dry	☼	07/02/14 10:53	07/02/14 18:55	1.00
<b>PCB-1260</b>	<b>97.2</b>		44.9		ug/kg dry	☼	07/02/14 10:53	07/02/14 18:55	1.00
PCB-1268	ND		44.9		ug/kg dry	☼	07/02/14 10:53	07/02/14 18:55	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	68.7		46.2 - 210				07/02/14 10:53	07/02/14 18:55	1.00
Decachlorobiphenyl	113		65.6 - 186				07/02/14 10:53	07/02/14 18:55	1.00

## Client Sample ID: TP-7-2-S

Lab Sample ID: SXF0198-58

Date Collected: 06/27/14 08:16

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 87.6

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		43.9		ug/kg dry	☼	07/02/14 10:53	07/02/14 19:11	1.00
PCB-1221	ND		43.9		ug/kg dry	☼	07/02/14 10:53	07/02/14 19:11	1.00
PCB-1232	ND		43.9		ug/kg dry	☼	07/02/14 10:53	07/02/14 19:11	1.00
PCB-1242	ND		43.9		ug/kg dry	☼	07/02/14 10:53	07/02/14 19:11	1.00
PCB-1248	ND		43.9		ug/kg dry	☼	07/02/14 10:53	07/02/14 19:11	1.00
PCB-1254	ND		43.9		ug/kg dry	☼	07/02/14 10:53	07/02/14 19:11	1.00
<b>PCB-1260</b>	<b>279</b>		43.9		ug/kg dry	☼	07/02/14 10:53	07/02/14 19:11	1.00
PCB-1268	ND		43.9		ug/kg dry	☼	07/02/14 10:53	07/02/14 19:11	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	86.0		46.2 - 210				07/02/14 10:53	07/02/14 19:11	1.00
Decachlorobiphenyl	102		65.6 - 186				07/02/14 10:53	07/02/14 19:11	1.00

## Client Sample ID: TP-7-3-N

Lab Sample ID: SXF0198-59

Date Collected: 06/27/14 08:20

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 94.3

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		44.4		ug/kg dry	☼	07/02/14 10:53	07/02/14 19:27	1.00
PCB-1221	ND		44.4		ug/kg dry	☼	07/02/14 10:53	07/02/14 19:27	1.00
PCB-1232	ND		44.4		ug/kg dry	☼	07/02/14 10:53	07/02/14 19:27	1.00
PCB-1242	ND		44.4		ug/kg dry	☼	07/02/14 10:53	07/02/14 19:27	1.00
PCB-1248	ND		44.4		ug/kg dry	☼	07/02/14 10:53	07/02/14 19:27	1.00
PCB-1254	ND		44.4		ug/kg dry	☼	07/02/14 10:53	07/02/14 19:27	1.00
PCB-1260	ND		44.4		ug/kg dry	☼	07/02/14 10:53	07/02/14 19:27	1.00
PCB-1268	ND		44.4		ug/kg dry	☼	07/02/14 10:53	07/02/14 19:27	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	94.4		46.2 - 210				07/02/14 10:53	07/02/14 19:27	1.00
Decachlorobiphenyl	113		65.6 - 186				07/02/14 10:53	07/02/14 19:27	1.00

TestAmerica Spokane

# Client Sample Results

Client: Geo Engineers - Spokane  
Project/Site: 0504-047-01

TestAmerica Job ID: SXF0198

## Client Sample ID: TP-7-3-S

Lab Sample ID: SXF0198-60

Date Collected: 06/27/14 08:21

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 88.8

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		45.1		ug/kg dry	☼	07/02/14 10:53	07/02/14 19:42	1.00
PCB-1221	ND		45.1		ug/kg dry	☼	07/02/14 10:53	07/02/14 19:42	1.00
PCB-1232	ND		45.1		ug/kg dry	☼	07/02/14 10:53	07/02/14 19:42	1.00
PCB-1242	ND		45.1		ug/kg dry	☼	07/02/14 10:53	07/02/14 19:42	1.00
PCB-1248	ND		45.1		ug/kg dry	☼	07/02/14 10:53	07/02/14 19:42	1.00
PCB-1254	ND		45.1		ug/kg dry	☼	07/02/14 10:53	07/02/14 19:42	1.00
<b>PCB-1260</b>	<b>147</b>		45.1		ug/kg dry	☼	07/02/14 10:53	07/02/14 19:42	1.00
PCB-1268	ND		45.1		ug/kg dry	☼	07/02/14 10:53	07/02/14 19:42	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
TCX	85.7		46.2 - 210				07/02/14 10:53	07/02/14 19:42	1.00
Decachlorobiphenyl	115		65.6 - 186				07/02/14 10:53	07/02/14 19:42	1.00

## Client Sample ID: TP-7-4-N

Lab Sample ID: SXF0198-61

Date Collected: 06/27/14 08:30

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 93

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		51.4		ug/kg dry	☼	07/02/14 10:53	07/02/14 19:58	1.00
PCB-1221	ND		51.4		ug/kg dry	☼	07/02/14 10:53	07/02/14 19:58	1.00
PCB-1232	ND		51.4		ug/kg dry	☼	07/02/14 10:53	07/02/14 19:58	1.00
PCB-1242	ND		51.4		ug/kg dry	☼	07/02/14 10:53	07/02/14 19:58	1.00
PCB-1248	ND		51.4		ug/kg dry	☼	07/02/14 10:53	07/02/14 19:58	1.00
PCB-1254	ND		51.4		ug/kg dry	☼	07/02/14 10:53	07/02/14 19:58	1.00
<b>PCB-1260</b>	<b>117</b>		51.4		ug/kg dry	☼	07/02/14 10:53	07/02/14 19:58	1.00
PCB-1268	ND		51.4		ug/kg dry	☼	07/02/14 10:53	07/02/14 19:58	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
TCX	71.9		46.2 - 210				07/02/14 10:53	07/02/14 19:58	1.00
Decachlorobiphenyl	120		65.6 - 186				07/02/14 10:53	07/02/14 19:58	1.00

## Client Sample ID: TP-7-4-S

Lab Sample ID: SXF0198-62

Date Collected: 06/27/14 08:31

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 95.1

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		225		ug/kg dry	☼	07/02/14 10:53	07/07/14 19:29	5.00
PCB-1221	ND		225		ug/kg dry	☼	07/02/14 10:53	07/07/14 19:29	5.00
PCB-1232	ND		225		ug/kg dry	☼	07/02/14 10:53	07/07/14 19:29	5.00
PCB-1242	ND		225		ug/kg dry	☼	07/02/14 10:53	07/07/14 19:29	5.00
PCB-1248	ND		225		ug/kg dry	☼	07/02/14 10:53	07/07/14 19:29	5.00
PCB-1254	ND		225		ug/kg dry	☼	07/02/14 10:53	07/07/14 19:29	5.00
<b>PCB-1260</b>	<b>633</b>		225		ug/kg dry	☼	07/02/14 10:53	07/07/14 19:29	5.00
PCB-1268	ND		225		ug/kg dry	☼	07/02/14 10:53	07/07/14 19:29	5.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
TCX	109		46.2 - 210				07/02/14 10:53	07/07/14 19:29	5.00
Decachlorobiphenyl	181		65.6 - 186				07/02/14 10:53	07/07/14 19:29	5.00

TestAmerica Spokane

# Client Sample Results

Client: Geo Engineers - Spokane  
Project/Site: 0504-047-01

TestAmerica Job ID: SXF0198

## Client Sample ID: TP-7-5-N

Lab Sample ID: SXF0198-63

Date Collected: 06/27/14 08:40

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 90.7

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		54.7		ug/kg dry	☼	07/02/14 10:53	07/02/14 20:30	1.00
PCB-1221	ND		54.7		ug/kg dry	☼	07/02/14 10:53	07/02/14 20:30	1.00
PCB-1232	ND		54.7		ug/kg dry	☼	07/02/14 10:53	07/02/14 20:30	1.00
PCB-1242	ND		54.7		ug/kg dry	☼	07/02/14 10:53	07/02/14 20:30	1.00
PCB-1248	ND		54.7		ug/kg dry	☼	07/02/14 10:53	07/02/14 20:30	1.00
PCB-1254	ND		54.7		ug/kg dry	☼	07/02/14 10:53	07/02/14 20:30	1.00
PCB-1260	ND		54.7		ug/kg dry	☼	07/02/14 10:53	07/02/14 20:30	1.00
PCB-1268	ND		54.7		ug/kg dry	☼	07/02/14 10:53	07/02/14 20:30	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	83.9		46.2 - 210				07/02/14 10:53	07/02/14 20:30	1.00
Decachlorobiphenyl	116		65.6 - 186				07/02/14 10:53	07/02/14 20:30	1.00

## Client Sample ID: TP-7-5-S

Lab Sample ID: SXF0198-64

Date Collected: 06/27/14 08:41

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 96.2

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		39.7		ug/kg dry	☼	07/02/14 10:53	07/07/14 19:13	1.00
PCB-1221	ND		39.7		ug/kg dry	☼	07/02/14 10:53	07/07/14 19:13	1.00
PCB-1232	ND		39.7		ug/kg dry	☼	07/02/14 10:53	07/07/14 19:13	1.00
PCB-1242	ND		39.7		ug/kg dry	☼	07/02/14 10:53	07/07/14 19:13	1.00
PCB-1248	ND		39.7		ug/kg dry	☼	07/02/14 10:53	07/07/14 19:13	1.00
PCB-1254	ND		39.7		ug/kg dry	☼	07/02/14 10:53	07/07/14 19:13	1.00
<b>PCB-1260</b>	<b>41.5</b>		39.7		ug/kg dry	☼	07/02/14 10:53	07/07/14 19:13	1.00
PCB-1268	ND		39.7		ug/kg dry	☼	07/02/14 10:53	07/07/14 19:13	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	45.5	Z	46.2 - 210				07/02/14 10:53	07/07/14 19:13	1.00
Decachlorobiphenyl	144		65.6 - 186				07/02/14 10:53	07/07/14 19:13	1.00

## Client Sample ID: TP-8-1-S

Lab Sample ID: SXF0198-68

Date Collected: 06/27/14 07:15

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 91.4

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		49.9		ug/kg dry	☼	07/02/14 10:53	07/02/14 21:02	1.00
PCB-1221	ND		49.9		ug/kg dry	☼	07/02/14 10:53	07/02/14 21:02	1.00
PCB-1232	ND		49.9		ug/kg dry	☼	07/02/14 10:53	07/02/14 21:02	1.00
PCB-1242	ND		49.9		ug/kg dry	☼	07/02/14 10:53	07/02/14 21:02	1.00
PCB-1248	ND		49.9		ug/kg dry	☼	07/02/14 10:53	07/02/14 21:02	1.00
PCB-1254	ND		49.9		ug/kg dry	☼	07/02/14 10:53	07/02/14 21:02	1.00
PCB-1260	ND		49.9		ug/kg dry	☼	07/02/14 10:53	07/02/14 21:02	1.00
PCB-1268	ND		49.9		ug/kg dry	☼	07/02/14 10:53	07/02/14 21:02	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	89.7		46.2 - 210				07/02/14 10:53	07/02/14 21:02	1.00
Decachlorobiphenyl	102		65.6 - 186				07/02/14 10:53	07/02/14 21:02	1.00

TestAmerica Spokane



# Client Sample Results

Client: Geo Engineers - Spokane  
Project/Site: 0504-047-01

TestAmerica Job ID: SXF0198

## Client Sample ID: TP-8-2-S

Lab Sample ID: SXF0198-70

Date Collected: 06/27/14 07:25

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 93.1

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		50.9		ug/kg dry	☼	07/02/14 10:53	07/02/14 21:17	1.00
PCB-1221	ND		50.9		ug/kg dry	☼	07/02/14 10:53	07/02/14 21:17	1.00
PCB-1232	ND		50.9		ug/kg dry	☼	07/02/14 10:53	07/02/14 21:17	1.00
PCB-1242	ND		50.9		ug/kg dry	☼	07/02/14 10:53	07/02/14 21:17	1.00
PCB-1248	ND		50.9		ug/kg dry	☼	07/02/14 10:53	07/02/14 21:17	1.00
PCB-1254	ND		50.9		ug/kg dry	☼	07/02/14 10:53	07/02/14 21:17	1.00
PCB-1260	ND		50.9		ug/kg dry	☼	07/02/14 10:53	07/02/14 21:17	1.00
PCB-1268	ND		50.9		ug/kg dry	☼	07/02/14 10:53	07/02/14 21:17	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	74.1		46.2 - 210				07/02/14 10:53	07/02/14 21:17	1.00
Decachlorobiphenyl	106		65.6 - 186				07/02/14 10:53	07/02/14 21:17	1.00

## Client Sample ID: TP-7-1-N

Lab Sample ID: SXF0198-75

Date Collected: 06/27/14 08:11

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 88.2

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		265		ug/kg dry	☼	07/03/14 08:13	07/07/14 14:13	5.00
PCB-1221	ND		265		ug/kg dry	☼	07/03/14 08:13	07/07/14 14:13	5.00
PCB-1232	ND		265		ug/kg dry	☼	07/03/14 08:13	07/07/14 14:13	5.00
PCB-1242	ND		265		ug/kg dry	☼	07/03/14 08:13	07/07/14 14:13	5.00
PCB-1248	ND		265		ug/kg dry	☼	07/03/14 08:13	07/07/14 14:13	5.00
PCB-1254	ND		265		ug/kg dry	☼	07/03/14 08:13	07/07/14 14:13	5.00
<b>PCB-1260</b>	<b>846</b>		265		ug/kg dry	☼	07/03/14 08:13	07/07/14 14:13	5.00
PCB-1268	ND		265		ug/kg dry	☼	07/03/14 08:13	07/07/14 14:13	5.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	76.1		46.2 - 210				07/03/14 08:13	07/07/14 14:13	5.00
Decachlorobiphenyl	189	ZX	65.6 - 186				07/03/14 08:13	07/07/14 14:13	5.00

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082 - RE1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		54.0		ug/kg dry	☼	07/03/14 08:13	07/22/14 13:45	1.00
PCB-1221	ND		54.0		ug/kg dry	☼	07/03/14 08:13	07/22/14 13:45	1.00
PCB-1232	ND		54.0		ug/kg dry	☼	07/03/14 08:13	07/22/14 13:45	1.00
PCB-1242	ND		54.0		ug/kg dry	☼	07/03/14 08:13	07/22/14 13:45	1.00
PCB-1248	ND		54.0		ug/kg dry	☼	07/03/14 08:13	07/22/14 13:45	1.00
PCB-1254	ND		54.0		ug/kg dry	☼	07/03/14 08:13	07/22/14 13:45	1.00
<b>PCB-1260</b>	<b>217</b>		54.0		ug/kg dry	☼	07/03/14 08:13	07/22/14 13:45	1.00
PCB-1268	ND		54.0		ug/kg dry	☼	07/03/14 08:13	07/22/14 13:45	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	72.1		46.2 - 210				07/03/14 08:13	07/22/14 13:45	1.00
Decachlorobiphenyl	98.7		65.6 - 186				07/03/14 08:13	07/22/14 13:45	1.00

TestAmerica Spokane

# Client Sample Results

Client: Geo Engineers - Spokane  
Project/Site: 0504-047-01

TestAmerica Job ID: SXF0198

**Client Sample ID: TP-7-1-S**

**Lab Sample ID: SXF0198-76**

Date Collected: 06/27/14 08:10

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 89.3

**Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		1290		ug/kg dry	☼	07/03/14 08:13	07/08/14 10:20	25.0
PCB-1221	ND		1290		ug/kg dry	☼	07/03/14 08:13	07/08/14 10:20	25.0
PCB-1232	ND		1290		ug/kg dry	☼	07/03/14 08:13	07/08/14 10:20	25.0
PCB-1242	ND		1290		ug/kg dry	☼	07/03/14 08:13	07/08/14 10:20	25.0
PCB-1248	ND		1290		ug/kg dry	☼	07/03/14 08:13	07/08/14 10:20	25.0
PCB-1254	ND		1290		ug/kg dry	☼	07/03/14 08:13	07/08/14 10:20	25.0
<b>PCB-1260</b>	<b>1770</b>		1290		ug/kg dry	☼	07/03/14 08:13	07/08/14 10:20	25.0
PCB-1268	ND		1290		ug/kg dry	☼	07/03/14 08:13	07/08/14 10:20	25.0
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	95.9		46.2 - 210				07/03/14 08:13	07/08/14 10:20	25.0
Decachlorobiphenyl	183		65.6 - 186				07/03/14 08:13	07/08/14 10:20	25.0

**Client Sample ID: TP-9-1-N**

**Lab Sample ID: SXF0198-77**

Date Collected: 06/27/14 09:45

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 87.3

**Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		53.8		ug/kg dry	☼	07/03/14 08:13	07/07/14 14:45	1.00
PCB-1221	ND		53.8		ug/kg dry	☼	07/03/14 08:13	07/07/14 14:45	1.00
PCB-1232	ND		53.8		ug/kg dry	☼	07/03/14 08:13	07/07/14 14:45	1.00
PCB-1242	ND		53.8		ug/kg dry	☼	07/03/14 08:13	07/07/14 14:45	1.00
PCB-1248	ND		53.8		ug/kg dry	☼	07/03/14 08:13	07/07/14 14:45	1.00
PCB-1254	ND		53.8		ug/kg dry	☼	07/03/14 08:13	07/07/14 14:45	1.00
<b>PCB-1260</b>	<b>221</b>		53.8		ug/kg dry	☼	07/03/14 08:13	07/07/14 14:45	1.00
PCB-1268	ND		53.8		ug/kg dry	☼	07/03/14 08:13	07/07/14 14:45	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	85.6		46.2 - 210				07/03/14 08:13	07/07/14 14:45	1.00
Decachlorobiphenyl	156		65.6 - 186				07/03/14 08:13	07/07/14 14:45	1.00

**Client Sample ID: TP-9-1-S**

**Lab Sample ID: SXF0198-78**

Date Collected: 06/27/14 09:46

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 84.6

**Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		54.5		ug/kg dry	☼	07/03/14 08:13	07/07/14 15:01	1.00
PCB-1221	ND		54.5		ug/kg dry	☼	07/03/14 08:13	07/07/14 15:01	1.00
PCB-1232	ND		54.5		ug/kg dry	☼	07/03/14 08:13	07/07/14 15:01	1.00
PCB-1242	ND		54.5		ug/kg dry	☼	07/03/14 08:13	07/07/14 15:01	1.00
PCB-1248	ND		54.5		ug/kg dry	☼	07/03/14 08:13	07/07/14 15:01	1.00
PCB-1254	ND		54.5		ug/kg dry	☼	07/03/14 08:13	07/07/14 15:01	1.00
<b>PCB-1260</b>	<b>81.2</b>		54.5		ug/kg dry	☼	07/03/14 08:13	07/07/14 15:01	1.00
PCB-1268	ND		54.5		ug/kg dry	☼	07/03/14 08:13	07/07/14 15:01	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	93.0		46.2 - 210				07/03/14 08:13	07/07/14 15:01	1.00
Decachlorobiphenyl	155		65.6 - 186				07/03/14 08:13	07/07/14 15:01	1.00

TestAmerica Spokane

# Client Sample Results

Client: Geo Engineers - Spokane  
Project/Site: 0504-047-01

TestAmerica Job ID: SXF0198

## Client Sample ID: TP-9-2-N

Lab Sample ID: SXF0198-79

Date Collected: 06/27/14 09:55

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 89.5

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		52.8		ug/kg dry	☼	07/03/14 08:13	07/07/14 15:16	1.00
PCB-1221	ND		52.8		ug/kg dry	☼	07/03/14 08:13	07/07/14 15:16	1.00
PCB-1232	ND		52.8		ug/kg dry	☼	07/03/14 08:13	07/07/14 15:16	1.00
PCB-1242	ND		52.8		ug/kg dry	☼	07/03/14 08:13	07/07/14 15:16	1.00
PCB-1248	ND		52.8		ug/kg dry	☼	07/03/14 08:13	07/07/14 15:16	1.00
PCB-1254	ND		52.8		ug/kg dry	☼	07/03/14 08:13	07/07/14 15:16	1.00
<b>PCB-1260</b>	<b>168</b>		52.8		ug/kg dry	☼	07/03/14 08:13	07/07/14 15:16	1.00
PCB-1268	ND		52.8		ug/kg dry	☼	07/03/14 08:13	07/07/14 15:16	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
TCX	86.0		46.2 - 210				07/03/14 08:13	07/07/14 15:16	1.00
Decachlorobiphenyl	132		65.6 - 186				07/03/14 08:13	07/07/14 15:16	1.00

## Client Sample ID: TP-9-2-S

Lab Sample ID: SXF0198-80

Date Collected: 06/27/14 09:56

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 90.4

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		50.3		ug/kg dry	☼	07/03/14 08:13	07/07/14 15:32	1.00
PCB-1221	ND		50.3		ug/kg dry	☼	07/03/14 08:13	07/07/14 15:32	1.00
PCB-1232	ND		50.3		ug/kg dry	☼	07/03/14 08:13	07/07/14 15:32	1.00
PCB-1242	ND		50.3		ug/kg dry	☼	07/03/14 08:13	07/07/14 15:32	1.00
PCB-1248	ND		50.3		ug/kg dry	☼	07/03/14 08:13	07/07/14 15:32	1.00
PCB-1254	ND		50.3		ug/kg dry	☼	07/03/14 08:13	07/07/14 15:32	1.00
PCB-1260	ND		50.3		ug/kg dry	☼	07/03/14 08:13	07/07/14 15:32	1.00
PCB-1268	ND		50.3		ug/kg dry	☼	07/03/14 08:13	07/07/14 15:32	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
TCX	95.4		46.2 - 210				07/03/14 08:13	07/07/14 15:32	1.00
Decachlorobiphenyl	153		65.6 - 186				07/03/14 08:13	07/07/14 15:32	1.00

## Client Sample ID: TP-9-3-N

Lab Sample ID: SXF0198-81

Date Collected: 06/27/14 10:00

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 93.8

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		48.9		ug/kg dry	☼	07/03/14 08:13	07/07/14 16:04	1.00
PCB-1221	ND		48.9		ug/kg dry	☼	07/03/14 08:13	07/07/14 16:04	1.00
PCB-1232	ND		48.9		ug/kg dry	☼	07/03/14 08:13	07/07/14 16:04	1.00
PCB-1242	ND		48.9		ug/kg dry	☼	07/03/14 08:13	07/07/14 16:04	1.00
PCB-1248	ND		48.9		ug/kg dry	☼	07/03/14 08:13	07/07/14 16:04	1.00
PCB-1254	ND		48.9		ug/kg dry	☼	07/03/14 08:13	07/07/14 16:04	1.00
PCB-1260	ND		48.9		ug/kg dry	☼	07/03/14 08:13	07/07/14 16:04	1.00
PCB-1268	ND		48.9		ug/kg dry	☼	07/03/14 08:13	07/07/14 16:04	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
TCX	98.3		46.2 - 210				07/03/14 08:13	07/07/14 16:04	1.00
Decachlorobiphenyl	152		65.6 - 186				07/03/14 08:13	07/07/14 16:04	1.00

TestAmerica Spokane

# Client Sample Results

Client: Geo Engineers - Spokane  
Project/Site: 0504-047-01

TestAmerica Job ID: SXF0198

## Client Sample ID: TP-9-3-S

## Lab Sample ID: SXF0198-82

Date Collected: 06/27/14 10:01

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 93.3

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		52.3		ug/kg dry	☼	07/03/14 08:13	07/07/14 16:20	1.00
PCB-1221	ND		52.3		ug/kg dry	☼	07/03/14 08:13	07/07/14 16:20	1.00
PCB-1232	ND		52.3		ug/kg dry	☼	07/03/14 08:13	07/07/14 16:20	1.00
PCB-1242	ND		52.3		ug/kg dry	☼	07/03/14 08:13	07/07/14 16:20	1.00
PCB-1248	ND		52.3		ug/kg dry	☼	07/03/14 08:13	07/07/14 16:20	1.00
PCB-1254	ND		52.3		ug/kg dry	☼	07/03/14 08:13	07/07/14 16:20	1.00
PCB-1260	ND		52.3		ug/kg dry	☼	07/03/14 08:13	07/07/14 16:20	1.00
PCB-1268	ND		52.3		ug/kg dry	☼	07/03/14 08:13	07/07/14 16:20	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	91.5		46.2 - 210				07/03/14 08:13	07/07/14 16:20	1.00
Decachlorobiphenyl	136		65.6 - 186				07/03/14 08:13	07/07/14 16:20	1.00

## Client Sample ID: TP-9-4-N

## Lab Sample ID: SXF0198-83

Date Collected: 06/27/14 10:05

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 92.6

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		53.6		ug/kg dry	☼	07/03/14 08:13	07/07/14 16:36	1.00
PCB-1221	ND		53.6		ug/kg dry	☼	07/03/14 08:13	07/07/14 16:36	1.00
PCB-1232	ND		53.6		ug/kg dry	☼	07/03/14 08:13	07/07/14 16:36	1.00
PCB-1242	ND		53.6		ug/kg dry	☼	07/03/14 08:13	07/07/14 16:36	1.00
PCB-1248	ND		53.6		ug/kg dry	☼	07/03/14 08:13	07/07/14 16:36	1.00
PCB-1254	ND		53.6		ug/kg dry	☼	07/03/14 08:13	07/07/14 16:36	1.00
PCB-1260	ND		53.6		ug/kg dry	☼	07/03/14 08:13	07/07/14 16:36	1.00
PCB-1268	ND		53.6		ug/kg dry	☼	07/03/14 08:13	07/07/14 16:36	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	96.3		46.2 - 210				07/03/14 08:13	07/07/14 16:36	1.00
Decachlorobiphenyl	153		65.6 - 186				07/03/14 08:13	07/07/14 16:36	1.00

## Client Sample ID: TP-9-4-S

## Lab Sample ID: SXF0198-84

Date Collected: 06/27/14 10:06

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 93.1

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		50.5		ug/kg dry	☼	07/03/14 08:13	07/07/14 16:52	1.00
PCB-1221	ND		50.5		ug/kg dry	☼	07/03/14 08:13	07/07/14 16:52	1.00
PCB-1232	ND		50.5		ug/kg dry	☼	07/03/14 08:13	07/07/14 16:52	1.00
PCB-1242	ND		50.5		ug/kg dry	☼	07/03/14 08:13	07/07/14 16:52	1.00
PCB-1248	ND		50.5		ug/kg dry	☼	07/03/14 08:13	07/07/14 16:52	1.00
PCB-1254	ND		50.5		ug/kg dry	☼	07/03/14 08:13	07/07/14 16:52	1.00
PCB-1260	ND		50.5		ug/kg dry	☼	07/03/14 08:13	07/07/14 16:52	1.00
PCB-1268	ND		50.5		ug/kg dry	☼	07/03/14 08:13	07/07/14 16:52	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	95.7		46.2 - 210				07/03/14 08:13	07/07/14 16:52	1.00
Decachlorobiphenyl	137		65.6 - 186				07/03/14 08:13	07/07/14 16:52	1.00

TestAmerica Spokane

# Client Sample Results

Client: Geo Engineers - Spokane  
Project/Site: 0504-047-01

TestAmerica Job ID: SXF0198

**Client Sample ID: TP-13-1-N**

**Lab Sample ID: SXF0198-AL**

Date Collected: 06/27/14 13:30

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 88.6

**Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		55.7		ug/kg dry	☼	07/03/14 08:13	07/08/14 10:36	1.00
PCB-1221	ND		55.7		ug/kg dry	☼	07/03/14 08:13	07/08/14 10:36	1.00
PCB-1232	ND		55.7		ug/kg dry	☼	07/03/14 08:13	07/08/14 10:36	1.00
PCB-1242	ND		55.7		ug/kg dry	☼	07/03/14 08:13	07/08/14 10:36	1.00
PCB-1248	ND		55.7		ug/kg dry	☼	07/03/14 08:13	07/08/14 10:36	1.00
PCB-1254	ND		55.7		ug/kg dry	☼	07/03/14 08:13	07/08/14 10:36	1.00
<b>PCB-1260</b>	<b>236</b>		55.7		ug/kg dry	☼	07/03/14 08:13	07/08/14 10:36	1.00
PCB-1268	ND		55.7		ug/kg dry	☼	07/03/14 08:13	07/08/14 10:36	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	94.3		46.2 - 210				07/03/14 08:13	07/08/14 10:36	1.00
Decachlorobiphenyl	133		65.6 - 186				07/03/14 08:13	07/08/14 10:36	1.00

**Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082 - RE1**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		51.1		ug/kg dry	☼	07/03/14 08:13	07/22/14 15:25	1.00
PCB-1221	ND		51.1		ug/kg dry	☼	07/03/14 08:13	07/22/14 15:25	1.00
PCB-1232	ND		51.1		ug/kg dry	☼	07/03/14 08:13	07/22/14 15:25	1.00
PCB-1242	ND		51.1		ug/kg dry	☼	07/03/14 08:13	07/22/14 15:25	1.00
PCB-1248	ND		51.1		ug/kg dry	☼	07/03/14 08:13	07/22/14 15:25	1.00
PCB-1254	ND		51.1		ug/kg dry	☼	07/03/14 08:13	07/22/14 15:25	1.00
<b>PCB-1260</b>	<b>172</b>		51.1		ug/kg dry	☼	07/03/14 08:13	07/22/14 15:25	1.00
PCB-1268	ND		51.1		ug/kg dry	☼	07/03/14 08:13	07/22/14 15:25	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	90.2		46.2 - 210				07/03/14 08:13	07/22/14 15:25	1.00
Decachlorobiphenyl	91.9		65.6 - 186				07/03/14 08:13	07/22/14 15:25	1.00

**Client Sample ID: TP-13-1-S**

**Lab Sample ID: SXF0198-AM**

Date Collected: 06/27/14 13:31

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 80.8

**Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		57.5		ug/kg dry	☼	07/03/14 08:13	07/08/14 10:52	1.00
PCB-1221	ND		57.5		ug/kg dry	☼	07/03/14 08:13	07/08/14 10:52	1.00
PCB-1232	ND		57.5		ug/kg dry	☼	07/03/14 08:13	07/08/14 10:52	1.00
PCB-1242	ND		57.5		ug/kg dry	☼	07/03/14 08:13	07/08/14 10:52	1.00
PCB-1248	ND		57.5		ug/kg dry	☼	07/03/14 08:13	07/08/14 10:52	1.00
PCB-1254	ND		57.5		ug/kg dry	☼	07/03/14 08:13	07/08/14 10:52	1.00
<b>PCB-1260</b>	<b>77.6</b>		57.5		ug/kg dry	☼	07/03/14 08:13	07/08/14 10:52	1.00
PCB-1268	ND		57.5		ug/kg dry	☼	07/03/14 08:13	07/08/14 10:52	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	109		46.2 - 210				07/03/14 08:13	07/08/14 10:52	1.00
Decachlorobiphenyl	132		65.6 - 186				07/03/14 08:13	07/08/14 10:52	1.00

TestAmerica Spokane

# Client Sample Results

Client: Geo Engineers - Spokane  
Project/Site: 0504-047-01

TestAmerica Job ID: SXF0198

**Client Sample ID: TP-13-2-N**

**Lab Sample ID: SXF0198-AN**

Date Collected: 06/27/14 13:35

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 85.8

**Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		55.6		ug/kg dry	☼	07/03/14 08:13	07/07/14 17:39	1.00
PCB-1221	ND		55.6		ug/kg dry	☼	07/03/14 08:13	07/07/14 17:39	1.00
PCB-1232	ND		55.6		ug/kg dry	☼	07/03/14 08:13	07/07/14 17:39	1.00
PCB-1242	ND		55.6		ug/kg dry	☼	07/03/14 08:13	07/07/14 17:39	1.00
PCB-1248	ND		55.6		ug/kg dry	☼	07/03/14 08:13	07/07/14 17:39	1.00
PCB-1254	ND		55.6		ug/kg dry	☼	07/03/14 08:13	07/07/14 17:39	1.00
PCB-1260	ND		55.6		ug/kg dry	☼	07/03/14 08:13	07/07/14 17:39	1.00
PCB-1268	ND		55.6		ug/kg dry	☼	07/03/14 08:13	07/07/14 17:39	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	103		46.2 - 210				07/03/14 08:13	07/07/14 17:39	1.00
Decachlorobiphenyl	166		65.6 - 186				07/03/14 08:13	07/07/14 17:39	1.00

**Client Sample ID: TP-13-2-S**

**Lab Sample ID: SXF0198-AO**

Date Collected: 06/27/14 13:36

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 87.3

**Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		52.5		ug/kg dry	☼	07/03/14 08:13	07/07/14 17:54	1.00
PCB-1221	ND		52.5		ug/kg dry	☼	07/03/14 08:13	07/07/14 17:54	1.00
PCB-1232	ND		52.5		ug/kg dry	☼	07/03/14 08:13	07/07/14 17:54	1.00
PCB-1242	ND		52.5		ug/kg dry	☼	07/03/14 08:13	07/07/14 17:54	1.00
PCB-1248	ND		52.5		ug/kg dry	☼	07/03/14 08:13	07/07/14 17:54	1.00
PCB-1254	ND		52.5		ug/kg dry	☼	07/03/14 08:13	07/07/14 17:54	1.00
PCB-1260	ND		52.5		ug/kg dry	☼	07/03/14 08:13	07/07/14 17:54	1.00
PCB-1268	ND		52.5		ug/kg dry	☼	07/03/14 08:13	07/07/14 17:54	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	101		46.2 - 210				07/03/14 08:13	07/07/14 17:54	1.00
Decachlorobiphenyl	163		65.6 - 186				07/03/14 08:13	07/07/14 17:54	1.00

**Client Sample ID: TP-14-1-N**

**Lab Sample ID: SXF0198-AT**

Date Collected: 06/27/14 14:00

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 89.4

**Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		242		ug/kg dry	☼	07/21/14 10:08	07/23/14 09:54	4.00
PCB-1221	ND		242		ug/kg dry	☼	07/21/14 10:08	07/23/14 09:54	4.00
PCB-1232	ND		242		ug/kg dry	☼	07/21/14 10:08	07/23/14 09:54	4.00
PCB-1242	ND		242		ug/kg dry	☼	07/21/14 10:08	07/23/14 09:54	4.00
PCB-1248	ND		242		ug/kg dry	☼	07/21/14 10:08	07/23/14 09:54	4.00
PCB-1254	ND		242		ug/kg dry	☼	07/21/14 10:08	07/23/14 09:54	4.00
<b>PCB-1260</b>	<b>247</b>		242		ug/kg dry	☼	07/21/14 10:08	07/23/14 09:54	4.00
PCB-1268	ND		242		ug/kg dry	☼	07/21/14 10:08	07/23/14 09:54	4.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	35.6	Z	46.2 - 210				07/21/14 10:08	07/23/14 09:54	4.00
Decachlorobiphenyl	99.5		65.6 - 186				07/21/14 10:08	07/23/14 09:54	4.00

TestAmerica Spokane

# Client Sample Results

Client: Geo Engineers - Spokane  
Project/Site: 0504-047-01

TestAmerica Job ID: SXF0198

**Client Sample ID: TP-14-1-S**

**Lab Sample ID: SXF0198-AU**

Date Collected: 06/27/14 14:01

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 87.5

**Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		26500		ug/kg dry	☼	07/03/14 08:13	07/07/14 18:10	500
PCB-1221	ND		26500		ug/kg dry	☼	07/03/14 08:13	07/07/14 18:10	500
PCB-1232	ND		26500		ug/kg dry	☼	07/03/14 08:13	07/07/14 18:10	500
PCB-1242	ND		26500		ug/kg dry	☼	07/03/14 08:13	07/07/14 18:10	500
PCB-1248	ND		26500		ug/kg dry	☼	07/03/14 08:13	07/07/14 18:10	500
PCB-1254	ND		26500		ug/kg dry	☼	07/03/14 08:13	07/07/14 18:10	500
<b>PCB-1260</b>	<b>30500</b>		26500		ug/kg dry	☼	07/03/14 08:13	07/07/14 18:10	500
PCB-1268	ND		26500		ug/kg dry	☼	07/03/14 08:13	07/07/14 18:10	500
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX		Z3	46.2 - 210				07/03/14 08:13	07/07/14 18:10	500
Decachlorobiphenyl	1120	Z3	65.6 - 186				07/03/14 08:13	07/07/14 18:10	500

**Client Sample ID: TP-14-2-N**

**Lab Sample ID: SXF0198-AV**

Date Collected: 06/27/14 14:05

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 90.2

**Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		43.9		ug/kg dry	☼	07/21/14 10:08	07/22/14 15:57	1.00
PCB-1221	ND		43.9		ug/kg dry	☼	07/21/14 10:08	07/22/14 15:57	1.00
PCB-1232	ND		43.9		ug/kg dry	☼	07/21/14 10:08	07/22/14 15:57	1.00
PCB-1242	ND		43.9		ug/kg dry	☼	07/21/14 10:08	07/22/14 15:57	1.00
PCB-1248	ND		43.9		ug/kg dry	☼	07/21/14 10:08	07/22/14 15:57	1.00
PCB-1254	ND		43.9		ug/kg dry	☼	07/21/14 10:08	07/22/14 15:57	1.00
PCB-1260	ND		43.9		ug/kg dry	☼	07/21/14 10:08	07/22/14 15:57	1.00
PCB-1268	ND		43.9		ug/kg dry	☼	07/21/14 10:08	07/22/14 15:57	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	90.0		46.2 - 210				07/21/14 10:08	07/22/14 15:57	1.00
Decachlorobiphenyl	79.5		65.6 - 186				07/21/14 10:08	07/22/14 15:57	1.00

**Client Sample ID: TP-14-2-S**

**Lab Sample ID: SXF0198-AW**

Date Collected: 06/27/14 14:06

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 89.8

**Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		525		ug/kg dry	☼	07/03/14 08:13	07/08/14 11:08	10.0
PCB-1221	ND		525		ug/kg dry	☼	07/03/14 08:13	07/08/14 11:08	10.0
PCB-1232	ND		525		ug/kg dry	☼	07/03/14 08:13	07/08/14 11:08	10.0
PCB-1242	ND		525		ug/kg dry	☼	07/03/14 08:13	07/08/14 11:08	10.0
PCB-1248	ND		525		ug/kg dry	☼	07/03/14 08:13	07/08/14 11:08	10.0
PCB-1254	ND		525		ug/kg dry	☼	07/03/14 08:13	07/08/14 11:08	10.0
PCB-1260	ND		525		ug/kg dry	☼	07/03/14 08:13	07/08/14 11:08	10.0
PCB-1268	ND		525		ug/kg dry	☼	07/03/14 08:13	07/08/14 11:08	10.0
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	111		46.2 - 210				07/03/14 08:13	07/08/14 11:08	10.0
Decachlorobiphenyl	154		65.6 - 186				07/03/14 08:13	07/08/14 11:08	10.0

TestAmerica Spokane

# Client Sample Results

Client: Geo Engineers - Spokane  
 Project/Site: 0504-047-01

TestAmerica Job ID: SXF0198

**Client Sample ID: TP-14-2-S**

**Lab Sample ID: SXF0198-AW**

**Date Collected: 06/27/14 14:06**

**Matrix: Soil**

**Date Received: 06/27/14 15:50**

**Percent Solids: 89.8**

**Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082 - RE1**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		48.4		ug/kg dry	☼	07/03/14 08:13	07/22/14 16:45	1.00
PCB-1221	ND		48.4		ug/kg dry	☼	07/03/14 08:13	07/22/14 16:45	1.00
PCB-1232	ND		48.4		ug/kg dry	☼	07/03/14 08:13	07/22/14 16:45	1.00
PCB-1242	ND		48.4		ug/kg dry	☼	07/03/14 08:13	07/22/14 16:45	1.00
PCB-1248	ND		48.4		ug/kg dry	☼	07/03/14 08:13	07/22/14 16:45	1.00
PCB-1254	ND		48.4		ug/kg dry	☼	07/03/14 08:13	07/22/14 16:45	1.00
<b>PCB-1260</b>	<b>127</b>		48.4		ug/kg dry	☼	07/03/14 08:13	07/22/14 16:45	1.00
PCB-1268	ND		48.4		ug/kg dry	☼	07/03/14 08:13	07/22/14 16:45	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	71.0		46.2 - 210				07/03/14 08:13	07/22/14 16:45	1.00
Decachlorobiphenyl	99.3		65.6 - 186				07/03/14 08:13	07/22/14 16:45	1.00



# QC Sample Results

Client: Geo Engineers - Spokane  
Project/Site: 0504-047-01

TestAmerica Job ID: SXF0198

## Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

**Lab Sample ID: 14F0183-BLK1**  
**Matrix: Soil**  
**Analysis Batch: 14F0183**

**Client Sample ID: Method Blank**  
**Prep Type: Total**  
**Prep Batch: 14F0183\_P**

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		50.0		ug/kg wet		06/30/14 08:43	06/30/14 14:22	1.00
PCB-1221	ND		50.0		ug/kg wet		06/30/14 08:43	06/30/14 14:22	1.00
PCB-1232	ND		50.0		ug/kg wet		06/30/14 08:43	06/30/14 14:22	1.00
PCB-1242	ND		50.0		ug/kg wet		06/30/14 08:43	06/30/14 14:22	1.00
PCB-1248	ND		50.0		ug/kg wet		06/30/14 08:43	06/30/14 14:22	1.00
PCB-1254	ND		50.0		ug/kg wet		06/30/14 08:43	06/30/14 14:22	1.00
PCB-1260	ND		50.0		ug/kg wet		06/30/14 08:43	06/30/14 14:22	1.00
PCB-1268	ND		50.0		ug/kg wet		06/30/14 08:43	06/30/14 14:22	1.00

Surrogate	Blank %Recovery	Blank Qualifier	Limits	Prepared	Analyzed	Dil Fac
TCX	89.8		46.2 - 210	06/30/14 08:43	06/30/14 14:22	1.00
Decachlorobiphenyl	107		65.6 - 186	06/30/14 08:43	06/30/14 14:22	1.00

**Lab Sample ID: 14F0183-BS1**  
**Matrix: Soil**  
**Analysis Batch: 14F0183**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total**  
**Prep Batch: 14F0183\_P**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
PCB-1016	66.7	68.9		ug/kg wet		103	44.4 - 180
PCB-1260	66.7	65.9		ug/kg wet		98.9	60.3 - 169

Surrogate	LCS %Recovery	LCS Qualifier	Limits
TCX	63.4		46.2 - 210
Decachlorobiphenyl	109		65.6 - 186

**Lab Sample ID: 14F0183-BSD1**  
**Matrix: Soil**  
**Analysis Batch: 14F0183**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total**  
**Prep Batch: 14F0183\_P**

Analyte	Spike Added	LCS Dup Result	LCS Dup Qualifier	Unit	D	%Rec	Limits	RPD	Limit
PCB-1016	66.7	71.8		ug/kg wet		108	44.4 - 180	4.06	25
PCB-1260	66.7	68.3		ug/kg wet		102	60.3 - 169	3.44	25

Surrogate	LCS Dup %Recovery	LCS Dup Qualifier	Limits
TCX	85.2		46.2 - 210
Decachlorobiphenyl	112		65.6 - 186

**Lab Sample ID: 14F0183-MS1**  
**Matrix: Soil**  
**Analysis Batch: 14F0183**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total**  
**Prep Batch: 14F0183\_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	%Rec	Limits
PCB-1016	ND		73.1	70.2		ug/kg dry	☼	96.0	50.6 - 145
PCB-1260	ND		73.1	69.4		ug/kg dry	☼	94.9	57.6 - 120

Surrogate	Matrix Spike %Recovery	Matrix Spike Qualifier	Limits
TCX	76.0		46.2 - 210

TestAmerica Spokane

# QC Sample Results

Client: Geo Engineers - Spokane  
Project/Site: 0504-047-01

TestAmerica Job ID: SXF0198

## Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082 (Continued)

**Lab Sample ID: 14F0183-MS1**  
**Matrix: Soil**  
**Analysis Batch: 14F0183**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total**  
**Prep Batch: 14F0183\_P**

Surrogate	Matrix Spike		Limits
	%Recovery	Qualifier	
Decachlorobiphenyl	99.5		65.6 - 186

**Lab Sample ID: 14F0183-MSD1**  
**Matrix: Soil**  
**Analysis Batch: 14F0183**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total**  
**Prep Batch: 14F0183\_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	%Rec	Limits	RPD	Limit
PCB-1016	ND		73.6	73.8		ug/kg dry	☼	100	50.6 - 145	4.91	40
PCB-1260	ND		73.6	70.8		ug/kg dry	☼	96.2	57.6 - 120	1.98	27.4

Surrogate	Matrix Spike Dup		Limits
	%Recovery	Qualifier	
TCX	88.7		46.2 - 210
Decachlorobiphenyl	100		65.6 - 186

**Lab Sample ID: 14G0003-BLK1**  
**Matrix: Soil**  
**Analysis Batch: 14G0003**

**Client Sample ID: Method Blank**  
**Prep Type: Total**  
**Prep Batch: 14G0003\_P**

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		50.0		ug/kg wet		07/01/14 08:46	07/02/14 12:13	1.00
PCB-1221	ND		50.0		ug/kg wet		07/01/14 08:46	07/02/14 12:13	1.00
PCB-1232	ND		50.0		ug/kg wet		07/01/14 08:46	07/02/14 12:13	1.00
PCB-1242	ND		50.0		ug/kg wet		07/01/14 08:46	07/02/14 12:13	1.00
PCB-1248	ND		50.0		ug/kg wet		07/01/14 08:46	07/02/14 12:13	1.00
PCB-1254	ND		50.0		ug/kg wet		07/01/14 08:46	07/02/14 12:13	1.00
PCB-1260	ND		50.0		ug/kg wet		07/01/14 08:46	07/02/14 12:13	1.00
PCB-1268	ND		50.0		ug/kg wet		07/01/14 08:46	07/02/14 12:13	1.00

Surrogate	Blank		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
TCX	47.7		46.2 - 210	07/01/14 08:46	07/02/14 12:13	1.00
Decachlorobiphenyl	92.1		65.6 - 186	07/01/14 08:46	07/02/14 12:13	1.00

**Lab Sample ID: 14G0003-BS1**  
**Matrix: Soil**  
**Analysis Batch: 14G0003**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total**  
**Prep Batch: 14G0003\_P**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
PCB-1016	66.7	60.6		ug/kg wet		90.9	44.4 - 180
PCB-1260	66.7	67.0		ug/kg wet		100	60.3 - 169

Surrogate	LCS		Limits
	%Recovery	Qualifier	
TCX	56.7		46.2 - 210
Decachlorobiphenyl	114		65.6 - 186

TestAmerica Spokane

# QC Sample Results

Client: Geo Engineers - Spokane  
Project/Site: 0504-047-01

TestAmerica Job ID: SXF0198

## Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082 (Continued)

**Lab Sample ID: 14G0003-MS1**

**Matrix: Soil**

**Analysis Batch: 14G0003**

**Client Sample ID: TP-2-2-N**

**Prep Type: Total**

**Prep Batch: 14G0003\_P**

Analyte	Sample	Sample	Spike	Matrix Spike	Matrix Spike	Unit	D	%Rec	%Rec.	Limits
	Result	Qualifier	Added	Result	Qualifier					
PCB-1016	ND		73.6	69.6		ug/kg dry	☼	94.6	50.6 - 145	
PCB-1260	1680		73.6	ND	MHA	ug/kg dry	☼	-2290	57.6 - 120	
<b>Surrogate</b>		<b>Matrix Spike</b>	<b>Matrix Spike</b>							
		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>						
TCX		65.3		46.2 - 210						
Decachlorobiphenyl		118		65.6 - 186						

**Lab Sample ID: 14G0003-MSD1**

**Matrix: Soil**

**Analysis Batch: 14G0003**

**Client Sample ID: TP-2-2-N**

**Prep Type: Total**

**Prep Batch: 14G0003\_P**

Analyte	Sample	Sample	Spike	Matrix Spike Dup	Matrix Spike Dup	Unit	D	%Rec	%Rec.	Limits	RPD	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier								
PCB-1016	ND		68.1	65.1		ug/kg dry	☼	95.5	50.6 - 145	6.71	40		
PCB-1260	1680		68.1	ND	MHA	ug/kg dry	☼	-2470	57.6 - 120		27.4		
<b>Surrogate</b>		<b>Matrix Spike Dup</b>	<b>Matrix Spike Dup</b>										
		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>									
TCX		60.4		46.2 - 210									
Decachlorobiphenyl		114		65.6 - 186									

**Lab Sample ID: 14G0019-BLK1**

**Matrix: Soil**

**Analysis Batch: 14G0019**

**Client Sample ID: Method Blank**

**Prep Type: Total**

**Prep Batch: 14G0019\_P**

Analyte	Blank	Blank	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
PCB-1016	ND		50.0		ug/kg wet		07/02/14 10:53	07/02/14 16:02	1.00
PCB-1221	ND		50.0		ug/kg wet		07/02/14 10:53	07/02/14 16:02	1.00
PCB-1232	ND		50.0		ug/kg wet		07/02/14 10:53	07/02/14 16:02	1.00
PCB-1242	ND		50.0		ug/kg wet		07/02/14 10:53	07/02/14 16:02	1.00
PCB-1248	ND		50.0		ug/kg wet		07/02/14 10:53	07/02/14 16:02	1.00
PCB-1254	ND		50.0		ug/kg wet		07/02/14 10:53	07/02/14 16:02	1.00
PCB-1260	ND		50.0		ug/kg wet		07/02/14 10:53	07/02/14 16:02	1.00
PCB-1268	ND		50.0		ug/kg wet		07/02/14 10:53	07/02/14 16:02	1.00
<b>Surrogate</b>		<b>Blank</b>	<b>Blank</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
		<b>%Recovery</b>	<b>Qualifier</b>						
TCX		112		46.2 - 210			07/02/14 10:53	07/02/14 16:02	1.00
Decachlorobiphenyl		110		65.6 - 186			07/02/14 10:53	07/02/14 16:02	1.00

**Lab Sample ID: 14G0019-BS1**

**Matrix: Soil**

**Analysis Batch: 14G0019**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total**

**Prep Batch: 14G0019\_P**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.	Limits
		Result	Qualifier					
PCB-1016	66.7	80.2		ug/kg wet		120	44.4 - 180	
PCB-1260	66.7	76.8		ug/kg wet		115	60.3 - 169	
<b>Surrogate</b>		<b>LCS</b>	<b>LCS</b>					
		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				
TCX		98.3		46.2 - 210				

TestAmerica Spokane

# QC Sample Results

Client: Geo Engineers - Spokane  
Project/Site: 0504-047-01

TestAmerica Job ID: SXF0198

## Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082 (Continued)

**Lab Sample ID: 14G0019-BS1**  
**Matrix: Soil**  
**Analysis Batch: 14G0019**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total**  
**Prep Batch: 14G0019\_P**

Surrogate	LCS		Limits
	%Recovery	Qualifier	
Decachlorobiphenyl	137		65.6 - 186

**Lab Sample ID: 14G0019-MS1**  
**Matrix: Soil**  
**Analysis Batch: 14G0019**

**Client Sample ID: TP-5-5-N**  
**Prep Type: Total**  
**Prep Batch: 14G0019\_P**

Analyte	Sample	Sample	Spike	Matrix Spike	Matrix Spike	Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier				
PCB-1016	ND		87.9	82.3		ug/kg dry	☼	93.7	50.6 - 145
PCB-1260	ND		87.9	85.1		ug/kg dry	☼	96.9	57.6 - 120

Surrogate	Matrix Spike		Limits
	%Recovery	Qualifier	
TCX	60.7		46.2 - 210
Decachlorobiphenyl	120		65.6 - 186

**Lab Sample ID: 14G0019-MSD1**  
**Matrix: Soil**  
**Analysis Batch: 14G0019**

**Client Sample ID: TP-5-5-N**  
**Prep Type: Total**  
**Prep Batch: 14G0019\_P**

Analyte	Sample	Sample	Spike	Matrix Spike Dup	Matrix Spike Dup	Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
PCB-1016	ND		64.3	70.8		ug/kg dry	☼	110	50.6 - 145	15.0	40
PCB-1260	ND		64.3	64.8		ug/kg dry	☼	101	57.6 - 120	27.1	27.4

Surrogate	Matrix Spike Dup		Limits
	%Recovery	Qualifier	
TCX	92.1		46.2 - 210
Decachlorobiphenyl	117		65.6 - 186

**Lab Sample ID: 14G0026-BLK1**  
**Matrix: Soil**  
**Analysis Batch: 14G0026**

**Client Sample ID: Method Blank**  
**Prep Type: Total**  
**Prep Batch: 14G0026\_P**

Analyte	Blank	Blank	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
PCB-1016	ND		50.0		ug/kg wet		07/03/14 08:13	07/07/14 13:12	1.00
PCB-1221	ND		50.0		ug/kg wet		07/03/14 08:13	07/07/14 13:12	1.00
PCB-1232	ND		50.0		ug/kg wet		07/03/14 08:13	07/07/14 13:12	1.00
PCB-1242	ND		50.0		ug/kg wet		07/03/14 08:13	07/07/14 13:12	1.00
PCB-1248	ND		50.0		ug/kg wet		07/03/14 08:13	07/07/14 13:12	1.00
PCB-1254	ND		50.0		ug/kg wet		07/03/14 08:13	07/07/14 13:12	1.00
PCB-1260	ND		50.0		ug/kg wet		07/03/14 08:13	07/07/14 13:12	1.00
PCB-1268	ND		50.0		ug/kg wet		07/03/14 08:13	07/07/14 13:12	1.00

Surrogate	Blank		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
TCX	84.0		46.2 - 210	07/03/14 08:13	07/07/14 13:12	1.00
Decachlorobiphenyl	126		65.6 - 186	07/03/14 08:13	07/07/14 13:12	1.00

TestAmerica Spokane

# QC Sample Results

Client: Geo Engineers - Spokane  
Project/Site: 0504-047-01

TestAmerica Job ID: SXF0198

## Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082 (Continued)

**Lab Sample ID: 14G0026-BS1**

**Matrix: Soil**

**Analysis Batch: 14G0026**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total**

**Prep Batch: 14G0026\_P**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
PCB-1016	66.7	64.7		ug/kg wet		97.1	44.4 - 180
PCB-1260	66.7	85.1	M3	ug/kg wet		128	60.3 - 169

Surrogate	%Recovery	Qualifier	Limits
TCX	51.9		46.2 - 210
Decachlorobiphenyl	128		65.6 - 186

**Lab Sample ID: 14G0026-MS1**

**Matrix: Soil**

**Analysis Batch: 14G0026**

**Client Sample ID: TP-7-1-N**

**Prep Type: Total**

**Prep Batch: 14G0026\_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	%Rec	Limits
PCB-1016	ND		68.3	51.9		ug/kg dry	☼	75.9	50.6 - 145

Surrogate	%Recovery	Qualifier	Limits
TCX	76.4		46.2 - 210
Decachlorobiphenyl	154		65.6 - 186

**Lab Sample ID: 14G0026-MSD1**

**Matrix: Soil**

**Analysis Batch: 14G0026**

**Client Sample ID: TP-7-1-N**

**Prep Type: Total**

**Prep Batch: 14G0026\_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	%Rec	Limits	RPD	Limit
PCB-1016	ND		69.6	50.7		ug/kg dry	☼	72.9	50.6 - 145	2.33	40

Surrogate	%Recovery	Qualifier	Limits
TCX	77.2		46.2 - 210
Decachlorobiphenyl	147		65.6 - 186

**Lab Sample ID: 14G0147-BLK1**

**Matrix: Soil**

**Analysis Batch: 14G0147**

**Client Sample ID: Method Blank**

**Prep Type: Total**

**Prep Batch: 14G0147\_P**

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		50.0		ug/kg wet		07/21/14 10:08	07/22/14 08:45	1.00
PCB-1221	ND		50.0		ug/kg wet		07/21/14 10:08	07/22/14 08:45	1.00
PCB-1232	ND		50.0		ug/kg wet		07/21/14 10:08	07/22/14 08:45	1.00
PCB-1242	ND		50.0		ug/kg wet		07/21/14 10:08	07/22/14 08:45	1.00
PCB-1248	ND		50.0		ug/kg wet		07/21/14 10:08	07/22/14 08:45	1.00
PCB-1254	ND		50.0		ug/kg wet		07/21/14 10:08	07/22/14 08:45	1.00
PCB-1260	ND		50.0		ug/kg wet		07/21/14 10:08	07/22/14 08:45	1.00
PCB-1268	ND		50.0		ug/kg wet		07/21/14 10:08	07/22/14 08:45	1.00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
TCX	87.1		46.2 - 210	07/21/14 10:08	07/22/14 08:45	1.00
Decachlorobiphenyl	175		65.6 - 186	07/21/14 10:08	07/22/14 08:45	1.00

TestAmerica Spokane

# QC Sample Results

Client: Geo Engineers - Spokane  
 Project/Site: 0504-047-01

TestAmerica Job ID: SXF0198

## Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082 (Continued)

Lab Sample ID: 14G0147-BS1

Matrix: Soil

Analysis Batch: 14G0147

Client Sample ID: Lab Control Sample

Prep Type: Total

Prep Batch: 14G0147\_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
PCB-1016	33.3	36.4	M3	ug/kg wet		109	44.4 - 180
PCB-1260	33.3	38.1	M3	ug/kg wet		114	60.3 - 169

Surrogate	LCS		Limits
	%Recovery	Qualifier	
TCX	93.2	M3	46.2 - 210
Decachlorobiphenyl	112	M3	65.6 - 186

# Lab Chronicle

Client: Geo Engineers - Spokane  
Project/Site: 0504-047-01

TestAmerica Job ID: SXF0198

## Client Sample ID: TP-1-1-N

Lab Sample ID: SXF0198-01

Date Collected: 06/26/14 08:45

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 92.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.945	14F0183_P	06/30/14 14:00	NI	TAL SPK
Total	Analysis	EPA 8082A		400	14F0183	07/01/14 11:01	NMI	TAL SPK
Total	Prep	Wet Chem		1.00	14G0004_P	06/30/14 15:20	NI	TAL SPK
Total	Analysis	TA SOP		1.00	14G0004	07/01/14 09:16	NI	TAL SPK

## Client Sample ID: TP-1-1-S

Lab Sample ID: SXF0198-02

Date Collected: 06/26/14 08:46

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 81.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.937	14F0183_P	06/30/14 14:00	NI	TAL SPK
Total	Analysis	EPA 8082A		100	14F0183	07/01/14 10:13	NMI	TAL SPK

## Client Sample ID: TP-1-2-N

Lab Sample ID: SXF0198-03

Date Collected: 06/26/14 08:55

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 91.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.995	14F0183_P	06/30/14 14:00	NI	TAL SPK
Total	Analysis	EPA 8082A		100	14F0183	07/01/14 10:29	NMI	TAL SPK

## Client Sample ID: TP-1-2-S

Lab Sample ID: SXF0198-04

Date Collected: 06/26/14 08:56

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 86.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.993	14F0183_P	06/30/14 14:00	NI	TAL SPK
Total	Analysis	EPA 8082A		10.0	14F0183	07/01/14 10:45	NMI	TAL SPK

## Client Sample ID: TP-1-3-N

Lab Sample ID: SXF0198-05

Date Collected: 06/26/14 09:10

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 91.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.957	14G0147_P	07/21/14 10:08	MS	TAL SPK
Total	Analysis	EPA 8082A		200	14G0147	07/22/14 10:39	MS	TAL SPK
Total	Prep	Wet Chem		1.00	14G0176_P	07/21/14 17:35	MS	TAL SPK
Total	Analysis	TA SOP		1.00	14G0176	07/22/14 16:40	MS	TAL SPK

TestAmerica Spokane

# Lab Chronicle

Client: Geo Engineers - Spokane  
Project/Site: 0504-047-01

TestAmerica Job ID: SXF0198

## Client Sample ID: TP-1-3-S

Lab Sample ID: SXF0198-06

Date Collected: 06/26/14 09:11

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 92.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.983	14G0147_P	07/21/14 10:08	MS	TAL SPK
Total	Analysis	EPA 8082A		500	14G0147	07/22/14 10:55	MS	TAL SPK

## Client Sample ID: TP-1-4-N

Lab Sample ID: SXF0198-07

Date Collected: 06/26/14 09:20

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 90.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.942	14G0147_P	07/21/14 10:08	MS	TAL SPK
Total	Analysis	EPA 8082A		5.00	14G0147	07/22/14 11:10	MS	TAL SPK

## Client Sample ID: TP-1-4-S

Lab Sample ID: SXF0198-08

Date Collected: 06/26/14 09:21

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 95.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.970	14G0147_P	07/21/14 10:08	MS	TAL SPK
Total	Analysis	EPA 8082A		1.00	14G0147	07/22/14 10:05	MS	TAL SPK

## Client Sample ID: TP-2-1-N

Lab Sample ID: SXF0198-09

Date Collected: 06/26/14 10:50

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 90.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.920	14F0183_P	06/30/14 14:00	NI	TAL SPK
Total	Analysis	EPA 8082A		1.00	14F0183	06/30/14 18:37	NMI	TAL SPK

## Client Sample ID: TP-2-1-S

Lab Sample ID: SXF0198-10

Date Collected: 06/26/14 10:51

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 88.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.965	14F0183_P	06/30/14 14:00	NI	TAL SPK
Total	Analysis	EPA 8082A		1.00	14F0183	06/30/14 18:53	NMI	TAL SPK

## Client Sample ID: TP-2-2-N

Lab Sample ID: SXF0198-11

Date Collected: 06/26/14 11:01

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 90.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.982	14G0003_P	07/01/14 08:46	MS	TAL SPK
Total	Analysis	EPA 8082A		10.0	14G0003	07/02/14 11:40	NMI	TAL SPK
Total	Prep	Wet Chem		1.00	14G0020_P	07/01/14 14:20	NI	TAL SPK

TestAmerica Spokane



# Lab Chronicle

Client: Geo Engineers - Spokane  
Project/Site: 0504-047-01

TestAmerica Job ID: SXF0198

## Client Sample ID: TP-2-2-N

Lab Sample ID: SXF0198-11

Date Collected: 06/26/14 11:01

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 90.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Analysis	TA SOP		1.00	14G0020	07/02/14 11:41	NI	TAL SPK

## Client Sample ID: TP-2-2-S

Lab Sample ID: SXF0198-12

Date Collected: 06/26/14 11:00

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 88.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.881	14G0003_P	07/01/14 08:46	MS	TAL SPK
Total	Analysis	EPA 8082A		5.00	14G0003	07/02/14 10:48	NMI	TAL SPK

## Client Sample ID: TP-2-3-N

Lab Sample ID: SXF0198-13

Date Collected: 06/26/14 11:11

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 88.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.797	14G0147_P	07/21/14 10:08	MS	TAL SPK
Total	Analysis	EPA 8082A		1.00	14G0147	07/22/14 12:42	MS	TAL SPK

## Client Sample ID: TP-2-3-S

Lab Sample ID: SXF0198-14

Date Collected: 06/26/14 11:10

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 89.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.936	14G0147_P	07/21/14 10:08	MS	TAL SPK
Total	Analysis	EPA 8082A		50.0	14G0147	07/22/14 17:01	MS	TAL SPK

## Client Sample ID: TP-2-4-N

Lab Sample ID: SXF0198-15

Date Collected: 06/26/14 11:16

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 91.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.801	14G0147_P	07/21/14 10:08	MS	TAL SPK
Total	Analysis	EPA 8082A		5.00	14G0147	07/22/14 17:17	MS	TAL SPK

## Client Sample ID: TP-2-4-S

Lab Sample ID: SXF0198-16

Date Collected: 06/26/14 11:15

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 92

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.968	14G0147_P	07/21/14 10:08	MS	TAL SPK
Total	Analysis	EPA 8082A		1.00	14G0147	07/22/14 15:10	MS	TAL SPK

TestAmerica Spokane

# Lab Chronicle

Client: Geo Engineers - Spokane  
Project/Site: 0504-047-01

TestAmerica Job ID: SXF0198

## Client Sample ID: TP-3-1-N

Lab Sample ID: SXF0198-17

Date Collected: 06/26/14 12:01

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 91.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.957	14G0003_P	07/01/14 08:46	MS	TAL SPK
Total	Analysis	EPA 8082A		1.00	14G0003	07/01/14 17:54	NMI	TAL SPK

## Client Sample ID: TP-3-1-S

Lab Sample ID: SXF0198-18

Date Collected: 06/26/14 12:00

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 89.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.960	14G0003_P	07/01/14 08:46	MS	TAL SPK
Total	Analysis	EPA 8082A		1.00	14G0003	07/01/14 18:10	NMI	TAL SPK

## Client Sample ID: TP-3-2-N

Lab Sample ID: SXF0198-19

Date Collected: 06/26/14 12:11

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 90.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.911	14G0003_P	07/01/14 08:46	MS	TAL SPK
Total	Analysis	EPA 8082A		1.00	14G0003	07/01/14 18:25	NMI	TAL SPK

## Client Sample ID: TP-3-2-S

Lab Sample ID: SXF0198-20

Date Collected: 06/26/14 12:10

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 89.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.936	14G0003_P	07/01/14 08:46	MS	TAL SPK
Total	Analysis	EPA 8082A		1.00	14G0003	07/01/14 18:57	NMI	TAL SPK

## Client Sample ID: TP-3-3-N

Lab Sample ID: SXF0198-21

Date Collected: 06/26/14 12:21

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 87.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.949	14G0003_P	07/01/14 08:46	MS	TAL SPK
Total	Analysis	EPA 8082A		20.0	14G0003	07/02/14 11:24	NMI	TAL SPK

## Client Sample ID: TP-3-3-S

Lab Sample ID: SXF0198-22

Date Collected: 06/26/14 12:20

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 88.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.945	14G0003_P	07/01/14 08:46	MS	TAL SPK
Total	Analysis	EPA 8082A		1.00	14G0003	07/01/14 19:28	NMI	TAL SPK

TestAmerica Spokane

# Lab Chronicle

Client: Geo Engineers - Spokane  
Project/Site: 0504-047-01

TestAmerica Job ID: SXF0198

## Client Sample ID: TP-3-4-N

Lab Sample ID: SXF0198-23

Date Collected: 06/26/14 12:30

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 91.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.920	14G0003_P	07/01/14 08:46	MS	TAL SPK
Total	Analysis	EPA 8082A		1.00	14G0003	07/01/14 19:44	NMI	TAL SPK

## Client Sample ID: TP-3-4-S

Lab Sample ID: SXF0198-24

Date Collected: 06/26/14 12:25

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 92.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.959	14G0003_P	07/01/14 08:46	MS	TAL SPK
Total	Analysis	EPA 8082A		1.00	14G0003	07/02/14 10:16	NMI	TAL SPK

## Client Sample ID: TP-4-1-S

Lab Sample ID: SXF0198-26

Date Collected: 06/26/14 14:01

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 88.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.974	14G0003_P	07/01/14 08:46	MS	TAL SPK
Total	Analysis	EPA 8082A		1.00	14G0003	07/01/14 20:16	NMI	TAL SPK

## Client Sample ID: TP-4-2-S

Lab Sample ID: SXF0198-28

Date Collected: 06/26/14 14:06

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 90.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.880	14G0003_P	07/01/14 08:46	MS	TAL SPK
Total	Analysis	EPA 8082A		1.00	14G0003	07/01/14 20:32	NMI	TAL SPK

## Client Sample ID: TP-4-3-S

Lab Sample ID: SXF0198-30

Date Collected: 06/26/14 14:16

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 93.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.794	14G0147_P	07/21/14 10:08	MS	TAL SPK
Total	Analysis	EPA 8082A		1.00	14G0147	07/22/14 13:13	MS	TAL SPK

## Client Sample ID: TP-4-4-S

Lab Sample ID: SXF0198-32

Date Collected: 06/26/14 14:21

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 94.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.973	14G0147_P	07/21/14 10:08	MS	TAL SPK
Total	Analysis	EPA 8082A		1.00	14G0147	07/22/14 13:29	MS	TAL SPK

TestAmerica Spokane

# Lab Chronicle

Client: Geo Engineers - Spokane  
Project/Site: 0504-047-01

TestAmerica Job ID: SXF0198

**Client Sample ID: TP-5-1-N**

**Lab Sample ID: SXF0198-33**

Date Collected: 06/26/14 14:56

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 92.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.973	14G0003_P	07/01/14 08:46	MS	TAL SPK
Total	Analysis	EPA 8082A		1.00	14G0003	07/01/14 20:47	NMI	TAL SPK

**Client Sample ID: TP-5-1-S**

**Lab Sample ID: SXF0198-34**

Date Collected: 06/26/14 14:55

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 89.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.904	14G0003_P	07/01/14 08:46	MS	TAL SPK
Total	Analysis	EPA 8082A		1.00	14G0003	07/01/14 21:03	NMI	TAL SPK

**Client Sample ID: TP-5-2-N**

**Lab Sample ID: SXF0198-35**

Date Collected: 06/26/14 15:01

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 89.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.977	14G0003_P	07/01/14 08:46	MS	TAL SPK
Total	Analysis	EPA 8082A		1.00	14G0003	07/01/14 21:19	NMI	TAL SPK

**Client Sample ID: TP-5-2-S**

**Lab Sample ID: SXF0198-36**

Date Collected: 06/26/14 15:00

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 88.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.966	14G0003_P	07/01/14 08:46	MS	TAL SPK
Total	Analysis	EPA 8082A		1.00	14G0003	07/01/14 21:51	NMI	TAL SPK

**Client Sample ID: TP-5-3-N**

**Lab Sample ID: SXF0198-37**

Date Collected: 06/26/14 15:06

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 90.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.936	14G0003_P	07/01/14 08:46	MS	TAL SPK
Total	Analysis	EPA 8082A		1.00	14G0003	07/01/14 22:07	NMI	TAL SPK

**Client Sample ID: TP-5-3-S**

**Lab Sample ID: SXF0198-38**

Date Collected: 06/26/14 15:05

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 89.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.908	14G0003_P	07/01/14 08:46	MS	TAL SPK
Total	Analysis	EPA 8082A		1.00	14G0003	07/01/14 22:23	NMI	TAL SPK

TestAmerica Spokane

# Lab Chronicle

Client: Geo Engineers - Spokane  
Project/Site: 0504-047-01

TestAmerica Job ID: SXF0198

## Client Sample ID: TP-5-4-N

Lab Sample ID: SXF0198-39

Date Collected: 06/26/14 15:11

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 92.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.894	14G0003_P	07/01/14 08:46	MS	TAL SPK
Total	Analysis	EPA 8082A		1.00	14G0003	07/01/14 22:39	NMI	TAL SPK

## Client Sample ID: TP-5-4-S

Lab Sample ID: SXF0198-40

Date Collected: 06/26/14 15:10

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 94.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.940	14G0003_P	07/01/14 08:46	MS	TAL SPK
Total	Analysis	EPA 8082A		1.00	14G0003	07/01/14 22:55	NMI	TAL SPK

## Client Sample ID: TP-5-5-N

Lab Sample ID: SXF0198-41

Date Collected: 06/26/14 15:16

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 94.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.900	14G0019_P	07/02/14 10:53	MS	TAL SPK
Total	Analysis	EPA 8082A		1.00	14G0019	07/02/14 17:05	NMI	TAL SPK
Total	Prep	Wet Chem		1.00	14G0029_P	07/02/14 12:54	NI	TAL SPK
Total	Analysis	TA SOP		1.00	14G0029	07/03/14 09:50	NI	TAL SPK

## Client Sample ID: TP-5-5-S

Lab Sample ID: SXF0198-42

Date Collected: 06/26/14 15:15

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 93.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.869	14G0019_P	07/02/14 10:53	MS	TAL SPK
Total	Analysis	EPA 8082A		1.00	14G0019	07/02/14 17:20	NMI	TAL SPK

## Client Sample ID: TP-6-1-S

Lab Sample ID: SXF0198-46

Date Collected: 06/26/14 16:10

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 90.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.958	14G0019_P	07/02/14 10:53	MS	TAL SPK
Total	Analysis	EPA 8082A		1.00	14G0019	07/07/14 18:57	NMI	TAL SPK

## Client Sample ID: TP-6-2-S

Lab Sample ID: SXF0198-48

Date Collected: 06/26/14 16:15

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 92.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.968	14G0019_P	07/02/14 10:53	MS	TAL SPK

TestAmerica Spokane

# Lab Chronicle

Client: Geo Engineers - Spokane  
Project/Site: 0504-047-01

TestAmerica Job ID: SXF0198

## Client Sample ID: TP-6-2-S

Lab Sample ID: SXF0198-48

Date Collected: 06/26/14 16:15

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 92.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Analysis	EPA 8082A		1.00	14G0019	07/02/14 17:52	NMI	TAL SPK

## Client Sample ID: TP-6-3-S

Lab Sample ID: SXF0198-50

Date Collected: 06/26/14 16:20

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 92.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.962	14G0019_P	07/02/14 10:53	MS	TAL SPK
Total	Analysis	EPA 8082A		1.00	14G0019	07/02/14 18:08	NMI	TAL SPK

## Client Sample ID: TP-6-4-S

Lab Sample ID: SXF0198-52

Date Collected: 06/26/14 16:25

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 94.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.922	14G0019_P	07/02/14 10:53	MS	TAL SPK
Total	Analysis	EPA 8082A		1.00	14G0019	07/02/14 18:24	NMI	TAL SPK

## Client Sample ID: TP-7-2-N

Lab Sample ID: SXF0198-57

Date Collected: 06/27/14 08:15

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 86.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.780	14G0019_P	07/02/14 10:53	MS	TAL SPK
Total	Analysis	EPA 8082A		1.00	14G0019	07/02/14 18:55	NMI	TAL SPK

## Client Sample ID: TP-7-2-S

Lab Sample ID: SXF0198-58

Date Collected: 06/27/14 08:16

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 87.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.770	14G0019_P	07/02/14 10:53	MS	TAL SPK
Total	Analysis	EPA 8082A		1.00	14G0019	07/02/14 19:11	NMI	TAL SPK

## Client Sample ID: TP-7-3-N

Lab Sample ID: SXF0198-59

Date Collected: 06/27/14 08:20

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 94.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.837	14G0019_P	07/02/14 10:53	MS	TAL SPK
Total	Analysis	EPA 8082A		1.00	14G0019	07/02/14 19:27	NMI	TAL SPK

TestAmerica Spokane

# Lab Chronicle

Client: Geo Engineers - Spokane  
Project/Site: 0504-047-01

TestAmerica Job ID: SXF0198

## Client Sample ID: TP-7-3-S

Lab Sample ID: SXF0198-60

Date Collected: 06/27/14 08:21

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 88.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.801	14G0019_P	07/02/14 10:53	MS	TAL SPK
Total	Analysis	EPA 8082A		1.00	14G0019	07/02/14 19:42	NMI	TAL SPK

## Client Sample ID: TP-7-4-N

Lab Sample ID: SXF0198-61

Date Collected: 06/27/14 08:30

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 93

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.957	14G0019_P	07/02/14 10:53	MS	TAL SPK
Total	Analysis	EPA 8082A		1.00	14G0019	07/02/14 19:58	NMI	TAL SPK

## Client Sample ID: TP-7-4-S

Lab Sample ID: SXF0198-62

Date Collected: 06/27/14 08:31

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 95.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.857	14G0019_P	07/02/14 10:53	MS	TAL SPK
Total	Analysis	EPA 8082A		5.00	14G0019	07/07/14 19:29	NMI	TAL SPK

## Client Sample ID: TP-7-5-N

Lab Sample ID: SXF0198-63

Date Collected: 06/27/14 08:40

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 90.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.992	14G0019_P	07/02/14 10:53	MS	TAL SPK
Total	Analysis	EPA 8082A		1.00	14G0019	07/02/14 20:30	NMI	TAL SPK

## Client Sample ID: TP-7-5-S

Lab Sample ID: SXF0198-64

Date Collected: 06/27/14 08:41

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 96.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.764	14G0019_P	07/02/14 10:53	MS	TAL SPK
Total	Analysis	EPA 8082A		1.00	14G0019	07/07/14 19:13	NMI	TAL SPK

## Client Sample ID: TP-8-1-S

Lab Sample ID: SXF0198-68

Date Collected: 06/27/14 07:15

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 91.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.912	14G0019_P	07/02/14 10:53	MS	TAL SPK
Total	Analysis	EPA 8082A		1.00	14G0019	07/02/14 21:02	NMI	TAL SPK

TestAmerica Spokane

# Lab Chronicle

Client: Geo Engineers - Spokane  
Project/Site: 0504-047-01

TestAmerica Job ID: SXF0198

## Client Sample ID: TP-8-2-S

Lab Sample ID: SXF0198-70

Date Collected: 06/27/14 07:25

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 93.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.948	14G0019_P	07/02/14 10:53	MS	TAL SPK
Total	Analysis	EPA 8082A		1.00	14G0019	07/02/14 21:17	NMI	TAL SPK

## Client Sample ID: TP-7-1-N

Lab Sample ID: SXF0198-75

Date Collected: 06/27/14 08:11

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 88.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.936	14G0026_P	07/03/14 08:13	NI	TAL SPK
Total	Analysis	EPA 8082A		5.00	14G0026	07/07/14 14:13	NMI	TAL SPK
Total	Prep	EPA 3550B	RE1	0.953	14G0147_P	07/03/14 08:13	NI	TAL SPK
Total	Analysis	EPA 8082A	RE1	1.00	14G0147	07/22/14 13:45	MS	TAL SPK

## Client Sample ID: TP-7-1-S

Lab Sample ID: SXF0198-76

Date Collected: 06/27/14 08:10

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 89.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.925	14G0026_P	07/03/14 08:13	NI	TAL SPK
Total	Analysis	EPA 8082A		25.0	14G0026	07/08/14 10:20	NMI	TAL SPK

## Client Sample ID: TP-9-1-N

Lab Sample ID: SXF0198-77

Date Collected: 06/27/14 09:45

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 87.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.940	14G0026_P	07/03/14 08:13	NI	TAL SPK
Total	Analysis	EPA 8082A		1.00	14G0026	07/07/14 14:45	NMI	TAL SPK

## Client Sample ID: TP-9-1-S

Lab Sample ID: SXF0198-78

Date Collected: 06/27/14 09:46

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 84.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.923	14G0026_P	07/03/14 08:13	NI	TAL SPK
Total	Analysis	EPA 8082A		1.00	14G0026	07/07/14 15:01	NMI	TAL SPK

## Client Sample ID: TP-9-2-N

Lab Sample ID: SXF0198-79

Date Collected: 06/27/14 09:55

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 89.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.945	14G0026_P	07/03/14 08:13	NI	TAL SPK

TestAmerica Spokane



# Lab Chronicle

Client: Geo Engineers - Spokane  
Project/Site: 0504-047-01

TestAmerica Job ID: SXF0198

**Client Sample ID: TP-9-2-N**

**Lab Sample ID: SXF0198-79**

Date Collected: 06/27/14 09:55

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 89.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Analysis	EPA 8082A		1.00	14G0026	07/07/14 15:16	NMI	TAL SPK

**Client Sample ID: TP-9-2-S**

**Lab Sample ID: SXF0198-80**

Date Collected: 06/27/14 09:56

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 90.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.909	14G0026_P	07/03/14 08:13	NI	TAL SPK
Total	Analysis	EPA 8082A		1.00	14G0026	07/07/14 15:32	NMI	TAL SPK

**Client Sample ID: TP-9-3-N**

**Lab Sample ID: SXF0198-81**

Date Collected: 06/27/14 10:00

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 93.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.917	14G0026_P	07/03/14 08:13	NI	TAL SPK
Total	Analysis	EPA 8082A		1.00	14G0026	07/07/14 16:04	NMI	TAL SPK

**Client Sample ID: TP-9-3-S**

**Lab Sample ID: SXF0198-82**

Date Collected: 06/27/14 10:01

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 93.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.975	14G0026_P	07/03/14 08:13	NI	TAL SPK
Total	Analysis	EPA 8082A		1.00	14G0026	07/07/14 16:20	NMI	TAL SPK

**Client Sample ID: TP-9-4-N**

**Lab Sample ID: SXF0198-83**

Date Collected: 06/27/14 10:05

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 92.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.992	14G0026_P	07/03/14 08:13	NI	TAL SPK
Total	Analysis	EPA 8082A		1.00	14G0026	07/07/14 16:36	NMI	TAL SPK

**Client Sample ID: TP-9-4-S**

**Lab Sample ID: SXF0198-84**

Date Collected: 06/27/14 10:06

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 93.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.940	14G0026_P	07/03/14 08:13	NI	TAL SPK
Total	Analysis	EPA 8082A		1.00	14G0026	07/07/14 16:52	NMI	TAL SPK

TestAmerica Spokane

# Lab Chronicle

Client: Geo Engineers - Spokane  
Project/Site: 0504-047-01

TestAmerica Job ID: SXF0198

## Client Sample ID: TP-13-1-N

Lab Sample ID: SXF0198-AL

Date Collected: 06/27/14 13:30

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 88.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.987	14G0026_P	07/03/14 08:13	NI	TAL SPK
Total	Analysis	EPA 8082A		1.00	14G0026	07/08/14 10:36	NMI	TAL SPK
Total	Prep	EPA 3550B	RE1	0.905	14G0147_P	07/03/14 08:13	NI	TAL SPK
Total	Analysis	EPA 8082A	RE1	1.00	14G0147	07/22/14 15:25	MS	TAL SPK
Total	Prep	Wet Chem		1.00	14G0054_P	07/03/14 12:40	NI	TAL SPK
Total	Analysis	TA SOP		1.00	14G0054	07/08/14 10:01	NI	TAL SPK

## Client Sample ID: TP-13-1-S

Lab Sample ID: SXF0198-AM

Date Collected: 06/27/14 13:31

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 80.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.929	14G0026_P	07/03/14 08:13	NI	TAL SPK
Total	Analysis	EPA 8082A		1.00	14G0026	07/08/14 10:52	NMI	TAL SPK

## Client Sample ID: TP-13-2-N

Lab Sample ID: SXF0198-AN

Date Collected: 06/27/14 13:35

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 85.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.954	14G0026_P	07/03/14 08:13	NI	TAL SPK
Total	Analysis	EPA 8082A		1.00	14G0026	07/07/14 17:39	NMI	TAL SPK

## Client Sample ID: TP-13-2-S

Lab Sample ID: SXF0198-AO

Date Collected: 06/27/14 13:36

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 87.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.917	14G0026_P	07/03/14 08:13	NI	TAL SPK
Total	Analysis	EPA 8082A		1.00	14G0026	07/07/14 17:54	NMI	TAL SPK

## Client Sample ID: TP-14-1-N

Lab Sample ID: SXF0198-AT

Date Collected: 06/27/14 14:00

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 89.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		2.71	14G0147_P	07/21/14 10:08	MS	TAL SPK
Total	Analysis	EPA 8082A		4.00	14G0147	07/23/14 09:54	MS	TAL SPK

TestAmerica Spokane

# Lab Chronicle

Client: Geo Engineers - Spokane  
Project/Site: 0504-047-01

TestAmerica Job ID: SXF0198

## Client Sample ID: TP-14-1-S

Lab Sample ID: SXF0198-AU

Date Collected: 06/27/14 14:01

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 87.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.928	14G0026_P	07/03/14 08:13	NI	TAL SPK
Total	Analysis	EPA 8082A		500	14G0026	07/07/14 18:10	NMI	TAL SPK

## Client Sample ID: TP-14-2-N

Lab Sample ID: SXF0198-AV

Date Collected: 06/27/14 14:05

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 90.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.792	14G0147_P	07/21/14 10:08	MS	TAL SPK
Total	Analysis	EPA 8082A		1.00	14G0147	07/22/14 15:57	MS	TAL SPK

## Client Sample ID: TP-14-2-S

Lab Sample ID: SXF0198-AW

Date Collected: 06/27/14 14:06

Matrix: Soil

Date Received: 06/27/14 15:50

Percent Solids: 89.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.943	14G0026_P	07/03/14 08:13	NI	TAL SPK
Total	Analysis	EPA 8082A		10.0	14G0026	07/08/14 11:08	NMI	TAL SPK
Total	Prep	EPA 3550B	RE1	0.870	14G0147_P	07/03/14 08:13	NI	TAL SPK
Total	Analysis	EPA 8082A	RE1	1.00	14G0147	07/22/14 16:45	MS	TAL SPK

**Laboratory References:**

TAL SPK = TestAmerica Spokane, 11922 East 1st. Avenue, Spokane, WA 99206, TEL (509)924-9200

# Certification Summary

Client: Geo Engineers - Spokane  
Project/Site: 0504-047-01

TestAmerica Job ID: SXF0198

## Laboratory: TestAmerica Spokane

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-071	10-31-14
Washington	State Program	10	C569	01-06-15

1

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# Method Summary

Client: Geo Engineers - Spokane  
Project/Site: 0504-047-01

TestAmerica Job ID: SXF0198

Method	Method Description	Protocol	Laboratory
EPA 8082A	Polychlorinated Biphenyls by EPA Method 8082		TAL SPK
TA SOP	Conventional Chemistry Parameters by APHA/EPA Methods		TAL SPK

**Protocol References:**

**Laboratory References:**

TAL SPK = TestAmerica Spokane, 11922 East 1st. Avenue, Spokane, WA 99206, TEL (509)924-9200

1

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# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Also Report to:  
 Huckleberry Palmer  
 hpal461@ecy.wa.gov  
 4601 N. Monroe St.  
 Spokane, WA 99205  
 509-822-3283

5755 8<sup>th</sup> Street East, Tacoma, WA 98424-1317  
 11922 E. First Ave., Spokane WA 99206-5302  
 9405 SW Nimbus Ave., Beaverton, OR 97008-7145  
 2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119

253-922-2310 FAX 922-5047  
 509-924-9200 FAX 924-9290  
 503-906-9200 FAX 906-9210  
 907-563-9200 FAX 563-9210

6/24/2014

## CHAIN OF CUSTODY REPORT

Work Order #: **SXF0198**

CLIENT: <i>Caco Engineers</i>		INVOICE TO: <i>Huckleberry Palmer - hpal461@ecy.wa.gov</i>		<b>TURNAROUND REQUEST</b> in Business Days * Organic & Inorganic Analyses <input type="checkbox"/> 10 <input type="checkbox"/> 7 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> <1 <small>STD.</small> Petroleum Hydrocarbon Analyses <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> <1 <small>STD.</small> <input type="checkbox"/> <b>OTHER</b> Specify: _____ <small>* Turnaround Requests less than standard may incur Rush Charges.</small>						
REPORT TO: <i>DLAUDER@geoengineers.com</i>		Department of Ecology 4601 N. Monroe St. Spokane WA 99205								
ADDRESS: <i>523 E Second Ave Spokane, WA 99202</i>		P.O. NUMBER:								
PHONE: <i>509-763-3125</i> FAX:										
PROJECT NAME: <i>City Parcel</i>		PRESERVATIVE								
PROJECT NUMBER: <i>0504-047-01</i>		REQUESTED ANALYSES								
SAMPLED BY: <i>JML</i>										
CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME						MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID
<i>1 TP-1-1-N</i>	<i>6/26/2014 0845</i>	<i>X</i>					<i>S</i>	<i>1</i>		
<i>2 TP-1-1-S</i>		<i>X</i>								
<i>3 TP-1-2-N</i>		<i>X</i>								
<i>4 TP-1-2-S</i>		<i>X</i>								
<i>5 TP-1-3-N</i>										
<i>6 TP-1-3-S</i>										
<i>7 TP-1-4-N</i>										
<i>8 TP-1-4-S</i>										
<i>9 TP-2-1-N</i>		<i>X</i>								
<i>10 TP-2-1-S</i>		<i>X</i>								
RELEASED BY: <i>Jenith</i>	DATE: <i>6/27/14</i>	RECEIVED BY: <i>Stangle Amington</i>	DATE: <i>6/27/14</i>	FIRM: <i>Ecology</i>		FIRM: <i>TestAmerica</i>		TEMP: <i>57</i>		
PRINT NAME: <i>Huckleberry Palmer</i>	TIME: <i>17:00</i>	PRINT NAME: <i>Jander Amington</i>	TIME: <i>15:50</i>	FIRM: <i>Ecology</i>		FIRM: <i>TestAmerica</i>		PAGE <i>1</i> OF <i>14</i>		
RELEASED BY:	DATE:	RECEIVED BY:	DATE:	FIRM:		FIRM:		TEMP:		
PRINT NAME:	TIME:	PRINT NAME:	TIME:	FIRM:		FIRM:		PAGE OF		
ADDITIONAL REMARKS:										

Page 52 of 68

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Also Report to:  
 Huckleberry Palmer  
 hpalk@ecy.wa.gov  
 4601 N. Monroe St  
 Spokane, WA 99205  
 509-322-3433

5755 8<sup>th</sup> Street East, Tacoma, WA 98424-1317  
 11922 E. First Ave., Spokane WA 99206-5302  
 9405 SW Nimbus Ave., Beaverton, OR 97008-7145  
 2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119

253-922-2310 FAX 922-5047  
 509-924-9200 FAX 924-9290  
 503-906-9200 FAX 906-9210  
 907-563-9200 FAX 563-9210

7/24/2014

## CHAIN OF CUSTODY REPORT

Work Order # SXF0198

CLIENT: <u>GeoEngineers</u>		INVOICE TO: <u>Huckleberry Palmer</u>		<b>TURNAROUND REQUEST</b> in Business Days * Organic & Inorganic Analyses <input type="checkbox"/> 10 <input type="checkbox"/> 7 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> <1 STD. Petroleum Hydrocarbon Analyses <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> <1 STD. <input type="checkbox"/> OTHER Specify: * Turnaround Requests less than standard may incur Rush Charges.							
REPORT TO: <u>dlambert@geengineers.com</u>		Department of Ecology <u>hpalk@ecy.wa.gov</u>									
ADDRESS: <u>523 E Second Ave Spokane WA 99202</u>		4601 N. Monroe St Spokane, WA 99205									
PHONE: <u>509-363-3125</u> FAX:		P.O. NUMBER:									
PROJECT NAME: <u>City Parcel</u>		PRESERVATIVE									
PROJECT NUMBER: <u>0504-047-01</u>		REQUESTED ANALYSES									
SAMPLED BY: <u>JML</u>											
CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME							MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID
1 TP-2-2-N	6/26/2014 1101	X						S	1		
2 TP-2-2-S	1100	X									
3 TP-2-3-N	1111										
4 TP-2-3-S	1110										
5 TP-2-4-N	1116										
6 TP-2-4-S	1115										
7 TP-3-1-N	1201	X									
8 TP-3-1-S	1200	X									
9 TP-3-2-N	1211	X									
10 TP-3-2-S	1210	X									
RELEASED BY: <u>JML</u>	DATE: <u>6/27/14</u>	RECEIVED BY: <u>Randee Amington</u>	DATE: <u>6/27/14</u>	PRINT NAME: <u>Randee Amington</u>	FIRM: <u>TestAmerica</u>	DATE: <u>6/27/14</u>	TIME: <u>1:55</u>				
PRINT NAME: <u>Huckleberry Palmer</u>	FIRM: <u>Ecology</u>	DATE: <u>12:00</u>	TIME: <u>12:00</u>	PRINT NAME:	FIRM:	DATE:	TIME:				
RELEASED BY:	DATE:	RECEIVED BY:	DATE:	PRINT NAME:	FIRM:	DATE:	TIME:				
PRINT NAME:	FIRM:	PRINT NAME:	FIRM:	PRINT NAME:	FIRM:	DATE:	TIME:				
ADDITIONAL REMARKS:								TEMP: <u>57</u>	PAGE: <u>2</u> OF <u>14</u>		

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# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Also Report To:  
 Huckleberry Palmer  
 hpalk@ecy.wa.gov  
 4661 N. Manne St  
 Spokane, WA 99205  
 509-324-5433

5755 8<sup>th</sup> Street East, Tacoma, WA 98424-1317  
 11922 E. First Ave., Spokane WA 99206-5302  
 9405 SW Nimbus Ave., Beaverton, OR 97008-7145  
 2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119

253-922-2310 FAX 922-5047  
 509-924-9200 FAX 924-9290  
 503-906-9200 FAX 906-9210  
 907-563-9200 FAX 563-9210

6/24/2014

## CHAIN OF CUSTODY REPORT

Work Order #: **SXF0198**

CLIENT: <b>Geo Engineers</b>		INVOICE TO: <b>Huckleberry Palmer</b>		<b>TURNAROUND REQUEST</b> in Business Days * Organic & Inorganic Analyses <input type="checkbox"/> 10 <input type="checkbox"/> 7 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> <1 STD. Petroleum Hydrocarbon Analyses <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> <1 STD. <input type="checkbox"/> OTHER Specify: _____ * Turnaround Requests less than standard may incur Rush Charges.					
REPORT TO: <b>blander@geoengineers.com</b>		Department of Ecology 4661 N. Manne St Spokane, WA 99205							
ADDRESS: <b>523 E Second Ave Spokane, WA 99202</b>		P.O. NUMBER:							
PHONE: <b>509-363-3125</b> FAX:									
PROJECT NAME: <b>City Parcel</b>		PRESERVATIVE							
PROJECT NUMBER: <b>0501-017-01</b>		REQUESTED ANALYSES							
SAMPLED BY: <b>JML</b>									
CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME					MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID
1 TP-3-3-N	6/26/2014 1231	X				S	1		
2 TP-3-3-S	1220	X							
3 TP-3-4-N	1230	X							
4 TP-3-4-S	1225	X							
5 TP-4-1-N	1400	X							
6 TP-4-1-S	1401	X							
7 TP-4-2-N	1405								
8 TP-4-2-S	1406	X							
9 TP-4-3-N	1415								
10 TP-4-3-S	1416								
RELEASED BY: <b>Debra Palmer</b>		DATE: <b>6-27-14</b>		RECEIVED BY: <b>Blaine Arrington</b>		DATE: <b>6/27/14</b>			
PRINT NAME: <b>Huck Palmer</b>		FIRM: <b>Ecology</b>		PRINT NAME: <b>Blaine Arrington</b>		FIRM: <b>TestAmerica</b>		TIME: <b>1550</b>	
RELEASED BY:		DATE:		RECEIVED BY:		DATE:			
PRINT NAME:		FIRM:		PRINT NAME:		FIRM:		TIME:	
ADDITIONAL REMARKS:								TEMP: <b>57</b>	PAGE <b>3</b> OF <b>14</b>

Page 54 of 68



# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Also Report To

Huckleberry Palmer  
 hp@hpl.com  
 4601 N. Monroe  
 Spokane, WA 99205  
 509-328-3433

5755 8<sup>th</sup> Street East, Tacoma, WA 98424-1317  
 11922 E. First Ave., Spokane WA 99206-5302  
 9405 SW Nimbus Ave., Beaverton, OR 97008-7145  
 2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119

253-922-2310 FAX 922-5047  
 509-924-9200 FAX 924-9290  
 503-906-9200 FAX 906-9210  
 907-563-9200 FAX 563-9210

7/24/2014

## CHAIN OF CUSTODY REPORT

Work Order # **SXF0189**

CLIENT: **Geo Engineers**  
 REPORT TO: **blander@geoengineers.com**  
 ADDRESS: **523 E Second St**  
**Spokane, WA 99202**  
 PHONE: **509-865-3125** FAX:  
 PROJECT NAME: **City Parcel**  
 PROJECT NUMBER: **0504-442.01**  
 SAMPLED BY: **JML**

INVOICE TO: **Huckleberry Palmer**  
 Dept. of Ecology  
 4601 N. Monroe St  
 Spokane, WA 99205  
 P.O. NUMBER:

**TURNAROUND REQUEST**  
 in Business Days \*  
 Organic & Inorganic Analyses  
 STD.  10  7  5  4  3  2  1  <1  
 Petroleum Hydrocarbon Analyses  
 STD.  5  4  3  2  1  <1  
 OTHER Specify:  
 \* Turnaround Requests less than standard may incur Rush Charges.

CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	PRESERVATIVE	REQUESTED ANALYSES																	
1 TP-4-4-N	6/26/2014 1420																			
2 TP-4-4-S	1421																			
3 TP-5-1-N	1456	X																		
4 TP-5-1-S	1455	X																		
5 TP-5-2-N	1501	X																		
6 TP-5-2-S	1500	X																		
7 TP-5-3-N	1506	X																		
8 TP-5-3-S	1505	X																		
9 TP-5-4-N	1511	X																		
10 TP-5-4-S	1510	X																		

MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID
S	1		

RELEASED BY: **JML** DATE: **6-27-14**  
 PRINT NAME: **Huckleberry Palmer** FIRM: **Ecology** TIME: **1200**

RECEIVED BY: **Blander Arrington** DATE: **6/27/14**  
 PRINT NAME: **Blander Arrington** FIRM: **TestAmerica** TIME: **1550**

ADDITIONAL REMARKS: TEMP: **5.7** PAGE **4** OF **14**

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Ats Report To  
 Huckleberry Palmer  
 hpal461@cy.wa.gov  
 4601 N. Monroe  
 Spokane, WA 99205  
 509-322-3483

5755 8<sup>th</sup> Street East, Tacoma, WA 98424-1317  
 11922 E. First Ave., Spokane WA 99206-5302  
 9405 SW Nimbus Ave., Beaverton, OR 97008-7145  
 2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119

253-922-2310 FAX 922-5047  
 509-924-9200 FAX 924-9290  
 503-906-9200 FAX 906-9210  
 907-563-9200 FAX 563-9210

7/24/2014

## CHAIN OF CUSTODY REPORT

Work Order #: **SXF0198**

CLIENT: <b>Geo Engineers</b>		INVOICE TO: <b>Huckleberry Palmer</b>		<table border="1"> <tr> <th colspan="8">TURNAROUND REQUEST</th> </tr> <tr> <th colspan="8">in Business Days *</th> </tr> <tr> <td colspan="8">Organic &amp; Inorganic Analyses</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td colspan="8">Petroleum Hydrocarbon Analyses</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td colspan="8">OTHER Specify:</td> </tr> <tr> <td colspan="8">* Turnaround Requests less than standard may incur Rush Charges.</td> </tr> <tr> <th>MATRIX (W, S, O)</th> <th># OF CONT.</th> <th>LOCATION/ COMMENTS</th> <th>TA WO ID</th> <td colspan="4"></td> <td></td> </tr> <tr> <td>S</td> <td>1</td> <td></td> <td></td> <td colspan="4"></td> <td></td> </tr> </table>				TURNAROUND REQUEST								in Business Days *								Organic & Inorganic Analyses								<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Petroleum Hydrocarbon Analyses								<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	OTHER Specify:								* Turnaround Requests less than standard may incur Rush Charges.								MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID						S	1							
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S	1																																																																																								
REPORT TO: <b>clauder@geoengineers.com</b>		Department of Ecology 4601 N. Monroe St Spokane, WA 99205																																																																																							
ADDRESS: <b>523 E Second Ave Spokane, WA 99202</b>		P.O. NUMBER:																																																																																							
PHONE: <b>509-363-3175</b> FAX:																																																																																									
PROJECT NAME: <b>city parcel</b>		PRESERVATIVE																																																																																							
PROJECT NUMBER: <b>OSD4-647-01</b>		REQUESTED ANALYSES																																																																																							
SAMPLED BY: <b>JML</b>																																																																																									
CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME																																																																																								
1 TP-5-5-N	6/26/2014 1516	X																																																																																							
2 TP-5-5-S	1515	X																																																																																							
3 TP-5-6-N	1521																																																																																								
4 TP-5-6-S	1520																																																																																								
5 TP-6-1-N	1611																																																																																								
6 TP-6-1-S	1610	X																																																																																							
7 TP-6-2-N	1616																																																																																								
8 TP-6-2-S	1615	X																																																																																							
9 TP-6-3-N	1621																																																																																								
10 TP-6-3-S	1620	X																																																																																							
RELEASED BY: <b>[Signature]</b>	DATE: <b>6-22-14</b>	RECEIVED BY: <b>[Signature]</b>	DATE: <b>6/27/14</b>																																																																																						
PRINT NAME: <b>Huckleberry Palmer</b>	FIRM: <b>Ecology</b>	PRINT NAME: <b>Randy Arrington</b>	FIRM: <b>TestAmerica</b>																																																																																						
RELEASED BY:	DATE:	RECEIVED BY:	DATE:																																																																																						
PRINT NAME:	FIRM:	PRINT NAME:	FIRM:																																																																																						
ADDITIONAL REMARKS:			TEMP: <b>5.7</b>	PAGE: <b>5</b>	OF: <b>14</b>																																																																																				

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# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Also Report to

Huckleberry Palmer  
 hpal461@ecy.wa.gov  
 4601 N. Monroe  
 Spokane, WA 99205  
 509-320-3433

5755 8<sup>th</sup> Street East, Tacoma, WA 98424-1317  
 11922 E. First Ave., Spokane WA 99206-5302  
 9405 SW Nimbus Ave., Beaverton, OR 97008-7145  
 2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119

253-922-2310 FAX 922-5047  
 509-924-9200 FAX 924-9290  
 503-906-9200 FAX 906-9210  
 907-563-9200 FAX 563-9210

7/24/2014

## CHAIN OF CUSTODY REPORT

Work Order # **SKFO198**

CLIENT: <b>Geo Engineers</b>		INVOICE TO: <b>Huckleberry Palmer</b>		<b>TURNAROUND REQUEST</b> in Business Days * Organic & Inorganic Analyses <input type="checkbox"/> 10 <input type="checkbox"/> 7 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> <1 <small>STD.</small> Petroleum Hydrocarbon Analyses <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> <1 <small>STD.</small> <input type="checkbox"/> OTHER Specify: <small>* Turnaround Requests less than standard may incur Rush Charges.</small>					
REPORT TO: <b>blander@geoengineers.com</b>		Department of Ecology 4601 N. Monroe St Spokane, WA 99205							
ADDRESS: <b>523 E Second Ave Spokane WA 99202</b>		P.O. NUMBER:							
PHONE: <b>509-320-3433</b> FAX:									
PROJECT NAME: <b>City Parcel</b>		PRESERVATIVE							
PROJECT NUMBER: <b>0504-047-01</b>		REQUESTED ANALYSES							
SAMPLED BY: <b>JML</b>									
CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME					MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID
1 TP-6-4-N	6/26/2014 1626					S			
2 TP-6-4-S	1625	X							
3 TP-6-5-N	1631								
4 TP-6-5-S	1630								
5 TP-6-6-N	1636								
6 TP-6-6-S	1635								
7									
8									
9									
10									
RELEASED BY: <b>Jem Palmer</b>	FIRM: <b>Ecology</b>	DATE: <b>6-27-14</b>	TIME: <b>1700</b>	RECEIVED BY: <b>Jander Amington</b>	FIRM: <b>TestAmerica</b>	DATE: <b>6/27/14</b>	TIME: <b>1850</b>		
PRINT NAME: <b>Huck Palmer</b>				PRINT NAME: <b>Jander Amington</b>					
ADDITIONAL REMARKS:									

TEMP: **5.7** PAGE **6** OF **14**

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Also Report to  
Huckleberry Palmer  
 hpal461@ecy.wa.gov  
 4601 N. Monroe St  
 Spokane, WA 99205  
 509-322-3433

5755 8<sup>th</sup> Street East, Tacoma, WA 98424-1317  
 11922 E. First Ave., Spokane WA 99206-5302  
 9405 SW Nimbus Ave., Beaverton, OR 97008-7145  
 2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119

253-922-2310 FAX 922-5047  
 509-924-9200 FAX 924-9290  
 503-906-9200 FAX 906-9210  
 907-563-9200 FAX 563-9210

10/24/2014

## CHAIN OF CUSTODY REPORT

Work Order # **EXT098**

CLIENT: <b>Geo Engineers</b>		INVOICE TO: <b>Huckleberry Palmer</b>		<b>TURNAROUND REQUEST</b> in Business Days * Organic & Inorganic Analyses <input type="checkbox"/> 10 <input type="checkbox"/> 7 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> <1 <small>STD.</small> Petroleum Hydrocarbon Analyses <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> <1 <small>STD.</small> <input type="checkbox"/> <b>OTHER</b> Specify: <small>* Turnaround Requests less than standard may incur Rush Charges.</small>							
REPORT TO: <b>dhuder@geoengineers.com</b>		Department of Ecology									
ADDRESS: <b>523 E Second Ave Spokane, WA 99202</b>		4601 N. Monroe St Spokane, WA 99205									
PHONE: <b>509-363-3125</b> FAX:		P.O. NUMBER:									
PROJECT NAME: <b>City Panel</b>		PRESERVATIVE									
PROJECT NUMBER: <b>0584-047-01</b>		REQUESTED ANALYSES									
SAMPLED BY: <b>JML</b>		<div style="display: flex; justify-content: space-between;"> <span style="writing-mode: vertical-rl; transform: rotate(180deg);">DOB</span> <span style="writing-mode: vertical-rl; transform: rotate(180deg);">PCBS</span> </div>									
CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME							MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID
1 TP-7-2-N	6-22-14 / 0815	X									
2 TP-7-2-S	0816	X									
3 TP-7-3-N	0820	X									
4 TP-7-3-S	0821	X									
5 TP-7-4-N	0830	X									
6 TP-7-4-S	0831	X									
7 TP-7-5-N	0840	X									
8 TP-7-5-S	0841	X									
9 TP-7-6-N	0846										
10 TP-7-6-S	0845										
RELEASED BY: <b>JML</b>		DATE: <b>6-27-14</b>		RECEIVED BY: <b>Rander Arrington</b>		DATE: <b>6/27/14</b>					
PRINT NAME: <b>Huckleberry Palmer</b>		FIRM: <b>Ecology</b>		PRINT NAME: <b>Rander Arrington</b>		FIRM: <b>TestAmerica</b>		TIME: <b>1550</b>			
RELEASED BY:		DATE:		RECEIVED BY:		DATE:					
PRINT NAME:		FIRM:		PRINT NAME:		FIRM:					
ADDITIONAL REMARKS:											
								TEMP: <b>5.7</b>	PAGE <b>7</b> OF <b>14</b>		

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# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Also Report To:  
 Huckleberry Palmer  
 hpal461@ecy.wa.gov  
 4601 N. Monroe St.  
 Spokane, WA 99205  
 509-321-3433

5755 8th Street East, Tacoma, WA 98424-1317  
 11922 E. First Ave., Spokane WA 99206-5302  
 9405 SW Nimbus Ave., Beaverton, OR 97008-7145  
 2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119

253-922-2310 FAX 922-5047  
 509-924-9200 FAX 924-9290  
 503-906-9200 FAX 906-9210  
 907-563-9200 FAX 563-9210

7/24/2014

## CHAIN OF CUSTODY REPORT

Work Order # **2XFO198**

CLIENT: <b>Geo Engineers</b>		INVOICE TO: <b>Huckleberry Palmer</b>		<b>TURNAROUND REQUEST</b> in Business Days * Organic & Inorganic Analyses <input type="checkbox"/> 10 <input type="checkbox"/> 7 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> <1 STD. Petroleum Hydrocarbon Analyses <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> <1 STD. <input type="checkbox"/> OTHER Specify:			
REPORT TO: <b>alandar@geoengineers.com</b>		Department of Ecology					
ADDRESS: <b>528 E Summit Ave</b>		4601 N. Monroe St.		* Turnaround Requests less than standard may incur Rush Charges.			
Spokane, WA 99202		Spokane, WA 99205					
PHONE: <b>509-363-3125</b> FAX:		P.O. NUMBER:		MATRIX (W, S, O)			
PROJECT NAME: <b>City Prial</b>		PRESERVATIVE		# OF CONT.			
PROJECT NUMBER: <b>OSD4-047-01</b>		REQUESTED ANALYSES		LOCATION/ COMMENTS			
SAMPLED BY: <b>JML</b>				TA WO ID			
CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME						
1 TP-8-1-N	6-27-14 / 0716					S	1
2 TP-8-1-S	/ 0715	X					
3 TP-8-2-N	/ 0726						
4 TP-8-2-S	/ 0725	X					
5 TP-8-3-N	/ 0731						
6 TP-8-3-S	/ 0730						
7 TP-8-4-N	/ 0741						
8 TP-8-4-S	/ 0740						
9 TP-7-1-N	/ 0811	X					
10 TP-7-1-S	/ 0810	X					
RELEASED BY: <b>[Signature]</b>	DATE: <b>6-27-14</b>	RECEIVED BY: <b>[Signature]</b>	DATE: <b>6-27-14</b>	RECEIVED BY: <b>[Signature]</b>	DATE: <b>6/27/14</b>		
PRINT NAME: <b>Huckleberry Palmer</b>	FIRM: <b>Ecology</b>	TIME: <b>1700</b>	TIME: <b>1700</b>	PRINT NAME: <b>[Signature]</b>	TIME: <b>1550</b>		
RELEASED BY:	DATE:	RECEIVED BY:	DATE:	RECEIVED BY:	DATE:		
PRINT NAME:	FIRM:	PRINT NAME:	FIRM:	PRINT NAME:	FIRM:		
ADDITIONAL REMARKS:						TEMP: <b>5.7</b>	PAGE <b>8</b> OF <b>14</b>

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# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Also Report to:  
 Huckleberry Palmer  
 hpa1461@26y.wa.gov  
 4601 N. Monroe St  
 Spokane, WA 99205  
 509-329-3433

5755 8<sup>th</sup> Street East, Tacoma, WA 98424-1317  
 11922 E. First Ave., Spokane WA 99206-5302  
 9405 SW Nimbus Ave., Beaverton, OR 97008-7145  
 2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119

253-922-2310 FAX 922-5047  
 509-924-9200 FAX 924-9290  
 503-906-9200 FAX 906-9210  
 907-563-9200 FAX 563-9210

7/24/2014

## CHAIN OF CUSTODY REPORT

Work Order # **XF0198**

CLIENT: <b>Geo Engineers</b>		INVOICE TO:		<b>TURNAROUND REQUEST</b> in Business Days * Organic & Inorganic Analyses <input type="checkbox"/> 10 <input type="checkbox"/> 7 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> <1 STD. Petroleum Hydrocarbon Analyses <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> <1 STD. <input type="checkbox"/> OTHER Specify: * Turnaround Requests less than standard may incur Rush Charges.							
REPORT TO: <b>d.buckler@geoservices.com</b>		P.O. NUMBER:									
ADDRESS: <b>523 E Second Ave Spokane, WA 99202</b>		PRESERVATIVE									
PHONE: <b>509-363-7125</b> FAX:		REQUESTED ANALYSES									
PROJECT NAME: <b>City Parcel</b>		SAMPLED BY: <b>JML</b>									
PROJECT NUMBER: <b>0504-047-01</b>											
CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME						MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID	
1 TP-9-1-N	6/27/2014 0945	X					S	1			
2 TP-9-1-S	0946	X									
3 TP-9-2-N	0955	X									
4 TP-9-2-S	0956	X									
5 TP-9-3-N	1000	X									
6 TP-9-3-S	1001	X									
7 TP-9-4-N	1005	X									
8 TP-9-4-S	1006	X									
9 TP-9-5-N	1010										
10 TP-9-5-S	1011										
RELEASED BY:	DATE:	FIRM:	TIME:	RECEIVED BY: <b>Brandon Arrington</b>	DATE: <b>6/27/14</b>	FIRM: <b>TestAmerica</b>	TIME: <b>1:55</b>				
PRINT NAME:				PRINT NAME: <b>Brandon Arrington</b>							
RECEIVED BY:	DATE:	FIRM:	TIME:	RECEIVED BY:	DATE:	FIRM:	TIME:				
PRINT NAME:				PRINT NAME:							
ADDITIONAL REMARKS:							TEMP: <b>5.7</b>	PAGE <b>9</b> OF <b>14</b>			

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# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

1 2 3 4 5 6 7 8 9 10

Also Report to:  
 Hackleberry Palmer  
 hpa1461@ecy.wa.gov  
 4601 N Monroe St  
 Spokane, WA 99205  
 509-329-3433

5755 8<sup>th</sup> Street East, Tacoma, WA 98424-1317  
 11922 E. First Ave., Spokane WA 99206-5302  
 9405 SW Nimbus Ave., Beaverton, OR 97008-7145  
 2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119

253-922-2310 FAX 922-5047  
 509-924-9200 FAX 924-9290  
 503-906-9200 FAX 906-9210  
 907-563-9200 FAX 563-9210

7/24/2014

## CHAIN OF CUSTODY REPORT

Work Order # SXF0198

CLIENT: <u>Geo Engineers</u>		INVOICE TO:		<b>TURNAROUND REQUEST</b> in Business Days * Organic & Inorganic Analyses <input type="checkbox"/> 10 <input type="checkbox"/> 7 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> <1 STD. Petroleum Hydrocarbon Analyses <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> <1 STD. <input type="checkbox"/> OTHER Specify: * Turnaround Requests less than standard may incur Rush Charges.			
REPORT TO: <u>Alander@geoengineers.com</u>		P.O. NUMBER:					
ADDRESS: <u>523 E second Ave</u>		PRESERVATIVE					
SPokane, WA 99202		REQUESTED ANALYSES					
PHONE: <u>509-363-3125</u> FAX:		SAMPLED BY: <u>JML</u>					
PROJECT NAME: <u>City Parcel</u>		PROJECT NUMBER: <u>0504-047-01</u>					
CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	<u>SOB</u>	<u>PCBY</u>				
<u>1 TP-10-1-N</u>	<u>1250</u>					<u>S</u>	<u>2</u>
<u>2 TP-10-1-S</u>	<u>1251</u>						
<u>3 TP-10-2-N</u>	<u>1255</u>						
<u>4 TP-10-2-S</u>	<u>1256</u>						
<u>5 TP-10-3-N</u>	<u>1300</u>						
<u>6 TP-10-3-S</u>	<u>1301</u>						
<u>7 TP-10-4-N</u>	<u>1305</u>						
<u>8 TP-10-4-S</u>	<u>1306</u>						
RELEASED BY:	FIRM:	DATE:	TIME:	RECEIVED BY: <u>Alander Amington</u>	FIRM: <u>TestAmerica</u>	DATE: <u>6/27/14</u>	TIME: <u>1058</u>
PRINT NAME:	FIRM:	DATE:	TIME:	PRINT NAME:	FIRM:	DATE:	TIME:
ADDITIONAL REMARKS:						TEMP: <u>57</u>	PAGE <u>10</u> OF <u>19</u>

Page 61 of 68

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Also Report to:  
 Huckleberry Palmer  
 hpal146T@ecy.wa.gov  
 4601 N. Mound St.  
 Spokane, WA 99200  
 509-329-3433

5755 8<sup>th</sup> Street East, Tacoma, WA 98424-1317  
 11922 E. First Ave., Spokane WA 99206-5302  
 9405 SW Nimbus Ave., Beaverton, OR 97008-7145  
 2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119

253-922-2310 FAX 922-5047  
 509-924-9200 FAX 924-9290  
 503-906-9200 FAX 906-9210  
 907-563-9200 FAX 563-9210

## CHAIN OF CUSTODY REPORT

Work Order #: **SXF098**

CLIENT: <i>Geo Engineers</i>		INVOICE TO:		<b>TURNAROUND REQUEST</b> in Business Days * Organic & Inorganic Analyses <input type="checkbox"/> 10 <input type="checkbox"/> 7 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> <1 <small>STD.</small> Petroleum Hydrocarbon Analyses <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> <1 <small>STD.</small> <input type="checkbox"/> OTHER Specify: <small>* Turnaround Requests less than standard may incur Rush Charges.</small>			
REPORT TO: <i>dlander @ geoengineers.com</i>		P.O. NUMBER:					
ADDRESS: <i>573 E Second Ave Spokane WA 99202</i>		PROJECT NAME: <i>City Parcel</i>		MATRIX (W, S, O)   # OF CONT.   LOCATION/ COMMENTS   TA WO ID			
PHONE: <i>509 363 3125</i> FAX:		PROJECT NUMBER: <i>0504-047-01</i>					
SAMPLED BY: <i>JML</i>		PRESERVATIVE		REQUESTED ANALYSES (Grid with handwritten '0000' and 'P.C.S.' in the first column)			
CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME						
<i>1 TP-11-1-N</i>	<i>6/27/2014 1145</i>						
<i>2 TP-11-1-S</i>	<i>1146</i>						
<i>3 TP-11-2-N</i>	<i>1150</i>						
<i>4 TP-11-2-S</i>	<i>1151</i>						
<i>5 TP-11-3-N</i>	<i>1155</i>						
<i>6 TP-11-3-S</i>	<i>1156</i>						
<i>7 TP-11-4-N</i>	<i>1200</i>						
<i>8 TP-11-4-S</i>	<i>1201</i>						
<i>9 TP-12-1-N</i>	<i>1100</i>						
<i>10 TP-12-1-S</i>	<i>1101</i>						
RELEASED BY:	DATE:	RECEIVED BY:	DATE:	RECEIVED BY: <i>Stander Arrington</i> DATE: <i>6/27/14</i> PRINT NAME: <i>Stander Arrington</i> FIRM: <i>TestAmerica</i> TIME: <i>1500</i>			
PRINT NAME:	FIRM:	PRINT NAME:	TIME:				
RELEASED BY:	DATE:	RECEIVED BY:	DATE:				
PRINT NAME:	FIRM:	PRINT NAME:	TIME:				
ADDITIONAL REMARKS:				TEMP: <i>5.7</i> PAGE <i>11</i> OF <i>14</i>			



# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Also Report to:  
 Ancklebery Palmer  
 hpul461@ecy.wa.gov  
 4601 N Monroe St  
 Spokane, WA 99202  
 509-329-3433

5755 8<sup>th</sup> Street East, Tacoma, WA 98424-1317  
 11922 E. First Ave., Spokane WA 99206-5302  
 9405 SW Nimbus Ave., Beaverton, OR 97008-7145  
 2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119

253-922-2310 FAX 922-5047  
 509-924-9200 FAX 924-9290  
 503-906-9200 FAX 906-9210  
 907-563-9200 FAX 563-9210

11/24/2014

## CHAIN OF CUSTODY REPORT

Work Order # **SXF0198**

CLIENT: <b>Geoengineers</b>		INVOICE TO:		<b>TURNAROUND REQUEST</b> in Business Days * Organic & Inorganic Analyses <input type="checkbox"/> 10 <input type="checkbox"/> 7 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> <1 STD. Petroleum Hydrocarbon Analyses <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> <1 STD. <input type="checkbox"/> OTHER Specify: * Turnaround Requests less than standard may incur Rush Charges.					
REPORT TO: <b>dlawler@geoengineers.com</b>		P.O. NUMBER:							
ADDRESS: <b>523 E Second Ave Spokane, WA 99202</b>		PRESERVATIVE							
PHONE: <b>509-363-3125</b> FAX:		REQUESTED ANALYSES							
PROJECT NAME: <b>City Pond</b>		SAMPLED BY: <b>JML</b>							
PROJECT NUMBER: <b>0504-047-01</b>									
CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME					MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID
1 TP-12-2-N	6/27/2014 1105					S	1		
2 TP-12-2-S	1106								
3 TP-12-3-N	1110								
4 TP-12-3-S	1111								
5 TP-12-4-N	1115								
6 TP-12-4-S	1116								
7 TP-13-1-N	1330	X							
8 TP-13-1-S	1331	X							
9 TP-13-2-N	1335	X							
10 TP-13-2-S	1336	X							
RELEASED BY:	DATE:	RECEIVED BY: <b>Stanley Amington</b>	DATE: <b>6/27/14</b>						
PRINT NAME:	FIRM:	PRINT NAME: <b>Stanley Amington</b>	FIRM: <b>TestAmerica</b>	TIME: <b>1:55</b>					
ADDITIONAL REMARKS:	TEMP: <b>5.7</b>	PAGE: <b>12</b>	OF: <b>14</b>						

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# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Also Report To:  
 Huckleberry Palmer  
 hpal@hbp.com  
 4601 N Monroe St.  
 Spokane, WA 99205  
 509-324-3433

5755 8<sup>th</sup> Street East, Tacoma, WA 98424-1317 253-922-2310 FAX 922-5047  
 11922 E. First Ave., Spokane WA 99206-5302 509-924-9200 FAX 924-9290  
 9405 SW Nimbus Ave., Beaverton, OR 97008-7145 503-906-9200 FAX 906-9210  
 2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119 907-563-9200 FAX 563-9210

7/24/2014

## CHAIN OF CUSTODY REPORT

Work Order #: **SXF0198**

CLIENT: <b>bes Engineers</b>		INVOICE TO: <b>Huckleberry Palmer</b>		<b>TURNAROUND REQUEST</b> in Business Days * Organic & Inorganic Analyses <input type="checkbox"/> 10 <input type="checkbox"/> 7 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> <1 STD. Petroleum Hydrocarbon Analyses <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> <1 STD. <input type="checkbox"/> OTHER Specify: * Turnaround Requests less than standard may incur Rush Charges.							
REPORT TO: <b>clauder@besengineers.com</b>		Department <b>Ecology</b>									
ADDRESS: <b>523 E Second Ave Spokane WA 99202</b>		<b>4601 N. Monroe St Spokane, WA 99205</b>									
PHONE: <b>509-365-3125</b> FAX:		P.O. NUMBER:									
PROJECT NAME:		PRESERVATIVE									
PROJECT NUMBER:		REQUESTED ANALYSES									
SAMPLED BY:		bbs oob oob									
CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME							MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID
1 TP-13-3-N	6/27/2014 1340							S	1		
2 TP-13-3-S	1341										
3 TP-13-4-N	1345										
4 TP-13-4-S	1346										
5 TP-14-1-N	1400										
6 TP-14-1-S	1401	X									
7 TP-14-2-N	1405										
8 TP-14-2-S	1406	X									
9 TP-14-3-N	1410										
10 TP-14-3-S	1411										
RELEASED BY: <b>John [Signature]</b>		DATE: <b>6-27-14</b>		RECEIVED BY: <b>Claude Amington</b>		DATE: <b>6/27/14</b>					
PRINT NAME: <b>Huckleberry Palmer</b>		FIRM: <b>Ecology</b>		PRINT NAME: <b>Randa Amington</b>		FIRM: <b>TestAmerica</b>		TIME: <b>1552</b>			
RELEASED BY:		DATE:		RECEIVED BY:		DATE:					
PRINT NAME:		FIRM:		PRINT NAME:		FIRM:		TIME:			
ADDITIONAL REMARKS:								TEMP: <b>5.7</b> <b>13.14</b> PAGE OF			

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# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Also Report to :

Huckleberry Palmer  
 hpal461@ecy.wa.gov  
 Department of Ecology  
 4601 N. Marine St  
 Spokane, WA 99205

509-521-3433

5755 8<sup>th</sup> Street East, Tacoma, WA 98424-1317  
 11922 E. First Ave., Spokane WA 99206-5302  
 9405 SW Nimbus Ave., Beaverton, OR 97008-7145  
 2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119

253-922-2310 FAX 922-5047  
 509-924-9200 FAX 924-9290  
 503-906-9200 FAX 906-9210  
 907-563-9200 FAX 563-9210

<input type="checkbox"/>
<input checked="" type="checkbox"/>
<input type="checkbox"/>

## CHAIN OF CUSTODY REPORT

Work Order #: **SXF0193**

CLIENT: <b>Geo Engineers</b>		INVOICE TO: <b>Huckleberry Palmer</b>		<b>TURNAROUND REQUEST</b> in Business Days * Organic & Inorganic Analyses <input type="checkbox"/> 10 <input type="checkbox"/> 7 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> <1 STD. Petroleum Hydrocarbon Analyses <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> <1 STD.					
REPORT TO: <b>hpal461@ecy.wa.gov</b>		Department of Ecology							
ADDRESS: <b>523 E Second Ave</b>		4601 N. Marine St		<input type="checkbox"/> OTHER Specify: * Turnaround Requests less than standard may incur Rush Charges.					
Spokane, WA 99202		Spokane, WA 99205							
PHONE: <b>509-363-3125</b> FAX:		P.O. NUMBER:							
PROJECT NAME: <b>City Parcel</b>		PRESERVATIVE							
PROJECT NUMBER: <b>0504-047-01</b>		REQUESTED ANALYSES							
SAMPLED BY: <b>JML</b>									
CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME					MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID
1 TP-14-4-N	6/27/2014 1415					S	1		
2 TP-14-4-S	6/27/2014 1416					RS	1		
3									
4									
5									
6									
7									
8									
9									
10									
RELEASED BY: <b>[Signature]</b>	DATE: <b>6-27-14</b>	RECEIVED BY: <b>[Signature]</b>	DATE: <b>6/27/14</b>						
PRINT NAME: <b>Huckleberry Palmer</b>	FIRM: <b>Ecology</b>	PRINT NAME: <b>Andree Arnington</b>	TIME: <b>120</b>	FIRM: <b>TestAmerica</b>					
RELEASED BY:	DATE:	RECEIVED BY:	DATE:						
PRINT NAME:	FIRM:	PRINT NAME:	TIME:	FIRM:					
ADDITIONAL REMARKS:								TEMP: <b>5.7</b>	PAGE <b>14</b> OF <b>14</b>

**TestAmerica Spokane  
Sample Receipt Form**

Work Order #: <b>SXFO198</b>	Client: <b>Geo Engineers</b>	Project: <b>City Parcel</b>		
Date/Time Received: <b>6/20/14 1:50</b>		By: <b>PA</b>		
Samples Delivered By: <input type="checkbox"/> Shipping Service <input type="checkbox"/> Courier <input checked="" type="checkbox"/> Client <input type="checkbox"/> Other:				
List Air Bill Number(s) or Attach a photocopy of the Air Bill:				
Receipt Phase	Yes	No	NA	Comments
Were samples received in a cooler:	X			
Custody Seals are present and intact:			X	
Are CoC documents present:	X			
Necessary signatures:	X			
Thermal Preservation Type: <input type="checkbox"/> Blue Ice <input type="checkbox"/> Gel Ice <input checked="" type="checkbox"/> Real Ice <input type="checkbox"/> Dry Ice <input type="checkbox"/> None <input type="checkbox"/> Other:				
Temperature: <b>5.7</b> °C Thermometer (Circle one Serial #122208348 Keyring IR Serial # 111874910 IR Gun 2 )(acceptance criteria 0-6				
Temperature out of range: <input type="checkbox"/> Not enough ice <input type="checkbox"/> Ice melted <input type="checkbox"/> w/in 4hrs of collection <input type="checkbox"/> NA <input type="checkbox"/> Other:				
Log-in Phase	Yes	No	NA	Comments
Date/Time: <b>6/30/14 12:15</b> By: <b>OS</b>				
Are sample labels affixed and completed for each container	X			
Samples containers were received intact:	Y			
Do sample IDs match the CoC	Y			
Appropriate sample containers were received for tests requested	Y			
Are sample volumes adequate for tests requested	Y			
Appropriate preservatives were used for the tests requested	Y			
pH of inorganic samples checked and is within method specification	Y			
Are VOC samples free of bubbles >6mm (1/4" diameter)			Y	
Are dissolved parameters field filtered			Y	
Do any samples need to be filtered or preserved by the lab			Y	
Does this project require quick turnaround analysis			Y	
Are there any short hold time tests (see chart below)		Y		
Are any samples within 2 days of or past expiration		Y		
Was the CoC scanned	Y			
Were there Non-conformance issues at login		Y		
If yes, was a CAR generated #			Y	

24 hours or less	48 hours	7 days
Coliform Bacteria	BOD, Color, MBAS	TDS, TSS, VDS, FDS
Chromium +6	Nitrate/Nitrite	Sulfide
	Orthophosphate	Aqueous Organic Prep

Form No. SP-FORM-SPL-002 12 December 2012



Initial PCB Analysis

TP-1-1-N

TP-1-1-N

TP-1-1-S

TP-1-2-N

TP-1-2-N

TP-1-2-S

TP-2-1-N

TP-2-1-N

TP-2-1-S

TP-2-2-N

TP-2-2-N

TP-2-2-S

TP-3-1-N

TP-3-1-N

TP-3-1-S

TP-3-2-N

TP-3-2-N

TP-3-2-S

TP-3-3-N

TP-3-3-S

TP-3-4-N

TP-3-4-S

TP-4-1-S

TP-4-2-S

TP-5-1-N

TP-5-1-S

TP-5-2-N

TP-5-2-S

TP-5-3-N

TP-5-3-S

TP-5-4-N

TP-5-4-S

TP-5-5-N

TP-5-5-S

TP-6-1-S

TP-6-2-S

TP-6-3-S

~~TP-6-4-S~~

TP-7-1-N

TP-7-1-S

TP-7-2-N

TP-7-2-S

TP-7-3-N

TP-7-3-S

TP-7-4-N

TP-7-4-S

TP-7-5-N  
TP-7-5-S  
TP-8-1-S  
TP-8-2-S  
TP-9-1-N  
TP-9-1-S  
TP-9-2-N  
TP-9-2-S  
TP-9-3-N  
TP-9-3-S  
TP-9-4-N  
TP-9-4-S  
TP-13-1-N  
TP-13-1-S  
TP-13-2-N  
TP-13-2-S  
TP-14-1-S  
TP-14-2-S



# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.  
TestAmerica Spokane  
11922 East 1st. Avenue  
Spokane, WA 99206  
Tel: (509)924-9200

TestAmerica Job ID: SXG0130  
Client Project/Site: [none]  
Client Project Description: City Parcel Site

For:  
Washington Department of Ecology  
4601 N. Monroe  
Spokane, WA 99205

Attn: Huckleberry Palmer



Authorized for release by:  
7/24/2014 2:54:28 PM

Randee Arrington, Project Manager  
(509)924-9200  
[Randee.Arrington@testamericainc.com](mailto:Randee.Arrington@testamericainc.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:  
[www.testamericainc.com](http://www.testamericainc.com)

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

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

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# Sample Summary

Client: Washington Department of Ecology  
Project/Site: [none]

TestAmerica Job ID: SXG0130

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
SXG0130-01	HA-1-1	Soil	07/18/14 10:20	07/18/14 11:40
SXG0130-02	HA-1-2	Soil	07/18/14 10:25	07/18/14 11:40
SXG0130-03	HA-2-1	Soil	07/18/14 10:45	07/18/14 11:40
SXG0130-04	HA-2-2	Soil	07/18/14 10:50	07/18/14 11:40

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# Definitions/Glossary

Client: Washington Department of Ecology  
Project/Site: [none]

TestAmerica Job ID: SXG0130

## Qualifiers

### Semivolatiles

Qualifier	Qualifier Description
E	Concentration exceeds the calibration range and therefore result is semi-quantitative.
Z3	The sample required a dilution due to the nature of the sample matrix. Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

# Client Sample Results

Client: Washington Department of Ecology  
Project/Site: [none]

TestAmerica Job ID: SXG0130

**Client Sample ID: HA-1-1**

**Lab Sample ID: SXG0130-01**

Date Collected: 07/18/14 10:20

Matrix: Soil

Date Received: 07/18/14 11:40

Percent Solids: 91.8

**Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		259		ug/kg dry	☼	07/22/14 10:58	07/23/14 10:10	5.00
PCB-1221	ND		259		ug/kg dry	☼	07/22/14 10:58	07/23/14 10:10	5.00
PCB-1232	ND		259		ug/kg dry	☼	07/22/14 10:58	07/23/14 10:10	5.00
PCB-1242	ND		259		ug/kg dry	☼	07/22/14 10:58	07/23/14 10:10	5.00
PCB-1248	ND		259		ug/kg dry	☼	07/22/14 10:58	07/23/14 10:10	5.00
PCB-1254	ND		259		ug/kg dry	☼	07/22/14 10:58	07/23/14 10:10	5.00
<b>PCB-1260</b>	<b>346</b>		259		ug/kg dry	☼	07/22/14 10:58	07/23/14 10:10	5.00
PCB-1268	ND		259		ug/kg dry	☼	07/22/14 10:58	07/23/14 10:10	5.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	67.6		46.2 - 210				07/22/14 10:58	07/23/14 10:10	5.00
Decachlorobiphenyl	77.1		65.6 - 186				07/22/14 10:58	07/23/14 10:10	5.00

**Client Sample ID: HA-1-2**

**Lab Sample ID: SXG0130-02**

Date Collected: 07/18/14 10:25

Matrix: Soil

Date Received: 07/18/14 11:40

Percent Solids: 87.8

**Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		54.2		ug/kg dry	☼	07/22/14 10:58	07/22/14 18:52	1.00
PCB-1221	ND		54.2		ug/kg dry	☼	07/22/14 10:58	07/22/14 18:52	1.00
PCB-1232	ND		54.2		ug/kg dry	☼	07/22/14 10:58	07/22/14 18:52	1.00
PCB-1242	ND		54.2		ug/kg dry	☼	07/22/14 10:58	07/22/14 18:52	1.00
PCB-1248	ND		54.2		ug/kg dry	☼	07/22/14 10:58	07/22/14 18:52	1.00
PCB-1254	ND		54.2		ug/kg dry	☼	07/22/14 10:58	07/22/14 18:52	1.00
PCB-1260	ND		54.2		ug/kg dry	☼	07/22/14 10:58	07/22/14 18:52	1.00
PCB-1268	ND		54.2		ug/kg dry	☼	07/22/14 10:58	07/22/14 18:52	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	60.2		46.2 - 210				07/22/14 10:58	07/22/14 18:52	1.00
Decachlorobiphenyl	83.5		65.6 - 186				07/22/14 10:58	07/22/14 18:52	1.00

**Client Sample ID: HA-2-1**

**Lab Sample ID: SXG0130-03**

Date Collected: 07/18/14 10:45

Matrix: Soil

Date Received: 07/18/14 11:40

Percent Solids: 91.1

**Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		10100		ug/kg dry	☼	07/22/14 10:58	07/23/14 10:26	200
PCB-1221	ND		10100		ug/kg dry	☼	07/22/14 10:58	07/23/14 10:26	200
PCB-1232	ND		10100		ug/kg dry	☼	07/22/14 10:58	07/23/14 10:26	200
PCB-1242	ND		10100		ug/kg dry	☼	07/22/14 10:58	07/23/14 10:26	200
PCB-1248	ND		10100		ug/kg dry	☼	07/22/14 10:58	07/23/14 10:26	200
PCB-1254	ND		10100		ug/kg dry	☼	07/22/14 10:58	07/23/14 10:26	200
<b>PCB-1260</b>	<b>19600</b>		10100		ug/kg dry	☼	07/22/14 10:58	07/23/14 10:26	200
PCB-1268	ND		10100		ug/kg dry	☼	07/22/14 10:58	07/23/14 10:26	200
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX		Z3	46.2 - 210				07/22/14 10:58	07/23/14 10:26	200
Decachlorobiphenyl		Z3	65.6 - 186				07/22/14 10:58	07/23/14 10:26	200

TestAmerica Spokane

# Client Sample Results

Client: Washington Department of Ecology  
 Project/Site: [none]

TestAmerica Job ID: SXG0130

**Client Sample ID: HA-2-2**

**Lab Sample ID: SXG0130-04**

**Date Collected: 07/18/14 10:50**

**Matrix: Soil**

**Date Received: 07/18/14 11:40**

**Percent Solids: 87.6**

**Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		55.6		ug/kg dry	☼	07/22/14 10:58	07/22/14 19:56	1.00
PCB-1221	ND		55.6		ug/kg dry	☼	07/22/14 10:58	07/22/14 19:56	1.00
PCB-1232	ND		55.6		ug/kg dry	☼	07/22/14 10:58	07/22/14 19:56	1.00
PCB-1242	ND		55.6		ug/kg dry	☼	07/22/14 10:58	07/22/14 19:56	1.00
PCB-1248	ND		55.6		ug/kg dry	☼	07/22/14 10:58	07/22/14 19:56	1.00
PCB-1254	ND		55.6		ug/kg dry	☼	07/22/14 10:58	07/22/14 19:56	1.00
<b>PCB-1260</b>	<b>170</b>		55.6		ug/kg dry	☼	07/22/14 10:58	07/22/14 19:56	1.00
PCB-1268	ND		55.6		ug/kg dry	☼	07/22/14 10:58	07/22/14 19:56	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	56.5		46.2 - 210				07/22/14 10:58	07/22/14 19:56	1.00
Decachlorobiphenyl	116		65.6 - 186				07/22/14 10:58	07/22/14 19:56	1.00

# QC Sample Results

Client: Washington Department of Ecology  
Project/Site: [none]

TestAmerica Job ID: SXG0130

## Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

**Lab Sample ID: 14G0157-BLK1**

**Matrix: Soil**

**Analysis Batch: 14G0157**

**Client Sample ID: Method Blank**

**Prep Type: Total**

**Prep Batch: 14G0157\_P**

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		50.0		ug/kg wet		07/22/14 10:58	07/22/14 17:33	1.00
PCB-1221	ND		50.0		ug/kg wet		07/22/14 10:58	07/22/14 17:33	1.00
PCB-1232	ND		50.0		ug/kg wet		07/22/14 10:58	07/22/14 17:33	1.00
PCB-1242	ND		50.0		ug/kg wet		07/22/14 10:58	07/22/14 17:33	1.00
PCB-1248	ND		50.0		ug/kg wet		07/22/14 10:58	07/22/14 17:33	1.00
PCB-1254	ND		50.0		ug/kg wet		07/22/14 10:58	07/22/14 17:33	1.00
PCB-1260	ND		50.0		ug/kg wet		07/22/14 10:58	07/22/14 17:33	1.00
PCB-1268	ND		50.0		ug/kg wet		07/22/14 10:58	07/22/14 17:33	1.00

Surrogate	Blank %Recovery	Blank Qualifier	Limits	Prepared	Analyzed	Dil Fac
TCX	74.6		46.2 - 210	07/22/14 10:58	07/22/14 17:33	1.00
Decachlorobiphenyl	98.7		65.6 - 186	07/22/14 10:58	07/22/14 17:33	1.00

**Lab Sample ID: 14G0157-BS1**

**Matrix: Soil**

**Analysis Batch: 14G0157**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total**

**Prep Batch: 14G0157\_P**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	33.3	31.6		ug/kg wet		94.7	44.4 - 180
PCB-1260	33.3	38.4		ug/kg wet		115	60.3 - 169

Surrogate	LCS %Recovery	LCS Qualifier	Limits
TCX	79.8		46.2 - 210
Decachlorobiphenyl	99.4		65.6 - 186

**Lab Sample ID: 14G0157-MS1**

**Matrix: Soil**

**Analysis Batch: 14G0157**

**Client Sample ID: HA-1-1**

**Prep Type: Total**

**Prep Batch: 14G0157\_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	ND		32.8	38.7		ug/kg dry	☼	118	50.6 - 145
PCB-1260	346		32.8	298	E	ug/kg dry	☼	-145	57.6 - 120

Surrogate	Matrix Spike %Recovery	Matrix Spike Qualifier	Limits
TCX	88.6		46.2 - 210
Decachlorobiphenyl	109		65.6 - 186

**Lab Sample ID: 14G0157-MSD1**

**Matrix: Soil**

**Analysis Batch: 14G0157**

**Client Sample ID: HA-1-1**

**Prep Type: Total**

**Prep Batch: 14G0157\_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
PCB-1016	ND		37.7	44.3		ug/kg dry	☼	118	50.6 - 145	13.5	40
PCB-1260	346		37.7	367	E	ug/kg dry	☼	55.4	57.6 - 120	20.6	27.4

Surrogate	Matrix Spike Dup %Recovery	Matrix Spike Dup Qualifier	Limits
TCX	82.0		46.2 - 210

TestAmerica Spokane

# QC Sample Results

Client: Washington Department of Ecology  
Project/Site: [none]

TestAmerica Job ID: SXG0130

## Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082 (Continued)

Lab Sample ID: 14G0157-MSD1

Matrix: Soil

Analysis Batch: 14G0157

Client Sample ID: HA-1-1

Prep Type: Total

Prep Batch: 14G0157\_P

<i>Surrogate</i>	<i>Matrix Spike Dup</i>	<i>Matrix Spike Dup</i>	
	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>
<i>Decachlorobiphenyl</i>	117		65.6 - 186

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# Lab Chronicle

Client: Washington Department of Ecology  
Project/Site: [none]

TestAmerica Job ID: SXG0130

## Client Sample ID: HA-1-1

Lab Sample ID: SXG0130-01

Date Collected: 07/18/14 10:20

Matrix: Soil

Date Received: 07/18/14 11:40

Percent Solids: 91.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.952	14G0157_P	07/22/14 10:58	MS	TAL SPK
Total	Analysis	EPA 8082A		5.00	14G0157	07/23/14 10:10	MS	TAL SPK
Total	Prep	Wet Chem		1.00	14G0176_P	07/21/14 17:35	MS	TAL SPK
Total	Analysis	TA SOP		1.00	14G0176	07/22/14 16:40	MS	TAL SPK

## Client Sample ID: HA-1-2

Lab Sample ID: SXG0130-02

Date Collected: 07/18/14 10:25

Matrix: Soil

Date Received: 07/18/14 11:40

Percent Solids: 87.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.951	14G0157_P	07/22/14 10:58	MS	TAL SPK
Total	Analysis	EPA 8082A		1.00	14G0157	07/22/14 18:52	MS	TAL SPK

## Client Sample ID: HA-2-1

Lab Sample ID: SXG0130-03

Date Collected: 07/18/14 10:45

Matrix: Soil

Date Received: 07/18/14 11:40

Percent Solids: 91.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.922	14G0157_P	07/22/14 10:58	MS	TAL SPK
Total	Analysis	EPA 8082A		200	14G0157	07/23/14 10:26	MS	TAL SPK

## Client Sample ID: HA-2-2

Lab Sample ID: SXG0130-04

Date Collected: 07/18/14 10:50

Matrix: Soil

Date Received: 07/18/14 11:40

Percent Solids: 87.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.974	14G0157_P	07/22/14 10:58	MS	TAL SPK
Total	Analysis	EPA 8082A		1.00	14G0157	07/22/14 19:56	MS	TAL SPK

**Laboratory References:**

TAL SPK = TestAmerica Spokane, 11922 East 1st. Avenue, Spokane, WA 99206, TEL (509)924-9200

# Certification Summary

Client: Washington Department of Ecology  
Project/Site: [none]

TestAmerica Job ID: SXG0130

## Laboratory: TestAmerica Spokane

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-071	10-31-14
Washington	State Program	10	C569	01-06-15

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# Method Summary

Client: Washington Department of Ecology  
Project/Site: [none]

TestAmerica Job ID: SXG0130

Method	Method Description	Protocol	Laboratory
EPA 8082A	Polychlorinated Biphenyls by EPA Method 8082		TAL SPK
TA SOP	Conventional Chemistry Parameters by APHA/EPA Methods		TAL SPK

**Protocol References:**

**Laboratory References:**

TAL SPK = TestAmerica Spokane, 11922 East 1st. Avenue, Spokane, WA 99206, TEL (509)924-9200



# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

5755 8<sup>th</sup> Street East, Tacoma, WA 98424-1317  
 11922 E. First Ave., Spokane WA 99206-5302  
 9405 SW Nimbus Ave., Beaverton, OR 97008-7145  
 2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119

253-922-2310 FAX 922-5047  
 509-924-9200 FAX 924-9290  
 503-906-9200 FAX 906-9210  
 907-563-9200 FAX 563-9210



## CHAIN OF CUSTODY REPORT

Work Order #: **SXG0136**

CLIENT: <b>Ecology</b>		INVOICE TO: <b>Huckleberry Palmer</b>		<b>TURNAROUND REQUEST</b> in Business Days * Organic & Inorganic Analyses STD. <input type="checkbox"/> 10 <input type="checkbox"/> 7 <input checked="" type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> <1 Petroleum Hydrocarbon Analyses STD. <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> <1 OTHER Specify: _____ * Turnaround Requests less than standard may incur Rush Charges.					
REPORT TO: <b>Huckleberry Palmer</b> ADDRESS: <b>4601 N. Monroe St Spokane, WA 99205</b>		Department of Ecology <b>4601 N. Monroe St Spokane WA, 99205</b>							
PHONE: <b>509-324-3433</b> FAX:		P.O. NUMBER: <b>JA-160</b>							
PROJECT NAME: <b>City Parcel Site</b>		PRESERVATIVE							
PROJECT NUMBER:		REQUESTED ANALYSES							
SAMPLED BY: <b>H. Palmer</b>									
CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME					MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID
1 HA-1-1	7-18-14/10:20	X				S			
2 HA-1-2	7-18-14/10:25	X				S			
3 HA-2-1	7-18-14/10:45	X				S			
4 HA-2-2	7-18-14/10:50	X				S			
5									
6									
7									
8									
9									
10									
RELEASED BY: <b>[Signature]</b>		DATE: <b>11:30</b>		RECEIVED BY: <b>[Signature]</b>		DATE: <b>7-18-14</b>			
PRINT NAME: <b>Huckleberry Palmer</b>		FIRM: <b>Ecology</b>		PRINT NAME: <b>Pat Stapleton</b>		FIRM: <b>TestAmerica</b>		TIME: <b>11:40</b>	
RELEASED BY:		DATE:		RECEIVED BY:		DATE:			
PRINT NAME:		FIRM:		PRINT NAME:		FIRM:		TIME:	
ADDITIONAL REMARKS:								TEMP: <b>24.3</b>	PAGE OF

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7/24/2014



**TestAmerica Spokane  
Sample Receipt Form**

Work Order #: <b>SXG0130</b>	Client: <b>Ecology</b>	Project: <b>City Parcel Site</b>		
Date/Time Received: <b>7-18-14 11:46</b>	By: <b>CS</b>			
Samples Delivered By: <input type="checkbox"/> Shipping Service <input type="checkbox"/> Courier <input checked="" type="checkbox"/> Client <input type="checkbox"/> Other:				
List Air Bill Number(s) or Attach a photocopy of the Air Bill:				
Receipt Phase	Yes	No	NA	Comments
Were samples received in a cooler:	X			
Custody Seals are present and intact:			X	
Are CoC documents present:	X			
Necessary signatures:	X			
Thermal Preservation Type: <input type="checkbox"/> Blue Ice <input type="checkbox"/> Gel Ice <input type="checkbox"/> Real Ice <input type="checkbox"/> Dry Ice <input checked="" type="checkbox"/> None <input type="checkbox"/> Other:				
Temperature: <b>24.3</b> °C Thermometer (Circle one Serial #122208348 Keyring IR Serial # 111874910 IR Gun 2) (acceptance criteria 0-6)				
Temperature out of range: <input type="checkbox"/> Not enough ice <input type="checkbox"/> Ice melted <input checked="" type="checkbox"/> Within 4hrs of collection <input type="checkbox"/> NA <input type="checkbox"/> Other:				
Log-in Phase	Yes	No	NA	Comments
Date/Time: <b>7-18-14 11:52</b> By: <b>CS</b>				
Are sample labels affixed and completed for each container	X			
Samples containers were received intact:	X			
Do sample IDs match the CoC	X			
Appropriate sample containers were received for tests requested	X			
Are sample volumes adequate for tests requested	X			
Appropriate preservatives were used for the tests requested	X			
pH of inorganic samples checked and is within method specification			X	
Are VOC samples free of bubbles >6mm (1/4" diameter)			X	
Are dissolved parameters field filtered			X	
Do any samples need to be filtered or preserved by the lab		X		
Does this project require quick turnaround analysis	X			<b>5 days</b>
Are there any short hold time tests (see chart below)		X		
Are any samples within 2 days of or past expiration		X		
Was the CoC scanned	X			
Were there Non-conformance issues at login		X		
If yes, was a CAR generated #			X	

24 hours or less	48 hours	7 days
Coliform Bacteria	BOD, Color, MBAS	TDS, TSS, VDS, FDS
Chromium +6	Nitrate/Nitrite	Sulfide
	Orthophosphate	Aqueous Organic Prep

Form No. SP-FORM-SPL-002 12 December 2012

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# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.  
TestAmerica Spokane  
11922 East 1st. Avenue  
Spokane, WA 99206  
Tel: (509)924-9200

TestAmerica Job ID: SXI0102  
Client Project/Site: [none]  
Client Project Description: City Parcel Site

For:  
Washington Department of Ecology  
4601 N. Monroe  
Spokane, WA 99205

Attn: Huckleberry Palmer



Authorized for release by:  
9/30/2014 2:35:36 PM

Randee Arrington, Project Manager  
(509)924-9200  
[Randee.Arrington@testamericainc.com](mailto:Randee.Arrington@testamericainc.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:  
[www.testamericainc.com](http://www.testamericainc.com)

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

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

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# Table of Contents

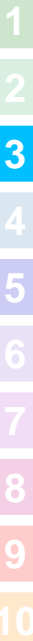
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# Sample Summary

Client: Washington Department of Ecology  
Project/Site: [none]

TestAmerica Job ID: SXI0102

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
SXI0102-01	HA-4-0.5	Soil	09/16/14 09:45	09/16/14 10:55
SXI0102-02	HA-4-1.5	Soil	09/16/14 09:55	09/16/14 10:55
SXI0102-03	HA-5-0.5	Soil	09/16/14 10:00	09/16/14 10:55
SXI0102-04	HA-5-1.5	Soil	09/16/14 10:05	09/16/14 10:55
SXI0102-05	HA-6-0.5	Soil	09/16/14 10:10	09/16/14 10:55
SXI0102-06	HA-6-1.5	Soil	09/16/14 10:15	09/16/14 10:55



# Definitions/Glossary

Client: Washington Department of Ecology  
Project/Site: [none]

TestAmerica Job ID: SXI0102

## Qualifiers

### Semivolatiles

Qualifier	Qualifier Description
Z3	The sample required a dilution due to the nature of the sample matrix. Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

# Client Sample Results

Client: Washington Department of Ecology  
Project/Site: [none]

TestAmerica Job ID: SXI0102

**Client Sample ID: HA-4-0.5**

**Lab Sample ID: SXI0102-01**

Date Collected: 09/16/14 09:45

Matrix: Soil

Date Received: 09/16/14 10:55

Percent Solids: 94.8

**Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		9.95		ug/kg dry	☼	09/25/14 09:29	09/25/14 19:57	1.00
PCB-1221	ND		9.95		ug/kg dry	☼	09/25/14 09:29	09/25/14 19:57	1.00
PCB-1232	ND		9.95		ug/kg dry	☼	09/25/14 09:29	09/25/14 19:57	1.00
PCB-1242	ND		9.95		ug/kg dry	☼	09/25/14 09:29	09/25/14 19:57	1.00
PCB-1248	ND		9.95		ug/kg dry	☼	09/25/14 09:29	09/25/14 19:57	1.00
PCB-1254	ND		9.95		ug/kg dry	☼	09/25/14 09:29	09/25/14 19:57	1.00
<b>PCB-1260</b>	<b>20.9</b>		9.95		ug/kg dry	☼	09/25/14 09:29	09/25/14 19:57	1.00
PCB-1268	ND		9.95		ug/kg dry	☼	09/25/14 09:29	09/25/14 19:57	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	105		46.2 - 210				09/25/14 09:29	09/25/14 19:57	1.00
Decachlorobiphenyl	127		65.6 - 186				09/25/14 09:29	09/25/14 19:57	1.00

**Client Sample ID: HA-4-1.5**

**Lab Sample ID: SXI0102-02**

Date Collected: 09/16/14 09:55

Matrix: Soil

Date Received: 09/16/14 10:55

Percent Solids: 91.4

**Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		10.7		ug/kg dry	☼	09/25/14 09:29	09/25/14 20:18	1.00
PCB-1221	ND		10.7		ug/kg dry	☼	09/25/14 09:29	09/25/14 20:18	1.00
PCB-1232	ND		10.7		ug/kg dry	☼	09/25/14 09:29	09/25/14 20:18	1.00
PCB-1242	ND		10.7		ug/kg dry	☼	09/25/14 09:29	09/25/14 20:18	1.00
PCB-1248	ND		10.7		ug/kg dry	☼	09/25/14 09:29	09/25/14 20:18	1.00
PCB-1254	ND		10.7		ug/kg dry	☼	09/25/14 09:29	09/25/14 20:18	1.00
PCB-1260	ND		10.7		ug/kg dry	☼	09/25/14 09:29	09/25/14 20:18	1.00
PCB-1268	ND		10.7		ug/kg dry	☼	09/25/14 09:29	09/25/14 20:18	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	115		46.2 - 210				09/25/14 09:29	09/25/14 20:18	1.00
Decachlorobiphenyl	133		65.6 - 186				09/25/14 09:29	09/25/14 20:18	1.00

**Client Sample ID: HA-5-0.5**

**Lab Sample ID: SXI0102-03**

Date Collected: 09/16/14 10:00

Matrix: Soil

Date Received: 09/16/14 10:55

Percent Solids: 90

**Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		452		ug/kg dry	☼	09/25/14 09:29	09/26/14 13:15	40.0
PCB-1221	ND		452		ug/kg dry	☼	09/25/14 09:29	09/26/14 13:15	40.0
PCB-1232	ND		452		ug/kg dry	☼	09/25/14 09:29	09/26/14 13:15	40.0
PCB-1242	ND		452		ug/kg dry	☼	09/25/14 09:29	09/26/14 13:15	40.0
PCB-1248	ND		452		ug/kg dry	☼	09/25/14 09:29	09/26/14 13:15	40.0
PCB-1254	ND		452		ug/kg dry	☼	09/25/14 09:29	09/26/14 13:15	40.0
<b>PCB-1260</b>	<b>4360</b>		452		ug/kg dry	☼	09/25/14 09:29	09/26/14 13:15	40.0
PCB-1268	ND		452		ug/kg dry	☼	09/25/14 09:29	09/26/14 13:15	40.0
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX		Z3	46.2 - 210				09/25/14 09:29	09/26/14 13:15	40.0
Decachlorobiphenyl		Z3	65.6 - 186				09/25/14 09:29	09/26/14 13:15	40.0

TestAmerica Spokane



# Client Sample Results

Client: Washington Department of Ecology  
Project/Site: [none]

TestAmerica Job ID: SXI0102

**Client Sample ID: HA-5-1.5**

**Lab Sample ID: SXI0102-04**

Date Collected: 09/16/14 10:05

Matrix: Soil

Date Received: 09/16/14 10:55

Percent Solids: 91.8

**Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		2060		ug/kg dry	☼	09/25/14 09:29	09/29/14 09:56	200
PCB-1221	ND		2060		ug/kg dry	☼	09/25/14 09:29	09/29/14 09:56	200
PCB-1232	ND		2060		ug/kg dry	☼	09/25/14 09:29	09/29/14 09:56	200
PCB-1242	ND		2060		ug/kg dry	☼	09/25/14 09:29	09/29/14 09:56	200
PCB-1248	ND		2060		ug/kg dry	☼	09/25/14 09:29	09/29/14 09:56	200
PCB-1254	ND		2060		ug/kg dry	☼	09/25/14 09:29	09/29/14 09:56	200
<b>PCB-1260</b>	<b>19200</b>		2060		ug/kg dry	☼	09/25/14 09:29	09/29/14 09:56	200
PCB-1268	ND		2060		ug/kg dry	☼	09/25/14 09:29	09/29/14 09:56	200
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX		Z3	46.2 - 210				09/25/14 09:29	09/29/14 09:56	200
Decachlorobiphenyl		Z3	65.6 - 186				09/25/14 09:29	09/29/14 09:56	200

**Client Sample ID: HA-6-0.5**

**Lab Sample ID: SXI0102-05**

Date Collected: 09/16/14 10:10

Matrix: Soil

Date Received: 09/16/14 10:55

Percent Solids: 94.6

**Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		50.6		ug/kg dry	☼	09/25/14 09:29	09/25/14 21:22	5.00
PCB-1221	ND		50.6		ug/kg dry	☼	09/25/14 09:29	09/25/14 21:22	5.00
PCB-1232	ND		50.6		ug/kg dry	☼	09/25/14 09:29	09/25/14 21:22	5.00
PCB-1242	ND		50.6		ug/kg dry	☼	09/25/14 09:29	09/25/14 21:22	5.00
PCB-1248	ND		50.6		ug/kg dry	☼	09/25/14 09:29	09/25/14 21:22	5.00
PCB-1254	ND		50.6		ug/kg dry	☼	09/25/14 09:29	09/25/14 21:22	5.00
<b>PCB-1260</b>	<b>390</b>		50.6		ug/kg dry	☼	09/25/14 09:29	09/25/14 21:22	5.00
PCB-1268	ND		50.6		ug/kg dry	☼	09/25/14 09:29	09/25/14 21:22	5.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	96.2		46.2 - 210				09/25/14 09:29	09/25/14 21:22	5.00
Decachlorobiphenyl	147		65.6 - 186				09/25/14 09:29	09/25/14 21:22	5.00

**Client Sample ID: HA-6-1.5**

**Lab Sample ID: SXI0102-06**

Date Collected: 09/16/14 10:15

Matrix: Soil

Date Received: 09/16/14 10:55

Percent Solids: 87

**Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		12.0		ug/kg dry	☼	09/25/14 09:29	09/26/14 13:57	1.00
PCB-1221	ND		12.0		ug/kg dry	☼	09/25/14 09:29	09/26/14 13:57	1.00
PCB-1232	ND		12.0		ug/kg dry	☼	09/25/14 09:29	09/26/14 13:57	1.00
PCB-1242	ND		12.0		ug/kg dry	☼	09/25/14 09:29	09/26/14 13:57	1.00
PCB-1248	ND		12.0		ug/kg dry	☼	09/25/14 09:29	09/26/14 13:57	1.00
PCB-1254	ND		12.0		ug/kg dry	☼	09/25/14 09:29	09/26/14 13:57	1.00
<b>PCB-1260</b>	<b>19.1</b>		12.0		ug/kg dry	☼	09/25/14 09:29	09/26/14 13:57	1.00
PCB-1268	ND		12.0		ug/kg dry	☼	09/25/14 09:29	09/26/14 13:57	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	92.3		46.2 - 210				09/25/14 09:29	09/26/14 13:57	1.00
Decachlorobiphenyl	121		65.6 - 186				09/25/14 09:29	09/26/14 13:57	1.00

TestAmerica Spokane

# QC Sample Results

Client: Washington Department of Ecology  
Project/Site: [none]

TestAmerica Job ID: SXI0102

## Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

**Lab Sample ID: 14I0156-BLK1**

**Matrix: Soil**

**Analysis Batch: 14I0156**

**Client Sample ID: Method Blank**

**Prep Type: Total**

**Prep Batch: 14I0156\_P**

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		10.0		ug/kg wet		09/25/14 09:29	09/25/14 18:12	1.00
PCB-1221	ND		10.0		ug/kg wet		09/25/14 09:29	09/25/14 18:12	1.00
PCB-1232	ND		10.0		ug/kg wet		09/25/14 09:29	09/25/14 18:12	1.00
PCB-1242	ND		10.0		ug/kg wet		09/25/14 09:29	09/25/14 18:12	1.00
PCB-1248	ND		10.0		ug/kg wet		09/25/14 09:29	09/25/14 18:12	1.00
PCB-1254	ND		10.0		ug/kg wet		09/25/14 09:29	09/25/14 18:12	1.00
PCB-1260	ND		10.0		ug/kg wet		09/25/14 09:29	09/25/14 18:12	1.00
PCB-1268	ND		10.0		ug/kg wet		09/25/14 09:29	09/25/14 18:12	1.00

Surrogate	Blank %Recovery	Blank Qualifier	Limits	Prepared	Analyzed	Dil Fac
TCX	110		46.2 - 210	09/25/14 09:29	09/25/14 18:12	1.00
Decachlorobiphenyl	131		65.6 - 186	09/25/14 09:29	09/25/14 18:12	1.00

**Lab Sample ID: 14I0156-BS1**

**Matrix: Soil**

**Analysis Batch: 14I0156**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total**

**Prep Batch: 14I0156\_P**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
PCB-1016	33.3	40.7		ug/kg wet		122	44.4 - 180
PCB-1260	33.3	40.6		ug/kg wet		122	60.3 - 169

Surrogate	LCS %Recovery	LCS Qualifier	Limits
TCX	96.7		46.2 - 210
Decachlorobiphenyl	132		65.6 - 186

**Lab Sample ID: 14I0156-BSD1**

**Matrix: Soil**

**Analysis Batch: 14I0156**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total**

**Prep Batch: 14I0156\_P**

Analyte	Spike Added	LCS Dup Result	LCS Dup Qualifier	Unit	D	%Rec	Limits	RPD	Limit
PCB-1016	33.3	41.0		ug/kg wet		123	44.4 - 180	0.699	25
PCB-1260	33.3	40.6		ug/kg wet		122	60.3 - 169	0.155	25

Surrogate	LCS Dup %Recovery	LCS Dup Qualifier	Limits
TCX	101		46.2 - 210
Decachlorobiphenyl	134		65.6 - 186

**Lab Sample ID: 14I0156-MS1**

**Matrix: Soil**

**Analysis Batch: 14I0156**

**Client Sample ID: HA-4-0.5**

**Prep Type: Total**

**Prep Batch: 14I0156\_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	%Rec	Limits
PCB-1016	ND		35.6	37.5		ug/kg dry	⊛	105	50.6 - 145
PCB-1260	20.9		35.6	50.6		ug/kg dry	⊛	83.6	57.6 - 120

Surrogate	Matrix Spike %Recovery	Matrix Spike Qualifier	Limits
TCX	104		46.2 - 210

TestAmerica Spokane

# QC Sample Results

Client: Washington Department of Ecology  
 Project/Site: [none]

TestAmerica Job ID: SXI0102

## Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082 (Continued)

**Lab Sample ID: 14I0156-MS1**

**Matrix: Soil**

**Analysis Batch: 14I0156**

**Client Sample ID: HA-4-0.5**

**Prep Type: Total**

**Prep Batch: 14I0156\_P**

<i>Surrogate</i>	<i>Matrix Spike</i>	<i>Matrix Spike</i>	<i>Limits</i>
	<i>%Recovery</i>	<i>Qualifier</i>	
<i>Decachlorobiphenyl</i>	127		65.6 - 186

**Lab Sample ID: 14I0156-MSD1**

**Matrix: Soil**

**Analysis Batch: 14I0156**

**Client Sample ID: HA-4-0.5**

**Prep Type: Total**

**Prep Batch: 14I0156\_P**

<i>Analyte</i>	<i>Sample</i>	<i>Sample</i>	<i>Spike</i>	<i>Matrix Spike Dup</i>	<i>Matrix Spike Dup</i>	<i>D</i>	<i>%Rec</i>	<i>Limits</i>	<i>RPD</i>	<i>Limit</i>
	<i>Result</i>	<i>Qualifier</i>	<i>Added</i>	<i>Result</i>	<i>Unit</i>					
PCB-1016	ND		34.8	32.5	ug/kg dry	☼	93.2	50.6 - 145	14.4	40
PCB-1260	20.9		34.8	47.5	ug/kg dry	☼	76.4	57.6 - 120	6.41	27.4

<i>Surrogate</i>	<i>Matrix Spike Dup</i>	<i>Matrix Spike Dup</i>	<i>Limits</i>
	<i>%Recovery</i>	<i>Qualifier</i>	
<i>TCX</i>	89.6		46.2 - 210
<i>Decachlorobiphenyl</i>	105		65.6 - 186

# Lab Chronicle

Client: Washington Department of Ecology  
Project/Site: [none]

TestAmerica Job ID: SXI0102

## Client Sample ID: HA-4-0.5

Date Collected: 09/16/14 09:45

Date Received: 09/16/14 10:55

## Lab Sample ID: SXI0102-01

Matrix: Soil

Percent Solids: 94.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.943	14I0156_P	09/25/14 09:29	IAB	TAL SPK
Total	Analysis	EPA 8082A		1.00	14I0156	09/25/14 19:57	NMI	TAL SPK
Total	Prep	Wet Chem		1.00	14I0176_P	09/25/14 12:00	NI	TAL SPK
Total	Analysis	TA SOP		1.00	14I0176	09/26/14 11:46	NI	TAL SPK

## Client Sample ID: HA-4-1.5

Date Collected: 09/16/14 09:55

Date Received: 09/16/14 10:55

## Lab Sample ID: SXI0102-02

Matrix: Soil

Percent Solids: 91.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.980	14I0156_P	09/25/14 09:29	IAB	TAL SPK
Total	Analysis	EPA 8082A		1.00	14I0156	09/25/14 20:18	NMI	TAL SPK

## Client Sample ID: HA-5-0.5

Date Collected: 09/16/14 10:00

Date Received: 09/16/14 10:55

## Lab Sample ID: SXI0102-03

Matrix: Soil

Percent Solids: 90

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		1.02	14I0156_P	09/25/14 09:29	IAB	TAL SPK
Total	Analysis	EPA 8082A		40.0	14I0156	09/26/14 13:15	NMI	TAL SPK

## Client Sample ID: HA-5-1.5

Date Collected: 09/16/14 10:05

Date Received: 09/16/14 10:55

## Lab Sample ID: SXI0102-04

Matrix: Soil

Percent Solids: 91.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.945	14I0156_P	09/25/14 09:29	IAB	TAL SPK
Total	Analysis	EPA 8082A		200	14I0156	09/29/14 09:56	NMI	TAL SPK

## Client Sample ID: HA-6-0.5

Date Collected: 09/16/14 10:10

Date Received: 09/16/14 10:55

## Lab Sample ID: SXI0102-05

Matrix: Soil

Percent Solids: 94.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.957	14I0156_P	09/25/14 09:29	IAB	TAL SPK
Total	Analysis	EPA 8082A		5.00	14I0156	09/25/14 21:22	NMI	TAL SPK

TestAmerica Spokane

# Lab Chronicle

Client: Washington Department of Ecology  
Project/Site: [none]

TestAmerica Job ID: SXI0102

**Client Sample ID: HA-6-1.5**

**Lab Sample ID: SXI0102-06**

**Date Collected: 09/16/14 10:15**

**Matrix: Soil**

**Date Received: 09/16/14 10:55**

**Percent Solids: 87**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		1.04	14I0156_P	09/25/14 09:29	IAB	TAL SPK
Total	Analysis	EPA 8082A		1.00	14I0156	09/26/14 13:57	NMI	TAL SPK

**Laboratory References:**

TAL SPK = TestAmerica Spokane, 11922 East 1st. Avenue, Spokane, WA 99206, TEL (509)924-9200



# Certification Summary

Client: Washington Department of Ecology  
Project/Site: [none]

TestAmerica Job ID: SXI0102

## Laboratory: TestAmerica Spokane

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-071	10-31-14
Washington	State Program	10	C569	01-06-15

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# Method Summary

Client: Washington Department of Ecology  
Project/Site: [none]

TestAmerica Job ID: SXI0102

Method	Method Description	Protocol	Laboratory
EPA 8082A	Polychlorinated Biphenyls by EPA Method 8082		TAL SPK
TA SOP	Conventional Chemistry Parameters by APHA/EPA Methods		TAL SPK

**Protocol References:**

**Laboratory References:**

TAL SPK = TestAmerica Spokane, 11922 East 1st. Avenue, Spokane, WA 99206, TEL (509)924-9200

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## CHAIN OF CUSTODY REPORT

Work Order # **SKID102**

CLIENT: <b>Ecology</b>		INVOICE TO: <b>Huckleberry Palmer</b>		<b>TURNAROUND REQUEST</b> in Business Days * <input checked="" type="checkbox"/> Organic & Inorganic Analyses 7 5 4 3 2 1 <1 <input checked="" type="checkbox"/> Petroleum Hydrocarbon Analyses 5 4 3 2 1 <1 STD. <input type="checkbox"/> OTHER Specify:					
REPORT TO: <b>Huckleberry Palmer</b>		Dept. of Ecology							
ADDRESS: <b>4601 N. Marae St. Spokane, WA 99205</b>		<b>hpal46@ecy.wa.gov</b>		4601 N. Monroe St. Spokane, WA 99205		<b>hpal46@ecy.wa.gov</b>			
PHONE: <b>509-328-3433</b> FAX:		P.O. NUMBER: <b>JA160</b>		* Turnaround Requests less than standard may incur Rush Charges.					
PROJECT NAME: <b>City Parcel Site</b>		PRESERVATIVE							
PROJECT NUMBER:		REQUESTED ANALYSES							
SAMPLED BY: <b>H. Palmer</b>									
CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	<b>2012 REG</b>				MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID
1 HA-4-0.5	9-16-14/0945	X				S			
2 HA-4-1.5	9-16-14/0955	X				S			
3 HA-5-0.5	9-16-14/1000	X				S			
4 HA-5-1.5	9-16-14/1005	X				S			
5 HA-6-0.5	9-16-14/1010	X				S			
6 HA-6-1.5	9-16-14/1015	X				S			
7									
8									
9									
10									
RELEASED BY: <b>[Signature]</b>		DATE: <b>9-16-14</b>		RECEIVED BY: <b>[Signature]</b>		DATE: <b>9-16-14</b>			
PRINT NAME: <b>Huckleberry Palmer</b>		FIRM: <b>Ecology</b>		PRINT NAME: <b>[Signature]</b>		FIRM: <b>TA</b>			
ADDITIONAL REMARKS:		TIME: <b>10:45</b>		TIME: <b>10:45</b>		TIME: <b>09:55</b>			
						TEMP: <b>218</b>		PAGE OF	

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9/30/2014





**TestAmerica Spokane  
Sample Receipt Form**

Work Order # <u>SXID102</u>	Client: <u>Ecology</u>	Project: <u>City Parcel Site</u>		
Date/Time Received: <u>9/16/14 10:55</u> By: <u>CS</u>				
Samples Delivered By: <input type="checkbox"/> Shipping Service <input type="checkbox"/> Courier <input checked="" type="checkbox"/> Client <input type="checkbox"/> Other: _____				
List Air Bill Number(s) or Attach a photocopy of the Air Bill:				
Receipt Phase	Yes	No	NA	Comments
Were samples received in a cooler:	<input checked="" type="checkbox"/>			
Custody Seals are present and intact:			<input checked="" type="checkbox"/>	
Are CoC documents present:	<input checked="" type="checkbox"/>			
Necessary signatures:	<input checked="" type="checkbox"/>			
Thermal Preservation Type: <input type="checkbox"/> Blue Ice <input type="checkbox"/> Gel Ice <input type="checkbox"/> Real Ice <input type="checkbox"/> Dry Ice <input checked="" type="checkbox"/> None <input type="checkbox"/> Other: _____				
Temperature: <u>21.8</u> °C Thermometer (Circle one Serial #122208348 Keyring IR Serial # 111874910 IR Gun 2) (acceptance criteria 0-6				
Temperature out of range: <input type="checkbox"/> Not enough ice <input type="checkbox"/> Ice melted <input checked="" type="checkbox"/> W/in 4hrs of collection <input type="checkbox"/> NA <input type="checkbox"/> Other: _____				
Log-in Phase	Yes	No	NA	Comments
Date/Time: <u>9/16/14 11:25</u> By: <u>CS</u>				
Are sample labels affixed and completed for each container	<input checked="" type="checkbox"/>			
Samples containers were received intact:	<input checked="" type="checkbox"/>			
Do sample IDs match the CoC	<input checked="" type="checkbox"/>			
Appropriate sample containers were received for tests requested	<input checked="" type="checkbox"/>			
Are sample volumes adequate for tests requested	<input checked="" type="checkbox"/>			
Appropriate preservatives were used for the tests requested	<input checked="" type="checkbox"/>			
pH of inorganic samples checked and is within method specification	<input checked="" type="checkbox"/>			
Are VOC samples free of bubbles >6mm (1/4" diameter)			<input checked="" type="checkbox"/>	
Are dissolved parameters field filtered			<input checked="" type="checkbox"/>	
Do any samples need to be filtered or preserved by the lab			<input checked="" type="checkbox"/>	
Does this project require quick turnaround analysis			<input checked="" type="checkbox"/>	
Are there any short hold time tests (see chart below)		<input checked="" type="checkbox"/>		
Are any samples within 2 days of or past expiration		<input checked="" type="checkbox"/>		
Was the CoC scanned	<input checked="" type="checkbox"/>			
Were there Non-conformance issues at login		<input checked="" type="checkbox"/>		
If yes, was a CAR generated #			<input checked="" type="checkbox"/>	

24 hours or less	48 hours	7 days
Coliform Bacteria	BOD, Color, MBAS	TDS, TSS, VDS, FDS
Chromium +6	Nitrate/Nitrite	Sulfide
	Orthophosphate	Aqueous Organic Prep

Form No. SP-FORM-SPL-002 12 December 2012

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# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.  
TestAmerica Spokane  
11922 East 1st. Avenue  
Spokane, WA 99206  
Tel: (509)924-9200

TestAmerica Job ID: SXL0029  
Client Project/Site: [none]  
Client Project Description: City Parcel Site

For:  
Washington Department of Ecology  
4601 N. Monroe  
Spokane, WA 99205

Attn: Huckleberry Palmer



Authorized for release by:  
12/11/2014 11:04:18 AM

Randee Arrington, Project Manager  
(509)924-9200  
[Randee.Arrington@testamericainc.com](mailto:Randee.Arrington@testamericainc.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:  
[www.testamericainc.com](http://www.testamericainc.com)

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

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

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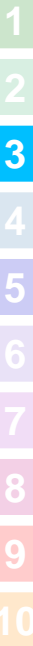
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# Sample Summary

Client: Washington Department of Ecology  
Project/Site: [none]

TestAmerica Job ID: SXL0029

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
SXL0029-01	W1	Soil	12/04/14 08:00	12/04/14 15:30
SXL0029-02	B1	Soil	12/04/14 08:15	12/04/14 15:30
SXL0029-03	W2	Soil	12/04/14 09:00	12/04/14 15:30
SXL0029-04	B2	Soil	12/04/14 09:15	12/04/14 15:30
SXL0029-05	W3	Soil	12/04/14 10:00	12/04/14 15:30
SXL0029-06	B3	Soil	12/04/14 10:15	12/04/14 15:30



# Definitions/Glossary

Client: Washington Department of Ecology  
Project/Site: [none]

TestAmerica Job ID: SXL0029

## Qualifiers

### Semivolatiles

Qualifier	Qualifier Description
ZX	Due to sample matrix effects, the surrogate recovery was outside the acceptance limits.
Z3	The sample required a dilution due to the nature of the sample matrix. Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

# Client Sample Results

Client: Washington Department of Ecology  
Project/Site: [none]

TestAmerica Job ID: SXL0029

## Client Sample ID: W1

Date Collected: 12/04/14 08:00

Date Received: 12/04/14 15:30

## Lab Sample ID: SXL0029-01

Matrix: Soil

Percent Solids: 89.6

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		109		ug/kg dry	☼	12/05/14 10:17	12/05/14 14:09	10.0
PCB-1221	ND		109		ug/kg dry	☼	12/05/14 10:17	12/05/14 14:09	10.0
PCB-1232	ND		109		ug/kg dry	☼	12/05/14 10:17	12/05/14 14:09	10.0
PCB-1242	ND		109		ug/kg dry	☼	12/05/14 10:17	12/05/14 14:09	10.0
PCB-1248	ND		109		ug/kg dry	☼	12/05/14 10:17	12/05/14 14:09	10.0
PCB-1254	ND		109		ug/kg dry	☼	12/05/14 10:17	12/05/14 14:09	10.0
<b>PCB-1260</b>	<b>439</b>		109		ug/kg dry	☼	12/05/14 10:17	12/05/14 14:09	10.0
PCB-1268	ND		109		ug/kg dry	☼	12/05/14 10:17	12/05/14 14:09	10.0
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
TCX	74.9		51.9 - 151				12/05/14 10:17	12/05/14 14:09	10.0
Decachlorobiphenyl	590	ZX	73.5 - 164				12/05/14 10:17	12/05/14 14:09	10.0

## Client Sample ID: B1

Date Collected: 12/04/14 08:15

Date Received: 12/04/14 15:30

## Lab Sample ID: SXL0029-02

Matrix: Soil

Percent Solids: 87

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		105		ug/kg dry	☼	12/05/14 10:17	12/05/14 16:37	10.0
PCB-1221	ND		105		ug/kg dry	☼	12/05/14 10:17	12/05/14 16:37	10.0
PCB-1232	ND		105		ug/kg dry	☼	12/05/14 10:17	12/05/14 16:37	10.0
PCB-1242	ND		105		ug/kg dry	☼	12/05/14 10:17	12/05/14 16:37	10.0
PCB-1248	ND		105		ug/kg dry	☼	12/05/14 10:17	12/05/14 16:37	10.0
PCB-1254	ND		105		ug/kg dry	☼	12/05/14 10:17	12/05/14 16:37	10.0
<b>PCB-1260</b>	<b>191</b>		105		ug/kg dry	☼	12/05/14 10:17	12/05/14 16:37	10.0
PCB-1268	ND		105		ug/kg dry	☼	12/05/14 10:17	12/05/14 16:37	10.0
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
TCX	99.8		51.9 - 151				12/05/14 10:17	12/05/14 16:37	10.0
Decachlorobiphenyl	142		73.5 - 164				12/05/14 10:17	12/05/14 16:37	10.0

## Client Sample ID: W2

Date Collected: 12/04/14 09:00

Date Received: 12/04/14 15:30

## Lab Sample ID: SXL0029-03

Matrix: Soil

Percent Solids: 83.1

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		585		ug/kg dry	☼	12/05/14 10:17	12/05/14 16:58	50.0
PCB-1221	ND		585		ug/kg dry	☼	12/05/14 10:17	12/05/14 16:58	50.0
PCB-1232	ND		585		ug/kg dry	☼	12/05/14 10:17	12/05/14 16:58	50.0
PCB-1242	ND		585		ug/kg dry	☼	12/05/14 10:17	12/05/14 16:58	50.0
PCB-1248	ND		585		ug/kg dry	☼	12/05/14 10:17	12/05/14 16:58	50.0
PCB-1254	ND		585		ug/kg dry	☼	12/05/14 10:17	12/05/14 16:58	50.0
<b>PCB-1260</b>	<b>6880</b>		585		ug/kg dry	☼	12/05/14 10:17	12/05/14 16:58	50.0
PCB-1268	ND		585		ug/kg dry	☼	12/05/14 10:17	12/05/14 16:58	50.0
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
TCX	114		51.9 - 151				12/05/14 10:17	12/05/14 16:58	50.0
Decachlorobiphenyl	517	Z3	73.5 - 164				12/05/14 10:17	12/05/14 16:58	50.0

TestAmerica Spokane

# Client Sample Results

Client: Washington Department of Ecology  
Project/Site: [none]

TestAmerica Job ID: SXL0029

## Client Sample ID: B2

Lab Sample ID: SXL0029-04

Date Collected: 12/04/14 09:15

Matrix: Soil

Date Received: 12/04/14 15:30

Percent Solids: 87.6

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		514		ug/kg dry	☼	12/05/14 10:17	12/05/14 17:19	50.0
PCB-1221	ND		514		ug/kg dry	☼	12/05/14 10:17	12/05/14 17:19	50.0
PCB-1232	ND		514		ug/kg dry	☼	12/05/14 10:17	12/05/14 17:19	50.0
PCB-1242	ND		514		ug/kg dry	☼	12/05/14 10:17	12/05/14 17:19	50.0
PCB-1248	ND		514		ug/kg dry	☼	12/05/14 10:17	12/05/14 17:19	50.0
PCB-1254	ND		514		ug/kg dry	☼	12/05/14 10:17	12/05/14 17:19	50.0
<b>PCB-1260</b>	<b>3150</b>		514		ug/kg dry	☼	12/05/14 10:17	12/05/14 17:19	50.0
PCB-1268	ND		514		ug/kg dry	☼	12/05/14 10:17	12/05/14 17:19	50.0
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
TCX	121		51.9 - 151				12/05/14 10:17	12/05/14 17:19	50.0
Decachlorobiphenyl	344	Z3	73.5 - 164				12/05/14 10:17	12/05/14 17:19	50.0

## Client Sample ID: W3

Lab Sample ID: SXL0029-05

Date Collected: 12/04/14 10:00

Matrix: Soil

Date Received: 12/04/14 15:30

Percent Solids: 79.6

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		116		ug/kg dry	☼	12/05/14 10:17	12/05/14 17:40	10.0
PCB-1221	ND		116		ug/kg dry	☼	12/05/14 10:17	12/05/14 17:40	10.0
PCB-1232	ND		116		ug/kg dry	☼	12/05/14 10:17	12/05/14 17:40	10.0
PCB-1242	ND		116		ug/kg dry	☼	12/05/14 10:17	12/05/14 17:40	10.0
PCB-1248	ND		116		ug/kg dry	☼	12/05/14 10:17	12/05/14 17:40	10.0
PCB-1254	ND		116		ug/kg dry	☼	12/05/14 10:17	12/05/14 17:40	10.0
<b>PCB-1260</b>	<b>1300</b>		116		ug/kg dry	☼	12/05/14 10:17	12/05/14 17:40	10.0
PCB-1268	ND		116		ug/kg dry	☼	12/05/14 10:17	12/05/14 17:40	10.0
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
TCX	97.1		51.9 - 151				12/05/14 10:17	12/05/14 17:40	10.0
Decachlorobiphenyl	150		73.5 - 164				12/05/14 10:17	12/05/14 17:40	10.0

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082 - RE1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		241		ug/kg dry	☼	12/10/14 09:30	12/10/14 14:55	20.0
PCB-1221	ND		241		ug/kg dry	☼	12/10/14 09:30	12/10/14 14:55	20.0
PCB-1232	ND		241		ug/kg dry	☼	12/10/14 09:30	12/10/14 14:55	20.0
PCB-1242	ND		241		ug/kg dry	☼	12/10/14 09:30	12/10/14 14:55	20.0
PCB-1248	ND		241		ug/kg dry	☼	12/10/14 09:30	12/10/14 14:55	20.0
PCB-1254	ND		241		ug/kg dry	☼	12/10/14 09:30	12/10/14 14:55	20.0
<b>PCB-1260</b>	<b>3390</b>		241		ug/kg dry	☼	12/10/14 09:30	12/10/14 14:55	20.0
PCB-1268	ND		241		ug/kg dry	☼	12/10/14 09:30	12/10/14 14:55	20.0
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
TCX	108		51.9 - 151				12/10/14 09:30	12/10/14 14:55	20.0
Decachlorobiphenyl	196	Z3	73.5 - 164				12/10/14 09:30	12/10/14 14:55	20.0

TestAmerica Spokane

# Client Sample Results

Client: Washington Department of Ecology  
 Project/Site: [none]

TestAmerica Job ID: SXL0029

**Client Sample ID: B3**

**Lab Sample ID: SXL0029-06**

**Date Collected: 12/04/14 10:15**

**Matrix: Soil**

**Date Received: 12/04/14 15:30**

**Percent Solids: 80.1**

**Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		4810		ug/kg dry	☼	12/05/14 10:17	12/05/14 18:01	400
PCB-1221	ND		4810		ug/kg dry	☼	12/05/14 10:17	12/05/14 18:01	400
PCB-1232	ND		4810		ug/kg dry	☼	12/05/14 10:17	12/05/14 18:01	400
PCB-1242	ND		4810		ug/kg dry	☼	12/05/14 10:17	12/05/14 18:01	400
PCB-1248	ND		4810		ug/kg dry	☼	12/05/14 10:17	12/05/14 18:01	400
PCB-1254	ND		4810		ug/kg dry	☼	12/05/14 10:17	12/05/14 18:01	400
<b>PCB-1260</b>	<b>55700</b>		4810		ug/kg dry	☼	12/05/14 10:17	12/05/14 18:01	400
PCB-1268	ND		4810		ug/kg dry	☼	12/05/14 10:17	12/05/14 18:01	400
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX		Z3	51.9 - 151				12/05/14 10:17	12/05/14 18:01	400
Decachlorobiphenyl		Z3	73.5 - 164				12/05/14 10:17	12/05/14 18:01	400



# QC Sample Results

Client: Washington Department of Ecology  
 Project/Site: [none]

TestAmerica Job ID: SXL0029

## Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

**Lab Sample ID: 14L0032-BLK1**  
**Matrix: Soil**  
**Analysis Batch: 14L0032**

**Client Sample ID: Method Blank**  
**Prep Type: Total**  
**Prep Batch: 14L0032\_P**

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		10.0		ug/kg wet		12/05/14 10:17	12/05/14 13:02	1.00
PCB-1221	ND		10.0		ug/kg wet		12/05/14 10:17	12/05/14 13:02	1.00
PCB-1232	ND		10.0		ug/kg wet		12/05/14 10:17	12/05/14 13:02	1.00
PCB-1242	ND		10.0		ug/kg wet		12/05/14 10:17	12/05/14 13:02	1.00
PCB-1248	ND		10.0		ug/kg wet		12/05/14 10:17	12/05/14 13:02	1.00
PCB-1254	ND		10.0		ug/kg wet		12/05/14 10:17	12/05/14 13:02	1.00
PCB-1260	ND		10.0		ug/kg wet		12/05/14 10:17	12/05/14 13:02	1.00
PCB-1268	ND		10.0		ug/kg wet		12/05/14 10:17	12/05/14 13:02	1.00

Surrogate	Blank %Recovery	Blank Qualifier	Limits	Prepared	Analyzed	Dil Fac
TCX	100		51.9 - 151	12/05/14 10:17	12/05/14 13:02	1.00
Decachlorobiphenyl	107		73.5 - 164	12/05/14 10:17	12/05/14 13:02	1.00

**Lab Sample ID: 14L0032-BS1**  
**Matrix: Soil**  
**Analysis Batch: 14L0032**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total**  
**Prep Batch: 14L0032\_P**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
PCB-1016	33.3	35.1		ug/kg wet		105	58 - 146
PCB-1260	33.3	37.5		ug/kg wet		112	64.2 - 152

Surrogate	LCS %Recovery	LCS Qualifier	Limits
TCX	78.1		51.9 - 151
Decachlorobiphenyl	111		73.5 - 164

**Lab Sample ID: 14L0054-BLK1**  
**Matrix: Soil**  
**Analysis Batch: 14L0054**

**Client Sample ID: Method Blank**  
**Prep Type: Total**  
**Prep Batch: 14L0054\_P**

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		10.0		ug/kg wet		12/10/14 08:15	12/10/14 14:34	1.00
PCB-1221	ND		10.0		ug/kg wet		12/10/14 08:15	12/10/14 14:34	1.00
PCB-1232	ND		10.0		ug/kg wet		12/10/14 08:15	12/10/14 14:34	1.00
PCB-1242	ND		10.0		ug/kg wet		12/10/14 08:15	12/10/14 14:34	1.00
PCB-1248	ND		10.0		ug/kg wet		12/10/14 08:15	12/10/14 14:34	1.00
PCB-1254	ND		10.0		ug/kg wet		12/10/14 08:15	12/10/14 14:34	1.00
PCB-1260	ND		10.0		ug/kg wet		12/10/14 08:15	12/10/14 14:34	1.00
PCB-1268	ND		10.0		ug/kg wet		12/10/14 08:15	12/10/14 14:34	1.00

Surrogate	Blank %Recovery	Blank Qualifier	Limits	Prepared	Analyzed	Dil Fac
TCX	106		51.9 - 151	12/10/14 08:15	12/10/14 14:34	1.00
Decachlorobiphenyl	129		73.5 - 164	12/10/14 08:15	12/10/14 14:34	1.00

TestAmerica Spokane

# QC Sample Results

Client: Washington Department of Ecology  
Project/Site: [none]

TestAmerica Job ID: SXL0029

## Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082 (Continued)

**Lab Sample ID: 14L0054-BS1**

**Matrix: Soil**

**Analysis Batch: 14L0054**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total**

**Prep Batch: 14L0054\_P**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
PCB-1016	33.3	40.2		ug/kg wet		121	58 - 146
PCB-1260	33.3	42.6		ug/kg wet		128	64.2 - 152
		<b>LCS LCS</b>					
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				
TCX	111		51.9 - 151				
Decachlorobiphenyl	137		73.5 - 164				

**Lab Sample ID: 14L0054-MS1**

**Matrix: Soil**

**Analysis Batch: 14L0054**

**Client Sample ID: Matrix Spike**

**Prep Type: Total**

**Prep Batch: 14L0054\_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	%Rec	Limits
PCB-1016	ND		33.4	40.3		ug/kg dry	☼	121	50.6 - 145
PCB-1260	11.8		33.4	45.3		ug/kg dry	☼	100	57.6 - 120
		<b>Matrix Spike Matrix Spike</b>							
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>						
TCX	107		51.9 - 151						
Decachlorobiphenyl	125		73.5 - 164						

**Lab Sample ID: 14L0054-MSD1**

**Matrix: Soil**

**Analysis Batch: 14L0054**

**Client Sample ID: Matrix Spike Duplicate**

**Prep Type: Total**

**Prep Batch: 14L0054\_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	%Rec	Limits	RPD	Limit
PCB-1016	ND		35.5	42.3		ug/kg dry	☼	119	50.6 - 145	4.93	40
PCB-1260	11.8		35.5	50.5		ug/kg dry	☼	109	57.6 - 120	10.8	27.4
		<b>Matrix Spike Dup Matrix Spike Dup</b>									
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>								
TCX	110		51.9 - 151								
Decachlorobiphenyl	126		73.5 - 164								

# Lab Chronicle

Client: Washington Department of Ecology  
Project/Site: [none]

TestAmerica Job ID: SXL0029

## Client Sample ID: W1

Lab Sample ID: SXL0029-01

Date Collected: 12/04/14 08:00

Matrix: Soil

Date Received: 12/04/14 15:30

Percent Solids: 89.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.974	14L0032_P	12/05/14 10:17	NI	TAL SPK
Total	Analysis	EPA 8082A		10.0	14L0032	12/05/14 14:09	NMI	TAL SPK

## Client Sample ID: B1

Lab Sample ID: SXL0029-02

Date Collected: 12/04/14 08:15

Matrix: Soil

Date Received: 12/04/14 15:30

Percent Solids: 87

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.910	14L0032_P	12/05/14 10:17	NI	TAL SPK
Total	Analysis	EPA 8082A		10.0	14L0032	12/05/14 16:37	NMI	TAL SPK
Total	Prep	Wet Chem		1.00	14L0037_P	12/05/14 12:15	NI	TAL SPK
Total	Analysis	TA SOP		1.00	14L0037	12/08/14 10:06	NI	TAL SPK

## Client Sample ID: W2

Lab Sample ID: SXL0029-03

Date Collected: 12/04/14 09:00

Matrix: Soil

Date Received: 12/04/14 15:30

Percent Solids: 83.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.972	14L0032_P	12/05/14 10:17	NI	TAL SPK
Total	Analysis	EPA 8082A		50.0	14L0032	12/05/14 16:58	NMI	TAL SPK

## Client Sample ID: B2

Lab Sample ID: SXL0029-04

Date Collected: 12/04/14 09:15

Matrix: Soil

Date Received: 12/04/14 15:30

Percent Solids: 87.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.900	14L0032_P	12/05/14 10:17	NI	TAL SPK
Total	Analysis	EPA 8082A		50.0	14L0032	12/05/14 17:19	NMI	TAL SPK

## Client Sample ID: W3

Lab Sample ID: SXL0029-05

Date Collected: 12/04/14 10:00

Matrix: Soil

Date Received: 12/04/14 15:30

Percent Solids: 79.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.920	14L0032_P	12/05/14 10:17	NI	TAL SPK
Total	Analysis	EPA 8082A		10.0	14L0032	12/05/14 17:40	NMI	TAL SPK
Total	Prep	EPA 3550B	RE1	0.958	14L0054_P	12/10/14 09:30	NI	TAL SPK
Total	Analysis	EPA 8082A	RE1	20.0	14L0054	12/10/14 14:55	NMI	TAL SPK

TestAmerica Spokane

# Lab Chronicle

Client: Washington Department of Ecology  
Project/Site: [none]

TestAmerica Job ID: SXL0029

**Client Sample ID: B3**

**Lab Sample ID: SXL0029-06**

**Date Collected: 12/04/14 10:15**

**Matrix: Soil**

**Date Received: 12/04/14 15:30**

**Percent Solids: 80.1**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.964	14L0032_P	12/05/14 10:17	NI	TAL SPK
Total	Analysis	EPA 8082A		400	14L0032	12/05/14 18:01	NMI	TAL SPK

**Laboratory References:**

TAL SPK = TestAmerica Spokane, 11922 East 1st. Avenue, Spokane, WA 99206, TEL (509)924-9200



# Certification Summary

Client: Washington Department of Ecology  
Project/Site: [none]

TestAmerica Job ID: SXL0029

## Laboratory: TestAmerica Spokane

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-071	10-31-15
Washington	State Program	10	C569	01-06-15



# Method Summary

Client: Washington Department of Ecology  
Project/Site: [none]

TestAmerica Job ID: SXL0029

Method	Method Description	Protocol	Laboratory
EPA 8082A	Polychlorinated Biphenyls by EPA Method 8082		TAL SPK
TA SOP	Conventional Chemistry Parameters by APHA/EPA Methods		TAL SPK

**Protocol References:**

**Laboratory References:**

TAL SPK = TestAmerica Spokane, 11922 East 1st. Avenue, Spokane, WA 99206, TEL (509)924-9200



# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

11922 E. First Ave., Spokane WA 99206-5302  
 9405 SW Nimbus Ave., Beaverton, OR 97008-7145  
 2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119

509-924-9200 FAX 924-9290  
 503-906-9200 FAX 906-9210  
 907-563-9200 FAX 563-9210

## CHAIN OF CUSTODY REPORT

Work Order #: **SX10029**

CLIENT: <b>Ecology</b>		INVOICE TO: <b>Huckleberry Palmer</b> 4601 North Monroe Street Spokane, WA 99205		npalk61@ecy.wa.gov		<b>TURNAROUND REQUEST</b> in Business Days * Organic & Inorganic Analyses STD. <input type="checkbox"/> 10 <input type="checkbox"/> 7 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> <1 Petroleum Hydrocarbon Analyses STD. <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> <1 OTHER <input checked="" type="checkbox"/> Specify: <b>48 hr</b> * Turnaround Requests less than standard may incur Rush Charges.				
REPORT TO: <b>Huckleberry Palmer</b> ADDRESS: <b>4601 North Monroe Street</b> <b>Spokane, WA 99205</b>		PHONE: <b>509-328-5433</b> FAX:		R.O. NUMBER:						
PROJECT NAME: <b>City Parcel</b>		PRESERVATIVE								
PROJECT NUMBER:		REQUESTED ANALYSES								
SAMPLED BY: <b>H. Palmer</b>										
CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	PLUS - EPA 9082					MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID
1 W1	12-4-14 / 0800	X					S	1		
2 B1	12-4-14 / 0815	X					S	1		
3 W2	/ 0900	X					S	1		
4 B2	/ 0915	X					S	1		
5 W3	/ 1000	X					S	1		
6 B3	/ 1015	X					S	1		
7	/ 1030	X					S	1		
8	/ 1045	X					S	1		
9	/ 1100	X					S	1		
10	/ 1115	X					S	1		
RELEASED BY: <b>H. Palmer</b>	DATE: <b>12-4-14</b>	RECEIVED BY: <b>Randy Arrington</b>	DATE: <b>12/4/14</b>	PRINT NAME: <b>Huckleberry Palmer</b>	FIRM: <b>WA Dept. of Ecology</b>	PRINT NAME: <b>Randy Arrington</b>	FIRM: <b>TestAmerica</b>	TIME: <b>15:30</b>	DATE: <b>12/4/14</b>	TIME: <b>15:30</b>
ADDITIONAL REMARKS:						TEMP: <b>11.90C</b> PAGE 1 OF 1				

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12/11/2014



**TestAmerica Spokane  
Sample Receipt Form**

Work Order # <b>5X10029</b>	Client: <b>WA DOE</b>	Project: <b>City Parcel</b>		
Date/Time Received: <b>12/4/14 1530</b>	By: <b>BA</b>			
Samples Delivered By: <input type="checkbox"/> Shipping Service <input type="checkbox"/> Courier <input checked="" type="checkbox"/> Client <input type="checkbox"/> Other:				
List Air Bill Number(s) or Attach a photocopy of the Air Bill:				
Receipt Phase	Yes	No	NA	Comments
Were samples received in a cooler:	X			
Custody Seals are present and intact:			X	
Are CoC documents present:	X			
Necessary signatures:	X			
Thermal Preservation Type: <input type="checkbox"/> Blue Ice <input type="checkbox"/> Gel Ice <input type="checkbox"/> Real Ice <input type="checkbox"/> Dry Ice <input checked="" type="checkbox"/> None <input type="checkbox"/> Other:				
Temperature: <b>4.9</b> °C Thermometer (Circle one Serial #122208348 Keyring IR Serial # 111874910 IR Gun 2 )(acceptance criteria 0-6				
Temperature out of range: <input type="checkbox"/> Not enough ice <input type="checkbox"/> Ice melted <input type="checkbox"/> w/in 4hrs of collection <input type="checkbox"/> NA <input type="checkbox"/> Other:				
Log-In Phase	Yes	No	NA	Comments
Date/Time: <b>12-4-14 16:08</b> By: <b>CS</b>				
Are sample labels affixed and completed for each container	Y			
Samples containers were received intact:	Y			
Do sample IDs match the CoC	Y			
Appropriate sample containers were received for tests requested	Y			
Are sample volumes adequate for tests requested	Y			
Appropriate preservatives were used for the tests requested	Y			
pH of inorganic samples checked and is within method specification	Y			
Are VOC samples free of bubbles >6mm (1/4" diameter)			Y	
Are dissolved parameters field filtered			Y	
Do any samples need to be filtered or preserved by the lab		Y		
Does this project require quick turnaround analysis	Y			2 days
Are there any short hold time tests (see chart below)		Y		
Are any samples within 2 days of or past expiration		Y		
Was the CoC scanned	Y			
Were there Non-conformance issues at login		Y		
If yes, was a CAR generated #			Y	

24 hours or less	48 hours	7 days
Coliform Bacteria	BOD, Color, MBAS	TDS, TSS, VDS, FDS
Chromium +6	Nitrate/Nitrite	Sulfide
	Orthophosphate	Aqueous Organic Prep

Form No. SP-FORM-SPL-002 12 December 2012

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# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.  
TestAmerica Spokane  
11922 East 1st. Avenue  
Spokane, WA 99206  
Tel: (509)924-9200

TestAmerica Job ID: SXL0032  
Client Project/Site: [none]  
Client Project Description: City Parcel Site

For:  
Washington Department of Ecology  
4601 N. Monroe  
Spokane, WA 99205

Attn: Huckleberry Palmer



Authorized for release by:  
12/8/2014 12:02:23 PM

Randee Arrington, Project Manager  
(509)924-9200  
[Randee.Arrington@testamericainc.com](mailto:Randee.Arrington@testamericainc.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:  
[www.testamericainc.com](http://www.testamericainc.com)

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

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

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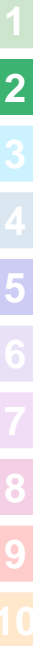
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# Sample Summary

Client: Washington Department of Ecology  
Project/Site: [none]

TestAmerica Job ID: SXL0032

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
SXL0032-01	B4	Soil	12/05/14 09:15	12/05/14 10:40
SXL0032-02	B5	Soil	12/05/14 09:30	12/05/14 10:40
SXL0032-03	B6	Soil	12/05/14 09:45	12/05/14 10:40
SXL0032-04	W4	Soil	12/05/14 10:30	12/05/14 10:40

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## Definitions/Glossary

Client: Washington Department of Ecology  
Project/Site: [none]

TestAmerica Job ID: SXL0032

### Qualifiers

#### Semivolatiles

Qualifier	Qualifier Description
ZX	Due to sample matrix effects, the surrogate recovery was outside the acceptance limits.

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

# Client Sample Results

Client: Washington Department of Ecology  
Project/Site: [none]

TestAmerica Job ID: SXL0032

## Client Sample ID: B4

Date Collected: 12/05/14 09:15

Date Received: 12/05/14 10:40

## Lab Sample ID: SXL0032-01

Matrix: Soil

Percent Solids: 83

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		577		ug/kg dry	☼	12/05/14 14:00	12/08/14 09:26	50.0
PCB-1221	ND		577		ug/kg dry	☼	12/05/14 14:00	12/08/14 09:26	50.0
PCB-1232	ND		577		ug/kg dry	☼	12/05/14 14:00	12/08/14 09:26	50.0
PCB-1242	ND		577		ug/kg dry	☼	12/05/14 14:00	12/08/14 09:26	50.0
PCB-1248	ND		577		ug/kg dry	☼	12/05/14 14:00	12/08/14 09:26	50.0
PCB-1254	ND		577		ug/kg dry	☼	12/05/14 14:00	12/08/14 09:26	50.0
<b>PCB-1260</b>	<b>5850</b>		577		ug/kg dry	☼	12/05/14 14:00	12/08/14 09:26	50.0
PCB-1268	ND		577		ug/kg dry	☼	12/05/14 14:00	12/08/14 09:26	50.0
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
TCX	80.0		51.9 - 151				12/05/14 14:00	12/08/14 09:26	50.0
Decachlorobiphenyl		ZX	73.5 - 164				12/05/14 14:00	12/08/14 09:26	50.0

## Client Sample ID: B5

Date Collected: 12/05/14 09:30

Date Received: 12/05/14 10:40

## Lab Sample ID: SXL0032-02

Matrix: Soil

Percent Solids: 86.8

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		107		ug/kg dry	☼	12/05/14 14:00	12/08/14 09:47	10.0
PCB-1221	ND		107		ug/kg dry	☼	12/05/14 14:00	12/08/14 09:47	10.0
PCB-1232	ND		107		ug/kg dry	☼	12/05/14 14:00	12/08/14 09:47	10.0
PCB-1242	ND		107		ug/kg dry	☼	12/05/14 14:00	12/08/14 09:47	10.0
PCB-1248	ND		107		ug/kg dry	☼	12/05/14 14:00	12/08/14 09:47	10.0
PCB-1254	ND		107		ug/kg dry	☼	12/05/14 14:00	12/08/14 09:47	10.0
<b>PCB-1260</b>	<b>788</b>		107		ug/kg dry	☼	12/05/14 14:00	12/08/14 09:47	10.0
PCB-1268	ND		107		ug/kg dry	☼	12/05/14 14:00	12/08/14 09:47	10.0
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
TCX	123		51.9 - 151				12/05/14 14:00	12/08/14 09:47	10.0
Decachlorobiphenyl	185	ZX	73.5 - 164				12/05/14 14:00	12/08/14 09:47	10.0

## Client Sample ID: B6

Date Collected: 12/05/14 09:45

Date Received: 12/05/14 10:40

## Lab Sample ID: SXL0032-03

Matrix: Soil

Percent Solids: 91.7

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		107		ug/kg dry	☼	12/05/14 14:00	12/08/14 10:08	10.0
PCB-1221	ND		107		ug/kg dry	☼	12/05/14 14:00	12/08/14 10:08	10.0
PCB-1232	ND		107		ug/kg dry	☼	12/05/14 14:00	12/08/14 10:08	10.0
PCB-1242	ND		107		ug/kg dry	☼	12/05/14 14:00	12/08/14 10:08	10.0
PCB-1248	ND		107		ug/kg dry	☼	12/05/14 14:00	12/08/14 10:08	10.0
PCB-1254	ND		107		ug/kg dry	☼	12/05/14 14:00	12/08/14 10:08	10.0
<b>PCB-1260</b>	<b>832</b>		107		ug/kg dry	☼	12/05/14 14:00	12/08/14 10:08	10.0
PCB-1268	ND		107		ug/kg dry	☼	12/05/14 14:00	12/08/14 10:08	10.0
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
TCX	106		51.9 - 151				12/05/14 14:00	12/08/14 10:08	10.0
Decachlorobiphenyl	174	ZX	73.5 - 164				12/05/14 14:00	12/08/14 10:08	10.0

TestAmerica Spokane

# Client Sample Results

Client: Washington Department of Ecology  
 Project/Site: [none]

TestAmerica Job ID: SXL0032

**Client Sample ID: W4**

**Lab Sample ID: SXL0032-04**

**Date Collected: 12/05/14 10:30**

**Matrix: Soil**

**Date Received: 12/05/14 10:40**

**Percent Solids: 90.5**

**Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		48.5		ug/kg dry	☼	12/05/14 14:00	12/08/14 10:53	5.00
PCB-1221	ND		48.5		ug/kg dry	☼	12/05/14 14:00	12/08/14 10:53	5.00
PCB-1232	ND		48.5		ug/kg dry	☼	12/05/14 14:00	12/08/14 10:53	5.00
PCB-1242	ND		48.5		ug/kg dry	☼	12/05/14 14:00	12/08/14 10:53	5.00
PCB-1248	ND		48.5		ug/kg dry	☼	12/05/14 14:00	12/08/14 10:53	5.00
PCB-1254	ND		48.5		ug/kg dry	☼	12/05/14 14:00	12/08/14 10:53	5.00
<b>PCB-1260</b>	<b>317</b>		48.5		ug/kg dry	☼	12/05/14 14:00	12/08/14 10:53	5.00
PCB-1268	ND		48.5		ug/kg dry	☼	12/05/14 14:00	12/08/14 10:53	5.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
TCX	123		51.9 - 151				12/05/14 14:00	12/08/14 10:53	5.00
Decachlorobiphenyl	144		73.5 - 164				12/05/14 14:00	12/08/14 10:53	5.00

# QC Sample Results

Client: Washington Department of Ecology  
 Project/Site: [none]

TestAmerica Job ID: SXL0032

## Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

**Lab Sample ID: 14L0032-BLK1**

**Matrix: Soil**

**Analysis Batch: 14L0032**

**Client Sample ID: Method Blank**

**Prep Type: Total**

**Prep Batch: 14L0032\_P**

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		10.0		ug/kg wet		12/05/14 10:17	12/05/14 13:02	1.00
PCB-1221	ND		10.0		ug/kg wet		12/05/14 10:17	12/05/14 13:02	1.00
PCB-1232	ND		10.0		ug/kg wet		12/05/14 10:17	12/05/14 13:02	1.00
PCB-1242	ND		10.0		ug/kg wet		12/05/14 10:17	12/05/14 13:02	1.00
PCB-1248	ND		10.0		ug/kg wet		12/05/14 10:17	12/05/14 13:02	1.00
PCB-1254	ND		10.0		ug/kg wet		12/05/14 10:17	12/05/14 13:02	1.00
PCB-1260	ND		10.0		ug/kg wet		12/05/14 10:17	12/05/14 13:02	1.00
PCB-1268	ND		10.0		ug/kg wet		12/05/14 10:17	12/05/14 13:02	1.00

Surrogate	Blank %Recovery	Blank Qualifier	Limits	Prepared	Analyzed	Dil Fac
TCX	100		51.9 - 151	12/05/14 10:17	12/05/14 13:02	1.00
Decachlorobiphenyl	107		73.5 - 164	12/05/14 10:17	12/05/14 13:02	1.00

**Lab Sample ID: 14L0032-BS1**

**Matrix: Soil**

**Analysis Batch: 14L0032**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total**

**Prep Batch: 14L0032\_P**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
PCB-1016	33.3	35.1		ug/kg wet		105	58 - 146
PCB-1260	33.3	37.5		ug/kg wet		112	64.2 - 152

Surrogate	LCS %Recovery	LCS Qualifier	Limits
TCX	78.1		51.9 - 151
Decachlorobiphenyl	111		73.5 - 164

# Lab Chronicle

Client: Washington Department of Ecology  
Project/Site: [none]

TestAmerica Job ID: SXL0032

## Client Sample ID: B4

Lab Sample ID: SXL0032-01

Date Collected: 12/05/14 09:15

Matrix: Soil

Date Received: 12/05/14 10:40

Percent Solids: 83

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.958	14L0032_P	12/05/14 14:00	NI	TAL SPK
Total	Analysis	EPA 8082A		50.0	14L0032	12/08/14 09:26	NMI	TAL SPK
Total	Prep	Wet Chem		1.00	14L0037_P	12/05/14 12:15	NI	TAL SPK
Total	Analysis	TA SOP		1.00	14L0037	12/08/14 10:06	NI	TAL SPK

## Client Sample ID: B5

Lab Sample ID: SXL0032-02

Date Collected: 12/05/14 09:30

Matrix: Soil

Date Received: 12/05/14 10:40

Percent Solids: 86.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.932	14L0032_P	12/05/14 14:00	NI	TAL SPK
Total	Analysis	EPA 8082A		10.0	14L0032	12/08/14 09:47	NMI	TAL SPK

## Client Sample ID: B6

Lab Sample ID: SXL0032-03

Date Collected: 12/05/14 09:45

Matrix: Soil

Date Received: 12/05/14 10:40

Percent Solids: 91.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.978	14L0032_P	12/05/14 14:00	NI	TAL SPK
Total	Analysis	EPA 8082A		10.0	14L0032	12/08/14 10:08	NMI	TAL SPK

## Client Sample ID: W4

Lab Sample ID: SXL0032-04

Date Collected: 12/05/14 10:30

Matrix: Soil

Date Received: 12/05/14 10:40

Percent Solids: 90.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.878	14L0032_P	12/05/14 14:00	NI	TAL SPK
Total	Analysis	EPA 8082A		5.00	14L0032	12/08/14 10:53	NMI	TAL SPK

### Laboratory References:

TAL SPK = TestAmerica Spokane, 11922 East 1st. Avenue, Spokane, WA 99206, TEL (509)924-9200



# Certification Summary

Client: Washington Department of Ecology  
Project/Site: [none]

TestAmerica Job ID: SXL0032

## Laboratory: TestAmerica Spokane

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-071	10-31-15
Washington	State Program	10	C569	01-06-15



# Method Summary

Client: Washington Department of Ecology  
Project/Site: [none]

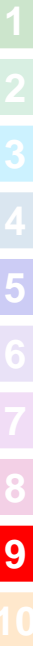
TestAmerica Job ID: SXL0032

Method	Method Description	Protocol	Laboratory
EPA 8082A	Polychlorinated Biphenyls by EPA Method 8082		TAL SPK
TA SOP	Conventional Chemistry Parameters by APHA/EPA Methods		TAL SPK

**Protocol References:**

**Laboratory References:**

TAL SPK = TestAmerica Spokane, 11922 East 1st. Avenue, Spokane, WA 99206, TEL (509)924-9200



# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

5755 8<sup>th</sup> Street East, Tacoma, WA 98424-1317  
 11922 E. First Ave., Spokane WA 99206-5302  
 9405 SW Nimbus Ave., Beaverton, OR 97008-7145  
 2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119

253-922-2310 FAX 922-5047  
 509-924-9200 FAX 924-9290  
 503-906-9200 FAX 906-9210  
 907-563-9200 FAX 563-9210

## CHAIN OF CUSTODY REPORT

Work Order #: **SXL0032**

CLIENT: <b>Ecology</b>		INVOICE TO:		<table border="1" style="width:100%; text-align: center;"> <tr> <td colspan="4">TURNAROUND REQUEST</td> </tr> <tr> <td colspan="4">in Business Days *</td> </tr> <tr> <td colspan="4">Organic &amp; Inorganic Analyses</td> </tr> <tr> <td>10</td><td>7</td><td>5</td><td>4</td><td>3</td><td>2</td><td>1</td><td>&lt;1</td> </tr> <tr> <td colspan="4">STD.</td> </tr> <tr> <td colspan="4">Petroleum Hydrocarbon Analyses</td> </tr> <tr> <td>5</td><td>4</td><td>3</td><td>2</td><td>1</td><td>&lt;1</td> <td colspan="2"></td> </tr> <tr> <td colspan="4">STD.</td> </tr> <tr> <td colspan="2"><input checked="" type="checkbox"/> OTHER</td> <td colspan="2">Specify: <b>Ughw</b></td> <td colspan="4">* Turnaround Requests less than standard may incur Rush Charges.</td> </tr> </table>				TURNAROUND REQUEST				in Business Days *				Organic & Inorganic Analyses				10	7	5	4	3	2	1	<1	STD.				Petroleum Hydrocarbon Analyses				5	4	3	2	1	<1			STD.				<input checked="" type="checkbox"/> OTHER		Specify: <b>Ughw</b>		* Turnaround Requests less than standard may incur Rush Charges.			
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<input checked="" type="checkbox"/> OTHER		Specify: <b>Ughw</b>		* Turnaround Requests less than standard may incur Rush Charges.																																																			
REPORT TO: <b>Huckleberry Palmer</b>		ADDRESS: <b>4601 N. Marine St. Spokane, WA 99205</b>		hpal461@ecy.wa.gov																																																			
PHONE: <b>509-324-2433</b>		FAX:		P.O. NUMBER:																																																			
PROJECT NAME:		PRESERVATIVE																																																					
PROJECT NUMBER:		REQUESTED ANALYSES																																																					
SAMPLED BY:																																																							
CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME							MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID																																												
<b>B4</b>	<b>12/5/14 / 0915</b>	<input checked="" type="checkbox"/>						<b>S</b>																																															
<b>B5</b>	<b>12-5-14 / 0930</b>	<input checked="" type="checkbox"/>						<b>S</b>																																															
<b>B6</b>	<b>12-5-14 / 0945</b>	<input checked="" type="checkbox"/>						<b>S</b>																																															
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RELEASED BY: <b>[Signature]</b>	DATE: <b>12-5-14</b>	RECEIVED BY: <b>[Signature]</b>	DATE: <b>12-5-14</b>																																																				
PRINT NAME: <b>Huckleberry Palmer</b>	FIRM: <b>WA Dept. of Ecology</b>	PRINT NAME: <b>[Signature]</b>	TIME: <b>11:30</b>	FIRM: <b>TestAmerica</b>	TIME: <b>10:40</b>																																																		
RELEASED BY:	DATE:	RECEIVED BY:	DATE:																																																				
PRINT NAME:	FIRM:	PRINT NAME:	TIME:	FIRM:	TIME:																																																		
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12/8/2014



**TestAmerica Spokane  
Sample Receipt Form**

Work Order # <b>5XL0032</b>	Client: <b>Ecology</b>	Project: <b>City Parcel</b>		
Date/Time Received: <b>12-5-14 10:40</b>	By: _____			
Samples Delivered By: <input type="checkbox"/> Shipping Service <input type="checkbox"/> Courier <input type="checkbox"/> Client <input type="checkbox"/> Other: _____				
List Air Bill Number(s) or Attach a photocopy of the Air Bill:				
Receipt Phase	Yes	No	NA	Comments
Were samples received in a cooler:		X		
Custody Seals are present and intact:			X	
Are CoC documents present:	X			
Necessary signatures:	X			
Thermal Preservation Type: <input type="checkbox"/> Blue Ice <input type="checkbox"/> Gel Ice <input type="checkbox"/> Real Ice <input type="checkbox"/> Dry Ice <input checked="" type="checkbox"/> None <input type="checkbox"/> Other: _____				
Temperature: <b>5.6</b> °C Thermometer (Circle one Serial #122208348 Keyring IR Serial # 111874910 IR Gun 2) (acceptance criteria 0-6				
Temperature out of range: <input type="checkbox"/> Not enough ice <input type="checkbox"/> Ice melted <input type="checkbox"/> w/in 4hrs of collection <input type="checkbox"/> NA <input type="checkbox"/> Other: _____				
Log-In Phase	Yes	No	NA	Comments
Date/Time: <b>12-5-14 10:50</b> By: <b>OS</b>				
Are sample labels affixed and completed for each container	X			
Samples containers were received intact:	X			
Do sample IDs match the CoC	X			
Appropriate sample containers were received for tests requested	X			
Are sample volumes adequate for tests requested	X			
Appropriate preservatives were used for the tests requested	X			
pH of Inorganic samples checked and is within method specification	X			
Are VOC samples free of bubbles >6mm (1/4" diameter)			X	
Are dissolved parameters field filtered			X	
Do any samples need to be filtered or preserved by the lab			X	
Does this project require quick turnaround analysis	X			<b>1 day</b>
Are there any short hold time tests (see chart below)		X		
Are any samples within 2 days of or past expiration		X		
Was the CoC scanned	X			
Were there Non-conformance issues at login		X		
If yes, was a CAR generated #			X	

24 hours or less	48 hours	7 days
Coliform Bacteria	BOD, Color, MBAS	TDS, TSS, VDS, FDS
Chromium +6	Nitrate/Nitrite	Sulfide
	Orthophosphate	Aqueous Organic Prep

Form No. SP-FORM-SPL-002 12 December 2012

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.  
TestAmerica Spokane  
11922 East 1st. Avenue  
Spokane, WA 99206  
Tel: (509)924-9200

TestAmerica Job ID: SXL0054  
Client Project/Site: [none]  
Client Project Description: City Parcel Site

For:  
Washington Department of Ecology  
4601 N. Monroe  
Spokane, WA 99205

Attn: Huckleberry Palmer



Authorized for release by:  
12/11/2014 10:58:59 AM

Randee Arrington, Project Manager  
(509)924-9200  
[Randee.Arrington@testamericainc.com](mailto:Randee.Arrington@testamericainc.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:  
[www.testamericainc.com](http://www.testamericainc.com)

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

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

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Chronicle . . . . .	8
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# Sample Summary

Client: Washington Department of Ecology  
Project/Site: [none]

TestAmerica Job ID: SXL0054

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
SXL0054-01	W2A	Soil	12/09/14 15:15	12/09/14 16:40
SXL0054-02	B2A	Soil	12/09/14 15:30	12/09/14 16:40
SXL0054-03	B4A	Soil	12/09/14 15:50	12/09/14 16:40

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## Definitions/Glossary

Client: Washington Department of Ecology  
Project/Site: [none]

TestAmerica Job ID: SXL0054

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)



# Client Sample Results

Client: Washington Department of Ecology  
Project/Site: [none]

TestAmerica Job ID: SXL0054

**Client Sample ID: W2A**

**Lab Sample ID: SXL0054-01**

Date Collected: 12/09/14 15:15

Matrix: Soil

Date Received: 12/09/14 16:40

Percent Solids: 91.7

**Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		10.1		ug/kg dry	☼	12/10/14 08:15	12/10/14 10:35	1.00
PCB-1221	ND		10.1		ug/kg dry	☼	12/10/14 08:15	12/10/14 10:35	1.00
PCB-1232	ND		10.1		ug/kg dry	☼	12/10/14 08:15	12/10/14 10:35	1.00
PCB-1242	ND		10.1		ug/kg dry	☼	12/10/14 08:15	12/10/14 10:35	1.00
PCB-1248	ND		10.1		ug/kg dry	☼	12/10/14 08:15	12/10/14 10:35	1.00
PCB-1254	ND		10.1		ug/kg dry	☼	12/10/14 08:15	12/10/14 10:35	1.00
<b>PCB-1260</b>	<b>11.8</b>		10.1		ug/kg dry	☼	12/10/14 08:15	12/10/14 10:35	1.00
PCB-1268	ND		10.1		ug/kg dry	☼	12/10/14 08:15	12/10/14 10:35	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	110		51.9 - 151				12/10/14 08:15	12/10/14 10:35	1.00
Decachlorobiphenyl	123		73.5 - 164				12/10/14 08:15	12/10/14 10:35	1.00

**Client Sample ID: B2A**

**Lab Sample ID: SXL0054-02**

Date Collected: 12/09/14 15:30

Matrix: Soil

Date Received: 12/09/14 16:40

Percent Solids: 89.6

**Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		10.9		ug/kg dry	☼	12/10/14 08:15	12/10/14 12:45	1.00
PCB-1221	ND		10.9		ug/kg dry	☼	12/10/14 08:15	12/10/14 12:45	1.00
PCB-1232	ND		10.9		ug/kg dry	☼	12/10/14 08:15	12/10/14 12:45	1.00
PCB-1242	ND		10.9		ug/kg dry	☼	12/10/14 08:15	12/10/14 12:45	1.00
PCB-1248	ND		10.9		ug/kg dry	☼	12/10/14 08:15	12/10/14 12:45	1.00
PCB-1254	ND		10.9		ug/kg dry	☼	12/10/14 08:15	12/10/14 12:45	1.00
PCB-1260	ND		10.9		ug/kg dry	☼	12/10/14 08:15	12/10/14 12:45	1.00
PCB-1268	ND		10.9		ug/kg dry	☼	12/10/14 08:15	12/10/14 12:45	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	99.4		51.9 - 151				12/10/14 08:15	12/10/14 12:45	1.00
Decachlorobiphenyl	128		73.5 - 164				12/10/14 08:15	12/10/14 12:45	1.00

**Client Sample ID: B4A**

**Lab Sample ID: SXL0054-03**

Date Collected: 12/09/14 15:50

Matrix: Soil

Date Received: 12/09/14 16:40

Percent Solids: 94.3

**Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		10.1		ug/kg dry	☼	12/10/14 08:15	12/10/14 13:06	1.00
PCB-1221	ND		10.1		ug/kg dry	☼	12/10/14 08:15	12/10/14 13:06	1.00
PCB-1232	ND		10.1		ug/kg dry	☼	12/10/14 08:15	12/10/14 13:06	1.00
PCB-1242	ND		10.1		ug/kg dry	☼	12/10/14 08:15	12/10/14 13:06	1.00
PCB-1248	ND		10.1		ug/kg dry	☼	12/10/14 08:15	12/10/14 13:06	1.00
PCB-1254	ND		10.1		ug/kg dry	☼	12/10/14 08:15	12/10/14 13:06	1.00
<b>PCB-1260</b>	<b>20.6</b>		10.1		ug/kg dry	☼	12/10/14 08:15	12/10/14 13:06	1.00
PCB-1268	ND		10.1		ug/kg dry	☼	12/10/14 08:15	12/10/14 13:06	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	87.0		51.9 - 151				12/10/14 08:15	12/10/14 13:06	1.00
Decachlorobiphenyl	137		73.5 - 164				12/10/14 08:15	12/10/14 13:06	1.00

TestAmerica Spokane

# QC Sample Results

Client: Washington Department of Ecology  
Project/Site: [none]

TestAmerica Job ID: SXL0054

## Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

**Lab Sample ID: 14L0054-BLK1**  
**Matrix: Soil**  
**Analysis Batch: 14L0054**

**Client Sample ID: Method Blank**  
**Prep Type: Total**  
**Prep Batch: 14L0054\_P**

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		10.0		ug/kg wet		12/10/14 08:15	12/10/14 14:34	1.00
PCB-1221	ND		10.0		ug/kg wet		12/10/14 08:15	12/10/14 14:34	1.00
PCB-1232	ND		10.0		ug/kg wet		12/10/14 08:15	12/10/14 14:34	1.00
PCB-1242	ND		10.0		ug/kg wet		12/10/14 08:15	12/10/14 14:34	1.00
PCB-1248	ND		10.0		ug/kg wet		12/10/14 08:15	12/10/14 14:34	1.00
PCB-1254	ND		10.0		ug/kg wet		12/10/14 08:15	12/10/14 14:34	1.00
PCB-1260	ND		10.0		ug/kg wet		12/10/14 08:15	12/10/14 14:34	1.00
PCB-1268	ND		10.0		ug/kg wet		12/10/14 08:15	12/10/14 14:34	1.00

Surrogate	Blank %Recovery	Blank Qualifier	Limits	Prepared	Analyzed	Dil Fac
TCX	106		51.9 - 151	12/10/14 08:15	12/10/14 14:34	1.00
Decachlorobiphenyl	129		73.5 - 164	12/10/14 08:15	12/10/14 14:34	1.00

**Lab Sample ID: 14L0054-BS1**  
**Matrix: Soil**  
**Analysis Batch: 14L0054**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total**  
**Prep Batch: 14L0054\_P**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
PCB-1016	33.3	40.2		ug/kg wet		121	58 - 146
PCB-1260	33.3	42.6		ug/kg wet		128	64.2 - 152

Surrogate	LCS %Recovery	LCS Qualifier	Limits
TCX	111		51.9 - 151
Decachlorobiphenyl	137		73.5 - 164

**Lab Sample ID: 14L0054-MS1**  
**Matrix: Soil**  
**Analysis Batch: 14L0054**

**Client Sample ID: W2A**  
**Prep Type: Total**  
**Prep Batch: 14L0054\_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	%Rec	Limits
PCB-1016	ND		33.4	40.3		ug/kg dry	☼	121	50.6 - 145
PCB-1260	11.8		33.4	45.3		ug/kg dry	☼	100	57.6 - 120

Surrogate	Matrix Spike %Recovery	Matrix Spike Qualifier	Limits
TCX	107		51.9 - 151
Decachlorobiphenyl	125		73.5 - 164

**Lab Sample ID: 14L0054-MSD1**  
**Matrix: Soil**  
**Analysis Batch: 14L0054**

**Client Sample ID: W2A**  
**Prep Type: Total**  
**Prep Batch: 14L0054\_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	%Rec	Limits	RPD	Limit
PCB-1016	ND		35.5	42.3		ug/kg dry	☼	119	50.6 - 145	4.93	40
PCB-1260	11.8		35.5	50.5		ug/kg dry	☼	109	57.6 - 120	10.8	27.4

Surrogate	Matrix Spike Dup %Recovery	Matrix Spike Dup Qualifier	Limits
TCX	110		51.9 - 151

TestAmerica Spokane

# QC Sample Results

Client: Washington Department of Ecology  
Project/Site: [none]

TestAmerica Job ID: SXL0054

## Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082 (Continued)

Lab Sample ID: 14L0054-MSD1

Matrix: Soil

Analysis Batch: 14L0054

Client Sample ID: W2A

Prep Type: Total

Prep Batch: 14L0054\_P

<i>Surrogate</i>	<i>Matrix Spike Dup</i>	<i>Matrix Spike Dup</i>	<i>Limits</i>
	<i>%Recovery</i>	<i>Qualifier</i>	
Decachlorobiphenyl	126		73.5 - 164

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# Lab Chronicle

Client: Washington Department of Ecology  
Project/Site: [none]

TestAmerica Job ID: SXL0054

## Client Sample ID: W2A

Lab Sample ID: SXL0054-01

Date Collected: 12/09/14 15:15

Matrix: Soil

Date Received: 12/09/14 16:40

Percent Solids: 91.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.924	14L0054_P	12/10/14 08:15	NI	TAL SPK
Total	Analysis	EPA 8082A		1.00	14L0054	12/10/14 10:35	NMI	TAL SPK

## Client Sample ID: B2A

Lab Sample ID: SXL0054-02

Date Collected: 12/09/14 15:30

Matrix: Soil

Date Received: 12/09/14 16:40

Percent Solids: 89.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.973	14L0054_P	12/10/14 08:15	NI	TAL SPK
Total	Analysis	EPA 8082A		1.00	14L0054	12/10/14 12:45	NMI	TAL SPK
Total	Prep	Wet Chem		1.00	14L0059_P	12/10/14 08:45	NI	TAL SPK
Total	Analysis	TA SOP		1.00	14L0059	12/11/14 08:43	NI	TAL SPK

## Client Sample ID: B4A

Lab Sample ID: SXL0054-03

Date Collected: 12/09/14 15:50

Matrix: Soil

Date Received: 12/09/14 16:40

Percent Solids: 94.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.954	14L0054_P	12/10/14 08:15	NI	TAL SPK
Total	Analysis	EPA 8082A		1.00	14L0054	12/10/14 13:06	NMI	TAL SPK

### Laboratory References:

TAL SPK = TestAmerica Spokane, 11922 East 1st. Avenue, Spokane, WA 99206, TEL (509)924-9200

# Certification Summary

Client: Washington Department of Ecology  
Project/Site: [none]

TestAmerica Job ID: SXL0054

## Laboratory: TestAmerica Spokane

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-071	10-31-15
Washington	State Program	10	C569	01-06-15



# Method Summary

Client: Washington Department of Ecology  
Project/Site: [none]

TestAmerica Job ID: SXL0054

Method	Method Description	Protocol	Laboratory
EPA 8082A	Polychlorinated Biphenyls by EPA Method 8082		TAL SPK
TA SOP	Conventional Chemistry Parameters by APHA/EPA Methods		TAL SPK

**Protocol References:**

**Laboratory References:**

TAL SPK = TestAmerica Spokane, 11922 East 1st. Avenue, Spokane, WA 99206, TEL (509)924-9200



# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

5755 8<sup>th</sup> Street East, Tacoma, WA 98424-1317  
 11922 E. First Ave., Spokane WA 99206-5302  
 9405 SW Nimbus Ave., Beaverton, OR 97008-7145  
 2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119

253-922-2310 FAX 922-5047  
 509-924-9200 FAX 924-9290  
 503-906-9200 FAX 906-9210  
 907-563-9200 FAX 563-9210

## CHAIN OF CUSTODY REPORT

Work Order #: **SXL0054**

CLIENT: <u>Washington State Department of Ecology</u>		INVOICE TO: <u>Huckleberry Palmer hpal461@ecy.wa.gov</u>		<b>TURNAROUND REQUEST</b>						
REPORT TO: <u>Huckleberry Palmer hpal461@ecy.wa.gov</u>		ADDRESS: <u>4601 N. Monroe Street Spokane, WA 99205</u>		in Business Days *						
PHONE: <u>509-322-3433</u> FAX:		P.O. NUMBER:		Organic & Inorganic Analyses						
PROJECT NAME: <u>City Parcel</u>		PRESERVATIVE		<input type="checkbox"/> 10 <input type="checkbox"/> 7 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> <1 STD.						
PROJECT NUMBER:		REQUESTED ANALYSES		<input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> <1 STD.						
SAMPLED BY: <u>H. Palmer</u>				<input checked="" type="checkbox"/> OTHER Specify: <u>48 hr</u>						
				* Turnaround Requests less than standard may incur Rush Charges.						
CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	<u>POBS</u>	<u>EXA</u>	<u>9082</u>			MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID
<del>W2A</del>	<del>12-9-14</del>									
W2A	12-9-14 3:15	X					S	1		
B2A	12-9-14 3:30	X					S	1		
B4A	12-9-14 3:50	X					S	1		
RELEASED BY: <u>JM Palmer</u>	FIRM: <u>Dept. of Ecology</u>	DATE: <u>12-9-14</u>	TIME: <u>16:30</u>	RECEIVED BY: <u>Cat Stapleton</u>	FIRM: <u>TestAmerica</u>	DATE: <u>12-9-14</u>	TIME: <u>16:40</u>			
PRINT NAME: <u>Huckleberry Palmer</u>				PRINT NAME: <u>Cat Stapleton</u>						
RELEASED BY:	FIRM:	DATE:	TIME:	RECEIVED BY:	FIRM:	DATE:	TIME:			
PRINT NAME:				PRINT NAME:						
ADDITIONAL REMARKS:							TEMP: <u>9.5</u>	PAGE OF		

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12/11/2014



**TestAmerica Spokane  
Sample Receipt Form**

Work Order #: <b>SXL0054</b>	Client: <b>WaState Ecology</b>	Project: <b>City Parcel</b>		
Date/Time Received: <b>12-9-14 16:40</b>	By: <b>CS</b>			
Samples Delivered By: <input type="checkbox"/> Shipping Service <input type="checkbox"/> Courier <input checked="" type="checkbox"/> Client <input type="checkbox"/> Other:				
List Air Bill Number(s) or Attach a photocopy of the Air Bill:				
Receipt Phase	Yes	No	NA	Comments
Were samples received in a cooler:	<b>X</b>			
Custody Seals are present and intact:			<b>X</b>	
Are CoC documents present:	<b>Y</b>			
Necessary signatures:	<b>Y</b>			
Thermal Preservation Type: <input type="checkbox"/> Blue Ice <input type="checkbox"/> Gel Ice <input type="checkbox"/> Real Ice <input type="checkbox"/> Dry Ice <input checked="" type="checkbox"/> None <input type="checkbox"/> Other:				
Temperature: <b>9.5</b> °C Thermometer (Circle one Serial #122208348 Keyring IR Serial # 111874910 IR Gun 2 (acceptance criteria 0-6				
Temperature out of range: <input type="checkbox"/> Not enough ice <input type="checkbox"/> Ice melted <input checked="" type="checkbox"/> In 4hrs of collection <input type="checkbox"/> NA <input type="checkbox"/> Other:				
Log-in Phase	Yes	No	NA	Comments
Date/Time: <b>12-9-14 16:40</b> By: <b>CS</b>				
Are sample labels affixed and completed for each container	<b>X</b>			
Samples containers were received intact:	<b>Y</b>			
Do sample IDs match the CoC	<b>Y</b>			
Appropriate sample containers were received for tests requested	<b>X</b>			
Are sample volumes adequate for tests requested	<b>X</b>			
Appropriate preservatives were used for the tests requested	<b>X</b>			
pH of inorganic samples checked and is within method specification	<b>X</b>			
Are VOC samples free of bubbles >6mm (1/4" diameter)			<b>X</b>	
Are dissolved parameters field filtered			<b>X</b>	
Do any samples need to be filtered or preserved by the lab			<b>X</b>	
Does this project require quick turnaround analysis	<b>X</b>			<b>2 days</b>
Are there any short hold time tests (see chart below)		<b>X</b>		
Are any samples within 2 days of or past expiration		<b>X</b>		
Was the CoC scanned	<b>Y</b>			
Were there Non-conformance issues at login		<b>Y</b>		
If yes, was a CAR generated #			<b>X</b>	

24 hours or less	48 hours	7 days
Coliform Bacteria	BOD, Color, MBAS	TDS, TSS, VDS, FDS
Chromium +6	Nitrate/Nitrite	Sulfide
	Orthophosphate	Aqueous Organic Prep

Form No. SP-FORM-SPL-002 12 December 2012





# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.  
TestAmerica Spokane  
11922 East 1st. Avenue  
Spokane, WA 99206  
Tel: (509)924-9200

TestAmerica Job ID: SXL0055  
Client Project/Site: [none]  
Client Project Description: City Parcel Site

For:  
Washington Department of Ecology  
4601 N. Monroe  
Spokane, WA 99205

Attn: Huckleberry Palmer



Authorized for release by:  
12/11/2014 11:02:17 AM

Randee Arrington, Project Manager  
(509)924-9200  
[Randee.Arrington@testamericainc.com](mailto:Randee.Arrington@testamericainc.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:  
[www.testamericainc.com](http://www.testamericainc.com)

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

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

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# Sample Summary

Client: Washington Department of Ecology  
Project/Site: [none]

TestAmerica Job ID: SXL0055

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
SXL0055-01	W3A	Soil	12/10/14 08:15	12/10/14 09:15
SXL0055-02	B3A	Soil	12/10/14 08:30	12/10/14 09:15

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## Definitions/Glossary

Client: Washington Department of Ecology  
Project/Site: [none]

TestAmerica Job ID: SXL0055

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

# Client Sample Results

Client: Washington Department of Ecology  
Project/Site: [none]

TestAmerica Job ID: SXL0055

**Client Sample ID: W3A**

**Lab Sample ID: SXL0055-01**

Date Collected: 12/10/14 08:15

Matrix: Soil

Date Received: 12/10/14 09:15

Percent Solids: 86.9

**Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		10.3		ug/kg dry	☼	12/10/14 09:30	12/10/14 13:27	1.00
PCB-1221	ND		10.3		ug/kg dry	☼	12/10/14 09:30	12/10/14 13:27	1.00
PCB-1232	ND		10.3		ug/kg dry	☼	12/10/14 09:30	12/10/14 13:27	1.00
PCB-1242	ND		10.3		ug/kg dry	☼	12/10/14 09:30	12/10/14 13:27	1.00
PCB-1248	ND		10.3		ug/kg dry	☼	12/10/14 09:30	12/10/14 13:27	1.00
PCB-1254	ND		10.3		ug/kg dry	☼	12/10/14 09:30	12/10/14 13:27	1.00
<b>PCB-1260</b>	<b>112</b>		10.3		ug/kg dry	☼	12/10/14 09:30	12/10/14 13:27	1.00
PCB-1268	ND		10.3		ug/kg dry	☼	12/10/14 09:30	12/10/14 13:27	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	81.2		51.9 - 151				12/10/14 09:30	12/10/14 13:27	1.00
Decachlorobiphenyl	85.4		73.5 - 164				12/10/14 09:30	12/10/14 13:27	1.00

**Client Sample ID: B3A**

**Lab Sample ID: SXL0055-02**

Date Collected: 12/10/14 08:30

Matrix: Soil

Date Received: 12/10/14 09:15

Percent Solids: 95.4

**Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		10.2		ug/kg dry	☼	12/10/14 09:30	12/10/14 13:48	1.00
PCB-1221	ND		10.2		ug/kg dry	☼	12/10/14 09:30	12/10/14 13:48	1.00
PCB-1232	ND		10.2		ug/kg dry	☼	12/10/14 09:30	12/10/14 13:48	1.00
PCB-1242	ND		10.2		ug/kg dry	☼	12/10/14 09:30	12/10/14 13:48	1.00
PCB-1248	ND		10.2		ug/kg dry	☼	12/10/14 09:30	12/10/14 13:48	1.00
PCB-1254	ND		10.2		ug/kg dry	☼	12/10/14 09:30	12/10/14 13:48	1.00
PCB-1260	ND		10.2		ug/kg dry	☼	12/10/14 09:30	12/10/14 13:48	1.00
PCB-1268	ND		10.2		ug/kg dry	☼	12/10/14 09:30	12/10/14 13:48	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	97.4		51.9 - 151				12/10/14 09:30	12/10/14 13:48	1.00
Decachlorobiphenyl	132		73.5 - 164				12/10/14 09:30	12/10/14 13:48	1.00

TestAmerica Spokane

# QC Sample Results

Client: Washington Department of Ecology  
Project/Site: [none]

TestAmerica Job ID: SXL0055

## Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

**Lab Sample ID: 14L0054-BLK1**  
**Matrix: Soil**  
**Analysis Batch: 14L0054**

**Client Sample ID: Method Blank**  
**Prep Type: Total**  
**Prep Batch: 14L0054\_P**

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		10.0		ug/kg wet		12/10/14 08:15	12/10/14 14:34	1.00
PCB-1221	ND		10.0		ug/kg wet		12/10/14 08:15	12/10/14 14:34	1.00
PCB-1232	ND		10.0		ug/kg wet		12/10/14 08:15	12/10/14 14:34	1.00
PCB-1242	ND		10.0		ug/kg wet		12/10/14 08:15	12/10/14 14:34	1.00
PCB-1248	ND		10.0		ug/kg wet		12/10/14 08:15	12/10/14 14:34	1.00
PCB-1254	ND		10.0		ug/kg wet		12/10/14 08:15	12/10/14 14:34	1.00
PCB-1260	ND		10.0		ug/kg wet		12/10/14 08:15	12/10/14 14:34	1.00
PCB-1268	ND		10.0		ug/kg wet		12/10/14 08:15	12/10/14 14:34	1.00

Surrogate	Blank %Recovery	Blank Qualifier	Limits	Prepared	Analyzed	Dil Fac
TCX	106		51.9 - 151	12/10/14 08:15	12/10/14 14:34	1.00
Decachlorobiphenyl	129		73.5 - 164	12/10/14 08:15	12/10/14 14:34	1.00

**Lab Sample ID: 14L0054-BS1**  
**Matrix: Soil**  
**Analysis Batch: 14L0054**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total**  
**Prep Batch: 14L0054\_P**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
PCB-1016	33.3	40.2		ug/kg wet		121	58 - 146
PCB-1260	33.3	42.6		ug/kg wet		128	64.2 - 152

Surrogate	LCS %Recovery	LCS Qualifier	Limits
TCX	111		51.9 - 151
Decachlorobiphenyl	137		73.5 - 164

**Lab Sample ID: 14L0054-MS1**  
**Matrix: Soil**  
**Analysis Batch: 14L0054**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total**  
**Prep Batch: 14L0054\_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	%Rec	Limits
PCB-1016	ND		33.4	40.3		ug/kg dry	☼	121	50.6 - 145
PCB-1260	11.8		33.4	45.3		ug/kg dry	☼	100	57.6 - 120

Surrogate	Matrix Spike %Recovery	Matrix Spike Qualifier	Limits
TCX	107		51.9 - 151
Decachlorobiphenyl	125		73.5 - 164

**Lab Sample ID: 14L0054-MSD1**  
**Matrix: Soil**  
**Analysis Batch: 14L0054**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total**  
**Prep Batch: 14L0054\_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	%Rec	Limits	RPD	Limit
PCB-1016	ND		35.5	42.3		ug/kg dry	☼	119	50.6 - 145	4.93	40
PCB-1260	11.8		35.5	50.5		ug/kg dry	☼	109	57.6 - 120	10.8	27.4

Surrogate	Matrix Spike Dup %Recovery	Matrix Spike Dup Qualifier	Limits
TCX	110		51.9 - 151

TestAmerica Spokane

# QC Sample Results

Client: Washington Department of Ecology  
Project/Site: [none]

TestAmerica Job ID: SXL0055

## Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082 (Continued)

Lab Sample ID: 14L0054-MSD1

Matrix: Soil

Analysis Batch: 14L0054

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total

Prep Batch: 14L0054\_P

<i>Surrogate</i>	<i>Matrix Spike Dup</i>	<i>Matrix Spike Dup</i>	<i>Limits</i>
	<i>%Recovery</i>	<i>Qualifier</i>	
<i>Decachlorobiphenyl</i>	126		73.5 - 164

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# Lab Chronicle

Client: Washington Department of Ecology  
 Project/Site: [none]

TestAmerica Job ID: SXL0055

## Client Sample ID: W3A

Lab Sample ID: SXL0055-01

Date Collected: 12/10/14 08:15

Matrix: Soil

Date Received: 12/10/14 09:15

Percent Solids: 86.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.897	14L0054_P	12/10/14 09:30	MS	TAL SPK
Total	Analysis	EPA 8082A		1.00	14L0054	12/10/14 13:27	NMI	TAL SPK

## Client Sample ID: B3A

Lab Sample ID: SXL0055-02

Date Collected: 12/10/14 08:30

Matrix: Soil

Date Received: 12/10/14 09:15

Percent Solids: 95.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.977	14L0054_P	12/10/14 09:30	MS	TAL SPK
Total	Analysis	EPA 8082A		1.00	14L0054	12/10/14 13:48	NMI	TAL SPK
Total	Prep	Wet Chem		1.00	14L0059_P	12/10/14 09:30	NI	TAL SPK
Total	Analysis	TA SOP		1.00	14L0059	12/11/14 08:43	NI	TAL SPK

**Laboratory References:**

TAL SPK = TestAmerica Spokane, 11922 East 1st. Avenue, Spokane, WA 99206, TEL (509)924-9200





# Certification Summary

Client: Washington Department of Ecology  
Project/Site: [none]

TestAmerica Job ID: SXL0055

## Laboratory: TestAmerica Spokane

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-071	10-31-15
Washington	State Program	10	C569	01-06-15



# Method Summary

Client: Washington Department of Ecology  
Project/Site: [none]

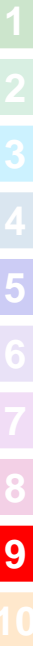
TestAmerica Job ID: SXL0055

Method	Method Description	Protocol	Laboratory
EPA 8082A	Polychlorinated Biphenyls by EPA Method 8082		TAL SPK
TA SOP	Conventional Chemistry Parameters by APHA/EPA Methods		TAL SPK

**Protocol References:**

**Laboratory References:**

TAL SPK = TestAmerica Spokane, 11922 East 1st. Avenue, Spokane, WA 99206, TEL (509)924-9200



# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

5755 8<sup>th</sup> Street East, Tacoma, WA 98424-1317  
 11922 E. First Ave., Spokane WA 99206-5302  
 9405 SW Nimbus Ave., Beaverton, OR 97008-7145  
 2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119

253-922-2310 FAX 922-5047  
 509-924-9200 FAX 924-9290  
 503-906-9200 FAX 906-9210  
 907-563-9200 FAX 563-9210

## CHAIN OF CUSTODY REPORT

Work Order #: **SX10055**

CLIENT: <b>Dept. of Ecology</b>		INVOICE TO: <b>Huckleberry Palmer</b>		<table border="1" style="width:100%; text-align: center;"> <tr> <th colspan="6">TURNAROUND REQUEST</th> </tr> <tr> <th colspan="6">in Business Days *</th> </tr> <tr> <td colspan="6">Organic &amp; Inorganic Analyses</td> </tr> <tr> <td><input type="checkbox"/> 10</td> <td><input type="checkbox"/> 7</td> <td><input type="checkbox"/> 5</td> <td><input type="checkbox"/> 4</td> <td><input type="checkbox"/> 3</td> <td><input type="checkbox"/> 2</td> </tr> <tr> <td colspan="6">Petroleum Hydrocarbon Analyses</td> </tr> <tr> <td><input type="checkbox"/> 5</td> <td><input type="checkbox"/> 4</td> <td><input type="checkbox"/> 3</td> <td><input type="checkbox"/> 2</td> <td><input type="checkbox"/> 1</td> <td><input type="checkbox"/> &lt;1</td> </tr> <tr> <td colspan="6"> <input checked="" type="checkbox"/> OTHER Specify: <b>48hr</b> </td> </tr> <tr> <td colspan="6">* Turnaround Requests less than standard may incur Rush Charges.</td> </tr> </table>		TURNAROUND REQUEST						in Business Days *						Organic & Inorganic Analyses						<input type="checkbox"/> 10	<input type="checkbox"/> 7	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	Petroleum Hydrocarbon Analyses						<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> <1	<input checked="" type="checkbox"/> OTHER Specify: <b>48hr</b>						* Turnaround Requests less than standard may incur Rush Charges.					
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* Turnaround Requests less than standard may incur Rush Charges.																																																					
REPORT TO: <b>Huckleberry Palmer</b>		ADDRESS: <b>4601 N. Monroe St.</b>		PHONE: <b>509-329-8433</b>																																																	
ADDRESS: <b>Spokane WA 99205</b>		PHONE: <b>509-329-8433</b>		FAX:																																																	
PROJECT NAME: <b>City Parcel</b>		PRESERVATIVE		REQUESTED ANALYSES																																																	
PROJECT NUMBER:		PRESERVATIVE		REQUESTED ANALYSES																																																	
SAMPLED BY:		PRESERVATIVE		REQUESTED ANALYSES																																																	
CLIENT SAMPLE IDENTIFICATION		SAMPLING DATE/TIME		MATRIX (W, S, O)																																																	
1 <b>W3A</b>		<b>12-10-14 / 8:15</b>		<b>S</b>																																																	
2 <b>B3A</b>		<b>12-10-14 / 8:30</b>		<b>S</b>																																																	
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RELEASED BY: <b>Huckleberry Palmer</b>		DATE: <b>12-10-14</b>		RECEIVED BY: <b>Carl Stephenson</b>																																																	
PRINT NAME: <b>[Signature]</b>		FIRM: <b>Ecology</b>		PRINT NAME: <b>[Signature]</b>																																																	
RELEASED BY:		DATE:		RECEIVED BY:																																																	
PRINT NAME:		FIRM:		PRINT NAME:																																																	
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12/11/2014



**TestAmerica Spokane  
Sample Receipt Form**

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Work Order # <u>SXLO055</u>		Client: <u>Ecology</u>		Project: <u>City Parcel</u>	
Date/Time Received: <u>12-10-14 9:15</u>			By: <u>CS</u>		
Samples Delivered By: <input type="checkbox"/> Shipping Service <input type="checkbox"/> Courier <input checked="" type="checkbox"/> Client <input type="checkbox"/> Other:					
List Air Bill Number(s) or Attach a photocopy of the Air Bill:					
Receipt Phase	Yes	No	NA	Comments	
Were samples received in a cooler:	<u>X</u>				
Custody Seals are present and intact:			<u>✓</u>		
Are CoC documents present:	<u>✓</u>				
Necessary signatures:	<u>✓</u>				
Thermal Preservation Type: <input type="checkbox"/> Blue Ice <input type="checkbox"/> Gel Ice <input type="checkbox"/> Real Ice <input type="checkbox"/> Dry Ice <input checked="" type="checkbox"/> None <input type="checkbox"/> Other:					
Temperature: <u>9.8</u> °C Thermometer (Circle one Serial #122208348 Keyring IR Serial # 111874910 IR Gun 2) (acceptance criteria 0-6					
Temperature out of range: <input type="checkbox"/> Not enough ice <input type="checkbox"/> Ice melted <input checked="" type="checkbox"/> in 4hrs of collection <input type="checkbox"/> NA <input type="checkbox"/> Other:					
Log-In Phase	Yes	No	NA	Comments	
Date/Time: <u>12-10-14/9:16</u> By: <u>CS</u>					
Are sample labels affixed and completed for each container	<u>✓</u>				
Samples containers were received intact:	<u>✓</u>				
Do sample IDs match the CoC	<u>✓</u>				
Appropriate sample containers were received for tests requested	<u>✓</u>				
Are sample volumes adequate for tests requested	<u>✓</u>				
Appropriate preservatives were used for the tests requested	<u>✓</u>				
pH of inorganic samples checked and is within method specification	<u>✓</u>				
Are VOC samples free of bubbles >6mm (1/4" diameter)			<u>✓</u>		
Are dissolved parameters field filtered			<u>✓</u>		
Do any samples need to be filtered or preserved by the lab			<u>X</u>		
Does this project require quick turnaround analysis	<u>X</u>			<u>2 days</u>	
Are there any short hold time tests (see chart below)		<u>✓</u>			
Are any samples within 2 days of or past expiration		<u>✓</u>			
Was the CoC scanned	<u>✓</u>				
Were there Non-conformance issues at login		<u>✓</u>			
If yes, was a CAR generated #				<u>✓</u>	

24 hours or less	48 hours	7 days
Coliform Bacteria	BOD, Color, MBAS	TDS, TSS, VDS, FDS
Chromium +6	Nitrate/Nitrite	Sulfide
	Orthophosphate	Aqueous Organic Prep

Form No. SP-FORM-SPL-002 12 December 2012

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Spokane

11922 East 1st Ave

Spokane, WA 99206

Tel: (509)924-9200

TestAmerica Job ID: 590-2243-1

Client Project/Site: North Monroe PCB

For:

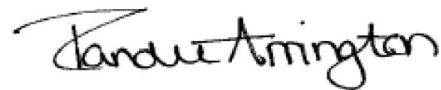
Washington State Dept of Ecology

Attn: Accounts Payable

PO BOX 47612

Olympia, Washington 98504

Attn: Huckleberry Palmer



Authorized for release by:

10/29/2015 9:34:47 AM

Randee Arrington, Project Manager II

(509)924-9200

[randee.arrington@testamericainc.com](mailto:randee.arrington@testamericainc.com)

### LINKS

Review your project  
results through

Total Access

Have a Question?



Visit us at:

[www.testamericainc.com](http://www.testamericainc.com)

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

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

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# Case Narrative

Client: Washington State Dept of Ecology  
Project/Site: North Monroe PCB

TestAmerica Job ID: 590-2243-1

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**Job ID: 590-2243-1**

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**Laboratory: TestAmerica Spokane**

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## Narrative

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### Receipt

The samples were received on 10/27/2015 11:55 AM; the samples arrived in good condition. The temperature of the cooler at receipt was 14.9° C.

### GC Semi VOA

Method 8082A: The following sample required a dilution due to the nature of the sample matrix: EB-6 (590-2243-10). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

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

### General Chemistry

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

### Organic Prep

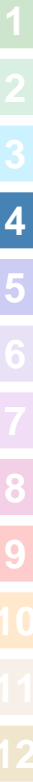
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Sample Summary

Client: Washington State Dept of Ecology  
Project/Site: North Monroe PCB

TestAmerica Job ID: 590-2243-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
590-2243-1	ES-1	Solid	10/27/15 09:35	10/27/15 11:55
590-2243-2	ES-2	Solid	10/27/15 09:45	10/27/15 11:55
590-2243-3	ES-3	Solid	10/27/15 10:40	10/27/15 11:55
590-2243-4	ES-4	Solid	10/27/15 10:30	10/27/15 11:55
590-2243-5	EB-1	Solid	10/27/15 09:30	10/27/15 11:55
590-2243-6	EB-2	Solid	10/27/15 09:40	10/27/15 11:55
590-2243-7	EB-3	Solid	10/27/15 09:50	10/27/15 11:55
590-2243-8	EB-4	Solid	10/27/15 10:35	10/27/15 11:55
590-2243-9	EB-5	Solid	10/27/15 10:25	10/27/15 11:55
590-2243-10	EB-6	Solid	10/27/15 09:55	10/27/15 11:55





# Definitions/Glossary

Client: Washington State Dept of Ecology  
Project/Site: North Monroe PCB

TestAmerica Job ID: 590-2243-1

## Qualifiers

### GC Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

# Client Sample Results

Client: Washington State Dept of Ecology  
Project/Site: North Monroe PCB

TestAmerica Job ID: 590-2243-1

## Client Sample ID: ES-1

Date Collected: 10/27/15 09:35

Date Received: 10/27/15 11:55

## Lab Sample ID: 590-2243-1

Matrix: Solid

Percent Solids: 91.9

### Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		11		ug/Kg	☼	10/28/15 08:35	10/28/15 12:29	1
PCB-1221	ND		11		ug/Kg	☼	10/28/15 08:35	10/28/15 12:29	1
PCB-1232	ND		11		ug/Kg	☼	10/28/15 08:35	10/28/15 12:29	1
PCB-1242	ND		11		ug/Kg	☼	10/28/15 08:35	10/28/15 12:29	1
PCB-1248	ND		11		ug/Kg	☼	10/28/15 08:35	10/28/15 12:29	1
PCB-1254	ND		11		ug/Kg	☼	10/28/15 08:35	10/28/15 12:29	1
PCB-1260	ND		11		ug/Kg	☼	10/28/15 08:35	10/28/15 12:29	1
PCB-1262	ND		11		ug/Kg	☼	10/28/15 08:35	10/28/15 12:29	1
PCB-1268	ND		11		ug/Kg	☼	10/28/15 08:35	10/28/15 12:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	80		51.9 - 151	10/28/15 08:35	10/28/15 12:29	1
DCB Decachlorobiphenyl (Surr)	94		73.5 - 164	10/28/15 08:35	10/28/15 12:29	1

## Client Sample ID: ES-2

Date Collected: 10/27/15 09:45

Date Received: 10/27/15 11:55

## Lab Sample ID: 590-2243-2

Matrix: Solid

Percent Solids: 94.0

### Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		11		ug/Kg	☼	10/28/15 08:35	10/28/15 12:50	1
PCB-1221	ND		11		ug/Kg	☼	10/28/15 08:35	10/28/15 12:50	1
PCB-1232	ND		11		ug/Kg	☼	10/28/15 08:35	10/28/15 12:50	1
PCB-1242	ND		11		ug/Kg	☼	10/28/15 08:35	10/28/15 12:50	1
PCB-1248	ND		11		ug/Kg	☼	10/28/15 08:35	10/28/15 12:50	1
PCB-1254	ND		11		ug/Kg	☼	10/28/15 08:35	10/28/15 12:50	1
PCB-1260	4900		210		ug/Kg	☼	10/28/15 08:35	10/28/15 15:55	20
PCB-1262	ND		11		ug/Kg	☼	10/28/15 08:35	10/28/15 12:50	1
PCB-1268	ND		11		ug/Kg	☼	10/28/15 08:35	10/28/15 12:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	73		51.9 - 151	10/28/15 08:35	10/28/15 12:50	1
DCB Decachlorobiphenyl (Surr)	101		73.5 - 164	10/28/15 08:35	10/28/15 12:50	1

## Client Sample ID: ES-3

Date Collected: 10/27/15 10:40

Date Received: 10/27/15 11:55

## Lab Sample ID: 590-2243-3

Matrix: Solid

Percent Solids: 86.4

### Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		11		ug/Kg	☼	10/28/15 08:35	10/28/15 13:10	1
PCB-1221	ND		11		ug/Kg	☼	10/28/15 08:35	10/28/15 13:10	1
PCB-1232	ND		11		ug/Kg	☼	10/28/15 08:35	10/28/15 13:10	1
PCB-1242	ND		11		ug/Kg	☼	10/28/15 08:35	10/28/15 13:10	1
PCB-1248	ND		11		ug/Kg	☼	10/28/15 08:35	10/28/15 13:10	1
PCB-1254	ND		11		ug/Kg	☼	10/28/15 08:35	10/28/15 13:10	1
PCB-1260	790		55		ug/Kg	☼	10/28/15 08:35	10/28/15 16:15	5
PCB-1262	ND		11		ug/Kg	☼	10/28/15 08:35	10/28/15 13:10	1
PCB-1268	ND		11		ug/Kg	☼	10/28/15 08:35	10/28/15 13:10	1

TestAmerica Spokane

# Client Sample Results

Client: Washington State Dept of Ecology  
Project/Site: North Monroe PCB

TestAmerica Job ID: 590-2243-1

## Client Sample ID: ES-3

Date Collected: 10/27/15 10:40

Date Received: 10/27/15 11:55

## Lab Sample ID: 590-2243-3

Matrix: Solid

Percent Solids: 86.4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	87		51.9 - 151	10/28/15 08:35	10/28/15 13:10	1
DCB Decachlorobiphenyl (Surr)	90		73.5 - 164	10/28/15 08:35	10/28/15 13:10	1

## Client Sample ID: ES-4

Date Collected: 10/27/15 10:30

Date Received: 10/27/15 11:55

## Lab Sample ID: 590-2243-4

Matrix: Solid

Percent Solids: 89.7

### Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		11		ug/Kg	☼	10/28/15 08:35	10/28/15 13:31	1
PCB-1221	ND		11		ug/Kg	☼	10/28/15 08:35	10/28/15 13:31	1
PCB-1232	ND		11		ug/Kg	☼	10/28/15 08:35	10/28/15 13:31	1
PCB-1242	ND		11		ug/Kg	☼	10/28/15 08:35	10/28/15 13:31	1
PCB-1248	ND		11		ug/Kg	☼	10/28/15 08:35	10/28/15 13:31	1
PCB-1254	ND		11		ug/Kg	☼	10/28/15 08:35	10/28/15 13:31	1
<b>PCB-1260</b>	<b>190</b>		11		ug/Kg	☼	10/28/15 08:35	10/28/15 13:31	1
PCB-1262	ND		11		ug/Kg	☼	10/28/15 08:35	10/28/15 13:31	1
PCB-1268	ND		11		ug/Kg	☼	10/28/15 08:35	10/28/15 13:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	84		51.9 - 151	10/28/15 08:35	10/28/15 13:31	1
DCB Decachlorobiphenyl (Surr)	102		73.5 - 164	10/28/15 08:35	10/28/15 13:31	1

## Client Sample ID: EB-1

Date Collected: 10/27/15 09:30

Date Received: 10/27/15 11:55

## Lab Sample ID: 590-2243-5

Matrix: Solid

Percent Solids: 90.1

### Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		11		ug/Kg	☼	10/28/15 08:35	10/28/15 13:52	1
PCB-1221	ND		11		ug/Kg	☼	10/28/15 08:35	10/28/15 13:52	1
PCB-1232	ND		11		ug/Kg	☼	10/28/15 08:35	10/28/15 13:52	1
PCB-1242	ND		11		ug/Kg	☼	10/28/15 08:35	10/28/15 13:52	1
PCB-1248	ND		11		ug/Kg	☼	10/28/15 08:35	10/28/15 13:52	1
PCB-1254	ND		11		ug/Kg	☼	10/28/15 08:35	10/28/15 13:52	1
<b>PCB-1260</b>	<b>16</b>		11		ug/Kg	☼	10/28/15 08:35	10/28/15 13:52	1
PCB-1262	ND		11		ug/Kg	☼	10/28/15 08:35	10/28/15 13:52	1
PCB-1268	ND		11		ug/Kg	☼	10/28/15 08:35	10/28/15 13:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	81		51.9 - 151	10/28/15 08:35	10/28/15 13:52	1
DCB Decachlorobiphenyl (Surr)	99		73.5 - 164	10/28/15 08:35	10/28/15 13:52	1

## Client Sample ID: EB-2

Date Collected: 10/27/15 09:40

Date Received: 10/27/15 11:55

## Lab Sample ID: 590-2243-6

Matrix: Solid

Percent Solids: 96.5

### Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		20		ug/Kg	☼	10/28/15 08:35	10/28/15 16:36	2
PCB-1221	ND		20		ug/Kg	☼	10/28/15 08:35	10/28/15 16:36	2

TestAmerica Spokane

# Client Sample Results

Client: Washington State Dept of Ecology  
Project/Site: North Monroe PCB

TestAmerica Job ID: 590-2243-1

**Client Sample ID: EB-2**

**Date Collected: 10/27/15 09:40**

**Date Received: 10/27/15 11:55**

**Lab Sample ID: 590-2243-6**

**Matrix: Solid**

**Percent Solids: 96.5**

**Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1232	ND		20		ug/Kg	☼	10/28/15 08:35	10/28/15 16:36	2
PCB-1242	ND		20		ug/Kg	☼	10/28/15 08:35	10/28/15 16:36	2
PCB-1248	ND		20		ug/Kg	☼	10/28/15 08:35	10/28/15 16:36	2
PCB-1254	ND		20		ug/Kg	☼	10/28/15 08:35	10/28/15 16:36	2
<b>PCB-1260</b>	<b>390</b>		20		ug/Kg	☼	10/28/15 08:35	10/28/15 16:36	2
PCB-1262	ND		20		ug/Kg	☼	10/28/15 08:35	10/28/15 16:36	2
PCB-1268	ND		20		ug/Kg	☼	10/28/15 08:35	10/28/15 16:36	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>Tetrachloro-m-xylene</i>	86		51.9 - 151	10/28/15 08:35	10/28/15 16:36	2
<i>DCB Decachlorobiphenyl (Surr)</i>	106		73.5 - 164	10/28/15 08:35	10/28/15 16:36	2

**Client Sample ID: EB-3**

**Date Collected: 10/27/15 09:50**

**Date Received: 10/27/15 11:55**

**Lab Sample ID: 590-2243-7**

**Matrix: Solid**

**Percent Solids: 89.2**

**Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		11		ug/Kg	☼	10/28/15 08:35	10/28/15 14:33	1
PCB-1221	ND		11		ug/Kg	☼	10/28/15 08:35	10/28/15 14:33	1
PCB-1232	ND		11		ug/Kg	☼	10/28/15 08:35	10/28/15 14:33	1
PCB-1242	ND		11		ug/Kg	☼	10/28/15 08:35	10/28/15 14:33	1
PCB-1248	ND		11		ug/Kg	☼	10/28/15 08:35	10/28/15 14:33	1
PCB-1254	ND		11		ug/Kg	☼	10/28/15 08:35	10/28/15 14:33	1
<b>PCB-1260</b>	<b>1400</b>		110		ug/Kg	☼	10/28/15 08:35	10/28/15 16:56	10
PCB-1262	ND		11		ug/Kg	☼	10/28/15 08:35	10/28/15 14:33	1
PCB-1268	ND		11		ug/Kg	☼	10/28/15 08:35	10/28/15 14:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>Tetrachloro-m-xylene</i>	81		51.9 - 151	10/28/15 08:35	10/28/15 14:33	1
<i>DCB Decachlorobiphenyl (Surr)</i>	107		73.5 - 164	10/28/15 08:35	10/28/15 14:33	1

**Client Sample ID: EB-4**

**Date Collected: 10/27/15 10:35**

**Date Received: 10/27/15 11:55**

**Lab Sample ID: 590-2243-8**

**Matrix: Solid**

**Percent Solids: 90.2**

**Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		210		ug/Kg	☼	10/28/15 08:35	10/28/15 14:53	20
PCB-1221	ND		210		ug/Kg	☼	10/28/15 08:35	10/28/15 14:53	20
PCB-1232	ND		210		ug/Kg	☼	10/28/15 08:35	10/28/15 14:53	20
PCB-1242	ND		210		ug/Kg	☼	10/28/15 08:35	10/28/15 14:53	20
PCB-1248	ND		210		ug/Kg	☼	10/28/15 08:35	10/28/15 14:53	20
PCB-1254	ND		210		ug/Kg	☼	10/28/15 08:35	10/28/15 14:53	20
<b>PCB-1260</b>	<b>5500</b>		210		ug/Kg	☼	10/28/15 08:35	10/28/15 14:53	20
PCB-1262	ND		210		ug/Kg	☼	10/28/15 08:35	10/28/15 14:53	20
PCB-1268	ND		210		ug/Kg	☼	10/28/15 08:35	10/28/15 14:53	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>Tetrachloro-m-xylene</i>	88		51.9 - 151	10/28/15 08:35	10/28/15 14:53	20
<i>DCB Decachlorobiphenyl (Surr)</i>	118		73.5 - 164	10/28/15 08:35	10/28/15 14:53	20

TestAmerica Spokane

# Client Sample Results

Client: Washington State Dept of Ecology  
 Project/Site: North Monroe PCB

TestAmerica Job ID: 590-2243-1

**Client Sample ID: EB-5**

**Date Collected: 10/27/15 10:25**

**Date Received: 10/27/15 11:55**

**Lab Sample ID: 590-2243-9**

**Matrix: Solid**

**Percent Solids: 93.6**

**Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		21		ug/Kg	☼	10/28/15 08:35	10/28/15 15:14	2
PCB-1221	ND		21		ug/Kg	☼	10/28/15 08:35	10/28/15 15:14	2
PCB-1232	ND		21		ug/Kg	☼	10/28/15 08:35	10/28/15 15:14	2
PCB-1242	ND		21		ug/Kg	☼	10/28/15 08:35	10/28/15 15:14	2
PCB-1248	ND		21		ug/Kg	☼	10/28/15 08:35	10/28/15 15:14	2
PCB-1254	ND		21		ug/Kg	☼	10/28/15 08:35	10/28/15 15:14	2
<b>PCB-1260</b>	<b>7400</b>		430		ug/Kg	☼	10/28/15 08:35	10/28/15 17:17	40
PCB-1262	ND		21		ug/Kg	☼	10/28/15 08:35	10/28/15 15:14	2
PCB-1268	ND		21		ug/Kg	☼	10/28/15 08:35	10/28/15 15:14	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	71		51.9 - 151	10/28/15 08:35	10/28/15 15:14	2
DCB Decachlorobiphenyl (Surr)	138		73.5 - 164	10/28/15 08:35	10/28/15 15:14	2

**Client Sample ID: EB-6**

**Date Collected: 10/27/15 09:55**

**Date Received: 10/27/15 11:55**

**Lab Sample ID: 590-2243-10**

**Matrix: Solid**

**Percent Solids: 90.2**

**Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		220		ug/Kg	☼	10/28/15 08:35	10/28/15 15:34	20
PCB-1221	ND		220		ug/Kg	☼	10/28/15 08:35	10/28/15 15:34	20
PCB-1232	ND		220		ug/Kg	☼	10/28/15 08:35	10/28/15 15:34	20
PCB-1242	ND		220		ug/Kg	☼	10/28/15 08:35	10/28/15 15:34	20
PCB-1248	ND		220		ug/Kg	☼	10/28/15 08:35	10/28/15 15:34	20
PCB-1254	ND		220		ug/Kg	☼	10/28/15 08:35	10/28/15 15:34	20
<b>PCB-1260</b>	<b>24000</b>		1100		ug/Kg	☼	10/28/15 08:35	10/28/15 17:37	100
PCB-1262	ND		220		ug/Kg	☼	10/28/15 08:35	10/28/15 15:34	20
PCB-1268	ND		220		ug/Kg	☼	10/28/15 08:35	10/28/15 15:34	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	69		51.9 - 151	10/28/15 08:35	10/28/15 15:34	20
DCB Decachlorobiphenyl (Surr)	184	X	73.5 - 164	10/28/15 08:35	10/28/15 15:34	20

# QC Sample Results

Client: Washington State Dept of Ecology  
Project/Site: North Monroe PCB

TestAmerica Job ID: 590-2243-1

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

**Lab Sample ID: MB 590-4178/1-A**

**Matrix: Solid**

**Analysis Batch: 4179**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 4178**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		10		ug/Kg		10/28/15 08:35	10/28/15 11:09	1
PCB-1221	ND		10		ug/Kg		10/28/15 08:35	10/28/15 11:09	1
PCB-1232	ND		10		ug/Kg		10/28/15 08:35	10/28/15 11:09	1
PCB-1242	ND		10		ug/Kg		10/28/15 08:35	10/28/15 11:09	1
PCB-1248	ND		10		ug/Kg		10/28/15 08:35	10/28/15 11:09	1
PCB-1254	ND		10		ug/Kg		10/28/15 08:35	10/28/15 11:09	1
PCB-1260	ND		10		ug/Kg		10/28/15 08:35	10/28/15 11:09	1
PCB-1262	ND		10		ug/Kg		10/28/15 08:35	10/28/15 11:09	1
PCB-1268	ND		10		ug/Kg		10/28/15 08:35	10/28/15 11:09	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	94		51.9 - 151	10/28/15 08:35	10/28/15 11:09	1
DCB Decachlorobiphenyl (Surr)	110		73.5 - 164	10/28/15 08:35	10/28/15 11:09	1

**Lab Sample ID: LCS 590-4178/2-A**

**Matrix: Solid**

**Analysis Batch: 4179**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 4178**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	66.7	57.3		ug/Kg		86	58 - 146
PCB-1260	66.7	63.1		ug/Kg		95	64.2 - 152

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	80		51.9 - 151
DCB Decachlorobiphenyl (Surr)	98		73.5 - 164

**Lab Sample ID: 590-2243-1 MS**

**Matrix: Solid**

**Analysis Batch: 4179**

**Client Sample ID: ES-1**

**Prep Type: Total/NA**

**Prep Batch: 4178**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	ND		69.3	57.3		ug/Kg	☼	83	50.6 - 145
PCB-1260	ND		69.3	64.3		ug/Kg	☼	93	57.6 - 120

Surrogate	MS %Recovery	MS Qualifier	Limits
Tetrachloro-m-xylene	79		51.9 - 151
DCB Decachlorobiphenyl (Surr)	95		73.5 - 164

**Lab Sample ID: 590-2243-1 MSD**

**Matrix: Solid**

**Analysis Batch: 4179**

**Client Sample ID: ES-1**

**Prep Type: Total/NA**

**Prep Batch: 4178**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	ND		71.6	58.4		ug/Kg	☼	82	50.6 - 145	2	40
PCB-1260	ND		71.6	64.4		ug/Kg	☼	90	57.6 - 120	0	27.4

TestAmerica Spokane

# QC Sample Results

Client: Washington State Dept of Ecology  
Project/Site: North Monroe PCB

TestAmerica Job ID: 590-2243-1

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 590-2243-1 MSD  
Matrix: Solid  
Analysis Batch: 4179

Client Sample ID: ES-1  
Prep Type: Total/NA  
Prep Batch: 4178

Surrogate	MSD		Limits
	%Recovery	Qualifier	
Tetrachloro- <i>m</i> -xylene	79		51.9 - 151
DCB Decachlorobiphenyl (Surr)	91		73.5 - 164

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# Lab Chronicle

Client: Washington State Dept of Ecology  
Project/Site: North Monroe PCB

TestAmerica Job ID: 590-2243-1

## Client Sample ID: ES-1

Date Collected: 10/27/15 09:35

Date Received: 10/27/15 11:55

## Lab Sample ID: 590-2243-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			4171	10/27/15 16:50	IAB	TAL SPK

## Client Sample ID: ES-1

Date Collected: 10/27/15 09:35

Date Received: 10/27/15 11:55

## Lab Sample ID: 590-2243-1

Matrix: Solid

Percent Solids: 91.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			15.29 g	5 mL	4178	10/28/15 08:35	IAB	TAL SPK
Total/NA	Analysis	8082A		1	15.29 g	5 mL	4179	10/28/15 12:29	NMI	TAL SPK

## Client Sample ID: ES-2

Date Collected: 10/27/15 09:45

Date Received: 10/27/15 11:55

## Lab Sample ID: 590-2243-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			4171	10/27/15 16:50	IAB	TAL SPK

## Client Sample ID: ES-2

Date Collected: 10/27/15 09:45

Date Received: 10/27/15 11:55

## Lab Sample ID: 590-2243-2

Matrix: Solid

Percent Solids: 94.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			15.07 g	5 mL	4178	10/28/15 08:35	IAB	TAL SPK
Total/NA	Analysis	8082A		1	15.07 g	5 mL	4179	10/28/15 12:50	NMI	TAL SPK
Total/NA	Prep	3550C			15.07 g	5 mL	4178	10/28/15 08:35	IAB	TAL SPK
Total/NA	Analysis	8082A		20	15.07 g	5 mL	4179	10/28/15 15:55	NMI	TAL SPK

## Client Sample ID: ES-3

Date Collected: 10/27/15 10:40

Date Received: 10/27/15 11:55

## Lab Sample ID: 590-2243-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			4171	10/27/15 16:50	IAB	TAL SPK

## Client Sample ID: ES-3

Date Collected: 10/27/15 10:40

Date Received: 10/27/15 11:55

## Lab Sample ID: 590-2243-3

Matrix: Solid

Percent Solids: 86.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			15.80 g	5 mL	4178	10/28/15 08:35	IAB	TAL SPK
Total/NA	Analysis	8082A		1	15.80 g	5 mL	4179	10/28/15 13:10	NMI	TAL SPK
Total/NA	Prep	3550C			15.80 g	5 mL	4178	10/28/15 08:35	IAB	TAL SPK

TestAmerica Spokane



# Lab Chronicle

Client: Washington State Dept of Ecology  
Project/Site: North Monroe PCB

TestAmerica Job ID: 590-2243-1

**Client Sample ID: ES-3**

**Date Collected: 10/27/15 10:40**

**Date Received: 10/27/15 11:55**

**Lab Sample ID: 590-2243-3**

**Matrix: Solid**

**Percent Solids: 86.4**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8082A		5	15.80 g	5 mL	4179	10/28/15 16:15	NMI	TAL SPK

**Client Sample ID: ES-4**

**Date Collected: 10/27/15 10:30**

**Date Received: 10/27/15 11:55**

**Lab Sample ID: 590-2243-4**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			4171	10/27/15 16:50	IAB	TAL SPK

**Client Sample ID: ES-4**

**Date Collected: 10/27/15 10:30**

**Date Received: 10/27/15 11:55**

**Lab Sample ID: 590-2243-4**

**Matrix: Solid**

**Percent Solids: 89.7**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			15.09 g	5 mL	4178	10/28/15 08:35	IAB	TAL SPK
Total/NA	Analysis	8082A		1	15.09 g	5 mL	4179	10/28/15 13:31	NMI	TAL SPK

**Client Sample ID: EB-1**

**Date Collected: 10/27/15 09:30**

**Date Received: 10/27/15 11:55**

**Lab Sample ID: 590-2243-5**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			4171	10/27/15 16:50	IAB	TAL SPK

**Client Sample ID: EB-1**

**Date Collected: 10/27/15 09:30**

**Date Received: 10/27/15 11:55**

**Lab Sample ID: 590-2243-5**

**Matrix: Solid**

**Percent Solids: 90.1**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			15.55 g	5 mL	4178	10/28/15 08:35	IAB	TAL SPK
Total/NA	Analysis	8082A		1	15.55 g	5 mL	4179	10/28/15 13:52	NMI	TAL SPK

**Client Sample ID: EB-2**

**Date Collected: 10/27/15 09:40**

**Date Received: 10/27/15 11:55**

**Lab Sample ID: 590-2243-6**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			4171	10/27/15 16:50	IAB	TAL SPK

TestAmerica Spokane

# Lab Chronicle

Client: Washington State Dept of Ecology  
Project/Site: North Monroe PCB

TestAmerica Job ID: 590-2243-1

## Client Sample ID: EB-2

Date Collected: 10/27/15 09:40  
Date Received: 10/27/15 11:55

## Lab Sample ID: 590-2243-6

Matrix: Solid  
Percent Solids: 96.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			15.21 g	5 mL	4178	10/28/15 08:35	IAB	TAL SPK
Total/NA	Analysis	8082A		2	15.21 g	5 mL	4179	10/28/15 16:36	NMI	TAL SPK

## Client Sample ID: EB-3

Date Collected: 10/27/15 09:50  
Date Received: 10/27/15 11:55

## Lab Sample ID: 590-2243-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			4171	10/27/15 16:50	IAB	TAL SPK

## Client Sample ID: EB-3

Date Collected: 10/27/15 09:50  
Date Received: 10/27/15 11:55

## Lab Sample ID: 590-2243-7

Matrix: Solid  
Percent Solids: 89.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			15.68 g	5 mL	4178	10/28/15 08:35	IAB	TAL SPK
Total/NA	Analysis	8082A		1	15.68 g	5 mL	4179	10/28/15 14:33	NMI	TAL SPK
Total/NA	Prep	3550C			15.68 g	5 mL	4178	10/28/15 08:35	IAB	TAL SPK
Total/NA	Analysis	8082A		10	15.68 g	5 mL	4179	10/28/15 16:56	NMI	TAL SPK

## Client Sample ID: EB-4

Date Collected: 10/27/15 10:35  
Date Received: 10/27/15 11:55

## Lab Sample ID: 590-2243-8

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			4171	10/27/15 16:50	IAB	TAL SPK

## Client Sample ID: EB-4

Date Collected: 10/27/15 10:35  
Date Received: 10/27/15 11:55

## Lab Sample ID: 590-2243-8

Matrix: Solid  
Percent Solids: 90.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			15.67 g	5 mL	4178	10/28/15 08:35	IAB	TAL SPK
Total/NA	Analysis	8082A		20	15.67 g	5 mL	4179	10/28/15 14:53	NMI	TAL SPK

## Client Sample ID: EB-5

Date Collected: 10/27/15 10:25  
Date Received: 10/27/15 11:55

## Lab Sample ID: 590-2243-9

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			4171	10/27/15 16:50	IAB	TAL SPK

TestAmerica Spokane

# Lab Chronicle

Client: Washington State Dept of Ecology  
Project/Site: North Monroe PCB

TestAmerica Job ID: 590-2243-1

**Client Sample ID: EB-5**

**Date Collected: 10/27/15 10:25**

**Date Received: 10/27/15 11:55**

**Lab Sample ID: 590-2243-9**

**Matrix: Solid**

**Percent Solids: 93.6**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			15.05 g	5 mL	4178	10/28/15 08:35	IAB	TAL SPK
Total/NA	Analysis	8082A		2	15.05 g	5 mL	4179	10/28/15 15:14	NMI	TAL SPK
Total/NA	Prep	3550C			15.05 g	5 mL	4178	10/28/15 08:35	IAB	TAL SPK
Total/NA	Analysis	8082A		40	15.05 g	5 mL	4179	10/28/15 17:17	NMI	TAL SPK

**Client Sample ID: EB-6**

**Date Collected: 10/27/15 09:55**

**Date Received: 10/27/15 11:55**

**Lab Sample ID: 590-2243-10**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			4171	10/27/15 16:50	IAB	TAL SPK

**Client Sample ID: EB-6**

**Date Collected: 10/27/15 09:55**

**Date Received: 10/27/15 11:55**

**Lab Sample ID: 590-2243-10**

**Matrix: Solid**

**Percent Solids: 90.2**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			15.03 g	5 mL	4178	10/28/15 08:35	IAB	TAL SPK
Total/NA	Analysis	8082A		20	15.03 g	5 mL	4179	10/28/15 15:34	NMI	TAL SPK
Total/NA	Prep	3550C			15.03 g	5 mL	4178	10/28/15 08:35	IAB	TAL SPK
Total/NA	Analysis	8082A		100	15.03 g	5 mL	4179	10/28/15 17:37	NMI	TAL SPK

**Laboratory References:**

TAL SPK = TestAmerica Spokane, 11922 East 1st Ave, Spokane, WA 99206, TEL (509)924-9200

# Certification Summary

Client: Washington State Dept of Ecology  
Project/Site: North Monroe PCB

TestAmerica Job ID: 590-2243-1

## Laboratory: TestAmerica Spokane

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Washington	State Program	10	C569	01-06-16

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# Method Summary

Client: Washington State Dept of Ecology  
Project/Site: North Monroe PCB

TestAmerica Job ID: 590-2243-1

Method	Method Description	Protocol	Laboratory
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL SPK
Moisture	Percent Moisture	EPA	TAL SPK

**Protocol References:**

EPA = US Environmental Protection Agency

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

**Laboratory References:**

TAL SPK = TestAmerica Spokane, 11922 East 1st Ave, Spokane, WA 99206, TEL (509)924-9200

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# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

11922 E. First Ave., Spokane WA 99206-5302  
 9405 SW Nimbus Ave., Beaverton, OR 97008-7145  
 2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119

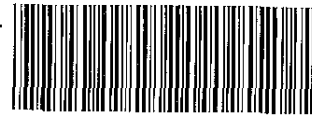
509-924-9200 FAX 924-9290  
 503-906-9200 FAX 906-9210  
 907-563-9200 FAX 563-9210

10/29/2015

## CHAIN OF CUSTODY REPORT

Work Order #:

CLIENT: <u>Department of Ecology</u>			INVOICE TO: <u>Huckleberg Palmer</u>			<b>TURNAROUND REQUEST</b> in Business Days * Organic & Inorganic Analyses <input type="checkbox"/> 10 <input type="checkbox"/> 7 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input checked="" type="checkbox"/> 1 <input type="checkbox"/> <1 STD. Petroleum Hydrocarbon Analyses <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> <1 STD. <input type="checkbox"/> OTHER Specify: * Turnaround Requests less than standard may incur Rush Charges.					
REPORT TO: <u>Huckleberg Palmer</u>			Department of Ecology <u>hpalk46@ecy.wa.gov</u>								
ADDRESS: <u>4601 N. Monroe St</u>			<u>4601 N. Monroe St</u>								
<u>Spokane, WA 99201</u>			<u>Spokane, WA 99201</u>								
PHONE: <u>509-329-3433</u> FAX: <u>hpalk46@ecy.wa.gov</u>			P.O. NUMBER:								
PROJECT NAME: <u>N64N Monroe PUB</u>			PRESERVATIVE								
PROJECT NUMBER:			N/A								
SAMPLED BY: <u>H. Palmer</u>			REQUESTED ANALYSES								
CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME							MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID
1 ES-1	10/27/15	9:35	X					S	1		
2 ES-2		9:45	X					S	1		
3 ES-3		10:40	X					S	1		
4 ES-4		10:50	X					S	1		
5 EB-1		9:30	X					S	1		
6 EB-2		9:40	X					S	1		
7 EB-3		9:50	X					S	1		
8 EB-4		10:35	X					S	1		
9 EB-5		10:25	X					S	1		
10 EB-6		9:55	X					S	1		
RELEASED BY: <u>Justin Rice</u>			DATE: <u>10/27/15</u>			RECEIVED BY: <u>Justin Rice</u>			DATE: <u>10/27/15</u>		
PRINT NAME: <u>Huckleberg Palmer</u>			FIRM: <u>Ecology</u>			PRINT NAME: <u>Justin Rice</u>			FIRM: <u>Geo</u>		
RELEASED BY: <u>Justin Rice</u>			DATE: <u>10/27/15</u>			RECEIVED BY: <u>Sheila Ryz</u>			DATE: <u>10/27/15</u>		
PRINT NAME: <u>Justin Rice</u>			FIRM: <u>Geo</u>			PRINT NAME: <u>Sheila Ryz</u>			FIRM: <u>TA/POK</u>		
ADDITIONAL REMARKS:									TEMP: <u>41.9C</u>		



590-2243 Chain of Custody

IR00/IAL-1000 (0714)

Page 18 of 19

## Login Sample Receipt Checklist

Client: Washington State Dept of Ecology

Job Number: 590-2243-1

**Login Number: 2243**

**List Number: 1**

**Creator: Kratz, Sheila J**

**List Source: TestAmerica Spokane**

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



# TestAmerica

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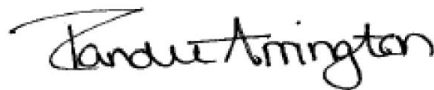
## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.  
TestAmerica Spokane  
11922 East 1st Ave  
Spokane, WA 99206  
Tel: (509)924-9200

TestAmerica Job ID: 590-2272-1  
Client Project/Site: N Cook

For:  
Washington State Dept of Ecology  
Attn: Accounts Payable  
PO BOX 47612  
Olympia, Washington 98504

Attn: Huckleberry Palmer



Authorized for release by:  
11/13/2015 4:01:39 PM

Randee Arrington, Project Manager II  
(509)924-9200  
[randee.arrington@testamericainc.com](mailto:randee.arrington@testamericainc.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:  
[www.testamericainc.com](http://www.testamericainc.com)

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

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

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## Case Narrative

Client: Washington State Dept of Ecology  
Project/Site: N Cook

TestAmerica Job ID: 590-2272-1

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**Job ID: 590-2272-1**

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**Laboratory: TestAmerica Spokane**

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### Narrative

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#### Receipt

The samples were received on 10/30/2015 9:30 AM; the samples arrived in good condition. The temperature of the cooler at receipt was 19.4° C.

#### GC Semi VOA

Method 8082A: The following sample required a dilution due to the nature of the sample matrix: EB-8 (590-2272-2). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

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

#### General Chemistry

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

#### Organic Prep

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

# Sample Summary

Client: Washington State Dept of Ecology  
Project/Site: N Cook

TestAmerica Job ID: 590-2272-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
590-2272-1	EB-7	Solid	10/29/15 15:35	10/30/15 09:30
590-2272-2	EB-8	Solid	10/29/15 15:30	10/30/15 09:30

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# Definitions/Glossary

Client: Washington State Dept of Ecology  
Project/Site: N Cook

TestAmerica Job ID: 590-2272-1

## Qualifiers

### GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
X	Surrogate is outside control limits

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

# Client Sample Results

Client: Washington State Dept of Ecology  
Project/Site: N Cook

TestAmerica Job ID: 590-2272-1

**Client Sample ID: EB-7**

**Date Collected: 10/29/15 15:35**

**Date Received: 10/30/15 09:30**

**Lab Sample ID: 590-2272-1**

**Matrix: Solid**

**Percent Solids: 92.9**

**Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		11		ug/Kg	☼	11/11/15 11:02	11/11/15 20:10	1
PCB-1221	ND		11		ug/Kg	☼	11/11/15 11:02	11/11/15 20:10	1
PCB-1232	ND		11		ug/Kg	☼	11/11/15 11:02	11/11/15 20:10	1
PCB-1242	ND		11		ug/Kg	☼	11/11/15 11:02	11/11/15 20:10	1
PCB-1248	ND		11		ug/Kg	☼	11/11/15 11:02	11/11/15 20:10	1
PCB-1254	ND		11		ug/Kg	☼	11/11/15 11:02	11/11/15 20:10	1
<b>PCB-1260</b>	<b>120</b>	<b>F1 F2</b>	11		ug/Kg	☼	11/11/15 11:02	11/11/15 20:10	1
PCB-1262	ND		11		ug/Kg	☼	11/11/15 11:02	11/11/15 20:10	1
PCB-1268	ND		11		ug/Kg	☼	11/11/15 11:02	11/11/15 20:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>Tetrachloro-m-xylene</i>	77		51.9 - 151	11/11/15 11:02	11/11/15 20:10	1
<i>DCB Decachlorobiphenyl (Surr)</i>	105		73.5 - 164	11/11/15 11:02	11/11/15 20:10	1

**Client Sample ID: EB-8**

**Date Collected: 10/29/15 15:30**

**Date Received: 10/30/15 09:30**

**Lab Sample ID: 590-2272-2**

**Matrix: Solid**

**Percent Solids: 95.2**

**Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		10		ug/Kg	☼	11/11/15 11:02	11/11/15 20:31	1
PCB-1221	ND		10		ug/Kg	☼	11/11/15 11:02	11/11/15 20:31	1
PCB-1232	ND		10		ug/Kg	☼	11/11/15 11:02	11/11/15 20:31	1
PCB-1242	ND		10		ug/Kg	☼	11/11/15 11:02	11/11/15 20:31	1
PCB-1248	ND		10		ug/Kg	☼	11/11/15 11:02	11/11/15 20:31	1
PCB-1254	ND		10		ug/Kg	☼	11/11/15 11:02	11/11/15 20:31	1
<b>PCB-1260</b>	<b>17000</b>		4200		ug/Kg	☼	11/11/15 11:02	11/12/15 09:50	400
PCB-1262	ND		10		ug/Kg	☼	11/11/15 11:02	11/11/15 20:31	1
PCB-1268	ND		10		ug/Kg	☼	11/11/15 11:02	11/11/15 20:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>Tetrachloro-m-xylene</i>	68		51.9 - 151	11/11/15 11:02	11/11/15 20:31	1
<i>Tetrachloro-m-xylene</i>	0	X	51.9 - 151	11/11/15 11:02	11/12/15 09:50	400
<i>DCB Decachlorobiphenyl (Surr)</i>	127		73.5 - 164	11/11/15 11:02	11/11/15 20:31	1
<i>DCB Decachlorobiphenyl (Surr)</i>	0	X	73.5 - 164	11/11/15 11:02	11/12/15 09:50	400

TestAmerica Spokane

# QC Sample Results

Client: Washington State Dept of Ecology  
Project/Site: N Cook

TestAmerica Job ID: 590-2272-1

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

**Lab Sample ID: MB 590-4433/1-A**

**Matrix: Solid**

**Analysis Batch: 4442**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 4433**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		10		ug/Kg		11/11/15 11:02	11/11/15 18:48	1
PCB-1221	ND		10		ug/Kg		11/11/15 11:02	11/11/15 18:48	1
PCB-1232	ND		10		ug/Kg		11/11/15 11:02	11/11/15 18:48	1
PCB-1242	ND		10		ug/Kg		11/11/15 11:02	11/11/15 18:48	1
PCB-1248	ND		10		ug/Kg		11/11/15 11:02	11/11/15 18:48	1
PCB-1254	ND		10		ug/Kg		11/11/15 11:02	11/11/15 18:48	1
PCB-1260	ND		10		ug/Kg		11/11/15 11:02	11/11/15 18:48	1
PCB-1262	ND		10		ug/Kg		11/11/15 11:02	11/11/15 18:48	1
PCB-1268	ND		10		ug/Kg		11/11/15 11:02	11/11/15 18:48	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	94		51.9 - 151	11/11/15 11:02	11/11/15 18:48	1
DCB Decachlorobiphenyl (Surr)	118		73.5 - 164	11/11/15 11:02	11/11/15 18:48	1

**Lab Sample ID: LCS 590-4433/2-A**

**Matrix: Solid**

**Analysis Batch: 4442**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 4433**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	66.7	75.9		ug/Kg		114	58 - 146
PCB-1260	66.7	86.5		ug/Kg		130	64.2 - 152

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	109		51.9 - 151
DCB Decachlorobiphenyl (Surr)	123		73.5 - 164

**Lab Sample ID: 590-2272-1 MS**

**Matrix: Solid**

**Analysis Batch: 4442**

**Client Sample ID: EB-7**

**Prep Type: Total/NA**

**Prep Batch: 4433**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	ND		70.4	74.7		ug/Kg	☼	106	50.6 - 145
PCB-1260	120	F1 F2	70.4	281	F1	ug/Kg	☼	222	57.6 - 120

Surrogate	MS %Recovery	MS Qualifier	Limits
Tetrachloro-m-xylene	87		51.9 - 151
DCB Decachlorobiphenyl (Surr)	106		73.5 - 164

**Lab Sample ID: 590-2272-1 MSD**

**Matrix: Solid**

**Analysis Batch: 4442**

**Client Sample ID: EB-7**

**Prep Type: Total/NA**

**Prep Batch: 4433**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	ND		71.6	69.4		ug/Kg	☼	97	50.6 - 145	7	40
PCB-1260	120	F1 F2	71.6	190	F2	ug/Kg	☼	92	57.6 - 120	39	27.4

TestAmerica Spokane

# QC Sample Results

Client: Washington State Dept of Ecology  
Project/Site: N Cook

TestAmerica Job ID: 590-2272-1

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 590-2272-1 MSD

Matrix: Solid

Analysis Batch: 4442

Client Sample ID: EB-7

Prep Type: Total/NA

Prep Batch: 4433

Surrogate	MSD		Limits
	%Recovery	Qualifier	
Tetrachloro- <i>m</i> -xylene	91		51.9 - 151
DCB Decachlorobiphenyl (Surr)	108		73.5 - 164

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# Lab Chronicle

Client: Washington State Dept of Ecology  
Project/Site: N Cook

TestAmerica Job ID: 590-2272-1

**Client Sample ID: EB-7**

**Date Collected: 10/29/15 15:35**

**Date Received: 10/30/15 09:30**

**Lab Sample ID: 590-2272-1**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			4423	11/10/15 15:09	IAB	TAL SPK

**Client Sample ID: EB-7**

**Date Collected: 10/29/15 15:35**

**Date Received: 10/30/15 09:30**

**Lab Sample ID: 590-2272-1**

**Matrix: Solid**

**Percent Solids: 92.9**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			15.09 g	5 mL	4433	11/11/15 11:02	IAB	TAL SPK
Total/NA	Analysis	8082A		1	15.09 g	5 mL	4442	11/11/15 20:10	MRS	TAL SPK

**Client Sample ID: EB-8**

**Date Collected: 10/29/15 15:30**

**Date Received: 10/30/15 09:30**

**Lab Sample ID: 590-2272-2**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			4423	11/10/15 15:09	IAB	TAL SPK

**Client Sample ID: EB-8**

**Date Collected: 10/29/15 15:30**

**Date Received: 10/30/15 09:30**

**Lab Sample ID: 590-2272-2**

**Matrix: Solid**

**Percent Solids: 95.2**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			15.16 g	5 mL	4433	11/11/15 11:02	IAB	TAL SPK
Total/NA	Analysis	8082A		1	15.16 g	5 mL	4442	11/11/15 20:31	MRS	TAL SPK
Total/NA	Prep	3550C			15.16 g	5 mL	4433	11/11/15 11:02	IAB	TAL SPK
Total/NA	Analysis	8082A		400	15.16 g	5 mL	4442	11/12/15 09:50	MRS	TAL SPK

**Laboratory References:**

TAL SPK = TestAmerica Spokane, 11922 East 1st Ave, Spokane, WA 99206, TEL (509)924-9200



# Certification Summary

Client: Washington State Dept of Ecology  
Project/Site: N Cook

TestAmerica Job ID: 590-2272-1

## Laboratory: TestAmerica Spokane

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Washington	State Program	10	C569	01-06-16

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# Method Summary

Client: Washington State Dept of Ecology  
Project/Site: N Cook

TestAmerica Job ID: 590-2272-1

Method	Method Description	Protocol	Laboratory
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL SPK
Moisture	Percent Moisture	EPA	TAL SPK

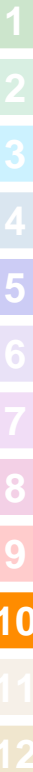
**Protocol References:**

EPA = US Environmental Protection Agency

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

**Laboratory References:**

TAL SPK = TestAmerica Spokane, 11922 East 1st Ave, Spokane, WA 99206, TEL (509)924-9200



# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

11922 E. First Ave., Spokane WA 99206-5302  
 9405 SW Nimbus Ave., Beaverton, OR 97008-7145  
 2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119

509-924-9200 FAX 924-9290  
 503-906-9200 FAX 906-9210  
 907-563-9200 FAX 563-9210

11/13/2015

## CHAIN OF CUSTODY REPORT

Work Order #:

CLIENT: <u>Ecology</u>		INVOICE TO: <u>Dept. of Ecology</u>		TURNAROUND REQUEST			
REPORT TO: <u>Huckleberry Palmer</u>		ADDRESS: <u>4601 N. Monroe St. Spokane WA 99204</u>		in Business Days *			
PHONE: <u>(509) 324-3483</u> FAX:		P.O. NUMBER:		<input checked="" type="checkbox"/> 10 <input type="checkbox"/> 7 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> <1			
PROJECT NAME: <u>N. Cook</u>		PRESERVATIVE		<input checked="" type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> <1 STD.			
PROJECT NUMBER:		REQUESTED ANALYSES		OTHER Specify			
SAMPLED BY:				* Turnaround Requests less than standard may incur Rush Charges.			
CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	GRAVIMETRIC P/B'S		MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID
1 <u>EB-7</u>	<u>10-24-15 / 3:35</u>	<input checked="" type="checkbox"/>		<u>S</u>	<u>1</u>		
2 <u>EB-8</u>	<u>10-24-15 / 3:30</u>	<input checked="" type="checkbox"/>		<u>S</u>	<u>1</u>		
3							
4							
5							
6							
7							
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9							
10							
RELEASED BY: <u>MLP</u>	DATE: <u>10-30-15</u>	RECEIVED BY: <u>Waltie</u>	DATE: <u>10-30-15</u>				
PRINT NAME: <u>Huckleberry Palmer</u>	FIRM: <u>Ecology</u>	PRINT NAME: <u>Heft Suda</u>	FIRM: <u>TestAmerica Inc</u>				
RELEASED BY:	DATE:	RECEIVED BY:	DATE:				
PRINT NAME:	FIRM:	PRINT NAME:	FIRM:				
ADDITIONAL REMARKS:				TEMP: <u>19.4°C</u> PAGE OF			



590-2272 Chain of Custody

(11/13/15) TAL-1000 (0714)

## Login Sample Receipt Checklist

Client: Washington State Dept of Ecology

Job Number: 590-2272-1

**Login Number: 2272**

**List Source: TestAmerica Spokane**

**List Number: 1**

**Creator: Kratz, Sheila J**

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



**APPENDIX C**  
**Disposal Records**

# WASTE DISPOSAL RECORD

Prepared by:	Matt Hooper	Client:	WA State Dept of Ecology
Project Name:	City Parcel Residual PCB Cleanup Action	Project No.:	2014-125
Site Location:	Spokane, WA	Page:	1 of 1

Ship Date	Daily Shipment #	Truck ID	Description	Manifest# or Shipping Paper#	Receiving Facility	Weight Ticket#	Weight (Tons)
12/4/14	1	158	Non-haz	110122OR	GWRL	720832	29.10
12/4/14	2	154	Non-haz	110122OR	GWRL	720833	32.50
12/4/14	3	25	Non-haz	110122OR	GWRL	721032	31.76
12/4/14	4	59	Non-haz	110122OR	GWRL	721017	32.47
12/4/14	5	97	Non-haz	110122OR	GWRL	720999	29.96
12/4/14	6	106	Non-haz	110122OR	GWRL	721001	31.60
12/4/14	7	150	Non-haz	110122OR	GWRL	721003	32.99
12/4/14	8		Non-haz	110122OR	GWRL	721002	28.92
12/5/14	1	R-65	Haz	013468831JJK	Chem Waste	437526	31.90
12/5/14	2	R-62	Haz	013468832JJK	Chem Waste	437527	30.80
12/5/14	3	158	Non-haz	110122OR	GWRL	720998	30.48
12/5/14	4	152	Non-haz	110122OR	GWRL	720981	33.08
12/5/14	5	65	Non-haz	110122OR	GWRL	721004	23.83
12/5/14	6	154	Non-haz	110122OR	GWRL	721015	23.80
12/10/14	1	152	Non-haz	110122OR	GWRL	721312	32.98
12/10/14	2	R-65	Haz	013468833JJK	Chem Waste	437624	31.93
12/12/14	3		Non-haz	110122OR	GWRL	721498	4.74
						<b>Total</b>	<b>492.84</b>

GWRL - Greater Wenatchee Regional Landfill

Date	Profile #	Manifest #	Ticket #	Material	Facility	Tons / Tonnes	Material Quantity	Material Unit
12/12/2014	110122OR	1101122or	721498	WPCB DANGEROUS WASTE (WA STATE SPECIAL WASTE)	Greater Wenatchee Regional LF	4.74	4.74	TON
12/10/2014	110122OR	110122or	721312	WPCB DANGEROUS WASTE (WA STATE SPECIAL WASTE)	Greater Wenatchee Regional LF	32.96	32.96	TON
12/08/2014	110122OR	110122or	721032	WPCB DANGEROUS WASTE (WA STATE SPECIAL WASTE)	Greater Wenatchee Regional LF	31.76	31.76	TON
12/08/2014	110122OR	110122or	721017	WPCB DANGEROUS WASTE (WA STATE SPECIAL WASTE)	Greater Wenatchee Regional LF	32.47	32.47	TON
12/08/2014	110122OR	110122or	721015	WPCB DANGEROUS WASTE (WA STATE SPECIAL WASTE)	Greater Wenatchee Regional LF	23.80	23.80	TON
12/08/2014	110122OR	110122or	720999	WPCB DANGEROUS WASTE (WA STATE SPECIAL WASTE)	Greater Wenatchee Regional LF	29.96	29.96	TON
12/08/2014	110122OR	110122or	721004	WPCB DANGEROUS WASTE (WA STATE SPECIAL WASTE)	Greater Wenatchee Regional LF	23.83	23.83	TON
12/08/2014	110122OR	110122or	721001	WPCB DANGEROUS WASTE (WA STATE SPECIAL WASTE)	Greater Wenatchee Regional LF	31.60	31.60	TON
12/08/2014	110122OR	110122or	721003	WPCB DANGEROUS WASTE (WA	Greater Wenatchee	32.99	32.99	TON

Date	Profile #	Manifest #	Ticket #	Material	Facility	Tons / Tonnes	Material Quantity	Material Unit
				STATE SPECIAL WASTE)	Regional LF			
12/08/2014	110122OR	110122or	721002	WPCB DANGEROUS WASTE (WA STATE SPECIAL WASTE)	Greater Wenatchee Regional LF	28.92	28.92	TON
12/08/2014	110122OR	110122or	720998	WPCB DANGEROUS WASTE (WA STATE SPECIAL WASTE)	Greater Wenatchee Regional LF	30.48	30.48	TON
12/08/2014	110122OR	110122or	720981	WPCB DANGEROUS WASTE (WA STATE SPECIAL WASTE)	Greater Wenatchee Regional LF	33.08	33.08	TON
12/04/2014	110122OR	110122OR	720833	WPCB DANGEROUS WASTE (WA STATE SPECIAL WASTE)	Greater Wenatchee Regional LF	32.50	32.50	TON
12/04/2014	110122OR	110122OR	720832	WPCB DANGEROUS WASTE (WA STATE SPECIAL WASTE)	Greater Wenatchee Regional LF	29.10	29.10	TON



Date	Profile #	Manifest #	Ticket #	Material	Facility	Material Quantity	Material Unit	System Type Code
12/10/2014	OR297754	013468833JJK	437624	PCB01 PCB CONTAMINATED SOIL	Chem Waste Arlington	29025.00	Kilograms	H132
12/05/2014	OR297754	013468832JJK	437527	PCB01 PCB CONTAMINATED SOIL	Chem Waste Arlington	28000.00	Kilograms	H132
12/05/2014	OR297754	013468831JJK	437526	PCB01 PCB CONTAMINATED SOIL	Chem Waste Arlington	29000.00	Kilograms	H132



CHEMICAL WASTE MANAGEMENT OF THE NORTHWEST

17629 Cedar Springs Lane  
Arlington, OR 97812

WASHINGTON DEPT ECOLOGY  
WAZ000008155  
708 N COOK ST  
SPOKANE WA 99202

CERTIFICATE OF DISPOSAL

Chemical Waste Management of the Northwest, Inc., ORD089452353, has received the following waste material and certifies that the material has been landfilled in accordance with 40 CFR part 761 as it pertains to the land disposal of Polychlorinated Biphenyl contaminated materials.

GENERATOR:	WASHINGTON DEPT ECOLOGY	
MANIFEST #:	013468831JJK	
LINE ITEM:	9b.1	
PROFILE #:	OR297754	
CWM TRACKING ID:	437526-01	
DATE RECEIVED:	12/05/14	
DISPOSAL PROCESS(ES):	LANDFILL	
FINAL DISPOSAL LOCATION:	LANDFILL	14
DISPOSAL DATE:	12/05/14	
CONTAINER # & TYPE:	1 DT	

Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (18 U.S.C. 1001 and 15 U.S.C. 2615) I certify that the information contained in or accompanying this document is true, accurate and complete. As to the identified section(s) of this document for which I cannot personally verify truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true, accurate and complete.

*Becky Sumner*

CWMNW RECORDS DEPARTMENT  
Date

12/15/14



REC'D DEC 29 2014

CHEMICAL WASTE MANAGEMENT OF THE NORTHWEST  
17629 Cedar Springs Lane  
Arlington, OR 97812

WASHINGTON DEPT ECOLOGY  
WAZ000008155  
708 N COOK ST  
SPOKANE WA 99202

CERTIFICATE OF DISPOSAL

Chemical Waste Management of the Northwest, Inc., ORD089452353, has received the following waste material and certifies that the material has been landfilled in accordance with 40 CFR part 761 as it pertains to the land disposal of Polychlorinated Biphenyl contaminated materials.

GENERATOR:	WASHINGTON DEPT ECOLOGY	
MANIFEST #:	013468832JJK	
LINE ITEM:	9b.1	
PROFILE #:	OR297754	
CWM TRACKING ID:	437527-01	
DATE RECEIVED:	12/05/14	
DISPOSAL PROCESS(ES):	LANDFILL	
FINAL DISPOSAL LOCATION:	LANDFILL	14
DISPOSAL DATE:	12/05/14	
CONTAINER # & TYPE:	1 DT	

Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (18 U.S.C. 1001 and 15 U.S.C. 2615) I certify that the information contained in or accompanying this document is true, accurate and complete. As to the identified section(s) of this document for which I cannot personally verify truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true, accurate and complete.

*Becky Sumner*

CWMNW RECORDS DEPARTMENT  
Date

12/15/14



**CHEMICAL WASTE MANAGEMENT OF THE NORTHWEST**  
 17629 Cedar Springs Lane  
 Arlington, OR 97812

WASHINGTON DEPT ECOLOGY  
 WAZ000008155  
 708 N COOK ST  
 SPOKANE WA 99202

**CERTIFICATE OF DISPOSAL**

Chemical Waste Management of the Northwest, Inc., ORD089452353, has received the following waste material and certifies that the material has been landfilled in accordance with 40 CFR part 761 as it pertains to the land disposal of Polychlorinated Biphenyl contaminated materials.

GENERATOR:	WASHINGTON DEPT ECOLOGY	
MANIFEST #:	013468833JJK	
LINE ITEM:	9b.1	
PROFILE #:	OR297754	
CWM TRACKING ID:	437624-01	
DATE RECEIVED:	12/10/14	
DISPOSAL PROCESS(ES):	LANDFILL	
FINAL DISPOSAL LOCATION:	LANDFILL	14
DISPOSAL DATE:	12/10/14	
CONTAINER # & TYPE:	1 DT	

Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (18 U.S.C. 1001 and 15 U.S.C. 2615) I certify that the information contained in or accompanying this document is true, accurate and complete. As to the identified section(s) of this document for which I cannot personally verify truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true, accurate and complete.

*Becky Sumner*

CWMNW RECORDS DEPARTMENT  
 Date

12/17/14



**Anderson Environmental Contracting  
705 Colorado St  
Kelso Washington 98626**

DATE:	11/9/2015
JOB#:	15-071
JOB SITE:	WA DOE

**City Parcel North Cook PCB Cleanup Action  
Export, Import, And Stockpile Summary**

Date	TSCA	Accumulative	Non-TSCA	Accumulative	Import	Accumulative
10/27/2015	28.91	28.91	66.66	66.66	100.41	
10/30/2015	-	-	30.82	97.48	31.35	131.76
	-	-	-	-	-	-
<b>Contract</b>	<b>-</b>	<b>22.22</b>	<b>-</b>	<b>60.44</b>		<b>85.33</b>
	-	-	-	-	-	-
<b>Unit Rate Diff</b>	<b>-</b>	<b>6.69</b>	<b>-</b>	<b>37.04</b>	<b>-</b>	<b>46.43</b>
	-	-	-	-	-	-
	-	-	-	-	-	-
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	-	-	-	-	-	-
<b>Total</b>	<b>28.91</b>	<b>28.91</b>	<b>97.48</b>	<b>97.48</b>	<b>131.76</b>	<b>131.76</b>

Contract Dimension/Take-off	TSCA	22.22	50*(4)*(2)
	Non-TSCA	60.44	136*(4)*(2)
	Import	85.33	

## **APPENDIX D**

### **Backfill Materials and Testing**


<b>TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE</b>	DATE  12/22/2014	TRANSMITTAL NO.  010
---	------------------------	----------------------------

**Section I – REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS**

<b>TO:</b> State of Washington Department of Ecology 4601 N. Monroe Spokane, WA	<b>FROM:</b> Engineering/Remediation Resources Group, Inc. 616 First Avenue, Suite 300 Seattle, WA 98104	<b>CONTRACT NO.</b> C1500052	<b>CHECK ONE:</b> <input checked="" type="checkbox"/> THIS IS A NEW TRANSMITTAL <input type="checkbox"/> THIS IS A RESUBMITTAL OF TRANSMITTAL__
---	---	---------------------------------	---

<b>SPEC. NO</b> 01 40 00	<b>PROJECT TITLE AND LOCATION:</b> City Parcel Residual PCB Cleanup Action	<b>CHECK ONE: THIS TRANSMITTAL IS FOR</b> <input type="checkbox"/> FIO <input checked="" type="checkbox"/> GOVERNMENT APPROVAL
-----------------------------	---	--

ITEM NO.	DESCRIPTION OF ITEM SUBMITTED <i>(Type, size, model number, etc.)</i>	MFG OR CONTR  CAT., CURVE DRAWING OR BROCHURE NO.	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT		FOR CONTRACTOR  USE CODE	VARIATION	FOR CE  USE CODE
				SPEC. PARA. NO.	DRAWING SHEET NO.			
				1	Import Weight Tickets			

<b>REMARKS</b>	I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as other wise stated.  <div style="text-align: center;"> <b>Matt Hooper</b>            _____          NAME AND SIGNATURE OF CONTRACTOR       </div>
----------------	---

**Section II – APPROVAL ACTION**

<b>ENCLOSURES RETURNED (List by Item No.)</b>	<b>NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY</b>	<b>DATE</b>
---	---	-------------

CONTRACT 06373

CUSTOMER EERG

PLANT:

- P2  P1  B  OTHER
- DELIVERED  BACKHAUL
- PICKED UP  DROP OFF

PROJECT NAME \_\_\_\_\_ MAP \_\_\_\_\_

PROJECT ADDRESS 728 N COOK ST

CONTACT INFO MATT PHONE 425-665-5642

LEAVE PLANT 9:35	ARRIVE JOBSITE 10:15
START DISCHARGE :	FINISH DISCHARGE :
LEAVE JOBSITE :	ARRIVE PLANT :

DRIVER Jim

TRUCK# 104300 10 8

LOAD# 1

MATERIAL GRAVEL ROAD

12/04/2010 09:36 AM  
 104300 10 8  
 40500 10 1 (CONCRETE)  
 64740 10 11  
 32.17 10 11

GROSS  
 TARE  
 NET  
 TONS

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- PAID  CASH \$ \_\_\_\_\_
- CHECK # \_\_\_\_\_  ACCOUNT \_\_\_\_\_
- CREDIT CARD  OTHER \_\_\_\_\_

Signature of Owner or its Agent

Print Name

**ACTION**  
Materials

P.O. Box 19425  
 Spokane, WA 99219  
 (509) 448-9386 Office  
 (509) 443-6234 Fax



CONTRACT NO. 66774

CUSTOMER FERG

- PLANT:
- P2  P1  B  OTHER
- DELIVERED  BACKHAUL
- PICKED UP  DROP OFF

PROJECT NAME \_\_\_\_\_ MAP \_\_\_\_\_

PROJECT ADDRESS 728 N COOK ST

CONTACT INFO MATT PHONE 425 468 3642

LEAVE PLANT :	ARRIVE JOBSITE :
START DISCHARGE :	FINISH DISCHARGE :
LEAVE JOBSITE :	ARRIVE PLANT :

DRIVER KEITH

TRUCK# 0154

LOAD# 1

MATERIAL GRAVEL

GROSS \_\_\_\_\_

TARE \_\_\_\_\_

NET \_\_\_\_\_

TONS \_\_\_\_\_

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- PAID  CASH \$ \_\_\_\_\_
- CHECK # \_\_\_\_\_  ACCOUNT \_\_\_\_\_
- CREDIT CARD  OTHER \_\_\_\_\_

Signature of Owner or its Agent \_\_\_\_\_

Print Name Matt Hooper

**ACTION**  
Materials

P.O. Box 19425  
Spokane, WA 99219  
(509) 448-9386 Office  
(509) 443-6234 Fax

CONTRACT 66792

CUSTOMER EEFG

PLANT:

PROJECT NAME \_\_\_\_\_ MAP \_\_\_\_\_

P2  P1  B  OTHER

PROJECT ADDRESS 728 N. Cox St

DELIVERED  BACKHAUL

CONTACT INFO MATT PHONE 448-3612

PICKED UP  DROP OFF

LEAVE PLANT <u>11:50</u>	ARRIVE JOBSITE <u>12:15</u>
START DISCHARGE :	FINISH DISCHARGE <u>12:38</u>
LEAVE JOBSITE :	ARRIVE PLANT :

DRIVER JAMES

TRUCK# 0154

LOAD# 1

MATERIAL Gravel

11/19/01 11:49 AM  
10760 TON  
3700 LB T + 10000  
6050 TON  
3190 TON

GROSS  
TARE  
NET  
TONS

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PAID  CASH \$ \_\_\_\_\_  
 CHECK # \_\_\_\_\_  ACCOUNT \_\_\_\_\_  
 CREDIT CARD  OTHER \_\_\_\_\_

[Signature]  
Signature of Owner or its Agent

Matt Wagner  
Print Name

**ACTION**  
Materials

P.O. Box 19425  
Spokane, WA 99219  
(509) 448-9386 Office  
(509) 443-6234 Fax

CONTRACT 11 88793

CUSTOMER FERG

PLANT:

- P2  P1  B  OTHER
- DELIVERED  BACKHAUL
- PICKED UP  DROP OFF

PROJECT NAME \_\_\_\_\_ MAP \_\_\_\_\_

PROJECT ADDRESS 728 N COOK ST

CONTACT INFO DAVE PHONE 425 460 5642

LEAVE PLANT :	ARRIVE JOBSITE <u>12:25</u>
START DISCHARGE <u>12:25</u>	FINISH DISCHARGE <u>12:30</u>
LEAVE JOBSITE :	ARRIVE PLANT :

DRIVER JOHN

TRUCK# 104705

LOAD# 1

MATERIAL GRAVEL

11:45 AM	104705	10.0	GROSS
		11500	TARE
		11300	NET
		11.30	TONS

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- PAID
- CHECK # \_\_\_\_\_
- CREDIT CARD
- CASH \$ \_\_\_\_\_
- ACCOUNT \_\_\_\_\_
- OTHER \_\_\_\_\_

[Signature]  
Signature of Owner or its Agent

Mark Hayes  
Print Name

**ACTION**  
Materials

P.O. Box 19425  
Spokane, WA 99219  
(509) 448-9386 Office  
(509) 443-6234 Fax

CONTRACT 12 60910

CUSTOMER ERRG

PLANT:

- P2  P1  B  OTHER
- DELIVERED  BACKHAUL
- PICKED UP  DROP OFF

PROJECT NAME \_\_\_\_\_ MAP \_\_\_\_\_

PROJECT ADDRESS 725 N COOK ST

CONTACT INFO 1716TT PHONE 425 400 3412

LEAVE PLANT <u>7:37</u>	ARRIVE JOBSITE :
START DISCHARGE :	FINISH DISCHARGE <u>8:03</u>
LEAVE JOBSITE :	ARRIVE PLANT :

DRIVER JEFF

TRUCK# 1001

LOAD# 1

MATERIAL GRAVEL

10/12/2014 07:37 AM  
 10/12/2014 08:03 AM  
 10/12/2014 08:03 AM  
 10/12/2014 08:03 AM  
 10/12/2014 08:03 AM

GROSS  
TARE  
NET  
TONS

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- PAID
- CHECK # \_\_\_\_\_
- CREDIT CARD
- CASH \$ \_\_\_\_\_
- ACCOUNT \_\_\_\_\_
- OTHER \_\_\_\_\_

[Signature]  
Signature of Owner or its Agent

[Print Name]  
Print Name

**ACTION**  
Materials

P.O. Box 19425  
Spokane, WA 99219  
(509) 448-9386 Office  
(509) 443-6234 Fax

CONTRACT NO. 00911

CUSTOMER FERG

PLANT:

- P2  P1  B  OTHER
- DELIVERED  BACKHAUL
- PICKED UP  DROP OFF

PROJECT NAME \_\_\_\_\_ MAP \_\_\_\_\_

PROJECT ADDRESS 728 N COOK ST

CONTACT INFO D1077 PHONE 509-448-5642

LEAVE PLANT <u>7:36</u>	ARRIVE JOBSITE :
START DISCHARGE :	FINISH DISCHARGE :
LEAVE JOBSITE :	ARRIVE PLANT :

DRIVER FERG

TRUCK# 005

LOAD# 1

MATERIAL GRAVEL PERIM

10/10/04 07:34 AM  
 10/10/04 07:34 AM  
 10/10/04 07:34 AM  
 10/10/04 07:34 AM  
 10/10/04 07:34 AM

GROSS  
 TARE  
 NET  
 TONS

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- PAID  CASH \$ \_\_\_\_\_
- CHECK # \_\_\_\_\_  ACCOUNT \_\_\_\_\_
- CREDIT CARD  OTHER \_\_\_\_\_

**ACTION**  
 Materials

P.O. Box 19425  
 Spokane, WA 99219  
 (509) 448-9386 Office  
 (509) 443-6234 Fax

Signature of Owner or its Agent \_\_\_\_\_  
 Print Name \_\_\_\_\_

CONTRACT 11 66912

CUSTOMER FRZG

PLANT:

PROJECT NAME \_\_\_\_\_ MAP \_\_\_\_\_

P2  P1  B  OTHER

PROJECT ADDRESS 728 N COOK ST

DELIVERED  BACKHAUL

CONTACT INFO MATT PHONE 424-6502

PICKED UP  DROP OFF

LEAVE PLANT :	ARRIVE JOBSITE 8:55
START DISCHARGE 6:50	FINISH DISCHARGE 8:00
LEAVE JOBSITE :	ARRIVE PLANT :

DRIVER TARVO

TRUCK# 0097

LOAD# 2

MATERIAL GRAVEL PERMAN

107420	IN	10
39040	IN	10
62500	IN	10
31.29	IN	10

GROSS

TARE

NET

TONS

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- PAID  CASH \$ \_\_\_\_\_
- CHECK # \_\_\_\_\_  ACCOUNT \_\_\_\_\_
- CREDIT CARD  OTHER \_\_\_\_\_

Signature of Owner or its Agent

Print Name

**ACTION**  
Materials

P.O. Box 19425  
Spokane, WA 99219  
(509) 448-9386 Office  
(509) 443-6234 Fax

CONTRACT 11 66913

CUSTOMER FERRIS

PLANT:

- P2  P1  B  OTHER
- DELIVERED  BACKHAUL
- PICKED UP  DROP OFF

PROJECT NAME \_\_\_\_\_ MAP \_\_\_\_\_

PROJECT ADDRESS 728 N COOK ST

CONTACT INFO MATT PHONE 425 466 5642

LEAVE PLANT 8:40	ARRIVE JOBSITE 8:58
START DISCHARGE 9:01	FINISH DISCHARGE 9:02
LEAVE JOBSITE 9:04	ARRIVE PLANT 9:42

DRIVER CHUCK

TRUCK# 065

LOAD# 2

MATERIAL GRAVEL

10/27/04 08:39 AM  
 8340 LB 8  
 8100 LB 1 (CONTAINER)  
 8100 LB 8  
 30.55 TON

GROSS  
 TARE  
 NET  
 TONS

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- PAID
- CHECK # \_\_\_\_\_
- CREDIT CARD
- CASH \$ \_\_\_\_\_
- ACCOUNT \_\_\_\_\_
- OTHER \_\_\_\_\_

Signature of Owner or its Agent \_\_\_\_\_

Print Name Matt H

**ACTION**  
 Materials

P.O. Box 19425  
 Spokane, WA 99219  
 (509) 448-9386 Office  
 (509) 443-6234 Fax

CONTRACT # 66916

CUSTOMER FERRIS

- PLANT:
- P2  P1  B  OTHER
- DELIVERED  BACKHAUL
- PICKED UP  DROP OFF

PROJECT NAME \_\_\_\_\_ MAP \_\_\_\_\_

PROJECT ADDRESS 728 N. CROCKET

CONTACT INFO MATT PHONE \_\_\_\_\_

LEAVE PLANT 4:29	ARRIVE JOBSITE 4:50
START DISCHARGE 4:50	FINISH DISCHARGE 9:53
LEAVE JOBSITE 10:31	ARRIVE PLANT 10:12

DRIVER ALBERT

TRUCK# 1000 GROSS \_\_\_\_\_

LOAD# 3 TARE \_\_\_\_\_

MATERIAL GRAVEL NET \_\_\_\_\_

TONS \_\_\_\_\_

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- PAID  CASH \$ \_\_\_\_\_
- CHECK # \_\_\_\_\_  ACCOUNT \_\_\_\_\_
- CREDIT CARD  OTHER \_\_\_\_\_

Signature of Owner or its Agent [Signature]

Print Name Matt H

**ACTION**  
Materials

P.O. Box 19425  
Spokane, WA 99219  
(509) 448-9386 Office  
(509) 443-6234 Fax



CONTRACT # 68917

CUSTOMER FERRO

PLANT:

- P2  P1  B  OTHER
- DELIVERED  BACKHAUL
- PICKED UP  DROP OFF

PROJECT NAME \_\_\_\_\_ MAP \_\_\_\_\_

PROJECT ADDRESS 700 N COOKS

CONTACT INFO MAT PHONE \_\_\_\_\_

LEAVE PLANT <u>9:46</u>	ARRIVE JOBSITE <u>10:07</u>
START DISCHARGE <u>10:08</u>	FINISH DISCHARGE <u>10:09</u>
LEAVE JOBSITE <u>10:12</u>	ARRIVE PLANT <u>10:31</u>

DRIVER CECIL

TRUCK# 105007 10 H

LOAD# \_\_\_\_\_

MATERIAL GRAVEL

105007 10 H

41000 10 T (TRUCKING)

63220 10 H

31 70 10 H

GROSS

TARE

NET

TONS

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- PAID  CASH \$ \_\_\_\_\_
- CHECK # \_\_\_\_\_  ACCOUNT \_\_\_\_\_
- CREDIT CARD  OTHER \_\_\_\_\_

Signature of Owner or its Agent \_\_\_\_\_

Print Name \_\_\_\_\_

**ACTION**  
Materials

P.O. Box 19425  
Spokane, WA 99219  
(509) 448-9386 Office  
(509) 443-6234 Fax

CONTRACT

56919

CUSTOMER

FERG

PLANT:

PROJECT NAME

MAP

P2  P1  B  OTHER

PROJECT ADDRESS

726 N COOK ST

DELIVERED  BACKHAUL

CONTACT INFO

MATT

PHONE

PICKED UP  DROP OFF

LEAVE PLANT	ARRIVE JOBSITE
10:30	10:40
START DISCHARGE	FINISH DISCHARGE
:	10:45
LEAVE JOBSITE	ARRIVE PLANT
10:46	11:05

DRIVER

JANIS

TRUCK#

0007 00517

LOAD#

4

MATERIAL

Gravel

10:10 AM  
 10:10 AM  
 10:10 AM  
 10:10 AM  
 10:10 AM  
 10:10 AM

GROSS  
 TARE  
 NET  
 TONS

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PAID

CASH \$

CHECK #

ACCOUNT

CREDIT CARD

OTHER

Signature of Owner or its Agent

Print Name

**ACTION**  
**Materials**

P.O. Box 19425  
 Spokane, WA 99219  
 (509) 448-9386 Office  
 (509) 443-6234 Fax

CONTRACT NO. 88920

CUSTOMER FERG

PLANT:

- P2  P1  B  OTHER
- DELIVERED  BACKHAUL
- PICKED UP  DROP OFF

PROJECT NAME \_\_\_\_\_ MAP \_\_\_\_\_

PROJECT ADDRESS 728 N. COLLEGE ST.

CONTACT INFO MATT PHONE \_\_\_\_\_

LEAVE PLANT <u>10:30</u>	ARRIVE JOBSITE <u>11:55</u>
START DISCHARGE <u>10:50</u>	FINISH DISCHARGE <u>11:58</u>
LEAVE JOBSITE <u>11:58</u>	ARRIVE PLANT <u>11:21</u>

DRIVER CECIL

TRUCK# 065

LOAD# 4

MATERIAL SPALL BRICK

17212/2014 10:36 AM  
 10000 10 13  
 4150 10 1 (MATERIAL)  
 6300 10 11  
 31 63 10 11

GROSS  
 TARE  
 NET  
 TONS

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- PAID
- CHECK # \_\_\_\_\_
- CREDIT CARD
- CASH \$ \_\_\_\_\_
- ACCOUNT \_\_\_\_\_
- OTHER \_\_\_\_\_

Signature of Owner or its Agent \_\_\_\_\_  
 Print Name Matt H

**ACTION**  
 Materials

P.O. Box 19425  
 Spokane, WA 99219  
 (509) 448-9386 Office  
 (509) 443-6234 Fax

CONTRACT # 58923

CUSTOMER EMERY

PLANT:

PROJECT NAME \_\_\_\_\_ MAP \_\_\_\_\_

- P2  P1  B  OTHER
- DELIVERED  BACKHAUL
- PICKED UP  DROP OFF

PROJECT ADDRESS 728 N COOK ST

CONTACT INFO MATT PHONE \_\_\_\_\_

LEAVE PLANT <u>11:21</u>	ARRIVE JOBSITE <u>45:</u>
START DISCHARGE :	FINISH DISCHARGE :
LEAVE JOBSITE :	ARRIVE PLANT <u>12:09</u>

DRIVER JAMES

TRUCK# 0097

LOAD# 5

MATERIAL GRAVEL PERKINS

109200 LB H  
37640 LB T (INCLUDES)  
65360 LB H  
73 58 LB H

GROSS  
TARE  
NET  
TONS

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- PAID  CASH \$ \_\_\_\_\_
- CHECK # \_\_\_\_\_  ACCOUNT \_\_\_\_\_
- CREDIT CARD  OTHER \_\_\_\_\_

Signature of Owner or its Agent [Signature]

Print Name \_\_\_\_\_

**ACTION**  
Materials

P.O. Box 19425  
Spokane, WA 99219  
(509) 448-9386 Office  
(509) 443-6234 Fax

CONTRACT 11 05924

CUSTOMER FERRO

PLANT:

- P2  P1  B  OTHER
- DELIVERED  BACKHAUL
- PICKED UP  DROP OFF

PROJECT NAME \_\_\_\_\_ MAP \_\_\_\_\_

PROJECT ADDRESS 728 N. COCKE ST

CONTACT INFO 1077 PHONE \_\_\_\_\_

LEAVE PLANT <u>11:27</u>	ARRIVE JOBSITE <u>11:50</u>
START DISCHARGE <u>11:50</u>	FINISH DISCHARGE <u>11:51</u>
LEAVE JOBSITE <u>11:53</u>	ARRIVE PLANT <u>12:11</u>

DRIVER C. F. C. U.

TRUCK# 065

LOAD# 10

MATERIAL 7/8 GRADE

11:50 TO 6  
11:50 TO T. COCKE ST  
11:50 TO H  
11:50 TO H

GROSS  
TARE  
NET  
TONS

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- PAID
- CHECK # \_\_\_\_\_
- CREDIT CARD
- CASH \$ \_\_\_\_\_
- ACCOUNT \_\_\_\_\_
- OTHER \_\_\_\_\_

Signature of Owner or its Agent

Print Name

**ACTION**  
Materials

P.O. Box 19425  
Spokane, WA 99219  
(509) 448-9386 Office  
(509) 443-6234 Fax

CONTRACT 11 68925

CUSTOMER FERG

PLANT:

PROJECT NAME \_\_\_\_\_ MAP \_\_\_\_\_

P2  P1  B  OTHER

PROJECT ADDRESS 728 N CHICK ST

DELIVERED  BACKHAUL

CONTACT INFO MATT PHONE \_\_\_\_\_

PICKED UP  DROP OFF

LEAVE PLANT <u>11:13</u>	ARRIVE JOBSITE :
START DISCHARGE :	FINISH DISCHARGE :
LEAVE JOBSITE :	ARRIVE PLANT :

DRIVER JARED

TRUCK# 100708

LOAD# 1

MATERIAL 7/8" MAX TOP SOLE

10:12 PM  
10:17 AM  
10:40 AM  
11:00 AM  
11:30 AM

GROSS  
TARE  
NET  
TONS

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- PAID  CASH \$ \_\_\_\_\_  
 CHECK # \_\_\_\_\_  ACCOUNT \_\_\_\_\_  
 CREDIT CARD  OTHER \_\_\_\_\_

Signature of Owner or its Agent

Print Name

**ACTION**  
Materials

P.O. Box 19425  
Spokane, WA 99219  
(509) 448-9386 Office  
(509) 443-6234 Fax

CONTRACT 11 00020

CUSTOMER FRRS

PLANT:

PROJECT NAME \_\_\_\_\_ MAP \_\_\_\_\_

P2  P1  B  OTHER

PROJECT ADDRESS 728 W COOK ST

DELIVERED  BACKHAUL

CONTACT INFO MATT PHONE \_\_\_\_\_

PICKED UP  DROP OFF

LEAVE PLANT <u>12:17</u>	ARRIVE JOBSITE <u>12:27</u>
START DISCHARGE :	FINISH DISCHARGE <u>12:42</u>
LEAVE JOBSITE <u>12:42</u>	ARRIVE PLANT :

DRIVER C. FELT

TRUCK# \_\_\_\_\_

LOAD# \_\_\_\_\_

MATERIAL 3/8" IRON COURSE

105140 IN H  
 10540 IN T (CONCRETE)  
 10500 IN H  
 2100 IN H

GROSS  
 TARE  
 NET  
 TONS

By signing below you agree to all terms and conditions of this contract as well as receipt of materials and/or services noted above. All invoices are net and payment is due on all invoices through the end of the calendar month by the 10th of the following month. Interest may accrue on all invoices that are past due at the rate of 1 1/2% per month (18% per annum) until paid. Further, as an additional consideration, the undersigned agrees to indemnify and hold harmless the driver of this truck and Action Materials, Inc. for any and all damages to the premises and/or adjacent property which may be claimed by anyone to have risen out of delivery of this order. The undersigned also agrees to help the driver remove mud from the wheels of the delivery vehicle so there is no cause for litter or damage to the public streets.

- PAID  CASH \$ \_\_\_\_\_  
 CHECK # \_\_\_\_\_  ACCOUNT \_\_\_\_\_  
 CREDIT CARD  OTHER \_\_\_\_\_

Signature of Owner or its Agent

Print Name

**ACTION**  
 Materials

P.O. Box 19425  
 Spokane, WA 99219  
 (509) 448-9386 Office  
 (509) 443-6234 Fax

**CONTRACT**

56932

CUSTOMER

FERG

**PLANT:**

- P2  P1  B  OTHER
- DELIVERED  BACKHAUL
- PICKED UP  DROP OFF

PROJECT NAME

MAP

PROJECT ADDRESS

728 N. Clark St

CONTACT INFO

MATT

PHONE

LEAVE PLANT 3:44	ARRIVE JOBSITE 4:15
START DISCHARGE :	FINISH DISCHARGE :
LEAVE JOBSITE :	ARRIVE PLANT :

DRIVER

Tom

TRUCK#

10500 15 E

LOAD#

10

MATERIAL

GRAVEL BORROW

10500 15 E  
10500 15 E  
10500 15 E  
10500 15 E

GROSS

TARE

NET

TONS

546.28 tons net

By signing below you agree to all terms and conditions of this contract as well as receipt of materials and/or services noted above. All invoices are net and payment is due on all invoices through the end of the calendar month by the 10th of the following month. Interest may accrue on all invoices that are past due at the rate of 1 1/2% per month (18% per annum) until paid. Further, as an additional consideration, the undersigned agrees to indemnify and hold harmless the driver of this truck and Action Materials, Inc. for any and all damages to the premises and/or adjacent property which may be claimed by anyone to have risen out of delivery of this order. The undersigned also agrees to help the driver remove mud from the wheels of the delivery vehicle so there is no cause for litter or damage to the public streets.

Signature of Owner or its Agent

Print Name

PAID

CHECK #

CREDIT CARD

CASH \$

ACCOUNT

OTHER

**ACTION**  
Materials

P.O. Box 19425  
Spokane, WA 99219  
(509) 448-9386 Office  
(509) 443-6234 Fax



<b>TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE</b>	DATE  10/29/2014	TRANSMITTAL NO.  005
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**Section I – REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS**

TO: State of Washington Department of Ecology 4601 N. Monroe Spokane, WA	FROM: Engineering/Remediation Resources Group, Inc. 616 First Avenue, Suite 300 Seattle, WA 98104	CONTRACT NO. C1500052	CHECK ONE: <input checked="" type="checkbox"/> THIS IS A NEW TRANSMITTAL <input type="checkbox"/> THIS IS A RESUBMITTAL OF TRANSMITTAL__
--	--	--------------------------	--

SPEC. NO 31 23 00	PROJECT TITLE AND LOCATION: City Parcel Residual PCB Cleanup Action	CHECK ONE: THIS TRANSMITTAL IS FOR <input type="checkbox"/> FIO <input checked="" type="checkbox"/> GOVERNMENT APPROVAL
----------------------	--	---

ITEM NO.	DESCRIPTION OF ITEM SUBMITTED <i>(Type, size, model number, etc.)</i>	MFG OR CONTR  CAT., CURVE DRAWING OR BROCHURE NO.	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT		FOR CONTRACTOR USE CODE	VARIATION	FOR CE USE CODE
				SPEC. PARA. NO.	DRAWING SHEET NO.			
				1	Import Material Chemical Testing			

REMARKS  Analytical has not been performed for gasoline range hydrocarbons. That test will be conducted during project mobilization and results will be submitted prior to importing material.	I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as other wise stated.  <div style="text-align: center;">           Matt Hooper              _____            NAME AND SIGNATURE OF CONTRACTOR         </div>
--	--

**Section II – APPROVAL ACTION**

ENCLOSURES RETURNED (List by Item No.)	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE
--	--	------

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.  
TestAmerica Spokane  
11922 East 1st. Avenue  
Spokane, WA 99206  
Tel: (509)924-9200

TestAmerica Job ID: SXJ0108  
Client Project/Site: Fill Dirt Testing  
Client Project Description: Fill Dirt Testing

For:  
Engineering Remediation Resources Group - Seattle  
616 First Ave Suite 300  
Seattle, WA 98104

Attn: Matt Hooper



Authorized for release by:  
10/27/2014 3:55:02 PM  
Chris Williams, Lab Director  
Chris.Williams@testamericainc.com

Designee for  
Ranee Arrington, Project Manager  
(509)924-9200  
Ranee.Arrington@testamericainc.com

### LINKS

Review your project  
results through  
**Total Access**

Have a Question?



Visit us at:  
[www.testamericainc.com](http://www.testamericainc.com)

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

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

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# Sample Summary

Client: Engineering Remediation Resources Group - Seattle  
Project/Site: Fill Dirt Testing

TestAmerica Job ID: SXJ0108

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Lab Sample ID	Client Sample ID	Matrix	Collected	Received
SXJ0108-01	Gravel Borrow	Soil	10/16/14 11:45	10/16/14 12:35

---

## Definitions/Glossary

Client: Engineering Remediation Resources Group - Seattle  
Project/Site: Fill Dirt Testing

TestAmerica Job ID: SXJ0108

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### Qualifiers

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#### Semivolatiles

Qualifier	Qualifier Description
B	Analyte was detected in the associated Method Blank.

#### Dioxin

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
q	The reported result is the estimated maximum possible concentration of this analyte, quantitated using the theoretical ion ratio. The measured ion ratio does not meet qualitative identification criteria and indicates a possible interference.

#### Metals

Qualifier	Qualifier Description
R2	The RPD exceeded the acceptance limit.
M8	The MS and/or MSD were below the acceptance limits. See Blank Spike (LCS).

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### Glossary

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Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

## Client Sample Results

Client: Engineering Remediation Resources Group - Seattle  
 Project/Site: Fill Dirt Testing

TestAmerica Job ID: SXJ0108

**Client Sample ID: Gravel Borrow**

**Lab Sample ID: SXJ0108-01**

Date Collected: 10/16/14 11:45

Matrix: Soil

Date Received: 10/16/14 12:35

Percent Solids: 94.4

**Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		10.5		ug/kg dry	☼	10/22/14 09:54	10/22/14 16:08	1.00
PCB-1221	ND		10.5		ug/kg dry	☼	10/22/14 09:54	10/22/14 16:08	1.00
PCB-1232	ND		10.5		ug/kg dry	☼	10/22/14 09:54	10/22/14 16:08	1.00
PCB-1242	ND		10.5		ug/kg dry	☼	10/22/14 09:54	10/22/14 16:08	1.00
PCB-1248	ND		10.5		ug/kg dry	☼	10/22/14 09:54	10/22/14 16:08	1.00
PCB-1254	ND		10.5		ug/kg dry	☼	10/22/14 09:54	10/22/14 16:08	1.00
PCB-1260	ND		10.5		ug/kg dry	☼	10/22/14 09:54	10/22/14 16:08	1.00
PCB-1268	ND		10.5		ug/kg dry	☼	10/22/14 09:54	10/22/14 16:08	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
TCX	110		46.2 - 210				10/22/14 09:54	10/22/14 16:08	1.00
Decachlorobiphenyl	136		65.6 - 186				10/22/14 09:54	10/22/14 16:08	1.00

**Method: EPA 8270D - Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.0208		mg/kg dry	☼	10/20/14 12:44	10/20/14 17:33	1.00
2-Methylnaphthalene	ND		0.0208		mg/kg dry	☼	10/20/14 12:44	10/20/14 17:33	1.00
1-Methylnaphthalene	ND		0.0208		mg/kg dry	☼	10/20/14 12:44	10/20/14 17:33	1.00
Acenaphthylene	ND		0.0208		mg/kg dry	☼	10/20/14 12:44	10/20/14 17:33	1.00
Acenaphthene	ND		0.0208		mg/kg dry	☼	10/20/14 12:44	10/20/14 17:33	1.00
Fluorene	ND		0.0208		mg/kg dry	☼	10/20/14 12:44	10/20/14 17:33	1.00
Phenanthrene	ND		0.0208		mg/kg dry	☼	10/20/14 12:44	10/20/14 17:33	1.00
Anthracene	ND		0.0208		mg/kg dry	☼	10/20/14 12:44	10/20/14 17:33	1.00
Fluoranthene	ND		0.0208		mg/kg dry	☼	10/20/14 12:44	10/20/14 17:33	1.00
Pyrene	ND		0.0208		mg/kg dry	☼	10/20/14 12:44	10/20/14 17:33	1.00
Benzo (a) anthracene	ND		0.0208		mg/kg dry	☼	10/20/14 12:44	10/20/14 17:33	1.00
Chrysene	ND		0.0208		mg/kg dry	☼	10/20/14 12:44	10/20/14 17:33	1.00
Benzo (b) fluoranthene	ND		0.0208		mg/kg dry	☼	10/20/14 12:44	10/20/14 17:33	1.00
Benzo (k) fluoranthene	ND		0.0208		mg/kg dry	☼	10/20/14 12:44	10/20/14 17:33	1.00
Benzo (a) pyrene	ND		0.0208		mg/kg dry	☼	10/20/14 12:44	10/20/14 17:33	1.00
Indeno (1,2,3-cd) pyrene	ND	B	0.0208		mg/kg dry	☼	10/20/14 12:44	10/20/14 17:33	1.00
Dibenzo (a,h) anthracene	ND		0.0125		mg/kg dry	☼	10/20/14 12:44	10/20/14 17:33	1.00
Benzo (ghi) perylene	ND		0.0208		mg/kg dry	☼	10/20/14 12:44	10/20/14 17:33	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Nitrobenzene-d5	83.0		36.3 - 152				10/20/14 12:44	10/20/14 17:33	1.00
2-FBP	99.8		30.2 - 135				10/20/14 12:44	10/20/14 17:33	1.00
p-Terphenyl-d14	87.6		65.1 - 134				10/20/14 12:44	10/20/14 17:33	1.00

**Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Hydrocarbons	ND		9.06		mg/kg dry	☼	10/17/14 08:19	10/20/14 13:45	1.00
Heavy Oil Range Hydrocarbons	ND		22.7		mg/kg dry	☼	10/17/14 08:19	10/20/14 13:45	1.00
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
o-Terphenyl	98.2		50 - 150				10/17/14 08:19	10/20/14 13:45	1.00
n-Triacontane-d62	102		50 - 150				10/17/14 08:19	10/20/14 13:45	1.00

**Method: 1613B - Dioxins and Furans (HRGC/HRMS)**

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		1.1	0.14	pg/g	☼	10/20/14 10:57	10/22/14 14:21	1

TestAmerica Spokane

## Client Sample Results

Client: Engineering Remediation Resources Group - Seattle

TestAmerica Job ID: SXJ0108

Project/Site: Fill Dirt Testing

**Client Sample ID: Gravel Borrow**

**Lab Sample ID: SXJ0108-01**

Date Collected: 10/16/14 11:45

Matrix: Soil

Date Received: 10/16/14 12:35

Percent Solids: 94.9

**Method: 1613B - Dioxins and Furans (HRGC/HRMS) (Continued)**

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDF	ND		1.1	0.14	pg/g	*	10/20/14 10:57	10/22/14 14:21	1
1,2,3,7,8-PeCDD	ND		5.3	0.29	pg/g	*	10/20/14 10:57	10/22/14 14:21	1
1,2,3,7,8-PeCDF	ND		5.3	0.15	pg/g	*	10/20/14 10:57	10/22/14 14:21	1
2,3,4,7,8-PeCDF	ND		5.3	0.17	pg/g	*	10/20/14 10:57	10/22/14 14:21	1
1,2,3,4,7,8-HxCDD	ND		5.3	0.092	pg/g	*	10/20/14 10:57	10/22/14 14:21	1
1,2,3,6,7,8-HxCDD	ND		5.3	0.15	pg/g	*	10/20/14 10:57	10/22/14 14:21	1
1,2,3,7,8,9-HxCDD	ND		5.3	0.083	pg/g	*	10/20/14 10:57	10/22/14 14:21	1
1,2,3,4,7,8-HxCDF	ND		5.3	0.094	pg/g	*	10/20/14 10:57	10/22/14 14:21	1
1,2,3,6,7,8-HxCDF	ND		5.3	0.085	pg/g	*	10/20/14 10:57	10/22/14 14:21	1
1,2,3,7,8,9-HxCDF	ND		5.3	0.10	pg/g	*	10/20/14 10:57	10/22/14 14:21	1
2,3,4,6,7,8-HxCDF	ND		5.3	0.086	pg/g	*	10/20/14 10:57	10/22/14 14:21	1
1,2,3,4,6,7,8-HpCDD	1.9	J B q	5.3	0.19	pg/g	*	10/20/14 10:57	10/22/14 14:21	1
1,2,3,4,6,7,8-HpCDF	0.38	J	5.3	0.061	pg/g	*	10/20/14 10:57	10/22/14 14:21	1
1,2,3,4,7,8,9-HpCDF	ND		5.3	0.097	pg/g	*	10/20/14 10:57	10/22/14 14:21	1
OCDD	24	B	11	0.30	pg/g	*	10/20/14 10:57	10/22/14 14:21	1
OCDF	1.3	J B	11	0.15	pg/g	*	10/20/14 10:57	10/22/14 14:21	1
Total TCDD	ND		1.1	0.14	pg/g	*	10/20/14 10:57	10/22/14 14:21	1
Total TCDF	ND		1.1	0.14	pg/g	*	10/20/14 10:57	10/22/14 14:21	1
Total PeCDD	ND		5.3	0.29	pg/g	*	10/20/14 10:57	10/22/14 14:21	1
Total PeCDF	ND		5.3	0.17	pg/g	*	10/20/14 10:57	10/22/14 14:21	1
Total HxCDD	0.26	J q	5.3	0.11	pg/g	*	10/20/14 10:57	10/22/14 14:21	1
Total HxCDF	0.30	J q	5.3	0.092	pg/g	*	10/20/14 10:57	10/22/14 14:21	1
Total HpCDD	4.3	J B q	5.3	0.19	pg/g	*	10/20/14 10:57	10/22/14 14:21	1
Total HpCDF	0.94	J q	5.3	0.079	pg/g	*	10/20/14 10:57	10/22/14 14:21	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C-2,3,7,8-TCDD	93		25 - 164	10/20/14 10:57	10/22/14 14:21	1
13C-2,3,7,8-TCDF	77		24 - 169	10/20/14 10:57	10/22/14 14:21	1
13C-1,2,3,7,8-PeCDD	108		25 - 181	10/20/14 10:57	10/22/14 14:21	1
13C-1,2,3,7,8-PeCDF	96		24 - 185	10/20/14 10:57	10/22/14 14:21	1
13C-2,3,4,7,8-PeCDF	93		21 - 178	10/20/14 10:57	10/22/14 14:21	1
13C-1,2,3,4,7,8-HxCDD	97		32 - 141	10/20/14 10:57	10/22/14 14:21	1
13C-1,2,3,6,7,8-HxCDD	94		28 - 130	10/20/14 10:57	10/22/14 14:21	1
13C-1,2,3,4,7,8-HxCDF	81		26 - 152	10/20/14 10:57	10/22/14 14:21	1
13C-1,2,3,6,7,8-HxCDF	85		26 - 123	10/20/14 10:57	10/22/14 14:21	1
13C-1,2,3,7,8,9-HxCDF	89		29 - 147	10/20/14 10:57	10/22/14 14:21	1
13C-2,3,4,6,7,8-HxCDF	85		28 - 136	10/20/14 10:57	10/22/14 14:21	1
13C-1,2,3,4,6,7,8-HpCDD	110		23 - 140	10/20/14 10:57	10/22/14 14:21	1
13C-1,2,3,4,6,7,8-HpCDF	94		28 - 143	10/20/14 10:57	10/22/14 14:21	1
13C-1,2,3,4,7,8,9-HpCDF	101		26 - 138	10/20/14 10:57	10/22/14 14:21	1
13C-OCDD	108		17 - 157	10/20/14 10:57	10/22/14 14:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
37Cl-2,3,7,8-TCDD	99		35 - 197	10/20/14 10:57	10/22/14 14:21	1

**Method: EPA 6010C - Metals Content by EPA 6010/7000 Series Methods, Prep by EPA 3050B**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	5.69		1.23		mg/kg dry	*	10/21/14 09:16	10/22/14 17:54	1.00
Barium	78.6		0.490		mg/kg dry	*	10/21/14 09:16	10/22/14 17:54	1.00
Cadmium	ND		0.196		mg/kg dry	*	10/21/14 09:16	10/22/14 17:54	1.00
Chromium	5.65		0.490		mg/kg dry	*	10/21/14 09:16	10/22/14 17:54	1.00

TestAmerica Spokane

## Client Sample Results

Client: Engineering Remediation Resources Group - Seattle  
 Project/Site: Fill Dirt Testing

TestAmerica Job ID: SXJ0108

**Client Sample ID: Gravel Borrow**

**Lab Sample ID: SXJ0108-01**

Date Collected: 10/16/14 11:45

Matrix: Soil

Date Received: 10/16/14 12:35

Percent Solids: 94.4

**Method: EPA 6010C - Metals Content by EPA 6010/7000 Series Methods, Prep by EPA 3050B (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	5.45		1.23		mg/kg dry	✱	10/21/14 09:16	10/22/14 17:54	1.00
Selenium	ND		2.45		mg/kg dry	✱	10/21/14 09:16	10/22/14 17:54	1.00
Silver	ND		0.530		mg/kg dry	✱	10/21/14 09:16	10/22/14 17:54	1.00

**Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		49.0		ug/kg dry	✱	10/24/14 09:21	10/24/14 15:43	1.00



## QC Sample Results

Client: Engineering Remediation Resources Group - Seattle  
 Project/Site: Fill Dirt Testing

TestAmerica Job ID: SXJ0108

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082

Lab Sample ID: 14J0133-BLK1							Client Sample ID: Method Blank			
Matrix: Soil							Prep Type: Total			
Analysis Batch: 14J0133							Prep Batch: 14J0133_P			
Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
PCB-1016	ND		10.0		ug/kg wet		10/22/14 09:54	10/22/14 15:04	1.00	
PCB-1221	ND		10.0		ug/kg wet		10/22/14 09:54	10/22/14 15:04	1.00	
PCB-1232	ND		10.0		ug/kg wet		10/22/14 09:54	10/22/14 15:04	1.00	
PCB-1242	ND		10.0		ug/kg wet		10/22/14 09:54	10/22/14 15:04	1.00	
PCB-1248	ND		10.0		ug/kg wet		10/22/14 09:54	10/22/14 15:04	1.00	
PCB-1254	ND		10.0		ug/kg wet		10/22/14 09:54	10/22/14 15:04	1.00	
PCB-1260	ND		10.0		ug/kg wet		10/22/14 09:54	10/22/14 15:04	1.00	
PCB-1268	ND		10.0		ug/kg wet		10/22/14 09:54	10/22/14 15:04	1.00	

Surrogate	Blank %Recovery	Blank Qualifier	Limits	Prepared	Analyzed	Dil Fac
TCX	107		46.2 - 210	10/22/14 09:54	10/22/14 15:04	1.00
Decachlorobiphenyl	142		65.6 - 186	10/22/14 09:54	10/22/14 15:04	1.00

Lab Sample ID: 14J0133-BS1							Client Sample ID: Lab Control Sample			
Matrix: Soil							Prep Type: Total			
Analysis Batch: 14J0133							Prep Batch: 14J0133_P			
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits			
PCB-1016	66.7	72.2		ug/kg wet		108	44.4 - 180			
PCB-1260	66.7	78.4		ug/kg wet		118	60.3 - 169			

Surrogate	LCS %Recovery	LCS Qualifier	Limits
TCX	112		46.2 - 210
Decachlorobiphenyl	143		65.6 - 186

Lab Sample ID: 14J0133-MS1							Client Sample ID: Gravel Borrow			
Matrix: Soil							Prep Type: Total			
Analysis Batch: 14J0133							Prep Batch: 14J0133_P			
Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	%Rec	Limits	
PCB-1016	ND		66.1	71.0		ug/kg dry	☼	108	50.6 - 145	
PCB-1260	ND		66.1	69.5		ug/kg dry	☼	105	57.6 - 120	

Surrogate	Matrix Spike %Recovery	Matrix Spike Qualifier	Limits
TCX	107		46.2 - 210
Decachlorobiphenyl	130		65.6 - 186

Lab Sample ID: 14J0133-MSD1							Client Sample ID: Gravel Borrow				
Matrix: Soil							Prep Type: Total				
Analysis Batch: 14J0133							Prep Batch: 14J0133_P				
Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	%Rec	Limits	RPD	Limit
PCB-1016	ND		67.4	71.3		ug/kg dry	☼	106	50.6 - 145	0.322	40
PCB-1260	ND		67.4	70.9		ug/kg dry	☼	105	57.6 - 120	1.94	27.4

Surrogate	Matrix Spike Dup %Recovery	Matrix Spike Dup Qualifier	Limits
TCX	108		46.2 - 210

TestAmerica Spokane

## QC Sample Results

Client: Engineering Remediation Resources Group - Seattle  
 Project/Site: Fill Dirt Testing

TestAmerica Job ID: SXJ0108

### Method: EPA 8082A - Polychlorinated Biphenyls by EPA Method 8082 (Continued)

Lab Sample ID: 14J0133-MSD1  
 Matrix: Soil  
 Analysis Batch: 14J0133

Client Sample ID: Gravel Borrow  
 Prep Type: Total  
 Prep Batch: 14J0133\_P

Surrogate	Matrix Spike Dup %Recovery	Matrix Spike Dup Qualifier	Limits
Decachlorobiphenyl	132		65.6 - 186

### Method: EPA 8270D - Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring

Lab Sample ID: 14J0117-BLK1  
 Matrix: Soil  
 Analysis Batch: 14J0117

Client Sample ID: Method Blank  
 Prep Type: Total  
 Prep Batch: 14J0117\_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.0100		mg/kg wet		10/20/14 12:44	10/20/14 16:04	1.00
2-Methylnaphthalene	ND		0.0100		mg/kg wet		10/20/14 12:44	10/20/14 16:04	1.00
1-Methylnaphthalene	ND		0.0100		mg/kg wet		10/20/14 12:44	10/20/14 16:04	1.00
Acenaphthylene	ND		0.0100		mg/kg wet		10/20/14 12:44	10/20/14 16:04	1.00
Acenaphthene	ND		0.0100		mg/kg wet		10/20/14 12:44	10/20/14 16:04	1.00
Fluorene	ND		0.0100		mg/kg wet		10/20/14 12:44	10/20/14 16:04	1.00
Phenanthrene	ND		0.0100		mg/kg wet		10/20/14 12:44	10/20/14 16:04	1.00
Anthracene	ND		0.0100		mg/kg wet		10/20/14 12:44	10/20/14 16:04	1.00
Fluoranthene	ND		0.0100		mg/kg wet		10/20/14 12:44	10/20/14 16:04	1.00
Pyrene	ND		0.0100		mg/kg wet		10/20/14 12:44	10/20/14 16:04	1.00
Benzo (a) anthracene	ND		0.0100		mg/kg wet		10/20/14 12:44	10/20/14 16:04	1.00
Chrysene	ND		0.0100		mg/kg wet		10/20/14 12:44	10/20/14 16:04	1.00
Benzo (b) fluoranthene	ND		0.0100		mg/kg wet		10/20/14 12:44	10/20/14 16:04	1.00
Benzo (k) fluoranthene	ND		0.0100		mg/kg wet		10/20/14 12:44	10/20/14 16:04	1.00
Benzo (a) pyrene	ND		0.0100		mg/kg wet		10/20/14 12:44	10/20/14 16:04	1.00
Indeno (1,2,3-cd) pyrene	0.0107	B	0.0100		mg/kg wet		10/20/14 12:44	10/20/14 16:04	1.00
Dibenzo (a,h) anthracene	ND		0.00600		mg/kg wet		10/20/14 12:44	10/20/14 16:04	1.00
Benzo (ghi) perylene	ND		0.0100		mg/kg wet		10/20/14 12:44	10/20/14 16:04	1.00

Surrogate	Blank %Recovery	Blank Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	88.4		36.3 - 152	10/20/14 12:44	10/20/14 16:04	1.00
2-FBP	82.8		30.2 - 135	10/20/14 12:44	10/20/14 16:04	1.00
p-Terphenyl-d14	81.8		65.1 - 134	10/20/14 12:44	10/20/14 16:04	1.00

Lab Sample ID: 14J0117-BS1  
 Matrix: Soil  
 Analysis Batch: 14J0117

Client Sample ID: Lab Control Sample  
 Prep Type: Total  
 Prep Batch: 14J0117\_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Naphthalene	0.133	0.117		mg/kg wet		87.5	51.4 - 113
Fluorene	0.133	0.143		mg/kg wet		107	65.7 - 123
Chrysene	0.133	0.121		mg/kg wet		91.0	57.3 - 133
Indeno (1,2,3-cd) pyrene	0.133	0.142		mg/kg wet		106	54.6 - 142

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Nitrobenzene-d5	95.0		36.3 - 152
2-FBP	88.6		30.2 - 135
p-Terphenyl-d14	90.0		65.1 - 134

TestAmerica Spokane

## QC Sample Results

Client: Engineering Remediation Resources Group - Seattle  
 Project/Site: Fill Dirt Testing

TestAmerica Job ID: SXJ0108

### Method: EPA 8270D - Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring (Continued)

Lab Sample ID: 14J0117-BSD1 Matrix: Soil Analysis Batch: 14J0117				Client Sample ID: Lab Control Sample Dup Prep Type: Total Prep Batch: 14J0117_P							
Analyte	Spike Added	LCS Dup Result	LCS Dup Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit		
Naphthalene	0.133	0.0900		mg/kg wet		67.5	51.4 - 113	25.8	35		
Fluorene	0.133	0.123		mg/kg wet		92.0	65.7 - 123	15.1	35		
Chrysene	0.133	0.105		mg/kg wet		78.5	57.3 - 133	14.7	35		
Indeno (1,2,3-cd) pyrene	0.133	0.111		mg/kg wet		83.5	54.6 - 142	24.2	35		
Surrogate	LCS Dup %Recovery	LCS Dup Qualifier	Limits								
Nitrobenzene-d5	56.0		36.3 - 152								
2-FBP	75.0		30.2 - 135								
p-Terphenyl-d14	73.0		65.1 - 134								

Lab Sample ID: 14J0117-MS1 Matrix: Soil Analysis Batch: 14J0117				Client Sample ID: Gravel Borrow Prep Type: Total Prep Batch: 14J0117_P							
Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
Naphthalene	ND		0.287	0.215		mg/kg dry	☼	75.0	30 - 120		
Fluorene	ND		0.287	0.261		mg/kg dry	☼	91.0	30 - 140		
Chrysene	ND		0.287	0.252		mg/kg dry	☼	88.0	30 - 133		
Indeno (1,2,3-cd) pyrene	ND		0.287	0.292		mg/kg dry	☼	102	30 - 140		
Surrogate	Matrix Spike %Recovery	Matrix Spike Qualifier	Limits								
Nitrobenzene-d5	93.6		36.3 - 152								
2-FBP	93.2		30.2 - 135								
p-Terphenyl-d14	87.4		65.1 - 134								

Lab Sample ID: 14J0117-MSD1 Matrix: Soil Analysis Batch: 14J0117				Client Sample ID: Gravel Borrow Prep Type: Total Prep Batch: 14J0117_P							
Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
Naphthalene	ND		0.274	0.173		mg/kg dry	☼	63.0	30 - 120	21.9	35
Fluorene	ND		0.274	0.319		mg/kg dry	☼	116	30 - 140	20.1	35
Chrysene	ND		0.274	0.249		mg/kg dry	☼	91.0	30 - 133	1.21	35
Indeno (1,2,3-cd) pyrene	ND		0.274	0.260		mg/kg dry	☼	95.0	30 - 140	11.7	35
Surrogate	Matrix Spike Dup %Recovery	Matrix Spike Dup Qualifier	Limits								
Nitrobenzene-d5	102		36.3 - 152								
2-FBP	109		30.2 - 135								
p-Terphenyl-d14	90.8		65.1 - 134								

## QC Sample Results

Client: Engineering Remediation Resources Group - Seattle  
 Project/Site: Fill Dirt Testing

TestAmerica Job ID: SXJ0108

### Method: NWTPH-Dx - Semivolatile Petroleum Products by NWTPH-Dx

Lab Sample ID: 14J0109-BLK1

Matrix: Soil

Analysis Batch: 14J0109

Client Sample ID: Method Blank

Prep Type: Total

Prep Batch: 14J0109\_P

Analyte	Blank	Blank	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Diesel Range Hydrocarbons	ND		10.0		mg/kg wet		10/17/14 08:19	10/20/14 15:59	1.00
Heavy Oil Range Hydrocarbons	ND		25.0		mg/kg wet		10/17/14 08:19	10/20/14 15:59	1.00

Surrogate	Blank	Blank	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
<i>o</i> -Terphenyl	101		50 - 150	10/17/14 08:19	10/20/14 15:59	1.00
<i>n</i> -Triacontane-d62	101		50 - 150	10/17/14 08:19	10/20/14 15:59	1.00

Lab Sample ID: 14J0109-BS1

Matrix: Soil

Analysis Batch: 14J0109

Client Sample ID: Lab Control Sample

Prep Type: Total

Prep Batch: 14J0109\_P

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	Limits
		Result	Qualifier				
Diesel Range Hydrocarbons	66.7	67.0		mg/kg wet		101	50 - 150

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
<i>o</i> -Terphenyl	105		50 - 150
<i>n</i> -Triacontane-d62	102		50 - 150

Lab Sample ID: 14J0109-DUP1

Matrix: Soil

Analysis Batch: 14J0109

Client Sample ID: Duplicate

Prep Type: Total

Prep Batch: 14J0109\_P

Analyte	Sample	Sample	Duplicate	Duplicate	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Diesel Range Hydrocarbons	121		102		mg/kg dry	*	16.8	40
Heavy Oil Range Hydrocarbons	78.8		76.1		mg/kg dry	*	3.49	40

Surrogate	Duplicate	Duplicate	Limits
	%Recovery	Qualifier	
<i>o</i> -Terphenyl	94.0		50 - 150
<i>n</i> -Triacontane-d62	100		50 - 150

Lab Sample ID: 14J0109-DUP2

Matrix: Soil

Analysis Batch: 14J0109

Client Sample ID: Duplicate

Prep Type: Total

Prep Batch: 14J0109\_P

Analyte	Sample	Sample	Duplicate	Duplicate	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Diesel Range Hydrocarbons	30.3		37.0		mg/kg dry	*	19.8	40
Heavy Oil Range Hydrocarbons	13.6		17.6		mg/kg dry	*	25.9	40

Surrogate	Duplicate	Duplicate	Limits
	%Recovery	Qualifier	
<i>o</i> -Terphenyl	93.0		50 - 150
<i>n</i> -Triacontane-d62	94.9		50 - 150

TestAmerica Spokane

# QC Sample Results

Client: Engineering Remediation Resources Group - Seattle  
 Project/Site: Fill Dirt Testing

TestAmerica Job ID: SXJ0108

## Method: 1613B - Dioxins and Furans (HRGC/HRMS)

Lab Sample ID: MB 320-55757/1-A

Matrix: Solid

Analysis Batch: 55955

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 55757

Analyte	MB MB		RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
2,3,7,8-TCDD	ND		1.0	0.15	pg/g		10/20/14 10:57	10/21/14 20:26	1
2,3,7,8-TCDF	ND		1.0	0.11	pg/g		10/20/14 10:57	10/21/14 20:26	1
1,2,3,7,8-PeCDD	ND		5.0	0.32	pg/g		10/20/14 10:57	10/21/14 20:26	1
1,2,3,7,8-PeCDF	ND		5.0	0.17	pg/g		10/20/14 10:57	10/21/14 20:26	1
2,3,4,7,8-PeCDF	ND		5.0	0.20	pg/g		10/20/14 10:57	10/21/14 20:26	1
1,2,3,4,7,8-HxCDD	ND		5.0	0.15	pg/g		10/20/14 10:57	10/21/14 20:26	1
1,2,3,6,7,8-HxCDD	ND		5.0	0.15	pg/g		10/20/14 10:57	10/21/14 20:26	1
1,2,3,7,8,9-HxCDD	ND		5.0	0.13	pg/g		10/20/14 10:57	10/21/14 20:26	1
1,2,3,4,7,8-HxCDF	ND		5.0	0.14	pg/g		10/20/14 10:57	10/21/14 20:26	1
1,2,3,6,7,8-HxCDF	ND		5.0	0.13	pg/g		10/20/14 10:57	10/21/14 20:26	1
1,2,3,7,8,9-HxCDF	ND		5.0	0.15	pg/g		10/20/14 10:57	10/21/14 20:26	1
2,3,4,6,7,8-HxCDF	ND		5.0	0.13	pg/g		10/20/14 10:57	10/21/14 20:26	1
1,2,3,4,6,7,8-HpCDD	0.478	J	5.0	0.19	pg/g		10/20/14 10:57	10/21/14 20:26	1
1,2,3,4,6,7,8-HpCDF	ND		5.0	0.12	pg/g		10/20/14 10:57	10/21/14 20:26	1
1,2,3,4,7,8,9-HpCDF	ND		5.0	0.19	pg/g		10/20/14 10:57	10/21/14 20:26	1
OCDD	3.15	J	10	0.24	pg/g		10/20/14 10:57	10/21/14 20:26	1
OCDF	0.481	J q	10	0.22	pg/g		10/20/14 10:57	10/21/14 20:26	1
Total TCDD	0.256	J	1.0	0.15	pg/g		10/20/14 10:57	10/21/14 20:26	1
Total TCDF	ND		1.0	0.11	pg/g		10/20/14 10:57	10/21/14 20:26	1
Total PeCDD	ND		5.0	0.32	pg/g		10/20/14 10:57	10/21/14 20:26	1
Total PeCDF	ND		5.0	0.20	pg/g		10/20/14 10:57	10/21/14 20:26	1
Total HxCDD	ND		5.0	0.16	pg/g		10/20/14 10:57	10/21/14 20:26	1
Total HxCDF	ND		5.0	0.15	pg/g		10/20/14 10:57	10/21/14 20:26	1
Total HpCDD	0.848	J	5.0	0.19	pg/g		10/20/14 10:57	10/21/14 20:26	1
Total HpCDF	ND		5.0	0.19	pg/g		10/20/14 10:57	10/21/14 20:26	1
	MB MB								
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C-2,3,7,8-TCDD	79		25 - 164				10/20/14 10:57	10/21/14 20:26	1
13C-2,3,7,8-TCDF	65		24 - 169				10/20/14 10:57	10/21/14 20:26	1
13C-1,2,3,7,8-PeCDD	84		25 - 181				10/20/14 10:57	10/21/14 20:26	1
13C-1,2,3,7,8-PeCDF	76		24 - 185				10/20/14 10:57	10/21/14 20:26	1
13C-2,3,4,7,8-PeCDF	72		21 - 178				10/20/14 10:57	10/21/14 20:26	1
13C-1,2,3,4,7,8-HxCDD	95		32 - 141				10/20/14 10:57	10/21/14 20:26	1
13C-1,2,3,6,7,8-HxCDD	79		28 - 130				10/20/14 10:57	10/21/14 20:26	1
13C-1,2,3,4,7,8-HxCDF	78		26 - 152				10/20/14 10:57	10/21/14 20:26	1
13C-1,2,3,6,7,8-HxCDF	71		26 - 123				10/20/14 10:57	10/21/14 20:26	1
13C-1,2,3,7,8,9-HxCDF	79		29 - 147				10/20/14 10:57	10/21/14 20:26	1
13C-2,3,4,6,7,8-HxCDF	75		28 - 136				10/20/14 10:57	10/21/14 20:26	1
13C-1,2,3,4,6,7,8-HpCDD	97		23 - 140				10/20/14 10:57	10/21/14 20:26	1
13C-1,2,3,4,6,7,8-HpCDF	86		28 - 143				10/20/14 10:57	10/21/14 20:26	1
13C-1,2,3,4,7,8,9-HpCDF	93		26 - 138				10/20/14 10:57	10/21/14 20:26	1
13C-OCDD	100		17 - 157				10/20/14 10:57	10/21/14 20:26	1
	MB MB								
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
37Cl4-2,3,7,8-TCDD	91		35 - 197				10/20/14 10:57	10/21/14 20:26	1

## QC Sample Results

Client: Engineering Remediation Resources Group - Seattle  
 Project/Site: Fill Dirt Testing

TestAmerica Job ID: SXJ0108

### Method: 1613B - Dioxins and Furans (HRGC/HRMS) (Continued)

Lab Sample ID: LCS 320-55757/2-A  
 Matrix: Solid  
 Analysis Batch: 55955

Client Sample ID: Lab Control Sample  
 Prep Type: Total/NA  
 Prep Batch: 55757

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
2,3,7,8-TCDD	20.0	15.6		pg/g		78	67 - 158	
2,3,7,8-TCDF	20.0	16.3		pg/g		82	75 - 158	
1,2,3,7,8-PeCDD	100	85.7		pg/g		86	70 - 142	
1,2,3,7,8-PeCDF	100	83.6		pg/g		84	80 - 134	
2,3,4,7,8-PeCDF	100	86.2		pg/g		86	68 - 160	
1,2,3,4,7,8-HxCDD	100	76.4		pg/g		76	70 - 164	
1,2,3,6,7,8-HxCDD	100	81.9		pg/g		82	76 - 134	
1,2,3,7,8,9-HxCDD	100	81.8		pg/g		82	64 - 162	
1,2,3,4,7,8-HxCDF	100	81.6		pg/g		82	72 - 134	
1,2,3,6,7,8-HxCDF	100	83.9		pg/g		84	84 - 130	
1,2,3,7,8,9-HxCDF	100	83.7		pg/g		84	78 - 130	
2,3,4,6,7,8-HxCDF	100	83.7		pg/g		84	70 - 156	
1,2,3,4,6,7,8-HpCDD	100	86.5		pg/g		87	70 - 140	
1,2,3,4,6,7,8-HpCDF	100	87.7		pg/g		88	82 - 122	
1,2,3,4,7,8,9-HpCDF	100	89.8		pg/g		90	78 - 138	
OCDD	200	178		pg/g		89	78 - 144	
OCDF	200	157		pg/g		79	63 - 170	

Isotope Dilution	LCS LCS		Limits
	%Recovery	Qualifier	
13C-2,3,7,8-TCDD	90		20 - 175
13C-2,3,7,8-TCDF	75		22 - 152
13C-1,2,3,7,8-PeCDD	94		21 - 227
13C-1,2,3,7,8-PeCDF	85		21 - 192
13C-2,3,4,7,8-PeCDF	80		13 - 328
13C-1,2,3,4,7,8-HxCDD	97		21 - 193
13C-1,2,3,6,7,8-HxCDD	87		25 - 163
13C-1,2,3,4,7,8-HxCDF	83		19 - 202
13C-1,2,3,6,7,8-HxCDF	75		21 - 159
13C-1,2,3,7,8,9-HxCDF	84		17 - 205
13C-2,3,4,6,7,8-HxCDF	79		22 - 176
13C-1,2,3,4,6,7,8-HpCDD	105		26 - 166
13C-1,2,3,4,6,7,8-HpCDF	90		21 - 158
13C-1,2,3,4,7,8,9-HpCDF	99		20 - 186
13C-OCDD	104		13 - 199

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
37Cl4-2,3,7,8-TCDD	93		35 - 197

### Method: EPA 6010C - Metals Content by EPA 6010/7000 Series Methods, Prep by EPA 3050B

Lab Sample ID: 14J0121-BLK1  
 Matrix: Other (L)  
 Analysis Batch: 14J0121

Client Sample ID: Method Blank  
 Prep Type: Total  
 Prep Batch: 14J0121\_P

Analyte	Blank Blank		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Arsenic	ND		1.25		mg/kg wet		10/21/14 09:16	10/22/14 17:51	1.00
Barium	ND		0.500		mg/kg wet		10/21/14 09:16	10/22/14 17:51	1.00

TestAmerica Spokane

## QC Sample Results

Client: Engineering Remediation Resources Group - Seattle  
 Project/Site: Fill Dirt Testing

TestAmerica Job ID: SXJ0108

**Method: EPA 6010C - Metals Content by EPA 6010/7000 Series Methods, Prep by EPA 3050B**  
 (Continued)

Lab Sample ID: 14J0121-BLK1  
 Matrix: Other (L)  
 Analysis Batch: 14J0121

Client Sample ID: Method Blank  
 Prep Type: Total  
 Prep Batch: 14J0121\_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.200		mg/kg wet		10/21/14 09:16	10/22/14 17:51	1.00
Chromium	ND		0.500		mg/kg wet		10/21/14 09:16	10/22/14 17:51	1.00
Lead	ND		1.25		mg/kg wet		10/21/14 09:16	10/22/14 17:51	1.00
Selenium	ND		2.50		mg/kg wet		10/21/14 09:16	10/22/14 17:51	1.00
Silver	ND		0.500		mg/kg wet		10/21/14 09:16	10/22/14 17:51	1.00

Lab Sample ID: 14J0121-BS1  
 Matrix: Other (L)  
 Analysis Batch: 14J0121

Client Sample ID: Lab Control Sample  
 Prep Type: Total  
 Prep Batch: 14J0121\_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Arsenic	50.0	44.5		mg/kg wet		88.9	80 - 120
Barium	50.0	47.3		mg/kg wet		94.5	80 - 120
Cadmium	50.0	44.1		mg/kg wet		88.1	80 - 120
Chromium	50.0	44.1		mg/kg wet		88.2	80 - 120
Lead	50.0	44.2		mg/kg wet		88.5	80 - 120
Selenium	500	464		mg/kg wet		92.9	80 - 120
Silver	50.0	47.6		mg/kg wet		95.3	80 - 120

Lab Sample ID: 14J0121-MS1  
 Matrix: Other (L)  
 Analysis Batch: 14J0121

Client Sample ID: Gravel Borrow  
 Prep Type: Total  
 Prep Batch: 14J0121\_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	%Rec	Limits
Arsenic	5.69		51.4	48.0		mg/kg dry	✱	82.3	75 - 125
Barium	78.6		51.4	109	M8	mg/kg dry	✱	58.8	75 - 125
Cadmium	0.145		51.4	43.2		mg/kg dry	✱	83.7	75 - 125
Chromium	5.65		51.4	48.1		mg/kg dry	✱	82.5	75 - 125
Lead	5.45		51.4	47.2		mg/kg dry	✱	81.2	75 - 125
Selenium	ND		514	440		mg/kg dry	✱	85.7	70 - 130
Silver	ND		51.4	45.9		mg/kg dry	✱	89.3	75 - 125

Lab Sample ID: 14J0121-MSD1  
 Matrix: Other (L)  
 Analysis Batch: 14J0121

Client Sample ID: Gravel Borrow  
 Prep Type: Total  
 Prep Batch: 14J0121\_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Arsenic	5.69		57.6	55.0		mg/kg dry	✱	85.7	75 - 125	13.6	20
Barium	78.6		57.6	116	M8	mg/kg dry	✱	65.4	75 - 125	6.60	20
Cadmium	0.145		57.6	52.2		mg/kg dry	✱	90.5	75 - 125	18.9	20
Chromium	5.65		57.6	55.5		mg/kg dry	✱	86.6	75 - 125	14.3	20
Lead	5.45		57.6	53.7		mg/kg dry	✱	83.7	75 - 125	12.8	20
Selenium	ND		576	529		mg/kg dry	✱	91.9	70 - 130	18.3	20
Silver	ND		57.6	55.2		mg/kg dry	✱	95.8	75 - 125	18.3	20

# QC Sample Results

Client: Engineering Remediation Resources Group - Seattle  
 Project/Site: Fill Dirt Testing

TestAmerica Job ID: SXJ0108

**Method: EPA 6010C - Metals Content by EPA 6010/7000 Series Methods, Prep by EPA 3050B**  
**(Continued)**

Lab Sample ID: 14J0121-DUP1  
 Matrix: Other (L)  
 Analysis Batch: 14J0121

Client Sample ID: Gravel Borrow  
 Prep Type: Total  
 Prep Batch: 14J0121\_P

Analyte	Sample	Sample	Duplicate	Duplicate	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Arsenic	5.69		5.58		mg/kg dry	*	1.95	20
Barium	78.6		101	R2	mg/kg dry	*	24.8	20
Cadmium	0.145		0.134		mg/kg dry	*	7.86	20
Chromium	5.65		6.24		mg/kg dry	*	9.93	20
Lead	5.45		7.99	R2	mg/kg dry	*	37.8	20
Selenium	ND		ND		mg/kg dry	*		20
Silver	ND		ND		mg/kg dry	*		20

**Method: EPA 7471B - Total Metals by EPA 6010/7000 Series Methods**

Lab Sample ID: 14J0154-BLK1  
 Matrix: Soil  
 Analysis Batch: 14J0154

Client Sample ID: Method Blank  
 Prep Type: Total  
 Prep Batch: 14J0154\_P

Analyte	Blank	Blank	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	ND		50.0		ug/kg wet		10/24/14 09:21	10/24/14 15:31	1.00

Lab Sample ID: 14J0154-BS1  
 Matrix: Soil  
 Analysis Batch: 14J0154

Client Sample ID: Lab Control Sample  
 Prep Type: Total  
 Prep Batch: 14J0154\_P  
 %Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits

Lab Sample ID: 14J0154-MS1  
 Matrix: Soil  
 Analysis Batch: 14J0154

Client Sample ID: Matrix Spike  
 Prep Type: Total  
 Prep Batch: 14J0154\_P  
 %Rec.

Analyte	Sample	Sample	Spike	Matrix Spike	Matrix Spike	Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier				
Mercury	ND		204	210		ug/kg wet		103	80 - 120

Lab Sample ID: 14J0154-MSD1  
 Matrix: Soil  
 Analysis Batch: 14J0154

Client Sample ID: Matrix Spike Duplicate  
 Prep Type: Total  
 Prep Batch: 14J0154\_P  
 %Rec.  
 RPD

Analyte	Sample	Sample	Spike	Matrix Spike Dup	Matrix Spike Dup	Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Mercury	ND		204	211		ug/kg wet		104	80 - 120	0.484	20

Lab Sample ID: 14J0154-DUP1  
 Matrix: Soil  
 Analysis Batch: 14J0154

Client Sample ID: Duplicate  
 Prep Type: Total  
 Prep Batch: 14J0154\_P  
 RPD

Analyte	Sample	Sample	Duplicate	Duplicate	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Mercury	ND		ND		ug/kg wet			40



## Lab Chronicle

Client: Engineering Remediation Resources Group - Seattle  
 Project/Site: Fill Dirt Testing

TestAmerica Job ID: SXJ0108

**Client Sample ID: Gravel Borrow**

**Lab Sample ID: SXJ0108-01**

Date Collected: 10/16/14 11:45

Matrix: Soil

Date Received: 10/16/14 12:35

Percent Solids: 94.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	EPA 3550B		0.987	14J0133_P	10/22/14 09:54	MS	TAL SPK
Total	Analysis	EPA 8082A		1.00	14J0133	10/22/14 16:08	NMI	TAL SPK
Total	Prep	EPA 3550B		1.96	14J0117_P	10/20/14 12:44	IAB	TAL SPK
Total	Analysis	EPA 8270D		1.00	14J0117	10/20/14 17:33	NMI	TAL SPK
Total	Prep	EPA 3550B		0.856	14J0109_P	10/17/14 08:19	IAB	TAL SPK
Total	Analysis	NWTPH-Dx		1.00	14J0109	10/20/14 13:45	NMI	TAL SPK
Total/NA	Prep	HRMS-Sox			55757	10/20/14 10:57	BDH	TAL SAC
Total/NA	Analysis	1613B		1	56096	10/22/14 14:21	SMA	TAL SAC
Total	Prep	EPA 3050B		0.926	14J0121_P	10/21/14 09:16	JSP	TAL SPK
Total	Analysis	EPA 6010C		1.00	14J0121	10/22/14 17:54	ICP	TAL SPK
Total	Prep	EPA 7471		0.980	14J0154_P	10/24/14 09:21	JSP	TAL SPK
Total	Analysis	EPA 7471B		1.00	14J0154	10/24/14 15:43	ZZZ	TAL SPK
Total/NA	Analysis	D 2216		1	56149	10/23/14 14:37	MAH	TAL SAC
Total	Prep	Wet Chem		1.00	14J0135_P	10/17/14 13:40	MS	TAL SPK
Total	Analysis	TA SOP		1.00	14J0135	10/20/14 13:40	MS	TAL SPK

**Laboratory References:**

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

TAL SPK = TestAmerica Spokane, 11922 East 1st. Avenue, Spokane, WA 99206, TEL (509)924-9200

## Certification Summary

Client: Engineering Remediation Resources Group - Seattle  
 Project/Site: Fill Dirt Testing

TestAmerica Job ID: SXJ0108

### Laboratory: TestAmerica Spokane

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-071	10-31-14
Washington	State Program	10	C569	01-06-15

### Laboratory: TestAmerica Sacramento

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

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	DoD ELAP		2928-01	01-31-16
Alaska (UST)	State Program	10	UST-055	12-18-14
Arizona	State Program	9	AZ0708	08-11-15
Arkansas DEQ	State Program	6	88-0691	06-17-15
California	State Program	9	2897	01-31-15
Colorado	State Program	8	N/A	08-31-15
Connecticut	State Program	1	PH-0691	06-30-15
Florida	NELAP	4	E87570	06-30-15
Hawaii	State Program	9	N/A	01-29-15
Illinois	NELAP	5	200060	03-17-15
Kansas	NELAP	7	E-10375	10-31-14
Louisiana	NELAP	6	30612	06-30-15
Michigan	State Program	5	9947	01-31-15
Nebraska	State Program	7	NE-OS-22-13	01-29-15
Nevada	State Program	9	CA44	07-31-15
New Jersey	NELAP	2	CA005	06-30-15
New York	NELAP	2	11666	04-01-15
Oregon	NELAP	10	CA200005	01-29-15
Oregon	NELAP Secondary AB	10	E87570	06-30-15
Pennsylvania	NELAP	3	9947	03-31-15
Texas	NELAP	6	T104704399-08-TX	05-31-15
US Fish & Wildlife	Federal		LE148388-0	12-31-14
USDA	Federal		P330-11-00436	12-30-14
USEPA UCMR	Federal	1	CA00044	11-06-16
Utah	NELAP	8	QUAN1	02-28-15
Washington	State Program	10	C581	05-05-15
West Virginia (DW)	State Program	3	9930C	12-31-14
Wyoming	State Program	8	8TMS-Q	01-29-15

## Method Summary

Client: Engineering Remediation Resources Group - Seattle  
Project/Site: Fill Dirt Testing

TestAmerica Job ID: SXJ0108

Method	Method Description	Protocol	Laboratory
EPA 8082A	Polychlorinated Biphenyls by EPA Method 8082		TAL SPK
EPA 8270D	Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring		TAL SPK
NWTPH-Dx	Semivolatile Petroleum Products by NWTPH-Dx		TAL SPK
1613B	Dioxins and Furans (HRGC/HRMS)	40CFR136A	TAL SAC
EPA 6010C	Metals Content by EPA 6010/7000 Series Methods, Prep by EPA 3050B		TAL SPK
EPA 7471B	Total Metals by EPA 6010/7000 Series Methods		TAL SPK
D 2216	Percent Moisture	ASTM	TAL SAC
TA SOP	Conventional Chemistry Parameters by APHA/EPA Methods		TAL SPK

### Protocol References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

ASTM = ASTM International

### Laboratory References:

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

TAL SPK = TestAmerica Spokane, 11922 East 1st. Avenue, Spokane, WA 99206, TEL (509)924-9200

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

11922 E. First Ave., Spokane WA 99206-5302  
 9405 SW Nimbus Ave., Beaverton, OR 97008-7145  
 2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119

509-924-9200 FAX 924-9290  
 503-906-9200 FAX 906-9210  
 907-563-9200 FAX 563-9210

## CHAIN OF CUSTODY REPORT

Work Order # **SXTD108**

CLIENT: <b>EREG</b>		INVOICE TO: <b>EREG -Accounts Payable</b>						<b>TURNAROUND REQUEST</b> in Business Days * Organic & Inorganic Analyses STD. <input type="checkbox"/> 10 <input type="checkbox"/> 7 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> <1 Petroleum Hydrocarbon Analyses STD. <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> <1 OTHER Specify: <b>Codan</b>					
REPORT TO: <b>Matt Hooper</b>		4565 Pacheco Blvd. Suite 200											
ADDRESS: <b>1616 First Ave Suite 300</b>		Martinez, CA 94553						* Turnaround Requests less than standard may incur Rush Charges.					
PHONE: <b>206-282-4499</b>		P.O. NUMBER:											
PROJECT NAME:		PRESERVATIVE						MATRIX (W, S, O)    # OF CONT.    LOCATION/ COMMENTS    TA WO ID					
PROJECT NUMBER:		REQUESTED ANALYSES											
SAMPLED BY:		TCVMS metals	PAHS	PCBLS	DX	GX	Pesticides Fungicides						
CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME												
1 Gravel/Borrow	10/16/14 1145	X	X	X	X	X	X			S			
2													
3													
4													
5													
6													
7													
8													
9													
10													
RELEASED BY: <b>Casey</b>		DATE: _____		RECEIVED BY: <b>Kandee Arrington</b>		DATE: <b>10/16/14</b>		FIRM: <b>TestAmerica</b>		DATE: <b>10/16/14</b>		TIME: <b>12:35</b>	
PRINT NAME: _____		FIRM: _____		TIME: _____		PRINT NAME: _____		FIRM: _____		DATE: _____		TIME: _____	
RELEASED BY: <b>CASEY LYNCH</b>		DATE: <b>10/16/14</b>		RECEIVED BY: _____		DATE: _____		FIRM: _____		DATE: _____		TIME: _____	
PRINT NAME: _____		FIRM: _____		TIME: <b>12:30</b>		PRINT NAME: _____		FIRM: _____		DATE: _____		TIME: _____	
ADDITIONAL REMARKS:										TEMP:	PAGE	OF	

TAL-1000 (0714)

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10/27/2014

**TestAmerica Spokane  
Sample Receipt Form**

Work Order #: <b>SXJD108</b>	Client: <b>ERRG</b>	Project: <b>Fill Dirt Testing</b>		
Date/Time Received: <b>10-16-14</b>	By: <b>RA</b>			
Samples Delivered By: <input type="checkbox"/> Shipping Service <input type="checkbox"/> Courier <input checked="" type="checkbox"/> Client <input type="checkbox"/> Other:				
List Air Bill Number(s) or Attach a photocopy of the Air Bill:				
Receipt Phase	Yes	No	NA	Comments
Were samples received in a cooler:		X		
Custody Seals are present and intact:			X	
Are CoC documents present:	X			
Necessary signatures:	X			
Thermal Preservation Type: <input type="checkbox"/> Blue Ice <input type="checkbox"/> Gel Ice <input type="checkbox"/> Real Ice <input type="checkbox"/> Dry Ice <input checked="" type="checkbox"/> None <input type="checkbox"/> Other:				
Temperature: <b>16.3</b> °C Thermometer (Circle one Serial #122208348 Keyring IR Serial # 111874910 IR Gun 2 (acceptance criteria 0-6				
Temperature out of range: <input type="checkbox"/> Not enough ice <input type="checkbox"/> Ice melted <input type="checkbox"/> w/in 4hrs of collection <input type="checkbox"/> NA <input type="checkbox"/> Other:				
Login Phase	Yes	No	NA	Comments
Date/Time: <b>10-16-14 15:25</b> By: <b>CS</b>				
Are sample labels affixed and completed for each container	X			
Samples containers were received intact:	X			
Do sample IDs match the CoC	X			
Appropriate sample containers were received for tests requested	X			
Are sample volumes adequate for tests requested	X			
Appropriate preservatives were used for the tests requested	X			
pH of inorganic samples checked and is within method specification	X			
Are VOC samples free of bubbles >6mm (1/4" diameter)			X	
Are dissolved parameters field filtered			X	
Do any samples need to be filtered or preserved by the lab			X	
Does this project require quick turnaround analysis	X	1		6 days
Are there any short hold time tests (see chart below)		2		
Are any samples within 2 days of or past expiration		1		
Was the CoC scanned	1			
Were there Non-conformance issues at login		2		
If yes, was a CAR generated #			1	

24 hours or less	48 hours	7 days
Coliform Bacteria	BOD, Color, MBAS	TDS, TSS, VDS, FDS
Chromium +6	Nitrate/Nitrite	Sulfide
	Orthophosphate	Aqueous Organic Prep

Form No. SP-FORM-SPL-002 12 December 2012

## Isotope Dilution Summary

Client: Engineering Remediation Resources Group - Seattle  
 Project/Site: Fill Dirt Testing

TestAmerica Job ID: SXJ0108

### Method: 1613B - Dioxins and Furans (HRGC/HRMS)

Matrix: Soil

Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	TCDD (25-164)	TCDF (24-169)	PeCDD (25-181)	PeCDF1 (24-185)	PeCDF2 (21-178)	HxCDD1 (32-141)	HxCDD2 (28-130)	HxCDF1 (26-152)
SXJ0108-01	Gravel Borrow	93	77	108	96	93	97	94	81

		Percent Isotope Dilution Recovery (Acceptance Limits)						
Lab Sample ID	Client Sample ID	HxCDF2 (26-123)	HxCDF4 (29-147)	HxCDF3 (28-136)	HpCDD (23-140)	HpCDF1 (28-143)	HpCDF2 (26-138)	OCDD (17-157)
SXJ0108-01	Gravel Borrow	85	89	85	110	94	101	108

**Surrogate Legend**

- TCDD = 13C-2,3,7,8-TCDD
- TCDF = 13C-2,3,7,8-TCDF
- PeCDD = 13C-1,2,3,7,8-PeCDD
- PeCDF1 = 13C-1,2,3,7,8-PeCDF
- PeCDF2 = 13C-2,3,4,7,8-PeCDF
- HxCDD1 = 13C-1,2,3,4,7,8-HxCDD
- HxCDD2 = 13C-1,2,3,6,7,8-HxCDD
- HxCDF1 = 13C-1,2,3,4,7,8-HxCDF
- HxCDF2 = 13C-1,2,3,6,7,8-HxCDF
- HxCDF4 = 13C-1,2,3,7,8,9-HxCDF
- HxCDF3 = 13C-2,3,4,6,7,8-HxCDF
- HpCDD = 13C-1,2,3,4,6,7,8-HpCDD
- HpCDF1 = 13C-1,2,3,4,6,7,8-HpCDF
- HpCDF2 = 13C-1,2,3,4,7,8,9-HpCDF
- OCDD = 13C-OCDD

### Method: 1613B - Dioxins and Furans (HRGC/HRMS)

Matrix: Solid

Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	TCDD (20-175)	TCDF (22-152)	PeCDD (21-227)	PeCDF1 (21-192)	PeCDF2 (13-328)	HxCDD1 (21-193)	HxCDD2 (25-163)	HxCDF1 (19-202)
LCS 320-55757/2-A	Lab Control Sample	90	75	94	85	80	97	87	83

		Percent Isotope Dilution Recovery (Acceptance Limits)						
Lab Sample ID	Client Sample ID	HxCDF2 (21-159)	HxCDF4 (17-205)	HxCDF3 (22-176)	HpCDD (26-166)	HpCDF1 (21-158)	HpCDF2 (20-186)	OCDD (13-199)
LCS 320-55757/2-A	Lab Control Sample	75	84	79	105	90	99	104

**Surrogate Legend**

- TCDD = 13C-2,3,7,8-TCDD
- TCDF = 13C-2,3,7,8-TCDF
- PeCDD = 13C-1,2,3,7,8-PeCDD
- PeCDF1 = 13C-1,2,3,7,8-PeCDF
- PeCDF2 = 13C-2,3,4,7,8-PeCDF
- HxCDD1 = 13C-1,2,3,4,7,8-HxCDD
- HxCDD2 = 13C-1,2,3,6,7,8-HxCDD
- HxCDF1 = 13C-1,2,3,4,7,8-HxCDF
- HxCDF2 = 13C-1,2,3,6,7,8-HxCDF
- HxCDF4 = 13C-1,2,3,7,8,9-HxCDF
- HxCDF3 = 13C-2,3,4,6,7,8-HxCDF
- HpCDD = 13C-1,2,3,4,6,7,8-HpCDD
- HpCDF1 = 13C-1,2,3,4,6,7,8-HpCDF

TestAmerica Spokane

# Isotope Dilution Summary

Client: Engineering Remediation Resources Group - Seattle  
 Project/Site: Fill Dirt Testing

TestAmerica Job ID: SXJ0108

HpCDF2 = 13C-1,2,3,4,7,8,9-HpCDF  
 OCDD = 13C-OCDD

## Method: 1613B - Dioxins and Furans (HRGC/HRMS)

Matrix: Solid

Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	TCDD (25-164)	TCDF (24-169)	PeCDD (25-181)	PeCDF1 (24-185)	PeCDF2 (21-178)	HxCDD1 (32-141)	HxCDD2 (28-130)	HxCDF1 (26-152)
MB 320-55757/1-A	Method Blank	79	65	84	76	72	95	79	78

		Percent Isotope Dilution Recovery (Acceptance Limits)						
Lab Sample ID	Client Sample ID	HxCDF2 (26-123)	HxCDF4 (29-147)	HxCDF3 (28-136)	HpCDD (23-140)	HpCDF1 (28-143)	HpCDF2 (26-138)	OCDD (17-157)
MB 320-55757/1-A	Method Blank	71	79	75	97	86	93	100

### Surrogate Legend


- TCDD = 13C-2,3,7,8-TCDD
- TCDF = 13C-2,3,7,8-TCDF
- PeCDD = 13C-1,2,3,7,8-PeCDD
- PeCDF1 = 13C-1,2,3,7,8-PeCDF
- PeCDF2 = 13C-2,3,4,7,8-PeCDF
- HxCDD1 = 13C-1,2,3,4,7,8-HxCDD
- HxCDD2 = 13C-1,2,3,6,7,8-HxCDD
- HxCDF1 = 13C-1,2,3,4,7,8-HxCDF
- HxCDF2 = 13C-1,2,3,6,7,8-HxCDF
- HxCDF4 = 13C-1,2,3,7,8,9-HxCDF
- HxCDF3 = 13C-2,3,4,6,7,8-HxCDF
- HpCDD = 13C-1,2,3,4,6,7,8-HpCDD
- HpCDF1 = 13C-1,2,3,4,6,7,8-HpCDF
- HpCDF2 = 13C-1,2,3,4,7,8,9-HpCDF
- OCDD = 13C-OCDD

<b>TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE</b>	DATE 12/4/2014	TRANSMITTAL NO. 009
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**Section I – REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS**

TO: State of Washington Department of Ecology 4601 N. Monroe Spokane, WA	FROM: Engineering/Remediation Resources Group, Inc. 816 First Avenue, Suite 300 Seattle, WA 98104	CONTRACT NO. C1500052	CHECK ONE: <input checked="" type="checkbox"/> THIS IS A NEW TRANSMITTAL <input type="checkbox"/> THIS IS A RESUBMITTAL OF TRANSMITTAL__
SPEC. NO 31 23 00	PROJECT TITLE AND LOCATION: City Parcel Residual PCB Cleanup Action		CHECK ONE: THIS TRANSMITTAL IS FOR <input type="checkbox"/> FIO <input checked="" type="checkbox"/> GOVERNMENT APPROVAL

ITEM NO.	DESCRIPTION OF ITEM SUBMITTED <i>(Type, size, model number, etc.)</i>	MFG OR CONTR  CAT., CURVE DRAWING OR BROCHURE NO.	NO. OF COPIES	CONTRACT REFERENCE		FOR CONTRACTOR USE CODE	VARIATION	FOR CE USE CODE
				SPEC. PARA. NO.	DRAWING SHEET NO.			
1	Import Material Chemical Testing (Gx)		Electronic	2.01 G				

REMARKS  Analytical submitted is for gasoline range hydrocarbons, which was not able to be analyzed until near mobilization.	I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as other wise stated.  <div style="text-align: center;"> <u>Matt Hooper</u>            NAME AND SIGNATURE OF CONTRACTOR       </div>
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**Section II – APPROVAL ACTION**

ENCLOSURES RETURNED (List by Item No.)	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE
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# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING


## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.  
TestAmerica Spokane  
11922 East 1st. Avenue  
Spokane, WA 99206  
Tel: (509)924-9200

TestAmerica Job ID: SXL0004  
Client Project/Site: City Parcel  
Client Project Description: Fill Dirt Testing

For:  
Engineering Remediation Resources Group - Seattle  
616 First Ave Suite 300  
Seattle, WA 98104

Attn: Matt Hooper



*Authorized for release by:  
12/3/2014 4:30:15 PM*

Randee Arrington, Project Manager  
(509)924-9200  
Randee.Arrington@testamericainc.com

### LINKS

Review your project  
results through  
**Total Access**

Have a Question?



Visit us at:  
[www.testamericainc.com](http://www.testamericainc.com)

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

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

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# Sample Summary

Client: Engineering Remediation Resources Group - Seattle  
Project/Site: City Parcel

TestAmerica Job ID: SXL0004

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Lab Sample ID	Client Sample ID	Matrix	Collected	Received
SXL0004-01	GB02	Soil	12/01/14 14:00	12/01/14 15:15

## Definitions/Glossary

Client: Engineering Remediation Resources Group - Seattle  
Project/Site: City Parcel

TestAmerica Job ID: SXL0004

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### Glossary

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Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

## Client Sample Results

Client: Engineering Remediation Resources Group - Seattle  
 Project/Site: City Parcel

TestAmerica Job ID: SXL0004

**Client Sample ID: GB02**

**Lab Sample ID: SXL0004-01**

Date Collected: 12/01/14 14:00

Matrix: Soil

Date Received: 12/01/14 15:15

Percent Solids: 93.4

Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND		5.66		mg/kg dry	*	12/01/14 14:05	12/02/14 00:19	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-bromofluorobenzene	106		41.5 - 162				12/01/14 14:05	12/02/14 00:19	1.00

## QC Sample Results

Client: Engineering Remediation Resources Group - Seattle  
 Project/Site: City Parcel

TestAmerica Job ID: SXL0004

### Method: NWTPH-Gx - Gasoline Hydrocarbons by NWTPH-Gx

Lab Sample ID: 14L0006-BLK1

Matrix: Soil

Analysis Batch: 14L0006

Client Sample ID: Method Blank

Prep Type: Total

Prep Batch: 14L0006\_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND		5.00		mg/kg wet		12/01/14 14:05	12/01/14 20:41	1.00
Surrogate	Blank %Recovery	Blank Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-bromofluorobenzene	104		41.5 - 162				12/01/14 14:05	12/01/14 20:41	1.00

Lab Sample ID: 14L0006-BS2

Matrix: Soil

Analysis Batch: 14L0006

Client Sample ID: Lab Control Sample

Prep Type: Total

Prep Batch: 14L0006\_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Gasoline Range Hydrocarbons	50.0	50.4		mg/kg wet		101	74.4 - 124
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-bromofluorobenzene	98.9		41.5 - 162				

# Lab Chronicle

Client: Engineering Remediation Resources Group - Seattle  
Project/Site: City Parcel

TestAmerica Job ID: SXL0004

**Client Sample ID: GB02**

**Lab Sample ID: SXL0004-01**

Date Collected: 12/01/14 14:00

Matrix: Soil

Date Received: 12/01/14 15:15

Percent Solids: 93.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	GC/MS Volatiles		0.992	14L0006_P	12/01/14 14:05	MS	TAL SPK
Total	Analysis	NWTPH-Gx		1.00	14L0006	12/02/14 00:19	MS	TAL SPK
Total	Prep	Wet Chem		1.00	14L0024_P	12/03/14 10:20	MS	TAL SPK
Total	Analysis	TA SOP		1.00	14L0024	12/03/14 16:21	MS	TAL SPK

**Laboratory References:**

TAL SPK = TestAmerica Spokane, 11922 East 1st. Avenue, Spokane, WA 99206, TEL (509)924-9200

## Certification Summary

Client: Engineering Remediation Resources Group - Seattle  
Project/Site: City Parcel

TestAmerica Job ID: SXL0004

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### Laboratory: TestAmerica Spokane

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

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Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-071	12-07-14
Washington	State Program	10	C569	01-06-15



## Method Summary

Client: Engineering Remediation Resources Group - Seattle  
Project/Site: City Parcel

TestAmerica Job ID: SXL0004

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Method	Method Description	Protocol	Laboratory
NWTPH-Gx	Gasoline Hydrocarbons by NWTPH-Gx		TAL SPK
TA SOP	Conventional Chemistry Parameters by APHA/EPA Methods		TAL SPK

**Protocol References:**

**Laboratory References:**

TAL SPK = TestAmerica Spokane, 11922 East 1st. Avenue, Spokane, WA 99206, TEL (509)924-9200

## CHAIN OF CUSTODY REPORT

Work Order #: **SX10004**

CLIENT: <b>ERRG</b>		INVOICE TO: <b>ERRG</b>		<b>TURNAROUND REQUEST</b> in Business Days * Organic & Inorganic Analyses <input type="checkbox"/> 10 <input type="checkbox"/> 7 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> <1 <small>STD.</small> Petroleum Hydrocarbon Analyses <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 1 <input type="checkbox"/> <1 <small>STD.</small> <input type="checkbox"/> OTHER Specify: <small>* Turnaround Requests less than standard may incur Rush Charges.</small>			
REPORT TO: <b>Matt Hooper</b>		P.O. NUMBER:					
ADDRESS: <b>616 First Ave, Suite 300 Seattle, WA 98104</b>							
PHONE: <b>206-282-4749</b> FAX: <b>206-282-4789</b>							
PROJECT NAME: <b>City Parcel</b>		PRESERVATIVE					
PROJECT NUMBER: <b>2014-125</b>		REQUESTED ANALYSES					
SAMPLED BY: <b>MAH</b>							
CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	<b>GX</b>					
<b>1 GB02</b>	<b>12/1/14 1400</b>	<b>X</b>					
2							
3							
4							
5							
6							
7							
8							
9							
10							
RELEASED BY: <b>Matt Hooper</b>	FIRM: <b>ERRG</b>	DATE: <b>12/1/14</b>	TIME: <b>15:15</b>	RECEIVED BY: <b>Cat Stapleton</b>	FIRM: <b>TestAmerica</b>	DATE: <b>12/1/14</b>	TIME: <b>10:15</b>
RELEASED BY:	FIRM:	DATE:	TIME:	RECEIVED BY:	FIRM:	DATE:	TIME:
PRINT NAME:	FIRM:	DATE:	TIME:	PRINT NAME:	FIRM:	DATE:	TIME:
ADDITIONAL REMARKS:						TEMP: <b>119</b>	PAGE OF

**TestAmerica Spokane  
Sample Receipt Form**

Work Order # <b>5X10004</b>	Client: <b>ERRG</b>	Project: <b>City Parcel</b>		
Date/Time Received: <b>12/14 15:15</b>		By: <b>CS</b>		
Samples Delivered By: <input type="checkbox"/> Shipping Service <input type="checkbox"/> Courier <input checked="" type="checkbox"/> Client <input type="checkbox"/> Other:				
List Air Bill Number(s) or Attach a photocopy of the Air Bill:				
Receipt Phase	Yes	No	NA	Comments
Were samples received in a cooler:	<b>X</b>			
Custody Seals are present and intact:			<b>X</b>	
Are CoC documents present:	<b>X</b>			
Necessary signatures:	<b>X</b>			
Thermal Preservation Type: <input type="checkbox"/> Blue Ice <input checked="" type="checkbox"/> Gel Ice <input type="checkbox"/> Real Ice <input type="checkbox"/> Dry Ice <input type="checkbox"/> None <input type="checkbox"/> Other:				
Temperature: <b>11.9</b> °C Thermometer (Circle one Serial #122208348 Keyring IR Serial # 111874910 IR Gun 2 ) (acceptance criteria 0-6				
Temperature out of range: <input type="checkbox"/> Not enough ice <input type="checkbox"/> Ice melted <input type="checkbox"/> w/in 4hrs of collection <input type="checkbox"/> NA <input type="checkbox"/> Other:				
Log-In Phase	Yes	No	NA	Comments
Date/Time: <b>12/14 16:07</b> By: <b>CS</b>				
Are sample labels affixed and completed for each container	<b>X</b>			
Samples containers were received intact:	<b>X</b>			
Do sample IDs match the CoC	<b>X</b>			
Appropriate sample containers were received for tests requested	<b>X</b>			
Are sample volumes adequate for tests requested	<b>X</b>			
Appropriate preservatives were used for the tests requested	<b>X</b>			
pH of inorganic samples checked and is within method specification	<b>X</b>			
Are VOC samples free of bubbles >6mm (1/4" diameter)			<b>X</b>	
Are dissolved parameters field filtered			<b>X</b>	
Do any samples need to be filtered or preserved by the lab			<b>X</b>	
Does this project require quick turnaround analysis	<b>X</b>			<b>2 days</b>
Are there any short hold time tests (see chart below)		<b>X</b>		
Are any samples within 2 days of or past expiration		<b>X</b>		
Was the CoC scanned	<b>X</b>			
Were there Non-conformance issues at login			<b>X</b>	
If yes, was a CAR generated #			<b>X</b>	

24 hours or less	48 hours	7 days
Coliform Bacteria	BOD, Color, MBAS	TDS, TSS, VDS, FDS
Chromium +6	Nitrate/Nitrite	Sulfide
	Orthophosphate	Aqueous Organic Prep

Form No. SP-FORM-SPL-002 12 December 2012


<b>TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE</b>	DATE 10/21/2014	TRANSMITTAL NO. 004
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**Section I – REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS**

TO: State of Washington Department of Ecology 4601 N. Monroe Spokane, WA	FROM: Engineering/Remediation Resources Group, Inc. 616 First Avenue, Suite 300 Seattle, WA 98104	CONTRACT NO. C1500052	CHECK ONE: <input checked="" type="checkbox"/> THIS IS A NEW TRANSMITTAL <input type="checkbox"/> THIS IS A RESUBMITTAL OF TRANSMITTAL__
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SPEC. NO. 32 15 00	PROJECT TITLE AND LOCATION: City Parcel Residual PCB Cleanup Action	CHECK ONE: THIS TRANSMITTAL IS FOR <input type="checkbox"/> FIO <input checked="" type="checkbox"/> GOVERNMENT APPROVAL
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ITEM NO.	DESCRIPTION OF ITEM SUBMITTED <i>(Type, size, model number, etc.)</i>	MFG OR CONTR  CAT., CURVE DRAWING OR BROCHURE NO.	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT		FOR CONTRACTOR USE CODE	VARIATION	FOR CE USE CODE
				SPEC. PARA. NO.	DRAWING SHEET NO.			
				1	Aggregate Surfacing			

REMARKS  ERRG is proposing to use this material under the asphalt patch on the Mr. Service property only. Please confirm that the chemical testing requirements as described in 31 23 00 2.01G do not apply for this material.	I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as other wise stated.  Matt Hooper  _____ NAME AND SIGNATURE OF CONTRACTOR
--	---

**Section II – APPROVAL ACTION**

ENCLOSURES RETURNED (List by Item No.)	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE



August 18, 2014  
 File: ACTMAT SP14080A  
 Reference No.: SL081414

Mr. Todd DeWeese  
 Action Materials  
 P.O. Box 19425  
 Spokane, Washington 99219

Project: 2014 Laboratory Testing  
 Date Received: August 14, 2014  
 Date Tested: August 15, 2014  
 Description: 5/8" Minus Crushed Aggregate  
 Source: Post Falls Pit- Client Provided

**REPORT OF SIEVE ANALYSIS  
 AASHTO T-27**

Sieve Size	Percent Passing	Specification <sup>1</sup>
3/4"	100	99-100
1/2"	94	80-100
3/8"	82	
No. 4	46	46-66
No. 8	28	
No. 16	19	
No. 30	14	
No. 40	12	8-24
No. 50	11	
No. 100	9	
No. 200	7.2	10.0 max

1. WSDOT Standard Specifications for Road, Bridge, and Municipal Construction, Sec. 9-03.9(3), Crushed Surfacing Top Course

Sincerely,  
 STRATA

Troy D. Craft  
 Construction Services Manager

# MOISTURE-DENSITY RELATIONSHIP CURVE

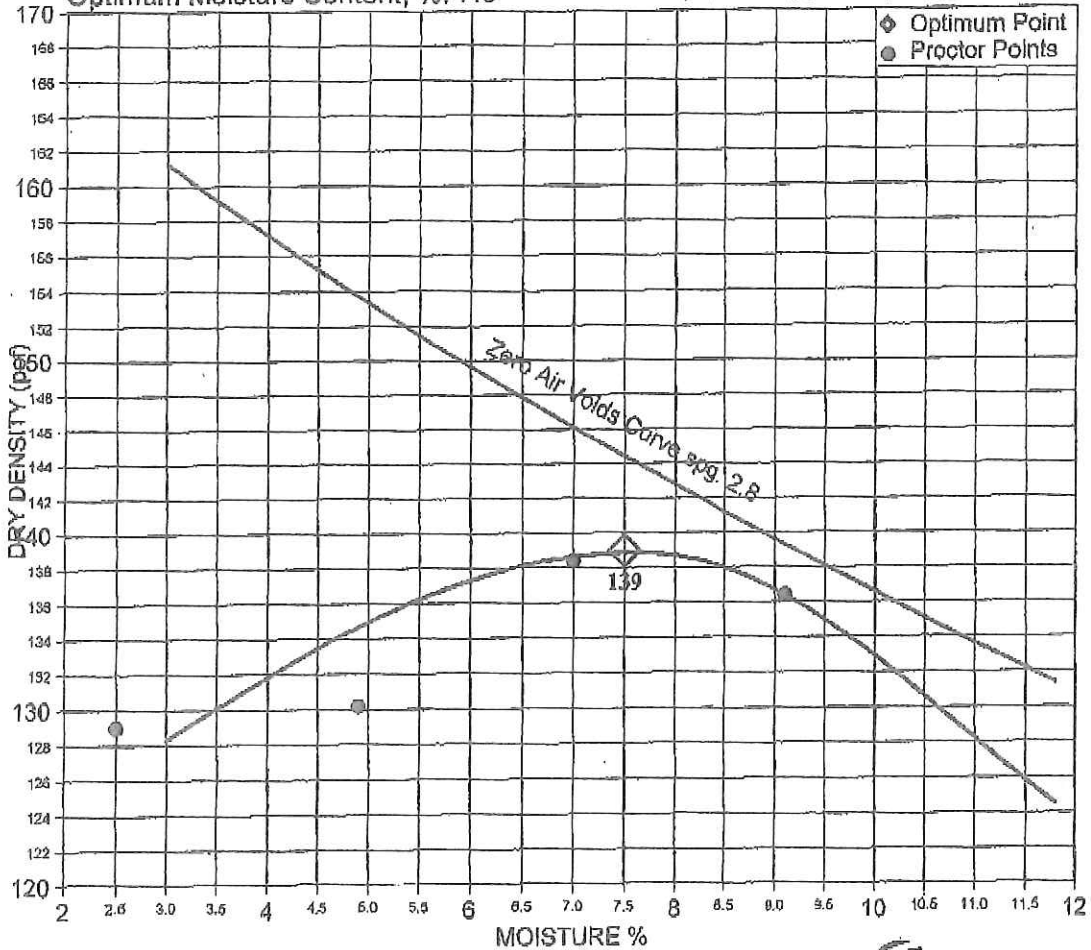
ASTM D 1557  
Method C

Project: 2014 Laboratory Testing  
 Client: Action Materials  
 File Name: ACTMAT SP14080A  
 Date Tested: August 15, 2014  
 Tested By: T. Tucker  
 Sample Number: SL081414  
 Sample Location: Post Falls Pit Stockpile - Client Provided  
 Sample Description: 5/8" Minus Crushed Aggregate (CSTC)

GRADING ANALYSIS		
SCREEN SIZE	% PASSING	AS TESTED
6 inch		
3 inch		
2 inch		
3/4 inch	100	100
3/8 inch	82	82
#4 screen	46	46

Corrected Dry Density, pcf: N/A  
 Corrected Moisture Content, %: N/A  
 Coarse Aggregate Correction, %: N/A  
 Bulk Specific Gravity (assumed): N/A

Maximum Dry Density, pcf : 139.0  
 Optimum Moisture Content, %: 7.5



Reviewed By




<b>TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE</b>	DATE 10/16/2014	TRANSMITTAL NO. 003
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**Section I – REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS**

TO: State of Washington Department of Ecology 4601 N. Monroe Spokane, WA	FROM: Engineering/Remediation Resources Group, Inc. 616 First Avenue, Suite 300 Seattle, WA 98104	CONTRACT NO. C1500052	CHECK ONE: <input checked="" type="checkbox"/> THIS IS A NEW TRANSMITTAL <input type="checkbox"/> THIS IS A RESUBMITTAL OF TRANSMITTAL__
--	--	--------------------------	--

SPEC. NO 31 23 00	PROJECT TITLE AND LOCATION: City Parcel Residual PCB Cleanup Action	CHECK ONE: THIS TRANSMITTAL IS FOR <input type="checkbox"/> FIO <input checked="" type="checkbox"/> GOVERNMENT APPROVAL
----------------------	--	---

ITEM NO.	DESCRIPTION OF ITEM SUBMITTED <i>(Type, size, model number, etc.)</i>	MFG OR CONTR  CAT., CURVE DRAWING OR BROCHURE NO.	NO. OF COPIES	CONTRACT REFERENCE		FOR CONTRACTOR USE CODE	VARIATION	FOR CE USE CODE
				DOCUMENT				
				SPEC. PARA. NO.	DRAWING SHEET NO.			
1	Gravel Borrow		Electronic	2.01D				

REMARKS  ERRG is proposing to use this for all backfill including under pavement. Per the vendor, "Action has used gravel borrow as base material under asphalt in the past with very good results. It serves very well as compactible fill material, and equally well as base under asphalt."	I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as other wise stated.  Matt Hooper  _____ NAME AND SIGNATURE OF CONTRACTOR
--	---

**Section II – APPROVAL ACTION**

ENCLOSURES RETURNED (List by Item No.)	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE
--	--	------



June 24, 2014  
 File: ACTMAT SP14080A  
 Reference No.: SL2458-2

Mr. Todd DeWeese  
 Action Materials  
 P.O. Box 19425  
 Spokane, Washington 99219

Project: 2014 Laboratory Testing  
 Date Received: June 17, 2014  
 Date Tested: June 18, 2014  
 Description: 1" Minus Gravel Borrow  
 Source: Grove Road Pit- Northside of Stockpile

**REPORT OF SIEVE ANALYSIS  
 AASHTO T-27**

Sieve Size	Percent Passing	Specification <sup>1</sup>	Specification <sup>2</sup>	Specification <sup>3</sup>	Specification <sup>4</sup>
6"	100				99-100
4"	100			99-100	
3"	100				75-100
2"	100	100		75-100	
1 1/2"	100		99-100		
1"	100		75-100		
3/4"	97				
5/8"	93		50-100		
1/2"	87				
3/8"	81				
No. 4	67	22-100	20-80	50-80	
No. 8	50				
No. 10	45				
No. 16	28				
No. 30	13				
No. 40	10		3-24	30 max	50 max
No. 50	8				
No. 100	6				
No. 200	4.9	10.0 max	10.0 max	7.0 max	10.0 max

1. WSDOT Standard Specifications for Road, Bridge, and Municipal Construction, Sec. 9-03.10, Aggregate for Gravel Base
2. Sec. 9-03.12(3) Gravel Backfill for Pipe Zone Bedding
3. Sec. 9-03.14(1) Gravel Borrow
4. Sec. 9-03.14(2) Select Borrow

Sincerely,  
 STRATA

DRAFT

Troy D. Craft  
 Construction Services Manager



# MOISTURE-DENSITY RELATIONSHIP CURVE

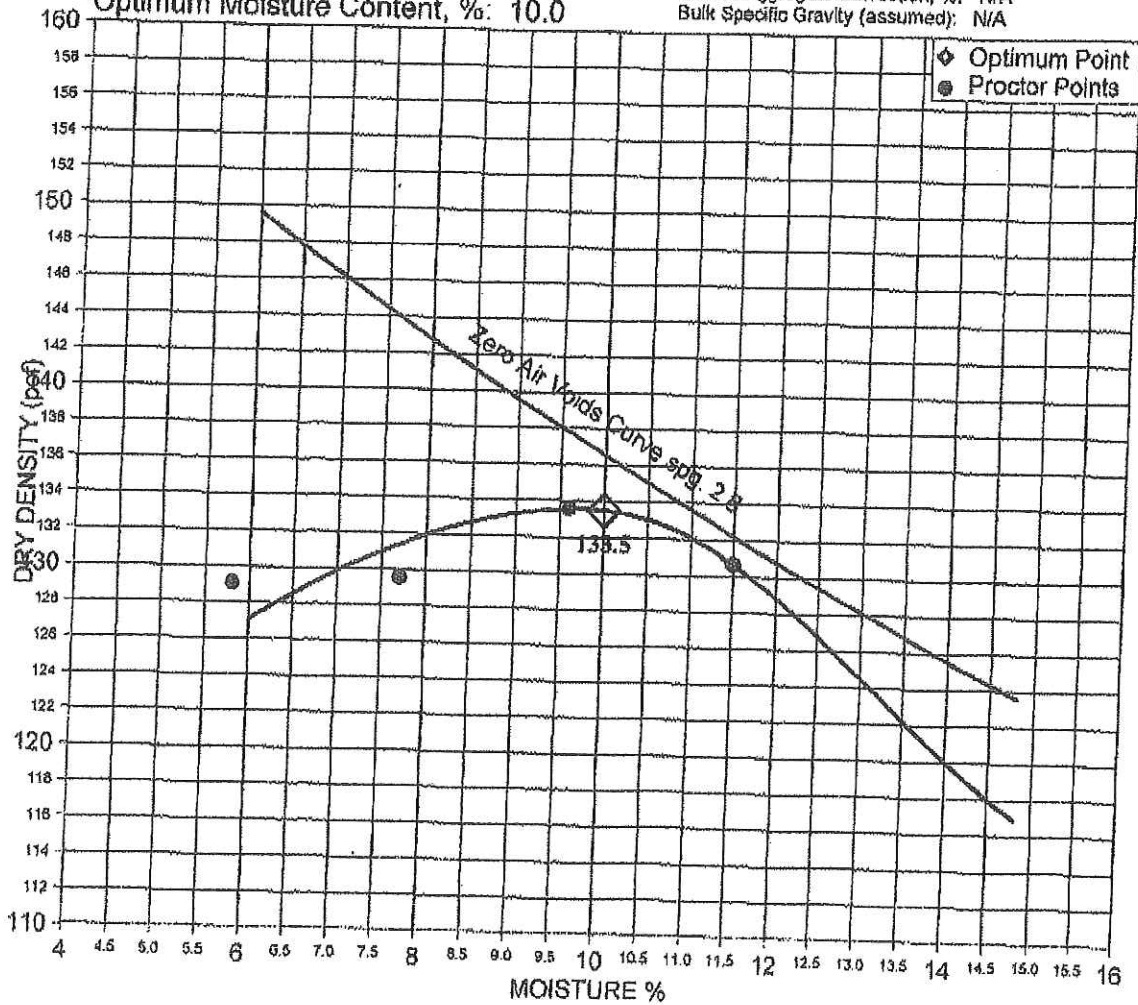
ASTM D 1557  
Method C

Project: Action Materials 2014 Laboratory Testing  
 Client: Action Materials  
 File Name: ACTMAT SP14080A  
 Date Tested: June 23, 2014  
 Tested By: T. Tucker  
 Sample Number: SL2458-2  
 Sample Location: North Side of Stockpile  
 Sample Description: 1-Inch Minus Gravel Borrow  
 (Grove Road Pit)

GRADING ANALYSIS		
SCREEN SIZE	% PASSING	AS TESTED
6 inch		
4 inch		
2 inch	100	100
3/4 inch	97	100
3/8 inch	81	81
#4 screen	67	67

Maximum Dry Density, pcf : 133.5  
 Optimum Moisture Content, %: 10.0

Corrected Dry Density, pcf: N/A  
 Corrected Moisture Content, %: N/A  
 Coarse Aggregate Correction, %: N/A  
 Bulk Specific Gravity (assumed): N/A



Reviewed By *Zeigler Craft*



**SPECIAL INSPECTION REPORT - EARTHWORK**



Form Revision 11/20/2013

523 East 2nd Ave., Spokane, WA 99202  
(509) 363-3125 . Fax (509) 363-3126

DISTRIBUTION	PROJECT:	City Parcel Remediation	
	GEI PROJECT NO.:	0504-047-03	REPORT NO: 1
	Date:	12/12/2014	PAGE: 1 of 3
	GEI Personnel on site:	Doug Hehr	
	Time on site:	10:00 AM	Time off site: 11:00 AM
Site Address: E Springfield Ave and N Cook St		Jurisdiction: Spokane, Washington	Permit:
Architect/Engineer of record:		Plan Version Date:	
Other guidance documents:			
General Contractor: ERRG, Inc.		Superintendent: Matt Hooper	
Specialty Contractor:		Foreman:	
Environmental Conditions: Overcast, 45°F			

**Observations:**

I performed multiple site visits to conduct in-place density testing on backfill material to replace contaminated soil excavated prior to my arrival. Seven in-place density tests were performed using a Troxler 3440 series nuclear densometer at a probe depth of 8 inches. Results indicate that the material in the areas tested appears to conform to the required minimum compaction according to project specifications. See density test sheet for results and drawing for approximate locations.

\*Second site visit from 1400 to 1445. Third site visit from 1630 to 1700. Will return at 0930 on 12/13/14 for density testing completion.

Observations, tests and any non-conforming items reported to: Matt Hooper of ERRG, Inc.

Attachments (if any): In-Place Density and Water Content of Soil by Nuclear Methods; Site Drawing

Based on the tests and/or observations described in this report, the work we observed generally:

<input checked="" type="checkbox"/>	CONFORMS	<input type="checkbox"/>	CORRECTS PREVIOUS DEFICIENCY
<input type="checkbox"/>	CONFORMS EXCEPT AS NOTED	<input type="checkbox"/>	REPORT DATED
<input type="checkbox"/>	DOES NOT CONFORM	<input type="checkbox"/>	REINSPECTION REQUIRED

to noted project plans and specifications, and relevant code provisions. NOTE: This is a preliminary document until reviewed and signed by GeoEngineers' technical representative.

PRELIMINARY	<input checked="" type="checkbox"/> FINAL
-------------	---

Doug Hehr 12/12/2014  
Report Prepared By Date

*[Signature]* 12/16/14  
Technical Reviewer Date

**DISCLAIMER:** This report presents data derived and opinions formed as a result of our activities relating to our approved scope of work. Test results apply only to the specific items, materials, locations, and/or times tested. We rely on the contractor to comply with the plans, specifications and codes throughout the duration of the project irrespective of the presence or absence of our representative. Our presence and activities on the site in no way relieve the contractor of his contractual obligations. Our work does not include supervision or direction of the work of others. Our firm will not be responsible for job or site safety of others on this project. Any electronic form, facsimile or hard copy of the original document (email, text, table, and/or figure), if provided, and any attachments are only a copy of the original document. The original document is stored by GeoEngineers, Inc. and will serve as the official document of record. A preliminary report is provided solely as evidence that field observation and/or special inspection was performed. The final report issued after technical review may vary from and shall take precedence over the preliminary report.

TEST NO.	TEST TYPE*	TEST LOCATION	ELEV	PROCTOR I.D. NO.	USCS	IMPORTED Y/N	EQUIP. TYPE	WET DENS. (test pcf)	% FIELD MOIST.	DRY DENS. (test pcf)	MAX. DENS. (Proctor)	R**	CALC. % COMP.	SPEC % COMP.	P/F
1	A-8"	Trench backfill / see drawing	SG -2'		GW/SW	yes	VSDR	141.8	7.5	131.9	133.5		99	95	P
2	A-8"	Trench backfill / see drawing	SG -3'		GW/SW	yes	VSDR	138.1	7.6	128.3	133.5		96	95	P
3	A-8"	Trench backfill / see drawing	SG -3.5'		GW/SW	yes	VSDR	140.8	7.0	131.6	133.5		99	95	P
4	A-8"	Trench backfill / see drawing	SG -1'		GW/SW	yes	VSDR	138.8	7.5	129.1	133.5		97	95	P
5	A-8"	Trench backfill / see drawing	SG -1.5'		GW/SW	yes	VSDR	139.9	7.4	130.3	133.5		98	95	P
6	A-8"	Trench backfill / see drawing	SG -1.5'		GW/SW	yes	VSDR	137.7	6.3	129.5	133.5		97	95	P
7	A-8"	Trench backfill / see drawing	SG -1'		GW/SW	yes	VSDR	139.4	6.6	130.8	133.5		98	95	P

\*TEST TYPE: A = direct transmission + depth B = backscatter \*\*R = rock correction applied

Standard Count: Wet/MS 523 xi/% -0.6 H<sub>2</sub>O/D5 1775 xi/% 0.08

Field Test Method:	Maximum Density Method:
<b>ASTM D6938</b>	<input type="checkbox"/> AASHTO T 99, ASTM D 698 (Standard Proctor) <input checked="" type="checkbox"/> AASHTO T 180, ASTM D1557 (Modified Proctor)

Nuclear Gauge Make/Model: Troxler 3440  
Nuclear Gauge Serial No: 14722  
Density bias (ref. block): \_\_\_\_\_ Moisture bias (oven): \_\_\_\_\_

USCS Material Visual Classification (ASTM D2488)		Compaction Equipment:	
GW well graded gravel	GP poorly graded gravel	(V)SDR (Vibratory) Smooth Drum Roller	
SW well graded sand	SP poorly graded sand	(V)SFR (Vibratory) Sheepsfoot Roller	
GM silty gravel	SM silty sand	RP Reciprocating Plate	
ML nonplastic silt	MH plastic silt	VP Vibratory Plate	
CL lean clay	CH fat clay	LV Loaded Vehicle	
GC clayey gravel	SC clayey sand	PR Pneumatic (rubber tire) Roller	
GW-GM well graded gravel with silt	CSBC crushed base course	GR Grid Roller	
GP-GM poorly graded gravel with silt	CSTC crushed top course	HP Hoe-Pac	
SW-SM well graded sand with silt	ACP asphalt concrete pavement	CW Compaction Wheel	

Notes (fill source, proctor info, observations etc.):  
SG = Subgrade elevation of planned grade  
SG -2' = 2 feet below final grade final  
Proctor value based on Contractor's submittal.

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TESTING DATE: 12/12/2014 File Number: 0504-047-03  
Project: City Parcel Remediation  
Project Location: E Springfield Ave and N Cook St, Spokane, WA  
Earthwork Contractor:  
General Contractor: ERRG, Inc.  
Gauge Operator: Doug Hehr Checked By: Dave Lauder

NOTE: Refer to daily field report for additional information. Field density test results are only applicable to the immediate area of the test at the time performed, and are not necessarily representative of conditions at other times, elevations or locations or for other materials. This report may not be reproduced, except in full, without written approval of GeoEngineers, Inc.



523 E. 2nd. Ave., Spokane, WA 99202  
Phone (509) 363-3125 Fax (509) 363-3126

**IN-PLACE DENSITY AND WATER CONTENT OF SOIL BY NUCLEAR METHODS**

Form Revision 11/20/2013

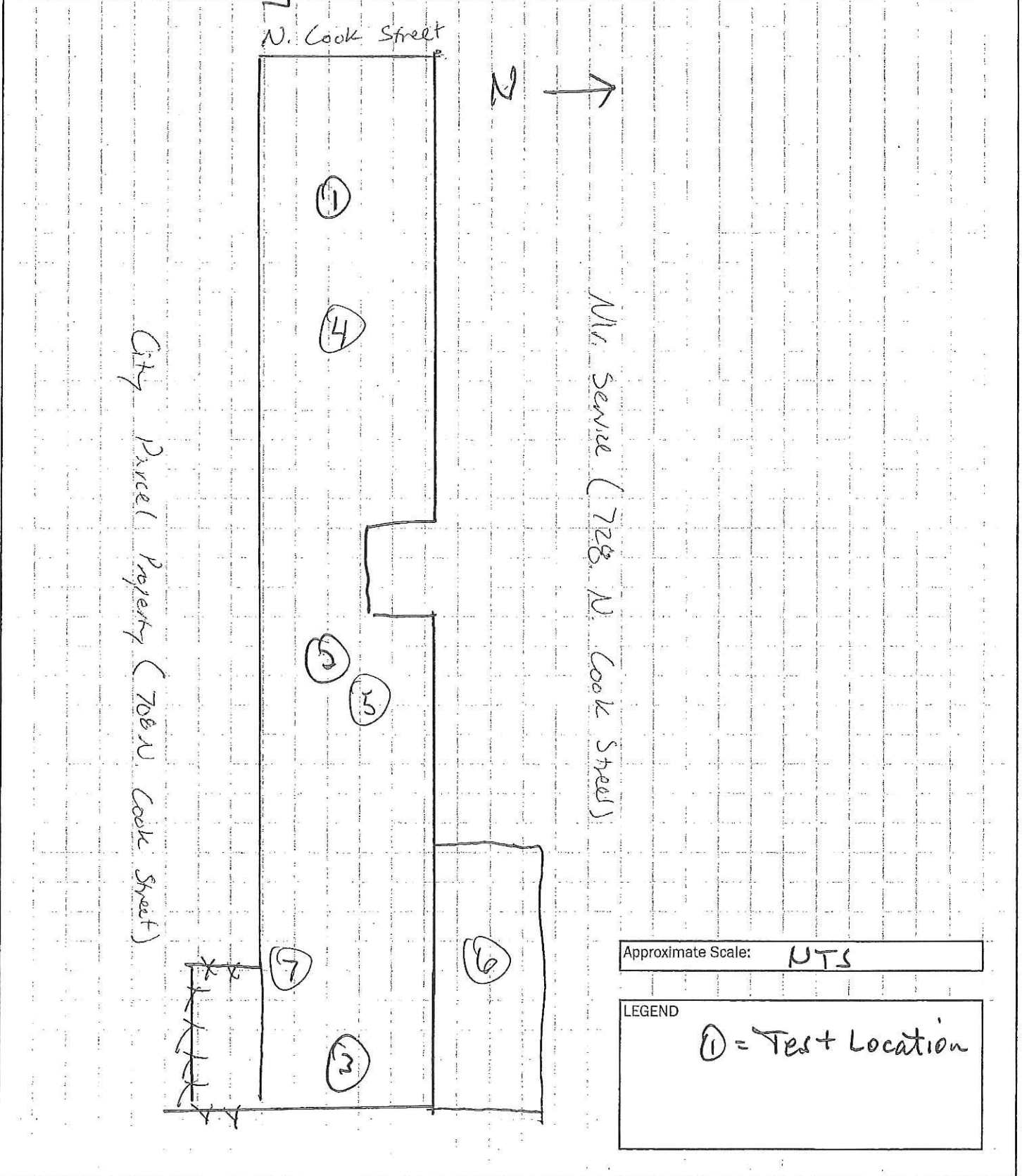
LOCATION SKETCH



Form Revision 5/18/2012

523 East 2nd Ave., Spokane, WA 99202  
(509) 363-3125 . Fax (509) 363-3126

PROJECT:	City Parcel Remediation		REPORT NO:	
GEI PROJECT NO.:	<del>04</del> 0504-042-03		PAGE:	3 of 3
Date:	12-12-14			
TITLE:	Density Test Locations			



**SPECIAL INSPECTION REPORT - EARTHWORK**



Form Revision 11/20/2013

523 East 2nd Ave., Spokane, WA 99202  
(509) 363-3125 . Fax (509) 363-3126

DISTRIBUTION	PROJECT:	City Parcel Remediation	
	GEI PROJECT NO.:	0504-047-03	REPORT NO: 2
	Date:	12/13/2014	PAGE: 1 of 3
	GEI Personnel on site:	Doug Hehr	
	Time on site:	8:30 AM	Time off site: 10:00 AM
Site Address: E Springfield Ave and N Cook St		Jurisdiction: Spokane, Washington	Permit:
Architect/Engineer of record:		Plan Version Date:	
Other guidance documents:			
General Contractor: ERRG, Inc.		Superintendent: Matt Hooper	
Specialty Contractor:		Foreman:	
Environmental Conditions: Overcast, 37°F			

Observations:

I performed a site visit to conduct in-place density testing on imported backfill material to replace excavated material. The area excavated is south of the Mr. Service, Inc. building and extends east to west from fence line to fence line. Four in-place density sites were performed using a Troxler 3440 series nuclear densometer at a probe depth of 8 inches. Results indicate that the soils in the areas tested appear to conform to the required minimum compaction according to project specifications. See test data sheet for results and drawing for approximate locations.

Observations, tests and any non-conforming items reported to: Matt Hooper of ERRG, Inc.

Attachments (if any): In-Place Density and Water Content of Soil by Nuclear Methods; Site Drawing

Based on the tests and/or observations described in this report, the work we observed generally:

<input checked="" type="checkbox"/> CONFORMS	<input type="checkbox"/> CORRECTS PREVIOUS DEFICIENCY
<input type="checkbox"/> CONFORMS EXCEPT AS NOTED	<input type="checkbox"/> REPORT DATED
<input type="checkbox"/> DOES NOT CONFORM	<input type="checkbox"/> REINSPECTION REQUIRED

to noted project plans and specifications, and relevant code provisions. NOTE: This is a preliminary document until reviewed and signed by GeoEngineers' technical representative.

<input type="checkbox"/> PRELIMINARY	<input checked="" type="checkbox"/> FINAL
Doug Hehr	12/13/2014
Report Prepared By	Date
	12/16/14
Technical Reviewer	Date

**DISCLAIMER:** This report presents data derived and opinions formed as a result of our activities relating to our approved scope of work. Test results apply only to the specific items, materials, locations, and/or times tested. We rely on the contractor to comply with the plans, specifications and codes throughout the duration of the project irrespective of the presence or absence of our representative. Our presence and activities on the site in no way relieve the contractor of his contractual obligations. Our work does not include supervision or direction of the work of others. Our firm will not be responsible for job or site safety of others on this project. Any electronic form, facsimile or hard copy of the original document (email, text, table, and/or figure), if provided, and any attachments are only a copy of the original document. The original document is stored by GeoEngineers, Inc. and will serve as the official document of record. A preliminary report is provided solely as evidence that field observation and/or special inspection was performed. The final report issued after technical review may vary from and shall take precedence over the preliminary report.



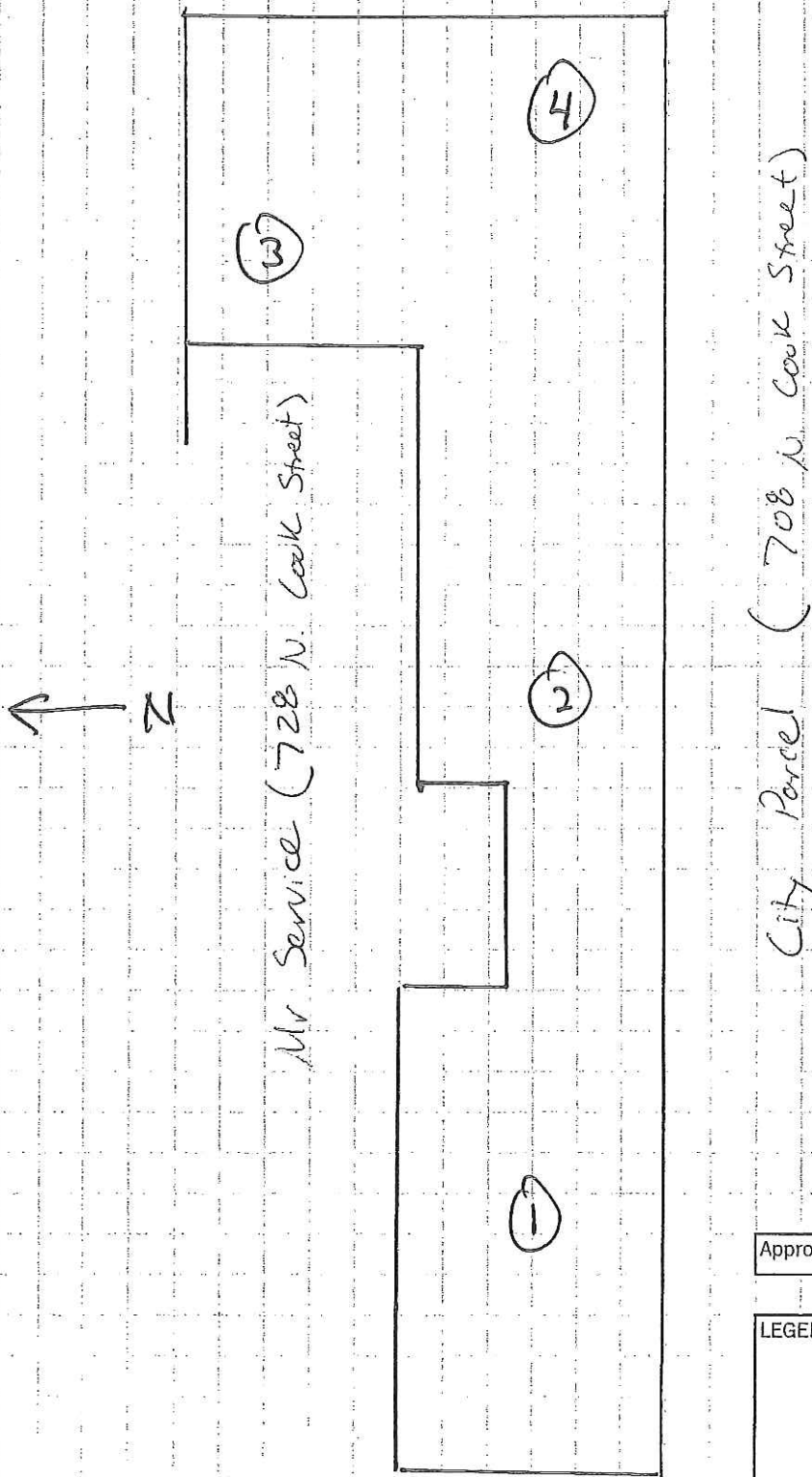
LOCATION SKETCH



Form Revision 5/18/2012

523 East 2nd Ave., Spokane, WA 99202  
(509) 363-3125 . Fax (509) 363-3126

PROJECT:	City Parcel Remediation		
GEI PROJECT NO.:	0504-047-03	REPORT NO:	
Date:	12-13-14	PAGE:	3 of 3
TITLE:	Density Test Locations		



Approximate Scale: NTS

LEGEND  
① = Test Location

N. Cook Street

**APPENDIX E**  
**MTCA Stat Output**



Compliance calculations

Statistical Analysis - North Cook Street

- 6800 CB01
- 1790 CB03
- 6850 CB04
- 1550 CB05
- 2330 CB06
- 1240 CB07
- 876 CB08
- 2810 CB09
- 7050 CB11
- 544 CB12
- 311 CB13
- 2140 CB16
- 814 CB17
- 1440 CB18
- 436 CB20
- 327 CB20
- 392 CB20
- 11500 CB21
- 1570 CB22
- 6650 CB24
- 815 CB25
- 80.9 CB26
- 94.1 CB29
- 232 CB30
- 12200 CB33
- 106 CB34
- 504 CB35
- 643 CB36
- 218 CB39
- 3690 CB40
- 303 CB41
- 188 CB44
- 470 CB46
- 4220 CS31
- 277 CS36
- 612 CS-E01
- 1440 DW03
- 9380 DW03
- 696 DW01
- 615 UST1
- 6860 UST2
- 6110 DW01
- 69.7 DW01
- 781 UST3
- 100 UST3
- 125 UST3
- 154 Vault-CB
- 6890 Vault-CS
- 2660 DL01-CB
- 2620 DL02-CB
- 3810 DL03-CS
- 348 DL05-CB
- 91.8 DL06-CB
- 287 DL07-CB
- 4900 ES-2
- 790 ES-3
- 190 ES-4
- 16 EB-1
- 390 EB-2
- 1400 EB-3
- 120 EB-7
- 17000 EB-8
- ND UST3
- ND UST1
- ND UST1
- ND CB02
- ND CB14
- ND CB15
- ND CB23
- ND CB28
- ND CB32
- ND CSN
- ND ES-1

Number of samples		Uncensored values		
Uncensored	62	Mean	2418.01	
Censored	11	Lognormal mean	2959.57	
Detection limit or PQL	58.8	Std. devn.	3480.94548	
Method detection limit		Median	785.5	
TOTAL	73	Min.	16	
		Max.	17000	
Lognormal distribution?		Normal distribution?		
r-squared is:	0.970	r-squared is:	0.726	
Recommendations:				
Use lognormal distribution.				
UCL (Land's method) is 7927.67803059706				
Cohen's method applied.				

**APPENDIX F**  
**Report Limitations and Guidelines for Use**

## **APPENDIX F REPORT LIMITATIONS AND GUIDELINES FOR USE<sup>1</sup>**

This appendix provides information to help you manage your risks with respect to the use of this report.

### **Environmental Services Are Performed for Specific Purposes, Persons and Projects**

This report has been prepared for the exclusive use of the Washington Department of Ecology. This report is not intended for use by others, and the information contained herein is not applicable to other properties.

GeoEngineers structures our services to meet the specific needs of our clients. For example, an Environmental Site Assessment (ESA) study conducted for a property owner may not fulfill the needs of a prospective purchaser of the same property. Because each environmental study is unique, each environmental report is unique, prepared solely for the specific client and property. No one except the Washington Department of Ecology should rely on this environmental report without first conferring with GeoEngineers. Use of this report is not recommended for any purpose or project except the one originally contemplated.

### **This Environmental Report is Based on a Unique Set of Project-Specific Factors**

This report has been prepared for the City Parcel site in Spokane, Washington. GeoEngineers considered a number of unique, project-specific factors when establishing the scope of services for this project and report. Unless GeoEngineers specifically indicates otherwise, it is important not to rely on this report if it was:

- not prepared for you,
- not prepared for your project,
- not prepared for the specific site explored, or
- completed before important project changes were made.

If important changes are made to the project or property after the date of this report, we recommend that GeoEngineers be given the opportunity to review our interpretations and recommendations. Based on that review, we can provide written modifications or confirmation, as appropriate.

### **Reliance Conditions for Third Parties**

Our report was prepared for the exclusive use of our Client. No other party may rely on the product of our services unless we agree to such reliance in advance and in writing. This is to provide our firm with reasonable protection against open-ended liability claims by third parties with whom there would otherwise be no contractual limits to their actions. Within the limitations of scope, schedule and budget, our services have been executed in accordance with our Agreement with the Client and generally accepted environmental practices in this area at the time this report was prepared.

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<sup>1</sup> Developed based on material provided by ASFE, Professional Firms Practicing in the Geosciences; [www.asfe.org](http://www.asfe.org).

### **Environmental Regulations Are Always Evolving**

Some substances may be present in the vicinity of the subject property in quantities or under conditions that may have led, or may lead, to contamination of the subject property, but are not included in current local, state or federal regulatory definitions of hazardous substances or do not otherwise present current potential liability. GeoEngineers cannot be responsible if the standards for appropriate inquiry, or regulatory definitions of hazardous substances, change or if more stringent environmental standards are developed in the future.

### **Uncertainty May Remain Even After This Phase II ESA is Completed**

Performance of a Phase II ESA is intended to reduce uncertainty regarding the potential for contamination in connection with a property, but no ESA can wholly eliminate that uncertainty. Our interpretation of subsurface conditions in this study is based on field observations and chemical analytical data from widely spaced sampling locations. It is always possible that contamination exists in areas that were not explored, sampled or analyzed.

### **Subsurface Conditions Can Change**

This environmental report is based on conditions that existed at the time the study was performed. The findings and conclusions of this report may be affected by the passage of time, by man-made events such as construction on or adjacent to the subject property, by new releases of hazardous substances, or by natural events such as floods, earthquakes, slope instability or groundwater fluctuations. Please contact GeoEngineers before applying this report for its intended purpose so that GeoEngineers may evaluate whether changed conditions affect the continued applicability of the report.

### **Soil and Groundwater End Use**

The cleanup levels referenced in this report are site- and situation-specific. The cleanup levels may not be applicable for other properties or for other on-site uses of the affected soil and/or groundwater. Note that hazardous substances may be present in some of the on-site soil and/or groundwater at detectable concentrations that are less than the referenced cleanup levels. GeoEngineers should be contacted prior to the export of soil or groundwater from the subject property or reuse of the affected soil or groundwater on-site to evaluate the potential for associated environmental liabilities. We are unable to assume responsibility for potential environmental liability arising out of the transfer of soil and/or groundwater from the subject property to another location or its reuse on-site in instances that we did not know or could not control.

### **Most Environmental Findings Are Professional Opinions**

Our interpretations of subsurface conditions are based on field observations and chemical analytical data from widely spaced sampling locations at the subject property. Site exploration identifies subsurface conditions only at those points where subsurface tests are conducted or samples are taken. GeoEngineers reviewed field and laboratory data and then applied our professional judgment to render an informed opinion about subsurface conditions throughout the property. Actual subsurface conditions may differ, sometimes significantly, from those indicated in this report. Our report, conclusions and interpretations should not be construed as a warranty of the subsurface conditions.

### **Do Not Redraw the Exploration Logs**

Environmental scientists prepare final boring and testing logs based upon their interpretation of field logs and laboratory data. To prevent errors or omissions, the logs included in an environmental report should never be redrawn for inclusion in other design drawings. Only photographic or electronic reproduction is acceptable, but separating logs from the report can create a risk of misinterpretation.

### **Read These Provisions Closely**

It is important to recognize that the geoscience practices (geotechnical engineering, geology and environmental science) are less exact than other engineering and natural science disciplines. Without this understanding, there may be expectations that could lead to disappointments, claims and disputes. GeoEngineers includes these explanatory “limitations” provisions in our reports to help reduce such risks. Please confer with GeoEngineers if you need to know more about how these “Report Limitations and Guidelines for Use” apply to your project or property.

### **Biological Pollutants**

GeoEngineers’ Scope of Work specifically excludes the investigation, detection, prevention or assessment of the presence of Biological Pollutants. Accordingly, this report does not include any interpretations, recommendations, findings or conclusions regarding the detecting, assessing, preventing or abating of Biological Pollutants, and no conclusions or inferences should be drawn regarding Biological Pollutants as they may relate to this project. The term “Biological Pollutants” includes, but is not limited to, molds, fungi, spores, bacteria and viruses, and/or any of their byproducts.

A Client that desires these specialized services is advised to obtain them from a consultant who offers services in this specialized field.

Have we delivered World Class Client Service?

Please let us know by visiting [www.geoengineers.com/feedback](http://www.geoengineers.com/feedback).

