DRAFT FINAL - 2015 Spokane River

Field Sampling Report

SPOKANE RIVER REGIONAL TOXICS TASK FORCE

WASHINGTON AND IDAHO

Prepared for

SRRTTF

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1. Introduction

This field sampling report provides a summary of the methods used and a summary of the information gathered during the August 2015 Spokane River sampling event for the Spokane River Regional Toxics Task Force (SRRTTF). This work was performed in support of the SRRTTF's development of a comprehensive plan to reduce toxic pollutants in the Spokane River (study area is depicted on Figure 1) and, specifically, to reduce polychlorinated biphenyls (PCBs). The 2015 sampling event was intended to supplement the synoptic sampling conducted in August 2014.

The Synoptic Survey conducted in 2014 was intended to identify potentially significant dry weather sources of PCBs to the Spokane River between Lake Coeur d'Alene and Nine Mile Dam and to provide data for a mass balance evaluation. The results of the 2014 data collection indicated the likelihood of a groundwater PCB source between Barker Road and the Trent Avenue Bridge, and the potential of an additional groundwater PCB source between the Trent Avenue Bridge and the Spokane USGS gage (LimnoTech, 2015a). The SRRTTF Technical Track Work Group recommended, and the Task Force as a whole approved, conducting a 2015 Dry Weather Synoptic Survey to confirm the findings of the 2014 Synoptic Survey that focuses on a narrower spatial area than occurred during 2014.

The Quality Assurance Project Plan (QAPP) Addendum (LimnoTech, 2015b) provided the 2015 sampling plan. Gravity Consulting, LLC (Gravity) conducted the sampling in accordance with the procedural and analytical requirements described in the QAPP Addendum. The August 2015 surface water sampling event was conducted on the Spokane River between the gage station at Greenacres, Washington and the gage at Spokane, Washington immediately upstream of the confluence with Latah (Hangman) Creek. Sampling was also conducted at discharge points from several major municipal and industrial facilities along this segment of the river. Sample locations are shown on Figure 2.

2. Field Sampling

Environmental specialists from Gravity led the sampling event and collected samples along with a representative from LimnoTech. Sample collection commenced on August 18 and finished on August 22 of 2015. Gravity's sampling equipment, vessels, meters, personal protective equipment (PPE), vehicles and field lab were used to support the field event.

Surface water samples were collected at five locations in the Spokane River on five consecutive days between August 18th and 22nd, 2016. Water discharge samples were collected at three municipal and industrial facilities on August 18, 20, and 22. Sample locations identifiers, descriptions, global positioning system (GPS) coordinates, and samples collected are provided in Table 1 and locations are depicted on Figure 2.

Unless otherwise noted within this report, the sample collection procedures described within this Field Report were conducted in accordance with the following planning documents referenced below:

- Sampling & Analysis Plan (SAP) (LimnoTech, 2014)
- Quality Assurance Project Plan (QAPP) Addendum (LimnoTech, 2015b)
- Health and Safety and Environmental Plan (Gravity, 2014)
- Field Implementation Plan (Gravity, 2015)

2.1. Surface Water Collection Methods

Gravity staff collected surface water grab samples at locations prescribed in the QAPP Addendum and using methods consistent with those described in the standard operating procedures (SOPs) described in Appendix C of the SAP. Field sample collection forms are provided in Appendix A. At most sample locations samples were collected by hand using “clean hands” and “dirty hands” methodology and direct immersion techniques. These methods reduce the likelihood of any cross-contamination from direct (e.g., handling dirty equipment) or indirect (e.g., dust or air transport) sources. Samples were collected using a dip sampler at a few of the facilities due to safety concerns. These sites are identified along with justification for not using direct immersion in Table 2. Appendix B provides some photographic documentation taken during the sampling event.

All sample compositing and filtering occurred, as necessary, at the laboratories after all samples were collected. Each sampling method used is further described below and additional details were provided in the SAP.

Direct Immersion Sampling using Modified Clean Methods – This was the preferred sampling method as it reduces the potential for confounding contamination. Clean sampling procedures, developed by the U.S. Environmental Protection Agency (USEPA) and described in EPA Document 1669 (USEPA, 1996), are designed to minimize inadvertent contamination during the collection and handling of the sample in the field as well as in the laboratory by preventing contact of the sample with other materials and minimizing exposure to the air. The modified clean method used for the Spokane River sampling is virtually identical to the clean sampling; however, not all of the personnel protective equipment was used (i.e., Tyvek was not worn due to concerns with heat and dust masks were not worn as they are intended to prevent mercury contamination). Generally, under this method, the gloved “dirty hands” sampler opens a Ziploc bag so the gloved “clean hands” sampler can reach in to grab the sample container. The “clean hands” sampler submerses the container under the water surface and then opens and closes it while submersed to avoid any potential atmospheric contamination. The sampler faces upstream during the sampling to avoid any disturbed substrate from getting in the container. The container is put back into the Ziploc by the “clean hands” sampler. Therefore, only one sampler (“clean hands”) touches the container and this sampler does not handle any other materials prior to sampling.

Dip Sampler using Modified Clean Methods – For a few effluent sample locations where safety concerns prevented direct immersion methods, then a long handled dip sampler was used. As described for direct immersion, the "clean" sampling procedures were also used for this method.

2.1.1. QA/QC Samples

In addition to normal grab samples, quality assurance/quality control (QA/QC) samples were collected daily. QA/QC samples included a daily blank using clean water provided by AXYS to determine whether sample procedures, equipment, or the atmosphere itself may confound the analytical results. Additionally, a blind replicate sample (i.e., duplicate) was collected daily at different locations throughout the sampling event. Daily blank and blind replicates (along with corresponding normal samples) are identified in Table 3.

2.1.2. Field Measurements

Field measurements of temperature, pH, specific conductance, turbidity, and dissolved oxygen were also collected for sample taken. Field measurement results are presented in Table 4 and Field Parameter Logs are provided in Appendix C.

2.1.3. Sample Handling, Transport and Custody

Sample handling, transport, and custody were performed as outlined in Section 5 of the SAP. After sample containers were filled, they were packed in coolers on ice. Samples were kept in a secure vehicle and repacked in ice, as necessary, until delivery or shipment to the appropriate laboratories. Coolers were transferred to laboratories using the following shipping and chain-of-custody procedures:

- Samples were packaged and shipped in accordance with U.S. Department of Transportation regulations as specified in 49 CFR 173.6 and 49 CFR 173.24;
- Individual sample containers were packed to prevent breakage;
- The coolers were clearly labeled with detailed sample collection information (name of project, time and date container was sealed, person sealing the cooler) to enable positive identification;
- Chain-of-custody forms were enclosed in a plastic bag and placed inside lid of the cooler; and
- Signed and dated chain-of-custody seals were placed on the outside of all coolers prior to shipping.

Samples analyzed for total suspended solids, total dissolved solids, total organic carbon, and dissolved organic carbon were hand delivered by Gravity staff to the Silver Valley Analytical Laboratory (SVL) in Coeur d'Alene, Idaho. Laboratory staff delivered samples on the same day to the SVL Analytical laboratory in Kellogg, Idaho. Copies of the chain-of-custody forms are provide in Appendix D.

All archived samples were also sent to SVL Analytical for storage at <4˚C. Samples to be analyzed for low level PCBs were delivered to FedEx in Spokane, Washington for shipment to the AXYS Analytical Services (AXYS) in Sidney, British Columbia.

2.1.4. Deviations from the SAP

No deviations from the sampling plan and schedule occurred.

3. Surface Water Analytical Testing

Surface water sampling analysis was conducted in accordance with QAPP Addendum and as summarized in Section 2 of this Field Report. Guidance included specification of methods, method report limits, and applicable QA/QC measures. The samples were analyzed for the parameters listed in Table 5. Results from the laboratory analyses were directly sent to the SRRTTF for input into a database and summarized in a report by LimnoTech.

4. Stream Flow

For locations without active stream gages, flow measurements were obtained in the field using a Sontek M-9 River Surveyor. In-field flow measurements were collected at the following locations:

- SR9 - Barker Road
- SR8a - Mirabeau Park
- SR7 - Trent Bridge Gage

The procedures followed for the flow measurements were as described in Appendix A of the QAPP Addendum. The results of the in-field stream flow data are presented in Table 5.

5. Summary

The goal of the 2015 sampling event was to collect supplemental information necessary to provide additional data in a focused segment of the Spokane River where PCBs in groundwater are suspected to be migrating to the river. Surface water samples from the Spokane River and discharge samples from municipal and industrial effluents were collected between the gage station at Greenacres, Washington and gage at Spokane, Washington immediately upstream of the confluence with Latah (Hangman) Creek Samples were sent by Gravity staff to AXYS for low level PCB analysis and to SVL for TSS, TDS, TOC, and DOC analyses. In-field stream flow data were also obtained to update the previous mass balance assessment.

The data obtained during the August 2015 sampling event will be used to update a mass balance assessment and to support the identification of potential PCB sources to the Spokane River ecosystem.

Additionally, the data collected will provide important information to be used to make informed planning decisions for potential future field events.

6. References

Gravity Consulting, LLC. 2014. *Health and Safety and Environmental Plan*. Submitted to the Spokane River Regional Toxics Task Force (SRRTTF) on August 11, 2014.

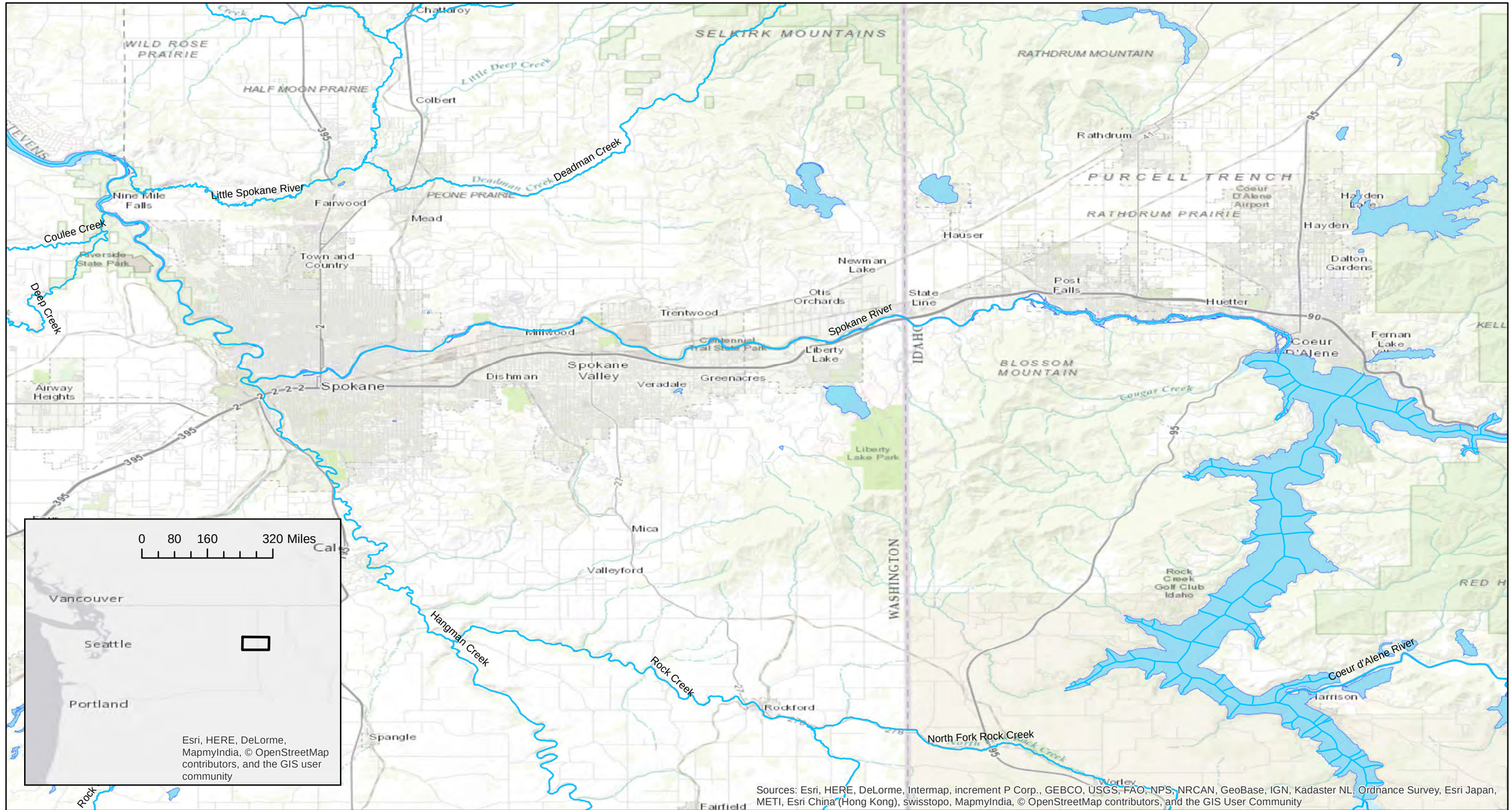
Gravity Consulting, LLC. 2015. *Field Implementation Plan*. Submitted to the Spokane River Regional Toxics Task Force (SRRTTF) on August 17, 2015.

LimnoTech. 2014. *Sampling & Analysis Plan – Spokane River Toxics Reduction Strategy Study*. Submitted to the Spokane River Regional Toxics Task Force (SRRTTF) on July 31, 2014.

LimnoTech, 2015a. Spokane River Regional Toxics Task Force Phase 2 Technical Activities Report: Identification of Potential Unmonitored Dry Weather Sources of PCBs to the Spokane River. Prepared for Spokane River Regional Toxics Task Force. DRAFT July 22, 2015

LimnoTech. 2015b. *Quality Assurance Project Plan – Addendum 1, Spokane River Toxics Reduction Strategy Study*. Submitted to the Spokane River Regional Toxics Task Force (SRRTTF) on August 3, 2015.

U.S. Environmental Protection Agency (USEPA). 1996. *Method 1669: Sampling Ambient Water for Trace Metals at EPA Water Quality Levels*. July.



Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Legend

- NHD Major Streams
- NHD Major Waterbodies

0 1 2 4 6 8 Miles

N

Figure 1.
2015 Spokane River Dry Weather Sampling Project Area

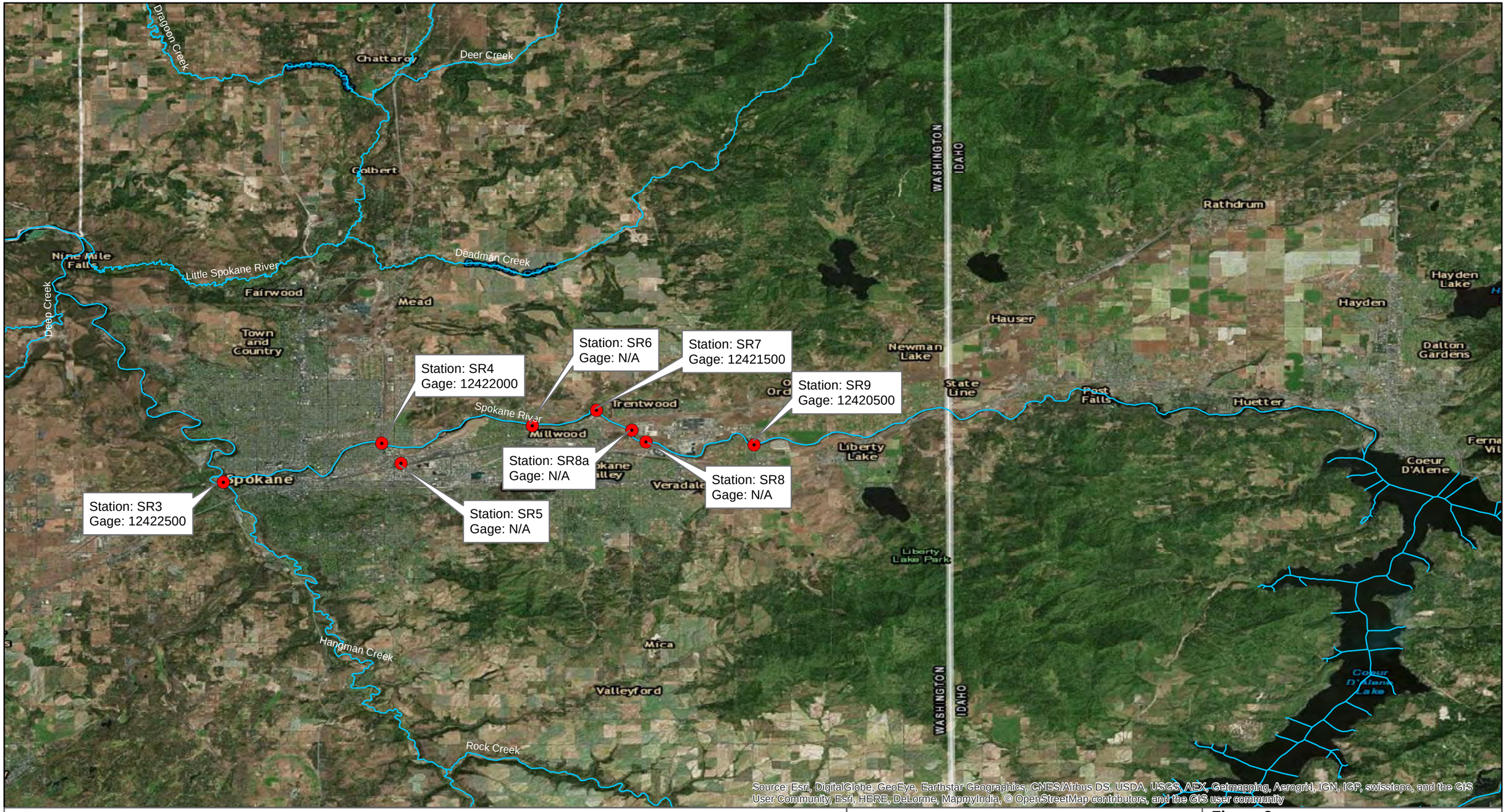
PROJECTION: GCS WGS 1984

GRAVITY Consulting, LLC

SCALE: See Scale Bar
SIZE: 11 x 17
PROJECT:
DATE: 08/02/2016

VERSION: A01
DRAWN: JW
CHECKED:
APPROVED:

Path: F:\Projects\Spokane River TMDL\GIS\MXD\FIG1_Project_Area_2015_11x17.mxd



Legend

- Sampling Stations
- NHD Major Streams

N/A : Not Applicable

PROJECTION: GCS WGS 1984

0 1 2 4 6 8 Miles

N

Figure 2.
2015 Spokane River Dry Weather Sampling Stations

GRAVITY Consulting LLC

SCALE: See Scale Bar
SIZE: 11 x 17
PROJECT: SRRTTF
DATE: 8/2/2016

VERSION: A01
DRAWN: JW
CHECKED:
APPROVED:

Path: F:\Projects\Spokane River TMDL\GIS\MXD\FIG2_Sampling_Stations_2015_11x17.mxd

Table 1
Summary of Sampling Stations and Samples Collected
SRRTTF - August 2015 Sampling Event

Station	Description	GPS Coordinates	Sample Type	Samples Collected (IDs include Station ID, Date of Collection, Time of Collection)
SR3	Spokane River Gage Station at Spokane	W -117.4497 N 47.65888	Normal	SR3-081815-1915, SR3-081915-0821, SR3-082015-1500, SR3-082115-0853, SR3-082215-1355
			Composite	SR3-081815-1915-C, SR3-081915-0821-C, SR3-082015-1500-C, SR3-082115-0853-C, SR3-082215-1355-C
			Archive*	SR3-081815-1915, SR3-081915-0821, SR3-082015-1500, SR3-082115-0853, SR3-082215-1355
SR4	Spokane River Gage Station below Greene Street Bridge	W -117.3628 N 47.67808	Normal	SR4-081815-1826, SR4-081915-0928, SR4-082015-1410, SR4-082115-0949, SR4-082215-1127
			Composite	SR4-081815-1826-C, SR4-081915-0928-C, SR4-082015-1410-C, SR4-082115-0949-C, SR4-082215-1127-C
			Archive*	SR4-081815-1826, SR4-081915-0928, SR4-082015-1410, SR4-082115-0949, SR4-082215-1127
SR5	Spokane County Regional WRF	W -117.3532 N 47.66705	Normal	SR5-081815-1352, SR5-082015-1330, SR5-082215-1311
			Composite	SR5-081815-1352-C, SR5-082015-1330-C, SR5-082215-1311-C
			Archive*	SR5-081815-1352, SR5-082015-1330, SR5-082215-1311
SR6	Inland Empire Paper	W -117.2782 N 47.68867	Normal	SR6-081815-1535, SR6-082-15-1041, SR6-082215-1043
			Composite	SR6-081815-1535-C, SR6-082-15-1041-C, SR6-082215-1043-C
			Archive*	SR6-081815-1535, SR6-082-15-1041, SR6-082215-1043
SR7	Spokane River Gage Station below Trent Street Bridge	W -117.2418 N 47.69708	Normal	SR7-081815-1650, SR7-081915-1026, SR7-082015-1130, SR7-082115-1045, SR7-082215-0935
			Composite	SR7-081815-1650-C, SR7-081915-1026-C, SR7-082015-1130-C, SR7-082115-1045-C, SR7-082215-0935-C
			Archive*	SR7-081815-1650, SR7-081915-1026, SR7-082015-1130, SR7-082115-1045, SR7-082215-0935
SR8a	Spokane River at Mirabeau Park Area	W -117.2137 N 47.67918	Normal	SR8a-081815-1019, SR8a-081915-1330, SR8a-082015-0845, SR8a-082115-1305, SR8a-082215-1525
			Composite	SR8a-081815-1019-C, SR8a-081915-1330-C, SR8a-082015-0845-C, SR8a-082115-1305-C, SR8a-082215-1525-C
			Archive*	SR8a-081815-1019, SR8a-081915-1330, SR8a-082015-0845, SR8a-082115-1305, SR8a-082215-1525
SR8	Kaiser Aluminum	W -117.2219 N 47.686603	Normal	SR8-081815-1205, SR8-082015-0945, SR8-082215-0845
			Composite	SR8-081815-1205-C, SR8-082015-0945-C, SR8-082215-0845-C
			Archive*	SR8-081815-1205, SR8-082015-0945, SR8-082215-0845
SR9	Spokane River Gage Station at Barker Road Bridge	W -117.1534 N 47.67835	Normal	SR9-081815-0832, SR9-081915-1450, SR9-082015-0750, SR9-082115-1429, SR9-082215-0733
			Composite	SR9-081815-0832-C, SR9-081915-1450-C, SR9-082015-0750-C, SR9-082115-1429-C, SR9-082215-0733-C
			Archive*	SR9-081815-0832, SR9-081915-1450, SR9-082015-0750, SR9-082115-1429, SR9-082215-0733

WRF = water reclamation facility
SR = Spokane River
W = degrees West (longitude), NAD83
N = degrees North (latitude), NAD83
* Held for archive; for potential jar breakage during shipment or re-analysis

Table 2
Sample-Specific Collection Methods
SRRTTF - August 2015 Sampling Event

Station	Sampling Methods Used	Comments
SR3	Direct immersion	
SR4	Direct immersion using non-motorized vessel	Water depth precluded wading
SR5	Dip Sampler	Manhole - confined space
SR6	Dip Sampler	Safety hazard due to high velocity and depth to water
SR7	Direct immersion	
SR8a	Direct immersion	
SR8	Direct immersion in sink	Same location as for NPDES testing
SR9	Direct immersion	

Table 3
Summary of Quality Assurance/Quality Control (QA/QC) Samples Collected
SRRTTF - August 2015 Sampling Event

QA/QC Type	Date Collected	Sample ID	Corresponding Normal ID
Duplicate	8/18/2015	Duplicate 1	SR6-081815-1535
Duplicate	8/19/2015	DUP-2	SR7-081915-1026
Duplicate	8/20/2015	DUP-3	SR8-082015-0945
Duplicate	8/21/2015	DUP-4	SR8a-082115-1305
Duplicate	8/22/2015	DUP-5	SR9-082215-0733
Field Blank (atmospheric)	8/18/2015	N/A	N/A
Field Blank (atmospheric)	8/19/2015	N/A	N/A
Field Blank (atmospheric)	8/20/2015	N/A	N/A
Field Blank (atmospheric)	8/22/2015	N/A	N/A
Trip Blank	8/18/2015	N/A	N/A
Trip Blank	8/19/2015	N/A	N/A
Trip Blank	8/20/2015	N/A	N/A
Trip Blank	8/21/2015	N/A	N/A
Trip Blank	8/22/2015	N/A	N/A

N/A = not applicable

Table 4
Summary of Surface Water Field Parameters
SRRTTF - August 2015 Sampling Event

Sample Location	Sample Date	Water Temperature (˚C)	pH	Specific Conductivity (µs/cm3)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)	Water Depth (ft)	Depth of Measurement (ft)	Comments
SR3	8/18/2015	14.43	8.25	221.2	0	10.59	3	0.5	
SR3	8/19/2015	13.97	8.12	230.5	0.04	10.32	3	0.5	
SR3	8/20/2015	14.55	8.31	230.3	0.03	10.41	3	0.5	
SR3	8/21/2015	13.62	8.04	233	0.01	9.7	3.5	0.5	
SR3	8/22/2015	13.98	8.38	265.5	-0.03	10.47	3	0.5	
SR4	8/18/2015	13.49	8.05	218.4	0	8.59	13	0.5	
SR4	8/19/2015	12.93	7.99	217.5	-0.01	8.23	12	0.5	
SR4	8/20/2015	13.34	8.03	223.3	-0.04	8.52	10	0.5	
SR4	8/21/2015	12.632	7.99	221.8	0.03	8.02	17	0.5	
SR4	8/22/2015	13	8.13	262.8	-0.03	8.33	10	0.5	
SR5	8/18/2015	23.18	7.8	969.2	0.2	7.27	*	<0.5	
SR5	8/20/2015	23.03	7.46	950.1	0.23	7.15	*	<0.5	
SR5	8/21/2015	22.83	7.65	1081.7	5.28	7.15	*	<0.5	
SR6	8/18/2015	26.47	7.83	897	18	7.16	*	<0.5	
SR6	8/20/2015	26.37	7.85	940.89	5.2	6.83	*	<0.5	
SR6	8/21/2015	24.6	8.04	1519.4	2.41	7.35	*	<0.5	
SR7	8/18/2015	13.78	8.14	216.7	0	9.47	3	0.5	
SR7	8/19/2015	12.8	7.92	216	-0.14	9	3	0.5	
SR7	8/20/2015	12.65	7.92	215.7	0.11	8.98	3	0.5	
SR7	8/21/2015	12.19	7.83	219.3	-0.03	8.58	3	0.5	
SR7	8/22/2015	11.56	7.94	247.4	0.06	8.61	3.5	0.5	
SR8a	8/18/2015	12.59	8.97	203.2	0	8.91	2.5	0.5	
SR8a	8/19/2015	13.35	7.87	270.2	-0.15	8.73	3	0.5	
SR8a	8/20/2015	12.49	7.8	205.8	-0.15	8.28	3	0.5	
SR8a	8/21/2015	12.44	7.82	212.1	0.16	8.59	2.5	0.5	
SR8a	8/22/2015	12.78	8.11	243.8	-0.22	8.65	3	0.5	
SR8	8/18/2015	--	--	--	--	--	*	<0.5	Dead batteries in YSI EXO
SR8	8/20/2015	18.94	7.74	315.1	2.31	6.76	*	<0.5	
SR8	8/21/2015	18.4	7.85	376.2	1.95	5.91	*	<0.5	
SR9	8/18/2015	21.05	7.52	91.9	0.02	7.95	3	0.5	
SR9	8/19/2015	24.88	8.99	76.3	-0.08	10.06	3	0.5	
SR9	8/20/2015	21.44	7.95	75.7	0.09	7.33	3	0.5	
SR9	8/21/2015	20.48	8.7	69.9	0.07	9.68	3.5	0.5	
SR9	8/22/2015	18.65	7.87	124.2	0.14	7.97	3	0.5	

* Samples collected near surface from basin or manhole using a dip sampler

Table 5
Summary Laboratory Analytes and Methods
SRRTTF - August 2015 Sampling Event

	AXYS	SVL Analytical			
Sample Type	PCB Congeners	Dissolved Organic Carbon	Total Organic Carbon	Total Suspended Solids	Total Dissolved Solids
Normal	X	X	X	X	X
Composite	X	X	X		
Archive	X*				

* Held for archive; for potential jar breakage during shipment or re-analysis of potentially anomalous results

Table 6
Summary of Spokane River Flows during Dry Weather Sampling
SRRTTF - August 2015 Sampling Event

Station ID	Corresponding USGS River Gage	Sample Date	Sample Time	USGS Flow (cfs)	In-Field Flow* (cfs)
SR3	12422500	8/18/2014	1915	652	N/A
		8/19/2014	0821	733	N/A
		8/20/2014	1500	700	N/A
		8/21/2014	0853	700	N/A
		8/22/2015	1355	684	N/A
SR4	12422000	8/18/2014	1826	N/A	810
		8/19/2014	0928	N/A	810
		8/20/2014	1410	N/A	810
		8/21/2014	0949	N/A	810
		8/22/2015	1127	N/A	800
SR7	12421500	8/18/2014	1650	N/A	620
		8/19/2014	1026	N/A	630
		8/20/2014	1130	N/A	600
		8/21/2014	1045	N/A	620
		8/22/2015	0935	N/A	610
SR8a	12421500	8/18/2014	1019	N/A	500
		8/19/2014	1330	N/A	490
		8/20/2014	0845	N/A	470
		8/21/2014	1305	N/A	460
		8/22/2015	1525	N/A	450
SR9	12420500	8/18/2014	0832	N/A	110
		8/19/2014	1450	N/A	110
		8/20/2014	0750	N/A	120
		8/21/2014	1429	N/A	120
		8/22/2015	0733	N/A	120

N/A = not available
cfs = cubic feet per second
* Measured in the field using a Sontek M-9 River Surveyor

APPENDIX A – FIELD SAMPLE COLLECTION LOGS

Spokane PCBs

GRAVITY Consulting LLC

StationID: SR 3

Date: 8.18.15

Sample Info

SAMPLE MATRIX: Riverine water WW effluent Other :_____

Time	Sample ID	Parameter	Sample Type*	Equipment Used/Method	Preservative	Comments
1915	SR3.081815-1915	PCB ✓	Normal	Immersion		Includes archive
		TSS ✓				
		TDS ✓				
		TOC ✓			✓	
		DOC ✓				
1915	SR3.081815-1915-C	PCB ✓	Comp			
		TSS				
		TDS				
		TOC ✓			✓	
		DOC ✓				
		PCB				
		TSS				
		TDS				
		TOC				
		DOC				
		PCB				
		TSS				
		TDS				
		TOC				
		DOC				

* Archive, Replicate, Blank

Notes:

Data Recorder Initials: MS

Spokane River - Idaho
NPDES - PCBs

StationID:	SR 4
Date:	8.18.15

GRAVITY Consulting LLC

Sample Info

SAMPLE MATRIX: Riverine water WW effluent Other :_____

Time	Sample ID	Parameter	Sample Type*	Equipment Used/Method	Preservative	Comments
1826	SR4-081815-1826	PCB ✓	Normal	Immersion		Includes archive
		TSS ✓				
		TDS ✓				
		TOC ✓			✓	
		DOC ✓				
1826	SR4-081815-1826	PCB ✓	Comp			
		TSS				
		TDS				
		TOC ✓			✓	
		DOC ✓				
		PCB				
		TSS				
		TDS				
		TOC				
		DOC				
		PCB				
		TSS				
		TDS				
		TOC				
		DOC				

* Normal, Archive, Replicate, Blank

Notes:

Data Recorder Initials: _____

Spokane PCBs

GRAVITY Consulting LLC

StationID: SR-5

Date: 8.18.15

Sample Info

SAMPLE MATRIX: Riverine water WW effluent Other :_____

Time	Sample ID	Parameter	Sample Type*	Equipment Used/Method	Preservative	Comments
1352	SR-5-081815-1352	PCB ✓	Normal	Immersion		including archive
		TSS ✓				
		TDS ✓				
		TOC ✓			✓	
		DOC ✓				
1352	SR5-081815-1352-C	PCB ✓	Composite			
		TSS				
		TDS				
		TOC ✓			✓	
		DOC ✓				
		PCB				
		TSS				
		TDS				
		TOC				
		DOC				
		PCB				
		TSS				
		TDS				
		TOC				
		DOC				

*Archive, Replicate, Blank

Notes:

Data Recorder Initials: JMS

Spokane PCBs

GRAVITY Consulting LLC

StationID:	SR 6
Date:	8.18.15

Sample Info

SAMPLE MATRIX: Riverine water WW effluent Other :_____

Time	Sample ID	Parameter	Sample Type*	Equipment Used/Method	Preservative	Comments
1535	SR6-081815-1535	PCB ✓	Normal	Immersion		including volume
		TSS ✓				
		TDS ✓				
		TOC ✓			✓	
		DOC ✓				
1535	SR6-081815-1535-C	PCB ✓	Composite			
		TSS				
		TDS				
		TOC ✓			✓	
		DOC ✓				
1535	Duplicate 1	PCB ✓	Normal	Immersion		
		TSS ✓				
		TDS ✓				
		TOC ✓			✓	
		DOC ✓				
1535	Blank 081815-1535	PCB	[illegible]			Field blank
		TSS				
		TDS				
		TOC				
		DOC				

* Archive, Replicate, Blank

Notes:

Data Recorder Initials: _____

Spokane PCBs

GRAVITY Consulting LLC

StationID:	SR7
Date:	8·18·15

Sample Info

SAMPLE MATRIX: Riverine water WW effluent Other :_____

Time	Sample ID	Parameter	Sample Type*	Equipment Used/Method	Preservative	Comments
1650	SR7-081815-1650	PCB ✓	Normal	Immersion		including arc line
		TSS ✓				
		TDS ✓				
		TOC ✓			✓	
		DOC ✓				
1650	SR7-081815-1650-C	PCB ✓	Comp			
		TSS				
		TDS				
		TOC ✓			✓	
		DOC ✓				
		PCB				
		TSS				
		TDS				
		TOC				
		DOC				
		PCB				
		TSS				
		TDS				
		TOC				
		DOC				

* Archive, Replicate, Blank

Notes:

Data Recorder Initials: _____

Spokane PCBs

GRAVITY Consulting LLC

StationID:	SR-8
Date:	8.18.15

Sample Info

SAMPLE MATRIX: **Riverine water** **WW effluent** **Other** :_____

Time	Sample ID	Parameter	Sample Type*	Equipment Used/Method	Preservative	Comments
1205	SR8-081815-1205	PCB ✓	Normal	Immersion		Excluding archive
		TSS ✓				
		TDS ✓				
		TOC ✓			✓	
		DOC ✓				
1205	SR8-081815-1205-C	PCB ✓	Composite			
		TSS				
		TDS				
		TOC ✓			✓	
		DOC ✓				
		PCB				
		TSS				
		TDS				
		TOC				
		DOC				
		PCB				
		TSS				
		TDS				
		TOC				
		DOC				

* Archive, Replicate, Blank

Notes:

Data Recorder Initials: MS

Spokane PCBs

GRAVITY Consulting LLC

StationID: SR-8A

Date: 8.18.15

Sample Info

SAMPLE MATRIX: Riverine water WW effluent Other :_____

Time	Sample ID	Parameter	Sample Type*	Equipment Used/Method	Preservative	Comments
1019	SR8a-081815-1019	PCB ✓	Normal	Immersion		including archive
		TSS ✓				
		TDS ✓				
		TOC ✓			✓	
		DOC ✓				
	SR8a-081815-1019-Composite	PCB ✓	Composite	Immersion		
		TSS				
		TDS				
		TOC ✓			✓	
		DOC ✓				
		PCB				
		TSS				
		TDS				
		TOC				
		DOC				
		PCB				
		TSS				
		TDS				
		TOC				
		DOC				

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Notes:

Data Recorder Initials: MWD

Spokane PCBs

GRAVITY Consulting LLC

StationID:	SR-9
Date:	8·18·15

Sample Info

SAMPLE MATRIX: Riverine water WW effluent Other :_____

Time	Sample ID	Parameter	Sample Type*	Equipment Used/Method	Preservative	Comments
0832	SR9-081815-0832	PCB ✓		Immersion		including Archive
		TSS ✓				
		TDS ✓				
		TOC ✓	Normal		✓	
		DOC ✓	"			
0832	Composite	PCB ✓	Composite	Immersion		
		~~TSS~~				
		~~TDS~~				
		TOC ✓			✓	
		DOC ✓				
		PCB				
		TSS				
		TDS				
		TOC				
		DOC				
		PCB				
		TSS				
		TDS				
		TOC				
		DOC				

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Notes:

Data Recorder Initials: MD

Spokane PCBs

GRAVITY Consulting LLC

StationID:	SR3 / SR4
Date:	8.19.15

Sample Info

SAMPLE MATRIX: (Riverine water) WW effluent Other :_____

Time	Sample ID	Parameter	Sample Type*	Equipment Used/Method	Preservative	Comments
0821	SR3-081915-0821	PCB ✓	Normal	Immersion		
		TSS ✓				
		TDS ✓				
		TOC ✓			✓	
		DOC ✓				
0821	SR3-081915-0821-C	PCB ✓	Composite			
		TSS				
		TDS				
		TOC ✓			✓	
		DOC ✓				
SR4 0928	SR4-081915-0928	PCB ✓	Normal			
		TSS ✓				
		TDS ✓				
		TOC ✓			✓	
		DOC ✓				
SR4 0928	SR4-081915-0928-C	PCB ✓	Composite			
		TSS				
		TDS				
		TOC ✓			✓	
		DOC ✓				

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Notes:

Data Recorder Initials: BEM

Spokane PCBs

GRAVITY Consulting LLC

StationID:	SR7
Date:	8·19·15

Sample Info

SAMPLE MATRIX: (Riverine water) WW effluent Other :_____

Time	Sample ID	Parameter	Sample Type*	Equipment Used/Method	Preservative	Comments
1026	SR7-081915-1026	PCB ✓	Normal	Immersion		
		TSS ✓				
		TDS ✓				
		TOC ✓			✓	
		DOC ✓				
1026	SR7-081915-1026-C	PCB ✓	Composite			
		TSS				
		TDS				
		TOC ✓			✓	
		DOC ✓				
1026 ~~NA~~	DUP-2	PCB ✓	Normal			
		TSS ✓				
		TDS ✓				
		TOC ✓			✓	
		DOC ✓				
1130	Blank-081915-1130	PCB	QA/QC	Poured		
		TSS ✓				
		TDS ✓				
		TOC ✓			✓	
		DOC ✓				

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Notes:

Data Recorder Initials: BEM

Spokane PCBs

GRAVITY Consulting LLC

StationID:	SR8a
Date:	8.19.15

Sample Info

SAMPLE MATRIX: (Riverine water) WW effluent Other :_____

Time	Sample ID	Parameter	Sample Type*	Equipment Used/Method	Preservative	Comments
1330	SR8a-081915-1330	PCB ✓	Normal	Immersion		
		TSS ✓				
		TDS ✓				
		TOC ✓			✓	
		DOC ✓				
1330	SR8a-081915-1330-C	PCB ✓	Composite			
		~~TSS~~				
		~~TDS~~				
		TOC ✓	composite		✓	
		DOC ✓				
		PCB				
		TSS				
		TDS				
		TOC				
		DOC				
		PCB				
		TSS				
		TDS				
		TOC				
		DOC				

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Notes:

Data Recorder Initials: BEM

Spokane PCBs

GRAVITY Consulting LLC

Station ID: SR9

Date: 8.19.15

Sample Info

SAMPLE MATRIX: (Riverine water) WW effluent Other : _____

Time	Sample ID	Parameter	Sample Type*	Equipment Used/Method	Preservative	Comments
1450	SR9-081915 1450	PCB ✓	Normal	Immersion		
		TSS ✓				
		TDS ✓				
		TOC ✓			✓	
		DOC ✓				
1450	SR9-081915 1450-C	PCB ✓	Composite			
		~~TSS~~				
		~~TDS~~				
		TOC x2	Composite		✓	1 extra for SVL
		DOC x2	↓	↓		" " "
		PCB				
		TSS				
		TDS				
		TOC				
		DOC				
		PCB				
		TSS				
		TDS				
		TOC				
		DOC				

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Notes:

Data Recorder Initials: BEM

Spokane PCBs

GRAVITY Consulting LLC

StationID: SR3

Date: 8/20/15

Sample Info

SAMPLE MATRIX: (Riverine water) WW effluent Other :_____

Time	Sample ID	Parameter	Sample Type*	Equipment Used/Method	Preservative	Comments
1500	SR3-082015-1500	PCB ✓	Normal	Immersion		Archive.
		TSS ✓				
		TDS ✓				
		TOC ✓				
		DOC ✓				
1500	SR3-082015-1500-C	PCB ✓	Composite			
		~~TSS~~				
		~~TDS~~				
		TOC ✓	Comp. S.			
		DOC ✓				
		PCB				
		TSS				
		TDS				
		TOC				
		DOC				
		PCB				
		TSS				
		TDS				
		TOC				
		DOC				

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Notes:

Data Recorder Initials: BEM

Spokane PCBs

GRAVITY Consulting LLC

StationID:	SR-4
Date:	8/20/15

Sample Info

SAMPLE MATRIX: (Riverine water) WW effluent Other :_____

Time	Sample ID	Parameter	Sample Type*	Equipment Used/Method	Preservative	Comments
1410	SR4-082015-1410	PCB ✓	Normal ↓	Immersion ↓		Archive
		TSS ✓				
		TDS ✓				
		TOC ✓				
		DOC ✓				
1410	SR4-082015-1410-C	PCB ✓	Composite			
		~~TSS~~				
		~~TDS~~				
		TOC ✓	comp.			
		DOC ✓	↓	↓		
		PCB				
		TSS				
		TDS				
		TOC				
		DOC				
		PCB				
		TSS				
		TDS				
		TOC				
		DOC				

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Notes:

Data Recorder Initials: BEM

Spokane PCBs

GRAVITY Consulting LLC

StationID:	SR-5
Date:	8/20/15

Sample Info

SAMPLE MATRIX: Riverine water (WW effluent) Other : _____

Time	Sample ID	Parameter	Sample Type*	Equipment Used/Method	Preservative	Comments
1330	SR5-082015-1330	PCB ✓	Normal	Dip Sample		Archive
		TSS ✓	↓	↓		
		TDS ✓				
		TOC ✓				
		DOC ✓				
1330	SR5-082015-1330-C	PCB ✓	Composite	↓		
		~~TSS~~				
		~~TDS~~				
		TOC ✓	comp.			
		DOC ✓	↓	↓		
1330	Blank-082015	PCB ✓	Blank	Pour		
		TSS ✓	↓	↓		
		TDS ✓				
		TOC ✓				
		DOC ✓				
		PCB				
		TSS				
		TDS				
		TOC				
		DOC				

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Notes:

Data Recorder Initials: BEM

Spokane PCBs

GRAVITY Consulting LLC

StationID: SR-6

Date: 8/20/15

Sample Info

SAMPLE MATRIX: Riverine water (WW effluent) Other : _____

Time	Sample ID	Parameter	Sample Type*	Equipment Used/Method	Preservative	Comments
1041	SR6-082015-1041	PCB ✓	Normal	Dip Sample		
		TSS ✓	↓	↓		
		TDS ✓				
		TOC ✓				
		DOC ✓				
1041	SR6-082015-1041-C	PCB ✓	Composite	↓		
		~~TSS~~				
		~~TDS~~				
		TOC ✓	comp.			
		DOC ✓	↓			
		PCB				
		TSS				
		TDS				
		TOC				
		DOC				
		PCB				
		TSS				
		TDS				
		TOC				
		DOC				

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Notes:

Data Recorder Initials: BEM

Spokane PCBs

GRAVITY Consulting LLC

StationID:	SR-7
Date:	8/20/15

Sample Info

SAMPLE MATRIX: (Riverine water) WW effluent Other :_____

Time	Sample ID	Parameter	Sample Type*	Equipment Used/Method	Preservative	Comments
1130	SR7-082015-1130	PCB ✓	Normal	Immersion		Archive
		TSS ✓	↓	↓		
		TDS ✓				
		TOC ✓				
		DOC ✓				
1130	SR7-082015-1130-C	PCB ✓	Composite	↓		
		~~TSS~~				
		~~TDS~~				
		TOC ✓	Comp.			
		DOC ✓	Comp.			
		PCB				
		TSS				
		TDS				
		TOC				
		DOC				
		PCB				
		TSS				
		TDS				
		TOC				
		DOC				

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Notes:

Data Recorder Initials: BEM

Spokane PCBs

GRAVITY Consulting LLC

StationID:	SR-8
Date:	8/20/15

Sample Info

SAMPLE MATRIX: Riverine water (WW effluent) Other :_____

Time	Sample ID	Parameter	Sample Type*	Equipment Used/Method	Preservative	Comments
0945	SR8-082015-0945	PCB ✓	Normal	~~Immersion~~ Bottle Fill from tap		
		TSS ✓				
		TDS ✓				
		TOC ✓	x2			1 extra for SVL
		DOC ✓	x2			" " "
0945	SR8-082015-0945-C	PCB ✓	Composite			
		~~TSS~~				
		~~TDS~~				
		TOC ✓	comp.			
		DOC ✓	↓			
0945	DUP-3	PCB ✓	Duplicate			
		TSS ✓				
		TDS ✓				
		TOC ✓				
		DOC ✓	↓	↓		
		PCB				
		TSS				
		TDS				
		TOC				
		DOC				

* Archive, Replicate, Blank

Notes:

Data Recorder Initials: BEM

Spokane PCBs

GRAVITY Consulting LLC

StationID:	SR-8a
Date:	8/20/15

Sample Info

SAMPLE MATRIX: (Riverine water) WW effluent Other :_____

Time	Sample ID	Parameter	Sample Type*	Equipment Used/Method	Preservative	Comments
0848	SR8a-082015-0848	PCB ✓	Normal	Immersion		Archive
		TSS ✓	↓	↓		
		TDS ✓				
		TOC ✓				
		DOC ✓				
0848	SR8a-082015-0848-C	PCB	Composite	↓		
		~~TSS~~				
		~~TDS~~				
		TOC	comp.			
		DOC	↓			
		PCB				
		TSS				
		TDS				
		TOC				
		DOC				
		PCB				
		TSS				
		TDS				
		TOC				
		DOC				

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Notes:

Data Recorder Initials: BEM

Spokane PCBs

GRAVITY Consulting LLC

StationID: SR-9

Date: 8/20/15

Sample Info

SAMPLE MATRIX: (Riverine water) WW effluent Other :_____

Time	Sample ID	Parameter	Sample Type*	Equipment Used/Method	Preservative	Comments
0750	SR9-082015-0750	PCB ✓	Normal	Immersion		Archive
		TSS ✓	↓	↓		
		TDS ✓				
		TOC ✓				
		DOC ✓				
0750	SR9-082015-0750-C	PCB ✓	composite	↓		
		~~TSS~~				
		~~TDS~~				
		TOC ✓	comp.			
		DOC ✓	↓			
		PCB				
		TSS				
		TDS				
		TOC				
		DOC				
		PCB				
		TSS				
		TDS				
		TOC				
		DOC				

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Notes:

Data Recorder Initials: BEM

Spokane PCBs

GRAVITY Consulting LLC

StationID:	SR-3
Date:	8/21/15

Sample Info

SAMPLE MATRIX: (Riverine water) WW effluent Other :_____

Time	Sample ID	Parameter	Sample Type*	Equipment Used/Method	Preservative	Comments
0853	SR3-082115-0853	PCB ✓	Normal	Immersion		Archive ✓
		TSS ✓	↓	↓		
		TDS ✓				
		TOC ✓				
		DOC ✓				
0853	SR3-082115-0853-C	PCB ✓	Composite	↓		
		~~TSS~~				
		~~TDS~~				
		TOC ✓	comp.			
		DOC ✓	↓			
		PCB				
		TSS				
		TDS				
		TOC				
		DOC				
		PCB				
		TSS				
		TDS				
		TOC				
		DOC				

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Notes:

Data Recorder Initials: BEM

Spokane PCBs

GRAVITY Consulting LLC

StationID:	SR-4
Date:	8/21/15

Sample Info

SAMPLE MATRIX: (Riverine water) WW effluent Other :_____

Time	Sample ID	Parameter	Sample Type*	Equipment Used/Method	Preservative	Comments
0949	SR4-082115-0949	PCB ✓	Normal	Immersion		Archive ✓
		TSS ✓	↓	↓		
		TDS ✓				
		TOC ✓				
		DOC ✓				
0949	SR4-082115-0949-C	PCB ✓	Composite	↓		
		~~TSS~~				
		~~TDS~~				
		TOC ✓	comp.			
		DOC ✓	↓			
		PCB				
		TSS				
		TDS				
		TOC				
		DOC				
		PCB				
		TSS				
		TDS				
		TOC				
		DOC				

* Archive, Replicate, Blank

Notes:

Data Recorder Initials: BEM

Spokane PCBs

GRAVITY Consulting LLC

StationID:	SR-7
Date:	8/21/15

Sample Info

SAMPLE MATRIX: (Riverine water) WW effluent Other :_____

Time	Sample ID	Parameter	Sample Type*	Equipment Used/Method	Preservative	Comments
1045	SR7-082115-1045	PCB ✓	Normal	Immersion		Archive
		TSS ✓	↓	↓		
		TDS ✓				
		TOC ✓				
		DOC ✓				
1045	SR7-082115-1045-C	PCB ✓	Composite	↓		
		~~TSS~~				
		~~TDS~~				
		TOC ✓	comp.			
		DOC ✓	↓			
		PCB				
		TSS				
		TDS				
		TOC				
		DOC				
		PCB				
		TSS				
		TDS				
		TOC				
		DOC				

* Archive, Replicate, Blank

Notes:

Data Recorder Initials: BEM

Spokane PCBs

GRAVITY Consulting LLC

StationID: SR-8a

Date: 8/21/15

Sample Info

SAMPLE MATRIX: (Riverine water) WW effluent Other : _____

Time	Sample ID	Parameter	Sample Type*	Equipment Used/Method	Preservative	Comments
1305	SR8a-082115-	PCB ✓	Normal	Immersion		
		TSS ✓	↓	↓		
		TDS ✓				
		TOC ✓				1 extra for SVL
		DOC ✓				" " "
1305	SR8a-082115--C	PCB ✓	Composite	↓		
		~~TSS~~				
		~~TDS~~				
		TOC ✓	Comp.			
		DOC ✓	↓	↓		
1305	DUP-4	PCB ✓	Duplicate	~~Duplicate~~ Immersion		
		TSS ✓	↓	↓		
		TDS ✓				
		TOC ✓				
		DOC ✓	↓	↓		
1405	Blank-082115-1405	~~PCB~~				
		TSS ✓	Blank	Pour		
		TDS ✓	↓	↓		
		TOC ✓				
		DOC ✓	↓	↓		

* Archive, Replicate, Blank

Notes:

Data Recorder Initials: BEM

Spokane PCBs

GRAVITY Consulting LLC

StationID: SR-9

Date: 8/21/15

Sample Info

SAMPLE MATRIX: (Riverine water) WW effluent Other : _____

Time	Sample ID	Parameter	Sample Type*	Equipment Used/Method	Preservative	Comments
1429	SR9-082115-	PCB	Normal	Immersion		
		TSS	↓	↓		
		TDS				
		TOC				
		DOC	↓			
1429	SR9-082115-C	PCB	Composite			
		~~TSS~~				
		~~TDS~~				
		TOC	comp.			
		DOC	↓	↓		
1500	Trip Blank - 082115	PCB	Trip Blank	none		
		~~TSS~~				
		~~TDS~~				
		~~TOC~~				
		~~DOC~~				
		PCB				
		TSS				
		TDS				
		TOC				
		DOC				

* Archive, Replicate, Blank

Notes:

Data Recorder Initials: BEM

Spokane PCBs

GRAVITY Consulting LLC

StationID:	SR-3
Date:	8/22/15

Sample Info

SAMPLE MATRIX: (Riverine water) WW effluent Other : _____

Time	Sample ID	Parameter	Sample Type*	Equipment Used/Method	Preservative	Comments
1355	SR3-082215-1355	PCB ✓	Normal	Immersion		Archive
		TSS ✓	↓	↓		
		TDS ✓				
		TOC ✓				
		DOC ✓				
1355	SR3-082215-1355-C	PCB ✓	Composite	↓		
		~~TSS~~				
		~~TDS~~				
		TOC ✓	Comp.			
		DOC ✓	↓	↓		
		PCB				
		TSS				
		TDS				
		TOC				
		DOC				
		PCB				
		TSS				
		TDS				
		TOC				
		DOC				

* Archive, Replicate, Blank

Notes:

Data Recorder Initials: BEM

Spokane PCBs

GRAVITY Consulting LLC

StationID: SR-4

Date: 8/22/15

Sample Info

SAMPLE MATRIX: (Riverine water) WW effluent Other :_____

Time	Sample ID	Parameter	Sample Type*	Equipment Used/Method	Preservative	Comments
1127	SR4-082215-1127	PCB	Normal	Immersion		Archive
		TSS	↓	↓		
		TDS				
		TOC				
		DOC				
1127	SR4-082215-1127-C	PCB	Composite			
		~~TSS~~				
		~~TDS~~				
		TOC	comp.			
		DOC	↓	↓		
		PCB				
		TSS				
		TDS				
		TOC				
		DOC				
		PCB				
		TSS				
		TDS				
		TOC				
		DOC				

* Archive, Replicate, Blank

Notes:

Data Recorder Initials: BEM

Spokane PCBs

GRAVITY Consulting LLC

StationID: SR-5

Date: 8/22/15

Sample Info

SAMPLE MATRIX: Riverine water (WW effluent) Other : _____

Time	Sample ID	Parameter	Sample Type*	Equipment Used/Method	Preservative	Comments
1311	SR5-082215-1311	PCB ✓	Normal	Dip Sampler		Archive
		TSS ✓				
		TDS ✓				
		TOC ✓				
		DOC ✓				
1311	SR5-082215-1311-C	PCB ✓	Composite			
		~~TSS~~				
		~~TDS~~				
		TOC ✓	Comp.			
		DOC ✓				
		PCB				
		TSS				
		TDS				
		TOC				
		DOC				
		PCB				
		TSS				
		TDS				
		TOC				
		DOC				

* Archive, Replicate, Blank

Notes:

Data Recorder Initials: BEM

Spokane PCBs

GRAVITY Consulting LLC

StationID:	SR-6
Date:	8/22/15

Sample Info

SAMPLE MATRIX: Riverine water (WW effluent) Other : _____

Time	Sample ID	Parameter	Sample Type*	Equipment Used/Method	Preservative	Comments
1043	SR6-082215-1043	PCB ✓	Normal	Dip Sampler		Archive
		TSS ✓	↓	↓		
		TDS ✓				
		TOC ✓				
		DOC ✓				
1043	SR6-082215-1043-C	PCB ✓	Composite	↓		
		~~TSS~~				
		~~TDS~~				
		TOC ✓	Comp.			
		DOC ✓	↓			
		PCB				
		TSS				
		TDS				
		TOC				
		DOC				
		PCB				
		TSS				
		TDS				
		TOC				
		DOC				

* Archive, Replicate, Blank

Notes:

Data Recorder Initials: BEM

Spokane PCBs

GRAVITY Consulting LLC

StationID: SR-7

Date: 8/22/15

Sample Info

SAMPLE MATRIX: (Riverine water) WW effluent Other :_____

Time	Sample ID	Parameter	Sample Type*	Equipment Used/Method	Preservative	Comments
0935	SR7-082215-0935	PCB ✓	Normal	Immersion		Archive
		TSS ✓	↓	↓		
		TDS ✓				
		TOC ✓				
		DOC ✓				
0935	SR7-082215-0935-C	PCB ✓	Composite	↓		
		~~TSS~~				
		~~TDS~~				
		TOC ✓	Comp.			
		DOC ✓	↓	↓		
		PCB				
		TSS				
		TDS				
		TOC				
		DOC				
		PCB				
		TSS				
		TDS				
		TOC				
		DOC				

* Archive, Replicate, Blank

Notes:

Data Recorder Initials: BEM

Spokane PCBs

GRAVITY Consulting LLC

StationID: SR-8

Date: 8/22/15

Sample Info

SAMPLE MATRIX: Riverine water (WW effluent) Other :_____

Time	Sample ID	Parameter	Sample Type*	Equipment Used/Method	Preservative	Comments
0845	SR8-082215-0845	PCB	Normal	Bottle fill from tap		
		TSS	↓	↓		
		TDS				
		TOC				
		DOC				
0845	SR8-082215-0845-C	PCB	Composite	↓		
		~~TSS~~				
		~~TDS~~				
		TOC	comp.			
		DOC	↓			
		PCB				
		TSS				
		TDS				
		TOC				
		DOC				
		PCB				
		TSS				
		TDS				
		TOC				
		DOC				

* Archive, Replicate, Blank

Notes:

Data Recorder Initials: BEM

Spokane PCBs

GRAVITY Consulting LLC

StationID:	SR-8a
Date:	8/22/15

Sample Info

SAMPLE MATRIX: (Riverine water) WW effluent Other :_____

Time	Sample ID	Parameter	Sample Type*	Equipment Used/Method	Preservative	Comments
1525	SR8a-082215-1525	PCB	Normal	Immersion		Archive
		TSS	↓	↓		
		TDS				
		TOC				
		DOC				
1525	SR8a-082215-1525-C	PCB	Composite			
		~~TSS~~				
		~~TDS~~				
		TOC	Comp.			
		DOC	↓	↓		
1611	Trip-BLANK-082215	PCB	Trip Blank	N/A		
		~~TSS~~				
		~~TDS~~				
		~~TOC~~				
		~~DOC~~				
		PCB				
		TSS				
		TDS				
		TOC				
		DOC				

* Archive, Replicate, Blank

Notes:

Data Recorder Initials: BEM

Spokane PCBs

GRAVITY Consulting LLC

StationID:	SR-9
Date:	8/22/15

Sample Info

SAMPLE MATRIX: (Riverine water) WW effluent Other :_____

Time	Sample ID	Parameter	Sample Type*	Equipment Used/Method	Preservative	Comments
0733	SR9-082215-0733	PCB ✓	Normal	Immersion		Archive
		TSS ✓		↓		
		TDS ✓		↓		
		TOC ✓		↓		1 extra for SVL
		DOC ✓		↓		" " "
0733	SR9-082215-0733-C	PCB ✓	Composite	↓		
		~~TSS~~		↓		
		~~TDS~~		↓		
		TOC ✓	Comp.	↓		
		DOC ✓	↓	↓		
0733	DUP-5	PCB ✓	Duplicate	↓		
		TSS ✓	↓	↓		
		TDS ✓	↓	↓		
		TOC ✓	↓	↓		
		DOC ✓	↓	↓		
0812	BLANK-082215-0812	PCB ✓	Blank	Pour		
		TSS ✓	↓	↓		
		TDS ✓	↓	↓		
		TOC ✓	↓	↓		
		DOC ✓	↓	↓		

* Archive, Replicate, Blank

Notes:

Data Recorder Initials: BEM

Spokane PCBs

GRAVITY Consulting LLC

SERIAL # of Instrument: _____

		CONDUCTIVITY			DISSOLVED OXYGEN (LDO)			pH				Turbidity	
Date	Time (24 Hour)	Initial (µS/cm)	Final (µS/cm)	Temp. (°C)	BP (mm Hg)	Initial DO (mg/L)	Final DO (mg/L)	Initial pH 7.0	Final pH 7.0	Initial pH 10	Final pH 10	Initial NTU	Final NTU
8/18/15	0702	1387.8	1412.8	21.882	710.7	89.9	93.5	6.29	7.0	8.29	10.11	-0.02	0.0
8/19/15	0714	1367.1	1413.0	20.16	707.9	~~93.0~~ ~~46.5~~	93.0	7.03	7.0	10.04	10.00	-0.01	0.0
8/20/15	0640	1404.0	1413.0	20.48	704.2	92.4	92.7	6.98	7.0	9.96	9.98	0.04	0.0
8/21/15	0738	1369.9	1413.0	21.32	702.9	93.4	92.5	7.01	7.0	10.05	10.0	-0.01	0.0
8/22/15	0644	1245.1	1413.0	14.35	713.2	93.4	93.9	6.86	7.0	9.97	10.0	0.06	0.0

Luminescent Dissolved Oxygen Calibration Method (circle one):

Air-Saturated Water Winkler Water-Saturated Air

Source of Barometric Pressure[1] (BP) Unit

Barometric Pressure corrected for altitude[2]: Yes N/Ap (circle one)

Depth calibrated at all locations (circle one): Yes N/Ap (circle one)

Calibration Standard: 1413 µS/cm
Lot # 7939500 1413 Exp. Date: 11/16

pH
Lot # AD14240 Exp. Date: 8/16

Turbidity
Lot# 15D578819 Exp. Date: 4/16

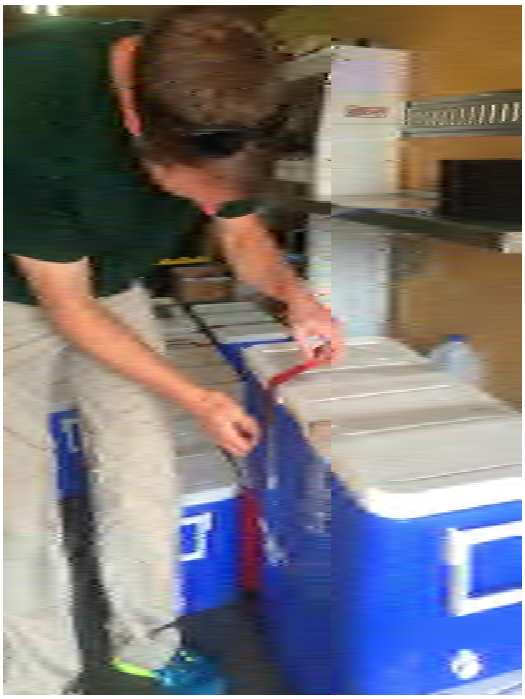
NOTES:

[1] Enter date & local BP (inches of Hg) at the time of calibrationin the notes (e.g.-5/29/97 BP=29.90")

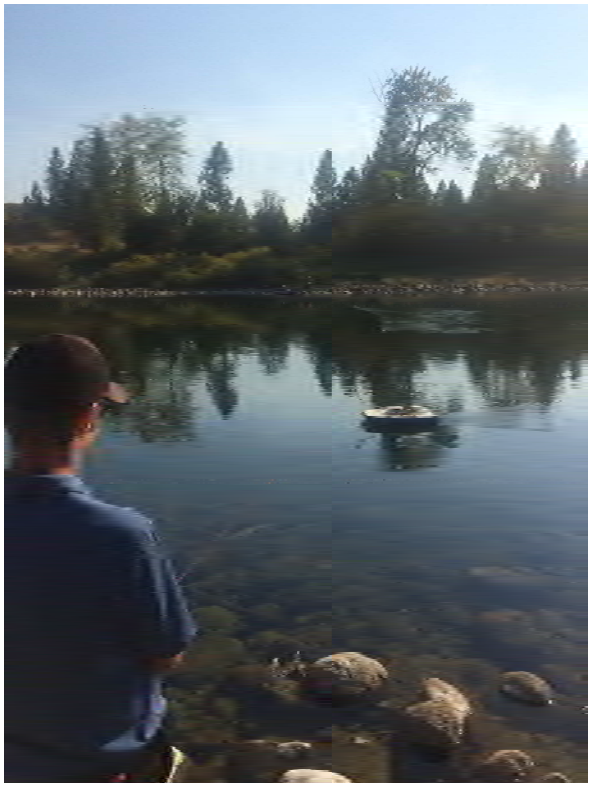
APPENDIX B – FIELD PHOTOGRAPHS

Picture 1. Daily preparation in the field lab; beginning YSI calibration

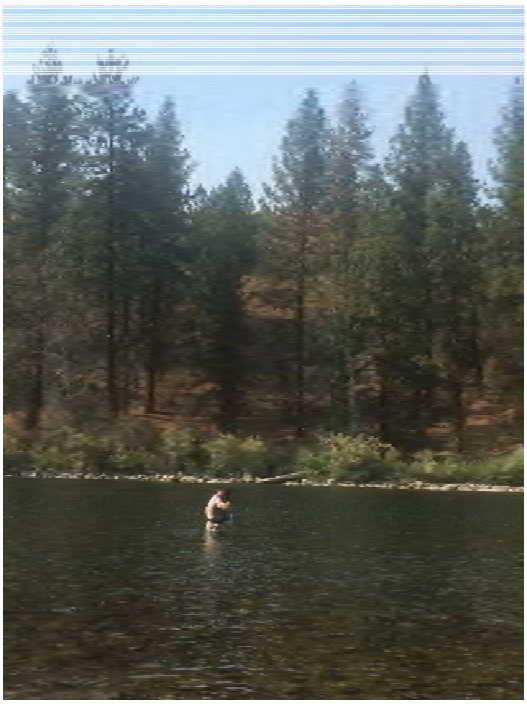
Picture 2. Packing samples in the field lab for shipping; applying custody seals



Pictures 3 and 4. Measuring flow at SR 8a using a Sontek River Surveyor



Picture 5. Direct immersion sampling at SR3



Picture 6. Sampling using a dip sampler at SR5

APPENDIX C – FIELD LOGS

Location _____ Date 8/17/15

Project / Client SRRTTF3

0900 - At Holiday Inn Spokane Valley to meet John Schaefer with Gravity to review QAPP, make plans

0915 - Picking up bottles at SVL

1000 - At Kaiser Aluminum, meeting Bud Leber. He is showing us some access points for Mirabeau Park Sample.

1130 - Picked up Axys bottles from Bud, going back to Spokane Valley hotel

1215 - At hotel, unloaded coolers into gravity trailer. Shawn and Jeff Wilson onsite.

1230 - Eating lunch

1315 - Getting M-9 from hotel

1345 - At SR-3 (Spokane @ Spokane)

1355 - At SR-4 (Green St.)

1410 - At Plant, Ferry looking at site (SR-7)

1445 - At Mirabeau Park (SR-8a)

1515 - At (SR-9) looking at Barker Rd.

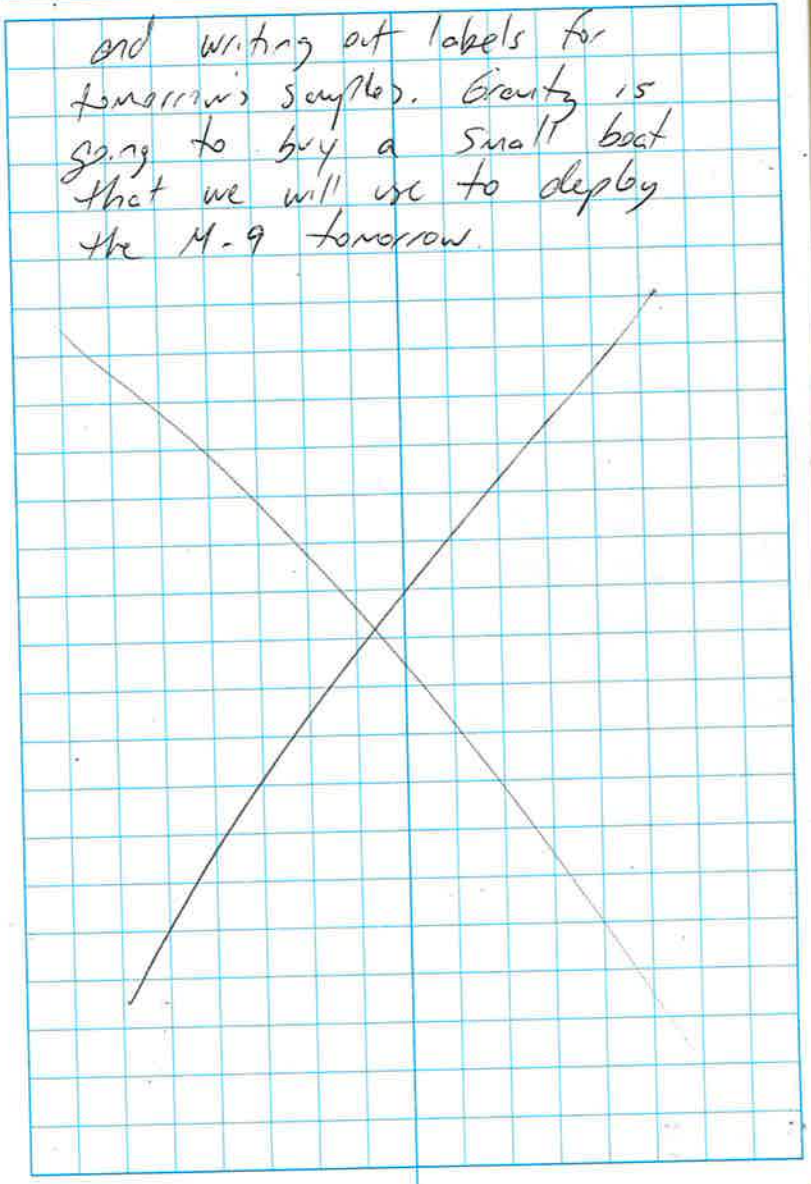
1530 - At field trailer, setting up bottles for tomorrow.

1800 - C. Behnke back at hotel testing M-9

Location _____ Date 8/17/15

Project / Client SRRTTF

and writing out labels for tomorrow's samples. Gravity is going to buy a small boat that we will use to deploy the M-9 tomorrow.



Location _____ Date 8/18/15

Project / Client SRETTF 3

0630 - At Grant's hotel prepping equipment, calibrating YSI EXO 1

0715 - Talked to Cathy Whiting, refined blank procedure.

0745 - Done calibrating

0805 - At Barker Rd.

0832 - Collected "SR9-081815-0832" + composite

0915 - Done collecting flows with M-9 pass #1 = 104 cfs, pass #2 = 114 cfs.

0940 - Done at Barker, going to Mirabeau Park

0950 - At Kaiser parking lot, moving equipment into truck to set back to the site.

1050 - Done with flows at Mirabeau Park site pass #1 = 498, pass #2 = 502 cfs

1019 - Collected "SR8a-081815-1019" + composite

1130 - Back at field lab, packing samples, prepping bottles for Kaiser sample (SR-8)

1205 - At SR-8 (Kaiser discharge), collecting "SR8-081815-1205" + composite

1245 - leaving site, getting batteries for YSI and lunch.

Location _____ Date 8/18/15

Project / Client SRETTF

1345 - At Spokane County Regional WWTP to collect sample (SR-5)

1352 - "SR5-081815-1352" → grab and composite collected

1452 - left SR-5

1530 - At Inland Paper (SR-6)

1535 - Collected "SR6-081815-1535" and composite. Also collected Duplicate 1 here. ~~and QA~~

1640 - At SR-7, "

1650 - Collected "SR7-081815-1650" and "SR7-081815-1650-C". Also collected flows. Pass #1 = 633 Pass #2 = 609

1826 - At SR-4, collecting "SR4-081815-1826" and "SR4-081815-1826-C".

1855 - Done at SR4, going to SR3

1915 - Collected "SR3-081815-1915" and "SR3-081815-1915-C"

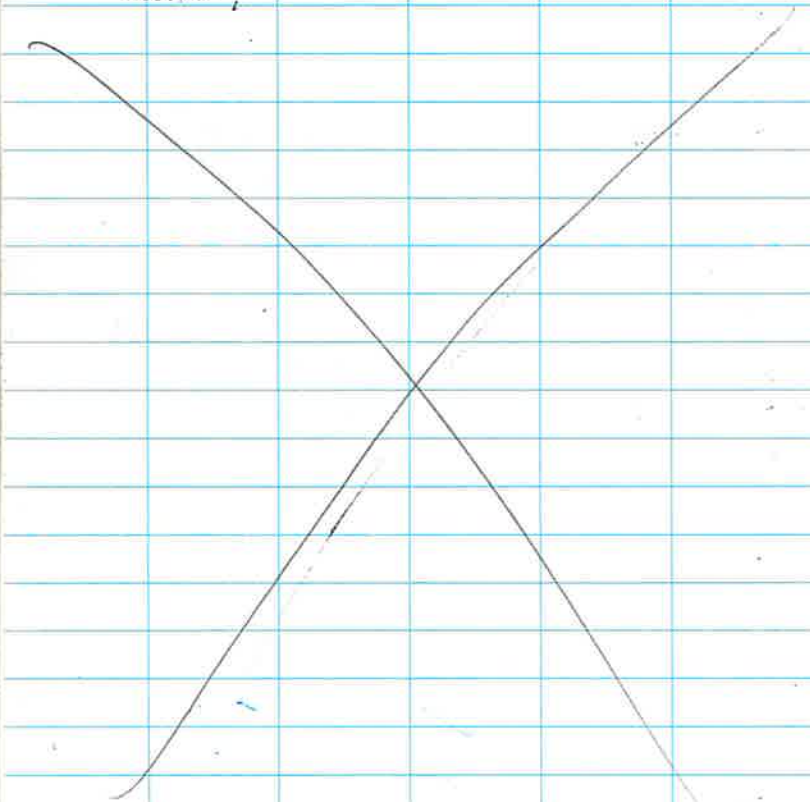
1950 - Done. Getting fuel for truck, then going back to hotel. Smoke has been hanging in the air all day, very visible on the

Location _____ Date 8/18/15

Project / Client SRRTTF3

distance against the mountains. The "air quality index" this morning was 160.

2030 - Collected "BLANK - 081815 - 2030" for SVL parameters using distilled water.



Location _____ Date 8/19/15

Project / Client SRRTTF

0630 - At County's hotel to pop samples for SVL and todays sampling.

0740 - Pete from County and I are going up to the lab to drop off samples

0840 - Dropped off, going to meet up with the other crew.

0920 - At green street location (SR-4) getting ready to sample. The other crew collected the sample at SR-3 at 0821.

0928 - Collected "SR4-081915-0928" and "SR4-081915-0928-C"

1015 - Calibrating ADCP.

1100 - flows done, pass #1 = 618, pass #2 = 644 cfs.

1026 - collected "SR7-081915-1026" and "SR7-081915-1026-C", also collected Dup 2 ~~000~~.

1130 - Collected "BLANK-081915-1130"

1155 - offsite, getting lunch.

1300 - At Kaiser parking lot, moving equipment into truck to go back to Mirabeau

Location _____ Date 8/19/15

Project / Client SRITTF3

Park site.

1350 - Measured flows: pass #1 = 545 cfs, pass #2 = 476 cfs. The agreement between the two readings isn't as good as I'd like, so we are doing another pass. pass #3 = 455, pass #4 = 470 cfs

1330 - Collected sample at "SR8a-081915-1330" and "SR8a-081915-1330-C"

1515 - Done with flows @ Barker Rd. Pass #1 = 94 cfs, pass #2 = 124 cfs. Note that at the end of pass #2, swimmers and a dog aproached the M-9 and swam around it, influencing the data. Use pass #1 only.

1450 - Collected "SR9-081915-1450" and "SR9-081915-1450-C"

1540 - Done at Barker Rd, going to SVL to drop off today's samples.

1700 - Back to hotel from the lab

Location _____ Date 8/20/15

Project / Client SRITTF3

0630 - At Grant's hotel, prepping equipment for the day.

0730 - leaving parking lot for Barker Rd.

0750 - At Barker Rd.

0820 - Done with flows. Pass #1 = 116 cfs, pass #2 = 121 cfs.

0750 - Collected "SR9-0820-0750" and "SR9-0820-0750-C"

0845 - At Mirabeau Park site, collecting flows here. PASS #1 = 471 cfs, pass #2 = 464 cfs.

0848 - Collected "SR8a-082015-0848" and "SR8a-082015-0848-C"

0935 - Going into Kaiser to collect samples

0945 - Collected "SR8-082015-0945", SR8-082015-0945-C and Dup 3.

1040 - At Inland Paper (SR6)

1041 - collected "SR6-082015-1041" and "SR6-082015-1041-C"

1110 - At Plante's Ferry, walking down

Location _____ Date 8/20/15.

Project / Client SRRTF

to measure flow.

1145 - Done with flows. Pass #1 = 592 cfs, pass #2 = 612 cfs.

1130 - Collected "SR7-082015-1130" and "SR7-082015-1130-C"

1230 - lunch

1330 - At Spokane County Regional collected "SR5-082015-1330" and SR5-082015-1330". Also collected "Blank-082015" for SVC and Anys parameters.

1410 - Collected "SR4-082015-1410" and "SR4-082015-1410-C"

1500 - Arrived at SR3, collecting "SR3-082015-1500" and "SR3-082015-1500-C"

1600 - Back at hotel, writing up summary email

Location _____ Date 8/21/15

Project / Client SRRTF

0730 - At Gravity's hotel, John Schaefer is sick today, so there will be (2) from Gravity (1) from Ecology and (1) from Limnotech today.

0740 - C. Behnke going to lab in Coeur d'Alene.

0810 - At lab, Linda says the courier to Kellogg has already left and that the samples would stay until Monday. I asked about the DOC sample getting filtered, and they called a courier to get the samples to Kellogg today. The DOC's collected on Friday will need to be filtered on Monday.

0853 - collected "SR3-082115-0853" and "SR3-082115-0853-C"

0949 - collected "SR4-082115-0949" and "SR4-082115-0949-C" Ash observed on the surface of the water at this location.

1105 - Conducting flows at Plante's Ferry

Location _____ Date 8/21/15

Project / Client SRP77F

pass #1 = 605 cfs. Pass #2 = 641 cfs

1045 - Collected "SR7-082115-1045" and "SR7-082115-1045-C"

1140 - lunch

1305 - Collected "SR8a-082115-1305" and "SR8a-082115-1305-C". Collecting flows as well. Pass #1 = 483 cfs Pass #2 = 442 cfs

1405 - Collected "Blank-082115-1405" for SVL parameters only

1515 - Done with flows at Baker Rd. Pass #1 = 153, #2 = 123, #3 = 115, #4 = 104 cfs.

1429 - Collected "SR9-082115-1429" and "SR9-082115-1429-C"

1500 - Collected "trip blank-082115"

There was ash on the water surface at this location.

1600 - Back at hotel, icing samples

Location _____ Date 8/22/15

Project / Client SRP77F

0630 - Meeting at Grunty's hotel, prepping for today's sampling.

0715 - Leaving hotel for Baker RD (SR9)

0730 - At Baker Rd, doing flows. Pass #1 = 122 cfs, pass #2 = 122 cfs.

0733 - Collected "SR9-082215-0733" and "SR9-082215-0733-C" dup 5

0812 - Collected "Blank-082215-0812" for SVL and Axys parameters (pour blank). Added trip blank (TRIP BLANK-082215) to sample cooler.

0840 - At Kaiser. There is a train blocking our access rd to SR8a, so we will do the facility last.

0845 - Collected "SR8-082215-0845" and "SR8-082215-0845-C"

1000 - Plank's Ferry flows - pass #1 = 616 cfs, pass #2 = 609 cfs.

0935 - Collected "SR7-082215-0935" and "SR7-082215-0935-C"

1043 - At Inland empire collecting

Location _____ Date 8/22/15

Project / Client SRCTF

Samples "SR6-082215-1043" and "SR6-082215-1043-C"
1120 - Arrived at Green St.
1127 - "SR4-082215-1127" and "SR4-082215-1127-C" collected.
1150 - Going to get lunch.
1300 - At Spokane County WWTP
1311 - Collected "SR5-082215-1311" and "SR5-082215-1311-C"
1350 - Arrive at SR3
1355 - Collected "SR3-082215-1355" and "SR3-082215-1355-C"
1500 - At Mead Kaiser, driving in to Meadowbrook site. Pass #1: 455 cfs, pass #2 = 447 cfs
1525 - Collected "SR8a-082215-1525" and "SR8a-082215-1525-C"
1630 - Back at Granty's hotel, icing samples for the night. Mike and Pete from Granty are leaving. Brandee from Ecology is also leaving.

Location _____ Date 8/24/15

Project / Client SRCTF

0630 - C. Behnke at Granty's hotel, John added ice to the samples yesterday to keep them cold. I am taking SVL samples to the lab this morning.
0845 - Back from the lab, John has added "blue ice" freezer packs to the Axys coolers. Making copies of paperwork and taping up coolers. Also adding custody seals to coolers.
1030 - At Fed Ex, shipping out (20) coolers to Axys and the M-9 ADCP back to Ann Arbor.
1130 - C. Behnke going to airport.

APPENDIX D – CHAIN-OF-CUSTODY FORMS

AXYS | Axys Analytical Services Ltd

2045 Mills Road West TEL: (250) 655-5800
Sidney, British Columbia, Canada V8L 5X2 FAX: (250) 655-5811

CHAIN OF CUSTODY

AXYS CLIENT #:

REPORT TO:
Company: SRRTTF- ACE
Address: P.O. BOX 3565
SPOKANE, WA, 99220
Contact: BUD LEBER
Phone: 509-927-6554
FAX:
E-mail: bud.leber@kaisertwd.com

INVOICE TO:
Company: SAME
Address:
Contact:
Phone:
FAX:
E-mail:

Project Name/Number: SRRTTF

Sampler's Name: CHRIS BEHNKE
Signature:

Client Sample Identification	Matrix	Sampling Date	Sampling Time	Container Type/No.	Preservative Y / N	AXYS Lab ID Lab use only	ANALYSIS REQUESTED: PCB
SR3-081815-1915	W	8/18/15	1915	1	N		X
SR3-081815-1915-C	W	8/18/15	1915	1	N		X
SR4-081815-1826	W	8/18/15	1826	1	N		X
SR4-081815-1826-C	W	8/18/15	1826	1	N		X
SR5-081815-1352	W		1352	1	N		X
SR5-081815-1352-C	W		1352	1	N		X
SR6-081815-1535	W		1535	1	N		X
SR6-081815-1535-C	W		1535	1	N		X
SR7-081815-1650	W		1650	1	N		X
SR7-081815-1650-C	W		1650	1	N		X
SR8-081815-1205	W		1205	1	N		X

Relinquished by (Signature)	Date	Time	Received by (Signature) Date	Time	Courier / Waybill No.
Relinquished by (Signature)	Date	Time	Received by (Signature) Date	Time	Sample Receipt
Remarks / Type Of Preservative					Temp °C / Cooler Custody Seal # / Cooler Seal Intact Y / N / Cooler Sample Tags Y / N / Cooler

AXYS | Axys Analytical Services Ltd

2045 Mills Road West TEL: (250) 655-5800
Sidney, British Columbia, Canada V8L 5X2 FAX: (250) 655-5811

CHAIN OF CUSTODY

AXYS CLIENT #:

REPORT TO:
Company: SRRTTF - ACE
Address: P.O. BOX 3565
SPOKANE, WA, 99220
Contact: BUD LEBER
Phone: 509 - 927 - 6554
FAX:
E-mail: bud.leber@kaisertwd.com

INVOICE TO:
Company: SAME
Address:
Contact:
Phone:
FAX:
E-mail:

Project Name/Number: SRRTTF

Sampler's Name: CHRIS BEHNKE
Signature:

Client Sample Identification	Matrix	Sampling Date	Sampling Time	Container Type/No.	Preservative Y / N	AXYS Lab ID Lab use only	ANALYSIS REQUESTED: PCB				
SRB - 081815 - 1205 - C	W	8/18/15	1205	1	N		X				
SR9 - 081815 - 0832	W	8/18/15	0832	1	N		X				
SR9 - 081815 - 0832 - C	W	8/18/15	0832	1	N		X				
SR8a - 081815 - 1019	W	8/18/15	1019	1	N		X				
SR8a - 081815 - 1019 - C	W	8/18/15	1019	1	N		X				
DUPLICATE 1	W	8/18/15	—	1	N		X				
BLANK - 081815 - 1535	W	8/18/15	1535	1	N		X				
TRIP BLANK - 081815	W	8/18/15	—	1	N		X				
TRIP BLANK - 081915	W	8/19/15	—	1	N		X				
DUP 3	W	8/20/15	—	1	N		X				
TRIP BLANK - 082015	W	8/20/15	—	1	N		X				

Relinquished by (Signature)	Date	Time	Received by (Signature)	Date	Time	Courier	Waybill No.
Relinquished by (Signature)	Date	Time	Received by (Signature)	Date	Time	Sample Receipt	

Remarks / Type Of Preservative		Cooler
	Temp °C	
	Custody Seal #	
	Seal Intact Y / N	
	Sample Tags Y / N	

AXYS | Axys Analytical Services Ltd

2045 Mills Road West TEL: (250) 655-5800
Sidney, British Columbia, Canada V8L 5X2 FAX: (250) 655-5811

CHAIN OF CUSTODY

AXYS CLIENT #:

REPORT TO:		INVOICE TO:	
Company	SRRTTF - ACE	Company	SAME
Address	P.O. Box 3565	Address	
	SPOKANE, WA, 99220		
Contact	BUD LEBER	Contact	
Phone	509 - 927 - 6554	Phone	
FAX		FAX	
E-mail	bud.leber@kaisertwd.com	E-mail	

Project Name/Number: SRRTTF

Sampler's Name: CHRIS BEHANE
Signature:

Client Sample Identification	Matrix	Sampling Date	Sampling Time	Container Type/No.	Preservative Y / N	AXYS Lab ID Lab use only	ANALYSIS REQUESTED: PCB				
SR3-081915-0821	W	8/19/15	0821	1			X				
SR3-081915-0821-C	W	8/19/15	0821	1			X				
SR4-081915-0928	W	8/19/15	0928	1			X				
SR4-081915-0928-C	W	8/19/15	0928	1			X				
SR7-081915-1026	W	8/19/15	1026	1			X				
SR7-081915-1026-C	W	8/19/15	1026	1			X				
SR8a-081915-1330	W	8/19/15	1330	1			X				
SR8a-081915-1330-C	W	8/19/15	1330	1			X				
SR9-081915-1450	W	8/19/15	1450	1			X				
SR9-081915-1450-C	W	8/19/15	1450	1			X				
DUP 2	W	8/19/15	—	1			X				

Relinquished by (Signature)	Date	Time	Received by (Signature)	Date	Time	Courier	Waybill No.
Relinquished by (Signature)	Date	Time	Received by (Signature)	Date	Time	Sample Receipt	
Remarks / Type Of Preservative							Cooler
						Temp °C	
						Custody Seal #	
						Seal Intact Y / N	
						Sample Tags Y / N	

AXYS | Axys Analytical Services Ltd

2045 Mills Road West TEL: (250) 655-5800
Sidney, British Columbia, Canada V8L 5X2 FAX: (250) 655-5811

CHAIN OF CUSTODY

AXYS CLIENT #:

REPORT TO:
Company: SRRTTF - ACE
Address: P.O. Box 3565
SPOKANE, WA, 99220
Contact: BUD LEBER
Phone: 509-927-6554
FAX:
E-mail: bud.leber@kaisertwd.com

INVOICE TO:
Company: SAME
Address:
Contact:
Phone:
FAX:
E-mail:

Project Name/Number: SRRTTF

Sampler's Name: CHRIS BEHNKE
Signature: [signature]

ANALYSIS REQUESTED: PCB

Client Sample Identification	Matrix	Sampling Date	Sampling Time	Container Type/No.	Preservative Y / N	AXYS Lab ID Lab use only	PCB				
SR9-082015-0750	W	8/20/15	0750	1	N		X				
SR9-082015-0750-C	W		0750	1	N		X				
SR8a-082015-0848	W		0848	1	N		X				
SR8a-082015-0848-C	W		0848	1	N		X				
SR8-082015-0945	W		0945	1	N		X				
SR8-082015-0945-C	W		0945	1	N		X				
SR6-082015-1041	W		1041	1	N		X				
SR6-082015-1041-C	W		1041	1	N		X				
SR7-082015-1130	W		1130	1	N		X				
SR7-082015-1130-C	W		1130	1	N		X				
~~[illegible]~~	~~W~~							CB			

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Relinquished by (Signature)	Date	Time	Received by (Signature)	Date	Time	Sample Receipt	
Remarks / Type Of Preservative							Cooler
						Temp °C	
						Custody Seal #	
						Seal Intact Y / N	
						Sample Tags Y / N	

AXYS | Axys Analytical Services Ltd

2045 Mills Road West TEL: (250) 655-5800
Sidney, British Columbia, Canada V8L 5X2 FAX: (250) 655-5811

CHAIN OF CUSTODY

AXYS CLIENT #:

REPORT TO:
Company: SRRTTF - ACE (BUD LEBER)
Address: P.O. BOX 3565
SPOKANE, WA, 99220
c/o - BUD LEBER
Contact:
Phone: 509-927-6554
FAX:
E-mail: bud.leber@kaisertwd.com

INVOICE TO: SAME
Company:
Address:
Contact:
Phone:
FAX:
E-mail:

Project Name/Number: SRRTTF

Sampler's Name: CHRIS BEHANE
Signature:

Client Sample Identification	Matrix	Sampling Date	Sampling Time	Container Type/No.	Preservative Y / N	AXYS Lab ID Lab use only	ANALYSIS REQUESTED: PCB
SR5-082015-1330	W	8/20/15	1330	1	N		X
SR5-082015-1330-C	W	8/20/15	1330	1	N		X
BLANK-082015	W	8/20/15	1330	1	N		X
SR4-082015-1410	W	8/20/15	1410	1	N		X
SR4-082015-1410-C	W	8/20/15	1410	1	N		X
SR3-082015-1500	W	8/20/15	1500	1	N		X
SR3-082015-1500-C	W	8/20/15	1500	1	N		X
SR3-082115-0853	W	8/21/15	0853	1	N		X
SR3-082115-0853-C	W	8/21/15	0853	1	N		X
SR4-082115-0949	W	8/21/15	0949	1	N		X
SR4-082115-0949-C	W	8/21/15	0949	1	N		X

Relinquished by (Signature)	Date	Time	Received by (Signature) Date	Time	Courier / Waybill No.
Relinquished by (Signature)	Date	Time	Received by (Signature) Date	Time	Sample Receipt
Remarks / Type Of Preservative					Temp °C / Cooler
					Custody Seal #
					Seal Intact Y / N
					Sample Tags Y / N

AXYS | Axys Analytical Services Ltd

2045 Mills Road West TEL: (250) 655-5800
Sidney, British Columbia, Canada V8L 5X2 FAX: (250) 655-5811

CHAIN OF CUSTODY

AXYS CLIENT #:

REPORT TO:		**INVOICE TO:**	
Company	SRRTTF - ACE	Company	SAME
Address	P.O. Box 3565	Address	
	SPOKANE, WA, 99220		
Contact	BUD LEBER	Contact	
Phone	509-927-6554	Phone	
FAX		FAX	
E-mail	bud.leber@kaisertwd.com	E-mail	
Project Name/Number:	SRRTTF	Sampler's Name:	CHRIS BOHNE
		Signature:	

Client Sample Identification	Matrix	Sampling Date	Sampling Time	Container Type/No.	Preservative Y / N	AXYS Lab ID Lab use only	ANALYSIS REQUESTED: PCB
SR7-082115-1045	W	8/21/15	1045	1	N		X
SR7-082115-1045-C	W		1045	1	N		X
SR8a-082115-1305	W		1305	1	N		X
SR8a-082115-1305-C	W		1305	1	N		X
SR9-082115-1429	W		1429	1	N		X
SR9-082115-1429-C	W		1429	1	N		X
DUP 4	W	8/21/15	—	1	N		X
TRIP BLANK-082115	W	8/21/15	1300	1	N		X
SR9-082215-0733	W	8/22/15	0733	1	N		X
SR9-082215-0733-C	W	8/22/15	0733	1	N		X
DUP 5	W	8/22/15	—	1	N		X

Relinquished by (Signature)	Date	Time	Received by (Signature)	Date	Time
Relinquished by (Signature)	Date	Time	Received by (Signature)	Date	Time

Courier	Waybill No.

Remarks / Type Of Preservative

Sample Receipt

	Cooler
Temp °C	
Custody Seal #	
Seal Intact Y / N	
Sample Tags Y / N	

AXYS | Axys Analytical Services Ltd

2045 Mills Road West TEL: (250) 655-5800
Sidney, British Columbia, Canada V8L 5X2 FAX: (250) 655-5811

CHAIN OF CUSTODY

AXYS CLIENT #:

REPORT TO:
Company: SRRTTF - ACE
Address: P.O. Box 3565
SPOKANE, WA, 99220
Contact: BUD LEBER
Phone: 509-927-0554
FAX:
E-mail: bud.leber@kaisertwd.com

INVOICE TO:
Company: SAME
Address:
Contact:
Phone:
FAX:
E-mail:

Project Name/Number: SRRTTF

Sampler's Name: CHRIS BETHUNE
Signature:

ANALYSIS REQUESTED: PCB

Client Sample Identification	Matrix	Sampling Date	Sampling Time	Container Type/No.	Preservative Y / N	AXYS Lab ID Lab use only	PCB
TRIP BLANK - 082215	W	8/22/15	—	1	N		X
Blank - 082215 - 0812	W	8/22/15	0812	1	N		X
SRB - 082215 - 0845	W	8/22/15	0845	1	N		X
SR3 - 082215 - 0845-C	W	8/22/15	0845	1	N		X
SR7 - 082215 - 0935	W	8/22/15	0935	1	N		X
SR7 - 082215 - 0935-C	W	8/22/15	0935	1	N		X
SR6 - 082215 - 1043	W	8/22/15	1043	1	N		X
SR6 - 082215 - 1043 - C	W	8/22/15	1043	1	N		X
SR4 - 082215 - 1127	W	8/22/15	1127	1	N		X
SR4 - 082215 - 1127 - C	W	8/22/15	1127	1	N		X

Relinquished by (Signature)	Date	Time	Received by (Signature) Date	Time	Courier	Waybill No.
Relinquished by (Signature)	Date	Time	Received by (Signature) Date	Time	Sample Receipt	
Remarks / Type Of Preservative						Cooler
					Temp °C	
					Custody Seal #	
					Seal Intact Y / N	
					Sample Tags Y / N	

AXYS | Axys Analytical Services Ltd

2045 Mills Road West TEL: (250) 655-5800
Sidney, British Columbia, Canada V8L 5X2 FAX: (250) 655-5811

CHAIN OF CUSTODY

AXYS CLIENT #:

REPORT TO:
Company: SRRTTF-ACE
Address: P.O. BOX 3565
SPOKANE, WA, 99220
Contact: BUD LEBER
Phone: 509-927-6554
FAX:
E-mail: bud.leber@kaisertwd.com

INVOICE TO:
Company: SAME
Address:
Contact:
Phone:
FAX:
E-mail:

Project Name/Number: SRRTTF

Sampler's Name: CHRIS BEHANE
Signature:

Client Sample Identification	Matrix	Sampling Date	Sampling Time	Container Type/No.	Preservative Y / N	AXYS Lab ID Lab use only	ANALYSIS REQUESTED: PCB
SR5-082215-1311	W	8/22/15	1311	1	N		X
SR5-082215-1311-C	W	8/22/15	1311	1	N		X
SR3-082215-1355	W	8/22/15	1355	1	N		X
SR3-082215-1355-C	W	8/22/15	1355	1	N		X
SR8a-082215-1525	W	8/22/15	1525	1	N		X
SR8a-082215-1525-C	W	8/22/15	1525	1	N		X

Relinquished by (Signature)	Date	Time	Received by (Signature)	Date	Time
Relinquished by (Signature)	Date	Time	Received by (Signature)	Date	Time

Remarks / Type Of Preservative

Courier	Waybill No.

Sample Receipt

	Cooler
Temp °C	
Custody Seal #	
Seal Intact Y / N	
Sample Tags Y / N	

Date: 8/18/15 (Day 1 of 5)

- SR3-081815-1915;
- SR3-081815-1915-C;
- SR4-081815-1826;
- SR4-081815-1826-C;
- SR5-081815-1352;
- SR5-081815-1352-C;
- SR6-081815-1535;
- SR6-081815-1535-C;
- SR7-081815-1650;
- SR7-081815-1650-C;
- SR8-081815-1205;
- SR8-081815-1205-C;
- SR8a-081815-1019;
- SR8a-081815-1019-C;
- SR9-081815-0832;
- SR9-081815-0832-C;
- Duplicate 1
- Blank-081815-1535;
- Trip Blank- 081815.

Date: 8/19/15 (Day 2 of 5)

- SR3-081915-0821;
- SR3-081915-0821-C;
- SR4-081915-0928;
- SR4-081915-0928-C;
- SR7-081915-1026;
- SR7-081915-1026-C;
- SR8a-081915-1330;
- SR8a-081915-1330-C;
- SR9-081915-1450;
- SR9-081915-1450-C;
- Dup 2
- Trip Blank- 081915.

Date: 8/20/15 (Day 3 of 5)

- SR3-082015-1500;
- SR3-082015-1500-C;
- SR4-082015-1410;
- SR4-082015-1410-C;
- SR5-082015-1330;
- SR5-082015-1330-C;
- SR6-082015-1041;
- SR6-082015-1041-C;
- SR7-082015-1130;
- SR7-082015-1130-C;
- SR8-082015-0945;
- SR8-082015-0945-C;
- SR8a-082015-0845;
- SR8a-082015-0845-C;
- SR9-082015-0750;
- SR9-082015-0750-C;
- Dup 3
- Blank-082015;
- Trip Blank- 082015.

Date: 8/21/15 (Day 4 of 5)

- SR3-082115-0853;
- SR3-082115-0853-C;
- SR4-082115-0949;
- SR4-082115-0949-C;
- SR7-082115-1045;
- SR7-082115-1045-C;
- SR8a-082115-1305;
- SR8a-082115-1305-C;
- SR9-082115-1429;
- SR9-082115-1429-C;
- Dup 4
- Trip Blank- 082115.

Date: 8/22/15 (Day 5 of 5)

- SR3-082215-1355;
- SR3-082215-1355-C;
- SR4-082215-1127;
- SR4-082215-1127-C;
- SR5-082215-1311;
- SR5-082215-1311-C;
- SR6-082215-1043;
- SR6-082215-1043-C;
- SR7-082215-0935;
- SR7-082215-0935-C;
- SR8-082215-0845;
- SR8-082215-0845-C;
- SR8a-082215-1525;
- SR8a-082215-1525-C;
- SR9-082215-0733;
- SR9-082215-0733-C;
- Dup 5;
- Blank-0822215-0812;
- Trip Blank- 082215.