DATA VALIDATION REPORT PERFORMANCE VERIFICATION SAMPLING EVENT SEPTEMBER 2005

Groundwater Migration Control System Sauget Area 2

Prepared for
Sauget Area 2 Sites Group
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July 2006

URS

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Project #21561510

URS

July 17, 2006

Mr. Steve Smith
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Re: Data Validation Report
Groundwater Migration Control System
Surface Water and Sediment Sampling Event – September 2005
Sauget, Illinois
URS Project No. 21561391

Dear Nabil:

URS is pleased to present this Data Validation Report for the surface water and sediment sampling that was conducted as part of the Groundwater Migration Control System Performance Verification Sampling Program. This report provides:

1. A brief summary of field activities,
2. A figure showing the sampling locations,
3. Detection Tables,
4. Sample summary lists,
5. Data validation checklists,
6. Data tables, and
7. Qualifier definition tables.

SCOPE OF WORK

The surface water and sediment sampling activities were conducted on September 21 through 23, 2005 in accordance with the Surface Water and Sediment Performance Verification Sampling Plan dated January 31, 2003. During this sampling event, surface water and sediment samples were collected from a total of five locations immediately adjacent to Site R, stations PDA-2,3,4,5, and 9 as defined in the Menzie Curra sampling effort in 2000. In addition, samples were also collected from

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three locations downgradient of Site R at locations R3AM, R3BM, and R3CM as defined in the original RI sampling effort in 2002 and one upgradient location PDA-9A.

Surface Water Monitoring

Surface water samples were collected at the sediment-water interface (within one foot of the bottom) at all stations. Because of the volumes required and sampling limitations due to the fast currents, a peristaltic pump system was utilized. Decontaminated tubing was used at each location. All chemical analysis in surface water samples will be conducted in unfiltered samples.

All surface water samples were analyzed for VOCs, SVOCs, pesticides, herbicides, and metals. In addition, field measurements of temperature, pH, dissolved oxygen, and conductivity were recorded. In addition to collecting an unfiltered water sample, an additional unpreserved water sample was collected for trace metals analysis and filtered in the laboratory. The VOC samples were collected by directly filling 40-mL VOC vials from the peristaltic pump tubing to minimize VOC loss and avoid preservative loss. One field duplicate, one field blank and one MS/MSD sample was collected for QC purposes.

All surface water samples were appropriately labeled with location, date, sampler's initials, test type and preservative and stored on ice, maintained at 4°C and delivered to the Severn Trent Laboratory (STL) in Savannah, Georgia. The chain-of-custody (COC) documentation accompanied all samples from the field to the laboratory.

Sediment Sampling

Sediment samples were collected using a Ponar Dredge sampler from the upper few inches (5 to 6 cm). This depth interval was selected as the zone most relevant to exposures of ecological receptors. Each sediment sample was analyzed for VOCs, SVOCs, pesticides, herbicides, and metals.

Samples for VOCs were obtained from the first grab. All other samples were drawn from a composite made up of the upper few inches of sediment from additional grab samples. The VOC sample was collected using a 5 mL modified syringe/plunger. The plunger tube was inserted into the sediment below the surface and removed with care taken to prevent loss. The plunger was then utilized to push the sample into the bottle. These samples will be released into 1) laboratory water

preservative for low-level analysis, 2) methanol preservative for high-level analysis. For all other parameters, the sediment (~5 to 6 cm) was removed from the sampler and homogenized in a stainless steel bowl using a stainless steel spoon or scoop. Each sample was taken using either a stainless steel spoon and placed in the appropriate container.

Field QC samples, included one field duplicate, one field rinsate blank and one trip blank, and matrix QC. Each sample container was labeled to identify sample location, analysis required and preservation, date, and the initials of the collector. All sediment samples were kept on ice within coolers maintained at 4°C and delivered to the STL lab in Savannah, Georgia. The COC documentation will accompany all samples from the field to the laboratory.

Prior to sampling at a location, all sampling devices were decontaminated.

Should you have any questions or comments regarding this Corrective Action Plan, please do not hesitate to contact me at 314.429.0100.

Very truly yours,

Robert Veenstra
Vice President

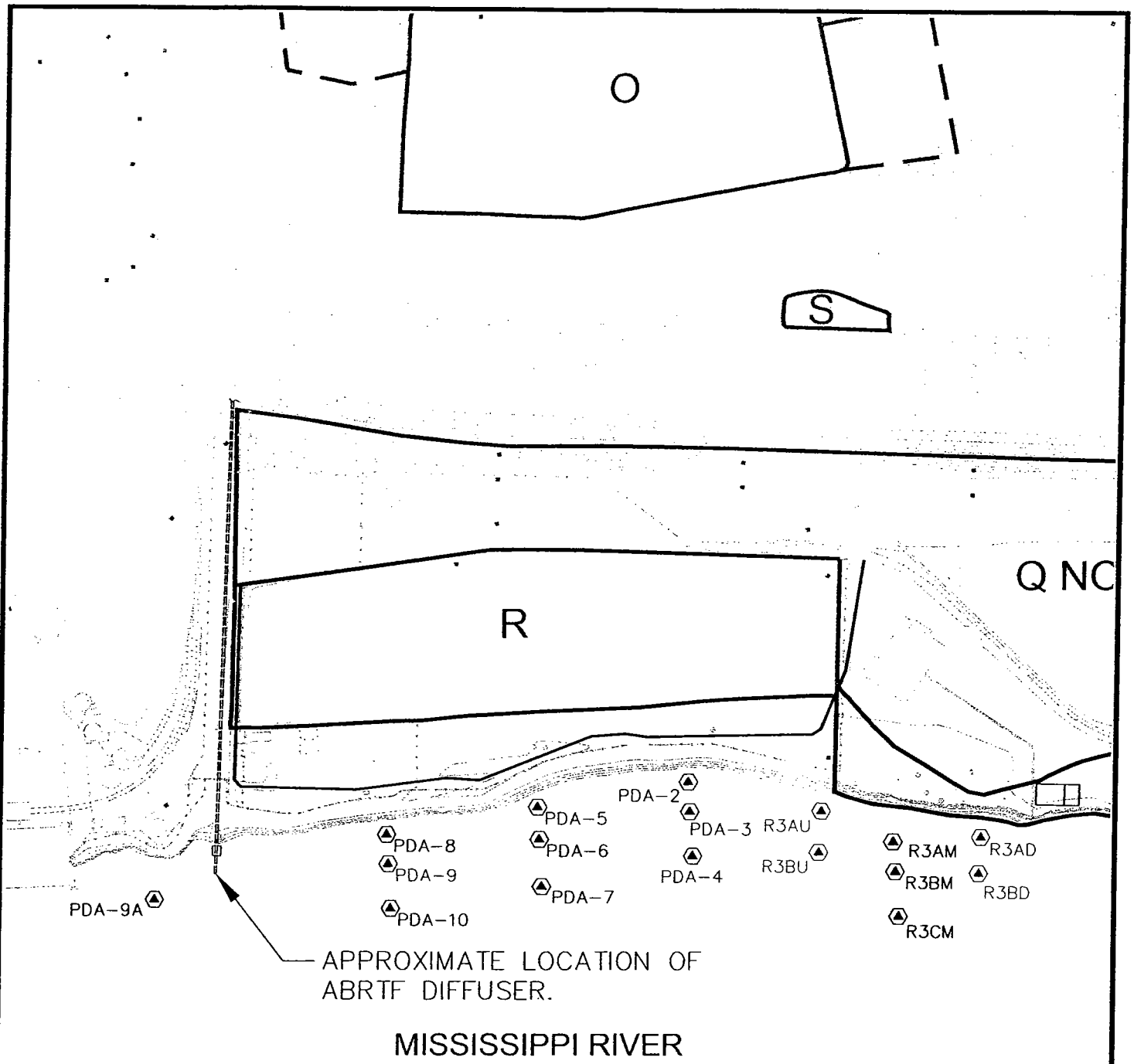
cc: Nabil S. Fayoumi - USEPA

Enclosure

RBV/SJS:mlr

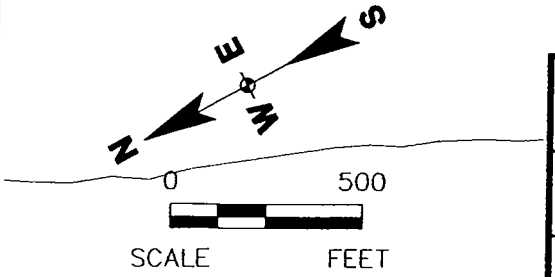
URS

Figure



LEGEND

- SURFACE WATER/SEDIMENT SAMPLE LOCATION (2005 SA2 SUPPLEMENTAL RI)
- SURFACE WATER/SEDIMENT SAMPLE LOCATION (BARRIER WALL UAO)
- SURFACE WATER/SEDIMENT SAMPLE LOCATION (2004 SA2 RI)
- SURFACE WATER/SEDIMENT SAMPLE LOCATION (2000 MENZIE CURRA)



SAUGET AREA 2 GROUNDWATER MIGRATION CONTROL SYSTEM SAUGET, ILLINOIS		PROJECT NO. 21561391
URS		
DRN. BY:djd 6/14/06 DSGN. BY:ss CHKD. BY:	Surface Water & Sediment Sampling Locations September 2005	FIG. NO. 1

File: P:\ENVIRONMENTAL\21561510 (SA2)\SEDIMENT-SURFACE WATER\SEPTEMBER 2005\FIG 1 SURFACE WATER & SEDIMENT SAMPLING LOCATIONS (SEPT 05).DWG Last edited: 07/17/06 @ 3:12 p.m. WC-ST.LOUIS, MO

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Detection Tables

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Detections
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	VOCs	Chlorobenzene	78	ug/Kg		J	F
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	VOCs	Ethylbenzene	2.1	ug/Kg	J		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	1,2-Dichlorobenzene	240	ug/Kg	J		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	1,4-Dichlorobenzene	200	ug/Kg	J		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	P-Chloroaniline	500	ug/Kg	J		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	Pyrene	45	ug/Kg	J		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Herbicides	2,4-D	120	ug/Kg		J	F
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Herbicides	Dichlorprop	31	ug/Kg	J		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Metals	Aluminum	12000	mg/Kg			
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Metals	Arsenic	6.7	mg/Kg			
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Metals	Barium	180	mg/Kg			
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Metals	Beryllium	0.65	mg/Kg	J		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Metals	Cadmium	0.57	mg/Kg	J		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Metals	Calcium	11000	mg/Kg			
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Metals	Chromium	17	mg/Kg			
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Metals	Cobalt	7.7	mg/Kg			
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Metals	Copper	18	mg/Kg			
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Metals	Iron	17000	mg/Kg			
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Metals	Lead	20	mg/Kg			
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Metals	Magnesium	4100	mg/Kg			
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Metals	Manganese	770	mg/Kg			
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Metals	Mercury	0.046	mg/Kg			
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Metals	Nickel	19	mg/Kg			
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Metals	Potassium	1700	mg/Kg	B		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Metals	Vanadium	28	mg/Kg			
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Metals	Zinc	210	mg/Kg			
Sediment	RIVER	PDA2	DUP SED	9/22/05	VOCs	Acetone	25	ug/Kg	J		
Sediment	RIVER	PDA2	DUP SED	9/22/05	VOCs	Benzene	4.9	ug/Kg	J		
Sediment	RIVER	PDA2	DUP SED	9/22/05	VOCs	Chlorobenzene	450	ug/Kg		J	F
Sediment	RIVER	PDA2	DUP SED	9/22/05	VOCs	Ethylbenzene	3.1	ug/Kg	J		
Sediment	RIVER	PDA2	DUP SED	9/22/05	VOCs	Toluene	8.5	ug/Kg	J		
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	1,2-Dichlorobenzene	180	ug/Kg	J	J	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	1,4-Dichlorobenzene	160	ug/Kg	J	J	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	P-Chloroaniline	380	ug/Kg	J	J	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	Herbicides	2,4-D	51	ug/Kg	P	J	F
Sediment	RIVER	PDA2	DUP SED	9/22/05	Herbicides	Dichlorprop	19	ug/Kg	J		
Sediment	RIVER	PDA2	DUP SED	9/22/05	Metals	Aluminum	12000	mg/Kg			
Sediment	RIVER	PDA2	DUP SED	9/22/05	Metals	Arsenic	5.9	mg/Kg			
Sediment	RIVER	PDA2	DUP SED	9/22/05	Metals	Barium	160	mg/Kg			
Sediment	RIVER	PDA2	DUP SED	9/22/05	Metals	Beryllium	0.65	mg/Kg	J		
Sediment	RIVER	PDA2	DUP SED	9/22/05	Metals	Cadmium	0.53	mg/Kg	J		
Sediment	RIVER	PDA2	DUP SED	9/22/05	Metals	Calcium	11000	mg/Kg			
Sediment	RIVER	PDA2	DUP SED	9/22/05	Metals	Chromium	17	mg/Kg			
Sediment	RIVER	PDA2	DUP SED	9/22/05	Metals	Cobalt	7.5	mg/Kg			

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Detections
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	PDA2	DUP SED	9/22/05	Metals	Copper	18	mg/Kg			
Sediment	RIVER	PDA2	DUP SED	9/22/05	Metals	Iron	17000	mg/Kg			
Sediment	RIVER	PDA2	DUP SED	9/22/05	Metals	Lead	21	mg/Kg			
Sediment	RIVER	PDA2	DUP SED	9/22/05	Metals	Magnesium	4200	mg/Kg			
Sediment	RIVER	PDA2	DUP SED	9/22/05	Metals	Manganese	760	mg/Kg			
Sediment	RIVER	PDA2	DUP SED	9/22/05	Metals	Mercury	0.04	mg/Kg	J		
Sediment	RIVER	PDA2	DUP SED	9/22/05	Metals	Nickel	18	mg/Kg			
Sediment	RIVER	PDA2	DUP SED	9/22/05	Metals	Potassium	1800	mg/Kg	B		
Sediment	RIVER	PDA2	DUP SED	9/22/05	Metals	Vanadium	29	mg/Kg			
Sediment	RIVER	PDA2	DUP SED	9/22/05	Metals	Zinc	200	mg/Kg			

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Detections
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	VOCs	Chlorobenzene	4.8	ug/Kg	J		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	1,2-Dichlorobenzene	52	ug/Kg	J		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	P-Chloroaniline	38	ug/Kg	J		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Pesticides	4,4'-DDD	6.5	ug/Kg			
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Herbicides	2,4-D	56	ug/Kg			
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Herbicides	Dichlorprop	15	ug/Kg	J		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Metals	Aluminum	4600	mg/Kg			
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Metals	Arsenic	3.7	mg/Kg			
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Metals	Barium	97	mg/Kg			
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Metals	Beryllium	0.28	mg/Kg	J		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Metals	Cadmium	0.75	mg/Kg			
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Metals	Calcium	6500	mg/Kg			
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Metals	Chromium	8.7	mg/Kg			
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Metals	Cobalt	4.1	mg/Kg			
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Metals	Copper	11	mg/Kg			
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Metals	Iron	8200	mg/Kg			
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Metals	Lead	18	mg/Kg			
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Metals	Magnesium	2300	mg/Kg			
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Metals	Manganese	420	mg/Kg			
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Metals	Mercury	0.016	mg/Kg	J		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Metals	Nickel	9.7	mg/Kg			
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Metals	Potassium	720	mg/Kg	B		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Metals	Vanadium	13	mg/Kg			
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Metals	Zinc	260	mg/Kg			

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Detections
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	VOCs	Chlorobenzene	56	ug/Kg			
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	1,4-Dichlorobenzene	650	ug/Kg			
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	P-Chloroaniline	320	ug/Kg	J		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Pesticides	4,4'-DDD	1.1	ug/Kg	J		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Metals	Aluminum	2100	mg/Kg			
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Metals	Arsenic	2.2	mg/Kg			
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Metals	Barium	43	mg/Kg			
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Metals	Beryllium	0.14	mg/Kg	J		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Metals	Cadmium	0.29	mg/Kg	J		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Metals	Calcium	2500	mg/Kg			
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Metals	Chromium	3.8	mg/Kg			
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Metals	Cobalt	3.1	mg/Kg			
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Metals	Copper	3.9	mg/Kg			
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Metals	Iron	4500	mg/Kg			
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Metals	Lead	6.3	mg/Kg			
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Metals	Magnesium	1000	mg/Kg			
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Metals	Manganese	130	mg/Kg			
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Metals	Mercury	0.021	mg/Kg	J		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Metals	Nickel	7.2	mg/Kg			
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Metals	Potassium	360	mg/Kg	B		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Metals	Vanadium	6	mg/Kg			
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Metals	Zinc	140	mg/Kg			

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Sediment Sample Detections
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	VOCs	Chlorobenzene	7.6	ug/Kg			
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	VOCs	Ethylbenzene	1.1	ug/Kg	J		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	P-Chloroaniline	33	ug/Kg	J		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Metals	Aluminum	2000	mg/Kg			
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Metals	Arsenic	2.3	mg/Kg			
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Metals	Barium	49	mg/Kg			
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Metals	Beryllium	0.11	mg/Kg	J		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Metals	Cadmium	1.5	mg/Kg			
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Metals	Calcium	2000	mg/Kg			
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Metals	Chromium	4.4	mg/Kg			
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Metals	Cobalt	5.1	mg/Kg			
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Metals	Copper	8	mg/Kg			
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Metals	Iron	6400	mg/Kg			
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Metals	Lead	7.6	mg/Kg			
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Metals	Magnesium	1000	mg/Kg			
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Metals	Manganese	140	mg/Kg			
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Metals	Mercury	0.0066	mg/Kg	J		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Metals	Nickel	11	mg/Kg			
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Metals	Potassium	190	mg/Kg	B		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Metals	Vanadium	7.4	mg/Kg			
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Metals	Zinc	510	mg/Kg			

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Detections
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	P-Chloroaniline	39	ug/Kg	J		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Metals	Aluminum	900	mg/Kg			
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Metals	Arsenic	2	mg/Kg			
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Metals	Barium	22	mg/Kg			
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Metals	Beryllium	0.098	mg/Kg	J		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Metals	Calcium	1800	mg/Kg		J	M
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Metals	Chromium	2.6	mg/Kg			
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Metals	Cobalt	2.6	mg/Kg			
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Metals	Copper	0.67	mg/Kg	J		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Metals	Iron	3200	mg/Kg			
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Metals	Lead	2	mg/Kg			
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Metals	Magnesium	710	mg/Kg		J	M
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Metals	Manganese	110	mg/Kg		J	K,M
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Metals	Nickel	6.1	mg/Kg			
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Metals	Potassium	160	mg/Kg	B		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Metals	Vanadium	3.2	mg/Kg		J	K
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Metals	Zinc	8.2	mg/Kg			

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Detections
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	VOCs	Chlorobenzene	2.4	ug/Kg	J		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	P-Chloroaniline	37	ug/Kg	J		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Metals	Aluminum	1000	mg/Kg			
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Metals	Arsenic	1.2	mg/Kg			
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Metals	Barium	27	mg/Kg			
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Metals	Beryllium	0.073	mg/Kg	J		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Metals	Calcium	1700	mg/Kg			
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Metals	Chromium	2.5	mg/Kg			
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Metals	Cobalt	2.1	mg/Kg			
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Metals	Copper	0.63	mg/Kg	J		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Metals	Iron	3200	mg/Kg			
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Metals	Lead	2.3	mg/Kg			
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Metals	Magnesium	840	mg/Kg			
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Metals	Manganese	200	mg/Kg			
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Metals	Mercury	0.029	mg/Kg			
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Metals	Nickel	3.9	mg/Kg	J		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Metals	Potassium	200	mg/Kg	B		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Metals	Vanadium	4.1	mg/Kg			
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Metals	Zinc	43	mg/Kg			

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Detections
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	VOCs	Chlorobenzene	4.7	ug/Kg	J		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	VOCs	Xylenes, Total	3.6	ug/Kg	J		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	1,2-Dichlorobenzene	74	ug/Kg	J		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	1,4-Dichlorobenzene	37	ug/Kg	J		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	bis(2-Ethylhexyl)phthalate	55	ug/Kg	J		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	P-Chloroaniline	86	ug/Kg	J		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	Pyrene	32	ug/Kg	J		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Herbicides	2,4-D	63	ug/Kg			
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Herbicides	Dichlorprop	18	ug/Kg	J		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Metals	Aluminum	2400	mg/Kg			
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Metals	Arsenic	3.4	mg/Kg			
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Metals	Barium	93	mg/Kg			
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Metals	Beryllium	0.18	mg/Kg	J		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Metals	Cadmium	1.7	mg/Kg			
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Metals	Calcium	5600	mg/Kg			
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Metals	Chromium	5.3	mg/Kg			
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Metals	Cobalt	3.3	mg/Kg			
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Metals	Copper	9.2	mg/Kg			
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Metals	Iron	6500	mg/Kg			
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Metals	Lead	29	mg/Kg		J	M
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Metals	Magnesium	2100	mg/Kg			
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Metals	Manganese	210	mg/Kg		J	M
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Metals	Mercury	0.023	mg/Kg	J	J	H
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Metals	Nickel	7.9	mg/Kg			
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Metals	Potassium	460	mg/Kg			
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Metals	Vanadium	8.4	mg/Kg			
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Metals	Zinc	540	mg/Kg			

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Detections
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Metals	Aluminum	1000	mg/Kg			
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Metals	Arsenic	1.3	mg/Kg			
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Metals	Barium	26	mg/Kg			
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Metals	Beryllium	0.081	mg/Kg	J		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Metals	Calcium	1800	mg/Kg			
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Metals	Chromium	2.8	mg/Kg			
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Metals	Cobalt	2.5	mg/Kg			
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Metals	Copper	1	mg/Kg	J		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Metals	Iron	3500	mg/Kg			
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Metals	Lead	3.4	mg/Kg	B		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Metals	Magnesium	720	mg/Kg			
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Metals	Manganese	100	mg/Kg			
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Metals	Nickel	6.2	mg/Kg			
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Metals	Potassium	190	mg/Kg			
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Metals	Vanadium	5.7	mg/Kg			
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Metals	Zinc	26	mg/Kg			

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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Metals	Aluminum	1100	mg/Kg			
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Metals	Arsenic	0.98	mg/Kg	J		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Metals	Barium	17	mg/Kg			
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Metals	Beryllium	0.064	mg/Kg	J		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Metals	Calcium	1700	mg/Kg			
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Metals	Chromium	3.2	mg/Kg			
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Metals	Cobalt	2.8	mg/Kg			
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Metals	Copper	0.66	mg/Kg	J		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Metals	Iron	3200	mg/Kg			
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Metals	Lead	2	mg/Kg	B		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Metals	Magnesium	970	mg/Kg			
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Metals	Manganese	71	mg/Kg			
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Metals	Mercury	0.0042	mg/Kg	J	J	H
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Metals	Nickel	6	mg/Kg			
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Metals	Potassium	150	mg/Kg			
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Metals	Vanadium	4.1	mg/Kg			
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Metals	Zinc	9.1	mg/Kg			

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Detections
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	VOCs	Chlorobenzene	0.87	ug/L	J	J	F
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Herbicides	2,4-D	0.25	ug/L	JP		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Aluminum	3.1	mg/L			
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Arsenic	0.0066	mg/L	J		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Barium	0.11	mg/L			
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Barium (Dissolved)	0.076	mg/L			
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Beryllium	0.00014	mg/L	J		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Calcium	46	mg/L			
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Calcium (Dissolved)	45	mg/L			
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Chromium	0.0038	mg/L	J		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Cobalt	0.0014	mg/L	J		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Copper	0.0039	mg/L	J		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Iron	3	mg/L			
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Lead	0.0047	mg/L	J		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Magnesium	21	mg/L			
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Magnesium (Dissolved)	21	mg/L			
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Manganese	0.24	mg/L			
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Nickel	0.0064	mg/L	J		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Nickel (Dissolved)	0.0024	mg/L	J		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Potassium	5.5	mg/L			
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Potassium (Dissolved)	4.8	mg/L			
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Sodium	35	mg/L			
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Sodium (Dissolved)	34	mg/L			
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Vanadium	0.0097	mg/L	J		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Vanadium (Dissolved)	0.0033	mg/L	J		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Zinc	0.052	mg/L			
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Zinc (Dissolved)	0.0061	mg/L	J		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	VOCs	Chlorobenzene	4.3	ug/L		J	F
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Aluminum	2.4	mg/L			
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Barium	0.11	mg/L			
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Barium (Dissolved)	0.074	mg/L			
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Beryllium	0.00012	mg/L	J		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Calcium	46	mg/L			
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Calcium (Dissolved)	43	mg/L			
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Chromium	0.0028	mg/L	J		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Cobalt	0.0013	mg/L	J		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Copper	0.0033	mg/L	J		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Iron	2.3	mg/L			
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Lead (Dissolved)	0.0024	mg/L	J		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Magnesium	21	mg/L			
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Magnesium (Dissolved)	20	mg/L			
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Manganese	0.21	mg/L			
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Nickel	0.0046	mg/L	J		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Potassium	5.4	mg/L			

Sauget Area 2
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Potassium (Dissolved)	4.7	mg/L			
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Sodium	35	mg/L			
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Sodium (Dissolved)	33	mg/L			
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Vanadium	0.0084	mg/L	J		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Vanadium (Dissolved)	0.002	mg/L	J		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Zinc	0.019	mg/L	J		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Zinc (Dissolved)	0.0037	mg/L	J		

Sauget Area 2
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	VOCs	Chlorobenzene	0.49	ug/L	J		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Aluminum	3.2	mg/L			
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Barium	0.11	mg/L			
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Barium (Dissolved)	0.076	mg/L			
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Beryllium	0.00013	mg/L	J		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Calcium	46	mg/L			
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Calcium (Dissolved)	44	mg/L			
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Chromium	0.0039	mg/L	J		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Cobalt	0.0015	mg/L	J		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Copper	0.0036	mg/L	J		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Iron	3	mg/L			
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Lead	0.0045	mg/L	J		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Magnesium	21	mg/L			
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Magnesium (Dissolved)	20	mg/L			
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Manganese	0.21	mg/L			
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Nickel	0.0055	mg/L	J		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Nickel (Dissolved)	0.002	mg/L	J		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Potassium	5.5	mg/L			
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Potassium (Dissolved)	4.9	mg/L			
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Sodium	34	mg/L			
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Sodium (Dissolved)	34	mg/L			
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Vanadium	0.01	mg/L			
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Vanadium (Dissolved)	0.0031	mg/L	J		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Zinc	0.03	mg/L			
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Zinc (Dissolved)	0.0065	mg/L	J		

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Surface Water Sample Detections
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Aluminum	2.6	mg/L			
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Arsenic	0.0046	mg/L	J		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Arsenic (Dissolved)	0.0061	mg/L	J		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Barium	0.11	mg/L			
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Barium (Dissolved)	0.075	mg/L			
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Calcium	46	mg/L			
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Calcium (Dissolved)	43	mg/L			
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Chromium	0.0034	mg/L	J		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Cobalt	0.0012	mg/L	J		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Copper	0.0036	mg/L	J		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Iron	2.5	mg/L			
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Lead	0.0035	mg/L	J		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Magnesium	22	mg/L			
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Magnesium (Dissolved)	20	mg/L			
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Manganese	0.18	mg/L			
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Nickel	0.0047	mg/L	J		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Nickel (Dissolved)	0.003	mg/L	J		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Potassium	5.5	mg/L			
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Potassium (Dissolved)	4.8	mg/L			
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Sodium	34	mg/L			
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Sodium (Dissolved)	33	mg/L			
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Vanadium	0.009	mg/L	J		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Vanadium (Dissolved)	0.0034	mg/L	J		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Zinc	0.012	mg/L	J		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Detections
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Aluminum	3.8	mg/L			
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Barium	0.12	mg/L			
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Barium (Dissolved)	0.074	mg/L			
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Beryllium	0.00015	mg/L	J		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Calcium	45	mg/L			
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Calcium (Dissolved)	43	mg/L			
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Chromium	0.0047	mg/L	J		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Cobalt	0.0012	mg/L	J		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Copper	0.005	mg/L	J		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Iron	3.5	mg/L			
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Lead	0.0035	mg/L	J		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Lead (Dissolved)	0.0022	mg/L	J		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Magnesium	21	mg/L			
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Magnesium (Dissolved)	20	mg/L			
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Manganese	0.25	mg/L			
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Nickel	0.006	mg/L	J		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Nickel (Dissolved)	0.0023	mg/L	J		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Potassium	5.5	mg/L			
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Potassium (Dissolved)	4.7	mg/L			
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Sodium	32	mg/L			
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Sodium (Dissolved)	32	mg/L			
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Vanadium	0.011	mg/L			
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Vanadium (Dissolved)	0.0032	mg/L	J		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Zinc	0.065	mg/L			

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Detections
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Aluminum	3.4	mg/L		J	M
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Arsenic (Dissolved)	0.0062	mg/L	J		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Barium	0.11	mg/L			
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Barium (Dissolved)	0.074	mg/L			
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Beryllium	0.00017	mg/L	J		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Calcium	45	mg/L			
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Calcium (Dissolved)	43	mg/L			
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Chromium	0.0038	mg/L	J		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Chromium (Dissolved)	0.00087	mg/L	J		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Cobalt	0.0015	mg/L	J		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Copper	0.0038	mg/L	J		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Iron	3.3	mg/L			
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Lead	0.0047	mg/L	J		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Lead (Dissolved)	0.0027	mg/L	J		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Magnesium	21	mg/L			
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Magnesium (Dissolved)	20	mg/L			
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Manganese	0.24	mg/L			
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Mercury	8.6E-05	mg/L	J		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Nickel	0.0065	mg/L	J		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Nickel (Dissolved)	0.0029	mg/L	J		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Potassium	5.4	mg/L			
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Potassium (Dissolved)	4.7	mg/L			
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Sodium	31	mg/L			
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Sodium (Dissolved)	31	mg/L			
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Vanadium	0.011	mg/L			
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Vanadium (Dissolved)	0.0043	mg/L	J		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Zinc	0.014	mg/L	J		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Zinc (Dissolved)	0.0031	mg/L	J		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Detections
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Aluminum	3.7	mg/L			
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Arsenic	0.005	mg/L	J		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Barium	0.11	mg/L			
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Barium (Dissolved)	0.074	mg/L			
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Beryllium	0.00014	mg/L	J		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Calcium	45	mg/L			
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Calcium (Dissolved)	44	mg/L			
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Chromium	0.0045	mg/L	J		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Cobalt	0.0016	mg/L	J		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Copper	0.0044	mg/L	J		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Iron	3.5	mg/L			
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Magnesium	21	mg/L			
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Magnesium (Dissolved)	20	mg/L			
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Manganese	0.24	mg/L			
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Nickel	0.0064	mg/L	J		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Nickel (Dissolved)	0.0027	mg/L	J		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Potassium	5.4	mg/L			
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Potassium (Dissolved)	4.7	mg/L			
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Sodium	30	mg/L			
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Sodium (Dissolved)	30	mg/L			
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Vanadium	0.011	mg/L			
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Vanadium (Dissolved)	0.0038	mg/L	J		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Zinc	0.014	mg/L	J		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Detections
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	VOCs	Chlorobenzene	0.57	ug/L	J		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Herbicides	2,4-D	1.2	ug/L			
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Herbicides	Dichlorprop	0.11	ug/L	JP		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Aluminum	1.4	mg/L			
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Arsenic	0.0066	mg/L	J		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Arsenic (Dissolved)	0.0077	mg/L	J		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Barium	0.088	mg/L			
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Barium (Dissolved)	0.066	mg/L			
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Calcium	43	mg/L			
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Calcium (Dissolved)	43	mg/L			
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Chromium	0.0026	mg/L	J		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Cobalt	0.0008	mg/L	J		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Copper	0.0028	mg/L	J		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Iron	1.6	mg/L			
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Lead	0.004	mg/L	J		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Magnesium	22	mg/L			
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Magnesium (Dissolved)	22	mg/L			
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Manganese	0.17	mg/L			
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Nickel	0.003	mg/L	J		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Potassium	4.4	mg/L			
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Potassium (Dissolved)	4.2	mg/L			
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Sodium	27	mg/L			
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Sodium (Dissolved)	28	mg/L			
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Thallium	0.01	mg/L	J		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Vanadium	0.0064	mg/L	J		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Vanadium (Dissolved)	0.0032	mg/L	J		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Zinc	0.022	mg/L			
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Zinc (Dissolved)	0.0048	mg/L	J		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Detections
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Herbicides	2,4-D	0.16	ug/L	JP		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Aluminum	1.3	mg/L			
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Arsenic	0.0063	mg/L	J		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Arsenic (Dissolved)	0.0043	mg/L	J		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Barium	0.084	mg/L			
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Barium (Dissolved)	0.066	mg/L			
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Calcium	44	mg/L			
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Calcium (Dissolved)	42	mg/L			
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Chromium	0.0021	mg/L	J		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Copper	0.0026	mg/L	J		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Iron	1.4	mg/L			
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Lead	0.0033	mg/L	J		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Magnesium	22	mg/L			
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Magnesium (Dissolved)	21	mg/L			
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Manganese	0.15	mg/L			
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Nickel	0.0034	mg/L	J		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Nickel (Dissolved)	0.0021	mg/L	J		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Potassium	4.5	mg/L			
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Potassium (Dissolved)	4.2	mg/L			
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Sodium	28	mg/L			
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Sodium (Dissolved)	28	mg/L			
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Vanadium	0.0059	mg/L	J		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Vanadium (Dissolved)	0.0031	mg/L	J		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Zinc	0.022	mg/L			
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Zinc (Dissolved)	0.0049	mg/L	J		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Detections
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Herbicides	2,4-D	1	ug/L			
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Aluminum	0.86	mg/L			
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Barium	0.082	mg/L			
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Barium (Dissolved)	0.067	mg/L			
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Calcium	44	mg/L			
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Calcium (Dissolved)	43	mg/L			
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Chromium	0.0019	mg/L	J		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Cobalt	0.00077	mg/L	J		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Copper	0.0019	mg/L	J		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Iron	0.98	mg/L			
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Lead	0.0022	mg/L	J		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Magnesium	22	mg/L			
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Magnesium (Dissolved)	21	mg/L			
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Manganese	0.15	mg/L			
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Nickel	0.0039	mg/L	J		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Potassium	4.5	mg/L			
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Potassium (Dissolved)	4.2	mg/L			
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Sodium	28	mg/L			
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Sodium (Dissolved)	27	mg/L			
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Vanadium	0.0051	mg/L	J		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Vanadium (Dissolved)	0.0033	mg/L	J		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Zinc	0.0085	mg/L	J		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Zinc (Dissolved)	0.0036	mg/L	J		

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Sample Summary List

Sauget Area 2
SAS040 Sample Summary List

SDG	Sample ID	Sample Date	VOCs	SVOCs	PCBs	Pesticides	Herbicides	Dioxins	Metals	Other
SAS040	DUP SW	9/22/05	X	X		X	X		X	
SAS040	SW-SA2-GMCS-PDA2	9/22/05	X	X		X	X		X	
SAS040	SW-SA2-GMCS-PDA3	9/22/05	X	X		X	X		X	
SAS040	SW-SA2-GMCS-PDA4	9/22/05	X	X		X	X		X	
SAS040	SW-SA2-GMCS-PDA5	9/22/05	X	X		X	X		X	
SAS040	SW-SA2-GMCS-PDA9	9/22/05	X	X		X	X		X	
SAS040	SW-SA2-GMCS-PDA9A	9/22/05	X	X		X	X		X	
SAS040	SW-SA2-GMCS-R3AM	9/21/05	X	X		X	X		X	
SAS040	SW-SA2-GMCS-R3BM	9/21/05	X	X		X	X		X	
SAS040	SW-SA2-GMCS-R3CM	9/21/05	X	X		X	X		X	

Sauget Area 2
SAS041 Sample Summary List

SDG	Sample ID	Sample Date	VOCs	SVOCs	PCBs	Pesticides	Herbicides	Dioxins	Metals	Other
SAS041	DUP SED	9/22/05	X	X		X	X		X	
SAS041	SED-SA2-GMCS-PDA2	9/22/05	X	X		X	X		X	
SAS041	SED-SA2-GMCS-PDA3	9/22/05	X	X		X	X		X	
SAS041	SED-SA2-GMCS-PDA4	9/22/05	X	X		X	X		X	
SAS041	SED-SA2-GMCS-PDA5	9/22/05	X	X		X	X		X	
SAS041	SED-SA2-GMCS-PDA9	9/22/05	X	X		X	X		X	
SAS041	SED-SA2-GMCS-PDA9A	9/22/05	X	X		X	X		X	
SAS041	SED-SA2-GMCS-R3AM	9/21/05	X	X		X	X		X	
SAS041	SED-SA2-GMCS-R3BM	9/21/05	X	X		X	X		X	
SAS041	SED-SA2-GMCS-R3CM	9/21/05	X	X		X	X		X	

URS

Checklists

DATA VALIDATION WORKSHEET
VOLATILE ORGANIC ANALYSIS

Reviewer:	Amelia Turnell	**Project Name:**	Sauget - Area 2
Date:	11/18/2005	**Project Number:**	21561510.60011
Laboratory	Severn Trent Laboratory - Savannah	**SDG No.:**	SAS 040
		Review Level:	Level III

Major Anomalies:

There were no major anomalies in this SDG.

Minor Anomalies:

Qualifiers were assigned due to field duplicates.

Field IDs:

SW-SA2-GMCS-R3AM	DUP SW	SW-SA2-GMCS-PDA9
SW-SA2-GMCS-R3BM	SW-SA2-GMCS-PDA3	SW-SA2-GMCS-PDA9A
SW-SA2-GMCS-R3CM	SW-SA2-GMCS-PDA4	RB-SA2-GMCS-RB1
SW-SA2-GMCS-PDA2	SW-SA2-GMCS-PDA5	TB-SA2-GMCC-TB1

1.0 Chain of Custody/Sample Condition

		Yes	No	NA
1.1	Do Chain-of-Custody forms list all samples analyzed?	x		
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was maintained?	x		
1.3	Do the Traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data?	x		

Note: The laboratory case narrative indicated that the trichloroethene MS recovery was high.

2.0 Holding Time/ Preservation (Code H)

		Yes	No	NA
2.1	Do sample preservation, collection and storage condition meet method requirement?	x		
	If sample preservation and/or temperature was inappropriate (i.e., <2° >6°C, etc.), comment in report. If unpreserved or temperature is outside the range 0° (but not frozen) to 10° flag all positive results with a "J" and all non-detects "UJ". If temperature exceeds 10°, flag positive detections "J" and non-detects "R".			
2.2	Have any technical holding times, determined from sampling to date of analysis, been exceeded? If yes, J(+)/UJ(-).		x	
	Matrix / Preserved / Aromatic / All others			
	Aqueous / No / 7 days / 14 days			
	Yes / 14 days / 14 days			
	Soil/Sediment / 4 °C ± 2 °C / 14 days / 14 days			
2.3	Have any technical holding times been grossly (twice the holding time) exceeded? If yes, J(+)/R(-).		x	

Note: All samples were analyzed within holding times.

3.0 GC/MS Instrument Performance Check (Code T)

		Yes	No	NA
3.1	Are GC/MS Tuning and Mass Calibration forms present for bromofluorobenzene (BFB)?			x
3.2	Have all samples been analyzed within twelve hours of the BFB tune? If no, flag R.			x
3.3	Have ion abundance criteria for BFB been met for each instrument used? If no, flag R.			x

Note:

4.0 Blanks (Method Blanks, Field Blanks and Trip Blanks)

(Code X - Field Blank Contamination, Code Y - Trip blank contamination, Code Z - Method blank contamination)

		Yes	No	NA
4.1	Is a Method Blank Summary form present for each batch?	x		
4.2	Do any method blanks have positive VOA results (TCL and/or TIC)?		x	
4.3	Do any field/trip rinse/equipment blanks have positive VOA results (TCL and/or TIC)?	x		
	Action: Positive sample results <5X (or 10X for common volatile lab contaminants- methylene chloride, acetone, and 2-butanone) the blank concentration should be qualified "U". The result should be elevated to the RL for estimate (laboratory "J" flagged) concentrations.			
4.4	If Level IV, review raw data and verify all detections for blanks were reported.			x

Note: The trip blank and the rinsate blank had estimated acetone detections. However, acetone was not detected in any of the investigative samples.

5.0 GC/MS Initial Calibration (Code C)

		Yes	No	NA
5.1	Are Initial Calibration summary forms present and complete for each instrument used?			x
5.2	Are CCCs linear applying either %RSD 30% and all other compounds <15% or >0.990?			x
	If not, J(+)/ UJ(-). In extreme cases, the reviewer may flag non-detects "R".			
5.3	Do any SPCC compounds have an RRF less than specification or any other compounds < 0.05 (use 0.01 for poor responders like ketones or alcohols)? If yes, J(+)/R(-).			x
5.4	Is the lowest standard at the same concentration, or lower, as the RL reported? If not, elevate RL.			x
5.5	If Level IV, recalculate a sample of RRFs and %RSDs to verify correct calculations are being made.			x

Note:

6.0 Continuing Calibration (Code C)

		Yes	No	NA
6.1	Are Continuing Calibration Summary forms present and complete?			x
6.2	Has a continuing calibration standard been analyzed every 12 hours?			x
6.3	Have all SPCCs and CCCs met method specifications? If not, comment in report, proceed to 6.4.			x
6.4	Do any compounds have a % difference (or % drift for quantitation from a curve) (%D) between initial and continuing calibration RRF outside QC limits (%D < 20%)?			x
	If yes, a marginal increase in response >20% then J(+) only; a decrease in response then J(+)/ UJ(-). For %D > 50%, flag R.			
6.5	Do any compounds have an RRF < 0.05 (use 0.01 for poor responders)? If yes, J(+)/R(-).			x
6.6	If Level IV, calculate a sample of RFs and %Ds from each RF to verify correct calculations.			x

Note:

7.0 Surrogate Recovery (Code S)

		Yes	No	NA
7.1	Are all samples listed on the appropriate Surrogate Recovery Summary Form ?	x		
7.2	Are surrogate recoveries within acceptance criteria specified in the QAPP for all samples?	x		
7.3	If No in Section 7.2, were these sample(s) or method blank(s) reanalyzed?			x
7.4	If No in Section 7.3, is any sample dilution factor greater than 10? (Surrogate recoveries may be diluted out.)			x
	Note: If SMC recoveries do not meet acceptance criteria in samples chosen for the MS/MSD or diluted samples, then no reanalysis is required.			
	> UCL / 10% to LCL / < 10%			
	Positive: J / J / J			
	Non-detect: None / UJ / R			

Note: All surrogate recoveries were within QC limits.

8.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD) or one MS with a Sample Duplicate (Recovery - Code M, RPD - Code D)

		Yes	No	NA
8.1	Is a Matrix Spike/Matrix Spike Duplicate recovery form present?	x		
8.2	Are MS/MSDs analyzed at the required frequency of one matrix spike per ten samples and a duplicate per twenty for each matrix?	x		
8.3	Are all MS/MSD %Rs and RPDs within acceptance criteria specified in the QAPP?		x	
	Using informed professional judgment, the data reviewer should use the MS and MSD results in conjunction with other QC criteria and determine the need for qualification of the data for samples *from the same site/matrix* . Recoveries <10% may require rejection. RPD failures may be flagged "J" (+ only)			

Note: Sample SW-SA2-GMCS-PDA9 was the MS/MSD client designated sample. The MS recovery was slightly high for trichloroethene 125%, the range is 75-

9.0 Laboratory Control Sample (LCS/LCSD) (Recovery - Code L, RPD - Code E)

		Yes	No	NA
9.1	Is an LCS recovery form present?	x		
9.2	Is an LCS analyzed at the required frequency of one per twenty field samples for each matrix?	x		
9.3	Are all LCS %Rs and RPDs within acceptance criteria specified in the QAPP?	x		
9.4	If Level IV, verify the % recoveries are calculated correctly.			x
	Action for specific compound outside the acceptance criteria: %R>UCL, J(+) only; <LCL, J(+)/UJ(-); <30% J(+)/R(-). RPD failures should be flagged "J" (+ only)			

Note: All LCS recoveries were within criteria.

10.0 Internal Standards (Code I)

					Yes	No	NA
10.1	Are internal standard areas for every sample and blank within upper and lower QC limits?				x		
		Area > +100%	Area < -50%	Area < -10%			
	Positive	J	J	J			
	Non-detect	None	UJ	R			
Note:	The method specification is for the continuing calibration to be compared to the mid-point initial calibration, not sample to continuing calibration. Thus, if all other QC specifications are met for a given sample, using informed professional judgment, the reviewer may choose not to flag individual samples in this case.						
10.2	Are retention times of internal standards within 30 seconds of the associated calibration standard?				x		
	Action: The chromatogram must be examined to determine if any false positives or negatives exist. For shift of a large magnitude, the reviewer may consider partial or total rejection of the data for non-detects in that sample/fraction.						

Note:

11.0 TCL Identification (Code W)

		Yes	No	NA
11.1	Is the relative retention time (RRT) of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration?			x
11.2	Are the three ions of greatest intensity present in the standard mass spectrum also present in the sample mass spectrum; and do sample and standard relative ion intensities agree within 30%?			x

Note:

12.0 TCL/TIC Quantitation and Reported Detection limits (Code K)

		Yes	No	NA
12.1	Are RLs used consistent with those specified in the QAPP?			x
12.2	Are these limits adjusted to reflect dilutions and/ or percent solids as required?			x
12.3	Are TIC ions greater than ten percent in the reference spectrum also present in the sample spectrum?			x
12.4	Are any positives reported that exceed the linear range of the instrument? If yes, than flag "J".			x
12.5	If Level IV, calculate a sample of positive results to verify correct calculations			x

Note:

13.0 Field Duplicate Samples (Code F)

		Yes	No	NA
13.1	Were any field duplicates submitted for VOC analysis?	x		
13.2	Were all RPD or absolute difference values within the control limits outlined in the QAPP?		x	
	Action: No qualifying action is taken based on field duplicate results, however the data validator should provide a qualitative assessment in the data validation report.			

Note: Sample DUP SW is the duplicate of sample SW-SA2-GMCS-PDA2.

Sample ID	Analytes	Reason for Qualifier	Qualifiers Assigned	Code
SW-SA2-GMCS-PDA2	Chlorobenzene	>2xs the RL difference	J	F
DUP-SW	Chlorobenzene	>2xs the RL difference	J	F

14.0 Data Completeness

			Yes	No	NA
14.1	Is % completeness within the control limits? (Control limit: Check QAPP or use 95% for aqueous sample, 90% for soil sample)		x		
14.2	Number of samples:	12			
14.3	Number of target compounds in each analysis:	33			
14.4	Number of results rejected and not reported:	0			
	% Completeness = 100 x ((14.1 * 14.2) - 14.3) / (14.1 * 14.2)				
	% Completeness	**100**			

Note:

DATA VALIDATION WORKSHEET
SEMIVOLATILE ORGANIC ANALYSIS

Reviewer:	Amelia Turnell	**Project Name:**	Sauget - Area 2
Date:	11/18/2005	**Project Number:**	21561510.60011
Laboratory	Severn Trent Laboratory - Savannah	**SDG No.:**	SAS 40
		Review Level:	Level III

Major Anomalies:

There were no rejections.

Minor Anomalies:

Samples were qualified based on holding times.

Field IDs:

SW-SA2-GMCS-R3AM	DUP SW	SW-SA2-GMCS-PDA9
SW-SA2-GMCS-R3BM	SW-SA2-GMCS-PDA3	SW-SA2-GMCS-PDA9A
SW-SA2-GMCS-R3CM	SW-SA2-GMCS-PDA4	RB-SA2-GMCS-RB1
SW-SA2-GMCS-PDA2	SW-SA2-GMCS-PDA5	

1.0 Chain of Custody/Sample Condition

		Yes	No	NA
1.1	Do Chain-of-Custody forms list all samples analyzed?	x		
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was maintained?	x		
1.3	Do the Traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data?	x		

Note: Sample SW-SA2-GMCS-PDA2 was extracted one day outside of holding time. Several spiking compounds recovered outside of control limits in the MS/MSD.

2.0 Holding Time/ Preservation (Code H)

		Yes	No	NA
2.1	Do sample preservation, collection and storage condition meet method requirement?	x		
	If samples were not on ice or the ice was melted upon arrival at the laboratory and the temperature of the cooler was elevated (> 10 ^{o}C), then flag all positive results with a "J" and all non-detects "UJ".			
2.2	Have any technical holding times, determined from sampling to date of analysis, been exceeded? (See attached Holding Time Table for sample holding time) If yes, J(+)/UJ(-).	x		
	Extraction: Soil/Sediment 14 days - aqueous 7 days Analysis: 40 days			
2.3	Have any technical holding times grossly (twice the holding time) been exceeded? If yes, J(+)/R(-).		x	

Note: Sample SW-SA2-GMCS-PDA2 was extracted one day outside holding time criteria. Qualifiers are listed below.

Analyte	Field ID	Qualification	Days late	Code
All SVOCs	SW-SA2-GMCS-PDA2	UJ	1	H

3.0 GC/MS Instrument Performance Check (Code T)

		Yes	No	NA
3.1	Are GC/MS Tuning and Mass Calibration forms present for DFTPP?			x
3.2	Have all samples been analyzed within twelve hours of the tune?			x
	If no, the data for the affected standards, blanks, field samples or QC samples are rejected "R".			
3.3	Have ion abundance criteria for DFTPP been met for each instrument used?			x
	If no, all standards, blanks, field samples and QC samples are rejected "R".			

Note:

4.0 Blanks (Method Blanks and Field Blanks) (Code X - Field Blank Contamination, Code Z - Method blank contamination)

		Yes	No	NA
4.1	Is a Method Blank Summary form present for each batch?	x		
4.2	Do any method/instrument/reagent blanks have positive results (TCL, and/or TIC)?		x	
4.3	Do any field equipment blanks have positive results (TCL, and/or TIC)?		x	
	Action: Positive sample results <5X (or 10X for phthalate contaminants) the blank concentration should be qualified "U" and the detection limit elevated to the RL for estimate concentrations.			
4,4	If Level IV, review raw data and verify all detections for blanks were reported.			

Note:

5.0 GC/MS Initial Calibration (Code C)

		Yes	No	NA
5.1	Are Initial Calibration summary forms present and complete for each instrument used?			x
5.2	Are CCCs linear applying either %RSD 30% and all other compounds <15% or >0.990?			x
	If not, J(+)/ UJ(-). In extreme cases, the reviewer may flag non-detects "R".			
5.3	Do any SPCC compounds have an RRF les than specification or any other compounds < 0.05 (use 0.01 for poor responders like amines and phenols)? If yes, J(+)/R(-).			x
5.4	Is the lowest standard at the same concentration, or lower, as the RL reported? If not, elevate RL.			x
5.5	If Level IV, recalculate a sample of RRFs and %RSDs to verify correct calculations are being made.			

Note:

6.0 Continuing Calibration (Code C)

		Yes	No	NA
6.1	Are Continuing Calibration Summary forms present and complete?			x
6.2	Has a continuing calibration standard been analyzed every 12 hours?			x
6.3	Have all SPCCs and CCCs met method specifications? If not, comment in report, proceed to 6.4.			x
6.4	Do any compounds have a % difference (or % drift for quantitation from a curve) (%D) between initial and continuing calibration RRF outside QC limits (%D < 20%)?			x
	If yes, a marginal increase in response >20% then J(+) only; a decrease in response then J(+)/ UJ(-). For %D > 50%, flag R.			
6.5	Do any compounds have an RRF < 0.05 (use 0.01 for poor responders)? If yes, J(+)/R(-).			x
6.6	If Level IV, calculate a sample of RFs and %Ds from each RF to verify correct calculations.			

Note:

7.0 Surrogate Recovery (Code S)

		Yes	No	NA
7.1	Are all samples listed on the appropriate Surrogate Recovery Summary Form ?	x		
7.2	Are surrogate recoveries within acceptance criteria specified in the QAPP for all samples and method blanks?	x		
7.3	Are more than one of either fraction outside the acceptance criteria?			x
7.4	If Yes in Section 7.3, are these sample(s) or method blank(s) reanalyzed?			x
7.5	If Yes in Section 7.3, is any sample dilution factor greater than 10?			x
	Note: If SMC recoveries display unacceptable recoveries in the MS and/ or diluted samples, then no reanalysis is required and acids and base/ neutrals are assessed separately.			
	> UCL 10% to LCL < 10%			
	Positive J J J			
	Non-detect None UJ R			

Note:

8.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD) or one MS with a Sample Duplicate (Recovery - Code M, RPD - Code D)

		Yes	No	NA
8.1	Is a Matrix Spike/Matrix Spike Duplicate recovery form present?	x		
8.2	Are MS/MSDs analyzed at the required frequency not to exceed twenty field samples for each matrix?	x		
8.3	Are all MS/MSD %Rs and RPDs within acceptance criteria provided by the laboratory?		x	
	Using informed professional judgment, the data reviewer should use the MS and MSD results in conjunction with other QC criteria and determine the need for qualification of the data for samples *from the same site/matrix*. Recoveries <10% may require rejection. RPD failures may be flagged "J" (+ only)			

Note: Sample SW-SA2-GMCS-PDA9 was the MS/MSD client designated sample. The MS/MSD recoveries were not within control limits for 3,3-dichlorobenzidine (12 and 21%, the range is 29-101%). The RPD was also high (60% and allowed is 40%). In addition, the hexachlorobenzene MSD recovery was slightly low (58%, 60-122%). Qualifications were not made based on MS/MSD alone and the LCS recoveries associated with this sample were within QC limits. No qualification of data were required.

9.0 Laboratory Control Sample (LCS/LCSD) (Recovery - Code L, RPD - Code E)

		Yes	No	NA
9.1	Is an LCS recovery form present?	x		
9.2	Is LCS analyzed at the required frequency for each matrix?	x		
9.3	Are all LCS %Rs (and RPDs) within acceptance criteria?		x	
	Action for specific compound outside the acceptance criteria: %R>UCL, J(+) only; <LCL, J(+)/UJ(-); <30% J(+)/R(-). RPD failures should be flagged "J" (+ only)			
9.4	If Level IV, verify the % recoveries are calculated correctly.			

Note: One LCS sample had percent recoveries out of criteria. Qualifiers are assigned.

Sample ID	LCS recovery and ranges	Related Samples	Qualifiers Assigned	Code
680-23685/8-A	Bis (2-chloroethoxy)methane, 123, 55-115	SW-SA2-GMCS-PDA2	None, already qualified due to H	L
	Dibenzofuran, 114, 65-109	SW-SA2-GMCS-PDA2	None, already qualified due to H	L
	Carbazole, 122, 60-120	SW-SA2-GMCS-PDA2	None, already qualified due to H	L

10.0 Internal Standards (Code I)

					Yes	No	NA
10.1	Are internal standard area of every sample and blank within upper and lower QC limits for each continuing calibration?				x		
		Area > +100%	Area < -50%	Area < -10%			
	Positive	J	J	J			
	Non-detect	None	UJ	R			
Note:	The method specification is for the continuing calibration to be compared to the mid-point initial calibration, not sample to continuing calibration. Thus, if all other QC specifications are met for a given sample, using informed professional judgment, the reviewer may choose not to flag individual samples in this case.						
10.2	Are retention times of internal standards within 30 seconds of the associated calibration standard?				x		
	Action: The chromatogram must be examined to determine if any false positives or negatives exist. For shift of a large magnitude, the reviewer may consider partial or total rejection of the data for non-detects in that sample/fraction.						

Note:

11.0 TCL Identification (Code W)

		Yes	No	NA
11.1	Is the relative retention time (RRT) of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration?			x
11.2	Are the three ions of greatest intensity present in the standard mass spectrum also present in the sample mass spectrum; and do sample and standard relative ion intensities agree within 30%?			x

Note:

12.0 TCL/TIC Quantitation and Reported Detection limits (Code K)

		Yes	No	NA
12.1	Are RLs used consistent with those specified in the QAPP?			x
12.2	Are these limits adjusted to reflect dilutions and/ or percent solids as required?			x
12.3	Are TIC ions greater than ten percent in the reference spectrum also present in the sample spectrum?			x
12.4	Are any positives reported that exceed the linear range of the instrument? If yes, than flag "J".			x
12.5	If Level IV, calculate a sample of positive results to verify correct calculations			

Note:

13.0 Field Duplicate Samples (Code F)

		Yes	No	NA
13.1	Were any field duplicates submitted for SVOC analysis?			
13.2	Were all RPD or absolute difference values within the control limits?			
	No action is taken based on field duplicate results, however the data validator should provide a qualitative assessment in the data validation report.			

Note: Sample DUP SW is the duplicate of sample SW-SA2-GMCS-PDA2.

14.0 Data Completeness

			Yes	No	NA
14.1	Is % completeness within the control limits? (Control limit: Check QAPP or use 95% for aqueous sample, 90% for soil sample)		X		
14.2	Number of samples:	11			
14.3	Number of target compounds in each analysis:	65			
14.4	Number of results rejected and not reported:	0			
	% Completeness = 100 x ((14.1 x 14.2) - 14.3) / (14.1 x 14.2)				
	% Completeness	**100**			

Note:

DATA VALIDATION WORKSHEET
PESTICIDES/PCBs ANALYSIS

Reviewer:	Amelia Turnell	**Project Name:**	Sauget - Area 2
Date:	11/28/2005	**Project Number:**	21561511.60011
Laboratory	Severn Trent Laboratory - Savannah	**SDG No.:**	SAS 040
		Review Level:	Level III

Major Anomalies:

No samples were rejected.

Minor Anomalies:

Qualifiers were assigned due to low surrogate recoveries.

Field IDs:

SW-SA2-GMCS-R3AM	DUP SW	SW-SA2-GMCS-PDA9
SW-SA2-GMCS-R3BM	SW-SA2-GMCS-PDA3	SW-SA2-GMCS-PDA9A
SW-SA2-GMCS-R3CM	SW-SA2-GMCS-PDA4	RB-SA2-GMCS-RB1
SW-SA2-GMCS-PDA2	SW-SA2-GMCS-PDA5	

1.0 Chain of Custody/Sample Condition

		Yes	No	NA
1.1	Do Chain-of-Custody forms list all samples analyzed?	x		
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was maintained?	x		
1.3	Do the Traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data?	x		

Note: The laboratory case narrative indicated that surrogate recoveries were low. Beta -BHC and delta-BHC exceeded the %RPD control limits for the MS/MSD. The narrative also indicated that CCVs had recoveries outside the QC limits. The Grand Mean Exception Rule was applied. This was not addressed in this review.

2.0 Holding Time/ Preservation (Code H)

		Yes	No	NA
2.1	Do sample preservation, collection and storage condition meet method requirement?	x		
	If samples were not on ice or the ice was melted upon arrival at the laboratory and the temperature of the cooler was elevated (> 10 °C), then flag all positive results with a "J" and all non-detects "UJ".			
2.2	Have any technical holding times, determined from sampling to date of analysis, been exceeded? (See attached Holding Time Table for sample holding time) If yes, J(+)/UJ(-).		x	
	Extraction: Soil/Sediment 14 days - aqueous 7 days Analysis: 40 days			
2.3	Have any technical holding times grossly (twice the holding time) been exceeded? If yes, J(+)/R(-).		x	

Note:

3.0 Blanks (Method Blanks and Field Blanks) (Code X - Field Blank Contamination, Code Z - Method blank contamination)

		Yes	No	NA
3.1	Is a Method Blank Summary form present for each batch?	x		
3.2	Do any method blanks have positive results (TCL)?		x	
3.3	Do any field/rinse/equipment blanks have positive results (TCL)?		x	
	Action: Positive sample results <5X the blank concentration should be qualified "U". The result should be elevated to the RL for estimate (laboratory "J" flagged) concentrations.			
3.4	If Level IV, review raw data and verify all detections for blanks were reported.			x

Note:

4.0 GC/ECD Instrument Performance Check (Code B)

		Yes	No	NA
4.1	Are Endrin and 4,4'-DDT breakdown forms present?	x		x
4.2	Have all samples been analyzed within twelve hours of the performance check sample?	x		x
	If no, the data for the affected standards, blanks, field samples or QC samples are rejected "R".			
4.3	Have percent breakdown criteria (15%) for endrin and 4,4'-DDT been met?	x		x
	If no, all standards, blanks, field samples and QC samples are rejected "R".			

Note:

5.0 Initial Calibration (Code R)

		Yes	No	NA
5.1	Are Initial Calibration summary forms present and complete for each instrument used?			x
5.2	Are response factors stable (%RSD values < 20% or >0.995) over the concentration range of the instrument			x
	If not, J(+)/ UJ(-). In extreme cases, the reviewer may flag non-detects "R".			
5.3	If Level IV, recalculate a sample of RRFs and %RSDs to verify correct calculations are being made.			x

Note:

6.0 Continuing Calibration (Code C)

		Yes	No	NA
6.1	Are Continuing Calibration Summary forms present and complete?			x
6.2	Has a continuing calibration standard been analyzed every 12 hours?			x
6.3	Do any compounds have a % difference (or % drift for quantitation from a curve) (%D) between initial and continuing calibration CF outside QC limits (%D < 15%)?			x
	If yes, a marginal increase in response >20% then J(+) only; a decrease in response then J(+)/ UJ(-). For %D > 50%, flag R.			
6.4	If Level IV, calculate a sample of CFs and %Ds to verify correct calculations.			x

Note:

7.0 Surrogate Recovery (Code S)

					Yes	No	NA
7.1	Are all samples listed on the appropriate Surrogate Recovery Summary Form ?						
7.2	Are surrogate recoveries within acceptance criteria specified in the QAPP for all samples?				x		
7.3	If No in Section 7.2, were these sample(s) or method blank(s) reanalyzed?					x	
7.4	If No in Section 7.3, is any sample dilution factor greater than 10? (Surrogate recoveries may be diluted out.)					x	
		> UCL	10% to LCL	< 10%		x	
	Positive	J	J	J			
	Non-detect	None	UJ	R			

Note: Several samples had surrogate recoveries outside QC limits. Qualifications are listed below.

Field ID	Surrogates	Surrogate recoveries	Recovery limits
SW-SA2-GMCS-PDA2	Decachlorobiphenyl	21	30-150
DUP SW	Decachlorobiphenyl	25	30-150
SW-SA2-GMCS-PDA3	Decachlorobiphenyl	27	30-150
SW-SA2-GMCS-PDA4	Decachlorobiphenyl	29	30-150
SW-SA2-GMCS-PDA5	Decachlorobiphenyl	27	30-150
SW-SA2-GMCS-PDA9	Decachlorobiphenyl	21	30-150
RB-SA2-GMCS-RB1	Decachlorobiphenyl	11	30-150

Field ID	Analytes	Qualification	Code
SW-SA2-GMCS-PDA2	All analytes	UJ (all analytes non-detect)	S
DUP SW	All analytes	UJ (all analytes non-detect)	S
SW-SA2-GMCS-PDA3	All analytes	UJ (all analytes non-detect)	S
SW-SA2-GMCS-PDA4	All analytes	UJ (all analytes non-detect)	S
SW-SA2-GMCS-PDA5	All analytes	UJ/J	S
SW-SA2-GMCS-PDA9	All analytes	UJ/J	S
RB-SA2-GMCS-RB1	Not applicable	None, the sample is a rinsate blank	

8.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD) or one MS with a Sample Duplicate (Code M - recovery, Code Dd - RPD)

		Yes	No	NA
8.1	Is a Matrix Spike/Matrix Spike Duplicate recovery form present?	x		
8.2	Are MS/MSDs analyzed at the required frequency of one matrix spike per ten samples and a duplicate per twenty for each matrix?	x		x
8.3	Are all MS/MSD %Rs and RPDs within acceptance criteria specified in the QAPP?		x	x
	Using informed professional judgment, the data reviewer should use the MS and MSD results in conjunction with other QC criteria and determine the need for qualification of the data for samples *from the same site/matrix*. Recoveries <10% may require rejection. RPD failures may be flagged "J" (+ only)			

Note: Delta-BHC MSD % recovery was low (24% , 39-123%) and the RPD was high (116% and the limit is 40%). Beta-BHC RPD was also high (66% and the limit is 40%).

No qualifiers were assigned since Delta-BHC and beta-BHC recoveries were within control limits in the LCS.

9.0 Laboratory Control Sample (LCS/LCSD) (Code L - LCS recovery Code E - RPD)

		Yes	No	NA
9.1	Is an LCS recovery form present?	x		
9.2	Is an LCS analyzed at the required frequency of one per twenty field samples for each matrix?	x		
9.3	Are all LCS %Rs and RPDs within acceptance criteria specified in the QAPP?	x		
9.4	If Level IV, verify the % recoveries are calculated correctly.			x
	Action for specific compound outside the acceptance criteria: %R>UCL, J(+) only; <LCL, J(+)/UJ(-); <30% J(+)/R(-). RPD failures should be flagged "J" (+ only)			

Note:

10.0 TCL Identification (Code W)

		Yes	No	NA
10.1	Is the relative retention time (RRT) of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration?	x		x

Note:

11.0 TCL Quantitation and Reported Detection limits (Code P)

		Yes	No	NA
11.1	Are RLs used consistent with those specified in the QAPP?			x
11.2	Are these limits adjusted to reflect dilutions and/ or percent solids as required?			x
11.3	Are any positives reported that exceed the linear range of the instrument? If yes, than flag "J".			x
11.4	If Level IV, calculate a sample of positive results to verify correct calculations			x

Note:

12.0 Field Duplicate Samples (Code F)

		Yes	No	NA
12.1	Were any field duplicates submitted for analysis?	x		
12.2	Were all RPD or absolute difference values within the control limits outlined in the QAPP?	x		x
	Action: No qualifying action is taken based on field duplicate results, however the data validator should provide a qualitative assessment in the data validation report.			

Note:

13.0 Data Completeness

			Yes	No	NA
13.1	Is % completeness within the control limits? (Control limit: Check QAPP or use 95% for aqueous sample, 90% for soil sample)		x		
13.2	Number of samples:	11			
13.3	Number of target compounds in each analysis:	21			
13.4	Number of results rejected and not reported:	0			
	% Completeness = 100 x ((13.1 x 13.2) - 13.3) / (13.1 x 13.2)				
	% Completeness	**100**			

Note:

DATA VALIDATION WORKSHEET
HERBICIDES ANALYSIS

Reviewer:	Amelia Turnell	**Project Name:**	Sauget - Area 2
Date:	11/28/2005	**Project Number:**	21561510.60010
Laboratory	Severn Trent Laboratory - Savannah	**SDG No.:**	SAS 040
		Review Level:	Level III

Major Anomalies:

No samples were rejected.

Minor Anomalies:

Dicamba was qualified in sample SW-SA2-GMCS-PDA9.

Field IDs:

SW-SA2-GMCS-R3AM	DUP SW	SW-SA2-GMCS-PDA9
SW-SA2-GMCS-R3BM	SW-SA2-GMCS-PDA3	SW-SA2-GMCS-PDA9A
SW-SA2-GMCS-R3CM	SW-SA2-GMCS-PDA4	RB-SA2-GMCS-RB1
SW-SA2-GMCS-PDA2	SW-SA2-GMCS-PDA5	

1.0 Chain of Custody/Sample Condition

		Yes	No	NA
1.1	Do Chain-of-Custody forms list all samples analyzed?	x		
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was maintained?	x		
1.3	Do the Traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data?	x		

Note: The laboratory case narrative indicated dalapon and dicamba MS/MSD recoveries were outside QC limits. Also, dicamba LCS/LCSD recoveries were high. The narrative also indicated that the CCV had recoveries outside the QC limits. The Grand Mean Exception Rule was applied. The CCVs are beyond the scope of this review, but it should be noted.

2.0 Holding Time/ Preservation (Code H)

		Yes	No	NA
2.1	Do sample preservation, collection and storage condition meet method requirement?	x		
	If samples were not on ice or the ice was melted upon arrival at the laboratory and the temperature of the cooler was elevated (> 10 °C), then flag all positive results with a "J" and all non-detects "UJ".			
2.2	Have any technical holding times, determined from sampling to date of analysis, been exceeded? (See attached Holding Time Table for sample holding time) If yes, J(+)/UJ(-).		x	
	Extraction: Soil/Sediment 14 days - aqueous 7 days Analysis: 40 days			
2.3	Have any technical holding times grossly (twice the holding time) been exceeded? If yes, J(+)/R(-).		x	

Note:

3.0 Blanks (Method Blanks and Field Blanks) (Code X - Field Blank Contamination, Code Z - Method blank contamination)

		Yes	No	NA
3.1	Is a Method Blank Summary form present for each batch?	x		
3.2	Do any method blanks have positive results?		x	
3.3	Do any field/rinse/equipment blanks have positive results?		x	
	Action: Positive sample results <5X the blank concentration should be qualified "U". The result should be elevated to the RL for estimate (laboratory "J" flagged) concentrations.			
3.4	If Level IV, review raw data and verify all detections for blanks were reported.			x

Note:

4.0 Initial Calibration (Code R)

		Yes	No	NA
4.1	Are Initial Calibration summary forms present and complete for each instrument used?			x
4.2	Are calibration factors stable (%RSD values < 20% or >0.995) over the concentration range of the instrument			x
	If not, J(+)/ UJ(-). In extreme cases, the reviewer may flag non-detects "R".			
4.3	If Level IV, recalculate a sample of RRFs and %RSDs to verify correct calculations are being made.			x

Note:

5.0 Continuing Calibration (Code C)

		Yes	No	NA
5.1	Are Continuing Calibration Summary forms present and complete?			x
5.2	Has a continuing calibration standard been analyzed every 12 hours?			x
5.3	Do any compounds have a % difference (or % drift for quantitation from a curve) (%D) between initial and continuing calibration CF outside QC limits (%D < 20%)?			x
	If yes, a marginal increase in response >20% then J(+) only; a decrease in response then J(+)/ UJ(-). For %D > 50%, flag R.			
5.5	If Level IV, calculate a sample of CFs and %Ds from each CF to verify correct calculations.			x

Note:

6.0 Surrogate Recovery (Code S)

		Yes	No	NA
6.1	Are all samples listed on the appropriate Surrogate Recovery Summary Form ?			
6.2	Are surrogate recoveries within acceptance criteria specified in the QAPP for all samples?			
6.3	If No in Section 6.2, were these sample(s) or method blank(s) reanalyzed?			x
6.4	If No in Section 6.3, is any sample dilution factor greater than 10? (Surrogate recoveries may be diluted out.)			x

	> UCL	10% to LCL	< 10%
Positive	J	J	J
Non-detect	None	UJ	R

Note:

7.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD) or one MS with a Sample Duplicate (Code M - recovery, Code D - RPD)

		Yes	No	NA
7.1	Is a Matrix Spike/Matrix Spike Duplicate recovery form present?			
7.2	Are MS/MSDs analyzed at the required frequency of one matrix spike per ten samples and a duplicate per twenty for each matrix?			
7.3	Are all MS/MSD %Rs and RPDs within acceptance criteria specified in the QAPP?		x	
	Using informed professional judgment, the data reviewer should use the MS and MSD results in conjunction with other QC criteria and determine the need for qualification of the data for samples *from the same site/matrix*. Recoveries <10% may require rejection. RPD failures may be flagged "J" (+ only)			

Note: Dalapon MS recovery was low (24%, 48-187%) and the RPD was high (114% and the limit is 40%). No qualifiers were assigned because dalapon recoveries in the LCS and LCSD were within limits. Dicamba MS/MSD recoveries were high (125 & 115%, 6-113%). Since dicamba recovereis were also high in the LCS/LCSD, qualifiers were assigned.

Sample ID	Analyte	Qualifiers Assigned	Code
SW-SA2-GMCS-PDA9	Dicamba	UJ	M

8.0 Laboratory Control Sample (LCS/LCSD) (Code L - LCS recovery Code E - RPD)

		Yes	No	NA
8.1	Is an LCS recovery form present?	x		
8.2	Is an LCS analyzed at the required frequency of one per twenty field samples for each matrix?	x		
8.3	Are all LCS %Rs and RPDs within acceptance criteria specified in the QAPP?		x	
8.4	If Level IV, verify the % recoveries are calculated correctly.			x
	Action for specific compound outside the acceptance criteria: %R>UCL, J(+) only; <LCL, J(+)/UJ(-); <30% J(+)/R(-). RPD failures should be flagged "J" (+ only)			

Note: Dicamba LCS and LCSD recoveries were high (131 and 128, 60-113%). No qualifiers were assigned because all related dicamba results were non-detect.

9.0 TCL Identification (Code W)

		Yes	No	NA
9.1	Is the relative retention time (RRT) of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration?			x

Note:

10.0 TCL Quantitation and Reported Detection limits (Code P)

		Yes	No	NA
10.1	Are RLs used consistent with those specified in the QAPP?			x
10.2	Are these limits adjusted to reflect dilutions and/ or percent solids as required?			x
10.3	Are any positives reported that exceed the linear range of the instrument? If yes, than flag "J".			x
10.4	If Level IV, calculate a sample of positive results to verify correct calculations			x

Note:

11.0 Field Duplicate Samples (Code F)

		Yes	No	NA
11.1	Were any field duplicates submitted for herbicide analysis?	X		
11.2	Were all RPD or absolute difference values within the control limits outlined in the QAPP?	X		
	Action: No qualifying action is taken based on field duplicate results, however the data validator should provide a qualitative assessment in the data validation report.			

Note: Sample DUP SW is the duplicate of sample SW-SA2-GMCS-PDA2.

12.0 Data Completeness

			Yes	No	NA
12.1	Is % completeness within the control limits? (Control limit: Check QAPP or use 95% for aqueous sample, 90% for soil sample)		X		
12.2	Number of samples:	11			
12.3	Number of target compounds in each analysis:	10			
12.4	Number of results rejected and not reported:	0			
	% Completeness = 100 x ((12.2 x 12.3) - 12.4) / (12.2 x 12.3)				
	% Completeness	**100**			

Note:

DATA VALIDATION WORKSHEET - Level III Review

Inorganic - ICP, ICP-MS, GFAA, and CVAA

Reviewer:	Amelia Turnell	**Project Name:**	Sauget - Area 2
Date:	12/1/2005	**Project Number:**	21561510.60011
Laboratory	Severn Trent Laboratory - Savannah	**SDG No.:**	SAS 040
		Review Level:	Level III

Major Anomalies:

None

Minor Anomalies:

Sample required qualification based on holding times and preparation blanks.

Field IDs:

All samples were collected filtered and unfiltered

SW-SA2-GMCS-R3AM	DUP SW	SW-SA2-GMCS-PDA9
SW-SA2-GMCS-R3BM	SW-SA2-GMCS-PDA3	SW-SA2-GMCS-PDA9A
SW-SA2-GMCS-R3CM	SW-SA2-GMCS-PDA4	RB-SA2-GMCS-RB1
SW-SA2-GMCS-PDA2	SW-SA2-GMCS-PDA5	

1.0 Chain of Custody/Sample Condition/Raw Data

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
1.1	Do Chain-of-Custody forms list all samples that were analyzed?	X									X		
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was maintained?	X									X		
1.3	Do the traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data?	X										X	
1.4	Does sample preservation, collection and storage meet method requirement? (water samples: with Nitric Acid to pH < 2, and soil/sediment samples: 4 °C ± 2 °C)	X									X		
1.5	Are the digestion logs present and complete with pH values, sample weights, dilutions, final volumes. % solids (for soil samples), and preparation dates? For any missing or incomplete documentation, contact the laboratory for	X									X		

Note: The laboratory case narrative indicated that dissolved and total selenium were detected in the preparation blank. The MS percent recovery was outside of control limits for total aluminum. For mercury total and dissolved, a matrix spike duplicate was performed instead of a sample duplicate. The sample duplicate for the dissolved metals analysis was inadvertently omitted from the initial analysis. The sample duplicate was analyzed later on October 17, 2005. Also, the dissolved and total post-digestion spikes were not spiked in the initial analysis. The dissolved and total post-digestion spikes were re-prepped and reanalyzed on October 17, 2005. All other acceptance criteria were met.

2.0 Holding Time (Code h)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
2.1	Have any technical holding times, determined from date of collection to date of analysis, been exceeded? (Hg: 28days, other metals: 6 months) See attached Holding Time Table.		x								x		
	Action: J(+)/UJ(-). If the holding times are grossly exceeded (twice the holding time criteria) J(+)/R(-).												

Note: Three mercury samples were analyzed outside holding times. The samples were collected 9/21/2005 and analyzed 10/20/2005. The exceedances were not mentioned in the case narrative. Qualifiers are listed below.

Field ID	Analyte	Days late	Qualification	Code
SW-SA2-GMCS-R3AM	Mercury	1	UJ	H
SW-SA2-GMCS-R3AM	Mercury, dissolved	1	UJ	H
SW-SA2-GMCS-R3BM	Mercury	1	UJ	H
SW-SA2-GMCS-R3BM	Mercury, dissolved	1	UJ	H
SW-SA2-GMCS-R3CM	Mercury	1	UJ	H
SW-SA2-GMCS-R3CM	Mercury, dissolved	1	UJ	H

3.0 Instrument Calibration (Code c)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
3.1	Are sufficient standards included in the calibration curve? (ICP/ICP-MS: blank + one standard; GFAA: blank + three standards; CVAA: blank + five standards)			x									
3.2	Are the correlation coefficients > 0.995? (for GFAA and CVAA) Action: J(+)/UJ(-).												x
3.3	Was an initial calibration verification (ICV) analyzed at the beginning of each analysis? Action: If no, use professional judgment to determine affect on the data and note in reviewer narrative.			x									x
3.4	Was continuing calibration verification (CCV) performed every 10 analysis or every 2 hours, whichever is more frequent? Action: If no, use professional judgment to determine affect on the data and note in reviewer narrative.			x									x
3.5	Are all calibration standard percent recoveries (ICV and CCV) within the control limits? Mercury (80%-120%) and other Metals (90%-110%).			x									x
	Action: R(+/-) J(+)/UJ(-) J(+) R(+)												
	Mercury < 65% 65% - 79% 121% - 135% > 135%												
	Other Metals < 75% 75% - 89% 111% - 125% > 125%												

Note:

4.0 Blanks (Code o - Calibration blank failure, Code p - Preparation blank failure, Code x - Field blank failure)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
4.1	Were preparation blank (PB) prepared at the appropriate frequency (one per 20 samples, per batch, per matrix and per level)?	x									x		
4.2	Are there reported PB values > + IDL? Action: If yes, action level of 5 times the blank value are determined for positive and negative blank values.	x										x	
4.3	Were initial calibration blanks (ICB) analyzed? Action: If no, use professional judgment to determine affect on the data note in reviewer narrative.	x									x		
4.4	Were continuing calibration blanks (CCB) analyzed after every 10 samples or every 2 hours whichever is more frequent? Action: If no, use professional judgment to determine affect on the data to note in reviewer narrative.	x									x		
4.5	Are there reported ICB or CCB values > + IDL? Action: If yes, action level of 5 times the blank value are determined for positive and negative blank values.			x									x
4.6	Are there samples with concentrations less than five times the highest level in associated blanks? Action: If yes, U at reported concentration.	x											x
4.7	Are there samples with non-detect results or with concentrations less than five times the most negative value in associated blanks? Action; If yes, J(+)/UJ(-).		x									x	

Note: Selenium was detected above the IDL in the preparation blanks. The qualifiers are listed below.

Sample ID	Analytes	Qualification	Code	NEW RL
SW-SA2-GMCS-R3AM	Selenium	U	P	0.012
SW-SA2-GMCS-R3AM	Selenium, dissolved	U	P	0.010
SW-SA2-GMCS-R3BM	Selenium	U	P	0.010
SW-SA2-GMCS-R3BM	Selenium, dissolved	U	P	0.010
SW-SA2-GMCS-R3CM	Selenium	U	P	0.010
SW-SA2-GMCS-PDA2	Selenium, dissolved	U	P	0.010
DUP SW	Selenium, dissolved	U	P	0.010
SW-SA2-GMCS-PDA3	Selenium	U	P	0.010
SW-SA2-GMCS-PDA4	Selenium	U	P	0.010
SW-SA2-GMCS-PDA5	Selenium, dissolved	U	P	0.010
SW-SA2-GMCS-PDA9A	Selenium, dissolved	U	P	0.010

5.0 ICP Interference Check Sample (ICS) (Code n)

			ICP			ICP-MS			GFAA			CVAA-Hg	
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
5.1	Was ICS AB analyzed at beginning of each ICP run (or at least twice every 8 hours), and at the beginning or once every 8 hours (whichever is more frequent) for ICP-MS?			x									
5.2	Are the ICS AB recoveries within 80% - 120%?			x									
5.3	Are the results for unspiked analytes (in ICS A) < + IDL?			x									
5.4	If not, are the associated sample Al, Ca, Fe, and Mg concentrations less than the level in the ICS?			x									
	Action: Not Spiked Analytes / Spiked analytes (ICS AB analytes)												
	< -IDL / > IDL / < 50% / 50% - 79% / > 120%												
	UJ(-) / J(+) / R(+/-) / J(+)/UJ(-) / J(+)												

Note:

6.0 Laboratory Control Sample (LCS) (Code l - Recovery, Code e - RPD)

			ICP			ICP-MS			GFAA			CVAA-Hg	
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
6.1	Was an LCS prepared and analyzed at the correct frequency (one per 20 samples, per batch, per matrix and per level)? Action: If no, J(+) any sample not associated with LCS results.	x									x		
6.2	Is any LCS recovery outside the control limits? (Aqueous limits: 80% - 120% - except Ag and Sb; Solid limits: as per EPA-EMSL/LV)		x									x	
	Action: Solid / Aqueous												
	< LCL / > UCL / < 50% / 50% - 79% / > 120%												
	J(+)/UJ(-) / J(+) / R(+/-) / J(+)/UJ(-) / J(+)												

Note:

7.0 Laboratory Duplicates (Code k)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
7.1	Were Laboratory duplicates prepared and analyzed at the correct frequency (one per 20 samples, per batch, per matrix and per level)? Action: If no, J(+), with professional judgment, analytes not associated with Duplicate results.	x									x		
7.2	Was a field blank used for the duplicate analysis? Action: If yes, J(+) with professional judgment. Note in worksheet.		x									x	
7.3	Are all analyte duplicate results within control? (RPD values < 20% or difference < ± PQL for aqueous, and RPD < 35% or difference < ± 2 X PQL for solids)? Action: If no, J(+).	x									x		
	Note: RPD criteria is used when both sample and duplicate results are > 5 X IDL.												

Note: Sample SW-SA2-GMCS-PDA9 was run in duplicate.

8.0 Spike Sample Analysis -Pre-Digestion (Code m - Recovery, Code d - RPD)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
8.1	Was a spiked sample prepared and analyzed at the correct frequency (one per 20 samples, per batch, per matrix and per level)? Action: If no, J(+), with professional judgment, analytes not associated with matrix spike results.	x									x		
8.2	Was a field blank used for the MS analysis? Action: If yes, J(+) with professional judgment. Note in worksheet.		x									x	
	Note: Matrix spike analysis may be performed on a field blank when it is the only aqueous sample in an SDG.												
8.3	For all analytes with sample concentration < 4 x spike concentration, are spike recoveries within the control limit of 75-125%? (No control limit applies to analytes with concentration > 4 x spike concentration.)		x								x		
	%R > 125% / 30% < %R < 74% / %R < 30%												
	Positive: J / J / J												
	Non-detect: None / UJ / R												

Note: Sample SW-SA2-GMCS-PDA9 was spiked and analyzed for metals and mercury. Qualifiers are listed below.

Field ID	Analyte	Recoveries (MS)	Limits
SW-SA2-GMCS-PDA9	Aluminum	157	75-125

Field ID	Analyte	Qualification	Code
SW-SA2-GMCS-PDA9	Aluminum	J	M

9.0 Instrument Detection Limits (IDL)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
9.1	Are all IDL equal to or less than the reporting limits specified?			x									x

Note:

10.0 ICP Serial Dilutions (Code s)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
10.1	Were serial dilutions performed?	x									x		
10.2	Was a five-fold dilution performed?	x									x		
10.3	Did the serial dilution results agree within 10% for analyte concentration > 50 x the IDL in the original sample? If no, J(+).	x									x		

Note: Samples SW-SA2-GMCS-R3AM and SW-SA2-GMCS-PDA9 were diluted and analyzed.

11.0 Field Duplicate Samples (Code f)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
11.1	Were any field duplicates submitted for metal analysis?	x									x		
11.2	Are all field duplicate results within control? (For aqueous sample, RPD values < 35% or difference < ± 2 x PQL and For solids, RPD < 50% or difference < ± 4 x PQL)	x									x		

Note: Sample DUP SW is the duplicate of sample SW-SA2-GMCS-PDA2.

12.0 Result Verification (Code Q)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
12.1	Were all results and detection limits for solid-matrix samples reported on a dry-weight basis?			x									x
12.2	Were all dilution reflected in the positive results and detection limits?			x									x

Note:

13.0 Data Completeness

13.1	Is % completeness within the control limits? (Control limit: Check QAPP or use 95% for aqueous sample, 90% for soil sample)							
13.2	Number of samples:	11		0		0		11
13.3	Number of target compounds in each analysis:	22		22		0		1
13.4	Number of results rejected and not reported:	0		0		0		0
	% Completeness = 100 x ((13.1 x 13.2) - 13.3) / (13.1 x 13.2)							
	% Completeness	**100**		#####		#####		**100**

Note:

DATA VALIDATION WORKSHEET
PESTICIDES/PCBs ANALYSIS

Reviewer:	Amelia Turnell	**Project Name:**	Sauget - Area 2
Date:	12/6/2005	**Project Number:**	21561511.60011
Laboratory	Severn Trent Laboratory - Savannah	**SDG No.:**	SAS 041
		Review Level:	Level III

Major Anomalies:

No samples were rejected.

Minor Anomalies:

Qualifiers were assigned due to low surrogate and LCS recoveries.

Field IDs:

SED-SA2-GMCS-R3AM	DUP SED	SED-SA2-GMCS-PDA9
SED-SA2-GMCS-R3BM	SED-SA2-GMCS-PDA3	SED-SA2-GMCS-PDA9A
SED-SA2-GMCS-R3CM	SED-SA2-GMCS-PDA4	
SED-SA2-GMCS-PDA2	SED-SA2-GMCS-PDA5	

1.0 Chain of Custody/Sample Condition

		Yes	No	NA
1.1	Do Chain-of-Custody forms list all samples analyzed?	x		
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was maintained?	x		
1.3	Do the Traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data?	x		

Note: The laboratory case narrative indicated that surrogate, LCS and MS/MSD recoveries were below QC criteria.

2.0 Holding Time/ Preservation (Code H)

		Yes	No	NA
2.1	Do sample preservation, collection and storage condition meet method requirement?	x		
	If samples were not on ice or the ice was melted upon arrival at the laboratory and the temperature of the cooler was elevated (> 10 °C), then flag all positive results with a "J" and all non-detects "UJ".			
2.2	Have any technical holding times, determined from sampling to date of analysis, been exceeded? (See attached Holding Time Table for sample holding time) If yes, J(+)/UJ(-).		x	
	Extraction: Soil/Sediment 14 days - aqueous 7 days Analysis: 40 days			
2.3	Have any technical holding times grossly (twice the holding time) been exceeded? If yes, J(+)/R(-).		x	

Note: All samples were extracted and analyzed within holding times.

3.0 Blanks (Method Blanks and Field Blanks) (Code X - Field Blank Contamination, Code Z - Method blank contamination)

		Yes	No	NA
3.1	Is a Method Blank Summary form present for each batch?	x		
3.2	Do any method blanks have positive results (TCL)?		x	
3.3	Do any field/rinse/equipment blanks have positive results (TCL)?		x	
	Action: Positive sample results <5X the blank concentration should be qualified "U". The result should be elevated to the RL for estimate (laboratory "J" flagged) concentrations.			
3.4	If Level IV, review raw data and verify all detections for blanks were reported.			x

Note: No analytes were detected in the blank samples.

4.0 GC/ECD Instrument Performance Check (Code B)

		Yes	No	NA
4.1	Are Endrin and 4,4'-DDT breakdown forms present?			x
4.2	Have all samples been analyzed within twelve hours of the performance check sample?			x
	If no, the data for the affected standards, blanks, field samples or QC samples are rejected "R".			
4.3	Have percent breakdown criteria (15%) for endrin and 4,4'-DDT been met?			x
	If no, all standards, blanks, field samples and QC samples are rejected "R".			

Note:

5.0 Initial Calibration (Code R)

		Yes	No	NA
5.1	Are Initial Calibration summary forms present and complete for each instrument used?			x
5.2	Are response factors stable (%RSD values < 20% or >0.995) over the concentration range of the instrument			x
	If not, J(+)/ UJ(-). In extreme cases, the reviewer may flag non-detects "R".			
5.3	If Level IV, recalculate a sample of RRFs and %RSDs to verify correct calculations are being made.			x

Note:

6.0 Continuing Calibration (Code C)

		Yes	No	NA
6.1	Are Continuing Calibration Summary forms present and complete?			x
6.2	Has a continuing calibration standard been analyzed every 12 hours?			x
6.3	Do any compounds have a % difference (or % drift for quantitation from a curve) (%D) between initial and continuing calibration CF outside QC limits (%D < 15%)?			x
	If yes, a marginal increase in response >20% then J(+) only; a decrease in response then J(+)/ UJ(-). For %D > 50%, flag R.			
6.4	If Level IV, calculate a sample of CFs and %Ds to verify correct calculations.			x

Note:

7.0 Surrogate Recovery (Code S)

		Yes	No	NA
7.1	Are all samples listed on the appropriate Surrogate Recovery Summary Form ?	x		
7.2	Are surrogate recoveries within acceptance criteria specified in the QAPP for all samples?		x	
7.3	If No in Section 7.2, were these sample(s) or method blank(s) reanalyzed?		x	
7.4	If No in Section 7.3, is any sample dilution factor greater than 10? (Surrogate recoveries may be diluted out.)	x		
	> UCL / 10% to LCL / < 10%			
	Positive: J / J / J			
	Non-detect: None / UJ / R			

Note: Several samples had surrogate recoveries outside QC limits. Qualifications are listed below.

Field ID	Surrogates	Surrogate recoveries	Recovery limits
SED-SA2-GMCS-R3CM	Tetrachloro-m-xylene	24	30-150
SED-SA2-GMCS-PDA2	Tetrachloro-m-xylene	0 D	30-150
DUP SED	Tetrachloro-m-xylene	25	30-150
SED-SA2-GMCS-PDA9	Tetrachloro-m-xylene	27	30-150
SED-SA2-GMCS-PDA9A	Tetrachloro-m-xylene	29	30-150

Field ID	Analytes	Qualification	Code
SED-SA2-GMCS-R3CM	All analytes	UJ (all analytes non-detect)	S
SED-SA2-GMCS-PDA2	None (surrogates diluted)	Not applicable	Not applicable
DUP SED	None (surrogates diluted)	Not applicable	Not applicable
SED-SA2-GMCS-PDA9	All analytes	UJ (all analytes non-detect)	S
SED-SA2-GMCS-PDA9A	All analytes	UJ/J	S

8.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD) or one MS with a Sample Duplicate (Code M - recovery, Code D - RPD)

		Yes	No	NA
8.1	Is a Matrix Spike/Matrix Spike Duplicate recovery form present?	x		
8.2	Are MS/MSDs analyzed at the required frequency of one matrix spike per ten samples and a duplicate per twenty for each matrix?	x		
8.3	Are all MS/MSD %Rs and RPDs within acceptance criteria Specified in the QAPP?		x	
	Using informed professional judgment, the data reviewer should use the MS and MSD results in conjunction with other QC criteria and determine the need for qualification of the data for samples *from the same site/matrix*. Recoveries <10% may require rejection. RPD failures may be flagged "J" (+ only)			

Note: Several MS/MSD recoveries were outside QC criteria. The LCS recovery for endrin ketone was also outside QC criteria.

Field ID	Analytes	MS/MSD recoveries/RPD	Criteria
SED-SA2-GMCS-PDA9	Heptachlor epoxide	42 / 36 / 14	43-132/ 50
SED-SA2-GMCS-PDA9	Endrin	41 / 41 / 3	45-148 / 50
SED-SA2-GMCS-PDA9	Endrin ketone	43 / 40 / 9	47-156 /50
SED-SA2-GMCS-PDA9	Gamma-chlordane	66 / 35 / 61	37 -152 / 50

Field ID	Analytes	Qualification	Code
SED-SA2-GMCS-PDA9	Endrin ketone	Previously qualified due to S	M

9.0 Laboratory Control Sample (LCS/LCSD) (Code L - LCS recovery Code E - RPD)

		Yes	No	NA
9.1	Is an LCS recovery form present?	X		
9.2	Is an LCS analyzed at the required frequency of one per twenty field samples for each matrix?	X		
9.3	Are all LCS %Rs and RPDs within acceptance criteria specified in the QAPP?		X	
9.4	If Level IV, verify the % recoveries are calculated correctly.			X
	Action for specific compound outside the acceptance criteria: %R>UCL, J(+) only; <LCL, J(+)/UJ(-); <30% J(+)/R(-). RPD failures should be flagged "J" (+ only)			

Note: The endrin ketone LCS recovery (46%) was below QC criteria (47-156%). Related samples are qualified in the following table.

Field ID	Analytes	Qualification	Code
SED-SA2-GMCS-R3AM	Endrin ketone	UJ	L
SED-SA2-GMCS-R3BM	Endrin ketone	UJ	L
SED-SA2-GMCS-R3CM	Endrin ketone	Previously qualified due to S	L
SED-SA2-GMCS-PDA2	Endrin ketone	UJ	L
DUP SED	Endrin ketone	UJ	L
SED-SA2-GMCS-PDA3	Endrin ketone	UJ	L
SED-SA2-GMCS-PDA4	Endrin ketone	UJ	L
SED-SA2-GMCS-PDA5	Endrin ketone	UJ	L
SED-SA2-GMCS-PDA9	Endrin ketone	Previously qualified due to S	L
SED-SA2-GMCS-PDA9A	Endrin ketone	Previously qualified due to S	L

10.0 TCL Identification (Code W)

		Yes	No	NA
10.1	Is the relative retention time (RRT) of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration?			X

Note:

11.0 TCL Quantitation and Reported Detection limits (Code P)

		Yes	No	NA
11.1	Are RLs used consistent with those specified in the QAPP?			x
11.2	Are these limits adjusted to reflect dilutions and/ or percent solids as required?			x
11.3	Are any positives reported that exceed the linear range of the instrument? If yes, than flag "J".			x
11.4	If Level IV, calculate a sample of positive results to verify correct calculations			x

Note:

12.0 Field Duplicate Samples (Code F)

		Yes	No	NA
12.1	Were any field duplicates submitted for analysis?	x		
12.2	Were all RPD or absolute difference values within the control limits outlined in the QAPP?	x		
	Action: No qualifying action is taken based on field duplicate results, however the data validator should provide a qualitative assessment in the data validation report.			

Note: Sample DUP SW is the duplicate of sample SED-SA2-GMCS-PDA2.

13.0 Data Completeness

			Yes	No	NA
13.1	Is % completeness within the control limits? (Control limit: Check QAPP or use 95% for aqueous sample, 90% for soil sample)		x		
13.2	Number of samples:	10			
13.3	Number of target compounds in each analysis:	21			
13.4	Number of results rejected and not reported:	0			
	% Completeness = 100 x ((13.1 x 13.2) - 13.3) / (13.1 x 13.2)				
	% Completeness	**100**			

Note:

DATA VALIDATION WORKSHEET
VOLATILE ORGANIC ANALYSIS

Reviewer:	Amelia Turnell	**Project Name:**	Sauget - Area 2
Date:	12/5/2005	**Project Number:**	21561510.60011
Laboratory	Severn Trent Laboratory - Savannah	**SDG No.:**	SAS 041
		Review Level:	Level III

Major Anomalies:

There were no major anomalies in this SDG.

Minor Anomalies:

Qualifiers were assigned due to field duplicates.

Field IDs:

SED-SA2-GMCS-R3AM	DUP SED	SED-SA2-GMCS-PDA9
SED-SA2-GMCS-R3BM	SED-SA2-GMCS-PDA3	SED-SA2-GMCS-PDA9A
SED-SA2-GMCS-R3CM	SED-SA2-GMCS-PDA4	
SED-SA2-GMCS-PDA2	SED-SA2-GMCS-PDA5	

1.0 Chain of Custody/Sample Condition

		Yes	No	NA
1.1	Do Chain-of-Custody forms list all samples analyzed?	X		
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was maintained?	X		
1.3	Do the Traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data?	X		

Note: The laboratory case narrative indicated that some MSD recoveries were above evaluation criteria.

2.0 Holding Time/ Preservation (Code H)

		Yes	No	NA
2.1	Do sample preservation, collection and storage condition meet method requirement?	X		
	If sample preservation and/or temperature was inappropriate (i.e., <2° >6°C, etc.), comment in report. If unpreserved or temperature is outside the range 0° (but not frozen) to 10° flag all positive results with a "J" and all non-detects "UJ". If temperature exceeds 10°, flag positive detections "J" and non-detects "R".			
2.2	Have any technical holding times, determined from sampling to date of analysis, been exceeded? If yes, J(+)/UJ(-).		X	
	Matrix / Preserved / Aromatic / All others			
	Aqueous / No / 7 days / 14 days			
	Yes / 14 days / 14 days			
	Soil/Sediment / 4 °C ± 2 °C / 14 days / 14 days			
2.3	Have any technical holding times been grossly (twice the holding time) exceeded? If yes, J(+)/R(-).		X	

Note: All samples were analyzed within holding times.

3.0 GC/MS Instrument Performance Check (Code T)

		Yes	No	NA
3.1	Are GC/MS Tuning and Mass Calibration forms present for bromofluorobenzene (BFB)?			x
3.2	Have all samples been analyzed within twelve hours of the BFB tune? If no, flag R.			x
3.3	Have ion abundance criteria for BFB been met for each instrument used? If no, flag R.			x

Note:

4.0 Blanks (Method Blanks, Field Blanks and Trip Blanks)

(Code X - Field Blank Contamination, Code Y - Trip blank contamination, Code Z - Method blank contamination)

		Yes	No	NA
4.1	Is a Method Blank Summary form present for each batch?	X		
4.2	Do any method blanks have positive VOA results (TCL and/or TIC)?		X	
4.3	Do any field/trip rinse/equipment blanks have positive VOA results (TCL and/or TIC)?			x
	Action: Positive sample results <5X (or 10X for common volatile lab contaminants- methylene chloride, acetone, and 2-butanone) the blank concentration should be qualified "U". The result should be elevated to the RL for estimate (laboratory "J" flagged) concentrations.			
4.4	If Level IV, review raw data and verify all detections for blanks were reported.			x

Note: No analytes were detected in the blank samples.

5.0 GC/MS Initial Calibration (Code C)

		Yes	No	NA
5.1	Are Initial Calibration summary forms present and complete for each instrument used?			x
5.2	Are CCCs linear applying either %RSD 30% and all other compounds <15% or >0.990?			x
	If not, J(+)/ UJ(-). In extreme cases, the reviewer may flag non-detects "R".			
5.3	Do any SPCC compounds have an RRF less than specification or any other compounds < 0.05 (use 0.01 for poor responders like ketones or alcohols)? If yes, J(+)/R(-).			x
5.4	Is the lowest standard at the same concentration, or lower, as the RL reported? If not, elevate RL.			x
5.5	If Level IV, recalculate a sample of RRFs and %RSDs to verify correct calculations are being made.			x

Note:

6.0 Continuing Calibration (Code C)

		Yes	No	NA
6.1	Are Continuing Calibration Summary forms present and complete?			x
6.2	Has a continuing calibration standard been analyzed every 12 hours?			x
6.3	Have all SPCCs and CCCs met method specifications? If not, comment in report, proceed to 6.4.			x
6.4	Do any compounds have a % difference (or % drift for quantitation from a curve) (%D) between initial and continuing calibration RRF outside QC limits (%D < 20%)?			x
	If yes, a marginal increase in response >20% then J(+) only; a decrease in response then J(+)/ UJ(-). For %D > 50%, flag R.			
6.5	Do any compounds have an RRF < 0.05 (use 0.01 for poor responders)? If yes, J(+)/R(-).			x
6.6	If Level IV, calculate a sample of RFs and %Ds from each RF to verify correct calculations.			x

Note:

7.0 Surrogate Recovery (Code S)

		Yes	No	NA
7.1	Are all samples listed on the appropriate Surrogate Recovery Summary Form ?	X		
7.2	Are surrogate recoveries within acceptance criteria specified in the QAPP for all samples?	X		
7.3	If No in Section 7.2, were these sample(s) or method blank(s) reanalyzed?			x
7.4	If No in Section 7.3, is any sample dilution factor greater than 10? (Surrogate recoveries may be diluted out.)			x
	Note: If SMC recoveries do not meet acceptance criteria in samples chosen for the MS/MSD or diluted samples, then no reanalysis is required.			
	> UCL 10% to LCL < 10%			
	Positive J J J			
	Non-detect None UJ R			

Note: All surrogate recoveries were within QC limits.

8.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD) or one MS with a Sample Duplicate (Recovery - Code M, RPD - Code D)

		Yes	No	NA
8.1	Is a Matrix Spike/Matrix Spike Duplicate recovery form present?	X		
8.2	Are MS/MSDs analyzed at the required frequency of one matrix spike per ten samples and a duplicate per twenty for each matrix?	X		
8.3	Are all MS/MSD %Rs and RPDs within acceptance criteria Specified in the QAPP?		X	
	Using informed professional judgment, the data reviewer should use the MS and MSD results in conjunction with other QC criteria and determine the need for qualification of the data for samples *from the same site/matrix* . Recoveries <10% may require rejection. RPD failures may be flagged "J" (+ only)			

Note: Sample SED-SA2-GMCS-PDA9 was the MS/MSD client designated sample. The MSD recovery for chloroethane (250%) was above QC criteria (20-140%). The RPD (129) was also outside QC criteria (50). Qualifications were not made based on MS/MSD alone and the LCS recoveries associated with this sample were within QC limits. No qualification of data were required.

9.0 Laboratory Control Sample (LCS/LCSD) (Recovery - Code L, RPD - Code E)

		Yes	No	NA
9.1	Is an LCS recovery form present?	X		
9.2	Is an LCS analyzed at the required frequency of one per twenty field samples for each matrix?	X		
9.3	Are all LCS %Rs and RPDs within acceptance criteria specified in the QAPP?		X	
9.4	If Level IV, verify the % recoveries are calculated correctly.			X
	Action for specific compound outside the acceptance criteria: %R>UCL, J(+) only; <LCL, J(+)/UJ(-); <30% J(+)/R(-). RPD failures should be flagged "J" (+ only)			

Note: Chloroethane LCS recovery (279%) was above QC criteria (20-140%) in LCS 680-23800/4. No qualifiers were assigned because chloroethane was non-detect in all associated samples.

10.0 Internal Standards (Code I)

					Yes	No	NA
10.1	Are internal standard areas for every sample and blank within upper and lower QC limits?				X		
		Area > +100%	Area < -50%	Area < -10%			
	Positive	J	J	J			
	Non-detect	None	UJ	R			
Note:	The method specification is for the continuing calibration to be compared to the mid-point initial calibration, not sample to continuing calibration. Thus, if all other QC specifications are met for a given sample, using informed professional judgment, the reviewer may choose not to flag individual samples in this case.						
10.2	Are retention times of internal standards within 30 seconds of the associated calibration standard?				X		
	Action: The chromatogram must be examined to determine if any false positives or negatives exist. For shift of a large magnitude, the reviewer may consider partial or total rejection of the data for non-detects in that sample/fraction.						

Note:

11.0 TCL Identification (Code W)

		Yes	No	NA
11.1	Is the relative retention time (RRT) of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration?			x
11.2	Are the three ions of greatest intensity present in the standard mass spectrum also present in the sample mass spectrum; and do sample and standard relative ion intensities agree within 30%?			x

Note:

12.0 TCL/TIC Quantitation and Reported Detection limits (Code K)

		Yes	No	NA
12.1	Are RLs used consistent with those specified in the QAPP?			x
12.2	Are these limits adjusted to reflect dilutions and/ or percent solids as required?			x
12.3	Are TIC ions greater than ten percent in the reference spectrum also present in the sample spectrum?			x
12.4	Are any positives reported that exceed the linear range of the instrument? If yes, than flag "J".			x
12.5	If Level IV, calculate a sample of positive results to verify correct calculations			x

Note:

13.0 Field Duplicate Samples (Code F)

		Yes	No	NA
13.1	Were any field duplicates submitted for VOC analysis?	x		
13.2	Were all RPD or absolute difference values within the control limits outlined in the QAPP?		x	
	Action: No qualifying action is taken based on field duplicate results, however the data validator should provide a qualitative assessment in the data validation report.			

Note: Sample DUP SED is the duplicate of sample SED-SA2-GMCS-PDA2.

Sample ID	Analytes	RPD	Qualifiers Assigned	Code
SED-SA2-GMCS-PDA2	Chlorobenzene (78 ug/kg)	141	J	F
DUP-SED	Chlorobenzene (450 ug/kg)		J	F

14.0 Data Completeness

			Yes	No	NA
14.1	Is % completeness within the control limits? (Control limit: Check QAPP or use 95% for aqueous sample, 90% for soil sample)		X		
14.2	Number of samples:	10			
14.3	Number of target compounds in each analysis:	33			
14.4	Number of results rejected and not reported:	0			
	% Completeness = 100 x ((14.1 * 14.2) - 14.3) / (14.1 * 14.2)				
	% Completeness	**100**			

Note:

DATA VALIDATION WORKSHEET
SEMIVOLATILE ORGANIC ANALYSIS

Reviewer:	Amelia Turnell	**Project Name:**	Sauget - Area 2
Date:	12/5/2005	**Project Number:**	21561510.60011
Laboratory:	Severn Trent Laboratory - Savannah	**SDG No.:**	SAS 41
		Review Level:	Level III

Major Anomalies:

Samples were rejected due to exceeded hold times.

Minor Anomalies:

Samples were qualified based on surrogate recoveries.

Field IDs:

SED-SA2-GMCS-R3AM	DUP SED	SED-SA2-GMCS-PDA9
SED-SA2-GMCS-R3BM	SED-SA2-GMCS-PDA3	SED-SA2-GMCS-PDA9A
SED-SA2-GMCS-R3CM	SED-SA2-GMCS-PDA4	
SED-SA2-GMCS-PDA2	SED-SA2-GMCS-PDA5	

1.0 Chain of Custody/Sample Condition

		Yes	No	NA
1.1	Do Chain-of-Custody forms list all samples analyzed?	x		
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was maintained?	x		
1.3	Do the Traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data?	x		

Note: Samples SED-SA2-GMCS-R3AM, SED-SA2-GMCS-R3BM, SED-SA2-GMCS-PDA2, DUP SED and SED-SA2-GMCS-PDA4 had surrogate recoveries outside QC criteria.

Samples SED-SA2-GMCS-R3AM, SED-SA2-GMCS-PDA2 and DUP SED were re-extracted outside holding time and all surrogates were recovered within control limits.

2.0 Holding Time/ Preservation (Code H)

		Yes	No	NA
2.1	Do sample preservation, collection and storage condition meet method requirement?	x		
	If samples were not on ice or the ice was melted upon arrival at the laboratory and the temperature of the cooler was elevated (> 10 ^{o}C), then flag all positive results with a "J" and all non-detects "UJ".			
2.2	Have any technical holding times, determined from sampling to date of analysis, been exceeded? (See attached Holding Time Table for sample holding time) If yes, J(+)/UJ(-).	x		
	Extraction: Soil/Sediment 14 days - aqueous 7 days Analysis: 40 days			
2.3	Have any technical holding times grossly (twice the holding time) been exceeded? If yes, J(+)/R(-).	x		

Note: Samples SED-SA2-GMCS-R3AM, SED-SA2-GMCS-PDA2 and DUP SED were re-extracted outside holding time criteria.

Analytes	Field ID	Qualification	Days late	Code
All SVOCs	SED-SA2-GMCS-R3AM RE	R	35	H
All SVOCs	SED-SA2-GMCS-PDA2 RE	R	34	H
All SVOCs	DUP SED RE	R	34	H

3.0 GC/MS Instrument Performance Check (Code T)

		Yes	No	NA
3.1	Are GC/MS Tuning and Mass Calibration forms present for DFTPP?			x
3.2	Have all samples been analyzed within twelve hours of the tune?			x
	If no, the data for the affected standards, blanks, field samples or QC samples are rejected "R".			
3.3	Have ion abundance criteria for DFTPP been met for each instrument used?			x
	If no, all standards, blanks, field samples and QC samples are rejected "R".			

Note:

4.0 Blanks (Method Blanks and Field Blanks) (Code X - Field Blank Contamination, Code Z - Method blank contamination)

		Yes	No	NA
4.1	Is a Method Blank Summary form present for each batch?			
4.2	Do any method/instrument/reagent blanks have positive results (TCL, and/or TIC)?	x		
4.3	Do any field equipment blanks have positive results (TCL, and/or TIC)?		x	
	Action: Positive sample results <5X (or 10X for phthalate contaminants) the blank concentration should be qualified "U" and the detection limit elevated to the RL for estimate concentrations.			
4.4	If Level IV, review raw data and verify all detections for blanks were reported.			

Note: Bis(2-ethylhexyl)phthalate was detected in MB 680-26326 with a concentration of 610 ug/kg. The related samples SED-SA2-GMCS-R3AMRE, SED-SA2-GMCS-PDA2RE and DUP SEDRE were previously qualified (R) due to exceeded hold times and no further qualification of data was required.

5.0 GC/MS Initial Calibration (Code C)

		Yes	No	NA
5.1	Are Initial Calibration summary forms present and complete for each instrument used?			x
5.2	Are CCCs linear applying either %RSD 30% and all other compounds <15% or >0.990?			x
	If not, J(+)/ UJ(-). In extreme cases, the reviewer may flag non-detects "R".			
5.3	Do any SPCC compounds have an RRF les than specification or any other compounds < 0.05 (use 0.01 for poor responders like amines and phenols)? If yes, J(+)/R(-).			x
5.4	Is the lowest standard at the same concentration, or lower, as the RL reported? If not, elevate RL.			x
5.5	If Level IV, recalculate a sample of RRFs and %RSDs to verify correct calculations are being made.			

Note:

6.0 Continuing Calibration (Code C)

		Yes	No	NA
6.1	Are Continuing Calibration Summary forms present and complete?			x
6.2	Has a continuing calibration standard been analyzed every 12 hours?			x
6.3	Have all SPCCs and CCCs met method specifications? If not, comment in report, proceed to 6.4.			x
6.4	Do any compounds have a % difference (or % drift for quantitation from a curve) (%D) between initial and continuing calibration RRF outside QC limits (%D < 20%)?			x
	If yes, a marginal increase in response >20% then J(+) only; a decrease in response then J(+)/ UJ(-). For %D > 50%, flag R.			
6.5	Do any compounds have an RRF < 0.05 (use 0.01 for poor responders)? If yes, J(+)/R(-).			x
6.6	If Level IV, calculate a sample of RFs and %Ds from each RF to verify correct calculations.			

Note:

7.0 Surrogate Recovery (Code S)

		Yes	No	NA
7.1	Are all samples listed on the appropriate Surrogate Recovery Summary Form ?	x		
7.2	Are surrogate recoveries within acceptance criteria specified in the QAPP for all samples and method blanks?		x	
7.3	Are more than one of either fraction outside the acceptance criteria?	x		
7.4	If Yes in Section 7.3, are these sample(s) or method blank(s) reanalyzed?	x		
7.5	If Yes in Section 7.3, is any sample dilution factor greater than 10?		x	
	Note: If SMC recoveries display unacceptable recoveries in the MS and/ or diluted samples, then no reanalysis is required and acids and base/ neutrals are assessed separately.			
	> UCL / 10% to LCL / < 10%			
	Positive: J / J / J			
	Non-detect: None / UJ / R			

Note: Surrogate recoveries were outside QC limits. Samples SED-SA2-GMCS-R3AM, SED-SA2-GMCS-R3BM, SED-SA2-GMCS-PDA2 and SED-SA2-GMCS-PDA4 had one surrogate recovery in the acid fraction outside of control limits. The sample DUP SED had several surrogate recoveries outside of criteria. Qualifiers are listed below.

Field ID	Surrogate	Surrogate Recoveries	Surrogate limits
DUP SED	2FP, FBP, NBZ, PHL	23, 32, 27, 31	36-101, 38-104, 33-94, 38-102

2FP=2-Fluorophenol, FBP=2-Fluorobiphenyl, NBZ=Nitrobenzene-d5, PHL=Phenol-d5

Field ID	Analyte	Qualification	Code
DUP SED	All SVOCs	J/UJ	S

8.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD) or one MS with a Sample Duplicate (Recovery - Code M, RPD - Code D)

		Yes	No	NA
8.1	Is a Matrix Spike/Matrix Spike Duplicate recovery form present?	x		
8.2	Are MS/MSDs analyzed at the required frequency not to exceed twenty field samples for each matrix?	x		
8.3	Are all MS/MSD %Rs and RPDs within acceptance criteria provided by the laboratory?		x	
	Using informed professional judgment, the data reviewer should use the MS and MSD results in conjunction with other QC criteria and determine the need for qualification of the data for samples *from the same site/matrix*. Recoveries <10% may require rejection. RPD failures may be flagged "J" (+ only)			

Note: Sample SED-SA2-GMCS-PDA9 was the MS/MSD client designated sample. The MSD recovery for dimethylphenol (35%) was below control limits (40-112%). Qualifications were not made based on MS/MSD alone and the LCS recoveries associated with this sample were within QC limits. No qualification of data were

9.0 Laboratory Control Sample (LCS/LCSD) (Recovery - Code L, RPD - Code E)

		Yes	No	NA
9.1	Is an LCS recovery form present?	X		
9.2	Is LCS analyzed at the required frequency for each matrix?	X		
9.3	Are all LCS %Rs (and RPDs) within acceptance criteria?	X		
	Action for specific compound outside the acceptance criteria: %R>UCL, J(+) only; <LCL, J(+)/UJ(-); <30% J(+)/R(-). RPD failures should be flagged "J" (+ only)			
9.4	If Level IV, verify the % recoveries are calculated correctly.			x

Note:

10.0 Internal Standards (Code I)

					Yes	No	NA
10.1	Are internal standard area of every sample and blank within upper and lower QC limits for each continuing calibration?					x	
		Area > +100%	Area < -50%	Area < -10%			
	Positive	J	J	J			
	Non-detect	None	UJ	R			
Note:	The method specification is for the continuing calibration to be compared to the mid-point initial calibration, not sample to continuing calibration. Thus, if all other QC specifications are met for a given sample, using informed professional judgment, the reviewer may choose not to flag individual samples in this case.						
10.2	Are retention times of internal standards within 30 seconds of the associated calibration standard?				X		
	Action: The chromatogram must be examined to determine if any false positives or negatives exist. For shift of a large magnitude, the reviewer may consider partial or total rejection of the data for non-detects in that sample/fraction.						

Note: Internal standards were outside control limits in the MS/MSD. No qualifiers were assigned because the parent sample internal standards were within control limits.

11.0 TCL Identification (Code W)

		Yes	No	NA
11.1	Is the relative retention time (RRT) of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration?			x
11.2	Are the three ions of greatest intensity present in the standard mass spectrum also present in the sample mass spectrum; and do sample and standard relative ion intensities agree within 30%?			x

Note:

12.0 TCL/TIC Quantitation and Reported Detection limits (Code K)

		Yes	No	NA
12.1	Are RLs used consistent with those specified in the QAPP?			x
12.2	Are these limits adjusted to reflect dilutions and/ or percent solids as required?			x
12.3	Are TIC ions greater than ten percent in the reference spectrum also present in the sample spectrum?			x
12.4	Are any positives reported that exceed the linear range of the instrument? If yes, than flag "J".			x
12.5	If Level IV, calculate a sample of positive results to verify correct calculations			

Note:

13.0 Field Duplicate Samples (Code F)

		Yes	No	NA
13.1	Were any field duplicates submitted for SVOC analysis?	x		
13.2	Were all RPD or absolute difference values within the control limits?	x		
	No action is taken based on field duplicate results, however the data validator should provide a qualitative assessment in the data validation report.			

Note: Sample DUP SW is the duplicate of sample SED-SA2-GMCS-PDA2.

14.0 Data Completeness

			Yes	No	NA
14.1	Is % completeness within the control limits? (Control limit: Check QAPP or use 95% for aqueous sample, 90% for soil sample)		x		
14.2	Number of samples:	10			
14.3	Number of target compounds in each analysis:	65			
14.4	Number of results rejected and not reported:	0			
	% Completeness = 100 x ((14.1 x 14.2) - 14.3) / (14.1 x 14.2)				
	% Completeness	**100**			

Note:

DATA VALIDATION WORKSHEET
HERBICIDES ANALYSIS

Reviewer:	Amelia Turnell	**Project Name:**	Sauget - Area 2
Date:	12/12/2005	**Project Number:**	21561510.60010
Laboratory	Severn Trent Laboratory - Savannah	**SDG No.:**	SAS 041
		Review Level:	Level III

Major Anomalies:

There were no rejections.

Minor Anomalies:

One analyte was qualified in one sample due to field duplicate relative percent difference.

Field IDs:

SED-SA2-GMCS-R3AM	DUP SED	SED-SA2-GMCS-PDA9
SED-SA2-GMCS-R3BM	SED-SA2-GMCS-PDA3	SED-SA2-GMCS-PDA9A
SED-SA2-GMCS-R3CM	SED-SA2-GMCS-PDA4	
SED-SA2-GMCS-PDA2	SED-SA2-GMCS-PDA5	

1.0 Chain of Custody/Sample Condition

		Yes	No	NA
1.1	Do Chain-of-Custody forms list all samples analyzed?	x		
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was maintained?	x		
1.3	Do the Traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data?	x		

Note: The laboratory case narrative indicated that the grand mean exception was applied to continuing calibration verification (CCV) standards in this package. This observation is beyond the scope of this review.

2.0 Holding Time/ Preservation (Code H)

		Yes	No	NA
2.1	Do sample preservation, collection and storage condition meet method requirement?	X		
	If samples were not on ice or the ice was melted upon arrival at the laboratory and the temperature of the cooler was elevated (> 10 °C), then flag all positive results with a "J" and all non-detects "UJ".			
2.2	Have any technical holding times, determined from sampling to date of analysis, been exceeded? (See attached Holding Time Table for sample holding time) If yes, J(+)/UJ(-).		X	
	Extraction: Soil/Sediment 14 days - aqueous 7 days Analysis: 40 days			
2.3	Have any technical holding times grossly (twice the holding time) been exceeded? If yes, J(+)/R(-).		X	

Note: All samples were analyzed within holding times.

3.0 Blanks (Method Blanks and Field Blanks) (Code X - Field Blank Contamination, Code Z - Method blank contamination)

		Yes	No	NA
3.1	Is a Method Blank Summary form present for each batch?	X		
3.2	Do any method blanks have positive results?		X	
3.3	Do any field/rinse/equipment blanks have positive results?		X	
	Action: Positive sample results <5X the blank concentration should be qualified "U". The result should be elevated to the RL for estimate (laboratory "J" flagged) concentrations.			
3.4	If Level IV, review raw data and verify all detections for blanks were reported.			x

Note: There were no detections in the blanks.

4.0 Initial Calibration (Code R)

		Yes	No	NA
4.1	Are Initial Calibration summary forms present and complete for each instrument used?			x
4.2	Are calibration factors stable (%RSD values < 20% or >0.995) over the concentration range of the instrument			x
	If not, J(+)/ UJ(-). In extreme cases, the reviewer may flag non-detects "R".			
4.3	If Level IV, recalculate a sample of RRFs and %RSDs to verify correct calculations are being made.			x

Note:

5.0 Continuing Calibration (Code C)

		Yes	No	NA
5.1	Are Continuing Calibration Summary forms present and complete?			x
5.2	Has a continuing calibration standard been analyzed every 12 hours?			x
5.3	Do any compounds have a % difference (or % drift for quantitation from a curve) (%D) between initial and continuing calibration CF outside QC limits (%D < 20%)?			x
	If yes, a marginal increase in response >20% then J(+) only; a decrease in response then J(+)/ UJ(-). For %D > 50%, flag R.			
5.5	If Level IV, calculate a sample of CFs and %Ds from each CF to verify correct calculations.			

Note:

6.0 Surrogate Recovery (Code S)

		Yes	No	NA
6.1	Are all samples listed on the appropriate Surrogate Recovery Summary Form ?			
6.2	Are surrogate recoveries within acceptance criteria specified in the QAPP for all samples?			
6.3	If No in Section 6.2, were these sample(s) or method blank(s) reanalyzed?			x
6.4	If No in Section 6.3, is any sample dilution factor greater than 10? (Surrogate recoveries may be diluted out.)			x
	> UCL / 10% to LCL / < 10%			
	Positive: J / J / J			
	Non-detect: None / UJ / R			

Note: All surrogate recoveries were within limits.

7.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD) or one MS with a Sample Duplicate (Code M - recovery, Code D - RPD)

		Yes	No	NA
7.1	Is a Matrix Spike/Matrix Spike Duplicate recovery form present?			
7.2	Are MS/MSDs analyzed at the required frequency of one matrix spike per ten samples and a duplicate per twenty for each matrix?			
7.3	Are all MS/MSD %Rs and RPDs within acceptance criteria Specified in the QAPP?			
	Using informed professional judgment, the data reviewer should use the MS and MSD results in conjunction with other QC criteria and determine the need for qualification of the data for samples *from the same site/matrix*. Recoveries <10% may require rejection. RPD failures may be flagged "J" (+ only)			

Note: Sample SED-SA2-GMCS-PDA9 was the MS/MSD client designated sample. All MS/MSD recoveries were within control limits.

8.0 Laboratory Control Sample (LCS/LCSD) (Code L - LCS recovery Code E - RPD)

		Yes	No	NA
8.1	Is an LCS recovery form present?	X		
8.2	Is an LCS analyzed at the required frequency of one per twenty field samples for each matrix?	X		
8.3	Are all LCS %Rs and RPDs within acceptance criteria specified in the QAPP?	X		
8.4	If Level IV, verify the % recoveries are calculated correctly.			x
	Action for specific compound outside the acceptance criteria: %R>UCL, J(+) only; <LCL, J(+)/UJ(-); <30% J(+)/R(-). RPD failures should be flagged "J" (+ only)			

Note: The LCS recoveries were within limits.

9.0 TCL Identification (Code W)

		Yes	No	NA
9.1	Is the relative retention time (RRT) of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration?			x

Note:

10.0 TCL Quantitation and Reported Detection limits (Code P)

		Yes	No	NA
10.1	Are RLs used consistent with those specified in the QAPP?			x
10.2	Are these limits adjusted to reflect dilutions and/ or percent solids as required?			x
10.3	Are any positives reported that exceed the linear range of the instrument? If yes, than flag "J".			x
10.4	If Level IV, calculate a sample of positive results to verify correct calculations			x

Note:

11.0 Field Duplicate Samples (Code F)

		Yes	No	NA
11.1	Were any field duplicates submitted for herbicide analysis?	X		
11.2	Were all RPD or absolute difference values within the control limits outlined in the QAPP?	X		
	Action: No qualifying action is taken based on field duplicate results, however the data validator should provide a qualitative assessment in the data validation report.			

Note: Sample DUP SED is the duplicate of sample SED-SA2-GMCS-PDA2.

Sample ID	Analytes	Reason for Qualifier	Qualifiers Assigned	Code
SED-SA2-GMCS-PDA2	2,4-D (120 ug/kg)	>2xs the RL difference	J	F
DUP-SED	2,4-D (51 ug/kg)	>2xs the RL difference	J	F

12.0 Data Completeness

			Yes	No	NA
12.1	Is % completeness within the control limits? (Control limit: Check QAPP or use 95% for aqueous sample, 90% for soil sample)		X		
12.2	Number of samples:	10			
12.3	Number of target compounds in each analysis:	10			
12.4	Number of results rejected and not reported:	0			
	% Completeness = 100 x ((12.1 x 12.2) - 12.3) / (12.1 x 12.2)				
	% Completeness	**100**			

Note:

DATA VALIDATION WORKSHEET - Level III Review

Inorganic - ICP, ICP-MS, GFAA, and CVAA

Reviewer:	Amelia Turnell	**Project Name:**	Sauget - Area 2
Date:	12/12/2005	**Project Number:**	21561510.60011
Laboratory	Severn Trent Laboratory - Savannah	**SDG No.:**	SAS041
		Review Level:	Level III

Major Anomalies:

No samples were rejected

Minor Anomalies:

Samples were qualified due to hold times, laboratory duplicates, spike recoveries and preparation blanks.

Field IDs:

SED-SA2-GMCS-R3AM	DUP SED	SED-SA2-GMCS-PDA9
SED-SA2-GMCS-R3BM	SED-SA2-GMCS-PDA3	SED-SA2-GMCS-PDA9A
SED-SA2-GMCS-R3CM	SED-SA2-GMCS-PDA4	
SED-SA2-GMCS-PDA2	SED-SA2-GMCS-PDA5	

1.0 Chain of Custody/Sample Condition/Raw Data

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
1.1	Do Chain-of-Custody forms list all samples that were analyzed?	X			X						X		
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was maintained?	X									X		
1.3	Do the traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data?	X										X	
1.4	Does sample preservation, collection and storage meet method requirement? (water samples: with Nitric Acid to pH < 2, and soil/sediment samples: 4 °C ± 2 °C)	X									X		
1.5	Are the digestion logs present and complete with pH values, sample weights, dilutions, final volumes. % solids (for soil samples), and preparation dates? For any missing or incomplete documentation, contact the laboratory for explanation/resubmittal.	X									X		

Note: The laboratory case narrative indicated that there were method blank detections, sample duplicate RPDs exceeding control limits and MS/MSD recoveries outside the QC limits. Some samples were analyzed outside holding time; however, this was not mentioned in the laboratory case narrative.

2.0 Holding Time (Code h)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
2.1	Have any technical holding times, determined from date of collection to date of analysis, been exceeded? (Hg: 28days, other metals: 6 months) See attached Holding Time Table.		x								x		
	Action: J(+)/UJ(-). If the holding times are grossly exceeded (twice the holding time criteria) J(+)/R(-).												

Note: Three mercury samples were analyzed outside holding time. The samples were collected 9/21/2005 and analyzed 10/20/2005. The exceedances were not mentioned in the case narrative. Qualifiers are listed below.

Field ID	Analyte	Days late	Qualification	Code
SED-SA2-GMCS-R3AM	Mercury	1	J	H
SED-SA2-GMCS-R3BM	Mercury	1	UJ	H
SED-SA2-GMCS-R3CM	Mercury	1	J	H

3.0 Instrument Calibration (Code c)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
3.1	Are sufficient standards included in the calibration curve? (ICP/ICP-MS: blank + one standard; GFAA: blank + three standards; CVAA: blank + five standards)			x									
3.2	Are the correlation coefficients > 0.995? (for GFAA and CVAA) Action: J(+)/UJ(-).												x
3.3	Was an initial calibration verification (ICV) analyzed at the beginning of each analysis? Action: If no, use professional judgment to determine affect on the data and note in reviewer narrative.			x									x
3.4	Was continuing calibration verification (CCV) performed every 10 analysis or every 2 hours, whichever is more frequent? Action: If no, use professional judgment to determine affect on the data and note in reviewer narrative.			x									x
3.5	Are all calibration standard percent recoveries (ICV and CCV) within the control limits? Mercury (80%-120%) and other Metals (90%-110%).			x									x

Action:	R(+/-)	J(+)/UJ(-)	J(+)	R(+)
Mercury	< 65%	65% - 79%	121% - 135%	> 135%
Other Metals	< 75%	75% - 89%	111% - 125%	> 125%

Note:

4.0 Blanks (Code o - Calibration blank failure, Code p - Preparation blank failure, Code x - Field blank failure)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
4.1	Were preparation blank (PB) prepared at the appropriate frequency (one per 20 samples, per batch, per matrix and per level)?	x									x		
4.2	Are there reported PB values > + IDL? Action: If yes, action level of 5 times the blank value are determined for positive and negative blank values.	x										x	
4.3	Were initial calibration blanks (ICB) analyzed? Action: If no, use professional judgment to determine affect on the data note in reviewer narrative.	x									x		
4.4	Were continuing calibration blanks (CCB) analyzed after every 10 samples or every 2 hours whichever is more frequent? Action: If no, use professional judgment to determine affect on the data to note in reviewer narrative.	x									x		
4.5	Are there reported ICB or CCB values > + IDL? Action: If yes, action level of 5 times the blank value are determined for positive and negative blank values.			x									x
4.6	Are there samples with concentrations less than five times the highest level in associated blanks? Action: If yes, U at reported concentration.	x										x	
4.7	Are there samples with non-detect results or with concentrations less than five times the most negative value in associated blanks? Action; If yes, J(+)/UJ(-).		x									x	

Note: Lead was detected with a concentration of 0.31 ug/kg and sodium was detected with a concentration of 74 ug/kg in method blank 680-24443. Sodium qualifiers are listed below. All the related lead detections were 5X greater than the preparation blank detection. Potassium was detected with a concentration of 1.4 ug/kg and sodium was detected with a concentration of 90 ug/kg in method blank 680-23718. Sodium qualifiers are listed below. All the related potassium detections were 5X greater than the preparation blank detection.

Sample ID	Analytes	Qualification	Code	NEW RL
SED-SA2-GMCS-R3AM	Sodium	U	P	200
SED-SA2-GMCS-R3BM	Sodium	U	P	140
SED-SA2-GMCS-R3CM	Sodium	U	P	110
SED-SA2-GMCS-PDA2	Sodium	U	P	360
DUP SED	Sodium	U	P	360
SED-SA2-GMCS-PDA3	Sodium	U	P	210
SED-SA2-GMCS-PDA4	Sodium	U	P	150
SED-SA2-GMCS-PDA5	Sodium	U	P	270
SED-SA2-GMCS-PDA9	Sodium	U	P	140
SED-SA2-GMCS-PDA9A	Sodium	U	P	150

5.0 ICP Interference Check Sample (ICS) (Code n)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
5.1	Was ICS AB analyzed at beginning of each ICP run (or at least twice every 8 hours), and at the beginning or once every 8 hours (whichever is more frequent) for ICP-MS?			x									
5.2	Are the ICS AB recoveries within 80% - 120%?			x									
5.3	Are the results for unspiked analytes (in ICS A) < + IDL?			x									
5.4	If not, are the associated sample Al, Ca, Fe, and Mg concentrations less than the level in the ICS?			x									
	Action: Not Spiked Analytes / Spiked analytes (ICS AB analytes)												
	< -IDL / > IDL / < 50% / 50% - 79% / > 120%												
	UJ(-) / J(+) / R(+/-) / J(+)/UJ(-) / J(+)												

Note:

6.0 Laboratory Control Sample (LCS) (Code l - Recovery, Code e - RPD)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
6.1	Was an LCS prepared and analyzed at the correct frequency (one per 20 samples, per batch, per matrix and per level)? Action: If no, J(+) any sample not associated with LCS results.	x						x			x		
6.2	Is any LCS recovery outside the control limits? (Aqueous limits: 80% - 120% - except Ag and Sb; Solid limits: as per EPA-EMSL/LV)		x									x	
	Action: Solid / Aqueous												
	< LCL / > UCL / < 50% / 50% - 79% / > 120%												
	J(+)/UJ(-) / J(+) / R(+/-) / J(+)/UJ(-) / J(+)												

Note: The LCS/LCSD recoveries were within limits.

7.0 Laboratory Duplicates (Code k)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
7.1	Were Laboratory duplicates prepared and analyzed at the correct frequency (one per 20 samples, per batch, per matrix and per level)? Action: If no, J(+), with professional judgment, analytes not associated with Duplicate results.	X									X		
7.2	Was a field blank used for the duplicate analysis? Action: If yes, J(+) with professional judgment. Note in worksheet.		X									X	
7.3	Are all analyte duplicate results within control? (RPD values < 20% or difference < ± PQL for aqueous, and RPD < 35% or difference < ± 2 X PQL for solids)? Action: If no, J(+).		X								X		
	Note: RPD criteria is used when both sample and duplicate results are > 5 X IDL.												

Note: Samples SED-SA2-GCMS-PDA9 and SED-SA2-GCMS-R3AM were analyzed in duplicate. Qualifiers are listed below.

Field ID	Analyte	RPD	Limits
SED-SA2-GMCS-PDA9	Manganese	45	35
SED-SA2-GMCS-PDA9	Vanadium	45	35

Field ID	Analyte	Qualifier	Code
SED-SA2-GMCS-PDA9	Manganese	J	K
SED-SA2-GMCS-PDA9	Vanadium	J	K

8.0 Spike Sample Analysis -Pre-Digestion (Code m - Recovery, Code d - RPD)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
8.1	Was a spiked sample prepared and analyzed at the correct frequency (one per 20 samples, per batch, per matrix and per level)? Action: If no, J(+), with professional judgment, analytes not associated with matrix spike results.	X									X		
8.2	Was a field blank used for the MS analysis? Action: If yes, J(+) with professional judgment. Note in worksheet.		X									X	
	Note: Matrix spike analysis may be performed on a field blank when it is the only aqueous sample in an SDG.												
8.3	For all analytes with sample concentration < 4 x spike concentration, are spike recoveries within the control limit of 75-125%? (No control limit applies to analytes with concentration > 4 x spike concentration.)		X								X		
	%R > 125% 30% < %R < 74% %R < 30%												
	Positive J J J												
	Non-detect None UJ R												

Note: The Matrix Spikes were run in samples SED-SA2-GMCS-PDA9 and SED-SA2-GMCS-R3AM. Matrix spike duplicates were not run for the ICP metals.

Sample ID	Analytes	MS	MS Limit
SED-SA2-GMCS-PDA9	Calcium	-84	75-125
SED-SA2-GMCS-PDA9	Magnesium	56	75-125
SED-SA2-GMCS-PDA9	Manganese	33	75-125
SED-SA2-GMCS-R3AM	Lead	73	75-125
SED-SA2-GMCS-R3AM	Manganese	193	75-125

Sample ID	Analytes	Qualification	Code
SED-SA2-GMCS-PDA9	Calcium	J	M
SED-SA2-GMCS-PDA9	Magnesium	J	M
SED-SA2-GMCS-PDA9	Manganese (already qualified due to K)	none	M
SED-SA2-GMCS-R3AM	Lead	J	M
SED-SA2-GMCS-R3AM	Manganese	J	M

9.0 Instrument Detection Limits (IDL)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
9.1	Are all IDL equal to or less than the reporting limits specified?			x									x

Note:

10.0 ICP Serial Dilutions (Code s)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
10.1	Were serial dilutions performed?	x									x		
10.2	Was a five-fold dilution performed?	x									x		
10.3	Did the serial dilution results agree within 10% for analyte concentration > 50 x the IDL in the original sample? If no, J(+).	x									x		

Note: Sample UAA-7-38 was analyzed at a dilution.

11.0 Field Duplicate Samples (Code f)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
11.1	Were any field duplicates submitted for metal analysis?	x									x		
11.2	Are all field duplicate results within control? (For aqueous sample, RPD values < 35% or difference < ± 2 x PQL and For solids, RPD < 50% or difference < ± 4 x PQL)	x									x		

Note: Sample DUP SED is the duplicate of sample SED-SA2-GMCS-PDA2.

12.0 Result Verification (Code Q)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
12.1	Were all results and detection limits for solid-matrix samples reported on a dry-weight basis?			x									x
12.2	Were all dilution reflected in the positive results and detection limits?			x									x

Note:

13.0 Data Completeness

13.1	Is % completeness within the control limits? (Control limit: Check QAPP or use 95% for aqueous sample, 90% for soil sample)							
13.2	Number of samples:	10		0		0		10
13.3	Number of target compounds in each analysis:	22		22		0		1
13.4	Number of results rejected and not reported:	0		0		0		0
	% Completeness = 100 x ((13.1 x 13.2) - 13.3) / (13.1 x 13.2)							
	% Completeness	**100**		###		###		**100**

Note:

URS

Data Tables

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	VOCs	1,1,1-Trichloroethane	11	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	VOCs	1,1,2,2-Tetrachloroethane	11	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	VOCs	1,1,2-Trichloroethane	11	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	VOCs	1,1-Dichloroethane	11	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	VOCs	1,1-Dichloroethylene	11	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	VOCs	1,2-Dichloroethane	11	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	VOCs	1,2-Dichloroethene (total)	21	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	VOCs	1,2-Dichloropropane	11	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	VOCs	2-Butanone (MEK)	53	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	VOCs	4-Methyl-2-pentanone (MIBK)	53	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	VOCs	Acetone	110	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	VOCs	Benzene	11	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	VOCs	Bromodichloromethane	11	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	VOCs	Bromoform	11	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	VOCs	Bromomethane	11	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	VOCs	Carbon Disulfide	11	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	VOCs	Carbon Tetrachloride	11	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	VOCs	Chlorobenzene	78	ug/Kg		J	F
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	VOCs	Chlorodibromomethane	11	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	VOCs	Chloroethane	11	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	VOCs	Chloroform	11	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	VOCs	Chloromethane	11	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	VOCs	cis-1,2-Dichloroethene	11	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	VOCs	cis-1,3-Dichloropropene	11	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	VOCs	Dichloromethane	11	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	VOCs	Ethylbenzene	2.1	ug/Kg	J		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	VOCs	Methyl N-Butyl Ketone	53	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	VOCs	Styrene (Monomer)	11	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	VOCs	Tetrachloroethene	11	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	VOCs	Toluene	11	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	VOCs	trans-1,2-Dichloroethene	11	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	VOCs	trans-1,3-Dichloropropene	11	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	VOCs	Trichloroethene	11	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	VOCs	Vinyl chloride	11	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	VOCs	Xylenes, Total	21	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	1,2,4-Trichlorobenzene	720	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	1,2-Dichlorobenzene	240	ug/Kg	J		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	1,3-Dichlorobenzene	720	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	1,4-Dichlorobenzene	200	ug/Kg	J		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	720	ug/Kg	U		

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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	2,4,5-Trichlorophenol	720	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	2,4,6-Trichlorophenol	720	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	2,4-Dichlorophenol	720	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	2,4-Dimethylphenol	720	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	2,4-Dinitrophenol	3700	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	2,4-Dinitrotoluene	720	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	2,6-Dinitrotoluene	720	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	2-Chloronaphthalene	720	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	2-Chlorophenol	720	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	2-Methylnaphthalene	720	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	2-Methylphenol (o-Cresol)	720	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	2-Nitroaniline	3700	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	2-Nitrophenol	720	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	3 & 4 Methylphenol	720	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	3,3'-Dichlorobenzidine	1400	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	3-Nitroaniline	3700	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	4,6-Dinitro-2-methylphenol	3700	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	4-Bromophenyl Phenyl Ether	720	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	4-Chloro-3-methylphenol	720	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	4-Chlorophenyl Phenyl Ether	720	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	4-Nitrophenol	3700	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	Acenaphthene	720	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	Acenaphthylene	720	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	Anthracene	720	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	Benzo(a)anthracene	720	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	Benzo(a)pyrene	720	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	Benzo(b)fluoranthene	720	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	Benzo(g,h,i)perylene	720	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	Benzo(k)fluoranthene	720	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	Benzyl Butyl Phthalate	720	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	bis(2-Chloroethoxy)methane	720	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	bis(2-Ethylhexyl)phthalate	720	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	Carbazole	720	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	Chrysene	720	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	Dibenzo(a,h)anthracene	720	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	Dibenzofuran	720	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	Diethyl Phthalate	720	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	Dimethyl Phthalate	720	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	Di-n-butylphthalate	720	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	Di-n-octylphthalate	720	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	Dinoseb	720	ug/Kg	U		

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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	Fluoranthene	720	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	Fluorene	720	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	Hexachlorobenzene	720	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	Hexachlorobutadiene	720	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	Hexachlorocyclopentadiene	720	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	Hexachloroethane	720	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	Indeno(1,2,3-cd)pyrene	720	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	Isophorone	720	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	Naphthalene	720	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	Nitrobenzene	720	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	N-Nitroso-di-n-propylamine	720	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	N-Nitrosodiphenylamine	720	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	P-Chloroaniline	500	ug/Kg	J		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	Phenanthrene	720	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	Phenol	720	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	P-Nitroaniline	3700	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	SVOCs	Pyrene	45	ug/Kg	J		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Pesticides	4,4'-DDD	73	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Pesticides	4,4'-DDE	73	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Pesticides	4,4'-DDT	73	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Pesticides	Aldrin	37	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Pesticides	alpha-BHC	37	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Pesticides	alpha-Chlordane	37	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Pesticides	beta-BHC	37	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Pesticides	delta-BHC	37	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Pesticides	Dieldrin	73	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Pesticides	Endosulfan I	37	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Pesticides	Endosulfan II	73	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Pesticides	Endosulfan Sulfate	73	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Pesticides	Endrin	73	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Pesticides	Endrin Aldehyde	73	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Pesticides	Endrin Ketone	73	ug/Kg	U	UJ	L
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Pesticides	gamma-BHC (Lindane)	37	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Pesticides	gamma-Chlordane	37	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Pesticides	Heptachlor	37	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Pesticides	Heptachlor Epoxide	37	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Pesticides	Methoxychlor	370	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Pesticides	Toxaphene	3700	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Herbicides	2,4,5-T	18	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Herbicides	2,4,5-TP (Silvex)	18	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Herbicides	2,4-D	120	ug/Kg		J	F

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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Herbicides	2,4-DB	18	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Herbicides	Dalapon	720	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Herbicides	Dicamba	18	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Herbicides	Dichlorprop	31	ug/Kg	J		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Herbicides	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	4400	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Herbicides	MCPP	4400	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Herbicides	Pentachlorophenol	18	ug/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Metals	Aluminum	12000	mg/Kg			
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Metals	Antimony	4.2	mg/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Metals	Arsenic	6.7	mg/Kg			
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Metals	Barium	180	mg/Kg			
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Metals	Beryllium	0.65	mg/Kg	J		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Metals	Cadmium	0.57	mg/Kg	J		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Metals	Calcium	11000	mg/Kg			
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Metals	Chromium	17	mg/Kg			
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Metals	Cobalt	7.7	mg/Kg			
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Metals	Copper	18	mg/Kg			
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Metals	Iron	17000	mg/Kg			
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Metals	Lead	20	mg/Kg			
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Metals	Magnesium	4100	mg/Kg			
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Metals	Manganese	770	mg/Kg			
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Metals	Mercury	0.046	mg/Kg			
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Metals	Nickel	19	mg/Kg			
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Metals	Potassium	1700	mg/Kg	B		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Metals	Selenium	5.3	mg/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Metals	Silver	2.1	mg/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Metals	Sodium	360	mg/Kg	B	U	P
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Metals	Thallium	5.3	mg/Kg	U		
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Metals	Vanadium	28	mg/Kg			
Sediment	RIVER	PDA2	SED-SA2-GMCS-PDA2	9/22/05	Metals	Zinc	210	mg/Kg			
Sediment	RIVER	PDA2	DUP SED	9/22/05	VOCs	1,1,1-Trichloroethane	15	ug/Kg	U		
Sediment	RIVER	PDA2	DUP SED	9/22/05	VOCs	1,1,2,2-Tetrachloroethane	15	ug/Kg	U		
Sediment	RIVER	PDA2	DUP SED	9/22/05	VOCs	1,1,2-Trichloroethane	15	ug/Kg	U		
Sediment	RIVER	PDA2	DUP SED	9/22/05	VOCs	1,1-Dichloroethane	15	ug/Kg	U		
Sediment	RIVER	PDA2	DUP SED	9/22/05	VOCs	1,1-Dichloroethylene	15	ug/Kg	U		
Sediment	RIVER	PDA2	DUP SED	9/22/05	VOCs	1,2-Dichloroethane	15	ug/Kg	U		
Sediment	RIVER	PDA2	DUP SED	9/22/05	VOCs	1,2-Dichloroethene (total)	30	ug/Kg	U		
Sediment	RIVER	PDA2	DUP SED	9/22/05	VOCs	1,2-Dichloropropane	15	ug/Kg	U		
Sediment	RIVER	PDA2	DUP SED	9/22/05	VOCs	2-Butanone (MEK)	75	ug/Kg	U		
Sediment	RIVER	PDA2	DUP SED	9/22/05	VOCs	4-Methyl-2-pentanone (MIBK)	75	ug/Kg	U		

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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	PDA2	DUP SED	9/22/05	VOCs	Acetone	25	ug/Kg	J		
Sediment	RIVER	PDA2	DUP SED	9/22/05	VOCs	Benzene	4.9	ug/Kg	J		
Sediment	RIVER	PDA2	DUP SED	9/22/05	VOCs	Bromodichloromethane	15	ug/Kg	U		
Sediment	RIVER	PDA2	DUP SED	9/22/05	VOCs	Bromoform	15	ug/Kg	U		
Sediment	RIVER	PDA2	DUP SED	9/22/05	VOCs	Bromomethane	15	ug/Kg	U		
Sediment	RIVER	PDA2	DUP SED	9/22/05	VOCs	Carbon Disulfide	15	ug/Kg	U		
Sediment	RIVER	PDA2	DUP SED	9/22/05	VOCs	Carbon Tetrachloride	15	ug/Kg	U		
Sediment	RIVER	PDA2	DUP SED	9/22/05	VOCs	Chlorobenzene	450	ug/Kg		J	F
Sediment	RIVER	PDA2	DUP SED	9/22/05	VOCs	Chlorodibromomethane	15	ug/Kg	U		
Sediment	RIVER	PDA2	DUP SED	9/22/05	VOCs	Chloroethane	15	ug/Kg	U		
Sediment	RIVER	PDA2	DUP SED	9/22/05	VOCs	Chloroform	15	ug/Kg	U		
Sediment	RIVER	PDA2	DUP SED	9/22/05	VOCs	Chloromethane	15	ug/Kg	U		
Sediment	RIVER	PDA2	DUP SED	9/22/05	VOCs	cis-1,2-Dichloroethene	15	ug/Kg	U		
Sediment	RIVER	PDA2	DUP SED	9/22/05	VOCs	cis-1,3-Dichloropropene	15	ug/Kg	U		
Sediment	RIVER	PDA2	DUP SED	9/22/05	VOCs	Dichloromethane	15	ug/Kg	U		
Sediment	RIVER	PDA2	DUP SED	9/22/05	VOCs	Ethylbenzene	3.1	ug/Kg	J		
Sediment	RIVER	PDA2	DUP SED	9/22/05	VOCs	Methyl N-Butyl Ketone	75	ug/Kg	U		
Sediment	RIVER	PDA2	DUP SED	9/22/05	VOCs	Styrene (Monomer)	15	ug/Kg	U		
Sediment	RIVER	PDA2	DUP SED	9/22/05	VOCs	Tetrachloroethene	15	ug/Kg	U		
Sediment	RIVER	PDA2	DUP SED	9/22/05	VOCs	Toluene	8.5	ug/Kg	J		
Sediment	RIVER	PDA2	DUP SED	9/22/05	VOCs	trans-1,2-Dichloroethene	15	ug/Kg	U		
Sediment	RIVER	PDA2	DUP SED	9/22/05	VOCs	trans-1,3-Dichloropropene	15	ug/Kg	U		
Sediment	RIVER	PDA2	DUP SED	9/22/05	VOCs	Trichloroethene	15	ug/Kg	U		
Sediment	RIVER	PDA2	DUP SED	9/22/05	VOCs	Vinyl chloride	15	ug/Kg	U		
Sediment	RIVER	PDA2	DUP SED	9/22/05	VOCs	Xylenes, Total	30	ug/Kg	U		
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	1,2,4-Trichlorobenzene	710	ug/Kg	U	UJ	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	1,2-Dichlorobenzene	180	ug/Kg	J	J	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	1,3-Dichlorobenzene	710	ug/Kg	U	UJ	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	1,4-Dichlorobenzene	160	ug/Kg	J	J	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	710	ug/Kg	U	UJ	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	2,4,5-Trichlorophenol	710	ug/Kg	U	UJ	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	2,4,6-Trichlorophenol	710	ug/Kg	U	UJ	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	2,4-Dichlorophenol	710	ug/Kg	U	UJ	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	2,4-Dimethylphenol	710	ug/Kg	U	UJ	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	2,4-Dinitrophenol	3700	ug/Kg	U	UJ	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	2,4-Dinitrotoluene	710	ug/Kg	U	UJ	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	2,6-Dinitrotoluene	710	ug/Kg	U	UJ	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	2-Chloronaphthalene	710	ug/Kg	U	UJ	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	2-Chlorophenol	710	ug/Kg	U	UJ	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	2-Methylnaphthalene	710	ug/Kg	U	UJ	S

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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	2-Methylphenol (o-Cresol)	710	ug/Kg	U	UJ	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	2-Nitroaniline	3700	ug/Kg	U	UJ	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	2-Nitrophenol	710	ug/Kg	U	UJ	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	3 & 4 Methylphenol	710	ug/Kg	U	UJ	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	3,3'-Dichlorobenzidine	1400	ug/Kg	U	UJ	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	3-Nitroaniline	3700	ug/Kg	U	UJ	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	4,6-Dinitro-2-methylphenol	3700	ug/Kg	U	UJ	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	4-Bromophenyl Phenyl Ether	710	ug/Kg	U	UJ	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	4-Chloro-3-methylphenol	710	ug/Kg	U	UJ	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	4-Chlorophenyl Phenyl Ether	710	ug/Kg	U	UJ	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	4-Nitrophenol	3700	ug/Kg	U	UJ	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	Acenaphthene	710	ug/Kg	U	UJ	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	Acenaphthylene	710	ug/Kg	U	UJ	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	Anthracene	710	ug/Kg	U	UJ	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	Benzo(a)anthracene	710	ug/Kg	U	UJ	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	Benzo(a)pyrene	710	ug/Kg	U	UJ	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	Benzo(b)fluoranthene	710	ug/Kg	U	UJ	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	Benzo(g,h,i)perylene	710	ug/Kg	U	UJ	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	Benzo(k)fluoranthene	710	ug/Kg	U	UJ	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	Benzyl Butyl Phthalate	710	ug/Kg	U	UJ	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	bis(2-Chloroethoxy)methane	710	ug/Kg	U	UJ	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	bis(2-Ethylhexyl)phthalate	710	ug/Kg	U	UJ	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	Carbazole	710	ug/Kg	U	UJ	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	Chrysene	710	ug/Kg	U	UJ	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	Dibenzo(a,h)anthracene	710	ug/Kg	U	UJ	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	Dibenzofuran	710	ug/Kg	U	UJ	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	Diethyl Phthalate	710	ug/Kg	U	UJ	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	Dimethyl Phthalate	710	ug/Kg	U	UJ	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	Di-n-butylphthalate	710	ug/Kg	U	UJ	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	Di-n-octylphthalate	710	ug/Kg	U	UJ	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	Dinoseb	710	ug/Kg	U	UJ	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	Fluoranthene	710	ug/Kg	U	UJ	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	Fluorene	710	ug/Kg	U	UJ	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	Hexachlorobenzene	710	ug/Kg	U	UJ	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	Hexachlorobutadiene	710	ug/Kg	U	UJ	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	Hexachlorocyclopentadiene	710	ug/Kg	U	UJ	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	Hexachloroethane	710	ug/Kg	U	UJ	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	Indeno(1,2,3-cd)pyrene	710	ug/Kg	U	UJ	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	Isophorone	710	ug/Kg	U	UJ	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	Naphthalene	710	ug/Kg	U	UJ	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	Nitrobenzene	710	ug/Kg	U	UJ	S

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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	N-Nitroso-di-n-propylamine	710	ug/Kg	U	UJ	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	N-Nitrosodiphenylamine	710	ug/Kg	U	UJ	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	P-Chloroaniline	380	ug/Kg	J	J	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	Phenanthrene	710	ug/Kg	U	UJ	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	Phenol	710	ug/Kg	U	UJ	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	P-Nitroaniline	3700	ug/Kg	U	UJ	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	SVOCs	Pyrene	710	ug/Kg	U	UJ	S
Sediment	RIVER	PDA2	DUP SED	9/22/05	Pesticides	4,4'-DDD	71	ug/Kg	U		
Sediment	RIVER	PDA2	DUP SED	9/22/05	Pesticides	4,4'-DDE	71	ug/Kg	U		
Sediment	RIVER	PDA2	DUP SED	9/22/05	Pesticides	4,4'-DDT	71	ug/Kg	U		
Sediment	RIVER	PDA2	DUP SED	9/22/05	Pesticides	Aldrin	37	ug/Kg	U		
Sediment	RIVER	PDA2	DUP SED	9/22/05	Pesticides	alpha-BHC	37	ug/Kg	U		
Sediment	RIVER	PDA2	DUP SED	9/22/05	Pesticides	alpha-Chlordane	37	ug/Kg	U		
Sediment	RIVER	PDA2	DUP SED	9/22/05	Pesticides	beta-BHC	37	ug/Kg	U		
Sediment	RIVER	PDA2	DUP SED	9/22/05	Pesticides	delta-BHC	37	ug/Kg	U		
Sediment	RIVER	PDA2	DUP SED	9/22/05	Pesticides	Dieldrin	71	ug/Kg	U		
Sediment	RIVER	PDA2	DUP SED	9/22/05	Pesticides	Endosulfan I	37	ug/Kg	U		
Sediment	RIVER	PDA2	DUP SED	9/22/05	Pesticides	Endosulfan II	71	ug/Kg	U		
Sediment	RIVER	PDA2	DUP SED	9/22/05	Pesticides	Endosulfan Sulfate	71	ug/Kg	U		
Sediment	RIVER	PDA2	DUP SED	9/22/05	Pesticides	Endrin	71	ug/Kg	U		
Sediment	RIVER	PDA2	DUP SED	9/22/05	Pesticides	Endrin Aldehyde	71	ug/Kg	U		
Sediment	RIVER	PDA2	DUP SED	9/22/05	Pesticides	Endrin Ketone	71	ug/Kg	U	UJ	L
Sediment	RIVER	PDA2	DUP SED	9/22/05	Pesticides	gamma-BHC (Lindane)	37	ug/Kg	U		
Sediment	RIVER	PDA2	DUP SED	9/22/05	Pesticides	gamma-Chlordane	37	ug/Kg	U		
Sediment	RIVER	PDA2	DUP SED	9/22/05	Pesticides	Heptachlor	37	ug/Kg	U		
Sediment	RIVER	PDA2	DUP SED	9/22/05	Pesticides	Heptachlor Epoxide	37	ug/Kg	U		
Sediment	RIVER	PDA2	DUP SED	9/22/05	Pesticides	Methoxychlor	370	ug/Kg	U		
Sediment	RIVER	PDA2	DUP SED	9/22/05	Pesticides	Toxaphene	3700	ug/Kg	U		
Sediment	RIVER	PDA2	DUP SED	9/22/05	Herbicides	2,4,5-T	18	ug/Kg	U		
Sediment	RIVER	PDA2	DUP SED	9/22/05	Herbicides	2,4,5-TP (Silvex)	18	ug/Kg	U		
Sediment	RIVER	PDA2	DUP SED	9/22/05	Herbicides	2,4-D	51	ug/Kg	P	J	F
Sediment	RIVER	PDA2	DUP SED	9/22/05	Herbicides	2,4-DB	18	ug/Kg	U		
Sediment	RIVER	PDA2	DUP SED	9/22/05	Herbicides	Dalapon	710	ug/Kg	U		
Sediment	RIVER	PDA2	DUP SED	9/22/05	Herbicides	Dicamba	18	ug/Kg	U		
Sediment	RIVER	PDA2	DUP SED	9/22/05	Herbicides	Dichlorprop	19	ug/Kg	J		
Sediment	RIVER	PDA2	DUP SED	9/22/05	Herbicides	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	4300	ug/Kg	U		
Sediment	RIVER	PDA2	DUP SED	9/22/05	Herbicides	MCPP	4300	ug/Kg	U		
Sediment	RIVER	PDA2	DUP SED	9/22/05	Herbicides	Pentachlorophenol	18	ug/Kg	U		
Sediment	RIVER	PDA2	DUP SED	9/22/05	Metals	Aluminum	12000	mg/Kg			
Sediment	RIVER	PDA2	DUP SED	9/22/05	Metals	Antimony	4	mg/Kg	U		

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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	PDA2	DUP SED	9/22/05	Metals	Arsenic	5.9	mg/Kg			
Sediment	RIVER	PDA2	DUP SED	9/22/05	Metals	Barium	160	mg/Kg			
Sediment	RIVER	PDA2	DUP SED	9/22/05	Metals	Beryllium	0.65	mg/Kg	J		
Sediment	RIVER	PDA2	DUP SED	9/22/05	Metals	Cadmium	0.53	mg/Kg	J		
Sediment	RIVER	PDA2	DUP SED	9/22/05	Metals	Calcium	11000	mg/Kg			
Sediment	RIVER	PDA2	DUP SED	9/22/05	Metals	Chromium	17	mg/Kg			
Sediment	RIVER	PDA2	DUP SED	9/22/05	Metals	Cobalt	7.5	mg/Kg			
Sediment	RIVER	PDA2	DUP SED	9/22/05	Metals	Copper	18	mg/Kg			
Sediment	RIVER	PDA2	DUP SED	9/22/05	Metals	Iron	17000	mg/Kg			
Sediment	RIVER	PDA2	DUP SED	9/22/05	Metals	Lead	21	mg/Kg			
Sediment	RIVER	PDA2	DUP SED	9/22/05	Metals	Magnesium	4200	mg/Kg			
Sediment	RIVER	PDA2	DUP SED	9/22/05	Metals	Manganese	760	mg/Kg			
Sediment	RIVER	PDA2	DUP SED	9/22/05	Metals	Mercury	0.04	mg/Kg	J		
Sediment	RIVER	PDA2	DUP SED	9/22/05	Metals	Nickel	18	mg/Kg			
Sediment	RIVER	PDA2	DUP SED	9/22/05	Metals	Potassium	1800	mg/Kg	B		
Sediment	RIVER	PDA2	DUP SED	9/22/05	Metals	Selenium	5	mg/Kg	U		
Sediment	RIVER	PDA2	DUP SED	9/22/05	Metals	Silver	2	mg/Kg	U		
Sediment	RIVER	PDA2	DUP SED	9/22/05	Metals	Sodium	360	mg/Kg	B	U	P
Sediment	RIVER	PDA2	DUP SED	9/22/05	Metals	Thallium	5	mg/Kg	U		
Sediment	RIVER	PDA2	DUP SED	9/22/05	Metals	Vanadium	29	mg/Kg			
Sediment	RIVER	PDA2	DUP SED	9/22/05	Metals	Zinc	200	mg/Kg			

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	VOCs	1,1,1-Trichloroethane	7	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	VOCs	1,1,2,2-Tetrachloroethane	7	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	VOCs	1,1,2-Trichloroethane	7	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	VOCs	1,1-Dichloroethane	7	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	VOCs	1,1-Dichloroethylene	7	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	VOCs	1,2-Dichloroethane	7	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	VOCs	1,2-Dichloroethene (total)	14	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	VOCs	1,2-Dichloropropane	7	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	VOCs	2-Butanone (MEK)	35	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	VOCs	4-Methyl-2-pentanone (MIBK)	35	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	VOCs	Acetone	70	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	VOCs	Benzene	7	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	VOCs	Bromodichloromethane	7	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	VOCs	Bromoform	7	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	VOCs	Bromomethane	7	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	VOCs	Carbon Disulfide	7	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	VOCs	Carbon Tetrachloride	7	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	VOCs	Chlorobenzene	4.8	ug/Kg	J		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	VOCs	Chlorodibromomethane	7	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	VOCs	Chloroethane	7	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	VOCs	Chloroform	7	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	VOCs	Chloromethane	7	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	VOCs	cis-1,2-Dichloroethene	7	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	VOCs	cis-1,3-Dichloropropene	7	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	VOCs	Dichloromethane	7	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	VOCs	Ethylbenzene	7	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	VOCs	Methyl N-Butyl Ketone	35	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	VOCs	Styrene (Monomer)	7	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	VOCs	Tetrachloroethene	7	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	VOCs	Toluene	7	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	VOCs	trans-1,2-Dichloroethene	7	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	VOCs	trans-1,3-Dichloropropene	7	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	VOCs	Trichloroethene	7	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	VOCs	Vinyl chloride	7	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	VOCs	Xylenes, Total	14	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	1,2,4-Trichlorobenzene	460	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	1,2-Dichlorobenzene	52	ug/Kg	J		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	1,3-Dichlorobenzene	460	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	1,4-Dichlorobenzene	460	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	460	ug/Kg	U		

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	2,4,5-Trichlorophenol	460	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	2,4,6-Trichlorophenol	460	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	2,4-Dichlorophenol	460	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	2,4-Dimethylphenol	460	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	2,4-Dinitrophenol	2400	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	2,4-Dinitrotoluene	460	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	2,6-Dinitrotoluene	460	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	2-Chloronaphthalene	460	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	2-Chlorophenol	460	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	2-Methylnaphthalene	460	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	2-Methylphenol (o-Cresol)	460	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	2-Nitroaniline	2400	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	2-Nitrophenol	460	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	3 & 4 Methylphenol	460	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	3,3'-Dichlorobenzidine	930	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	3-Nitroaniline	2400	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	4,6-Dinitro-2-methylphenol	2400	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	4-Bromophenyl Phenyl Ether	460	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	4-Chloro-3-methylphenol	460	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	4-Chlorophenyl Phenyl Ether	460	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	4-Nitrophenol	2400	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	Acenaphthene	460	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	Acenaphthylene	460	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	Anthracene	460	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	Benzo(a)anthracene	460	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	Benzo(a)pyrene	460	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	Benzo(b)fluoranthene	460	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	Benzo(g,h,i)perylene	460	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	Benzo(k)fluoranthene	460	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	Benzyl Butyl Phthalate	460	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	bis(2-Chloroethoxy)methane	460	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	bis(2-Ethylhexyl)phthalate	460	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	Carbazole	460	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	Chrysene	460	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	Dibenzo(a,h)anthracene	460	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	Dibenzofuran	460	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	Diethyl Phthalate	460	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	Dimethyl Phthalate	460	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	Di-n-butylphthalate	460	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	Di-n-octylphthalate	460	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	Dinoseb	460	ug/Kg	U		

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	Fluoranthene	460	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	Fluorene	460	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	Hexachlorobenzene	460	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	Hexachlorobutadiene	460	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	Hexachlorocyclopentadiene	460	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	Hexachloroethane	460	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	Indeno(1,2,3-cd)pyrene	460	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	Isophorone	460	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	Naphthalene	460	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	Nitrobenzene	460	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	N-Nitroso-di-n-propylamine	460	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	N-Nitrosodiphenylamine	460	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	P-Chloroaniline	38	ug/Kg	J		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	Phenanthrene	460	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	Phenol	460	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	P-Nitroaniline	2400	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	SVOCs	Pyrene	460	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Pesticides	4,4'-DDD	6.5	ug/Kg			
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Pesticides	4,4'-DDE	4.6	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Pesticides	4,4'-DDT	4.6	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Pesticides	Aldrin	2.4	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Pesticides	alpha-BHC	2.4	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Pesticides	alpha-Chlordane	2.4	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Pesticides	beta-BHC	2.4	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Pesticides	delta-BHC	2.4	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Pesticides	Dieldrin	4.6	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Pesticides	Endosulfan I	2.4	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Pesticides	Endosulfan II	4.6	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Pesticides	Endosulfan Sulfate	4.6	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Pesticides	Endrin	4.6	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Pesticides	Endrin Aldehyde	4.6	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Pesticides	Endrin Ketone	4.6	ug/Kg	U	UJ	L
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Pesticides	gamma-BHC (Lindane)	2.4	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Pesticides	gamma-Chlordane	2.4	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Pesticides	Heptachlor	2.4	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Pesticides	Heptachlor Epoxide	2.4	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Pesticides	Methoxychlor	24	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Pesticides	Toxaphene	240	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Herbicides	2,4,5-T	12	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Herbicides	2,4,5-TP (Silvex)	12	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Herbicides	2,4-D	56	ug/Kg			

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Herbicides	2,4-DB	12	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Herbicides	Dalapon	460	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Herbicides	Dicamba	12	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Herbicides	Dichlorprop	15	ug/Kg	J		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Herbicides	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2800	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Herbicides	MCPP	2800	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Herbicides	Pentachlorophenol	12	ug/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Metals	Aluminum	4600	mg/Kg			
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Metals	Antimony	2.5	mg/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Metals	Arsenic	3.7	mg/Kg			
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Metals	Barium	97	mg/Kg			
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Metals	Beryllium	0.28	mg/Kg	J		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Metals	Cadmium	0.75	mg/Kg			
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Metals	Calcium	6500	mg/Kg			
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Metals	Chromium	8.7	mg/Kg			
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Metals	Cobalt	4.1	mg/Kg			
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Metals	Copper	11	mg/Kg			
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Metals	Iron	8200	mg/Kg			
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Metals	Lead	18	mg/Kg			
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Metals	Magnesium	2300	mg/Kg			
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Metals	Manganese	420	mg/Kg			
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Metals	Mercury	0.016	mg/Kg	J		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Metals	Nickel	9.7	mg/Kg			
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Metals	Potassium	720	mg/Kg	B		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Metals	Selenium	3.1	mg/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Metals	Silver	1.2	mg/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Metals	Sodium	210	mg/Kg	B	U	P
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Metals	Thallium	3.1	mg/Kg	U		
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Metals	Vanadium	13	mg/Kg			
Sediment	RIVER	PDA3	SED-SA2-GMCS-PDA3	9/22/05	Metals	Zinc	260	mg/Kg			

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	VOCs	1,1,1-Trichloroethane	3.9	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	VOCs	1,1,2,2-Tetrachloroethane	3.9	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	VOCs	1,1,2-Trichloroethane	3.9	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	VOCs	1,1-Dichloroethane	3.9	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	VOCs	1,1-Dichloroethylene	3.9	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	VOCs	1,2-Dichloroethane	3.9	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	VOCs	1,2-Dichloroethene (total)	7.8	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	VOCs	1,2-Dichloropropane	3.9	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	VOCs	2-Butanone (MEK)	19	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	VOCs	4-Methyl-2-pentanone (MIBK)	19	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	VOCs	Acetone	39	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	VOCs	Benzene	3.9	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	VOCs	Bromodichloromethane	3.9	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	VOCs	Bromoform	3.9	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	VOCs	Bromomethane	3.9	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	VOCs	Carbon Disulfide	3.9	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	VOCs	Carbon Tetrachloride	3.9	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	VOCs	Chlorobenzene	56	ug/Kg			
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	VOCs	Chlorodibromomethane	3.9	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	VOCs	Chloroethane	3.9	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	VOCs	Chloroform	3.9	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	VOCs	Chloromethane	3.9	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	VOCs	cis-1,2-Dichloroethene	3.9	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	VOCs	cis-1,3-Dichloropropene	3.9	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	VOCs	Dichloromethane	3.9	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	VOCs	Ethylbenzene	3.9	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	VOCs	Methyl N-Butyl Ketone	19	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	VOCs	Styrene (Monomer)	3.9	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	VOCs	Tetrachloroethene	3.9	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	VOCs	Toluene	3.9	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	VOCs	trans-1,2-Dichloroethene	3.9	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	VOCs	trans-1,3-Dichloropropene	3.9	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	VOCs	Trichloroethene	3.9	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	VOCs	Vinyl chloride	3.9	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	VOCs	Xylenes, Total	7.8	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	1,2,4-Trichlorobenzene	410	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	1,2-Dichlorobenzene	410	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	1,3-Dichlorobenzene	410	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	1,4-Dichlorobenzene	650	ug/Kg			
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	410	ug/Kg	U		

Sauget Area 2
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	2,4,5-Trichlorophenol	410	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	2,4,6-Trichlorophenol	410	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	2,4-Dichlorophenol	410	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	2,4-Dimethylphenol	410	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	2,4-Dinitrophenol	2100	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	2,4-Dinitrotoluene	410	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	2,6-Dinitrotoluene	410	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	2-Chloronaphthalene	410	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	2-Chlorophenol	410	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	2-Methylnaphthalene	410	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	2-Methylphenol (o-Cresol)	410	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	2-Nitroaniline	2100	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	2-Nitrophenol	410	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	3 & 4 Methylphenol	410	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	3,3'-Dichlorobenzidine	810	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	3-Nitroaniline	2100	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	4,6-Dinitro-2-methylphenol	2100	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	4-Bromophenyl Phenyl Ether	410	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	4-Chloro-3-methylphenol	410	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	4-Chlorophenyl Phenyl Ether	410	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	4-Nitrophenol	2100	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	Acenaphthene	410	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	Acenaphthylene	410	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	Anthracene	410	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	Benzo(a)anthracene	410	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	Benzo(a)pyrene	410	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	Benzo(b)fluoranthene	410	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	Benzo(g,h,i)perylene	410	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	Benzo(k)fluoranthene	410	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	Benzyl Butyl Phthalate	410	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	bis(2-Chloroethoxy)methane	410	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	bis(2-Ethylhexyl)phthalate	410	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	Carbazole	410	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	Chrysene	410	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	Dibenzo(a,h)anthracene	410	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	Dibenzofuran	410	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	Diethyl Phthalate	410	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	Dimethyl Phthalate	410	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	Di-n-butylphthalate	410	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	Di-n-octylphthalate	410	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	Dinoseb	410	ug/Kg	U		

Sauget Area 2
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Sediment Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	Fluoranthene	410	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	Fluorene	410	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	Hexachlorobenzene	410	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	Hexachlorobutadiene	410	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	Hexachlorocyclopentadiene	410	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	Hexachloroethane	410	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	Indeno(1,2,3-cd)pyrene	410	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	Isophorone	410	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	Naphthalene	410	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	Nitrobenzene	410	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	N-Nitroso-di-n-propylamine	410	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	N-Nitrosodiphenylamine	410	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	P-Chloroaniline	320	ug/Kg	J		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	Phenanthrene	410	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	Phenol	410	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	P-Nitroaniline	2100	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	SVOCs	Pyrene	410	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Pesticides	4,4'-DDD	1.1	ug/Kg	J		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Pesticides	4,4'-DDE	4.1	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Pesticides	4,4'-DDT	4.1	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Pesticides	Aldrin	2.1	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Pesticides	alpha-BHC	2.1	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Pesticides	alpha-Chlordane	2.1	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Pesticides	beta-BHC	2.1	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Pesticides	delta-BHC	2.1	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Pesticides	Dieldrin	4.1	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Pesticides	Endosulfan I	2.1	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Pesticides	Endosulfan II	4.1	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Pesticides	Endosulfan Sulfate	4.1	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Pesticides	Endrin	4.1	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Pesticides	Endrin Aldehyde	4.1	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Pesticides	Endrin Ketone	4.1	ug/Kg	U	UJ	L
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Pesticides	gamma-BHC (Lindane)	2.1	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Pesticides	gamma-Chlordane	2.1	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Pesticides	Heptachlor	2.1	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Pesticides	Heptachlor Epoxide	2.1	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Pesticides	Methoxychlor	21	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Pesticides	Toxaphene	210	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Herbicides	2,4,5-T	10	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Herbicides	2,4,5-TP (Silvex)	10	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Herbicides	2,4-D	10	ug/Kg	U		

Sauget Area 2
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Herbicides	2,4-DB	10	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Herbicides	Dalapon	410	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Herbicides	Dicamba	10	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Herbicides	Dichlorprop	120	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Herbicides	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2500	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Herbicides	MCPP	2500	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Herbicides	Pentachlorophenol	10	ug/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Metals	Aluminum	2100	mg/Kg			
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Metals	Antimony	2.2	mg/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Metals	Arsenic	2.2	mg/Kg			
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Metals	Barium	43	mg/Kg			
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Metals	Beryllium	0.14	mg/Kg	J		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Metals	Cadmium	0.29	mg/Kg	J		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Metals	Calcium	2500	mg/Kg			
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Metals	Chromium	3.8	mg/Kg			
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Metals	Cobalt	3.1	mg/Kg			
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Metals	Copper	3.9	mg/Kg			
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Metals	Iron	4500	mg/Kg			
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Metals	Lead	6.3	mg/Kg			
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Metals	Magnesium	1000	mg/Kg			
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Metals	Manganese	130	mg/Kg			
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Metals	Mercury	0.021	mg/Kg	J		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Metals	Nickel	7.2	mg/Kg			
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Metals	Potassium	360	mg/Kg	B		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Metals	Selenium	2.8	mg/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Metals	Silver	1.1	mg/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Metals	Sodium	150	mg/Kg	B	U	P
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Metals	Thallium	2.8	mg/Kg	U		
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Metals	Vanadium	6	mg/Kg			
Sediment	RIVER	PDA4	SED-SA2-GMCS-PDA4	9/22/05	Metals	Zinc	140	mg/Kg			

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	VOCs	1,1,1-Trichloroethane	4.7	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	VOCs	1,1,2,2-Tetrachloroethane	4.7	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	VOCs	1,1,2-Trichloroethane	4.7	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	VOCs	1,1-Dichloroethane	4.7	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	VOCs	1,1-Dichloroethylene	4.7	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	VOCs	1,2-Dichloroethane	4.7	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	VOCs	1,2-Dichloroethene (total)	9.5	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	VOCs	1,2-Dichloropropane	4.7	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	VOCs	2-Butanone (MEK)	24	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	VOCs	4-Methyl-2-pentanone (MIBK)	24	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	VOCs	Acetone	47	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	VOCs	Benzene	4.7	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	VOCs	Bromodichloromethane	4.7	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	VOCs	Bromoform	4.7	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	VOCs	Bromomethane	4.7	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	VOCs	Carbon Disulfide	4.7	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	VOCs	Carbon Tetrachloride	4.7	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	VOCs	Chlorobenzene	7.6	ug/Kg			
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	VOCs	Chlorodibromomethane	4.7	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	VOCs	Chloroethane	4.7	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	VOCs	Chloroform	4.7	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	VOCs	Chloromethane	4.7	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	VOCs	cis-1,2-Dichloroethene	4.7	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	VOCs	cis-1,3-Dichloropropene	4.7	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	VOCs	Dichloromethane	4.7	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	VOCs	Ethylbenzene	1.1	ug/Kg	J		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	VOCs	Methyl N-Butyl Ketone	24	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	VOCs	Styrene (Monomer)	4.7	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	VOCs	Tetrachloroethene	4.7	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	VOCs	Toluene	4.7	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	VOCs	trans-1,2-Dichloroethene	4.7	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	VOCs	trans-1,3-Dichloropropene	4.7	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	VOCs	Trichloroethene	4.7	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	VOCs	Vinyl chloride	4.7	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	VOCs	Xylenes, Total	9.5	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	1,2,4-Trichlorobenzene	380	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	1,2-Dichlorobenzene	380	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	1,3-Dichlorobenzene	380	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	1,4-Dichlorobenzene	380	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	380	ug/Kg	U		

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	2,4,5-Trichlorophenol	380	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	2,4,6-Trichlorophenol	380	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	2,4-Dichlorophenol	380	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	2,4-Dimethylphenol	380	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	2,4-Dinitrophenol	2000	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	2,4-Dinitrotoluene	380	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	2,6-Dinitrotoluene	380	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	2-Chloronaphthalene	380	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	2-Chlorophenol	380	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	2-Methylnaphthalene	380	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	2-Methylphenol (o-Cresol)	380	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	2-Nitroaniline	2000	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	2-Nitrophenol	380	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	3 & 4 Methylphenol	380	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	3,3'-Dichlorobenzidine	760	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	3-Nitroaniline	2000	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	4,6-Dinitro-2-methylphenol	2000	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	4-Bromophenyl Phenyl Ether	380	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	4-Chloro-3-methylphenol	380	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	4-Chlorophenyl Phenyl Ether	380	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	4-Nitrophenol	2000	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	Acenaphthene	380	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	Acenaphthylene	380	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	Anthracene	380	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	Benzo(a)anthracene	380	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	Benzo(a)pyrene	380	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	Benzo(b)fluoranthene	380	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	Benzo(g,h,i)perylene	380	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	Benzo(k)fluoranthene	380	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	Benzyl Butyl Phthalate	380	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	bis(2-Chloroethoxy)methane	380	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	bis(2-Ethylhexyl)phthalate	380	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	Carbazole	380	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	Chrysene	380	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	Dibenzo(a,h)anthracene	380	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	Dibenzofuran	380	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	Diethyl Phthalate	380	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	Dimethyl Phthalate	380	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	Di-n-butylphthalate	380	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	Di-n-octylphthalate	380	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	Dinoseb	380	ug/Kg	U		

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	Fluoranthene	380	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	Fluorene	380	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	Hexachlorobenzene	380	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	Hexachlorobutadiene	380	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	Hexachlorocyclopentadiene	380	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	Hexachloroethane	380	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	Indeno(1,2,3-cd)pyrene	380	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	Isophorone	380	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	Naphthalene	380	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	Nitrobenzene	380	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	N-Nitroso-di-n-propylamine	380	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	N-Nitrosodiphenylamine	380	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	P-Chloroaniline	33	ug/Kg	J		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	Phenanthrene	380	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	Phenol	380	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	P-Nitroaniline	2000	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	SVOCs	Pyrene	380	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Pesticides	4,4'-DDD	3.8	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Pesticides	4,4'-DDE	3.8	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Pesticides	4,4'-DDT	3.8	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Pesticides	Aldrin	2	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Pesticides	alpha-BHC	2	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Pesticides	alpha-Chlordane	2	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Pesticides	beta-BHC	2	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Pesticides	delta-BHC	2	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Pesticides	Dieldrin	3.8	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Pesticides	Endosulfan I	2	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Pesticides	Endosulfan II	3.8	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Pesticides	Endosulfan Sulfate	3.8	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Pesticides	Endrin	3.8	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Pesticides	Endrin Aldehyde	3.8	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Pesticides	Endrin Ketone	3.8	ug/Kg	U	UJ	L
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Pesticides	gamma-BHC (Lindane)	2	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Pesticides	gamma-Chlordane	2	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Pesticides	Heptachlor	2	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Pesticides	Heptachlor Epoxide	2	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Pesticides	Methoxychlor	20	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Pesticides	Toxaphene	200	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Herbicides	2,4,5-T	9.6	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Herbicides	2,4,5-TP (Silvex)	9.6	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Herbicides	2,4-D	9.6	ug/Kg	U		

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Herbicides	2,4-DB	9.6	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Herbicides	Dalapon	380	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Herbicides	Dicamba	9.6	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Herbicides	Dichlorprop	120	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Herbicides	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2300	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Herbicides	MCPP	2300	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Herbicides	Pentachlorophenol	9.6	ug/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Metals	Aluminum	2000	mg/Kg			
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Metals	Antimony	2.1	mg/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Metals	Arsenic	2.3	mg/Kg			
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Metals	Barium	49	mg/Kg			
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Metals	Beryllium	0.11	mg/Kg	J		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Metals	Cadmium	1.5	mg/Kg			
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Metals	Calcium	2000	mg/Kg			
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Metals	Chromium	4.4	mg/Kg			
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Metals	Cobalt	5.1	mg/Kg			
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Metals	Copper	8	mg/Kg			
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Metals	Iron	6400	mg/Kg			
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Metals	Lead	7.6	mg/Kg			
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Metals	Magnesium	1000	mg/Kg			
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Metals	Manganese	140	mg/Kg			
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Metals	Mercury	0.0066	mg/Kg	J		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Metals	Nickel	11	mg/Kg			
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Metals	Potassium	190	mg/Kg	B		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Metals	Selenium	2.7	mg/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Metals	Silver	1.1	mg/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Metals	Sodium	270	mg/Kg	B	U	P
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Metals	Thallium	2.7	mg/Kg	U		
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Metals	Vanadium	7.4	mg/Kg			
Sediment	RIVER	PDA5	SED-SA2-GMCS-PDA5	9/22/05	Metals	Zinc	510	mg/Kg			

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	VOCs	1,1,1-Trichloroethane	5.5	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	VOCs	1,1,2,2-Tetrachloroethane	5.5	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	VOCs	1,1,2-Trichloroethane	5.5	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	VOCs	1,1-Dichloroethane	5.5	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	VOCs	1,1-Dichloroethylene	5.5	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	VOCs	1,2-Dichloroethane	5.5	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	VOCs	1,2-Dichloroethene (total)	11	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	VOCs	1,2-Dichloropropane	5.5	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	VOCs	2-Butanone (MEK)	27	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	VOCs	4-Methyl-2-pentanone (MIBK)	27	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	VOCs	Acetone	55	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	VOCs	Benzene	5.5	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	VOCs	Bromodichloromethane	5.5	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	VOCs	Bromoform	5.5	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	VOCs	Bromomethane	5.5	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	VOCs	Carbon Disulfide	5.5	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	VOCs	Carbon Tetrachloride	5.5	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	VOCs	Chlorobenzene	5.5	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	VOCs	Chlorodibromomethane	5.5	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	VOCs	Chloroethane	5.5	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	VOCs	Chloroform	5.5	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	VOCs	Chloromethane	5.5	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	VOCs	cis-1,2-Dichloroethene	5.5	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	VOCs	cis-1,3-Dichloropropene	5.5	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	VOCs	Dichloromethane	5.5	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	VOCs	Ethylbenzene	5.5	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	VOCs	Methyl N-Butyl Ketone	27	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	VOCs	Styrene (Monomer)	5.5	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	VOCs	Tetrachloroethene	5.5	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	VOCs	Toluene	5.5	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	VOCs	trans-1,2-Dichloroethene	5.5	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	VOCs	trans-1,3-Dichloropropene	5.5	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	VOCs	Trichloroethene	5.5	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	VOCs	Vinyl chloride	5.5	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	VOCs	Xylenes, Total	11	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	1,2,4-Trichlorobenzene	400	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	1,2-Dichlorobenzene	400	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	1,3-Dichlorobenzene	400	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	1,4-Dichlorobenzene	400	ug/Kg	U		

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	400	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	2,4,5-Trichlorophenol	400	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	2,4,6-Trichlorophenol	400	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	2,4-Dichlorophenol	400	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	2,4-Dimethylphenol	400	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	2,4-Dinitrophenol	2100	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	2,4-Dinitrotoluene	400	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	2,6-Dinitrotoluene	400	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	2-Chloronaphthalene	400	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	2-Chlorophenol	400	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	2-Methylnaphthalene	400	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	2-Methylphenol (o-Cresol)	400	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	2-Nitroaniline	2100	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	2-Nitrophenol	400	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	3 & 4 Methylphenol	400	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	3,3'-Dichlorobenzidine	800	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	3-Nitroaniline	2100	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	4,6-Dinitro-2-methylphenol	2100	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	4-Bromophenyl Phenyl Ether	400	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	4-Chloro-3-methylphenol	400	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	4-Chlorophenyl Phenyl Ether	400	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	4-Nitrophenol	2100	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	Acenaphthene	400	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	Acenaphthylene	400	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	Anthracene	400	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	Benzo(a)anthracene	400	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	Benzo(a)pyrene	400	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	Benzo(b)fluoranthene	400	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	Benzo(g,h,i)perylene	400	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	Benzo(k)fluoranthene	400	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	Benzyl Butyl Phthalate	400	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	bis(2-Chloroethoxy)methane	400	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	bis(2-Ethylhexyl)phthalate	400	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	Carbazole	400	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	Chrysene	400	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	Dibenzo(a,h)anthracene	400	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	Dibenzofuran	400	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	Diethyl Phthalate	400	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	Dimethyl Phthalate	400	ug/Kg	U		

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	Di-n-butylphthalate	400	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	Di-n-octylphthalate	400	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	Dinoseb	400	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	Fluoranthene	400	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	Fluorene	400	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	Hexachlorobenzene	400	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	Hexachlorobutadiene	400	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	Hexachlorocyclopentadiene	400	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	Hexachloroethane	400	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	Indeno(1,2,3-cd)pyrene	400	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	Isophorone	400	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	Naphthalene	400	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	Nitrobenzene	400	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	N-Nitroso-di-n-propylamine	400	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	N-Nitrosodiphenylamine	400	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	P-Chloroaniline	39	ug/Kg	J		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	Phenanthrene	400	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	Phenol	400	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	P-Nitroaniline	2100	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	SVOCs	Pyrene	400	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Pesticides	4,4'-DDD	4	ug/Kg	U	UJ	S
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Pesticides	4,4'-DDE	4	ug/Kg	U	UJ	S
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Pesticides	4,4'-DDT	4	ug/Kg	U	UJ	S
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Pesticides	Aldrin	2.1	ug/Kg	U	UJ	S
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Pesticides	alpha-BHC	2.1	ug/Kg	U	UJ	S
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Pesticides	alpha-Chlordane	2.1	ug/Kg	U	UJ	S
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Pesticides	beta-BHC	2.1	ug/Kg	U	UJ	S
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Pesticides	delta-BHC	2.1	ug/Kg	U	UJ	S
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Pesticides	Dieldrin	4	ug/Kg	U	UJ	S
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Pesticides	Endosulfan I	2.1	ug/Kg	U	UJ	S
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Pesticides	Endosulfan II	4	ug/Kg	U	UJ	S
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Pesticides	Endosulfan Sulfate	4	ug/Kg	U	UJ	S
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Pesticides	Endrin	4	ug/Kg	U	UJ	S
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Pesticides	Endrin Aldehyde	4	ug/Kg	U	UJ	S
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Pesticides	Endrin Ketone	4	ug/Kg	U	UJ	S
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Pesticides	gamma-BHC (Lindane)	2.1	ug/Kg	U	UJ	S,M,L
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Pesticides	gamma-Chlordane	2.1	ug/Kg	U	UJ	S
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Pesticides	Heptachlor	2.1	ug/Kg	U	UJ	S
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Pesticides	Heptachlor Epoxide	2.1	ug/Kg	U	UJ	S
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Pesticides	Methoxychlor	21	ug/Kg	U	UJ	S

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Pesticides	Toxaphene	210	ug/Kg	U	UJ	S
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Herbicides	2,4,5-T	10	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Herbicides	2,4,5-TP (Silvex)	10	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Herbicides	2,4-D	10	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Herbicides	2,4-DB	10	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Herbicides	Dalapon	400	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Herbicides	Dicamba	10	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Herbicides	Dichlorprop	120	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Herbicides	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2400	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Herbicides	MCPP	2400	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Herbicides	Pentachlorophenol	10	ug/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Metals	Aluminum	900	mg/Kg			
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Metals	Antimony	2.3	mg/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Metals	Arsenic	2	mg/Kg			
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Metals	Barium	22	mg/Kg			
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Metals	Beryllium	0.098	mg/Kg	J		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Metals	Cadmium	0.57	mg/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Metals	Calcium	1800	mg/Kg		J	M
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Metals	Chromium	2.6	mg/Kg			
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Metals	Cobalt	2.6	mg/Kg			
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Metals	Copper	0.67	mg/Kg	J		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Metals	Iron	3200	mg/Kg			
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Metals	Lead	2	mg/Kg			
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Metals	Magnesium	710	mg/Kg		J	M
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Metals	Manganese	110	mg/Kg		J	K,M
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Metals	Mercury	0.022	mg/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Metals	Nickel	6.1	mg/Kg			
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Metals	Potassium	160	mg/Kg	B		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Metals	Selenium	2.9	mg/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Metals	Silver	1.1	mg/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Metals	Sodium	140	mg/Kg	B	U	P
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Metals	Thallium	2.9	mg/Kg	U		
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Metals	Vanadium	3.2	mg/Kg		J	K
Sediment	RIVER	PDA9	SED-SA2-GMCS-PDA9	9/22/05	Metals	Zinc	8.2	mg/Kg			

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	VOCs	1,1,1-Trichloroethane	4.8	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	VOCs	1,1,2,2-Tetrachloroethane	4.8	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	VOCs	1,1,2-Trichloroethane	4.8	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	VOCs	1,1-Dichloroethane	4.8	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	VOCs	1,1-Dichloroethylene	4.8	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	VOCs	1,2-Dichloroethane	4.8	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	VOCs	1,2-Dichloroethene (total)	9.6	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	VOCs	1,2-Dichloropropane	4.8	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	VOCs	2-Butanone (MEK)	24	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	VOCs	4-Methyl-2-pentanone (MIBK)	24	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	VOCs	Acetone	48	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	VOCs	Benzene	4.8	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	VOCs	Bromodichloromethane	4.8	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	VOCs	Bromoform	4.8	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	VOCs	Bromomethane	4.8	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	VOCs	Carbon Disulfide	4.8	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	VOCs	Carbon Tetrachloride	4.8	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	VOCs	Chlorobenzene	2.4	ug/Kg	J		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	VOCs	Chlorodibromomethane	4.8	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	VOCs	Chloroethane	4.8	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	VOCs	Chloroform	4.8	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	VOCs	Chloromethane	4.8	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	VOCs	cis-1,2-Dichloroethene	4.8	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	VOCs	cis-1,3-Dichloropropene	4.8	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	VOCs	Dichloromethane	4.8	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	VOCs	Ethylbenzene	4.8	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	VOCs	Methyl N-Butyl Ketone	24	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	VOCs	Styrene (Monomer)	4.8	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	VOCs	Tetrachloroethene	4.8	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	VOCs	Toluene	4.8	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	VOCs	trans-1,2-Dichloroethene	4.8	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	VOCs	trans-1,3-Dichloropropene	4.8	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	VOCs	Trichloroethene	4.8	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	VOCs	Vinyl chloride	4.8	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	VOCs	Xylenes, Total	9.6	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	1,2,4-Trichlorobenzene	390	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	1,2-Dichlorobenzene	390	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	1,3-Dichlorobenzene	390	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	1,4-Dichlorobenzene	390	ug/Kg	U		

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	390	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	2,4,5-Trichlorophenol	390	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	2,4,6-Trichlorophenol	390	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	2,4-Dichlorophenol	390	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	2,4-Dimethylphenol	390	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	2,4-Dinitrophenol	2000	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	2,4-Dinitrotoluene	390	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	2,6-Dinitrotoluene	390	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	2-Chloronaphthalene	390	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	2-Chlorophenol	390	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	2-Methylnaphthalene	390	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	2-Methylphenol (o-Cresol)	390	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	2-Nitroaniline	2000	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	2-Nitrophenol	390	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	3 & 4 Methylphenol	390	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	3,3'-Dichlorobenzidine	770	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	3-Nitroaniline	2000	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	4,6-Dinitro-2-methylphenol	2000	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	4-Bromophenyl Phenyl Ether	390	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	4-Chloro-3-methylphenol	390	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	4-Chlorophenyl Phenyl Ether	390	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	4-Nitrophenol	2000	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	Acenaphthene	390	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	Acenaphthylene	390	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	Anthracene	390	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	Benzo(a)anthracene	390	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	Benzo(a)pyrene	390	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	Benzo(b)fluoranthene	390	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	Benzo(g,h,i)perylene	390	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	Benzo(k)fluoranthene	390	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	Benzyl Butyl Phthalate	390	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	bis(2-Chloroethoxy)methane	390	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	bis(2-Ethylhexyl)phthalate	390	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	Carbazole	390	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	Chrysene	390	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	Dibenzo(a,h)anthracene	390	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	Dibenzofuran	390	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	Diethyl Phthalate	390	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	Dimethyl Phthalate	390	ug/Kg	U		

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	Di-n-butylphthalate	390	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	Di-n-octylphthalate	390	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	Dinoseb	390	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	Fluoranthene	390	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	Fluorene	390	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	Hexachlorobenzene	390	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	Hexachlorobutadiene	390	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	Hexachlorocyclopentadiene	390	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	Hexachloroethane	390	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	Indeno(1,2,3-cd)pyrene	390	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	Isophorone	390	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	Naphthalene	390	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	Nitrobenzene	390	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	N-Nitroso-di-n-propylamine	390	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	N-Nitrosodiphenylamine	390	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	P-Chloroaniline	37	ug/Kg	J		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	Phenanthrene	390	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	Phenol	390	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	P-Nitroaniline	2000	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	SVOCs	Pyrene	390	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Pesticides	4,4'-DDD	3.9	ug/Kg	U	UJ	S
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Pesticides	4,4'-DDE	3.9	ug/Kg	U	UJ	S
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Pesticides	4,4'-DDT	3.9	ug/Kg	U	UJ	S
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Pesticides	Aldrin	2	ug/Kg	U	UJ	S
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Pesticides	alpha-BHC	2	ug/Kg	U	UJ	S
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Pesticides	alpha-Chlordane	2	ug/Kg	U	UJ	S
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Pesticides	beta-BHC	2	ug/Kg	U	UJ	S
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Pesticides	delta-BHC	2	ug/Kg	U	UJ	S
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Pesticides	Dieldrin	3.9	ug/Kg	U	UJ	S
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Pesticides	Endosulfan I	2	ug/Kg	U	UJ	S
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Pesticides	Endosulfan II	3.9	ug/Kg	U	UJ	S
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Pesticides	Endosulfan Sulfate	3.9	ug/Kg	U	UJ	S
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Pesticides	Endrin	3.9	ug/Kg	U	UJ	S
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Pesticides	Endrin Aldehyde	3.9	ug/Kg	U	UJ	S
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Pesticides	Endrin Ketone	3.9	ug/Kg	U	UJ	S,L
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Pesticides	gamma-BHC (Lindane)	2	ug/Kg	U	UJ	S
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Pesticides	gamma-Chlordane	2	ug/Kg	U	UJ	S
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Pesticides	Heptachlor	2	ug/Kg	U	UJ	S
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Pesticides	Heptachlor Epoxide	2	ug/Kg	U	UJ	S
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Pesticides	Methoxychlor	20	ug/Kg	U	UJ	S

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Pesticides	Toxaphene	200	ug/Kg	U	UJ	S
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Herbicides	2,4,5-T	9.7	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Herbicides	2,4,5-TP (Silvex)	9.7	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Herbicides	2,4-D	9.7	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Herbicides	2,4-DB	9.7	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Herbicides	Dalapon	390	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Herbicides	Dicamba	9.7	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Herbicides	Dichlorprop	120	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Herbicides	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2300	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Herbicides	MCPP	2300	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Herbicides	Pentachlorophenol	9.7	ug/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Metals	Aluminum	1000	mg/Kg			
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Metals	Antimony	2.2	mg/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Metals	Arsenic	1.2	mg/Kg			
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Metals	Barium	27	mg/Kg			
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Metals	Beryllium	0.073	mg/Kg	J		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Metals	Cadmium	0.54	mg/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Metals	Calcium	1700	mg/Kg			
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Metals	Chromium	2.5	mg/Kg			
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Metals	Cobalt	2.1	mg/Kg			
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Metals	Copper	0.63	mg/Kg	J		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Metals	Iron	3200	mg/Kg			
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Metals	Lead	2.3	mg/Kg			
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Metals	Magnesium	840	mg/Kg			
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Metals	Manganese	200	mg/Kg			
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Metals	Mercury	0.029	mg/Kg			
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Metals	Nickel	3.9	mg/Kg	J		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Metals	Potassium	200	mg/Kg	B		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Metals	Selenium	2.7	mg/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Metals	Silver	1.1	mg/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Metals	Sodium	150	mg/Kg	B	U	P
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Metals	Thallium	2.7	mg/Kg	U		
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Metals	Vanadium	4.1	mg/Kg			
Sediment	RIVER	PDA9A	SED-SA2-GMCS-PDA9A	9/22/05	Metals	Zinc	43	mg/Kg			

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	VOCs	1,1,1-Trichloroethane	5.4	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	VOCs	1,1,2,2-Tetrachloroethane	5.4	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	VOCs	1,1,2-Trichloroethane	5.4	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	VOCs	1,1-Dichloroethane	5.4	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	VOCs	1,1-Dichloroethylene	5.4	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	VOCs	1,2-Dichloroethane	5.4	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	VOCs	1,2-Dichloroethene (total)	11	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	VOCs	1,2-Dichloropropane	5.4	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	VOCs	2-Butanone (MEK)	27	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	VOCs	4-Methyl-2-pentanone (MIBK)	27	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	VOCs	Acetone	54	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	VOCs	Benzene	5.4	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	VOCs	Bromodichloromethane	5.4	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	VOCs	Bromoform	5.4	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	VOCs	Bromomethane	5.4	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	VOCs	Carbon Disulfide	5.4	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	VOCs	Carbon Tetrachloride	5.4	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	VOCs	Chlorobenzene	4.7	ug/Kg	J		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	VOCs	Chlorodibromomethane	5.4	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	VOCs	Chloroethane	5.4	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	VOCs	Chloroform	5.4	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	VOCs	Chloromethane	5.4	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	VOCs	cis-1,2-Dichloroethene	5.4	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	VOCs	cis-1,3-Dichloropropene	5.4	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	VOCs	Dichloromethane	5.4	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	VOCs	Ethylbenzene	5.4	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	VOCs	Methyl N-Butyl Ketone	27	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	VOCs	Styrene (Monomer)	5.4	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	VOCs	Tetrachloroethene	5.4	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	VOCs	Toluene	5.4	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	VOCs	trans-1,2-Dichloroethene	5.4	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	VOCs	trans-1,3-Dichloropropene	5.4	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	VOCs	Trichloroethene	5.4	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	VOCs	Vinyl chloride	5.4	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	VOCs	Xylenes, Total	3.6	ug/Kg	J		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	1,2,4-Trichlorobenzene	450	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	1,2-Dichlorobenzene	74	ug/Kg	J		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	1,3-Dichlorobenzene	450	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	1,4-Dichlorobenzene	37	ug/Kg	J		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	2,4,5-Trichlorophenol	450	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	2,4,6-Trichlorophenol	450	ug/Kg	U		

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	2,4-Dichlorophenol	450	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	2,4-Dimethylphenol	450	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	2,4-Dinitrophenol	2300	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	2,4-Dinitrotoluene	450	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	2,6-Dinitrotoluene	450	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	2-Chloronaphthalene	450	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	2-Chlorophenol	450	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	2-Methylnaphthalene	450	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	2-Methylphenol (o-Cresol)	450	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	2-Nitroaniline	2300	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	2-Nitrophenol	450	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	3 & 4 Methylphenol	450	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	3,3'-Dichlorobenzidine	890	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	3-Nitroaniline	2300	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	4,6-Dinitro-2-methylphenol	2300	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	4-Bromophenyl Phenyl Ether	450	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	4-Chloro-3-methylphenol	450	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	4-Chlorophenyl Phenyl Ether	450	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	4-Nitrophenol	2300	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	Acenaphthene	450	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	Acenaphthylene	450	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	Anthracene	450	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	Benzo(a)anthracene	450	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	Benzo(a)pyrene	450	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	Benzo(b)fluoranthene	450	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	Benzo(g,h,i)perylene	450	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	Benzo(k)fluoranthene	450	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	Benzyl Butyl Phthalate	450	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	bis(2-Chloroethoxy)methane	450	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	bis(2-Chloroethyl)ether	450	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	bis(2-Ethylhexyl)phthalate	55	ug/Kg	J		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	Carbazole	450	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	Chrysene	450	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	Dibenzo(a,h)anthracene	450	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	Dibenzofuran	450	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	Diethyl Phthalate	450	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	Dimethyl Phthalate	450	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	Di-n-butylphthalate	450	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	Di-n-octylphthalate	450	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	Dinoseb	450	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	Fluoranthene	450	ug/Kg	U		

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	Fluorene	450	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	Hexachlorobenzene	450	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	Hexachlorobutadiene	450	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	Hexachlorocyclopentadiene	450	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	Hexachloroethane	450	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	Indeno(1,2,3-cd)pyrene	450	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	Isophorone	450	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	Naphthalene	450	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	Nitrobenzene	450	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	N-Nitroso-di-n-propylamine	450	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	N-Nitrosodiphenylamine	450	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	P-Chloroaniline	86	ug/Kg	J		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	Phenanthrene	450	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	Phenol	450	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	P-Nitroaniline	2300	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	SVOCs	Pyrene	32	ug/Kg	J		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Pesticides	4,4'-DDD	4.5	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Pesticides	4,4'-DDE	4.5	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Pesticides	4,4'-DDT	4.5	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Pesticides	Aldrin	2.3	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Pesticides	alpha-BHC	2.3	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Pesticides	alpha-Chlordane	2.3	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Pesticides	beta-BHC	2.3	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Pesticides	delta-BHC	2.3	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Pesticides	Dieldrin	4.5	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Pesticides	Endosulfan I	2.3	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Pesticides	Endosulfan II	4.5	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Pesticides	Endosulfan Sulfate	4.5	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Pesticides	Endrin	4.5	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Pesticides	Endrin Aldehyde	4.5	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Pesticides	Endrin Ketone	4.5	ug/Kg	U	UJ	L
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Pesticides	gamma-BHC (Lindane)	2.3	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Pesticides	gamma-Chlordane	2.3	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Pesticides	Heptachlor	2.3	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Pesticides	Heptachlor Epoxide	2.3	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Pesticides	Methoxychlor	23	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Pesticides	Toxaphene	230	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Herbicides	2,4,5-T	11	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Herbicides	2,4,5-TP (Silvex)	11	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Herbicides	2,4-D	63	ug/Kg			
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Herbicides	2,4-DB	11	ug/Kg	U		

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Herbicides	Dalapon	450	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Herbicides	Dicamba	11	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Herbicides	Dichlorprop	18	ug/Kg	J		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Herbicides	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2700	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Herbicides	MCPP	2700	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Herbicides	Pentachlorophenol	11	ug/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Metals	Aluminum	2400	mg/Kg			
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Metals	Antimony	2.6	mg/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Metals	Arsenic	3.4	mg/Kg			
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Metals	Barium	93	mg/Kg			
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Metals	Beryllium	0.18	mg/Kg	J		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Metals	Cadmium	1.7	mg/Kg			
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Metals	Calcium	5600	mg/Kg			
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Metals	Chromium	5.3	mg/Kg			
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Metals	Cobalt	3.3	mg/Kg			
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Metals	Copper	9.2	mg/Kg			
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Metals	Iron	6500	mg/Kg			
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Metals	Lead	29	mg/Kg		J	M
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Metals	Magnesium	2100	mg/Kg			
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Metals	Manganese	210	mg/Kg		J	M
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Metals	Mercury	0.023	mg/Kg	J	J	H
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Metals	Nickel	7.9	mg/Kg			
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Metals	Potassium	460	mg/Kg			
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Metals	Selenium	3.2	mg/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Metals	Silver	1.3	mg/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Metals	Sodium	200	mg/Kg		U	P
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Metals	Thallium	3.2	mg/Kg	U		
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Metals	Vanadium	8.4	mg/Kg			
Sediment	RIVER	R3AM	SED-SA2-GMCS-R3AM	9/21/05	Metals	Zinc	540	mg/Kg			

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	VOCs	1,1,1-Trichloroethane	7.6	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	VOCs	1,1,2,2-Tetrachloroethane	7.6	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	VOCs	1,1,2-Trichloroethane	7.6	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	VOCs	1,1-Dichloroethane	7.6	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	VOCs	1,1-Dichloroethylene	7.6	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	VOCs	1,2-Dichloroethane	7.6	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	VOCs	1,2-Dichloroethene (total)	15	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	VOCs	1,2-Dichloropropane	7.6	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	VOCs	2-Butanone (MEK)	38	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	VOCs	4-Methyl-2-pentanone (MIBK)	38	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	VOCs	Acetone	76	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	VOCs	Benzene	7.6	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	VOCs	Bromodichloromethane	7.6	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	VOCs	Bromoform	7.6	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	VOCs	Bromomethane	7.6	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	VOCs	Carbon Disulfide	7.6	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	VOCs	Carbon Tetrachloride	7.6	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	VOCs	Chlorobenzene	7.6	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	VOCs	Chlorodibromomethane	7.6	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	VOCs	Chloroethane	7.6	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	VOCs	Chloroform	7.6	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	VOCs	Chloromethane	7.6	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	VOCs	cis-1,2-Dichloroethene	7.6	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	VOCs	cis-1,3-Dichloropropene	7.6	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	VOCs	Dichloromethane	7.6	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	VOCs	Ethylbenzene	7.6	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	VOCs	Methyl N-Butyl Ketone	38	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	VOCs	Styrene (Monomer)	7.6	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	VOCs	Tetrachloroethene	7.6	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	VOCs	Toluene	7.6	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	VOCs	trans-1,2-Dichloroethene	7.6	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	VOCs	trans-1,3-Dichloropropene	7.6	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	VOCs	Trichloroethene	7.6	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	VOCs	Vinyl chloride	7.6	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	VOCs	Xylenes, Total	15	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	1,2,4-Trichlorobenzene	400	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	1,2-Dichlorobenzene	400	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	1,3-Dichlorobenzene	400	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	1,4-Dichlorobenzene	400	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	2,4,5-Trichlorophenol	400	ug/Kg	U		

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	2,4,6-Trichlorophenol	400	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	2,4-Dichlorophenol	400	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	2,4-Dimethylphenol	400	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	2,4-Dinitrophenol	2100	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	2,4-Dinitrotoluene	400	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	2,6-Dinitrotoluene	400	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	2-Chloronaphthalene	400	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	2-Chlorophenol	400	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	2-Methylnaphthalene	400	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	2-Methylphenol (o-Cresol)	400	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	2-Nitroaniline	2100	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	2-Nitrophenol	400	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	3 & 4 Methylphenol	400	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	3,3'-Dichlorobenzidine	810	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	3-Nitroaniline	2100	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	4,6-Dinitro-2-methylphenol	2100	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	4-Bromophenyl Phenyl Ether	400	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	4-Chloro-3-methylphenol	400	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	4-Chlorophenyl Phenyl Ether	400	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	4-Nitrophenol	2100	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	Acenaphthene	400	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	Acenaphthylene	400	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	Anthracene	400	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	Benzo(a)anthracene	400	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	Benzo(a)pyrene	400	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	Benzo(b)fluoranthene	400	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	Benzo(g,h,i)perylene	400	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	Benzo(k)fluoranthene	400	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	Benzyl Butyl Phthalate	400	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	bis(2-Chloroethoxy)methane	400	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	bis(2-Chloroethyl)ether	400	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	bis(2-Ethylhexyl)phthalate	400	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	Carbazole	400	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	Chrysene	400	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	Dibenzo(a,h)anthracene	400	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	Dibenzofuran	400	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	Diethyl Phthalate	400	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	Dimethyl Phthalate	400	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	Di-n-butylphthalate	400	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	Di-n-octylphthalate	400	ug/Kg	U		

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	Dinoseb	400	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	Fluoranthene	400	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	Fluorene	400	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	Hexachlorobenzene	400	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	Hexachlorobutadiene	400	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	Hexachlorocyclopentadiene	400	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	Hexachloroethane	400	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	Indeno(1,2,3-cd)pyrene	400	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	Isophorone	400	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	Naphthalene	400	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	Nitrobenzene	400	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	N-Nitroso-di-n-propylamine	400	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	N-Nitrosodiphenylamine	400	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	P-Chloroaniline	810	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	Phenanthrene	400	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	Phenol	400	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	P-Nitroaniline	2100	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	SVOCs	Pyrene	400	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Pesticides	4,4'-DDD	4	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Pesticides	4,4'-DDE	4	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Pesticides	4,4'-DDT	4	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Pesticides	Aldrin	2.1	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Pesticides	alpha-BHC	2.1	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Pesticides	alpha-Chlordane	2.1	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Pesticides	beta-BHC	2.1	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Pesticides	delta-BHC	2.1	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Pesticides	Dieldrin	4	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Pesticides	Endosulfan I	2.1	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Pesticides	Endosulfan II	4	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Pesticides	Endosulfan Sulfate	4	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Pesticides	Endrin	4	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Pesticides	Endrin Aldehyde	4	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Pesticides	Endrin Ketone	4	ug/Kg	U	UJ	L
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Pesticides	gamma-BHC (Lindane)	2.1	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Pesticides	gamma-Chlordane	2.1	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Pesticides	Heptachlor	2.1	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Pesticides	Heptachlor Epoxide	2.1	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Pesticides	Methoxychlor	21	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Pesticides	Toxaphene	210	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Herbicides	2,4,5-T	10	ug/Kg	U		

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Herbicides	2,4,5-TP (Silvex)	10	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Herbicides	2,4-D	10	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Herbicides	2,4-DB	10	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Herbicides	Dalapon	400	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Herbicides	Dicamba	10	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Herbicides	Dichlorprop	120	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Herbicides	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2400	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Herbicides	MCPP	2400	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Herbicides	Pentachlorophenol	10	ug/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Metals	Aluminum	1000	mg/Kg			
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Metals	Antimony	2.2	mg/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Metals	Arsenic	1.3	mg/Kg			
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Metals	Barium	26	mg/Kg			
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Metals	Beryllium	0.081	mg/Kg	J		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Metals	Cadmium	0.56	mg/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Metals	Calcium	1800	mg/Kg			
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Metals	Chromium	2.8	mg/Kg			
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Metals	Cobalt	2.5	mg/Kg			
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Metals	Copper	1	mg/Kg	J		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Metals	Iron	3500	mg/Kg			
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Metals	Lead	3.4	mg/Kg	B		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Metals	Magnesium	720	mg/Kg			
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Metals	Manganese	100	mg/Kg			
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Metals	Mercury	0.022	mg/Kg	U	UJ	H
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Metals	Nickel	6.2	mg/Kg			
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Metals	Potassium	190	mg/Kg			
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Metals	Selenium	2.8	mg/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Metals	Silver	1.1	mg/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Metals	Sodium	140	mg/Kg	B	U	P
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Metals	Thallium	2.8	mg/Kg	U		
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Metals	Vanadium	5.7	mg/Kg			
Sediment	RIVER	R3BM	SED-SA2-GMCS-R3BM	9/21/05	Metals	Zinc	26	mg/Kg			

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	VOCs	1,1,1-Trichloroethane	5.2	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	VOCs	1,1,2,2-Tetrachloroethane	5.2	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	VOCs	1,1,2-Trichloroethane	5.2	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	VOCs	1,1-Dichloroethane	5.2	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	VOCs	1,1-Dichloroethylene	5.2	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	VOCs	1,2-Dichloroethane	5.2	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	VOCs	1,2-Dichloroethene (total)	10	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	VOCs	1,2-Dichloropropane	5.2	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	VOCs	2-Butanone (MEK)	26	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	VOCs	4-Methyl-2-pentanone (MIBK)	26	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	VOCs	Acetone	52	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	VOCs	Benzene	5.2	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	VOCs	Bromodichloromethane	5.2	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	VOCs	Bromoform	5.2	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	VOCs	Bromomethane	5.2	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	VOCs	Carbon Disulfide	5.2	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	VOCs	Carbon Tetrachloride	5.2	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	VOCs	Chlorobenzene	5.2	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	VOCs	Chlorodibromomethane	5.2	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	VOCs	Chloroethane	5.2	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	VOCs	Chloroform	5.2	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	VOCs	Chloromethane	5.2	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	VOCs	cis-1,2-Dichloroethene	5.2	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	VOCs	cis-1,3-Dichloropropene	5.2	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	VOCs	Dichloromethane	5.2	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	VOCs	Ethylbenzene	5.2	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	VOCs	Methyl N-Butyl Ketone	26	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	VOCs	Styrene (Monomer)	5.2	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	VOCs	Tetrachloroethene	5.2	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	VOCs	Toluene	5.2	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	VOCs	trans-1,2-Dichloroethene	5.2	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	VOCs	trans-1,3-Dichloropropene	5.2	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	VOCs	Trichloroethene	5.2	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	VOCs	Vinyl chloride	5.2	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	VOCs	Xylenes, Total	10	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	1,2,4-Trichlorobenzene	380	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	1,2-Dichlorobenzene	380	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	1,3-Dichlorobenzene	380	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	1,4-Dichlorobenzene	380	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	2,4,5-Trichlorophenol	380	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	2,4,6-Trichlorophenol	380	ug/Kg	U		

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	2,4-Dichlorophenol	380	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	2,4-Dimethylphenol	380	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	2,4-Dinitrophenol	1900	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	2,4-Dinitrotoluene	380	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	2,6-Dinitrotoluene	380	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	2-Chloronaphthalene	380	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	2-Chlorophenol	380	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	2-Methylnaphthalene	380	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	2-Methylphenol (o-Cresol)	380	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	2-Nitroaniline	1900	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	2-Nitrophenol	380	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	3 & 4 Methylphenol	380	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	3,3'-Dichlorobenzidine	750	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	3-Nitroaniline	1900	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	4,6-Dinitro-2-methylphenol	1900	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	4-Bromophenyl Phenyl Ether	380	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	4-Chloro-3-methylphenol	380	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	4-Chlorophenyl Phenyl Ether	380	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	4-Nitrophenol	1900	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	Acenaphthene	380	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	Acenaphthylene	380	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	Anthracene	380	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	Benzo(a)anthracene	380	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	Benzo(a)pyrene	380	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	Benzo(b)fluoranthene	380	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	Benzo(g,h,i)perylene	380	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	Benzo(k)fluoranthene	380	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	Benzyl Butyl Phthalate	380	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	bis(2-Chloroethoxy)methane	380	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	bis(2-Chloroethyl)ether	380	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	bis(2-Ethylhexyl)phthalate	380	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	Carbazole	380	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	Chrysene	380	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	Dibenzo(a,h)anthracene	380	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	Dibenzofuran	380	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	Diethyl Phthalate	380	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	Dimethyl Phthalate	380	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	Di-n-butylphthalate	380	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	Di-n-octylphthalate	380	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	Dinoseb	380	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	Fluoranthene	380	ug/Kg	U		

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	Fluorene	380	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	Hexachlorobenzene	380	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	Hexachlorobutadiene	380	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	Hexachlorocyclopentadiene	380	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	Hexachloroethane	380	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	Indeno(1,2,3-cd)pyrene	380	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	Isophorone	380	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	Naphthalene	380	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	Nitrobenzene	380	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	N-Nitroso-di-n-propylamine	380	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	N-Nitrosodiphenylamine	380	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	P-Chloroaniline	750	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	Phenanthrene	380	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	Phenol	380	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	P-Nitroaniline	1900	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	SVOCs	Pyrene	380	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Pesticides	4,4'-DDD	3.8	ug/Kg	U	UJ	S
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Pesticides	4,4'-DDE	3.8	ug/Kg	U	UJ	S
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Pesticides	4,4'-DDT	3.8	ug/Kg	U	UJ	S
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Pesticides	Aldrin	1.9	ug/Kg	U	UJ	S
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Pesticides	alpha-BHC	1.9	ug/Kg	U	UJ	S
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Pesticides	alpha-Chlordane	1.9	ug/Kg	U	UJ	S
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Pesticides	beta-BHC	1.9	ug/Kg	U	UJ	S
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Pesticides	delta-BHC	1.9	ug/Kg	U	UJ	S
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Pesticides	Dieldrin	3.8	ug/Kg	U	UJ	S
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Pesticides	Endosulfan I	1.9	ug/Kg	U	UJ	S
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Pesticides	Endosulfan II	3.8	ug/Kg	U	UJ	S
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Pesticides	Endosulfan Sulfate	3.8	ug/Kg	U	UJ	S
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Pesticides	Endrin	3.8	ug/Kg	U	UJ	S
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Pesticides	Endrin Aldehyde	3.8	ug/Kg	U	UJ	S
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Pesticides	Endrin Ketone	3.8	ug/Kg	U	UJ	S
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Pesticides	gamma-BHC (Lindane)	1.9	ug/Kg	U	UJ	S,L
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Pesticides	gamma-Chlordane	1.9	ug/Kg	U	UJ	S
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Pesticides	Heptachlor	1.9	ug/Kg	U	UJ	S
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Pesticides	Heptachlor Epoxide	1.9	ug/Kg	U	UJ	S
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Pesticides	Methoxychlor	19	ug/Kg	U	UJ	S
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Pesticides	Toxaphene	190	ug/Kg	U	UJ	S
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Herbicides	2,4,5-T	9.5	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Herbicides	2,4,5-TP (Silvex)	9.5	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Herbicides	2,4-D	9.5	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Herbicides	2,4-DB	9.5	ug/Kg	U		

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Herbicides	Dalapon	380	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Herbicides	Dicamba	9.5	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Herbicides	Dichlorprop	110	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Herbicides	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2300	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Herbicides	MCPP	2300	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Herbicides	Pentachlorophenol	9.5	ug/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Metals	Aluminum	1100	mg/Kg			
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Metals	Antimony	2	mg/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Metals	Arsenic	0.98	mg/Kg	J		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Metals	Barium	17	mg/Kg			
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Metals	Beryllium	0.064	mg/Kg	J		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Metals	Cadmium	0.5	mg/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Metals	Calcium	1700	mg/Kg			
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Metals	Chromium	3.2	mg/Kg			
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Metals	Cobalt	2.8	mg/Kg			
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Metals	Copper	0.66	mg/Kg	J		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Metals	Iron	3200	mg/Kg			
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Metals	Lead	2	mg/Kg	B		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Metals	Magnesium	970	mg/Kg			
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Metals	Manganese	71	mg/Kg			
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Metals	Mercury	0.0042	mg/Kg	J	J	H
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Metals	Nickel	6	mg/Kg			
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Metals	Potassium	150	mg/Kg			
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Metals	Selenium	2.5	mg/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Metals	Silver	1	mg/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Metals	Sodium	110	mg/Kg	B	U	P
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Metals	Thallium	2.5	mg/Kg	U		
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Metals	Vanadium	4.1	mg/Kg			
Sediment	RIVER	R3CM	SED-SA2-GMCS-R3CM	9/21/05	Metals	Zinc	9.1	mg/Kg			

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	VOCs	1,1,1-Trichloroethane	1	ug/L	U		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	VOCs	1,1,2,2-Tetrachloroethane	1	ug/L	U		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	VOCs	1,1,2-Trichloroethane	1	ug/L	U		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	VOCs	1,1-Dichloroethane	1	ug/L	U		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	VOCs	1,1-Dichloroethylene	1	ug/L	U		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	VOCs	1,2-Dichloroethane	1	ug/L	U		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	VOCs	1,2-Dichloroethene (total)	2	ug/L	U		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	VOCs	1,2-Dichloropropane	1	ug/L	U		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	VOCs	2-Butanone (MEK)	10	ug/L	U		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	VOCs	4-Methyl-2-pentanone (MIBK)	10	ug/L	U		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	VOCs	Acetone	25	ug/L	U		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	VOCs	Benzene	1	ug/L	U		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	VOCs	Bromodichloromethane	1	ug/L	U		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	VOCs	Bromoform	1	ug/L	U		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	VOCs	Bromomethane	1	ug/L	U		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	VOCs	Carbon Disulfide	1	ug/L	U		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	VOCs	Carbon Tetrachloride	1	ug/L	U		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	VOCs	Chlorobenzene	0.87	ug/L	J	J	F
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	VOCs	Chlorodibromomethane	1	ug/L	U		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	VOCs	Chloroethane	1	ug/L	U		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	VOCs	Chloroform	1	ug/L	U		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	VOCs	Chloromethane	1	ug/L	U		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	VOCs	cis-1,3-Dichloropropene	1	ug/L	U		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	VOCs	Dichloromethane	5	ug/L	U		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	VOCs	Ethylbenzene	1	ug/L	U		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	VOCs	Methyl N-Butyl Ketone	10	ug/L	U		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	VOCs	Styrene (Monomer)	1	ug/L	U		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	VOCs	Tetrachloroethene	1	ug/L	U		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	VOCs	Toluene	1	ug/L	U		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	VOCs	trans-1,3-Dichloropropene	1	ug/L	U		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	VOCs	Trichloroethene	1	ug/L	U		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	VOCs	Vinyl chloride	1	ug/L	U		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	VOCs	Xylenes, Total	2	ug/L	U		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	1,2,4-Trichlorobenzene	9.4	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	1,2-Dichlorobenzene	9.4	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	1,3-Dichlorobenzene	9.4	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	1,4-Dichlorobenzene	9.4	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	9.4	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	2,4,5-Trichlorophenol	9.4	ug/L	U	UJ	H

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	2,4,6-Trichlorophenol	9.4	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	2,4-Dichlorophenol	9.4	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	2,4-Dimethylphenol	9.4	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	2,4-Dinitrophenol	47	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	2,4-Dinitrotoluene	9.4	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	2,6-Dinitrotoluene	9.4	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	2-Chloronaphthalene	9.4	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	2-Chlorophenol	9.4	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	2-Methylnaphthalene	9.4	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	2-Methylphenol (o-Cresol)	9.4	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	2-Nitroaniline	47	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	2-Nitrophenol	9.4	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	3 & 4 Methylphenol	9.4	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	3,3'-Dichlorobenzidine	19	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	3-Nitroaniline	47	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	4,6-Dinitro-2-methylphenol	47	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	4-Bromophenyl Phenyl Ether	9.4	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	4-Chloro-3-methylphenol	9.4	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	4-Chlorophenyl Phenyl Ether	9.4	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	4-Nitrophenol	47	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	Acenaphthene	9.4	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	Acenaphthylene	9.4	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	Anthracene	9.4	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	Benzo(a)anthracene	9.4	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	Benzo(a)pyrene	9.4	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	Benzo(b)fluoranthene	9.4	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	Benzo(g,h,i)perylene	9.4	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	Benzo(k)fluoranthene	9.4	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	Benzyl Butyl Phthalate	9.4	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	bis(2-Chloroethoxy)methane	9.4	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	bis(2-Chloroethyl)ether	9.4	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	bis(2-Ethylhexyl)phthalate	9.4	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	Carbazole	9.4	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	Chrysene	9.4	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	Dibenzo(a,h)anthracene	9.4	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	Dibenzofuran	9.4	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	Diethyl Phthalate	9.4	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	Dimethyl Phthalate	9.4	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	Di-n-butylphthalate	9.4	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	Di-n-octylphthalate	9.4	ug/L	U	UJ	H

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	Dinoseb	9.4	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	Fluoranthene	9.4	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	Fluorene	9.4	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	Hexachlorobenzene	9.4	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	Hexachlorobutadiene	9.4	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	Hexachlorocyclopentadiene	9.4	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	Hexachloroethane	9.4	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	Indeno(1,2,3-cd)pyrene	9.4	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	Isophorone	9.4	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	Naphthalene	9.4	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	Nitrobenzene	9.4	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	N-Nitroso-di-n-propylamine	9.4	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	N-Nitrosodiphenylamine	9.4	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	P-Chloroaniline	19	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	Phenanthrene	9.4	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	Phenol	9.4	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	P-Nitroaniline	47	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	SVOCs	Pyrene	9.4	ug/L	U	UJ	H
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Pesticides	4,4'-DDD	0.094	ug/L	U	UJ	S
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Pesticides	4,4'-DDE	0.094	ug/L	U	UJ	S
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Pesticides	4,4'-DDT	0.094	ug/L	U	UJ	S
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Pesticides	Aldrin	0.047	ug/L	U	UJ	S
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Pesticides	alpha-BHC	0.047	ug/L	U	UJ	S
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Pesticides	alpha-Chlordane	0.047	ug/L	U	UJ	S
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Pesticides	beta-BHC	0.047	ug/L	U	UJ	S
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Pesticides	delta-BHC	0.047	ug/L	U	UJ	S
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Pesticides	Dieldrin	0.094	ug/L	U	UJ	S
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Pesticides	Endosulfan I	0.047	ug/L	U	UJ	S
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Pesticides	Endosulfan II	0.094	ug/L	U	UJ	S
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Pesticides	Endosulfan Sulfate	0.094	ug/L	U	UJ	S
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Pesticides	Endrin	0.094	ug/L	U	UJ	S
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Pesticides	Endrin Aldehyde	0.094	ug/L	U	UJ	S
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Pesticides	Endrin Ketone	0.094	ug/L	U	UJ	S
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Pesticides	gamma-BHC (Lindane)	0.047	ug/L	U	UJ	S
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Pesticides	gamma-Chlordane	0.047	ug/L	U	UJ	S
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Pesticides	Heptachlor	0.047	ug/L	U	UJ	S
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Pesticides	Heptachlor Epoxide	0.047	ug/L	U	UJ	S
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Pesticides	Methoxychlor	0.47	ug/L	U	UJ	S
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Pesticides	Toxaphene	4.7	ug/L	U	UJ	S
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Herbicides	2,4,5-T	0.48	ug/L	U		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Herbicides	2,4,5-TP (Silvex)	0.48	ug/L	U		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Herbicides	2,4-D	0.25	ug/L	JP		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Herbicides	2,4-DB	0.48	ug/L	U		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Herbicides	Dalapon	9.6	ug/L	U		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Herbicides	Dicamba	0.48	ug/L	U		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Herbicides	Dichlorprop	0.48	ug/L	U		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Herbicides	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	ug/L	U		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Herbicides	MCPP	120	ug/L	U		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Herbicides	Pentachlorophenol	0.24	ug/L	U		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Aluminum	3.1	mg/L			
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Aluminum (Dissolved)	0.2	mg/L	U		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Antimony	0.02	mg/L	U		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Antimony (Dissolved)	0.02	mg/L	U		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Arsenic	0.0066	mg/L	J		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Arsenic (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Barium	0.11	mg/L			
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Barium (Dissolved)	0.076	mg/L			
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Beryllium	0.00014	mg/L	J		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Beryllium (Dissolved)	0.004	mg/L	U		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Cadmium	0.005	mg/L	U		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Cadmium (Dissolved)	0.005	mg/L	U		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Calcium	46	mg/L			
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Calcium (Dissolved)	45	mg/L			
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Chromium	0.0038	mg/L	J		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Chromium (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Cobalt	0.0014	mg/L	J		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Cobalt (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Copper	0.0039	mg/L	J		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Copper (Dissolved)	0.02	mg/L	U		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Iron	3	mg/L			
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Iron (Dissolved)	0.05	mg/L	U		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Lead	0.0047	mg/L	J		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Lead (Dissolved)	0.005	mg/L	U		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Magnesium	21	mg/L			
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Magnesium (Dissolved)	21	mg/L			
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Manganese	0.24	mg/L			
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Manganese (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Mercury	0.0002	mg/L	U		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Mercury (Dissolved)	0.0002	mg/L	U		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Nickel	0.0064	mg/L	J		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Nickel (Dissolved)	0.0024	mg/L	J		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Potassium	5.5	mg/L			
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Potassium (Dissolved)	4.8	mg/L			
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Selenium	0.01	mg/L	U		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Selenium (Dissolved)	0.0075	mg/L	J B	U	P
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Silver	0.01	mg/L	U		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Silver (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Sodium	35	mg/L			
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Sodium (Dissolved)	34	mg/L			
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Thallium	0.025	mg/L	U		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Thallium (Dissolved)	0.025	mg/L	U		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Vanadium	0.0097	mg/L	J		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Vanadium (Dissolved)	0.0033	mg/L	J		
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Zinc	0.052	mg/L			
Surface Water	RIVER	PDA2	SW-SA2-GMCS-PDA2	9/22/05	Metals	Zinc (Dissolved)	0.0061	mg/L	J		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	VOCs	1,1,1-Trichloroethane	1	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	VOCs	1,1,2,2-Tetrachloroethane	1	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	VOCs	1,1,2-Trichloroethane	1	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	VOCs	1,1-Dichloroethane	1	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	VOCs	1,1-Dichloroethylene	1	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	VOCs	1,2-Dichloroethane	1	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	VOCs	1,2-Dichloroethene (total)	2	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	VOCs	1,2-Dichloropropane	1	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	VOCs	2-Butanone (MEK)	10	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	VOCs	4-Methyl-2-pentanone (MIBK)	10	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	VOCs	Acetone	25	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	VOCs	Benzene	1	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	VOCs	Bromodichloromethane	1	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	VOCs	Bromoform	1	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	VOCs	Bromomethane	1	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	VOCs	Carbon Disulfide	1	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	VOCs	Carbon Tetrachloride	1	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	VOCs	Chlorobenzene	4.3	ug/L		J	F
Surface Water	RIVER	PDA2	DUP SW	9/22/05	VOCs	Chlorodibromomethane	1	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	VOCs	Chloroethane	1	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	VOCs	Chloroform	1	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	VOCs	Chloromethane	1	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	VOCs	cis-1,3-Dichloropropene	1	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	VOCs	Dichloromethane	5	ug/L	U		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	PDA2	DUP SW	9/22/05	VOCs	Ethylbenzene	1	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	VOCs	Methyl N-Butyl Ketone	10	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	VOCs	Styrene (Monomer)	1	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	VOCs	Tetrachloroethene	1	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	VOCs	Toluene	1	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	VOCs	trans-1,3-Dichloropropene	1	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	VOCs	Trichloroethene	1	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	VOCs	Vinyl chloride	1	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	VOCs	Xylenes, Total	2	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	1,2,4-Trichlorobenzene	9.4	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	1,2-Dichlorobenzene	9.4	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	1,3-Dichlorobenzene	9.4	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	1,4-Dichlorobenzene	9.4	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	9.4	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	2,4,5-Trichlorophenol	9.4	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	2,4,6-Trichlorophenol	9.4	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	2,4-Dichlorophenol	9.4	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	2,4-Dimethylphenol	9.4	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	2,4-Dinitrophenol	47	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	2,4-Dinitrotoluene	9.4	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	2,6-Dinitrotoluene	9.4	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	2-Chloronaphthalene	9.4	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	2-Chlorophenol	9.4	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	2-Methylnaphthalene	9.4	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	2-Methylphenol (o-Cresol)	9.4	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	2-Nitroaniline	47	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	2-Nitrophenol	9.4	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	3 & 4 Methylphenol	9.4	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	3,3'-Dichlorobenzidine	19	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	3-Nitroaniline	47	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	4,6-Dinitro-2-methylphenol	47	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	4-Bromophenyl Phenyl Ether	9.4	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	4-Chloro-3-methylphenol	9.4	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	4-Chlorophenyl Phenyl Ether	9.4	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	4-Nitrophenol	47	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	Acenaphthene	9.4	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	Acenaphthylene	9.4	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	Anthracene	9.4	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	Benzo(a)anthracene	9.4	ug/L	U		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	Benzo(a)pyrene	9.4	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	Benzo(b)fluoranthene	9.4	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	Benzo(g,h,i)perylene	9.4	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	Benzo(k)fluoranthene	9.4	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	Benzyl Butyl Phthalate	9.4	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	bis(2-Chloroethoxy)methane	9.4	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	bis(2-Chloroethyl)ether	9.4	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	bis(2-Ethylhexyl)phthalate	9.4	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	Carbazole	9.4	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	Chrysene	9.4	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	Dibenzo(a,h)anthracene	9.4	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	Dibenzofuran	9.4	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	Diethyl Phthalate	9.4	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	Dimethyl Phthalate	9.4	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	Di-n-butylphthalate	9.4	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	Di-n-octylphthalate	9.4	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	Dinoseb	9.4	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	Fluoranthene	9.4	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	Fluorene	9.4	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	Hexachlorobenzene	9.4	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	Hexachlorobutadiene	9.4	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	Hexachlorocyclopentadiene	9.4	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	Hexachloroethane	9.4	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	Indeno(1,2,3-cd)pyrene	9.4	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	Isophorone	9.4	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	Naphthalene	9.4	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	Nitrobenzene	9.4	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	N-Nitroso-di-n-propylamine	9.4	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	N-Nitrosodiphenylamine	9.4	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	P-Chloroaniline	19	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	Phenanthrene	9.4	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	Phenol	9.4	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	P-Nitroaniline	47	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	SVOCs	Pyrene	9.4	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Pesticides	4,4'-DDD	0.094	ug/L	U	UJ	S
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Pesticides	4,4'-DDE	0.094	ug/L	U	UJ	S
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Pesticides	4,4'-DDT	0.094	ug/L	U	UJ	S
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Pesticides	Aldrin	0.047	ug/L	U	UJ	S
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Pesticides	alpha-BHC	0.047	ug/L	U	UJ	S
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Pesticides	alpha-Chlordane	0.047	ug/L	U	UJ	S

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Pesticides	beta-BHC	0.047	ug/L	U	UJ	S
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Pesticides	delta-BHC	0.047	ug/L	U	UJ	S
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Pesticides	Dieldrin	0.094	ug/L	U	UJ	S
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Pesticides	Endosulfan I	0.047	ug/L	U	UJ	S
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Pesticides	Endosulfan II	0.094	ug/L	U	UJ	S
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Pesticides	Endosulfan Sulfate	0.094	ug/L	U	UJ	S
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Pesticides	Endrin	0.094	ug/L	U	UJ	S
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Pesticides	Endrin Aldehyde	0.094	ug/L	U	UJ	S
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Pesticides	Endrin Ketone	0.094	ug/L	U	UJ	S
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Pesticides	gamma-BHC (Lindane)	0.047	ug/L	U	UJ	S
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Pesticides	gamma-Chlordane	0.047	ug/L	U	UJ	S
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Pesticides	Heptachlor	0.047	ug/L	U	UJ	S
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Pesticides	Heptachlor Epoxide	0.047	ug/L	U	UJ	S
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Pesticides	Methoxychlor	0.47	ug/L	U	UJ	S
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Pesticides	Toxaphene	4.7	ug/L	U	UJ	S
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Herbicides	2,4,5-T	0.49	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Herbicides	2,4,5-TP (Silvex)	0.49	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Herbicides	2,4-D	0.49	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Herbicides	2,4-DB	0.49	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Herbicides	Dalapon	9.7	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Herbicides	Dicamba	0.49	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Herbicides	Dichlorprop	0.49	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Herbicides	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Herbicides	MCPP	120	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Herbicides	Pentachlorophenol	0.24	ug/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Aluminum	2.4	mg/L			
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Aluminum (Dissolved)	0.2	mg/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Antimony	0.02	mg/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Antimony (Dissolved)	0.02	mg/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Arsenic	0.01	mg/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Arsenic (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Barium	0.11	mg/L			
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Barium (Dissolved)	0.074	mg/L			
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Beryllium	0.00012	mg/L	J		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Beryllium (Dissolved)	0.004	mg/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Cadmium	0.005	mg/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Cadmium (Dissolved)	0.005	mg/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Calcium	46	mg/L			
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Calcium (Dissolved)	43	mg/L			

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Chromium	0.0028	mg/L	J		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Chromium (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Cobalt	0.0013	mg/L	J		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Cobalt (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Copper	0.0033	mg/L	J		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Copper (Dissolved)	0.02	mg/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Iron	2.3	mg/L			
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Iron (Dissolved)	0.05	mg/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Lead	0.005	mg/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Lead (Dissolved)	0.0024	mg/L	J		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Magnesium	21	mg/L			
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Magnesium (Dissolved)	20	mg/L			
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Manganese	0.21	mg/L			
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Manganese (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Mercury	0.0002	mg/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Mercury (Dissolved)	0.0002	mg/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Nickel	0.0046	mg/L	J		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Nickel (Dissolved)	0.04	mg/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Potassium	5.4	mg/L			
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Potassium (Dissolved)	4.7	mg/L			
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Selenium	0.01	mg/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Selenium (Dissolved)	0.0066	mg/L	J B	U	P
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Silver	0.01	mg/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Silver (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Sodium	35	mg/L			
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Sodium (Dissolved)	33	mg/L			
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Thallium	0.025	mg/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Thallium (Dissolved)	0.025	mg/L	U		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Vanadium	0.0084	mg/L	J		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Vanadium (Dissolved)	0.002	mg/L	J		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Zinc	0.019	mg/L	J		
Surface Water	RIVER	PDA2	DUP SW	9/22/05	Metals	Zinc (Dissolved)	0.0037	mg/L	J		

Sauget Area 2
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Surface Water Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	VOCs	1,1,1-Trichloroethane	1	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	VOCs	1,1,2,2-Tetrachloroethane	1	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	VOCs	1,1,2-Trichloroethane	1	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	VOCs	1,1-Dichloroethane	1	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	VOCs	1,1-Dichloroethylene	1	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	VOCs	1,2-Dichloroethane	1	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	VOCs	1,2-Dichloroethene (total)	2	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	VOCs	1,2-Dichloropropane	1	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	VOCs	2-Butanone (MEK)	10	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	VOCs	4-Methyl-2-pentanone (MIBK)	10	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	VOCs	Acetone	25	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	VOCs	Benzene	1	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	VOCs	Bromodichloromethane	1	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	VOCs	Bromoform	1	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	VOCs	Bromomethane	1	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	VOCs	Carbon Disulfide	1	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	VOCs	Carbon Tetrachloride	1	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	VOCs	Chlorobenzene	0.49	ug/L	J		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	VOCs	Chlorodibromomethane	1	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	VOCs	Chloroethane	1	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	VOCs	Chloroform	1	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	VOCs	Chloromethane	1	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	VOCs	cis-1,3-Dichloropropene	1	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	VOCs	Dichloromethane	5	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	VOCs	Ethylbenzene	1	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	VOCs	Methyl N-Butyl Ketone	10	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	VOCs	Styrene (Monomer)	1	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	VOCs	Tetrachloroethene	1	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	VOCs	Toluene	1	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	VOCs	trans-1,3-Dichloropropene	1	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	VOCs	Trichloroethene	1	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	VOCs	Vinyl chloride	1	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	VOCs	Xylenes, Total	2	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	1,2,4-Trichlorobenzene	9.4	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	1,2-Dichlorobenzene	9.4	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	1,3-Dichlorobenzene	9.4	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	1,4-Dichlorobenzene	9.4	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	9.4	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	2,4,5-Trichlorophenol	9.4	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	2,4,6-Trichlorophenol	9.4	ug/L	U		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	2,4-Dichlorophenol	9.4	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	2,4-Dimethylphenol	9.4	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	2,4-Dinitrophenol	47	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	2,4-Dinitrotoluene	9.4	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	2,6-Dinitrotoluene	9.4	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	2-Chloronaphthalene	9.4	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	2-Chlorophenol	9.4	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	2-Methylnaphthalene	9.4	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	2-Methylphenol (o-Cresol)	9.4	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	2-Nitroaniline	47	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	2-Nitrophenol	9.4	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	3 & 4 Methylphenol	9.4	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	3,3'-Dichlorobenzidine	19	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	3-Nitroaniline	47	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	4,6-Dinitro-2-methylphenol	47	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	4-Bromophenyl Phenyl Ether	9.4	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	4-Chloro-3-methylphenol	9.4	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	4-Chlorophenyl Phenyl Ether	9.4	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	4-Nitrophenol	47	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	Acenaphthene	9.4	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	Acenaphthylene	9.4	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	Anthracene	9.4	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	Benzo(a)anthracene	9.4	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	Benzo(a)pyrene	9.4	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	Benzo(b)fluoranthene	9.4	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	Benzo(g,h,i)perylene	9.4	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	Benzo(k)fluoranthene	9.4	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	Benzyl Butyl Phthalate	9.4	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	bis(2-Chloroethoxy)methane	9.4	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	bis(2-Chloroethyl)ether	9.4	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	bis(2-Ethylhexyl)phthalate	9.4	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	Carbazole	9.4	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	Chrysene	9.4	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	Dibenzo(a,h)anthracene	9.4	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	Dibenzofuran	9.4	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	Diethyl Phthalate	9.4	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	Dimethyl Phthalate	9.4	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	Di-n-butylphthalate	9.4	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	Di-n-octylphthalate	9.4	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	Dinoseb	9.4	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	Fluoranthene	9.4	ug/L	U		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	Fluorene	9.4	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	Hexachlorobenzene	9.4	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	Hexachlorobutadiene	9.4	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	Hexachlorocyclopentadiene	9.4	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	Hexachloroethane	9.4	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	Indeno(1,2,3-cd)pyrene	9.4	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	Isophorone	9.4	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	Naphthalene	9.4	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	Nitrobenzene	9.4	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	N-Nitroso-di-n-propylamine	9.4	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	N-Nitrosodiphenylamine	9.4	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	P-Chloroaniline	19	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	Phenanthrene	9.4	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	Phenol	9.4	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	P-Nitroaniline	47	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	SVOCs	Pyrene	9.4	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Pesticides	4,4'-DDD	0.094	ug/L	U	UJ	S
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Pesticides	4,4'-DDE	0.094	ug/L	U	UJ	S
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Pesticides	4,4'-DDT	0.094	ug/L	U	UJ	S
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Pesticides	Aldrin	0.047	ug/L	U	UJ	S
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Pesticides	alpha-BHC	0.047	ug/L	U	UJ	S
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Pesticides	alpha-Chlordane	0.047	ug/L	U	UJ	S
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Pesticides	beta-BHC	0.047	ug/L	U	UJ	S
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Pesticides	delta-BHC	0.047	ug/L	U	UJ	S
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Pesticides	Dieldrin	0.094	ug/L	U	UJ	S
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Pesticides	Endosulfan I	0.047	ug/L	U	UJ	S
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Pesticides	Endosulfan II	0.094	ug/L	U	UJ	S
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Pesticides	Endosulfan Sulfate	0.094	ug/L	U	UJ	S
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Pesticides	Endrin	0.094	ug/L	U	UJ	S
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Pesticides	Endrin Aldehyde	0.094	ug/L	U	UJ	S
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Pesticides	Endrin Ketone	0.094	ug/L	U	UJ	S
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Pesticides	gamma-BHC (Lindane)	0.047	ug/L	U	UJ	S
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Pesticides	gamma-Chlordane	0.047	ug/L	U	UJ	S
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Pesticides	Heptachlor	0.047	ug/L	U	UJ	S
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Pesticides	Heptachlor Epoxide	0.047	ug/L	U	UJ	S
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Pesticides	Methoxychlor	0.47	ug/L	U	UJ	S
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Pesticides	Toxaphene	4.7	ug/L	U	UJ	S
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Herbicides	2,4,5-T	0.48	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Herbicides	2,4,5-TP (Silvex)	0.48	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Herbicides	2,4-D	0.48	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Herbicides	2,4-DB	0.48	ug/L	U		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Herbicides	Dalapon	9.6	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Herbicides	Dicamba	0.48	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Herbicides	Dichlorprop	0.48	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Herbicides	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Herbicides	MCPP	120	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Herbicides	Pentachlorophenol	0.24	ug/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Aluminum	3.2	mg/L			
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Aluminum (Dissolved)	0.2	mg/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Antimony	0.02	mg/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Antimony (Dissolved)	0.02	mg/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Arsenic	0.01	mg/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Arsenic (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Barium	0.11	mg/L			
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Barium (Dissolved)	0.076	mg/L			
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Beryllium	0.00013	mg/L	J		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Beryllium (Dissolved)	0.004	mg/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Cadmium	0.005	mg/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Cadmium (Dissolved)	0.005	mg/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Calcium	46	mg/L			
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Calcium (Dissolved)	44	mg/L			
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Chromium	0.0039	mg/L	J		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Chromium (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Cobalt	0.0015	mg/L	J		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Cobalt (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Copper	0.0036	mg/L	J		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Copper (Dissolved)	0.02	mg/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Iron	3	mg/L			
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Iron (Dissolved)	0.05	mg/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Lead	0.0045	mg/L	J		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Lead (Dissolved)	0.005	mg/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Magnesium	21	mg/L			
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Magnesium (Dissolved)	20	mg/L			
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Manganese	0.21	mg/L			
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Manganese (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Mercury	0.0002	mg/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Mercury (Dissolved)	0.0002	mg/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Nickel	0.0055	mg/L	J		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Nickel (Dissolved)	0.002	mg/L	J		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Potassium	5.5	mg/L			
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Potassium (Dissolved)	4.9	mg/L			

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Selenium	0.0067	mg/L	J B	U	P
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Selenium (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Silver	0.01	mg/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Silver (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Sodium	34	mg/L			
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Sodium (Dissolved)	34	mg/L			
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Thallium	0.025	mg/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Thallium (Dissolved)	0.025	mg/L	U		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Vanadium	0.01	mg/L			
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Vanadium (Dissolved)	0.0031	mg/L	J		
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Zinc	0.03	mg/L			
Surface Water	RIVER	PDA3	SW-SA2-GMCS-PDA3	9/22/05	Metals	Zinc (Dissolved)	0.0065	mg/L	J		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	VOCs	1,1,1-Trichloroethane	1	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	VOCs	1,1,2,2-Tetrachloroethane	1	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	VOCs	1,1,2-Trichloroethane	1	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	VOCs	1,1-Dichloroethane	1	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	VOCs	1,1-Dichloroethylene	1	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	VOCs	1,2-Dichloroethane	1	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	VOCs	1,2-Dichloroethene (total)	2	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	VOCs	1,2-Dichloropropane	1	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	VOCs	2-Butanone (MEK)	10	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	VOCs	4-Methyl-2-pentanone (MIBK)	10	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	VOCs	Acetone	25	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	VOCs	Benzene	1	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	VOCs	Bromodichloromethane	1	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	VOCs	Bromoform	1	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	VOCs	Bromomethane	1	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	VOCs	Carbon Disulfide	1	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	VOCs	Carbon Tetrachloride	1	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	VOCs	Chlorobenzene	1	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	VOCs	Chlorodibromomethane	1	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	VOCs	Chloroethane	1	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	VOCs	Chloroform	1	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	VOCs	Chloromethane	1	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	VOCs	cis-1,3-Dichloropropene	1	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	VOCs	Dichloromethane	5	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	VOCs	Ethylbenzene	1	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	VOCs	Methyl N-Butyl Ketone	10	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	VOCs	Styrene (Monomer)	1	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	VOCs	Tetrachloroethene	1	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	VOCs	Toluene	1	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	VOCs	trans-1,3-Dichloropropene	1	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	VOCs	Trichloroethene	1	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	VOCs	Vinyl chloride	1	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	VOCs	Xylenes, Total	2	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	1,2,4-Trichlorobenzene	9.4	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	1,2-Dichlorobenzene	9.4	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	1,3-Dichlorobenzene	9.4	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	1,4-Dichlorobenzene	9.4	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	9.4	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	2,4,5-Trichlorophenol	9.4	ug/L	U		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	2,4,6-Trichlorophenol	9.4	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	2,4-Dichlorophenol	9.4	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	2,4-Dimethylphenol	9.4	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	2,4-Dinitrophenol	47	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	2,4-Dinitrotoluene	9.4	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	2,6-Dinitrotoluene	9.4	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	2-Chloronaphthalene	9.4	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	2-Chlorophenol	9.4	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	2-Methylnaphthalene	9.4	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	2-Methylphenol (o-Cresol)	9.4	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	2-Nitroaniline	47	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	2-Nitrophenol	9.4	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	3 & 4 Methylphenol	9.4	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	3,3'-Dichlorobenzidine	19	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	3-Nitroaniline	47	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	4,6-Dinitro-2-methylphenol	47	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	4-Bromophenyl Phenyl Ether	9.4	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	4-Chloro-3-methylphenol	9.4	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	4-Chlorophenyl Phenyl Ether	9.4	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	4-Nitrophenol	47	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	Acenaphthene	9.4	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	Acenaphthylene	9.4	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	Anthracene	9.4	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	Benzo(a)anthracene	9.4	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	Benzo(a)pyrene	9.4	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	Benzo(b)fluoranthene	9.4	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	Benzo(g,h,i)perylene	9.4	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	Benzo(k)fluoranthene	9.4	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	Benzyl Butyl Phthalate	9.4	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	bis(2-Chloroethoxy)methane	9.4	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	bis(2-Chloroethyl)ether	9.4	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	bis(2-Ethylhexyl)phthalate	9.4	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	Carbazole	9.4	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	Chrysene	9.4	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	Dibenzo(a,h)anthracene	9.4	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	Dibenzofuran	9.4	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	Diethyl Phthalate	9.4	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	Dimethyl Phthalate	9.4	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	Di-n-butylphthalate	9.4	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	Di-n-octylphthalate	9.4	ug/L	U		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	Dinoseb	9.4	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	Fluoranthene	9.4	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	Fluorene	9.4	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	Hexachlorobenzene	9.4	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	Hexachlorobutadiene	9.4	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	Hexachlorocyclopentadiene	9.4	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	Hexachloroethane	9.4	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	Indeno(1,2,3-cd)pyrene	9.4	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	Isophorone	9.4	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	Naphthalene	9.4	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	Nitrobenzene	9.4	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	N-Nitroso-di-n-propylamine	9.4	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	N-Nitrosodiphenylamine	9.4	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	P-Chloroaniline	19	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	Phenanthrene	9.4	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	Phenol	9.4	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	P-Nitroaniline	47	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	SVOCs	Pyrene	9.4	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Pesticides	4,4'-DDD	0.095	ug/L	U	UJ	S
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Pesticides	4,4'-DDE	0.095	ug/L	U	UJ	S
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Pesticides	4,4'-DDT	0.095	ug/L	U	UJ	S
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Pesticides	Aldrin	0.048	ug/L	U	UJ	S
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Pesticides	alpha-BHC	0.048	ug/L	U	UJ	S
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Pesticides	alpha-Chlordane	0.048	ug/L	U	UJ	S
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Pesticides	beta-BHC	0.048	ug/L	U	UJ	S
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Pesticides	delta-BHC	0.048	ug/L	U	UJ	S
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Pesticides	Dieldrin	0.095	ug/L	U	UJ	S
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Pesticides	Endosulfan I	0.048	ug/L	U	UJ	S
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Pesticides	Endosulfan II	0.095	ug/L	U	UJ	S
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Pesticides	Endosulfan Sulfate	0.095	ug/L	U	UJ	S
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Pesticides	Endrin	0.095	ug/L	U	UJ	S
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Pesticides	Endrin Aldehyde	0.095	ug/L	U	UJ	S
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Pesticides	Endrin Ketone	0.095	ug/L	U	UJ	S
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Pesticides	gamma-BHC (Lindane)	0.048	ug/L	U	UJ	S
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Pesticides	gamma-Chlordane	0.048	ug/L	U	UJ	S
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Pesticides	Heptachlor	0.048	ug/L	U	UJ	S
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Pesticides	Heptachlor Epoxide	0.048	ug/L	U	UJ	S
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Pesticides	Methoxychlor	0.48	ug/L	U	UJ	S
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Pesticides	Toxaphene	4.8	ug/L	U	UJ	S
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Herbicides	2,4,5-T	0.49	ug/L	U		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Herbicides	2,4,5-TP (Silvex)	0.49	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Herbicides	2,4-D	0.49	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Herbicides	2,4-DB	0.49	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Herbicides	Dalapon	9.7	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Herbicides	Dicamba	0.49	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Herbicides	Dichlorprop	0.49	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Herbicides	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Herbicides	MCPP	120	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Herbicides	Pentachlorophenol	0.24	ug/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Aluminum	2.6	mg/L			
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Aluminum (Dissolved)	0.2	mg/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Antimony	0.02	mg/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Antimony (Dissolved)	0.02	mg/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Arsenic	0.0046	mg/L	J		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Arsenic (Dissolved)	0.0061	mg/L	J		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Barium	0.11	mg/L			
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Barium (Dissolved)	0.075	mg/L			
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Beryllium	0.004	mg/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Beryllium (Dissolved)	0.004	mg/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Cadmium	0.005	mg/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Cadmium (Dissolved)	0.005	mg/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Calcium	46	mg/L			
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Calcium (Dissolved)	43	mg/L			
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Chromium	0.0034	mg/L	J		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Chromium (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Cobalt	0.0012	mg/L	J		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Cobalt (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Copper	0.0036	mg/L	J		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Copper (Dissolved)	0.02	mg/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Iron	2.5	mg/L			
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Iron (Dissolved)	0.05	mg/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Lead	0.0035	mg/L	J		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Lead (Dissolved)	0.005	mg/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Magnesium	22	mg/L			
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Magnesium (Dissolved)	20	mg/L			
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Manganese	0.18	mg/L			
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Manganese (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Mercury	0.0002	mg/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Mercury (Dissolved)	0.0002	mg/L	U		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Nickel	0.0047	mg/L	J		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Nickel (Dissolved)	0.003	mg/L	J		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Potassium	5.5	mg/L			
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Potassium (Dissolved)	4.8	mg/L			
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Selenium	0.0097	mg/L	J B	U	P
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Selenium (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Silver	0.01	mg/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Silver (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Sodium	34	mg/L			
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Sodium (Dissolved)	33	mg/L			
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Thallium	0.025	mg/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Thallium (Dissolved)	0.025	mg/L	U		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Vanadium	0.009	mg/L	J		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Vanadium (Dissolved)	0.0034	mg/L	J		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Zinc	0.012	mg/L	J		
Surface Water	RIVER	PDA4	SW-SA2-GMCS-PDA4	9/22/05	Metals	Zinc (Dissolved)	0.02	mg/L	U		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	VOCs	1,1,1-Trichloroethane	1	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	VOCs	1,1,2,2-Tetrachloroethane	1	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	VOCs	1,1,2-Trichloroethane	1	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	VOCs	1,1-Dichloroethane	1	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	VOCs	1,1-Dichloroethylene	1	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	VOCs	1,2-Dichloroethane	1	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	VOCs	1,2-Dichloroethene (total)	2	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	VOCs	1,2-Dichloropropane	1	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	VOCs	2-Butanone (MEK)	10	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	VOCs	4-Methyl-2-pentanone (MIBK)	10	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	VOCs	Acetone	25	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	VOCs	Benzene	1	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	VOCs	Bromodichloromethane	1	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	VOCs	Bromoform	1	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	VOCs	Bromomethane	1	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	VOCs	Carbon Disulfide	1	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	VOCs	Carbon Tetrachloride	1	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	VOCs	Chlorobenzene	1	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	VOCs	Chlorodibromomethane	1	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	VOCs	Chloroethane	1	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	VOCs	Chloroform	1	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	VOCs	Chloromethane	1	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	VOCs	cis-1,3-Dichloropropene	1	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	VOCs	Dichloromethane	5	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	VOCs	Ethylbenzene	1	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	VOCs	Methyl N-Butyl Ketone	10	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	VOCs	Styrene (Monomer)	1	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	VOCs	Tetrachloroethene	1	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	VOCs	Toluene	1	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	VOCs	trans-1,3-Dichloropropene	1	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	VOCs	Trichloroethene	1	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	VOCs	Vinyl chloride	1	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	VOCs	Xylenes, Total	2	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	1,2,4-Trichlorobenzene	9.4	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	1,2-Dichlorobenzene	9.4	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	1,3-Dichlorobenzene	9.4	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	1,4-Dichlorobenzene	9.4	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	9.4	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	2,4,5-Trichlorophenol	9.4	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	2,4,6-Trichlorophenol	9.4	ug/L	U		

Sauget Area 2
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	2,4-Dichlorophenol	9.4	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	2,4-Dimethylphenol	9.4	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	2,4-Dinitrophenol	47	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	2,4-Dinitrotoluene	9.4	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	2,6-Dinitrotoluene	9.4	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	2-Chloronaphthalene	9.4	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	2-Chlorophenol	9.4	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	2-Methylnaphthalene	9.4	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	2-Methylphenol (o-Cresol)	9.4	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	2-Nitroaniline	47	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	2-Nitrophenol	9.4	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	3 & 4 Methylphenol	9.4	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	3,3'-Dichlorobenzidine	19	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	3-Nitroaniline	47	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	4,6-Dinitro-2-methylphenol	47	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	4-Bromophenyl Phenyl Ether	9.4	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	4-Chloro-3-methylphenol	9.4	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	4-Chlorophenyl Phenyl Ether	9.4	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	4-Nitrophenol	47	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	Acenaphthene	9.4	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	Acenaphthylene	9.4	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	Anthracene	9.4	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	Benzo(a)anthracene	9.4	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	Benzo(a)pyrene	9.4	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	Benzo(b)fluoranthene	9.4	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	Benzo(g,h,i)perylene	9.4	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	Benzo(k)fluoranthene	9.4	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	Benzyl Butyl Phthalate	9.4	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	bis(2-Chloroethoxy)methane	9.4	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	bis(2-Chloroethyl)ether	9.4	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	bis(2-Ethylhexyl)phthalate	9.4	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	Carbazole	9.4	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	Chrysene	9.4	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	Dibenzo(a,h)anthracene	9.4	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	Dibenzofuran	9.4	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	Diethyl Phthalate	9.4	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	Dimethyl Phthalate	9.4	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	Di-n-butylphthalate	9.4	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	Di-n-octylphthalate	9.4	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	Dinoseb	9.4	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	Fluoranthene	9.4	ug/L	U		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	Fluorene	9.4	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	Hexachlorobenzene	9.4	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	Hexachlorobutadiene	9.4	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	Hexachlorocyclopentadiene	9.4	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	Hexachloroethane	9.4	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	Indeno(1,2,3-cd)pyrene	9.4	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	Isophorone	9.4	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	Naphthalene	9.4	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	Nitrobenzene	9.4	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	N-Nitroso-di-n-propylamine	9.4	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	N-Nitrosodiphenylamine	9.4	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	P-Chloroaniline	19	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	Phenanthrene	9.4	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	Phenol	9.4	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	P-Nitroaniline	47	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	SVOCs	Pyrene	9.4	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Pesticides	4,4'-DDD	0.094	ug/L	U	UJ	S
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Pesticides	4,4'-DDE	0.094	ug/L	U	UJ	S
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Pesticides	4,4'-DDT	0.094	ug/L	U	UJ	S
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Pesticides	Aldrin	0.047	ug/L	U	UJ	S
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Pesticides	alpha-BHC	0.047	ug/L	U	UJ	S
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Pesticides	alpha-Chlordane	0.047	ug/L	U	UJ	S
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Pesticides	beta-BHC	0.047	ug/L	U	UJ	S
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Pesticides	delta-BHC	0.047	ug/L	U	UJ	S
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Pesticides	Dieldrin	0.094	ug/L	U	UJ	S
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Pesticides	Endosulfan I	0.047	ug/L	U	UJ	S
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Pesticides	Endosulfan II	0.094	ug/L	U	UJ	S
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Pesticides	Endosulfan Sulfate	0.094	ug/L	U	UJ	S
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Pesticides	Endrin	0.094	ug/L	U	UJ	S
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Pesticides	Endrin Aldehyde	0.094	ug/L	U	UJ	S
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Pesticides	Endrin Ketone	0.094	ug/L	U	UJ	S
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Pesticides	gamma-BHC (Lindane)	0.047	ug/L	U	UJ	S
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Pesticides	gamma-Chlordane	0.047	ug/L	U	UJ	S
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Pesticides	Heptachlor	0.047	ug/L	U	UJ	S
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Pesticides	Heptachlor Epoxide	0.047	ug/L	U	UJ	S
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Pesticides	Methoxychlor	0.47	ug/L	U	UJ	S
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Pesticides	Toxaphene	4.7	ug/L	U	UJ	S
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Herbicides	2,4,5-T	0.49	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Herbicides	2,4,5-TP (Silvex)	0.49	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Herbicides	2,4-D	0.49	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Herbicides	2,4-DB	0.49	ug/L	U		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Herbicides	Dalapon	9.7	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Herbicides	Dicamba	0.49	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Herbicides	Dichlorprop	0.49	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Herbicides	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Herbicides	MCPP	120	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Herbicides	Pentachlorophenol	0.24	ug/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Aluminum	3.8	mg/L			
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Aluminum (Dissolved)	0.2	mg/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Antimony	0.02	mg/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Antimony (Dissolved)	0.02	mg/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Arsenic	0.01	mg/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Arsenic (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Barium	0.12	mg/L			
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Barium (Dissolved)	0.074	mg/L			
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Beryllium	0.00015	mg/L	J		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Beryllium (Dissolved)	0.004	mg/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Cadmium	0.005	mg/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Cadmium (Dissolved)	0.005	mg/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Calcium	45	mg/L			
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Calcium (Dissolved)	43	mg/L			
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Chromium	0.0047	mg/L	J		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Chromium (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Cobalt	0.0012	mg/L	J		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Cobalt (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Copper	0.005	mg/L	J		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Copper (Dissolved)	0.02	mg/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Iron	3.5	mg/L			
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Iron (Dissolved)	0.05	mg/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Lead	0.0035	mg/L	J		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Lead (Dissolved)	0.0022	mg/L	J		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Magnesium	21	mg/L			
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Magnesium (Dissolved)	20	mg/L			
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Manganese	0.25	mg/L			
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Manganese (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Mercury	0.0002	mg/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Mercury (Dissolved)	0.0002	mg/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Nickel	0.006	mg/L	J		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Nickel (Dissolved)	0.0023	mg/L	J		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Potassium	5.5	mg/L			
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Potassium (Dissolved)	4.7	mg/L			

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Selenium	0.01	mg/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Selenium (Dissolved)	0.0078	mg/L	J B	U	P
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Silver	0.01	mg/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Silver (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Sodium	32	mg/L			
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Sodium (Dissolved)	32	mg/L			
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Thallium	0.025	mg/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Thallium (Dissolved)	0.025	mg/L	U		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Vanadium	0.011	mg/L			
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Vanadium (Dissolved)	0.0032	mg/L	J		
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Zinc	0.065	mg/L			
Surface Water	RIVER	PDA5	SW-SA2-GMCS-PDA5	9/22/05	Metals	Zinc (Dissolved)	0.02	mg/L	U		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	VOCs	1,1,1-Trichloroethane	1	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	VOCs	1,1,2,2-Tetrachloroethane	1	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	VOCs	1,1,2-Trichloroethane	1	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	VOCs	1,1-Dichloroethane	1	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	VOCs	1,1-Dichloroethylene	1	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	VOCs	1,2-Dichloroethane	1	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	VOCs	1,2-Dichloroethene (total)	2	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	VOCs	1,2-Dichloropropane	1	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	VOCs	2-Butanone (MEK)	10	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	VOCs	4-Methyl-2-pentanone (MIBK)	10	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	VOCs	Acetone	25	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	VOCs	Benzene	1	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	VOCs	Bromodichloromethane	1	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	VOCs	Bromoform	1	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	VOCs	Bromomethane	1	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	VOCs	Carbon Disulfide	1	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	VOCs	Carbon Tetrachloride	1	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	VOCs	Chlorobenzene	1	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	VOCs	Chlorodibromomethane	1	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	VOCs	Chloroethane	1	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	VOCs	Chloroform	1	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	VOCs	Chloromethane	1	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	VOCs	cis-1,3-Dichloropropene	1	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	VOCs	Dichloromethane	5	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	VOCs	Ethylbenzene	1	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	VOCs	Methyl N-Butyl Ketone	10	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	VOCs	Styrene (Monomer)	1	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	VOCs	Tetrachloroethene	1	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	VOCs	Toluene	1	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	VOCs	trans-1,3-Dichloropropene	1	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	VOCs	Trichloroethene	1	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	VOCs	Vinyl chloride	1	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	VOCs	Xylenes, Total	2	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	1,2,4-Trichlorobenzene	9.4	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	1,2-Dichlorobenzene	9.4	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	1,3-Dichlorobenzene	9.4	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	1,4-Dichlorobenzene	9.4	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	9.4	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	2,4,5-Trichlorophenol	9.4	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	2,4,6-Trichlorophenol	9.4	ug/L	U		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	2,4-Dichlorophenol	9.4	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	2,4-Dimethylphenol	9.4	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	2,4-Dinitrophenol	47	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	2,4-Dinitrotoluene	9.4	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	2,6-Dinitrotoluene	9.4	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	2-Chloronaphthalene	9.4	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	2-Chlorophenol	9.4	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	2-Methylnaphthalene	9.4	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	2-Methylphenol (o-Cresol)	9.4	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	2-Nitroaniline	47	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	2-Nitrophenol	9.4	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	3 & 4 Methylphenol	9.4	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	3,3'-Dichlorobenzidine	19	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	3-Nitroaniline	47	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	4,6-Dinitro-2-methylphenol	47	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	4-Bromophenyl Phenyl Ether	9.4	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	4-Chloro-3-methylphenol	9.4	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	4-Chlorophenyl Phenyl Ether	9.4	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	4-Nitrophenol	47	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	Acenaphthene	9.4	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	Acenaphthylene	9.4	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	Anthracene	9.4	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	Benzo(a)anthracene	9.4	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	Benzo(a)pyrene	9.4	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	Benzo(b)fluoranthene	9.4	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	Benzo(g,h,i)perylene	9.4	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	Benzo(k)fluoranthene	9.4	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	Benzyl Butyl Phthalate	9.4	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	bis(2-Chloroethoxy)methane	9.4	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	bis(2-Chloroethyl)ether	9.4	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	bis(2-Ethylhexyl)phthalate	9.4	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	Carbazole	9.4	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	Chrysene	9.4	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	Dibenzo(a,h)anthracene	9.4	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	Dibenzofuran	9.4	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	Diethyl Phthalate	9.4	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	Dimethyl Phthalate	9.4	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	Di-n-butylphthalate	9.4	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	Di-n-octylphthalate	9.4	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	Dinoseb	9.4	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	Fluoranthene	9.4	ug/L	U		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	Fluorene	9.4	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	Hexachlorobenzene	9.4	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	Hexachlorobutadiene	9.4	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	Hexachlorocyclopentadiene	9.4	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	Hexachloroethane	9.4	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	Indeno(1,2,3-cd)pyrene	9.4	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	Isophorone	9.4	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	Naphthalene	9.4	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	Nitrobenzene	9.4	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	N-Nitroso-di-n-propylamine	9.4	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	N-Nitrosodiphenylamine	9.4	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	P-Chloroaniline	19	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	Phenanthrene	9.4	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	Phenol	9.4	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	P-Nitroaniline	47	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	SVOCs	Pyrene	9.4	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Pesticides	4,4'-DDD	0.095	ug/L	U	UJ	S
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Pesticides	4,4'-DDE	0.095	ug/L	U	UJ	S
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Pesticides	4,4'-DDT	0.095	ug/L	U	UJ	S
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Pesticides	Aldrin	0.048	ug/L	U	UJ	S
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Pesticides	alpha-BHC	0.048	ug/L	U	UJ	S
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Pesticides	alpha-Chlordane	0.048	ug/L	U	UJ	S
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Pesticides	beta-BHC	0.048	ug/L	U	UJ	S
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Pesticides	delta-BHC	0.048	ug/L	U	UJ	S
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Pesticides	Dieldrin	0.095	ug/L	U	UJ	S
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Pesticides	Endosulfan I	0.048	ug/L	U	UJ	S
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Pesticides	Endosulfan II	0.095	ug/L	U	UJ	S
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Pesticides	Endosulfan Sulfate	0.095	ug/L	U	UJ	S
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Pesticides	Endrin	0.095	ug/L	U	UJ	S
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Pesticides	Endrin Aldehyde	0.095	ug/L	U	UJ	S
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Pesticides	Endrin Ketone	0.095	ug/L	U	UJ	S
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Pesticides	gamma-BHC (Lindane)	0.048	ug/L	U	UJ	S
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Pesticides	gamma-Chlordane	0.048	ug/L	U	UJ	S
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Pesticides	Heptachlor	0.048	ug/L	U	UJ	S
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Pesticides	Heptachlor Epoxide	0.048	ug/L	U	UJ	S
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Pesticides	Methoxychlor	0.48	ug/L	U	UJ	S
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Pesticides	Toxaphene	4.8	ug/L	U	UJ	S
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Herbicides	2,4,5-T	0.5	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Herbicides	2,4,5-TP (Silvex)	0.5	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Herbicides	2,4-D	0.5	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Herbicides	2,4-DB	0.5	ug/L	U		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Herbicides	Dalapon	9.9	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Herbicides	Dicamba	0.5	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Herbicides	Dichlorprop	0.5	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Herbicides	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Herbicides	MCPP	120	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Herbicides	Pentachlorophenol	0.25	ug/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Aluminum	3.4	mg/L		J	M
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Aluminum (Dissolved)	0.2	mg/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Antimony	0.02	mg/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Antimony (Dissolved)	0.02	mg/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Arsenic	0.01	mg/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Arsenic (Dissolved)	0.0062	mg/L	J		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Barium	0.11	mg/L			
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Barium (Dissolved)	0.074	mg/L			
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Beryllium	0.00017	mg/L	J		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Beryllium (Dissolved)	0.004	mg/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Cadmium	0.005	mg/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Cadmium (Dissolved)	0.005	mg/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Calcium	45	mg/L			
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Calcium (Dissolved)	43	mg/L			
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Chromium	0.0038	mg/L	J		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Chromium (Dissolved)	0.00087	mg/L	J		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Cobalt	0.0015	mg/L	J		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Cobalt (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Copper	0.0038	mg/L	J		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Copper (Dissolved)	0.02	mg/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Iron	3.3	mg/L			
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Iron (Dissolved)	0.05	mg/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Lead	0.0047	mg/L	J		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Lead (Dissolved)	0.0027	mg/L	J		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Magnesium	21	mg/L			
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Magnesium (Dissolved)	20	mg/L			
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Manganese	0.24	mg/L			
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Manganese (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Mercury	0.000086	mg/L	J		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Mercury (Dissolved)	0.0002	mg/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Nickel	0.0065	mg/L	J		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Nickel (Dissolved)	0.0029	mg/L	J		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Potassium	5.4	mg/L			
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Potassium (Dissolved)	4.7	mg/L			

Sauget Area 2
Groundwater Migration Control System
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Selenium	0.01	mg/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Selenium (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Silver	0.01	mg/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Silver (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Sodium	31	mg/L			
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Sodium (Dissolved)	31	mg/L			
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Thallium	0.025	mg/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Thallium (Dissolved)	0.025	mg/L	U		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Vanadium	0.011	mg/L			
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Vanadium (Dissolved)	0.0043	mg/L	J		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Zinc	0.014	mg/L	J		
Surface Water	RIVER	PDA9	SW-SA2-GMCS-PDA9	9/22/05	Metals	Zinc (Dissolved)	0.0031	mg/L	J		

Sauget Area 2
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	VOCs	1,1,1-Trichloroethane	1	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	VOCs	1,1,2,2-Tetrachloroethane	1	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	VOCs	1,1,2-Trichloroethane	1	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	VOCs	1,1-Dichloroethane	1	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	VOCs	1,1-Dichloroethylene	1	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	VOCs	1,2-Dichloroethane	1	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	VOCs	1,2-Dichloroethene (total)	2	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	VOCs	1,2-Dichloropropane	1	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	VOCs	2-Butanone (MEK)	10	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	VOCs	4-Methyl-2-pentanone (MIBK)	10	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	VOCs	Acetone	25	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	VOCs	Benzene	1	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	VOCs	Bromodichloromethane	1	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	VOCs	Bromoform	1	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	VOCs	Bromomethane	1	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	VOCs	Carbon Disulfide	1	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	VOCs	Carbon Tetrachloride	1	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	VOCs	Chlorobenzene	1	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	VOCs	Chlorodibromomethane	1	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	VOCs	Chloroethane	1	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	VOCs	Chloroform	1	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	VOCs	Chloromethane	1	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	VOCs	cis-1,3-Dichloropropene	1	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	VOCs	Dichloromethane	5	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	VOCs	Ethylbenzene	1	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	VOCs	Methyl N-Butyl Ketone	10	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	VOCs	Styrene (Monomer)	1	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	VOCs	Tetrachloroethene	1	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	VOCs	Toluene	1	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	VOCs	trans-1,3-Dichloropropene	1	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	VOCs	Trichloroethene	1	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	VOCs	Vinyl chloride	1	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	VOCs	Xylenes, Total	2	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	1,2,4-Trichlorobenzene	9.5	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	1,2-Dichlorobenzene	9.5	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	1,3-Dichlorobenzene	9.5	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	1,4-Dichlorobenzene	9.5	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	9.5	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	2,4,5-Trichlorophenol	9.5	ug/L	U		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	2,4,6-Trichlorophenol	9.5	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	2,4-Dichlorophenol	9.5	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	2,4-Dimethylphenol	9.5	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	2,4-Dinitrophenol	48	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	2,4-Dinitrotoluene	9.5	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	2,6-Dinitrotoluene	9.5	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	2-Chloronaphthalene	9.5	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	2-Chlorophenol	9.5	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	2-Methylnaphthalene	9.5	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	2-Methylphenol (o-Cresol)	9.5	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	2-Nitroaniline	48	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	2-Nitrophenol	9.5	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	3 & 4 Methylphenol	9.5	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	3,3'-Dichlorobenzidine	19	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	3-Nitroaniline	48	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	4,6-Dinitro-2-methylphenol	48	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	4-Bromophenyl Phenyl Ether	9.5	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	4-Chloro-3-methylphenol	9.5	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	4-Chlorophenyl Phenyl Ether	9.5	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	4-Nitrophenol	48	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	Acenaphthene	9.5	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	Acenaphthylene	9.5	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	Anthracene	9.5	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	Benzo(a)anthracene	9.5	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	Benzo(a)pyrene	9.5	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	Benzo(b)fluoranthene	9.5	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	Benzo(g,h,i)perylene	9.5	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	Benzo(k)fluoranthene	9.5	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	Benzyl Butyl Phthalate	9.5	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	bis(2-Chloroethoxy)methane	9.5	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	bis(2-Chloroethyl)ether	9.5	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	bis(2-Ethylhexyl)phthalate	9.5	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	Carbazole	9.5	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	Chrysene	9.5	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	Dibenzo(a,h)anthracene	9.5	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	Dibenzofuran	9.5	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	Diethyl Phthalate	9.5	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	Dimethyl Phthalate	9.5	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	Di-n-butylphthalate	9.5	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	Di-n-octylphthalate	9.5	ug/L	U		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	Dinoseb	9.5	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	Fluoranthene	9.5	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	Fluorene	9.5	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	Hexachlorobenzene	9.5	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	Hexachlorobutadiene	9.5	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	Hexachlorocyclopentadiene	9.5	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	Hexachloroethane	9.5	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	Indeno(1,2,3-cd)pyrene	9.5	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	Isophorone	9.5	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	Naphthalene	9.5	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	Nitrobenzene	9.5	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	N-Nitroso-di-n-propylamine	9.5	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	N-Nitrosodiphenylamine	9.5	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	P-Chloroaniline	19	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	Phenanthrene	9.5	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	Phenol	9.5	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	P-Nitroaniline	48	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	SVOCs	Pyrene	9.5	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Pesticides	4,4'-DDD	0.095	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Pesticides	4,4'-DDE	0.095	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Pesticides	4,4'-DDT	0.095	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Pesticides	Aldrin	0.048	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Pesticides	alpha-BHC	0.048	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Pesticides	alpha-Chlordane	0.048	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Pesticides	beta-BHC	0.048	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Pesticides	delta-BHC	0.048	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Pesticides	Dieldrin	0.095	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Pesticides	Endosulfan I	0.048	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Pesticides	Endosulfan II	0.095	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Pesticides	Endosulfan Sulfate	0.095	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Pesticides	Endrin	0.095	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Pesticides	Endrin Aldehyde	0.095	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Pesticides	Endrin Ketone	0.095	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Pesticides	gamma-BHC (Lindane)	0.048	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Pesticides	gamma-Chlordane	0.048	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Pesticides	Heptachlor	0.048	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Pesticides	Heptachlor Epoxide	0.048	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Pesticides	Methoxychlor	0.48	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Pesticides	Toxaphene	4.8	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Herbicides	2,4,5-T	0.5	ug/L	U		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Herbicides	2,4,5-TP (Silvex)	0.5	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Herbicides	2,4-D	0.5	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Herbicides	2,4-DB	0.5	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Herbicides	Dalapon	9.9	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Herbicides	Dicamba	0.5	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Herbicides	Dichlorprop	0.5	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Herbicides	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Herbicides	MCPP	120	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Herbicides	Pentachlorophenol	0.25	ug/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Aluminum	3.7	mg/L			
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Aluminum (Dissolved)	0.2	mg/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Antimony	0.02	mg/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Antimony (Dissolved)	0.02	mg/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Arsenic	0.005	mg/L	J		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Arsenic (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Barium	0.11	mg/L			
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Barium (Dissolved)	0.074	mg/L			
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Beryllium	0.00014	mg/L	J		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Beryllium (Dissolved)	0.004	mg/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Cadmium	0.005	mg/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Cadmium (Dissolved)	0.005	mg/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Calcium	45	mg/L			
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Calcium (Dissolved)	44	mg/L			
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Chromium	0.0045	mg/L	J		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Chromium (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Cobalt	0.0016	mg/L	J		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Cobalt (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Copper	0.0044	mg/L	J		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Copper (Dissolved)	0.02	mg/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Iron	3.5	mg/L			
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Iron (Dissolved)	0.05	mg/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Lead	0.005	mg/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Lead (Dissolved)	0.005	mg/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Magnesium	21	mg/L			
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Magnesium (Dissolved)	20	mg/L			
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Manganese	0.24	mg/L			
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Manganese (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Mercury	0.0002	mg/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Mercury (Dissolved)	0.0002	mg/L	U		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Nickel	0.0064	mg/L	J		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Nickel (Dissolved)	0.0027	mg/L	J		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Potassium	5.4	mg/L			
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Potassium (Dissolved)	4.7	mg/L			
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Selenium	0.01	mg/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Selenium (Dissolved)	0.0072	mg/L	J B	U	P
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Silver	0.01	mg/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Silver (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Sodium	30	mg/L			
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Sodium (Dissolved)	30	mg/L			
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Thallium	0.025	mg/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Thallium (Dissolved)	0.025	mg/L	U		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Vanadium	0.011	mg/L			
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Vanadium (Dissolved)	0.0038	mg/L	J		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Zinc	0.014	mg/L	J		
Surface Water	RIVER	PDA9A	SW-SA2-GMCS-PDA9A	9/22/05	Metals	Zinc (Dissolved)	0.02	mg/L	U		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	VOCs	1,1,1-Trichloroethane	1	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	VOCs	1,1,2,2-Tetrachloroethane	1	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	VOCs	1,1,2-Trichloroethane	1	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	VOCs	1,1-Dichloroethane	1	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	VOCs	1,1-Dichloroethylene	1	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	VOCs	1,2-Dichloroethane	1	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	VOCs	1,2-Dichloroethene (total)	2	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	VOCs	1,2-Dichloropropane	1	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	VOCs	2-Butanone (MEK)	10	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	VOCs	4-Methyl-2-pentanone (MIBK)	10	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	VOCs	Acetone	25	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	VOCs	Benzene	1	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	VOCs	Bromodichloromethane	1	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	VOCs	Bromoform	1	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	VOCs	Bromomethane	1	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	VOCs	Carbon Disulfide	1	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	VOCs	Carbon Tetrachloride	1	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	VOCs	Chlorobenzene	0.57	ug/L	J		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	VOCs	Chlorodibromomethane	1	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	VOCs	Chloroethane	1	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	VOCs	Chloroform	1	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	VOCs	Chloromethane	1	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	VOCs	cis-1,3-Dichloropropene	1	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	VOCs	Dichloromethane	5	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	VOCs	Ethylbenzene	1	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	VOCs	Methyl N-Butyl Ketone	10	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	VOCs	Styrene (Monomer)	1	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	VOCs	Tetrachloroethene	1	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	VOCs	Toluene	1	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	VOCs	trans-1,3-Dichloropropene	1	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	VOCs	Trichloroethene	1	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	VOCs	Vinyl chloride	1	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	VOCs	Xylenes, Total	2	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	1,2,4-Trichlorobenzene	9.4	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	1,2-Dichlorobenzene	9.4	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	1,3-Dichlorobenzene	9.4	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	1,4-Dichlorobenzene	9.4	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	9.4	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	2,4,5-Trichlorophenol	9.4	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	2,4,6-Trichlorophenol	9.4	ug/L	U		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	2,4-Dichlorophenol	9.4	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	2,4-Dimethylphenol	9.4	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	2,4-Dinitrophenol	47	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	2,4-Dinitrotoluene	9.4	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	2,6-Dinitrotoluene	9.4	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	2-Chloronaphthalene	9.4	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	2-Chlorophenol	9.4	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	2-Methylnaphthalene	9.4	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	2-Methylphenol (o-Cresol)	9.4	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	2-Nitroaniline	47	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	2-Nitrophenol	9.4	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	3 & 4 Methylphenol	9.4	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	3,3'-Dichlorobenzidine	19	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	3-Nitroaniline	47	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	4,6-Dinitro-2-methylphenol	47	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	4-Bromophenyl Phenyl Ether	9.4	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	4-Chloro-3-methylphenol	9.4	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	4-Chlorophenyl Phenyl Ether	9.4	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	4-Nitrophenol	47	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	Acenaphthene	9.4	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	Acenaphthylene	9.4	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	Anthracene	9.4	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	Benzo(a)anthracene	9.4	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	Benzo(a)pyrene	9.4	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	Benzo(b)fluoranthene	9.4	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	Benzo(g,h,i)perylene	9.4	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	Benzo(k)fluoranthene	9.4	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	Benzyl Butyl Phthalate	9.4	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	bis(2-Chloroethoxy)methane	9.4	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	bis(2-Chloroethyl)ether	9.4	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	bis(2-Ethylhexyl)phthalate	9.4	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	Carbazole	9.4	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	Chrysene	9.4	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	Dibenzo(a,h)anthracene	9.4	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	Dibenzofuran	9.4	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	Diethyl Phthalate	9.4	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	Dimethyl Phthalate	9.4	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	Di-n-butylphthalate	9.4	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	Di-n-octylphthalate	9.4	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	Dinoseb	9.4	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	Fluoranthene	9.4	ug/L	U		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	Fluorene	9.4	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	Hexachlorobenzene	9.4	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	Hexachlorobutadiene	9.4	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	Hexachlorocyclopentadiene	9.4	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	Hexachloroethane	9.4	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	Indeno(1,2,3-cd)pyrene	9.4	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	Isophorone	9.4	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	Naphthalene	9.4	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	Nitrobenzene	9.4	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	N-Nitroso-di-n-propylamine	9.4	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	N-Nitrosodiphenylamine	9.4	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	P-Chloroaniline	19	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	Phenanthrene	9.4	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	Phenol	9.4	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	P-Nitroaniline	47	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	SVOCs	Pyrene	9.4	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Pesticides	4,4'-DDD	0.095	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Pesticides	4,4'-DDE	0.095	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Pesticides	4,4'-DDT	0.095	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Pesticides	Aldrin	0.048	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Pesticides	alpha-BHC	0.048	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Pesticides	alpha-Chlordane	0.048	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Pesticides	beta-BHC	0.048	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Pesticides	delta-BHC	0.048	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Pesticides	Dieldrin	0.095	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Pesticides	Endosulfan I	0.048	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Pesticides	Endosulfan II	0.095	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Pesticides	Endosulfan Sulfate	0.095	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Pesticides	Endrin	0.095	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Pesticides	Endrin Aldehyde	0.095	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Pesticides	Endrin Ketone	0.095	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Pesticides	gamma-BHC (Lindane)	0.048	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Pesticides	gamma-Chlordane	0.048	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Pesticides	Heptachlor	0.048	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Pesticides	Heptachlor Epoxide	0.048	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Pesticides	Methoxychlor	0.48	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Pesticides	Toxaphene	4.8	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Herbicides	2,4,5-T	0.49	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Herbicides	2,4,5-TP (Silvex)	0.49	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Herbicides	2,4-D	1.2	ug/L			
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Herbicides	2,4-DB	0.49	ug/L	U		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Herbicides	Dalapon	9.8	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Herbicides	Dicamba	0.49	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Herbicides	Dichlorprop	0.11	ug/L	JP		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Herbicides	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Herbicides	MCPP	120	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Herbicides	Pentachlorophenol	0.25	ug/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Aluminum	1.4	mg/L			
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Aluminum (Dissolved)	0.2	mg/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Antimony	0.02	mg/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Antimony (Dissolved)	0.02	mg/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Arsenic	0.0066	mg/L	J		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Arsenic (Dissolved)	0.0077	mg/L	J		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Barium	0.088	mg/L			
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Barium (Dissolved)	0.066	mg/L			
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Beryllium	0.004	mg/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Beryllium (Dissolved)	0.004	mg/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Cadmium	0.005	mg/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Cadmium (Dissolved)	0.005	mg/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Calcium	43	mg/L			
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Calcium (Dissolved)	43	mg/L			
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Chromium	0.0026	mg/L	J		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Chromium (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Cobalt	0.0008	mg/L	J		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Cobalt (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Copper	0.0028	mg/L	J		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Copper (Dissolved)	0.02	mg/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Iron	1.6	mg/L			
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Iron (Dissolved)	0.05	mg/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Lead	0.004	mg/L	J		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Lead (Dissolved)	0.005	mg/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Magnesium	22	mg/L			
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Magnesium (Dissolved)	22	mg/L			
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Manganese	0.17	mg/L			
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Manganese (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Mercury	0.0002	mg/L	U	UJ	H
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Mercury (Dissolved)	0.0002	mg/L	U	UJ	H
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Nickel	0.003	mg/L	J		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Nickel (Dissolved)	0.04	mg/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Potassium	4.4	mg/L			
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Potassium (Dissolved)	4.2	mg/L			

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Selenium	0.012	mg/L	B	U	P
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Selenium (Dissolved)	0.0069	mg/L	J B	U	P
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Silver	0.01	mg/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Silver (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Sodium	27	mg/L			
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Sodium (Dissolved)	28	mg/L			
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Thallium	0.01	mg/L	J		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Thallium (Dissolved)	0.025	mg/L	U		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Vanadium	0.0064	mg/L	J		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Vanadium (Dissolved)	0.0032	mg/L	J		
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Zinc	0.022	mg/L			
Surface Water	RIVER	R3AM	SW-SA2-GMCS-R3AM	9/21/05	Metals	Zinc (Dissolved)	0.0048	mg/L	J		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	VOCs	1,1,1-Trichloroethane	1	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	VOCs	1,1,2,2-Tetrachloroethane	1	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	VOCs	1,1,2-Trichloroethane	1	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	VOCs	1,1-Dichloroethane	1	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	VOCs	1,1-Dichloroethylene	1	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	VOCs	1,2-Dichloroethane	1	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	VOCs	1,2-Dichloroethene (total)	2	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	VOCs	1,2-Dichloropropane	1	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	VOCs	2-Butanone (MEK)	10	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	VOCs	4-Methyl-2-pentanone (MIBK)	10	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	VOCs	Acetone	25	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	VOCs	Benzene	1	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	VOCs	Bromodichloromethane	1	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	VOCs	Bromoform	1	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	VOCs	Bromomethane	1	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	VOCs	Carbon Disulfide	1	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	VOCs	Carbon Tetrachloride	1	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	VOCs	Chlorobenzene	1	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	VOCs	Chlorodibromomethane	1	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	VOCs	Chloroethane	1	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	VOCs	Chloroform	1	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	VOCs	Chloromethane	1	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	VOCs	cis-1,3-Dichloropropene	1	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	VOCs	Dichloromethane	5	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	VOCs	Ethylbenzene	1	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	VOCs	Methyl N-Butyl Ketone	10	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	VOCs	Styrene (Monomer)	1	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	VOCs	Tetrachloroethene	1	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	VOCs	Toluene	1	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	VOCs	trans-1,3-Dichloropropene	1	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	VOCs	Trichloroethene	1	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	VOCs	Vinyl chloride	1	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	VOCs	Xylenes, Total	2	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	1,2,4-Trichlorobenzene	9.4	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	1,2-Dichlorobenzene	9.4	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	1,3-Dichlorobenzene	9.4	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	1,4-Dichlorobenzene	9.4	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	9.4	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	2,4,5-Trichlorophenol	9.4	ug/L	U		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	2,4,6-Trichlorophenol	9.4	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	2,4-Dichlorophenol	9.4	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	2,4-Dimethylphenol	9.4	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	2,4-Dinitrophenol	47	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	2,4-Dinitrotoluene	9.4	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	2,6-Dinitrotoluene	9.4	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	2-Chloronaphthalene	9.4	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	2-Chlorophenol	9.4	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	2-Methylnaphthalene	9.4	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	2-Methylphenol (o-Cresol)	9.4	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	2-Nitroaniline	47	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	2-Nitrophenol	9.4	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	3 & 4 Methylphenol	9.4	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	3,3'-Dichlorobenzidine	19	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	3-Nitroaniline	47	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	4,6-Dinitro-2-methylphenol	47	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	4-Bromophenyl Phenyl Ether	9.4	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	4-Chloro-3-methylphenol	9.4	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	4-Chlorophenyl Phenyl Ether	9.4	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	4-Nitrophenol	47	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	Acenaphthene	9.4	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	Acenaphthylene	9.4	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	Anthracene	9.4	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	Benzo(a)anthracene	9.4	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	Benzo(a)pyrene	9.4	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	Benzo(b)fluoranthene	9.4	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	Benzo(g,h,i)perylene	9.4	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	Benzo(k)fluoranthene	9.4	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	Benzyl Butyl Phthalate	9.4	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	bis(2-Chloroethoxy)methane	9.4	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	bis(2-Chloroethyl)ether	9.4	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	bis(2-Ethylhexyl)phthalate	9.4	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	Carbazole	9.4	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	Chrysene	9.4	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	Dibenzo(a,h)anthracene	9.4	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	Dibenzofuran	9.4	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	Diethyl Phthalate	9.4	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	Dimethyl Phthalate	9.4	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	Di-n-butylphthalate	9.4	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	Di-n-octylphthalate	9.4	ug/L	U		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	Dinoseb	9.4	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	Fluoranthene	9.4	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	Fluorene	9.4	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	Hexachlorobenzene	9.4	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	Hexachlorobutadiene	9.4	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	Hexachlorocyclopentadiene	9.4	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	Hexachloroethane	9.4	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	Indeno(1,2,3-cd)pyrene	9.4	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	Isophorone	9.4	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	Naphthalene	9.4	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	Nitrobenzene	9.4	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	N-Nitroso-di-n-propylamine	9.4	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	N-Nitrosodiphenylamine	9.4	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	P-Chloroaniline	19	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	Phenanthrene	9.4	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	Phenol	9.4	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	P-Nitroaniline	47	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	SVOCs	Pyrene	9.4	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Pesticides	4,4'-DDD	0.095	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Pesticides	4,4'-DDE	0.095	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Pesticides	4,4'-DDT	0.095	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Pesticides	Aldrin	0.048	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Pesticides	alpha-BHC	0.048	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Pesticides	alpha-Chlordane	0.048	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Pesticides	beta-BHC	0.048	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Pesticides	delta-BHC	0.048	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Pesticides	Dieldrin	0.095	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Pesticides	Endosulfan I	0.048	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Pesticides	Endosulfan II	0.095	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Pesticides	Endosulfan Sulfate	0.095	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Pesticides	Endrin	0.095	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Pesticides	Endrin Aldehyde	0.095	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Pesticides	Endrin Ketone	0.095	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Pesticides	gamma-BHC (Lindane)	0.048	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Pesticides	gamma-Chlordane	0.048	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Pesticides	Heptachlor	0.048	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Pesticides	Heptachlor Epoxide	0.048	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Pesticides	Methoxychlor	0.48	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Pesticides	Toxaphene	4.8	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Herbicides	2,4,5-T	0.49	ug/L	U		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Herbicides	2,4,5-TP (Silvex)	0.49	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Herbicides	2,4-D	0.16	ug/L	JP		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Herbicides	2,4-DB	0.49	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Herbicides	Dalapon	9.7	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Herbicides	Dicamba	0.49	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Herbicides	Dichlorprop	0.49	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Herbicides	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Herbicides	MCPP	120	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Herbicides	Pentachlorophenol	0.24	ug/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Aluminum	1.3	mg/L			
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Aluminum (Dissolved)	0.2	mg/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Antimony	0.02	mg/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Antimony (Dissolved)	0.02	mg/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Arsenic	0.0063	mg/L	J		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Arsenic (Dissolved)	0.0043	mg/L	J		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Barium	0.084	mg/L			
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Barium (Dissolved)	0.066	mg/L			
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Beryllium	0.004	mg/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Beryllium (Dissolved)	0.004	mg/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Cadmium	0.005	mg/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Cadmium (Dissolved)	0.005	mg/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Calcium	44	mg/L			
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Calcium (Dissolved)	42	mg/L			
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Chromium	0.0021	mg/L	J		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Chromium (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Cobalt	0.01	mg/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Cobalt (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Copper	0.0026	mg/L	J		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Copper (Dissolved)	0.02	mg/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Iron	1.4	mg/L			
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Iron (Dissolved)	0.05	mg/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Lead	0.0033	mg/L	J		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Lead (Dissolved)	0.005	mg/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Magnesium	22	mg/L			
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Magnesium (Dissolved)	21	mg/L			
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Manganese	0.15	mg/L			
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Manganese (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Mercury	0.0002	mg/L	U	UJ	H
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Mercury (Dissolved)	0.0002	mg/L	U	UJ	H

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Nickel	0.0034	mg/L	J		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Nickel (Dissolved)	0.0021	mg/L	J		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Potassium	4.5	mg/L			
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Potassium (Dissolved)	4.2	mg/L			
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Selenium	0.0066	mg/L	J B	U	P
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Selenium (Dissolved)	0.0068	mg/L	J B	U	P
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Silver	0.01	mg/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Silver (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Sodium	28	mg/L			
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Sodium (Dissolved)	28	mg/L			
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Thallium	0.025	mg/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Thallium (Dissolved)	0.025	mg/L	U		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Vanadium	0.0059	mg/L	J		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Vanadium (Dissolved)	0.0031	mg/L	J		
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Zinc	0.022	mg/L			
Surface Water	RIVER	R3BM	SW-SA2-GMCS-R3BM	9/21/05	Metals	Zinc (Dissolved)	0.0049	mg/L	J		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	VOCs	1,1,1-Trichloroethane	1	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	VOCs	1,1,2,2-Tetrachloroethane	1	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	VOCs	1,1,2-Trichloroethane	1	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	VOCs	1,1-Dichloroethane	1	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	VOCs	1,1-Dichloroethylene	1	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	VOCs	1,2-Dichloroethane	1	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	VOCs	1,2-Dichloroethene (total)	2	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	VOCs	1,2-Dichloropropane	1	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	VOCs	2-Butanone (MEK)	10	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	VOCs	4-Methyl-2-pentanone (MIBK)	10	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	VOCs	Acetone	25	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	VOCs	Benzene	1	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	VOCs	Bromodichloromethane	1	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	VOCs	Bromoform	1	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	VOCs	Bromomethane	1	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	VOCs	Carbon Disulfide	1	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	VOCs	Carbon Tetrachloride	1	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	VOCs	Chlorobenzene	1	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	VOCs	Chlorodibromomethane	1	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	VOCs	Chloroethane	1	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	VOCs	Chloroform	1	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	VOCs	Chloromethane	1	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	VOCs	cis-1,3-Dichloropropene	1	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	VOCs	Dichloromethane	5	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	VOCs	Ethylbenzene	1	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	VOCs	Methyl N-Butyl Ketone	10	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	VOCs	Styrene (Monomer)	1	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	VOCs	Tetrachloroethene	1	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	VOCs	Toluene	1	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	VOCs	trans-1,3-Dichloropropene	1	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	VOCs	Trichloroethene	1	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	VOCs	Vinyl chloride	1	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	VOCs	Xylenes, Total	2	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	1,2,4-Trichlorobenzene	9.4	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	1,2-Dichlorobenzene	9.4	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	1,3-Dichlorobenzene	9.4	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	1,4-Dichlorobenzene	9.4	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	9.4	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	2,4,5-Trichlorophenol	9.4	ug/L	U		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	2,4,6-Trichlorophenol	9.4	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	2,4-Dichlorophenol	9.4	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	2,4-Dimethylphenol	9.4	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	2,4-Dinitrophenol	47	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	2,4-Dinitrotoluene	9.4	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	2,6-Dinitrotoluene	9.4	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	2-Chloronaphthalene	9.4	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	2-Chlorophenol	9.4	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	2-Methylnaphthalene	9.4	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	2-Methylphenol (o-Cresol)	9.4	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	2-Nitroaniline	47	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	2-Nitrophenol	9.4	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	3 & 4 Methylphenol	9.4	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	3,3'-Dichlorobenzidine	19	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	3-Nitroaniline	47	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	4,6-Dinitro-2-methylphenol	47	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	4-Bromophenyl Phenyl Ether	9.4	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	4-Chloro-3-methylphenol	9.4	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	4-Chlorophenyl Phenyl Ether	9.4	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	4-Nitrophenol	47	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	Acenaphthene	9.4	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	Acenaphthylene	9.4	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	Anthracene	9.4	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	Benzo(a)anthracene	9.4	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	Benzo(a)pyrene	9.4	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	Benzo(b)fluoranthene	9.4	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	Benzo(g,h,i)perylene	9.4	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	Benzo(k)fluoranthene	9.4	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	Benzyl Butyl Phthalate	9.4	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	bis(2-Chloroethoxy)methane	9.4	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	bis(2-Chloroethyl)ether	9.4	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	bis(2-Ethylhexyl)phthalate	9.4	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	Carbazole	9.4	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	Chrysene	9.4	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	Dibenzo(a,h)anthracene	9.4	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	Dibenzofuran	9.4	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	Diethyl Phthalate	9.4	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	Dimethyl Phthalate	9.4	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	Di-n-butylphthalate	9.4	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	Di-n-octylphthalate	9.4	ug/L	U		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	Dinoseb	9.4	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	Fluoranthene	9.4	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	Fluorene	9.4	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	Hexachlorobenzene	9.4	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	Hexachlorobutadiene	9.4	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	Hexachlorocyclopentadiene	9.4	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	Hexachloroethane	9.4	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	Indeno(1,2,3-cd)pyrene	9.4	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	Isophorone	9.4	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	Naphthalene	9.4	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	Nitrobenzene	9.4	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	N-Nitroso-di-n-propylamine	9.4	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	N-Nitrosodiphenylamine	9.4	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	P-Chloroaniline	19	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	Phenanthrene	9.4	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	Phenol	9.4	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	P-Nitroaniline	47	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	SVOCs	Pyrene	9.4	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Pesticides	4,4'-DDD	0.094	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Pesticides	4,4'-DDE	0.094	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Pesticides	4,4'-DDT	0.094	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Pesticides	Aldrin	0.047	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Pesticides	alpha-BHC	0.047	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Pesticides	alpha-Chlordane	0.047	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Pesticides	beta-BHC	0.047	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Pesticides	delta-BHC	0.047	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Pesticides	Dieldrin	0.094	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Pesticides	Endosulfan I	0.047	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Pesticides	Endosulfan II	0.094	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Pesticides	Endosulfan Sulfate	0.094	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Pesticides	Endrin	0.094	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Pesticides	Endrin Aldehyde	0.094	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Pesticides	Endrin Ketone	0.094	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Pesticides	gamma-BHC (Lindane)	0.047	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Pesticides	gamma-Chlordane	0.047	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Pesticides	Heptachlor	0.047	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Pesticides	Heptachlor Epoxide	0.047	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Pesticides	Methoxychlor	0.47	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Pesticides	Toxaphene	4.7	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Herbicides	2,4,5-T	0.49	ug/L	U		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Herbicides	2,4,5-TP (Silvex)	0.49	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Herbicides	2,4-D	1	ug/L			
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Herbicides	2,4-DB	0.49	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Herbicides	Dalapon	9.7	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Herbicides	Dicamba	0.49	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Herbicides	Dichlorprop	0.49	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Herbicides	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Herbicides	MCPP	120	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Herbicides	Pentachlorophenol	0.24	ug/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Aluminum	0.86	mg/L			
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Aluminum (Dissolved)	0.2	mg/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Antimony	0.02	mg/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Antimony (Dissolved)	0.02	mg/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Arsenic	0.01	mg/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Arsenic (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Barium	0.082	mg/L			
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Barium (Dissolved)	0.067	mg/L			
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Beryllium	0.004	mg/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Beryllium (Dissolved)	0.004	mg/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Cadmium	0.005	mg/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Cadmium (Dissolved)	0.005	mg/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Calcium	44	mg/L			
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Calcium (Dissolved)	43	mg/L			
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Chromium	0.0019	mg/L	J		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Chromium (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Cobalt	0.00077	mg/L	J		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Cobalt (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Copper	0.0019	mg/L	J		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Copper (Dissolved)	0.02	mg/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Iron	0.98	mg/L			
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Iron (Dissolved)	0.05	mg/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Lead	0.0022	mg/L	J		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Lead (Dissolved)	0.005	mg/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Magnesium	22	mg/L			
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Magnesium (Dissolved)	21	mg/L			
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Manganese	0.15	mg/L			
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Manganese (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Mercury	0.0002	mg/L	U	UJ	H
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Mercury (Dissolved)	0.0002	mg/L	U	UJ	H

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
September 2005

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Nickel	0.0039	mg/L	J		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Nickel (Dissolved)	0.04	mg/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Potassium	4.5	mg/L			
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Potassium (Dissolved)	4.2	mg/L			
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Selenium	0.0087	mg/L	J B	U	P
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Selenium (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Silver	0.01	mg/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Silver (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Sodium	28	mg/L			
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Sodium (Dissolved)	27	mg/L			
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Thallium	0.025	mg/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Thallium (Dissolved)	0.025	mg/L	U		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Vanadium	0.0051	mg/L	J		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Vanadium (Dissolved)	0.0033	mg/L	J		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Zinc	0.0085	mg/L	J		
Surface Water	RIVER	R3CM	SW-SA2-GMCS-R3CM	9/21/05	Metals	Zinc (Dissolved)	0.0036	mg/L	J		

URS

Qualifier Definition Table

Sauget Area 2
Groundwater Migration Control System
STL Data Qualifier Definitions

Qualifier	Definition	Notes:
Organic Chemicals		
*	LCS, LCSD, MS, MSD, MD or Surrogate exceeds the control limits	
A	Tentatively identified compound (TIC) is a suspected aldol condensation product.	Only present in SA-O-1-SB-3 (SDG G5E070192) for 1,2,3,4,7,8-HxCDD.
B	Compound is found in the associated method blank.	
CON	Confirmation Analysis	
D	Concentrations identified from analysis of the sample at a secondary dilution.	
E	Compounds whose concentrations exceed the upper calibration range of the instrument for that analysis.	
J	Estimated value - result reported is less than the reporting limit but greater than the instrument detection limit.	
P	Greater than 25% (40% for CLP) difference for detected concentrations between the two GC columns.	
U	Compound analyzed for but not detected at a concentration above the reporting limit.	
Inorganic Chemicals		
B	Compound is found in the associated method blank.	
J	Estimated value - result reported is less than the reporting limit but greater than the instrument detection limit.	
S	Indicates that the Method of Standard Additions (MSA) determined the reported value.	
U	Compound analyzed for but not detected at a concentration above the reporting limit.	
JA	Compound tentatively identified, using theoretical ratios.	

Data Validation Report

Performance Verification Sampling Event

March 2006

Groundwater Migration Control System

Sauget Area 2

July 2006

DRAFT

DATA VALIDATION REPORT PERFORMANCE VERIFICATION SAMPLING EVENT MARCH 2006

Groundwater Migration Control System Sauget Area 2

Prepared for

Solutia Inc.
c/o Steve Smith
575 Maryville Centre Drive
St. Louis, MO 6314

July 2006

URS

URS Corporation
1001 Highland Plaza Drive West, Suite 300
St. Louis, MO 63110
(314) 429-0100
Project #21561510

URS

July 19, 2006

Mr. Steve Smith
Solutia Inc.
575 Maryville Centre Drive
St. Louis, Missouri 63141

Re: Data Validation Report
Groundwater Migration Control System
Surface Water and Sediment Sampling Event – March 2006
Sauget, Illinois
URS Project No. 21561391

Dear Steve:

URS is pleased to present this Data Validation Report for the surface water and sediment sampling that was conducted as part of the Groundwater Migration Control System Performance Verification Sampling Program. This report provides:

1. A brief summary of field activities,
2. A figure showing the sampling locations,
3. Detection Tables,
4. Sample summary lists,
5. Data validation checklists,
6. Data tables, and
7. Qualifier definition tables.

SCOPE OF WORK

The surface water and sediment sampling activities were conducted on March 13 and 14, 2006 in accordance with the Surface Water and Sediment Performance Verification Sampling Plan dated January 31, 2003. During this sampling event, surface water and sediment samples were collected from a total of five locations immediately adjacent to Site R, stations PDA-2,3,4,5, and 9 as defined in the Menzie Curra sampling effort in 2000.

1001 Highland Plaza Drive West, Suite 300
St. Louis, MO 63110
Phone: 314.429.0100
Fax: 314.429.0462

Surface Water Monitoring

Surface water samples were collected at the sediment-water interface (within one foot of the bottom) at all stations. Because of the volumes required and sampling limitations due to the fast currents, a peristaltic pump system was utilized. Decontaminated tubing was used at each location. All chemical analysis in surface water samples were conducted in unfiltered samples.

All surface water samples were analyzed for VOCs, SVOCs, pesticides, herbicides, and metals. In addition, field measurements of temperature, pH, dissolved oxygen, and conductivity were recorded. In addition to collecting an unfiltered water sample, an additional unpreserved water sample was collected for trace metals analysis and filtered in the laboratory. The VOC samples were collected by directly filling 40-mL VOC vials from the peristaltic pump tubing to minimize VOC loss and avoid preservative loss. One field duplicate, one field blank and one MS/MSD sample was collected for QC purposes.

All surface water samples were appropriately labeled with location, date, sampler's initials, test type and preservative and stored on ice, maintained at 4°C and delivered to the Severn Trent Laboratory (STL) in Savannah, Georgia. The chain-of-custody (COC) documentation accompanied all samples from the field to the laboratory.

Sediment Sampling

Sediment samples were collected using a Ponar Dredge sampler from the upper few inches (5 to 6 cm). This depth interval was selected as the zone most relevant to exposures of ecological receptors. Each sediment sample was analyzed for VOCs, SVOCs, pesticides, herbicides, and metals.

Samples for VOCs were obtained from the first grab. All other samples were drawn from a composite made up of the upper few inches of sediment from additional grab samples. The VOC sample was collected using a 5 mL modified syringe/plunger. The plunger tube was inserted into the sediment below the surface and removed with care taken to prevent loss. The plunger was then utilized to push the sample into the bottle. These samples will be released into 1) laboratory water preservative for low-level analysis, 2) methanol preservative for high-level analysis. For all other

parameters, the sediment (~5 to 6 cm) was removed from the sampler and homogenized in a stainless steel bowl using a stainless steel spoon or scoop. Each sample was taken using either a stainless steel spoon and placed in the appropriate container.

Field QC samples, included one field duplicate, one field rinsate blank and one trip blank, and matrix QC. Each sample container was labeled to identify sample location, analysis required and preservation, date, and the initials of the collector. All sediment samples were kept on ice within coolers maintained at 4°C and delivered to the STL lab in Savannah, Georgia. The COC documentation will accompany all samples from the field to the laboratory.

Prior to sampling at a location, all sampling devices were decontaminated.

Should you have any questions or comments regarding this Data Validation Report, please do not hesitate to contact me at 314.429.0100.

Very truly yours,

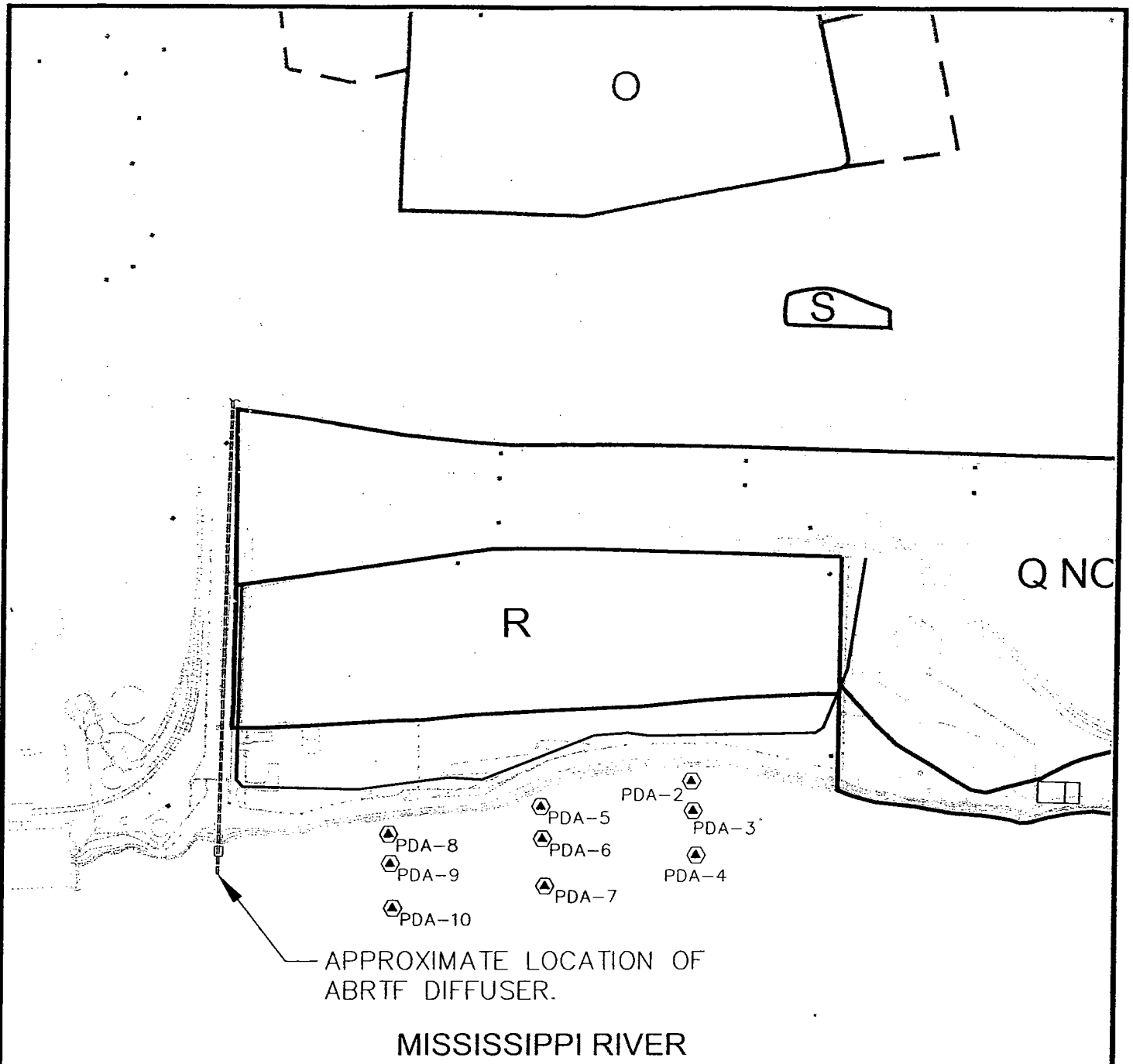
Robert Veenstra
Vice President

Enclosure

RBV/SJS:mlr

URS

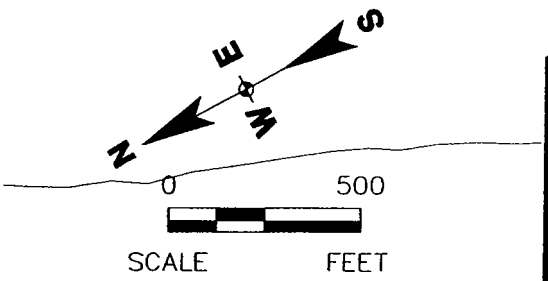
Figure



LEGEND

⊙ SURFACE WATER/SEDIMENT SAMPLE LOCATION (BARRIER WALL UAO)

⊛ SURFACE WATER/SEDIMENT SAMPLE LOCATION (2000 MENZIE CURRA)



SAUGET AREA 2 GROUNDWATER MIGRATION CONTROL SYSTEM SAUGET, ILLINOIS		PROJECT NO. 21561391
URS		
DRN. BY:djd 7/18/06 DSGN. BY:ss CHKD. BY:	Surface Water & Sediment Sampling Locations March 2006	FIG. NO. 1

File: P:\ENVIRONMENTAL\215815.10 (SA2)\SEDIMENT-SURFACE WATER\MARCH 2006\FIG 1 SURFACE WATER & SEDIMENT SAMPLING LOCATIONS (MARCH 06).DWG Last edited: 07/19/06 @ 3:36 p.m. WC-ST.LOUIS, MO

URS

Detection Tables

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Detections
March 2006

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Herbicides	2,4-D	0.47	ug/L	J		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Herbicides	Dichlorprop	0.14	ug/L	J	J	R
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Aluminum	1.5	mg/L			
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Barium	0.069	mg/L			
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Barium (Dissolved)	0.056	mg/L			
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Calcium	64	mg/L			
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Calcium (Dissolved)	64	mg/L			
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Chromium	0.0022	mg/L	J		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Copper	0.0024	mg/L	J		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Copper (Dissolved)	0.0019	mg/L	J		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Iron	1.7	mg/L			
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Lead	0.0035	mg/L	J		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Magnesium	27	mg/L			
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Magnesium (Dissolved)	27	mg/L			
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Manganese	0.13	mg/L			
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Nickel	0.0026	mg/L	J		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Potassium	4.1	mg/L			
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Potassium (Dissolved)	3.8	mg/L			
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Selenium (Dissolved)	0.0063	mg/L	J		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Sodium	37	mg/L			
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Sodium (Dissolved)	39	mg/L			
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Vanadium	0.0038	mg/L	J		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Zinc	0.018	mg/L	J	J	P
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Zinc (Dissolved)	0.0053	mg/L	J B		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Detections
March 2006

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Herbicides	2,4-D	0.48	ug/L	J		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Herbicides	Dichlorprop	0.13	ug/L	J	J	R
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Aluminum	1.3	mg/L			
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Barium	0.061	mg/L			
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Barium (Dissolved)	0.057	mg/L			
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Calcium	56	mg/L			
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Calcium (Dissolved)	65	mg/L			
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Chromium	0.0018	mg/L	J		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Cobalt	0.00089	mg/L	J		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Copper	0.0026	mg/L	J		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Copper (Dissolved)	0.002	mg/L	J		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Iron	1.5	mg/L			
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Lead	0.0025	mg/L	J		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Magnesium	23	mg/L			
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Magnesium (Dissolved)	28	mg/L			
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Manganese	0.11	mg/L			
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Potassium	3.6	mg/L			
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Potassium (Dissolved)	3.9	mg/L			
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Sodium	33	mg/L			
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Sodium (Dissolved)	40	mg/L			
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Vanadium	0.0037	mg/L	J		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Zinc	0.013	mg/L	J	J	P
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Zinc (Dissolved)	0.0082	mg/L	J B		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Detections
March 2006

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Aluminum	1.5	mg/L			
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Barium	0.069	mg/L			
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Barium (Dissolved)	0.058	mg/L			
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Calcium	62	mg/L			
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Calcium (Dissolved)	66	mg/L			
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Chromium	0.0022	mg/L	J		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Copper	0.0029	mg/L	J		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Copper (Dissolved)	0.0018	mg/L	J		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Iron	1.8	mg/L			
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Lead	0.0045	mg/L	J		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Magnesium	26	mg/L			
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Magnesium (Dissolved)	29	mg/L			
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Manganese	0.13	mg/L			
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Nickel (Dissolved)	0.0023	mg/L	J		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Potassium	4	mg/L			
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Potassium (Dissolved)	4.1	mg/L			
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Sodium	36	mg/L			
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Sodium (Dissolved)	40	mg/L			
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Vanadium	0.0042	mg/L	J		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Zinc	0.018	mg/L	J	J	P
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Zinc (Dissolved)	0.0049	mg/L	J B		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Detections
March 2006

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Herbicides	Dichlorprop	0.087	ug/L	J	J	R
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Aluminum	2.4	mg/L			
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Barium	0.078	mg/L			
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Barium (Dissolved)	0.056	mg/L			
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Calcium	62	mg/L			
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Calcium (Dissolved)	62	mg/L			
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Chromium	0.0034	mg/L	J		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Cobalt	0.001	mg/L	J		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Copper	0.0032	mg/L	J		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Copper (Dissolved)	0.0018	mg/L	J		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Iron	2.6	mg/L			
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Lead	0.0039	mg/L	J		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Magnesium	26	mg/L			
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Magnesium (Dissolved)	26	mg/L			
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Manganese	0.15	mg/L			
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Nickel	0.004	mg/L	J		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Potassium	4.2	mg/L			
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Potassium (Dissolved)	3.9	mg/L			
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Sodium	35	mg/L			
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Sodium (Dissolved)	37	mg/L			
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Vanadium	0.0056	mg/L	J		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Zinc	0.024	mg/L		J	P
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Zinc (Dissolved)	0.0046	mg/L	J B		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Aluminum	2.4	mg/L			
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Barium	0.079	mg/L			
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Barium (Dissolved)	0.058	mg/L			
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Calcium	61	mg/L			
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Calcium (Dissolved)	63	mg/L			
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Chromium	0.003	mg/L	J		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Cobalt	0.00071	mg/L	J		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Copper	0.0033	mg/L	J		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Copper (Dissolved)	0.002	mg/L	J		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Iron	2.7	mg/L			
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Lead	0.0055	mg/L			
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Magnesium	26	mg/L			
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Magnesium (Dissolved)	27	mg/L			
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Manganese	0.16	mg/L			
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Nickel	0.0031	mg/L	J		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Potassium	4.3	mg/L			
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Potassium (Dissolved)	3.9	mg/L			
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Sodium	35	mg/L			
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Sodium (Dissolved)	38	mg/L			
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Vanadium	0.0059	mg/L	J		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Zinc	0.019	mg/L	J	J	P
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Zinc (Dissolved)	0.0056	mg/L	J B		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Detections
March 2006

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Aluminum	1.5	mg/L			
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Barium	0.068	mg/L			
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Barium (Dissolved)	0.056	mg/L			
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Calcium	63	mg/L			
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Calcium (Dissolved)	65	mg/L			
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Chromium	0.0019	mg/L	J		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Copper	0.0025	mg/L	J		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Copper (Dissolved)	0.0024	mg/L	J		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Iron	1.7	mg/L			
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Lead	0.0039	mg/L	J		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Magnesium	26	mg/L			
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Magnesium (Dissolved)	28	mg/L			
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Manganese	0.13	mg/L			
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Nickel	0.0024	mg/L	J		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Nickel (Dissolved)	0.0019	mg/L	J		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Potassium	4	mg/L			
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Potassium (Dissolved)	3.8	mg/L			
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Sodium	37	mg/L			
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Sodium (Dissolved)	39	mg/L			
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Vanadium	0.004	mg/L	J		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Zinc	0.015	mg/L	J	J	P
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Zinc (Dissolved)	0.0045	mg/L	J B		

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Detections
March 2006

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	VOCs	2-Butanone (MEK)	62	ug/Kg	J		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	VOCs	Acetone	280	ug/Kg			
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	VOCs	Benzene	65	ug/Kg			
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	VOCs	Chlorobenzene	19000	ug/Kg	D		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	VOCs	Ethylbenzene	95	ug/Kg			
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	VOCs	Toluene	65	ug/Kg			
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	VOCs	Xylenes, Total	89	ug/Kg			
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	1,4-Dichlorobenzene	1200	ug/Kg	J		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	3 & 4 Methylphenol	480	ug/Kg	J		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	P-Chloroaniline	6100	ug/Kg	J		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Pesticides	4,4'-DDT	9.8	ug/Kg		J	C
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Metals	Aluminum	11000	mg/Kg			
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Metals	Arsenic	5.9	mg/Kg			
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Metals	Barium	190	mg/Kg			
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Metals	Beryllium	0.62	mg/Kg	J		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Metals	Cadmium	1.2	mg/Kg			
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Metals	Calcium	13000	mg/Kg			
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Metals	Chromium	17	mg/Kg			
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Metals	Cobalt	7.3	mg/Kg			
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Metals	Copper	20	mg/Kg			
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Metals	Iron	17000	mg/Kg			
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Metals	Lead	26	mg/Kg	B		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Metals	Magnesium	4200	mg/Kg			
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Metals	Manganese	550	mg/Kg			
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Metals	Mercury	0.047	mg/Kg			
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Metals	Nickel	18	mg/Kg			
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Metals	Potassium	1600	mg/Kg	B		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Metals	Vanadium	28	mg/Kg			
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Metals	Zinc	390	mg/Kg	B		

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Detections
March 2006

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	VOCs	2-Butanone (MEK)	58	ug/Kg	J		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	VOCs	Acetone	600	ug/Kg			
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	VOCs	Benzene	7.7	ug/Kg	J		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	VOCs	Chlorobenzene	410	ug/Kg			
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	VOCs	Ethylbenzene	6.5	ug/Kg	J		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	VOCs	Toluene	55	ug/Kg			
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	VOCs	Xylenes, Total	17	ug/Kg	J		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	1,2-Dichlorobenzene	310	ug/Kg	J		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	3 & 4 Methylphenol	430	ug/Kg	J		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	P-Chloroaniline	500	ug/Kg	J		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Herbicides	2,4-D	4.4	ug/Kg	JP		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Metals	Aluminum	7400	mg/Kg			
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Metals	Arsenic	3.9	mg/Kg			
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Metals	Barium	170	mg/Kg			
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Metals	Beryllium	0.4	mg/Kg	J		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Metals	Cadmium	1.7	mg/Kg			
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Metals	Calcium	12000	mg/Kg			
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Metals	Chromium	13	mg/Kg			
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Metals	Cobalt	5.3	mg/Kg			
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Metals	Copper	16	mg/Kg			
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Metals	Iron	13000	mg/Kg			
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Metals	Lead	26	mg/Kg	B		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Metals	Magnesium	3500	mg/Kg			
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Metals	Manganese	500	mg/Kg			
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Metals	Mercury	0.034	mg/Kg	J		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Metals	Nickel	13	mg/Kg			
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Metals	Potassium	1000	mg/Kg	B		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Metals	Vanadium	21	mg/Kg			
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Metals	Zinc	370	mg/Kg	B		

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Detections
March 2006

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	VOCs	2-Butanone (MEK)	15	ug/Kg	J		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	VOCs	Acetone	180	ug/Kg			
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	VOCs	Chlorobenzene	50	ug/Kg			
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Herbicides	2,4-D	4.2	ug/Kg	JP		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Metals	Aluminum	3900	mg/Kg			
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Metals	Arsenic	3.3	mg/Kg			
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Metals	Barium	98	mg/Kg			
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Metals	Beryllium	0.24	mg/Kg	J		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Metals	Cadmium	1.8	mg/Kg			
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Metals	Calcium	8500	mg/Kg			
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Metals	Chromium	7.6	mg/Kg			
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Metals	Cobalt	3.6	mg/Kg			
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Metals	Copper	10	mg/Kg			
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Metals	Iron	8000	mg/Kg			
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Metals	Lead	25	mg/Kg	B		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Metals	Magnesium	2200	mg/Kg			
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Metals	Manganese	280	mg/Kg			
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Metals	Mercury	0.034	mg/Kg			
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Metals	Nickel	8.5	mg/Kg			
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Metals	Potassium	630	mg/Kg	B		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Metals	Vanadium	12	mg/Kg			
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Metals	Zinc	480	mg/Kg	B		

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Detections
March 2006

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	VOCs	Acetone	33	ug/Kg	J		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	VOCs	Chlorobenzene	2.4	ug/Kg	J		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	1,4-Dichlorobenzene	64	ug/Kg	J		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	P-Chloroaniline	410	ug/Kg	J		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Pesticides	Endrin	0.99	ug/Kg	J P	J	C
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Metals	Aluminum	2600	mg/Kg			
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Metals	Antimony	0.62	mg/Kg	J		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Metals	Arsenic	3.4	mg/Kg			
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Metals	Barium	91	mg/Kg			
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Metals	Beryllium	0.17	mg/Kg	J		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Metals	Cadmium	4.8	mg/Kg			
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Metals	Calcium	5900	mg/Kg			
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Metals	Chromium	6.6	mg/Kg			
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Metals	Cobalt	3.9	mg/Kg			
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Metals	Copper	21	mg/Kg			
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Metals	Iron	7200	mg/Kg			
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Metals	Lead	53	mg/Kg	B		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Metals	Magnesium	2300	mg/Kg			
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Metals	Manganese	210	mg/Kg			
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Metals	Mercury	0.024	mg/Kg			
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Metals	Nickel	8.7	mg/Kg			
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Metals	Potassium	460	mg/Kg	B		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Metals	Silver	0.42	mg/Kg	J		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Metals	Vanadium	9.7	mg/Kg			
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Metals	Zinc	1000	mg/Kg	B		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	Acetone	25	ug/Kg	J		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	Chlorobenzene	1.2	ug/Kg	J		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	P-Chloroaniline	71	ug/Kg	J		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Aluminum	2400	mg/Kg		J	K
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Arsenic	4.1	mg/Kg			
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Barium	77	mg/Kg			
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Beryllium	0.18	mg/Kg	J		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Cadmium	3.8	mg/Kg		J	M
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Calcium	5300	mg/Kg		J	K
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Chromium	5.7	mg/Kg			
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Cobalt	3.7	mg/Kg			
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Copper	13	mg/Kg		J	M
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Iron	7200	mg/Kg			
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Lead	37	mg/Kg	B	J	M
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Magnesium	1600	mg/Kg		J	K
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Manganese	190	mg/Kg		J	K
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Mercury	0.008	mg/Kg	J		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Nickel	8.3	mg/Kg			

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Detections
March 2006

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Potassium	410	mg/Kg	B	J	S
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Silver	0.33	mg/Kg	J		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Vanadium	9.3	mg/Kg			
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Zinc	570	mg/Kg	B	J	K

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Detections
March 2006

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	VOCs	Acetone	42	ug/Kg	J		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	VOCs	Chlorobenzene	13	ug/Kg			
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	SVOCs	bis(2-Ethylhexyl)phthalate	160	ug/Kg	J		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Metals	Aluminum	950	mg/Kg			
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Metals	Arsenic	1.6	mg/Kg			
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Metals	Barium	30	mg/Kg			
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Metals	Beryllium	0.067	mg/Kg	J		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Metals	Calcium	1500	mg/Kg			
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Metals	Chromium	2.4	mg/Kg			
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Metals	Cobalt	2.1	mg/Kg			
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Metals	Copper	1.5	mg/Kg	J		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Metals	Iron	3400	mg/Kg			
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Metals	Lead	5.1	mg/Kg	B		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Metals	Magnesium	650	mg/Kg			
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Metals	Manganese	140	mg/Kg			
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Metals	Nickel	4.7	mg/Kg			
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Metals	Potassium	160	mg/Kg	B		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Metals	Vanadium	3.6	mg/Kg			
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Metals	Zinc	58	mg/Kg	B		

URS

Sample Summary List

Sauget Area 2
Groundwater Migration Control System
SAS042A Sample Summary List
March 2006

SDG	Sample ID	Sample Date	VOCs	SVOCs	PCBs	Pesticides	Herbicides	Dioxins	Metals	Other
SAS042A	SW-SA2-GMCS-STATION2	3/14/06	X	X		X	X		X	
SAS042A	SW-SA2-GMCS-STATION3	3/14/06	X	X		X	X		X	
SAS042A	SW-SA2-GMCS-STATION4	3/14/06	X	X		X	X		X	
SAS042A	SW-SA2-GMCS-STATION5	3/13/06	X	X		X	X		X	
SAS042A	SW-SA2-GMCS-STATION 5 DUP	3/13/06	X	X		X	X		X	
SAS042A	SW-SA2-GMCS-STATION9	3/14/06	X	X		X	X		X	

Sauget Area 2
Groundwater Migration Control System
SAS043 Sample Summary List
March 2006

SDG	Sample ID	Sample Date	VOCs	SVOCs	PCBs	Pesticides	Herbicides	Dioxins	Metals
SAS043	SED-SA2-GMCS-STATION2	3/14/06	X	X		X	X		X
SAS043	SED-SA2-GMCS-STATION3	3/14/06	X	X		X	X		X
SAS043	SED-SA2-GMCS-STATION4	3/14/06	X	X		X	X		X
SAS043	SED-SA2-GMCS-STATION5	3/13/06	X	X		X	X		X
SAS043	SED-SA2-GMCS-STATION 5 DUP	3/13/06	X	X		X	X		X
SAS043	SED-SA2-GMCS-STATION9	3/14/06	X	X		X	X		X

URS

Checklists

DATA VALIDATION WORKSHEET
VOLATILE ORGANIC ANALYSIS

Reviewer: Tony Sedlacek
Date: 6/1/2006
Laboratory Severn Trent Laboratory - Savannah

Project Name: GW/SW Miss.River SA2 Sup. Inves.
Project Number: 21561391.00001
SDG No.: SAS042A
Review Level: Level III

Major Anomolies:

No samples were rejected

Minor Anomolies:

No analytes required qualificaiton, based on this data review.

Field IDs:

SW-SA2-GMCS-STATION 2
SW-SA2-GMCS-STATION 3
SW-SA2-GMCS-STATION 4
SW-SA2-GMCS-STATION 5
SW-SA2-GMCS-STATION 5 DUP
SW-SA2-GMCS-STATION 9
TRIP BLANK 03/14/06

1.0 Chain of Custody/Sample Condition

		Yes	No	NA
1.1	Do Chain-of-Custody forms list all samples analyzed?	X		
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was maintained?	X		
1.3	Do the Traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data?		X	

Note: No anomalies were noted in the case narrative or cooler receipt forms. Although it was not indicated on the case narrative analytes Bromomethane, and 2,2-Dichloropropane had %D values higher than 20% between ICAL and CCAL RRF values.

2.0 Holding Time/ Preservation (Code H)

		Yes	No	NA
2.1	Do sample preservation, collection and storage condition meet method requirement?	X		
	If sample preservation and/or temperature was inappropriate (i.e., <2° >6°C, etc.), comment in report. If unpreserved or temperature is ouside the range 0° (but not frozen) to 10° flag all positive results with a "J" and all non-detects "UJ". If temperature exceeds 10°, flag positive detections "J" and non-detects "R".			
2.2	Have any technical holding times, determined from sampling to date of analysis, been exceeded? If yes, J(+)/UJ(-).		X	

Matrix	Preserved	Aromatic	All others
Aqueous	No	7 days	14 days
	Yes	14 days	14 days
Soil/Sediment	4 °C ± 2 °C	14 days	14 days

2.3	Have any technical holding times been grossly (twice the holding time) exceeded? If yes, J(+)/R(-).		X	

Note:

3.0 GC/MS Instrument Performance Check (Code T)

		Yes	No	NA
3.1	Are GC/MS Tuning and Mass Calibration forms present for bromofluorobenzene (BFB)?			
3.2	Have all samples been analyzed within twelve hours of the BFB tune? If no, flag R.			
3.3	Have ion abundance criteria for BFB been met for each instrument used? If no, flag R.			

Note:

4.0 Blanks (Method Blanks, Field Blanks and Trip Blanks)

(Code X - Field Blank Contamination, Code Y - Trip blank contamination, Code Z - Method blank contamination)

		Yes	No	NA
4.1	Is a Method Blank Summary form present for each batch?			
4.2	Do any method blanks have positive VOA results (TCL and/or TIC)?			
4.3	Do any field/trip rinse/equipment blanks have positive VOA results (TCL and/or TIC)?	x		
	Action: Positive sample results <5X (or 10X for common volatile lab contaminants- methylene chloride, acetone, and 2-butanone) the blank concentration should be qualified "U". The result should be elevated to the RL for estimate (laboratory "J" flagged) concentrations.			
4.4	If Level IV, review raw data and verify all detections for blanks were reported.			x

Note: The trip blank had methylene chloride contamination, the associated samples in the batch were all non-detect therefore, no qualifications of data was required.

5.0 GC/MS Initial Calibration (Code C)

		Yes	No	NA
5.1	Are Initial Calibration summary forms present and complete for each instrument used?			
5.2	Are CCCs linear applying either %RSD < 30% and all other compounds <15% or >0.990?			
	If not, J(+)/ UJ(-). In extreme cases, the reviewer may flag non-detects "R".			
5.3	Do any SPCC compounds have an RRF less than specification or any other compounds < 0.05 (use 0.01 for poor responders like ketones or alcohols)? If yes, J(+)/R(-).			
5.4	Is the lowest standard at the same concentration, or lower, as the RL reported? If not, elevate RL.			
5.5	If Level IV, recalculate a sample of RRFs and %RSDs to verify correct calculations are being made.			x

Note:

6.0 Continuing Calibration (Code C)

		Yes	No	NA
6.1	Are Continuing Calibration Summary forms present and complete?			
6.2	Has a continuing calibration standard been analyzed every 12 hours?			
6.3	Have all SPCCs and CCCs met method specifications? If not, comment in report, proceed to 6.4.			
6.4	Do any compounds have a % difference (or % drift for quantitation from a curve) (%D) between initial and continuing calibration RRF outside QC limits (%D < 20%)?	x		
	If yes, a marginal increase in response >20% then J(+) only; a decrease in response then J(+)/ UJ(-). For %D > 50%, flag R.			
6.5	Do any compounds have an RRF < 0.05 (use 0.01 for poor responders)? If yes, J(+)/R(-).			
6.6	If Level IV, calculate a sample of RFs and %Ds from ave RF to verify correct calculations.			x

Note: Bromomethane (35%), and 2,2-Dichloropropane (27.4%) had %D values higher than 20%. All analytes in the associated samples were non-detect therefore, no qualifications of data was required.

7.0 Surrogate Recovery (Code S)

		Yes	No	NA
7.1	Are all samples listed on the appropriate Surrogate Recovery Summary Form ?			
7.2	Are surrogate recoveries within acceptance criteria specified in the QAPP for all samples?			
7.3	If No in Section 7.2, were these sample(s) or method blank(s) reanalyzed?			x
7.4	If No in Section 7.3, is any sample dilution factor greater than 10? (Surrogate recoveries may be diluted out.)			x
	Note: If SMC recoveries do not meet acceptance criteria in samples chosen for the MS/MSD or diluted			

	> UCL	10% to LCL	< 10%
Positive	J	J	J
Non-detect	None	UJ	R

Note: All surrogate recoveries within evaluation criteria.

8.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD) or one MS with a Sample Duplicate (Recovery - Code M, RPD - Code D)

		Yes	No	NA
8.1	Is a Matrix Spike/Matrix Spike Duplicate recovery form present?		x	
8.2	Are MS/MSDs analyzed at the required frequency of one matrix spike per ten samples and a duplicate per twenty for each matrix?			x
8.3	Are all MS/MSD %Rs and RPDs within acceptance criteria Specified in the QAPP?			x
	Using informed professional judgment, the data reviewer should use the MS and MSD results in conjunction with other QC criteria and determine the need for qualification of the data for samples *from the same site/matrix*. Recoveries <10% may require rejection. RPD failures may be flagged "J" (+ only)			

Note: MS/MSD were not requested as part of this SDG.

9.0 Laboratory Control Sample (LCS/LCSD) (Recovery - Code L, RPD - Code E)

		Yes	No	NA
9.1	Is an LCS recovery form present?			
9.2	Is an LCS analyzed at the required frequency of one per twenty field samples for each matrix?			
9.3	Are all LCS %Rs and RPDs within acceptance criteria specified in the QAPP?			
9.4	If Level IV, verify the % recoveries are calculated correctly.			x
	Action for specific compound outside the acceptance criteria: %R>UCL, J(+) only; <LCL, J(+)/UJ(-); <30% J(+)/R(-). RPD failures should be flagged "J" (+ only)			

Note: All LCS recoveries within evaluation criteria.

10.0 Internal Standards (Code I)

		Yes	No	NA
10.1	Are internal standard areas for every sample and blank within upper and lower QC limits?			
	Area > +100% / Area < -50% / Area < -10%			
	Positive: J / J / J			
	Non-detect: None / UJ / R			
Note:	The method specification is for the continuing calibration to be compared to the mid-point initial calibration, not sample to continuing calibration. Thus, if all other QC specifications are met for a given sample, using informed professional judgement, the reviewer may choose not to flag individual samples			
10.2	Are retention times of internal standards within 30 seconds of the associated calibration standard?			
	Action: The chromatogram must be examined to determine if any false positives or negatives exist. For shift of a large magnitude, the reviewer may consider partial or total rejection of the data for non-detects in that sample/fraction.			

Note: All internal standard area counts and retention times within evaluation criteria.

11.0 TCL Identification (Code W)

		Yes	No	NA
11.1	Is the relative retention time (RRT) of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration?			
11.2	Are the three ions of greatest intensity present in the standard mass spectrum also present in the sample mass spectrum; and do sample and standard relative ion intensities agree within 30%?			

Note:

12.0 TCL/TIC Quantitation and Reported Detection limits (Code K)

		Yes	No	NA
12.1	Are RLs used consistent with those specified in the QAPP?			
12.2	Are these limits adjusted to reflect dilutions and/ or percent solids as required?			
12.3	Are TIC ions greater than ten percent in the reference spectrum also present in the sample spectrum?			x
12.4	Are any positives reported that exceed the linear range of the instrument?. If yes, than flag "J".			
12.5	If Level IV, calculate a sample of positive results to verify correct calculations			x

Note: No dilutions were required.

13.0 Field Duplicate Samples (Code F)

		Yes	No	NA
13.1	Were any field duplicates submitted for VOC analysis?			
13.2	Were all RPD or absolute difference values within the control limits outlined in the QAPP?			
	Action: No qualifying action is taken based on field duplicate results, however the data validator should provide a qualitative assessment in the data validation report.			

Note: Sample SW-SA2-GMCS-STATION 5 DUP was the field duplicate for sample SW-SA2-GMCS-STATION 5.

14.0 Data Completeness

			Yes	No	NA
14.1	Is % completeness within the control limits? (Control limit: Check QAPP or use 95% for aqueous				
14.2	Number of samples:	7			
14.3	Number of target compounds in each analysis:	33			
14.4	Number of results rejected and not reported:	0			
	% Completeness = 100 x ((14.1 * 14.2) - 14.3) / (14.1 * 14.2)				
	% Completeness	**100**			

Note:

DATA VALIDATION WORKSHEET
SEMIVOLATILE ORGANIC ANALYSIS

Reviewer: Tony Sedlacek
Date: 6/1/2006
Laboratory Severn Trent Laboratory - Savannah

Project Name: GW/SW Miss River SA2 Sup. Inves
Project Number: 21561391.00001
SDG No.: SAS042A
Review Level: Level III

Major Anomolies:

No samples were rejected

Minor Anomolies:

Compounds 2,4-Dinitrophenol (-20.3) , and 2-Nitroaniline (22.1) had a %D between the the ICAL and CCAL RRF greater than 20%.
Samples were qualified by CCC in the ICAL R ^ 2 < 0.990, and %D between ICAL and CCV is greater than 20%.

Field IDs:

SW-SA2-GMCS-STATION 2
SW-SA2-GMCS-STATION 3
SW-SA2-GMCS-STATION 4
SW-SA2-GMCS-STATION 5
SW-SA2-GMCS-STATION 5 DUP
SW-SA2-GMCS-STATION 9

1.0 Chain of Custody/Sample Condition

		Yes	No	NA
1.1	Do Chain-of-Custody forms list all samples analyzed?	X		
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was maintained?	X		
1.3	Do the Traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data?		X	

Note: The laboratory case narrative or sample receipt did not indicate any problems. Although not indicated in the case narrative, Di-n-octylphthalate a CCC in the ICAL had a R ^ 2 value less than the lower control limit. Also, 2,4-Dinitrophenol and 2-Nitroaniline had %D values between the ICAL and CCAL RRFs greater than 20%.

2.0 Holding Time/ Preservation (Code H)

		Yes	No	NA
2.1	Do sample preservation, collection and storage condition meet method requirement?	X		
	If samples were not on ice or the ice was melted upon arrival at the laboratory and the temperature of the cooler was elevated (> 10 °C), then flag all positive results with a "J" and all non-detects "UJ".			
2.2	Have any technical holding times, determined from sampling to date of analysis, been exceeded? (See attached		X	
	Extraction: Soil/Sediment 14 days - aqueous 7 days Analysis: 40 days			
2.3	Have any technical holding times grossly (twice the holding time) been exceeded? If yes, J(+)/R(-).		X	

Note:

3.0 GC/MS Instrument Performance Check (Code T)

		Yes	No	NA
3.1	Are GC/MS Tuning and Mass Calibration forms present for DFTPP?	X		
3.2	Have all samples been analyzed within twelve hours of the tune?	X		
	If no, the data for the affected standards, blanks, field samples or QC samples are rejected "R".			
3.3	Have ion abundance criteria for DFTPP been met for each instrument used?	X		
	If no, all standards, blanks, field samples and QC samples are rejected "R".			

Note:

4.0 Blanks (Method Blanks and Field Blanks)

(Code X - Field Blank Contamination, Code Z - Method blank contamination)

		Yes	No	NA
4.1	Is a Method Blank Summary form present for each batch?			
4.2	Do any method/instrument/reagent blanks have positive results (TCL, and/or TIC)?			
4.3	Do any field equipment blanks have positive results (TCL, and/or TIC)?			x
	Action: Positive sample results <5X (or 10X for phthalate contaminants) the blank concentration should be qualified "U" and the detection limit elevated to the RL for estimate concentrations.			
4.4	If Level IV, review raw data and verify all detections for blanks were reported.			x

Note:

5.0 GC/MS Initial Calibration (Code C)

		Yes	No	NA
5.1	Are Initial Calibration summary forms present and complete for each instrument used?			
5.2	Are CCCs linear applying either %RSD < 30% and all other compounds <15% or >0.990?	x		
	If not, J(+)/ UJ(-). In extreme cases, the reviewer may flag non-detects "R".			
5.3	Do any SPCC compounds have an RRF less than specification or any other compounds < 0.05 (use 0.01 for poor responders like amines and phenols)? If yes, J(+)/R(-).			
5.4	Is the lowest standard at the same concentration, or lower, as the RL reported? If not, elevate RL.			
5.5	If Level IV, recalculate a sample of RRFs and %RSDs to verify correct calculations are being made.			x

Note: In the ICAL the CCCs Di-n-octylphthalate (.988) R^2 value was <0.990. All associated samples were nondetect and qualified estimated nondetect "UJ".

Field ID	Analyte(s)	Qualification	Run #	Justification
SW-SA2-GMCS-STATION2	Di-n-octylphthalate	UJ	680-39800	R^2 <0.990
SW-SA2-GMCS-STATION3	Di-n-octylphthalate	UJ	680-39795	R^2 <0.990
SW-SA2-GMCS-STATION4	Di-n-octylphthalate	UJ	680-39795	R^2 <0.990
SW-SA2-GMCS-STATION5	Di-n-octylphthalate	UJ	680-39800	R^2 <0.990
SW-SA2-GMCS-STATION5 DUP	Di-n-octylphthalate	UJ	680-39795	R^2 <0.990
SW-SA2-GMCS-STATION9	Di-n-octylphthalate	UJ	680-39795	R^2 <0.990

6.0 Continuing Calibration (Code C)

		Yes	No	NA
6.1	Are Continuing Calibration Summary forms present and complete?			
6.2	Has a continuing calibration standard been analyzed every 12 hours?			
6.3	Have all SPCCs and CCCs met method specifications? If not, comment in report, proceed to 6.4.			
6.4	Do any compounds have a % difference (or % drift for quantitation from a curve) (%D) between initial and continuing calibration RRF outside QC limits (%D < 20%)?			
	If yes, a marginal increase in response >20% then J(+) only; a decrease in response then J(+)/ UJ(-). For %D > 50%, flag R.			
6.5	Do any compounds have an RRF < 0.05 (use 0.01 for poor responders)? If yes, J(+)/R(-).			
6.6	If Level IV, calculate a sample of RFs and %Ds from ave RF to verify correct calculations.			x

Note: Data package only contained one continuing calibration check, was analyzed approximately 2 hours before samples were analyzed.
Compounds 2,4-Dinitrophenol (-20.3), and 2-Nitroaniline (22.1) had a %D between the the ICAL and CCAL RRF.
Compound 2,4-Dinitrophenol was qualified estimated non-detect "UJ" in all associated samples. 2-Nitroaniline was non-detected in all samples, therefore no qualifications were required.

Field ID	Analyte(s)	Qualification	Run #	Justification
SW-SA2-GMCS-STATION2	2,4-Dinitrophenol	UJ	680-39800	%D between ICAL and CCV is greater than 20%
SW-SA2-GMCS-STATION3	2,4-Dinitrophenol	UJ	680-39795	%D between ICAL and CCV is greater than 20%
SW-SA2-GMCS-STATION4	2,4-Dinitrophenol	UJ	680-39795	%D between ICAL and CCV is greater than 20%
SW-SA2-GMCS-STATION5	2,4-Dinitrophenol	UJ	680-39800	%D between ICAL and CCV is greater than 20%
SW-SA2-GMCS-STATION5 DUP	2,4-Dinitrophenol	UJ	680-39795	%D between ICAL and CCV is greater than 20%

	SW-SA2-GMCS-STATION9	2,4-Dinitrophenol	UJ	680-39795	%D between ICAL and CCV is greater than 20%

7.0 Surrogate Recovery (Code S)

		Yes	No	NA
7.1	Are all samples listed on the appropriate Surrogate Recovery Summary Form ?			
7.2	Are surrogate recoveries within acceptance criteria specified in the QAPP for all samples and method blanks?			
7.3	Are more than one of either fraction outside the acceptance criteria?			
7.4	If Yes in Section 7.3, are these sample(s) or method blank(s) reanalyzed?			x
7.5	If Yes in Section 7.3, is any sample dilution factor greater than 10?			x
	Note: If SMC recoveries display unacceptable recoveries in the MS and/ or diluted samples, then no reanalysis is required and acids and base/ neutrals are assessed separately.			

	> UCL	10% to LCL	< 10%
Positive	J	J	J
Non-detect	None	UJ	R

Note:

8.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD) or one MS with a Sample Duplicate (Recovery - Code M, RPD - Code D)

		Yes	No	NA
8.1	Is a Matrix Spike/Matrix Spike Duplicate recovery form present?			x
8.2	Are MS/MSDs analyzed at the required frequency not to exceed twenty field samples for each matrix?			x
8.3	Are all MS/MSD %Rs and RPDs within acceptance criteria provided by the laboratory?			x
	Using informed professional judgment, the data reviewer should use the MS and MSD results in conjunction with other QC criteria and determine the need for qualification of the data for samples *from the same site/matrix*. Recoveries <10% may require rejection. RPD failures may be flagged "J" (+ only)			

Note: No MS/MSDs were requested for this SDG.

9.0 Laboratory Control Sample (LCS/LCSD) (Recovery - Code L, RPD - Code E)

		Yes	No	NA
9.1	Is an LCS recovery form present?			
9.2	Is LCS analyzed at the required frequency for each matrix?			
9.3	Are all LCS %Rs (and RPDs) within acceptance criteria?			
	Action for specific compound outside the acceptance criteria: %R>UCL, J(+) only; <LCL, J(+)/UJ(-); <30% J(+)/R(-). RPD failures should be flagged "J" (+ only)			
9.4	If Level IV, verify the % recoveries are calculated correctly.			x

Note:

10.0 Internal Standards (Code I)

		Yes	No	NA
10.1	Are internal standard area of every sample and blank within upper and lower QC limits for each continuing			

	Area > +100%	Area < -50%	Area < -10%
Positive	J	J	J
Non-detect	None	UJ	R

Note:

The method specification is for the continuing calibration to be compared to the mid-point initial calibration, not sample to continuing calibration. Thus, if all other QC specifications are met for a given sample, using informed professional judgment, the reviewer may choose not to flag individual samples in this case.

10.2	Are retention times of internal standards within 30 seconds of the associated calibration standard?			
	Action: The chromatogram must be examined to determine if any false positives or negatives exist. For shift of a large magnitude, the reviewer may consider partial or total rejection of the data for non-detects in that sample/fraction.			

Note:

11.0 TCL Identification (Code W)

		Yes	No	NA
11.1	Is the relative retention time (RRT) of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration?			
11.2	Are the three ions of greatest intensity present in the standard mass spectrum also present in the sample mass spectrum; and do sample and standard relative ion intensities agree within 30%?			

Note:

12.0 TCL/TIC Quantitation and Reported Detection limits (Code K)

		Yes	No	NA
12.1	Are RLs used consistent with those specified in the QAPP?			
12.2	Are these limits adjusted to reflect dilutions and/ or percent solids as required?		x	
12.3	Are TIC ions greater than ten percent in the reference spectrum also present in the sample spectrum?			x
12.4	Are any positives reported that exceed the linear range of the instrument? If yes, than flag "J".			
12.5	If Level IV, calculate a sample of positive results to verify correct calculations			x

Note: No dilutions were required.

13.0 Field Duplicate Samples (Code F)

		Yes	No	NA
13.1	Were any field duplicates submitted for SVOC analysis?		x	
13.2	Were all RPD or absolute difference values within the control limits?			x
	No action is taken based on field duplicate results, however the data validator should provide a qualitative assessment in the data validation report.			

Note: Sample SW-SA2-GMCS-STATION 5 DUP is the field duplicate sample for SW-SA2-GMCS-STATION 5.

14.0 Data Completeness

			Yes	No	NA
14.1	Is % completeness within the control limits? (Control limit: Check QAPP or use 95% for aqueous sample,				
14.2	Number of samples:	6			
14.3	Number of target compounds in each analysis:	65			
14.4	Number of results rejected and not reported:	0			
	% Completeness = 100 x ((14.1 x 14.2) - 14.3) / (14.1 x 14.2)				
	% Completeness	**100**			

Note:

DATA VALIDATION WORKSHEET
PESTICIDES/PCBs ANALYSIS

Reviewer:	Tony Sedlacek	Project Name:	Sauget - Area 2 Sup. RFI
Date:	6/1/2006	Project Number:	21561391.00001
Laboratory	Severn Trent Laboratory - Savannah	SDG No.:	SAS042A
		Review Level:	Level III

Major Anomolies:

No samples were rejected.

Minor Anomolies:

Qualifications were made on the all field IDs listed below with the exception of SW-SA2-GMCS-STATION 9, due to low surrogate recoveries.

Field IDs:

SW-SA2-GMCS-STATION 2	SW-SA2-GMCS-STATION 5
SW-SA2-GMCS-STATION 3	SW-SA2-GMCS-STATION 5 DUP
SW-SA2-GMCS-STATION 4	SW-SA2-GMCS-STATION 9

1.0 Chain of Custody/Sample Condition

		Yes	No	NA
1.1	Do Chain-of-Custody forms list all samples analyzed?			
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was maintained?			
1.3	Do the Traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data?	x		

Note: The laboratory case narrative indicated that the surrogate recovery for Decachlorobiphenyl was outside QC limits for all but one sample. The laboratory case narrative indicated that the grand mean exception rule was applied to the CCV standards. Also, the wrong COC was sent with this fraction of the SDG. The COC was used from the VOC fraction of the SDG. All fractions from this SDG are are on the same COC.

2.0 Holding Time/ Preservation (Code h)

		Yes	No	NA
2.1	Do sample preservation, collection and storage condition meet method requirement?			
	If samples were not on ice or the ice was melted upon arrival at the laboratory and the temperature of the cooler was elevated (> 10 °C), then flag all positive results with a "J" and all non-detects "UJ".			
2.2	Have any technical holding times, determined from sampling to date of analysis, been exceeded? (See attached Holding Time Table for sample holding time) If yes, J(+)/UJ(-).			
	Extraction: Soil/Sediment 14 days - aqueous 7 days Analysis: 40 days			
2.3	Have any technical holding times grossly (twice the holding time) been exceeded? If yes, J(+)/R(-).			

Note:

3.0 Blanks (Method Blanks and Field Blanks)

(Code x - Field Blank Contamination, Code z - Method blank contamination)

		Yes	No	NA
3.1	Is a Method Blank Summary form present for each batch?			
3.2	Do any method blanks have positive results (TCL)?			
3.3	Do any field/rinse/equipment blanks have positive results (TCL)?			x
	Action: Positive sample results <5X the blank concentration should be qualified "U". The result should be elevated to the RL for estimate (laboratory "J" flagged) concentrations.			
3.4	If Level IV, review raw data and verify all detections for blanks were reported.			x

Note:

4.0 GC/ECD Instrument Performance Check (Code b)

4.1	Are Endrin and 4,4'-DDT breakdown forms present?			
4.2	Have all samples been analyzed within twelve hours of the performance check sample?			
	If no, the data for the affected standards, blanks, field samples or QC samples are rejected "R".			
4.3	Have percent breakdown criteria < (15%) for endrin and 4,4'-DDT been met?			
	If no, all standards, blanks, field samples and QC samples are rejected "R".			

Note:

5.0 Initial Calibration (Code r)

		Yes	No	NA
5.1	Are Initial Calibration summary forms present and complete for each instrument used?			
5.2	Are response factors stable (%RSD values < 20% or >0.995) over the concentration range of the instrument			
	If not, J(+)/ UJ(-). In extreme cases, the reviewer may flag non-detects "R".			
5.3	If Level IV, recalculate a sample of RRFs and %RSDs to verify correct calculations are being made.			x

Note:

6.0 Continuing Calibration (Code c)

		Yes	No	NA
6.1	Are Continuing Calibration Summary forms present and complete?			
6.2	Has a continuing calibration standard been analyzed every 12 hours?			
6.3	Do any compounds have a % difference (or % drift for quantitation from a curve) (%D) between initial and continuing calibration CF outside QC limits (%D < 15%)?	x		
	If yes, a marginal increase in response >20% then J(+) only; a decrease in response then J(+)/ UJ(-). For %D > 50%, flag R.			
6.4	If Level IV, calculate a sample of CFs and %Ds to verify correct calculations.			x

Note: The grand mean exception was applied to continuing calibration verification standards in this package. The rule is described in Method SW-846 and states that when on or more compounds fails to meet acceptance criteria, the initial calibraiton (ICAL) may be used for quantitation if the average percent difference (%D) of all the compounds in the CCV is less than or equal to 15%. A calculation of the %D for each target compound and a calculation of the grand mean for specific CCVs. All grand mean calculations were less than 15% therefore, no qualification of data was required.

7.0 Surrogate Recovery (Code s)

		Yes	No	NA
7.1	Are all samples listed on the appropriate Surrogate Recovery Summary Form ?			
7.2	Are surrogate recoveries within acceptance criteria specified in the QAPP for all samples?		x	
7.3	If No in Section 7.2, were these sample(s) or method blank(s) reanalyzed?		x	
7.4	If No in Section 7.3, is any sample dilution factor greater than 10? (Surrogate recoveries may be diluted out.)			x

	> UCL	10% to LCL	< 10%
Positive	J	J	J
Non-detect	None	UJ	R

Note: The surrogate DCB Decachlorobiphenyl was outside QC limits in all samples with the exception of SW-SA2-GMCS-STATION 9. All analytes in associated samples were non-detect and did not require dilutions. All non-detect in samples were qualified estimated non-detect "UJ".

Field ID	Analyte(s)	Qualification	Run #	Justification
SW-SA2-GMCS-STATION 2	All Pesticides	UJ	680-39826	Low surrogate recovery
SW-SA2-GMCS-STATION3	All Pesticides	UJ	680-39826	Low surrogate recovery
SW-SA2-GMCS-STATION4	All Pesticides	UJ	680-39826	Low surrogate recovery
SW-SA2-GMCS-STATION5	All Pesticides	UJ	680-39826	Low surrogate recovery
SW-SA2-GMCS-STATION5 DUP	All Pesticides	UJ	680-39826	Low surrogate recovery

8.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD) or one MS with a Sample Duplicate (Code m - recovery, Code d - RPD)

		Yes	No	NA
8.1	Is a Matrix Spike/Matrix Spike Duplicate recovery form present?			x
8.2	Are MS/MSDs analyzed at the required frequency of one matrix spike per ten samples and a duplicate per twenty for each matrix?			x
8.3	Are all MS/MSD %Rs and RPDs within acceptance criteria Specified in the QAPP?			x
	Using informed professional judgment, the data reviewer should use the MS and MSD results in conjunction with other QC criteria and determine the need for qualification of the data for samples *from the same site/matrix.* Recoveries <10% may require rejection. RPD failures may be flagged "J" (+ only)			

Note: No MS/MSDs were requested for this data package.

9.0 Laboratory Control Sample (LCS/LCSD) (Code l - LCS recovery Code e - RPD)

		Yes	No	NA
9.1	Is an LCS recovery form present?			
9.2	Is an LCS analyzed at the required frequency of one per twenty field samples for each matrix?			
9.3	Are all LCS %Rs and RPDs within acceptance criteria specified in the QAPP?			
9.4	If Level IV, verify the % recoveries are calculated correctly.			x
	Action for specific compound outside the acceptance criteria: %R>UCL, J(+) only; <LCL, J(+)/UJ(-); <30% J(+)/R(-). RPD failures should be flagged "J" (+ only)			

Note:

10.0 TCL Identification (Code w)

		Yes	No	NA
10.1	Is the relative retention time (RRT) of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration?			

Note:

11.0 TCL Quantitation and Reported Detection limits (Code p)

		Yes	No	NA
11.1	Are RLs used consistent with those specified in the QAPP?			
11.2	Are these limits adjusted to reflect dilutions and/ or percent solids as required?			x
11.3	Are any positives reported that exceed the linear range of the instrument? If yes, than flag "J".			
11.4	If Level IV, calculate a sample of positive results to verify correct calculations			x

Note: No dilutions were required, all analytes were non-detected.

12.0 Field Duplicate Samples (Code f)

		Yes	No	NA
12.1	Were any field duplicates submitted for analysis?			
12.2	Were all RPD or absolute difference values within the control limits outlined in the QAPP?			
	Action: No qualifying action is taken based on field duplicate results, however the data validator should provide a qualitative assessment in the data validation report.			

Note: Sample SW-SA2-GMCS-STATION 5 DUP is the field duplicate of SW-SA2-GMCS-STATION 5.

13.0 Data Completeness

			Yes	No	NA
13.1	Is % completeness within the control limits? (Control limit: Check QAPP or use 95% for aqueous sample, 90% for soil				
13.2	Number of samples:	6			
13.3	Number of target compounds in each analysis:	21			
13.4	Number of results rejected and not reported:	0			
	% Completeness = 100 x ((13.1 x 13.2) - 13.3) / (13.1 x 13.2)				
	% Completeness	**100**			

Note:

DATA VALIDATION WORKSHEET
HERBICIDES ANALYSIS

Reviewer: Tony Sedlacek
Date: 6/2/2006
Laboratory Severn Trent Laboratory - Savannah

Project Name: Sauget - Area 2 Sup. RFI
Project Number: 21561391.00001
SDG No.: SAS042A
Review Level: Level III

Major Anomolies:

No samples were rejected

Minor Anomolies:

Samples required qualification for R ^ 2 < 0.995 in the ICAL.

Field IDs:

SW-SA2-GMCS-STATION 2 SW-SA2-GMCS-STATION 5
SW-SA2-GMCS-STATION 3 SW-SA2-GMCS-STATION 5 DUP
SW-SA2-GMCS-STATION 4 SW-SA2-GMCS-STATION 9

1.0 Chain of Custody/Sample Condition

		Yes	No	NA
1.1	Do Chain-of-Custody forms list all samples analyzed?			
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was maintained?			
1.3	Do the Traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data?	x		

Note: The laboratory case narrative indicated the grand mean exception rule was applied to the CCV standards. See Continuing calibration section below.
Although not indicated in the case narrative compounds Dichloroprop and MCPP had R ^ 2 values < 0.995 in the ICAL.

2.0 Holding Time/ Preservation (Code h)

		Yes	No	NA
2.1	Do sample preservation, collection and storage condition meet method requirement?			
	If samples were not on ice or the ice was melted upon arrival at the laboratory and the temperature of the cooler was elevated (> 10 °C), then flag all positive results with a "J" and all non-detects "UJ".			
2.2	Have any technical holding times, determined from sampling to date of analysis, been exceeded? (See attached Holding Time Table for sample holding time) If yes, J(+)/UJ(-).			
	Extraction: Soil/Sediment 14 days - aqueous 7 days Analysis: 40 days			
2.3	Have any technical holding times grossly (twice the holding time) been exceeded? If yes, J(+)/R(-).			

Note:

3.0 Blanks (Method Blanks and Field Blanks)

(Code x - Field Blank Contamination, Code z - Method blank contamination)

		Yes	No	NA
3.1	Is a Method Blank Summary form present for each batch?			
3.2	Do any method blanks have positive results?			
3.3	Do any field/rinse/equipment blanks have positive results?			x
	Action: Positive sample results <5X the blank concentration should be qualified "U". The result should be elevated to the RL for estimate (laboratory "J" flagged) concentrations.			
3.4	If Level IV, review raw data and verify all detections for blanks were reported.			x

Note:

4.0 Initial Calibration (Code r)

		Yes	No	NA
4.1	Are Initial Calibration summary forms present and complete for each instrument used?			
4.2	Are calibration factors stable (%RSD values < 20% or >0.995) over the concentration range of the instrument		x	
	If not, J(+)/ UJ(-). In extreme cases, the reviewer may flag non-detects "R".			
4.3	If Level IV, recalculate a sample of RRFs and %RSDs to verify correct calculations are being made.			x

Note: The following compounds had R ^ 2 values < 0.995 MCPP(0.9936) and Dichloroprop(0.9901), all detected analytes were qualified estimated "J" and all non-detect analytes were qualified as estimated non-detect "UJ".

Field ID	Analyte(s)	Qualification	Run #		Justification
SW-SA2-GMCS-STATION 2	Dichloroprop	J	680-39978		R^2 <0.995 in ICAL
SW-SA2-GMCS-STATION 2	MCPP	UJ	680-39978		R^2 <0.995 in ICAL
SW-SA2-GMCS-STATION 3	Dichloroprop	J	680-39978		R^2 <0.995 in ICAL
SW-SA2-GMCS-STATION 3	MCPP	UJ	680-39978		R^2 <0.995 in ICAL
SW-SA2-GMCS-STATION 4	Dichloroprop	UJ	680-39978		R^2 <0.995 in ICAL
SW-SA2-GMCS-STATION 4	MCPP	UJ	680-39978		R^2 <0.995 in ICAL
SW-SA2-GMCS-STATION 5	Dichloroprop	J	680-39978		R^2 <0.995 in ICAL
SW-SA2-GMCS-STATION 5	MCPP	UJ	680-39978		R^2 <0.995 in ICAL
SW-SA2-GMCS-STATION 5 DUP	Dichloroprop	UJ	680-39978		R^2 <0.995 in ICAL
SW-SA2-GMCS-STATION 5 DUP	MCPP	UJ	680-39978		R^2 <0.995 in ICAL
SW-SA2-GMCS-STATION 9	Dichloroprop	UJ	680-39978		R^2 <0.995 in ICAL
SW-SA2-GMCS-STATION 9	MCPP	UJ	680-39978		R^2 <0.995 in ICAL

5.0 Continuing Calibration (Code c)

		Yes	No	NA
5.1	Are Continuing Calibration Summary forms present and complete?			
5.2	Has a continuing calibration standard been analyzed every 12 hours?			
5.3	Do any compounds have a % difference (or % drift for quantitation from a curve) (%D) between initial and continuing calibration CF outside QC limits (%D < 20%)?	x		
	If yes, a marginal increase in response >20% then J(+) only; a decrease in response then J(+)/ UJ(-). For %D > 50%, flag R.			
5.5	If Level IV, calculate a sample of CFs and %Ds from ave CF to verify correct calculations.			x

Note: The grand mean exception was applied to continuing calibration verification standards in this package. The rule is described in Method SW-846 and states that when on or more compounds fails to meet acceptance criteria, the initial calibraiton (ICAL) may be used for quantitation if the average percent difference (%D) of all the compounds in the CCV is less than or equal to 15%. A calculation of the %D for each target compound and a calculation of the grand mean for specific CCVs. All grand mean calculations were less than 15%. No qualifications of data were required.

6.0 Surrogate Recovery (Code s)

		Yes	No	NA
6.1	Are all samples listed on the appropriate Surrogate Recovery Summary Form ?			
6.2	Are surrogate recoveries within acceptance criteria specified in the QAPP for all samples?			
6.3	If No in Section 6.2, were these sample(s) or method blank(s) reanalyzed?			x
6.4	If No in Section 6.3, is any sample dilution factor greater than 10? (Surrogate recoveries may be diluted out.)			x

	> UCL	10% to LCL	< 10%
Positive	J	J	J
Non-detect	None	UJ	R

Note: All surrogate recoveries within evaluation criteria.

7.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD) or one MS with a Sample Duplicate (Code m - recovery, Code d - RPD)

		Yes	No	NA
7.1	Is a Matrix Spike/Matrix Spike Duplicate recovery form present?			x
7.2	Are MS/MSDs analyzed at the required frequency of one matrix spike per ten samples and a duplicate per twenty for each matrix?			x
7.3	Are all MS/MSD %Rs and RPDs within acceptance criteria Specified in the QAPP?			x
	Using informed professional judgment, the data reviewer should use the MS and MSD results in conjunction with other QC criteria and determine the need for qualification of the data for samples *from the same site/matrix* Recoveries <10% may require rejection. RPD failures may be flagged "J" (+ only)			

Note: This data package did not request an MS/MSD.

8.0 Laboratory Control Sample (LCS/LCSD) (Code l - LCS recovery Code e - RPD)

		Yes	No	NA
8.1	Is an LCS recovery form present?			
8.2	Is an LCS analyzed at the required frequency of one per twenty field samples for each matrix?			
8.3	Are all LCS %Rs and RPDs within acceptance criteria specified in the QAPP?			
8.4	If Level IV, verify the % recoveries are calculated correctly.			x
	Action for specific compound outside the acceptance criteria: %R>UCL, J(+) only; <LCL, J(+)/UJ(-); <30% J(+)/R(-). RPD failures should be flagged "J" (+ only)			

Note: All LCS recoveries within evaluation criteria.

9.0 TCL Identification (Code w)

		Yes	No	NA
9.1	Is the relative retention time (RRT) of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration?			

Note:

10.0 TCL Quantitation and Reported Detection limits (Code p)

		Yes	No	NA
10.1	Are RLs used consistent with those specified in the QAPP?			
10.2	Are these limits adjusted to reflect dilutions and/ or percent solids as required?			x
10.3	Are any positives reported that exceed the linear range of the instrument? If yes, than flag "J".			
10.4	If Level IV, calculate a sample of positive results to verify correct calculations			x

Note: No dilutions were required for this data package.

11.0 Field Duplicate Samples (Code f)

		Yes	No	NA
11.1	Were any field duplicates submitted for herbicide analysis?			
11.2	Were all RPD or absolute difference values within the control limits outlined in the QAPP?		x	
	Action: No qualifying action is taken based on field duplicate results, however the data validator should provide a qualitative assessment in the data validation report.			

Note: Sample SW-SA2-GMCS-STATION 5 DUP is the duplicate for SW-SA2-GMCS-STATION 5.

12.0 Data Completeness

			Yes	No	NA
12.1	Is % completeness within the control limits? (Control limit: Check QAPP or use 95% for aqueous sample, 90% for				
12.2	Number of samples:	6			
12.3	Number of target compounds in each analysis:	10			
12.4	Number of results rejected and not reported:	0			
	% Completeness = 100 x ((12.1 x 12.2) - 12.3) / (12.1 x 12.2)				
	% Completeness	**100**			

Note:

DATA VALIDATION WORKSHEET - Level III Review
Inorganic - ICP, ICP-MS, GFAA, and CVAA

Reviewer: Tony Sedalcek
Date: 6/2/2006
Laboratory Severn Trent Laboratory - Savannah

Project Name: Sauget - Area 2 Sup. RFI
Project Number: 21561391.00001
SDG No.: SAS042A
Review Level: Level III

Major Anomolies:

No samples were rejected

Minor Anomolies:

All samples for dissolved metals were qualified for zinc due to blank contamination.

Field IDs:

SW-SA2-GMCS-STATION 2	SW-SA2-GMCS-STATION 5
SW-SA2-GMCS-STATION 2	SW-SA2-GMCS-STATION 5 DUP
SW-SA2-GMCS-STATION 4	SW-SA2-GMCS-STATION 9

1.0 Chain of Custody/Sample Condition/Raw Data

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
1.1	Do Chain-of-Custody forms list all samples that were analyzed?	x											
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was maintaine	x											
1.3	Do the traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data?	x											
1.4	Does sample preservation, collection and storage meet method requirement? (water samples: with Nitric Acid to pH < 2, and soil/sediment samples: 4 °C + 2 °C)	x											
1.5	Are the digestion logs present and complete with pH values, sample weights, dilutions, final volumes. % solids (for soil samples), and preparation dates? For any missing or incomplete documentation, contact the laboratory for explanation/resubmittal.	x											

Note: The laboratory case narrative indicated that dissolved zinc was detected in the prep blank. The dissolved sample 680-14629-9(SW-SA2-GMCS-STATION 5 DUP). was used as the batch MS/MSD for the dissloved ICP metals analysis and dissolved mercury analysis. The MSD percent recoveries were outside of control limits for calcium, magnesium, and sodium. No qualifications of data were required due to high levels of analytes in samples. A non-client sample was used as the batch serial dilution and post-digestion spike for the total mercury analysis. This serial dilution for mercury was outside of control limits.

2.0 Holding Time (Code h)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
2.1	Have any technical holding times, determined from date of collection to date of analysis, been exceeded? (Hg: 28days, other metals: 6 months) See attached Holding Time Table. Action: J(+)/UJ(-). If the holding times are grossly exceeded (twice the holding time criteria) J(+)/R(-).		x										

Note: All samples were analyzed within holding time criteria.

3.0 Instrument Calibration (Code c)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
3.1	Are sufficient standards included in the calibration curve? (ICP/ICP-MS: blank + one standard; GFAA: blank + three standards; CVAA: blank + five standards)												
3.2	Are the correlation coefficients > 0.995? (for GFAA and CVAA) Action: J(+)/UJ(-).			x									x
3.3	Was an initial calibration verification (ICV) analyzed at the beginning of each analysis? Action: If no, use professional judgment to determine affect on the data and note in reviewer narrative.												
3.4	Was continuing calibration verification (CCV) performed every 10 analysis or every 2 hours, whichever is more frequent? Action: If no, use professional judgment to determine affect on the data and note in reviewer narrative.												
3.5	Are all calibration standard percent recoveries (ICV and CCV) within the control limits? Mercury (80%-120%) and other Metals (90%-110%).												

Action:

	R(+/-)	J(+)/UJ(-)	J(+)	R(+)
Mercury	< 65%	65% - 79%	121% - 135%	> 135%
Other Metals	< 75%	75% - 89%	111% - 125%	> 125%

Note: %R values are given for CVAA-Hg instead of correlation coefficients. The %R are within control limits.

4.0 Blanks (Code o - Calibration blank failure, Code p - Preparation blank failure, Code x - Field blank failure)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
4.1	Were preparation blank (PB) prepared at the appropriate frequency (one per 20 samples, per batch, per matrix and per level)?												
4.2	Are there reported PB values > + IDL? Action: If yes, action level of 5 times the blank value are determined for positive and negative blank values.	x											
4.3	Were initial calibration blanks (ICB) analyzed? Action: If no, use professional judgment to determine affect on the data note in reviewer narrative.												
4.4	Were continuing calibration blanks (CCB) analyzed after every 10 samples or every 2 hours whichever is more frequent? Action: If no, use professional judgment to determine affect on the data to note in reviewer narrative.												
4.5	Are there reported ICB or CCB values > + IDL? Action: If yes, action level of 5 times the blank value are determined for positive and negative blank values.												
4.6	Are there samples with concentrations less than five times the highest level in associated blanks? Action: If yes, U at reported concentration.												
4.7	Are there samples with non-detect results or with concentrations less than five times the most negative value in associated blanks? Action; If yes, J(+)/UJ(-).												

Note:

Field ID	Analyte(s)	Run #	Qualification	Justification
SW-SA2-GMCS-STATION 2	zinc	680-40267	J	Blank contamination
SW-SA2-GMCS-STATION 3	zinc	680-40267	J	Blank contamination
SW-SA2-GMCS-STATION 4	zinc	680-40267	J	Blank contamination
SW-SA2-GMCS-STATION 5	zinc	680-40267	J	Blank contamination
SW-SA2-GMCS-STATION 5 DUP	zinc	680-40267	J	Blank contamination
SW-SA2-GMCS-STATION 9	zinc	680-40267	J	Blank contamination

5.0 ICP Interference Check Sample (ICS) (Code n)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
5.1	Was ICS AB analyzed at beginning of each ICP run (or at least twice every 8 hours), and at the beginning or once every 8 hours (whichever is more frequent) for ICP-MS?												
5.2	Are the ICS AB recoveries within 80% - 120%?												
5.3	Are the results for unspiked analytes (in ICS A) < + IDL?												
5.4	If not, are the associated sample Al, Ca, Fe, and Mg concentrations less than the level in the ICS?												

Action:

Not Spiked Analytes		Spiked analytes (ICS AB analytes)		
< -IDL	> IDL	< 50%	50% - 79%	> 120%
UJ(-)	J(+)	R(+/-)	J(+)/UJ(-)	J(+)

Note:

6.0 Laboratory Control Sample (LCS) (Code l - Recovery, Code e - RPD)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
6.1	Was an LCS prepared and analyzed at the correct frequency (one per 20 samples, per batch, per matrix and per level)? Action: If no, J(+) any sample not associated with LCS results.												
6.2	Is any LCS recovery outside the control limits? (Aqueous limits: 80% - 120% - except Ag and Sb; Solid limits: as per EPA-EMSL/LV) Action: Solid: < LCL J(+)/UJ(-); > UCL J(+); < 50% R(+/-). Aqueous: 50% - 79% J(+)/UJ(-); > 120% J(+)												

Note: All recoveries were within QC criteria.

7.0 Laboratory Duplicates (Code k)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
7.1	Were Laboratory duplicates prepared and analyzed at the correct frequency (one per 20 samples, per batch, per matrix and per level)? Action: If no, J(+), with professional judgment, analytes not associated with Duplicate results.												
7.2	Was a field blank used for the duplicate analysis? Action: If yes, J(+) with professional judgment. Note in worksheet.												
7.3	Are all analyte duplicate results within control? (RPD values < 20% or difference < ± PQL for aqueous, and RPD < 35% or difference < ± 2 X PQL for solids)? Action: If no, J(+). Note: RPD criteria is used when both sample and duplicate results are > 5 X IDL.												

Note: All RPD's were within criteria, sample SW-SA2-GMCS-STATION 5 DUP was used as the lab duplicate sample.

8.0 Spike Sample Analysis -Pre-Digestion (Code m - Recovery, Code d - RPD)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
8.1	Was a spiked sample prepared and analyzed at the correct frequency (one per 20 samples, per batch, per matrix and per level)? Action: If no, J(+), with professional judgment, analytes not associated with matrix spike results.												
8.2	**Was a field blank used for the MS analysis? Action: If yes, J(+) with professional judgment. Note in worksheet.** Note: Matrix spike analysis may be performed on a field blank when it is the only aqueous sample in an SDG.												
8.3	For all analytes with sample concentration < 4 x spike concentration, are spike recoveries within the control limit of 75-125%? (No control limit applies to analytes with concentration > 4 x spike concentration.) %R > 125%: Positive J, Non-detect None 30% < %R < 74%: Positive J, Non-detect UJ %R < 30%: Positive J, Non-detect R												

Note: Sample SW-SA2-GMCS-STATION 5 DUPFS and SW-SA2-GMCS-STATION 5 DUPFSD were spiked and analyzed, the MS/MSD recoveries for calcium, magnesium, and sodium were outside control limits. The sample concentrations were greater than 4x the spike concentration, therefore no qualifications of data were required.

9.0 Instrument Detection Limits (IDL)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
9.1	Are all IDL equal to or less than the reporting limits specified?												

Note:

10.0 ICP Serial Dilutions (Code s)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
10.1	Were serial dilutions performed?												
10.2	Was a five-fold dilution performed?		x										
10.3	Did the serial dilution results agree within 10% for analyte concentration > 50 x the IDL in the original sample? If no, J(+).												

Note: Samples SW-SA2-GMCS-STATION 2L, and SW-SA2-GMCS-STATION 5 DUPF were analyzed at a dilution and the results and %D were within QC limits.
A non-client sample was used for serial dilution and post-digestion spike of total mercury, the results were outside of control limits. This sample is not part of this SDG, therefore no qualifications were required.

11.0 Field Duplicate Samples (Code f)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
11.1	Were any field duplicates submitted for metal analysis?												
11.2	Are all field duplicate results within control? (For aqueous sample, RPD values < 35% or difference < ± 2 x PQL and For solids, RPD < 50% or difference < ± 4 x PQL)												

Note: Sample SW-SA2-GMCS-STATION 5 DUP was used as the duplicate sample for SW-SA2-GMCS-STATION 5.

12.0 Result Verification (Code Q)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
12.1	Were all results and detection limits for solid-matrix samples reported on a dry-weight basis?			x									x
12.2	Were all dilution reflected in the positive results and detection limits?			x									x

Note: All samples were aqueous and no dilutions were required.

13.0 Data Completeness

13.1	Is % completeness within the control limits? (Control limit: Check QAPP or use 95% for aqueous sample, 90% for soil sample)										
13.2	Number of samples:	14		0		0		14			
13.3	Number of target compounds in each analysis:	22		22		0		1			
13.4	Number of results rejected and not reported:	0		0		0		0			
	% Completeness = 100 x ((13.1 x 13.2) - 13.3) / (13.1 x 13.2)										
	% Completeness	100		#DIV/0!		###		100			

Note:

DATA VALIDATION WORKSHEET
VOLATILE ORGANIC ANALYSIS

Reviewer: Tony Sedlacek
Date: 6/5/2006
Laboratory Severn Trent Laboratory - Savannah

Project Name: Miss. River SA2-Sediments
Project Number: 21561391.00001
SDG No.: SAS043
Review Level: Level III

Major Anomolies:

No samples were rejected

Minor Anomolies:

No analytes required qualifications, based on this data review.

Field IDs:

SED-SA2-GMCS-STATION 2
SED-SA2-GMCS-STATION 3
SED-SA2-GMCS-STATION 4
SED-SA2-GMCS-STATION 5
SED-SA2-GMCS-STATION 5 DUP
SED-SA2-GMCS-STATION 9

1.0 Chain of Custody/Sample Condition

		Yes	No	NA
1.1	Do Chain-of-Custody forms list all samples analyzed?			
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was maintained?			
1.3	Do the Traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data?	x		

Note: The laboratory case narrative indicated that acetone was detected in the method blank 680-39741, but not in the samples. All surrogates in sample SED-SA2-GMCS-STATION 2 DL were diluted out of the sample. Benzene and 1,2-dichloropropane were recovered low in LCSD sample 680-39741/4. Also, the case narrative incorrectly identified the LCS/LCSD RPD for vinyl chloride outside QC limits. The correct analyte that was out was chloroethane.

2.0 Holding Time/ Preservation (Code H)

		Yes	No	NA
2.1	Do sample preservation, collection and storage condition meet method requirement?			
	If sample preservation and/or temperature was inappropriate (i.e., <2° >6°C, etc.), comment in report. If unpreserved or temperature is outside the range 0° (but not frozen) to 10° flag all positive results with a "J" and all non-detects "UJ". If temperature exceeds 10°, flag positive detections "J" and non-detects "R".			
2.2	Have any technical holding times, determined from sampling to date of analysis, been exceeded? If yes, J(+)/UJ(-).			

Matrix	Preserved	Aromatic	All others
Aqueous	No	7 days	14 days
	Yes	14 days	14 days
Soil/Sediment	$4^{o}C + 2\ ^{o}C$	14 days	14 days

		Yes	No	NA
2.3	Have any technical holding times been grossly (twice the holding time) exceeded? If yes, J(+)/R(-).			

Note:

3.0 GC/MS Instrument Performance Check (Code T)

		Yes	No	NA
3.1	Are GC/MS Tuning and Mass Calibration forms present for bromofluorobenzene (BFB)?			
3.2	Have all samples been analyzed within twelve hours of the BFB tune? If no, flag R.			
3.3	Have ion abundance criteria for BFB been met for each instrument used? If no, flag R.			

Note:

4.0 Blanks (Method Blanks, Field Blanks and Trip Blanks)

(Code X - Field Blank Contamination, Code Y - Trip blank contamination, Code Z - Method blank contamination)

		Yes	No	NA
4.1	Is a Method Blank Summary form present for each batch?			
4.2	Do any method blanks have positive VOA results (TCL and/or TIC)?	x		
4.3	Do any field/trip rinse/equipment blanks have positive VOA results (TCL and/or TIC)?			
	Action: Positive sample results <5X (or 10X for common volatile lab contaminants- methylene chloride, acetone, and 2-butanone) the blank concentration should be qualified "U". The result should be elevated to the RL for estimate (laboratory "J" flagged) concentrations.			
4.4	If Level IV, review raw data and verify all detections for blanks were reported.			x

Note: The method blank in batch 680-39741 had acetone present. The only samples associated with this batch are the LCS/LCSD.
No qualifications of data were required.

5.0 GC/MS Initial Calibration (Code C)

		Yes	No	NA
5.1	Are Initial Calibration summary forms present and complete for each instrument used?			
5.2	Are CCCs linear applying either %RSD 30% and all other compounds <15% or >0.990?			
	If not, J(+)/ UJ(-). In extreme cases, the reviewer may flag non-detects "R".			
5.3	Do any SPCC compounds have an RRF less than specification or any other compounds < 0.05 (use 0.01 for poor responders like ketones or alcohols)? If yes, J(+)/R(-).			
5.4	Is the lowest standard at the same concentration, or lower, as the RL reported? If not, elevate RL.			
5.5	If Level IV, recalculate a sample of RRFs and %RSDs to verify correct calculations are being made.			x

Note:

6.0 Continuing Calibration (Code C)

		Yes	No	NA
6.1	Are Continuing Calibration Summary forms present and complete?			
6.2	Has a continuing calibration standard been analyzed every 12 hours?			
6.3	Have all SPCCs and CCCs met method specifications? If not, comment in report, proceed to 6.4.			
6.4	Do any compounds have a % difference (or % drift for quantitation from a curve) (%D) between initial and continuing calibration RRF outside QC limits (%D < 20%)?	x		
	If yes, a marginal increase in response >20% then J(+) only; a decrease in response then J(+)/ UJ(-). For %D > 50%, flag R.	x		
6.5	Do any compounds have an RRF < 0.05 (use 0.01 for poor responders)? If yes, J(+)/R(-).			
6.6	If Level IV, calculate a sample of RFs and %Ds from ave RF to verify correct calculations.			x

Note: One continuing calibration standard form 7 was present, but the samples were analyzed within 12 hours of the continuing calibration standard. The following compounds had a %D greater than 20% between ICAL and CCV:
Dichlorodifluoromethane (27%), Chloromethane (27.4%), Bromomethane (31.5%), Trichlorofluoromethane (22.6%), Carbon Disulfide (23.8%), Methylene chloride (25.5%), Vinyl acetate (27.3%), and Methyl acetate (27.8%)
All associated samples were non-detected, therefore no qualifications were required.

7.0 Surrogate Recovery (Code S)

		Yes	No	NA
7.1	Are all samples listed on the appropriate Surrogate Recovery Summary Form ?			
7.2	Are surrogate recoveries within acceptance criteria specified in the QAPP for all samples?		x	
7.3	If No in Section 7.2, were these sample(s) or method blank(s) reanalyzed?		x	
7.4	If No in Section 7.3, is any sample dilution factor greater than 10? (Surrogate recoveries may be diluted out.)	x		
	Note: If SMC recoveries do not meet acceptance criteria in samples chosen for the MS/MSD or diluted samples, then no reanalysis is required.			

	> UCL	10% to LCL	< 10%
Positive	J	J	J
Non-detect	None	UJ	R

Note: The surrogates in sample SED-SA2-GMCS-STATION 2 DL were diluted out of the sample due to high levels of target analytes. The surrogates were within evaluation criteria for the undiluted sample therefore no qualifications were required.

8.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD) or one MS with a Sample Duplicate (Recovery - Code M, RPD - Code D)

		Yes	No	NA
8.1	Is a Matrix Spike/Matrix Spike Duplicate recovery form present?		x	
8.2	Are MS/MSDs analyzed at the required frequency of one matrix spike per ten samples and a duplicate per twenty for each matrix?			x
8.3	Are all MS/MSD %Rs and RPDs within acceptance criteria Specified in the QAPP?			x
	Using informed professional judgment, the data reviewer should use the MS and MSD results in conjunction with other QC criteria and determine the need for qualification of the data for samples *from the same site/matrix.* Recoveries <10% may require rejection. RPD failures may be flagged "J" (+ only)			

Note: No MS/MSD was requested for this data package.

9.0 Laboratory Control Sample (LCS/LCSD) (Recovery - Code L, RPD - Code E)

		Yes	No	NA
9.1	Is an LCS recovery form present?			
9.2	Is an LCS analyzed at the required frequency of one per twenty field samples for each matrix?			
9.3	Are all LCS %Rs and RPDs within acceptance criteria specified in the QAPP?		x	
9.4	If Level IV, verify the % recoveries are calculated correctly.			x
	Action for specific compound outside the acceptance criteria: %R>UCL, J(+) only; <LCL, J(+)/UJ(-); <30% J(+)/R(-). RPD failures should be flagged "J" (+ only)			

Note: Chloroethane had an RPD (100) outside the QC limit of 50. The only sample associated with this batch was a method blank, therefore no qualifications of data were required. Benzene and 1,2-dichloropropane recovered high in the LCD sample 680-39741/4, these analytes were within QC limits in the LCS. Also, the other sample in batch 680-39741 was a method blank in which these analytes were non-detected. Therefore no qualifications of data were required.

10.0 Internal Standards (Code I)

		Yes	No	NA
10.1	Are internal standard areas for every sample and blank within upper and lower QC limits?			
		Area > +100%	Area < -50%	Area < -10%
	Positive	J	J	J
	Non-detect	None	UJ	R
Note:	The method specification is for the continuing calibration to be compared to the mid-point initial calibration, not sample to continuing calibration. Thus, if all other QC specifications are met for a given sample, using informed professional judgment, the reviewer may choose not to flag individual samples in			
10.2	Are retention times of internal standards within 30 seconds of the associated calibration standard?			
	Action: The chromatogram must be examined to determine if any false positives or negatives exist. For shift of a large magnitude, the reviewer may consider partial or total rejection of the data for non-detects in that sample/fraction.			

Note: All internal standard area counts and retention times within evaluation criteria.

11.0 TCL Identification (Code W)

		Yes	No	NA
11.1	Is the relative retention time (RRT) of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration?			
11.2	Are the three ions of greatest intensity present in the standard mass spectrum also present in the sample mass spectrum; and do sample and standard relative ion intensities agree within 30%?			

Note:

12.0 TCL/TIC Quantitation and Reported Detection limits (Code K)

		Yes	No	NA
12.1	Are RLs used consistent with those specified in the QAPP?			
12.2	Are these limits adjusted to reflect dilutions and/ or percent solids as required?			
12.3	Are TIC ions greater than ten percent in the reference spectrum also present in the sample spectrum?			
12.4	Are any positives reported that exceed the linear range of the instrument? If yes, than flag "J".			
12.5	If Level IV, calculate a sample of positive results to verify correct calculations			x

Note:

13.0 Field Duplicate Samples (Code F)

		Yes	No	NA
13.1	Were any field duplicates submitted for VOC analysis?			
13.2	Were all RPD or absolute difference values within the control limits outlined in the QAPP?			
	Action: No qualifying action is taken based on field duplicate results, however the data validator should provide a qualitative assessment in the data validation report.			

Note: SED-SA2-GMCS-STATION 5 DUP was the field duplicate of SED-SA2-GCMS-STATION 5.

14.0 Data Completeness

			Yes	No	NA
14.1	Is % completeness within the control limits? (Control limit: Check QAPP or use 95% for aqueous				
14.2	Number of samples:	6			
14.3	Number of target compounds in each analysis:	35			
14.4	Number of results rejected and not reported:	0			
	% Completeness = 100 x ((14.1 * 14.2) - 14.3) / (14.1 * 14.2)				
	% Completeness	**100**			

Note:

DATA VALIDATION WORKSHEET
SEMIVOLATILE ORGANIC ANALYSIS

Reviewer:	Tony Sedlacek	**Project Name:**	Miss. River SA2-Sediments
Date:	6/5/2006	**Project Number:**	21561391.00001
Laboratory	Severn Trent Laboratory - Savannah	**SDG No.:**	SAS043
		Review Level:	Level III

Major Anomolies:

No samples were rejected

Minor Anomolies:

Samples were qualified as part of this review for ICAL R^2 < 0.995, and (D%) between ICAL and CCAL RRF (D% < 20)

Field IDs:

SED-SA2-GMCS-STATION 2	SED-SA2-GMCS-STATION 5
SED-SA2-GMCS-STATION 3	SED-SA2-GMCS-STATION 5 DUP
SED-SA2-GMCS-STATION 4	SED-SA2-GMCS-STATION 9

1.0 Chain of Custody/Sample Condition

		Yes	No
1.1	Do Chain-of-Custody forms list all samples analyzed?		
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was maintained?		
1.3	Do the Traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data?		

Note: No problems were indicated in the case narrative or the cooler receipt. Although it was not indicated on the case narrative, 4,6-Dinitro-2-methylphenol and Di-n-octylphthalate had R ^ 2 values less than 0.990 in the ICAL. Also, 2-Nitroaniline, and Diethylphthalate had %D > 20% between the ICAL and CCAL. The MS/MSD sample 680-39213 had MSD recoveries outside evaluation criteria. The sample SED-SA2-GMCS-STATION 5 and its duplicate SED-SA2-GMCS-STATION 5 DUP had RPD values greater than 35%.

2.0 Holding Time/ Preservation (Code H)

		Yes	No
2.1	Do sample preservation, collection and storage condition meet method requirement?		
	If samples were not on ice or the ice was melted upon arrival at the laboratory and the temperature of the cooler was elevated (> 10 °C), then flag all positive results with a "J" and all non-detects "UJ".		
2.2	Have any technical holding times, determined from sampling to date of analysis, been exceeded? (See attached		
	Extraction: Soil/Sediment 14 days - aqueous 7 days Analysis: 40 days		
2.3	Have any technical holding times grossly (twice the holding time) been exceeded? If yes, J(+)/R(-).		

Note:

3.0 GC/MS Instrument Performance Check (Code T)

		Yes	No
3.1	Are GC/MS Tuning and Mass Calibration forms present for DFTPP?		
3.2	Have all samples been analyzed within twelve hours of the tune?		
	If no, the data for the affected standards, blanks, field samples or QC samples are rejected "R".		
3.3	Have ion abundance criteria for DFTPP been met for each instrument used?		
	If no, all standards, blanks, field samples and QC samples are rejected "R".		

Note:

4.0 Blanks (Method Blanks and Field Blanks)

(Code X - Field Blank Contamination, Code Z - Method blank contamination)

		Yes	No
4.1	Is a Method Blank Summary form present for each batch?		
4.2	Do any method/instrument/reagent blanks have positive results (TCL, and/or TIC)?		
4.3	Do any field equipment blanks have positive results (TCL, and/or TIC)?		
	Action: Positive sample results <5X (or 10X for phthalate contaminants) the blank concentration should be qualified "U" and the detection limit elevated to the RL for estimate concentrations.		
4.4	If Level IV, review raw data and verify all detections for blanks were reported.		

Note:

5.0 GC/MS Initial Calibration (Code C)

		Yes	No
5.1	Are Initial Calibration summary forms present and complete for each instrument used?		
5.2	Are CCCs linear applying either %RSD < 30% and all other compounds <15% or >0.990?		
	If not, J(+)/ UJ(-). In extreme cases, the reviewer may flag non-detects "R".		
5.3	Do any SPCC compounds have an RRF less than specification or any other compounds < 0.05 (use 0.01 for poor responders like amines and phenols)? If yes, J(+)/R(-).	x	
5.4	Is the lowest standard at the same concentration, or lower, as the RL reported? If not, elevate RL.		
5.5	If Level IV, recalculate a sample of RRFs and %RSDs to verify correct calculations are being made.		

Note: 4,6-Dinitro-2-methylphenol (.989), and Di-n-octylphthalate (.988), had R^2 values less than 0.990, therefore all associated sample will be qualified estimated "J" for detected and "UJ" for all non-detected samples.

Field ID	Analyte(s)	Qualification	Run #	Justification
SED-SA2-GMCS-STATION 2	4,6-Dinitro-2-methylphenol	UJ	680-39357	ICAL R^2 <0.995
SED-SA2-GMCS-STATION 2	Di-n-octylphthalate	UJ	680-39357	ICAL R^2 <0.995
SED-SA2-GMCS-STATION 3	4,6-Dinitro-2-methylphenol	UJ	680-39357	ICAL R^2 <0.995
SED-SA2-GMCS-STATION 3	Di-n-octylphthalate	UJ	680-39357	ICAL R^2 <0.995
SED-SA2-GMCS-STATION 4	4,6-Dinitro-2-methylphenol	UJ	680-39357	ICAL R^2 <0.995
SED-SA2-GMCS-STATION 4	Di-n-octylphthalate	UJ	680-39357	ICAL R^2 <0.995
SED-SA2-GMCS-STATION 5	4,6-Dinitro-2-methylphenol	UJ	680-39357	ICAL R^2 <0.995
SED-SA2-GMCS-STATION 5	Di-n-octylphthalate	UJ	680-39357	ICAL R^2 <0.995
SED-SA2-GMCS-STATION 5 DUP	4,6-Dinitro-2-methylphenol	UJ	680-39357	ICAL R^2 <0.995
SED-SA2-GMCS-STATION 5 DUP	Di-n-octylphthalate	UJ	680-39357	ICAL R^2 <0.995
SED-SA2-GMCS-STATION 9	4,6-Dinitro-2-methylphenol	UJ	680-39357	ICAL R^2 <0.995
SED-SA2-GMCS-STATION 9	Di-n-octylphthalate	UJ	680-39357	ICAL R^2 <0.995

6.0 Continuing Calibration (Code C)

		Yes	No
6.1	Are Continuing Calibration Summary forms present and complete?		
6.2	Has a continuing calibration standard been analyzed every 12 hours?		x
6.3	Have all SPCCs and CCCs met method specifications? If not, comment in report, proceed to 6.4.		
6.4	Do any compounds have a % difference (or % drift for quantitation from a curve) (%D) between initial and continuing calibration RRF outside QC limits (%D < 20%)?		
	If yes, a marginal increase in response >20% then J(+) only; a decrease in response then J(+)/ UJ(-). For %D > 50%, flag R.		
6.5	Do any compounds have an RRF < 0.05 (use 0.01 for poor responders)? If yes, J(+)/R(-).		
6.6	If Level IV, calculate a sample of RFs and %Ds from ave RF to verify correct calculations.		

Note: 2-Nitroaniline (22.6%), and Diethylphthalate (25.7%) were all outside the QC limits of 20% for %D between ICAL and CCV.
In all associated sample detected will be qualified estimated "J", and all non-detects will be qualified as estimated non-detect "UJ".

Field ID	Analyte(s)	Qualification	Run #	Justification
SED-SA2-GMCS-STATION 2	2-Nitroaniline	UJ	680-39357	(%D) between ICAL & CCAL RRF (%D < 20%)
SED-SA2-GMCS-STATION 2	Diethylphthalate	UJ	680-39357	(%D) between ICAL & CCAL RRF (%D < 20%)
SED-SA2-GMCS-STATION 3	2-Nitroaniline	UJ	680-39357	(%D) between ICAL & CCAL RRF (%D < 20%)
SED-SA2-GMCS-STATION 3	Diethylphthalate	UJ	680-39357	(%D) between ICAL & CCAL RRF (%D < 20%)
SED-SA2-GMCS-STATION 4	2-Nitroaniline	UJ	680-39357	(%D) between ICAL & CCAL RRF (%D < 20%)
SED-SA2-GMCS-STATION 4	Diethylphthalate	UJ	680-39357	(%D) between ICAL & CCAL RRF (%D < 20%)
SED-SA2-GMCS-STATION 5	2-Nitroaniline	UJ	680-39357	(%D) between ICAL & CCAL RRF (%D < 20%)
SED-SA2-GMCS-STATION 5	Diethylphthalate	UJ	680-39357	(%D) between ICAL & CCAL RRF (%D < 20%)
SED-SA2-GMCS-STATION 5 DUP	2-Nitroaniline	UJ	680-39357	(%D) between ICAL & CCAL RRF (%D < 20%)
SED-SA2-GMCS-STATION 5 DUP	Diethylphthalate	UJ	680-39357	(%D) between ICAL & CCAL RRF (%D < 20%)
SED-SA2-GMCS-STATION 9	2-Nitroaniline	UJ	680-39357	(%D) between ICAL & CCAL RRF (%D < 20%)
SED-SA2-GMCS-STATION 9	Diethylphthalate	UJ	680-39357	(%D) between ICAL & CCAL RRF (%D < 20%)

7.0 Surrogate Recovery (Code S)

		Yes	No
7.1	Are all samples listed on the appropriate Surrogate Recovery Summary Form ?		
7.2	Are surrogate recoveries within acceptance criteria specified in the QAPP for all samples and method blanks?		
7.3	Are more than one of either fraction outside the acceptance criteria?		
7.4	If Yes in Section 7.3, are these sample(s) or method blank(s) reanalyzed?		
7.5	If Yes in Section 7.3, is any sample dilution factor greater than 10?		
	Note: If SMC recoveries display unacceptable recoveries in the MS and/ or diluted samples, then no reanalysis is required and acids and base/ neutrals are assessed separately.		

	> UCL	10% to LCL	< 10%
Positive	J	J	J
Non-detect	None	UJ	R

Note:

8.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD) or one MS with a Sample Duplicate (Recovery - Code M, RPD - Code D)

		Yes	No
8.1	Is a Matrix Spike/Matrix Spike Duplicate recovery form present?		
8.2	Are MS/MSDs analyzed at the required frequency not to exceed twenty field samples for each matrix?		
8.3	Are all MS/MSD %Rs and RPDs within acceptance criteria provided by the laboratory?		x
	Using informed professional judgment, the data reviewer should use the MS and MSD results in conjunction with other QC criteria and determine the need for qualification of the data for samples *from the same site/matrix*. Recoveries <10% may require rejection. RPD failures may be flagged "J" (+ only)		

Note: The analytes 2-Methylphenol (36%), with a QC limit (38-107%), 3,4-Methylpenol (36%) with a QC limit (37-106%), 2,4-Dimethylphenol (39%) with a QC limit (40-112%), and 2,4-Dichlorophenol (40%) with a QC limit (43-108%) were outside evaluation criteria in the MSD sample 680-39213. The analytes in the MS and RPD values were all within evaluation criteria. Therefore, no qualifications of data were required.

9.0 Laboratory Control Sample (LCS/LCSD) (Recovery - Code L, RPD - Code E)

		Yes	No
9.1	Is an LCS recovery form present?		
9.2	Is LCS analyzed at the required frequency for each matrix?		
9.3	Are all LCS %Rs (and RPDs) within acceptance criteria?		
	Action for specific compound outside the acceptance criteria: %R>UCL, J(+) only; <LCL, J(+)/UJ(-); <30% J(+)/R(-). RPD failures should be flagged "J" (+ only)		
9.4	If Level IV, verify the % recoveries are calculated correctly.		

Note:

10.0 Internal Standards (Code I)

		Yes	No
10.1	Are internal standard area of every sample and blank within upper and lower QC limits for each continuing		
	Positive: Area > +100% — J; Area < -50% — J; Area < -10% — J Non-detect: None; UJ; R		
Note:	The method specification is for the continuing calibration to be compared to the mid-point initial calibration, not sample to continuing calibration. Thus, if all other QC specifications are met for a given sample, using informed professional judgment, the reviewer may choose not to flag individual samples in this case.		
10.2	Are retention times of internal standards within 30 seconds of the associated calibration standard?		
	Action: The chromatogram must be examined to determine if any false positives or negatives exist. For shift of a large magnitude, the reviewer may consider partial or total rejection of the data for non-detects in that sample/fraction.		

Note:

11.0 TCL Identification (Code W)

		Yes	No
11.1	Is the relative retention time (RRT) of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration?		
11.2	Are the three ions of greatest intensity present in the standard mass spectrum also present in the sample mass spectrum; and do sample and standard relative ion intensities agree within 30%?		

Note:

12.0 TCL/TIC Quantitation and Reported Detection limits (Code K)

		Yes	No
12.1	Are RLs used consistent with those specified in the QAPP?		
12.2	Are these limits adjusted to reflect dilutions and/ or percent solids as required?		x
12.3	Are TIC ions greater than ten percent in the reference spectrum also present in the sample spectrum?		
12.4	Are any positives reported that exceed the linear range of the instrument? If yes, than flag "J".		
12.5	If Level IV, calculate a sample of positive results to verify correct calculations		

Note: No dilutions were required.

13.0 Field Duplicate Samples (Code F)

		Yes	No
13.1	Were any field duplicates submitted for SVOC analysis?		
13.2	Were all RPD or absolute difference values within the control limits?		x
	No action is taken based on field duplicate results, however the data validator should provide a qualitative assessment in the data validation report.		

Note: Analyte 1,4-Dichlorobenzene had a result of 64 (µg/Kg) in the parent sample SED-SA2-GMCS-STATION 5 and a result of 370 (µg/Kg) in the duplicate sample SED-SA2-GMCS-STATION 5 DUP, with an RPD of 143%. The same samples also had the analyte 4-Chloroaniline with a result of 410 (µg/Kg) in the parent and 71 (µg/Kg) in the duplicate, with and RPD of 141%. No qualification of data were required.

14.0 Data Completeness

			Yes	No
14.1	Is % completeness within the control limits? (Control limit: Check QAPP or use 95% for aqueous sample,			
14.2	Number of samples:	6		
14.3	Number of target compounds in each analysis:	65		
14.4	Number of results rejected and not reported:	0		
	% Completeness = 100 x ((14.1 x 14.2) - 14.3) / (14.1 x 14.2)			
	% Completeness	**100**		

Note:

DATA VALIDATION WORKSHEET
PESTICIDES/PCBs ANALYSIS

Reviewer: Tony Sedlacek
Date: 6/5/2006
Laboratory Severn Trent Laboratory - Savannah

Project Name: Sauget - Area 2 Sup. RFI
Project Number: 21561391.00001
SDG No.: SAS043
Review Level: Level III

Major Anomolies:

No samples were rejected.

Minor Anomolies:

All associated samples were qualified due to closing CCV outside of acceptance criteria.

Field IDs:

SED-SA2-GMCS-STATION 2
SED-SA2-GMCS-STATION 3
SED-SA2-GMCS-STATION 4
SED-SA2-GMCS-STATION 5
SED-SA2-GMCS-STATION 5 DUP
SED-SA2-GMCS-STATION 9

1.0 Chain of Custody/Sample Condition

		Yes	No	NA
1.1	Do Chain-of-Custody forms list all samples analyzed?			
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was maintained?			
1.3	Do the Traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data?	x		

Note: The laboratory case narrative indicated that the grand mean exception was applied to the CCV standards. The closing CCV in the first analysis failed to meet acceptance criteria. The samples were ran at a dilution on a second instrument and passed acceptance criteria. The surrogate, Tetrachloro-m-xylene exceeded the recovery acceptance limits in sample 680-14629-8 DL. The same sample was designated as and MS/MSD and some target compounds did not meet recovery acceptance criteria.

2.0 Holding Time/ Preservation (Code h)

		Yes	No	NA
2.1	Do sample preservation, collection and storage condition meet method requirement?			
	If samples were not on ice or the ice was melted upon arrival at the laboratory and the temperature of the cooler was elevated (> 10 ^{o}C), then flag all positive results with a "J" and all non-detects "UJ".			
2.2	Have any technical holding times, determined from sampling to date of analysis, been exceeded? (See attached Holding Time Table for sample holding time) If yes, J(+)/UJ(-).			
	Extraction: Soil/Sediment 14 days - aqueous 7 days Analysis: 40 days			
2.3	Have any technical holding times grossly (twice the holding time) been exceeded? If yes, J(+)/R(-).			

Note:

3.0 Blanks (Method Blanks and Field Blanks)

(Code x - Field Blank Contamination, Code z - Method blank contamination)

		Yes	No	NA
3.1	Is a Method Blank Summary form present for each batch?			
3.2	Do any method blanks have positive results (TCL)?			
3.3	Do any field/rinse/equipment blanks have positive results (TCL)?			x
	Action: Positive sample results <5X the blank concentration should be qualified "U". The result should be elevated to the RL for estimate (laboratory "J" flagged) concentrations.			
3.4	If Level IV, review raw data and verify all detections for blanks were reported.			x

Note:

4.0 GC/ECD Instrument Performance Check (Code b)

4.1	Are Endrin and 4,4'-DDT breakdown forms present?			
4.2	Have all samples been analyzed within twelve hours of the performance check sample?			
	If no, the data for the affected standards, blanks, field samples or QC samples are rejected "R".			
4.3	Have percent breakdown criteria < (15%) for endrin and 4,4'-DDT been met?			
	If no, all standards, blanks, field samples and QC samples are rejected "R".			

Note:

5.0 Initial Calibration (Code r)

		Yes	No	NA
5.1	Are Initial Calibration summary forms present and complete for each instrument used?			
5.2	Are response factors stable (%RSD values < 20% or >0.995) over the concentration range of the instrument			
	If not, J(+)/ UJ(-). In extreme cases, the reviewer may flag non-detects "R".			
5.3	If Level IV, recalculate a sample of RRFs and %RSDs to verify correct calculations are being made.			x

Note:

6.0 Continuing Calibration (Code c)

		Yes	No	NA
6.1	Are Continuing Calibration Summary forms present and complete?			x
6.2	Has a continuing calibration standard been analyzed every 12 hours?			
6.3	Do any compounds have a % difference (or % drift for quantitation from a curve) (%D) between initial and continuing calibration CF outside QC limits (%D < 15%)?	x		
	If yes, a marginal increase in response >20% then J(+) only; a decrease in response then J(+)/ UJ(-). For %D > 50% flag R.			
6.4	If Level IV, calculate a sample of CFs and %Ds to verify correct calculations.			x

Note: The grand mean exception was applied to continuing calibration verification standards in this package. The rule is described in Method SW-846 and states that when on or more compounds fails to meet acceptance criteria, the initial calibration (ICAL) may be used for quantitation if the average percent difference (%D) of all the compounds in the CCV is less than or equal to 15%. A calculation of the %D for each target compound and a calculation of the grand mean for specific CCVs. All grand mean calculations were less than 15%, except the closing CCV in the first analysis failed to meet acceptance criteria, the samples were ran at a dilution on a second instrument and the CCV passed acceptance criteria. All samples analyzed were qualified, all detected analytes were qualified estimated "J" and all non-detected analytes "UJ".

Field ID	Analyte(s)	Qualification	Run #	Justification
SED-SA2-GMCS-STATION 2	All Pesticides	J/UJ	680-40008	closing CCV outside QC limits
SED-SA2-GMCS-STATION 3	All Pesticides	UJ	680-40008	closing CCV outside QC limits
SED-SA2-GMCS-STATION 4	All Pesticides	UJ	680-40008	closing CCV outside QC limits
SED-SA2-GMCS-STATION 5	All Pesticides	J/UJ	680-40008	closing CCV outside QC limits
SED-SA2-GMCS-STATION 5 DUP	All Pesticides	UJ	680-40008	closing CCV outside QC limits
SED-SA2-GMCS-STATION 9	All Pesticides	UJ	680-40008	closing CCV outside QC limits

7.0 Surrogate Recovery (Code s)

		Yes	No	NA
7.1	Are all samples listed on the appropriate Surrogate Recovery Summary Form ?			
7.2	Are surrogate recoveries within acceptance criteria specified in the QAPP for all samples?			
7.3	If No in Section 7.2, were these sample(s) or method blank(s) reanalyzed?		x	
7.4	If No in Section 7.3, is any sample dilution factor greater than 10? (Surrogate recoveries may be diluted out.)		x	

	> UCL	10% to LCL	< 10%
Positive	J	J	J
Non-detect	None	UJ	R

Note: Samples in analysis 680-40011 were diluted and ran on a different instrument, this caused the surrogates to be diluted out of the samples. The samples from this batch were not used as part of this SDG. The original samples were part of analysis batch 680-40008 and all surrogates were within evaluation criteria, but the closing CCV was outside of evaluation criteria. The samples from the original run were used as part of this review, due to the all surrogates within evaluation criteria. All samples were previously qualified due to continuing calibration. No additional qualifications were required.

8.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD) or one MS with a Sample Duplicate (Code m - recovery, Code d - RPD)

		Yes	No	NA
8.1	Is a Matrix Spike/Matrix Spike Duplicate recovery form present?			
8.2	Are MS/MSDs analyzed at the required frequency of one matrix spike per ten samples and a duplicate per twenty for each matrix?			
8.3	Are all MS/MSD %Rs and RPDs within acceptance criteria Specified in the QAPP?		x	
	Using informed professional judgment, the data reviewer should use the MS and MSD results in conjunction with other QC criteria and determine the need for qualification of the data for samples *from the same site/matrix.* Recoveries <10% may require rejection. RPD failures may be flagged "J" (+ only)			

Note: Endrin (MSD 38%), Endosulfan sulfate (46/49%), 4,4'-DDT (MS 22%), Endrin ketone (24/20%), and alpha-Chlordane (MSD 38%) had MS/MSD recoveries outside the evaluation criteria. All samples were previously qualified due to continuing calibration. No additional qualifications were required.

9.0 Laboratory Control Sample (LCS/LCSD) (Code l - LCS recovery Code e - RPD)

		Yes	No	NA
9.1	Is an LCS recovery form present?			
9.2	Is an LCS analyzed at the required frequency of one per twenty field samples for each matrix?			
9.3	Are all LCS %Rs and RPDs within acceptance criteria specified in the QAPP?			
9.4	If Level IV, verify the % recoveries are calculated correctly.			x
	Action for specific compound outside the acceptance criteria: %R>UCL, J(+) only; <LCL, J(+)/UJ(-); <30% J(+)/R(-). RPD failures should be flagged "J" (+ only)			

Note:

10.0 TCL Identification (Code w)

		Yes	No	NA
10.1	Is the relative retention time (RRT) of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration?			

Note: All data was qualified due to closing continuing calibration failing to meet acceptance criteria.

11.0 TCL Quantitation and Reported Detection limits (Code p)

		Yes	No	NA
11.1	Are RLs used consistent with those specified in the QAPP?			
11.2	Are these limits adjusted to reflect dilutions and/ or percent solids as required?			
11.3	Are any positives reported that exceed the linear range of the instrument? If yes, than flag "J".			
11.4	If Level IV, calculate a sample of positive results to verify correct calculations			x

Note:

12.0 Field Duplicate Samples (Code f)

		Yes	No	NA
12.1	Were any field duplicates submitted for analysis?		-	
12.2	Were all RPD or absolute difference values within the control limits outlined in the QAPP?			
	Action: No qualifying action is taken based on field duplicate results, however the data validator should provide a qualitative assessment in the data validation report.			

Note: Sample SED-SA2-GMCS-STATION 5 DUP was the field duplicate of sample SED-SA2-GMCS-STATION 5.

13.0 Data Completeness

			Yes	No	NA
13.1	Is % completeness within the control limits? (Control limit: Check QAPP or use 95% for aqueous sample, 90% for				
13.2	Number of samples:	6			
13.3	Number of target compounds in each analysis:	21			
13.4	Number of results rejected and not reported:	0			
	% Completeness = 100 x ((13.1 x 13.2) - 13.3) / (13.1 x 13.2)				
	% Completeness	**100**			

Note:

DATA VALIDATION WORKSHEET
HERBICIDES ANALYSIS

Reviewer: Tony Sedlacek
Date: 6/5/2006
Laboratory Severn Trent Laboratory - Savannah

Project Name: Sauget - Area 2 Sup. RFI
Project Number: 21561391.00001
SDG No.: SAS043
Review Level: Level III

Major Anomolies:

No samples were rejected

Minor Anomolies:

No qualifications of data were required.

Field IDs:

SED-SA2-GMCS-STATION 2
SED-SA2-GMCS-STATION 3
SED-SA2-GMCS-STATION 4
SED-SA2-GMCS-STATION 5
SED-SA2-GMCS-STATION 5 DUP
SED-SA2-GMCS-STATION 9

1.0 Chain of Custody/Sample Condition

		Yes	No	NA
1.1	Do Chain-of-Custody forms list all samples analyzed?			
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was maintained?			
1.3	Do the Traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data?	x		

Note: The laboratory case narrative indicated the grand mean exception rule was applied to the CCV standards. See Continuing calibration section below.

2.0 Holding Time/ Preservation (Code h)

		Yes	No	NA
2.1	Do sample preservation, collection and storage condition meet method requirement?			
	If samples were not on ice or the ice was melted upon arrival at the laboratory and the temperature of the cooler was elevated (> 10 ^{o}C), then flag all positive results with a "J" and all non-detects "UJ".			
2.2	Have any technical holding times, determined from sampling to date of analysis, been exceeded? (See attached Holding Time Table for sample holding time) If yes, J(+)/UJ(-).			
	Extraction: Soil/Sediment 14 days - aqueous 7 days Analysis: 40 days			
2.3	Have any technical holding times grossly (twice the holding time) been exceeded? If yes, J(+)/R(-).			

Note:

3.0 Blanks (Method Blanks and Field Blanks)

(Code x - Field Blank Contamination, Code z - Method blank contamination)

		Yes	No	NA
3.1	Is a Method Blank Summary form present for each batch?			
3.2	Do any method blanks have positive results?			
3.3	Do any field/rinse/equipment blanks have positive results?			x
	Action: Positive sample results <5X the blank concentration should be qualified "U". The result should be elevated to the RL for estimate (laboratory "J" flagged) concentrations.			
3.4	If Level IV, review raw data and verify all detections for blanks were reported.			x

Note:

4.0 Initial Calibration (Code r)

		Yes	No	NA
4.1	Are Initial Calibration summary forms present and complete for each instrument used?			
4.2	Are calibration factors stable (%RSD values < 20% or >0.995) over the concentration range of the instrument			
	If not, J(+)/ UJ(-). In extreme cases, the reviewer may flag non-detects "R".			
4.3	If Level IV, recalculate a sample of RRFs and %RSDs to verify correct calculations are being made.			x

Note:

5.0 Continuing Calibration (Code c)

		Yes	No	NA
5.1	Are Continuing Calibration Summary forms present and complete?			
5.2	Has a continuing calibration standard been analyzed every 12 hours?			
5.3	Do any compounds have a % difference (or % drift for quantitation from a curve) (%D) between initial and continuing calibration CF outside QC limits (%D < 20%)?	x		
	If yes, a marginal increase in response >20% then J(+) only; a decrease in response then J(+)/ UJ(-). For %D > 50%, flag R.			
5.5	If Level IV, calculate a sample of CFs and %Ds from ave CF to verify correct calculations.			x

Note: The grand mean exception was applied to continuing calibration verification standards in this package. The rule is described in Method SW-846 and states that when on or more compounds fails to meet acceptance criteria, the initial calibration (ICAL) may be used for quantitation if the average percent difference (%D) of all the compounds in the CCV is less than or equal to 15%. A calculation of the %D for each target compound and a calculation of the grand mean for specific CCVs. All grand mean calculations were less than 15%. No qualifications of data were required.

6.0 Surrogate Recovery (Code s)

		Yes	No	NA
6.1	Are all samples listed on the appropriate Surrogate Recovery Summary Form ?			
6.2	Are surrogate recoveries within acceptance criteria specified in the QAPP for all samples?			
6.3	If No in Section 6.2, were these sample(s) or method blank(s) reanalyzed?			x
6.4	If No in Section 6.3, is any sample dilution factor greater than 10? (Surrogate recoveries may be diluted out.)			x

	> UCL	10% to LCL	< 10%
Positive	J	J	J
Non-detect	None	UJ	R

Note: All surrogate recoveries within evaluation criteria.

7.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD) or one MS with a Sample Duplicate (Code m - recovery, Code d - RPD)

		Yes	No	NA
7.1	Is a Matrix Spike/Matrix Spike Duplicate recovery form present?			
7.2	Are MS/MSDs analyzed at the required frequency of one matrix spike per ten samples and a duplicate per twenty for each matrix?			
7.3	Are all MS/MSD %Rs and RPDs within acceptance criteria Specified in the QAPP?			
	Using informed professional judgment, the data reviewer should use the MS and MSD results in conjunction with other QC criteria and determine the need for qualification of the data for samples *from the same site/matrix* . Recoveries <10% may require rejection. RPD failures may be flagged "J" (+ only)			

Note: Sample SED-SA2-GMCS-STATION 9 was spiked and analyzed for herbicides.

8.0 Laboratory Control Sample (LCS/LCSD) (Code l - LCS recovery Code e - RPD)

		Yes	No	NA
8.1	Is an LCS recovery form present?			
8.2	Is an LCS analyzed at the required frequency of one per twenty field samples for each matrix?			
8.3	Are all LCS %Rs and RPDs within acceptance criteria specified in the QAPP?			
8.4	If Level IV, verify the % recoveries are calculated correctly.			x
	Action for specific compound outside the acceptance criteria: %R>UCL, J(+) only; <LCL, J(+)/UJ(-); <30% J(+)/R(-). RPD failures should be flagged "J" (+ only)			

Note: All LCS recoveries within evaluation criteria.

9.0 TCL Identification (Code w)

		Yes	No	NA
9.1	Is the relative retention time (RRT) of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration?			

Note:

10.0 TCL Quantitation and Reported Detection limits (Code p)

		Yes	No	NA
10.1	Are RLs used consistent with those specified in the QAPP?			
10.2	Are these limits adjusted to reflect dilutions and/ or percent solids as required?			x
10.3	Are any positives reported that exceed the linear range of the instrument? If yes, than flag "J".			
10.4	If Level IV, calculate a sample of positive results to verify correct calculations			x

Note: No dilutions were required for this data package.

11.0 Field Duplicate Samples (Code f)

		Yes	No	NA
11.1	Were any field duplicates submitted for herbicide analysis?			
11.2	Were all RPD or absolute difference values within the control limits outlined in the QAPP?			
	Action: No qualifying action is taken based on field duplicate results, however the data validator should provide a qualitative assessment in the data validation report.			

Note: Sample SED-SA2-GMCS-STATION 5 DUP was the field duplicate of sample SED-SA2-GMCS-STATION 5.

12.0 Data Completeness

			Yes	No	NA
12.1	Is % completeness within the control limits? (Control limit: Check QAPP or use 95% for aqueous sample, 90%				
12.2	Number of samples:	6			
12.3	Number of target compounds in each analysis:	10			
12.4	Number of results rejected and not reported:	0			
	% Completeness = 100 x ((12.1 x 12.2) - 12.3) / (12.1 x 12.2)				
	% Completeness	**100**			

Note:

DATA VALIDATION WORKSHEET - Level III Review
Inorganic - ICP, ICP-MS, GFAA, and CVAA

Reviewer: Tony Sedlacek
Date: 6/5/2006
Laboratory Severn Trent Laboratory - Savannah

Project Name: Sauget - Area 2 Sup. RFI
Project Number: 21561391.00001
SDG No.: SAS043
Review Level: Level III

Major Anomolies:

No samples were rejected

Minor Anomolies:

Samples required qualification due to lab duplicate RPD > 35%, high/low spike recovery, serial dilution, and blank contamination.

Field IDs:

SED-SA2-GMCS-STATION 2
SED-SA2-GMCS-STATION 3
SED-SA2-GMCS-STATION 4
SED-SA2-GMCS-STATION 5
SED-SA2-GMCS-STATION 5 DUP
SED-SA2-GMCS-STATION 9

1.0 Chain of Custody/Sample Condition/Raw Data

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
1.1	Do Chain-of-Custody forms list all samples that were analyzed?	X			X			X			X		
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was maintaine	X			X			X			X		
1.3	Do the traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data?		X			X			X			X	
1.4	Does sample preservation, collection and storage meet method requirement? (water samples: with Nitric Acid to pH < 2, and soil/sediment samples: 4 °C ± °C)	X			X			X			X		
1.5	Are the digestion logs present and complete with pH values, sample weights, dilutions, final volumes. % solids (for soil samples), and preparation dates? For any missing or incomplete documentation, contact the laboratory for explanation/resubmittal.	X			X			X			X		

Note:

The laboratory case narrative indicated that sample SED-SA2-GMCS-STATION 5 DUP was used as the batch MS/MSD for ICP metals analysis.
The MS/MSD percent recoveries were outside the control limits for cadmium, copper, lead, magnesium, manganese, aluminum, calcium, iron and zinc.
The serial dilution exceeded the control limits for potassium, and zinc for the same sample. Although not indicated in the case narrative, sodium was detected in the prep blank for metals analysis.
Also, the laboratory duplicate sample SED-SA2-GMCS-STATION 5 DU had RPD values >35%, and the field duplicate sample SED-SA2-GMCS-STATION 5 DUP had RPD values > 50% for metals.

2.0 Holding Time (Code h)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
2.1	Have any technical holding times, determined from date of collection to date of analysis, been exceeded? (Hg: 28days, other metals: 6 months) See attached Holding Time Table. Action: J(+)/UJ(-). If the holding times are grossly exceeded (twice the holding time criteria) J(+)/R(-).		X			X			X			X	

Note:

All samples were analyzed within holding time criteria.

3.0 Instrument Calibration (Code c)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
3.1	Are sufficient standards included in the calibration curve? (ICP/ICP-MS: blank + one standard; GFAA: blank + three standards; CVAA: blank + five standards)												
3.2	Are the correlation coefficients > 0.995? (for GFAA and CVAA) Action: J(+)/UJ(-).			x									x
3.3	Was an initial calibration verification (ICV) analyzed at the beginning of each analysis? Action: If no, use professional judgment to determine affect on the data and note in reviewer narrative.												
3.4	Was continuing calibration verification (CCV) performed every 10 analysis or every 2 hours, whichever is more frequent? Action: If no, use professional judgment to determine affect on the data and note in reviewer narrative.												
3.5	Are all calibration standard percent recoveries (ICV and CCV) within the control limits? Mercury (80%-120%) and other Metals (90%-110%).												

Action:

	R(+/-)	J(+)/UJ(-)	J(+)	R(+)
Mercury	< 65%	65% - 79%	121% - 135%	> 135%
Other Metals	< 75%	75% - 89%	111% - 125%	> 125%

Note: %R values are given for CVAA-Hg instead of correlation coefficients. The %R are within control limits. No qualifications of data were required.

4.0 Blanks (Code o - Calibration blank failure, Code p - Preparation blank failure, Code x - Field blank failure)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
4.1	Were preparation blank (PB) prepared at the appropriate frequency (one per 20 samples, per batch, per matrix and per level)?												
4.2	Are there reported PB values > + IDL? Action: If yes, action level of 5 times the blank value are determined for positive and negative blank values.	x											
4.3	Were initial calibration blanks (ICB) analyzed? Action: If no, use professional judgment to determine affect on the data note in reviewer narrative.												
4.4	Were continuing calibration blanks (CCB) analyzed after every 10 samples or every 2 hours whichever is more frequent? Action: If no, use professional judgment to determine affect on the data to note in reviewer narrative.												
4.5	Are there reported ICB or CCB values > + IDL? Action: If yes, action level of 5 times the blank value are determined for positive and negative blank values.												
4.6	Are there samples with concentrations less than five times the highest level in associated blanks? Action: If yes, U at reported concentration.												
4.7	Are there samples with non-detect results or with concentrations less than five times the most negative value in associated blanks? Action; If yes, J(+)/UJ(-).												

Note: The analyte sodium was detected in the prep blank. All associated samples had sodium detected in the sample, these samples were all qualified as nondected "U", due to the results are less than 5x the prep blank concentration.

Field ID	Analyte(s)	Qualification	Run#		Justification	
SED-SA2-GMCS-STATION 2	Sodium	U	680-39927		Blank contamination	
SED-SA2-GMCS-STATION 3	Sodium	U	680-39927		Blank contamination	
SED-SA2-GMCS-STATION 4	Sodium	U	680-39927		Blank contamination	
SED-SA2-GMCS-STATION 5	Sodium	U	680-39927		Blank contamination	
SED-SA2-GMCS-STATION 5 DUP	Sodium	U	680-39927		Blank contamination	
SED-SA2-GMCS-STATION 9	Sodium	U	680-39927		Blank contamination	

5.0 ICP Interference Check Sample (ICS) (Code n)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
5.1	Was ICS AB analyzed at beginning of each ICP run (or at least twice every 8 hours), and at the beginning or once every 8 hours (whichever is more frequent) for ICP-MS?												
5.2	Are the ICS AB recoveries within 80% - 120%?												
5.3	Are the results for unspiked analytes (in ICS A) < + IDL?												
5.4	If not, are the associated sample Al, Ca, Fe, and Mg concentrations less than the level in the ICS?												

Action:

Not Spiked Analytes		Spiked analytes (ICS AB analytes)		
< -IDL	> IDL	< 50%	50% - 79%	> 120%
UJ(-)	J(+)	R(+/-)	J(+)/UJ(-)	J(+)

Note:

6.0 Laboratory Control Sample (LCS) (Code l - Recovery, Code e - RPD)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
6.1	Was an LCS prepared and analyzed at the correct frequency (one per 20 samples, per batch, per matrix and per level)? Action: If no, J(+) any sample not associated with LCS results.												
6.2	Is any LCS recovery outside the control limits? (Aqueous limits: 80% - 120% - except Ag and Sb; Solid limits: as per EPA-EMSL/LV)												

Action:

Solid		Aqueous		
< LCL	> UCL	< 50%	50% - 79%	> 120%
J(+)/UJ(-)	J(+)	R(+/-)	J(+)/UJ(-)	J(+)

Note: All recoveries were within QC criteria.

7.0 Laboratory Duplicates (Code k)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
7.1	Were Laboratory duplicates prepared and analyzed at the correct frequency (one per 20 samples, per batch, per matrix and per level)? Action: If no, J(+), with professional judgment, analytes not associated with Duplicate results.												
7.2	Was a field blank used for the duplicate analysis? Action: If yes, J(+) with professional judgment. Note in worksheet.												
7.3	Are all analyte duplicate results within control? (RPD values < 20% or difference < ± PQL for aqueous, and RPD < 35% or difference < ± 2 X PQL for solids)? Action: If no, J(+). Note: RPD criteria is used when both sample and duplicate results are > 5 X IDL.												

Note: Sample SED-SA2-GMCS-STATION 5 DU was analyzed as a duplicate. The following analytes had an RPD value greater than 35% for solids: Aluminum (55.6%), Calcium (75.6%), Magnesium (38.5%), Manganese (37.0%), and Zinc (38.0%). These analytes in all associated samples were qualified as estimated "J".

Field ID	Analyte(s)	Qualification	Run#	Justification
SED-SA2-GMCS-STATION 5 DUP	Aluminum	J	680-39927	Lab Duplicate RPD >35%.
SED-SA2-GMCS-STATION 5 DUP	Calcium	J	680-39927	Lab Duplicate RPD >35%.
SED-SA2-GMCS-STATION 5 DUP	Magnesium	J	680-39927	Lab Duplicate RPD >35%.
SED-SA2-GMCS-STATION 5 DUP	Manganese	J	680-39927	Lab Duplicate RPD >35%.
SED-SA2-GMCS-STATION 5 DUP	Zinc	J	680-39927	Lab Duplicate RPD >35%.

8.0 Spike Sample Analysis -Pre-Digestion (Code m - Recovery, Code d - RPD)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
8.1	Was a spiked sample prepared and analyzed at the correct frequency (one per 20 samples, per batch, per matrix and per level)? Action: If no, J(+), with professional judgment, analytes not associated with matrix spike results.												
8.2	**Was a field blank used for the MS analysis? Action: If yes, J(+) with professional judgment. Note in worksheet.** Note: Matrix spike analysis may be performed on a field blank when it is the only aqueous sample in an SDG.												
8.3	For all analytes with sample concentration < 4 x spike concentration, are spike recoveries within the control limit of 75-125%? (No control limit applies to analytes with concentration > 4 x spike concentration.)		x										

	%R > 125%	30% < %R < 74%	%R < 30%
Positive	J	J	J
Non-detect	None	UJ	R

Note: Sample SED-SA2-GMCS-STATION 5 DUPS and SED-SA2-GMCS-STATION 5 DUPSD were spiked and analyzed. The following analytes had spike recoveries outside of the control limit of 75-125%: Cadmium (57%), Lead (65%), Magnesium (26%), Manganese (22%), and Copper (132%). These analytes in all associated samples were qualified as estimated "J". Samples Magnesium and Manganese were previously qualified due to lab duplicate RPD > 35%, no further qualifications are required.

Field ID	Analyte(s)	Qualification	Run#	Justification
SED-SA2-GMCS-STATION 5 DUP	Cadmium	J	680-39927	Low Spike Recovery
SED-SA2-GMCS-STATION 5 DUP	Lead	J	680-39927	Low Spike Recovery
SED-SA2-GMCS-STATION 5 DUP	Copper	J	680-39927	High Spike Recovery

9.0 Instrument Detection Limits (IDL)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
9.1	Are all IDL equal to or less than the reporting limits specified?		x									x	

Note: Due to high levels of target analytes the RLs were all raised, and are higher than the IDLs.

10.0 ICP Serial Dilutions (Code s)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
10.1	Were serial dilutions performed?												
10.2	Was a five-fold dilution performed?												
10.3	Did the serial dilution results agree within 10% for analyte concentration > 50 x the IDL in the original sample? If no, J(+).												

Note: Samples SED-SA2-GMCS-STATION 5 DUP was analyzed at a serial dilution, Potassium and Zinc results were greater than 10%, therefore these analytes were qualified as estimated "J". The sample zinc was previously qualified for lab duplicate RPD>35%, no further qualifications were required.

Field ID	Analyte(s)	Qualification	Run#	Justification
SED-SA2-GMCS-STATION 5 DUP	Potassium	J	680-39927	Serial Dilution results %D >10%

11.0 Field Duplicate Samples (Code f)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
11.1	Were any field duplicates submitted for metal analysis?												
11.2	Are all field duplicate results within control? (For aqueous sample, RPD values < 35% or difference < ±2 x PQL and For solids, RPD < 50% or difference < ±4 x PQL)												

Note: The following analyte Zinc (54%) had an RPD greater than 50% in sample SED-SA2-GMCS-STATION 5 and its duplicate sample SED-SA2-GMCS-STATION 5 DUP. Zinc was previously qualified for lab duplicate RPD>35%, no further qualifications were required.

12.0 Result Verification (Code Q)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
12.1	Were all results and detection limits for solid-matrix samples reported on a dry-weight basis?												
12.2	Were all dilution reflected in the positive results and detection limits?			x									x

Note: All samples were ran at (1:1) dilutions.

13.0 Data Completeness

13.1	Is % completeness within the control limits? (Control limit: Check QAPP or use 95% for aqueous sample, 90% for soil sample)												
13.2	Number of samples:	6			0			0			6		
13.3	Number of target compounds in each analysis:	22			0			0			1		
13.4	Number of results rejected and not reported:	0			0			0			0		
	% Completeness = 100 x ((13.1 x 13.2) - 13.3) / (13.1 x 13.2)												
	% Completeness	**100**			##			###			**100**		

Note:

URS

Data Tables

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
March 2006

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	VOCs	1,1,1-Trichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	VOCs	1,1,2,2-Tetrachloroethane	1	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	VOCs	1,1,2-Trichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	VOCs	1,1-Dichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	VOCs	1,1-Dichloroethylene	1	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	VOCs	1,2-Dichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	VOCs	1,2-Dichloroethene (total)	2	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	VOCs	1,2-Dichloropropane	1	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	VOCs	2-Butanone (MEK)	10	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	VOCs	4-Methyl-2-pentanone (MIBK)	10	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	VOCs	Acetone	25	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	VOCs	Benzene	1	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	VOCs	Bromodichloromethane	1	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	VOCs	Bromoform	1	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	VOCs	Bromomethane	1	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	VOCs	Carbon Disulfide	2	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	VOCs	Carbon Tetrachloride	1	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	VOCs	Chlorobenzene	1	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	VOCs	Chlorodibromomethane	1	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	VOCs	Chloroethane	1	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	VOCs	Chloroform	1	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	VOCs	Chloromethane	1	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	VOCs	cis-1,3-Dichloropropene	1	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	VOCs	Dichloromethane	5	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	VOCs	Ethylbenzene	1	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	VOCs	Methyl N-Butyl Ketone	10	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	VOCs	Styrene (Monomer)	1	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	VOCs	Tetrachloroethene	1	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	VOCs	Toluene	1	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	VOCs	trans-1,3-Dichloropropene	1	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	VOCs	Trichloroethene	1	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	VOCs	Vinyl chloride	1	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	VOCs	Xylenes, Total	2	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	1,2,4-Trichlorobenzene	9.6	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	1,2-Dichlorobenzene	9.6	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	1,3-Dichlorobenzene	9.6	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	1,4-Dichlorobenzene	9.6	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	9.6	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	2,4,5-Trichlorophenol	9.6	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	2,4,6-Trichlorophenol	9.6	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	2,4-Dichlorophenol	9.6	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	2,4-Dimethylphenol	9.6	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	2,4-Dinitrophenol	48	ug/L	U	UJ	C

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
March 2006

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	2,4-Dinitrotoluene	9.6	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	2,6-Dinitrotoluene	9.6	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	2-Chloronaphthalene	9.6	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	2-Chlorophenol	9.6	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	2-Methylnaphthalene	9.6	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	2-Methylphenol (o-Cresol)	9.6	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	2-Nitroaniline	48	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	2-Nitrophenol	9.6	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	3 & 4 Methylphenol	9.6	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	3,3'-Dichlorobenzidine	19	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	3-Nitroaniline	48	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	4,6-Dinitro-2-methylphenol	48	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	4-Bromophenyl Phenyl Ether	9.6	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	4-Chloro-3-methylphenol	9.6	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	4-Chlorophenyl Phenyl Ether	9.6	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	4-Nitrophenol	48	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	Acenaphthene	9.6	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	Acenaphthylene	9.6	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	Anthracene	9.6	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	Benzo(a)anthracene	9.6	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	Benzo(a)pyrene	9.6	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	Benzo(b)fluoranthene	9.6	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	Benzo(g,h,i)perylene	9.6	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	Benzo(k)fluoranthene	9.6	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	Benzyl Butyl Phthalate	9.6	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	bis(2-Chloroethoxy)methane	9.6	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	bis(2-Chloroethyl)ether	9.6	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	bis(2-Ethylhexyl)phthalate	9.6	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	Carbazole	9.6	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	Chrysene	9.6	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	Dibenzo(a,h)anthracene	9.6	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	Dibenzofuran	9.6	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	Diethyl Phthalate	9.6	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	Dimethyl Phthalate	9.6	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	Di-n-butylphthalate	9.6	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	Di-n-octylphthalate	9.6	ug/L	U	UJ	C
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	Dinoseb	9.6	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	Fluoranthene	9.6	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	Fluorene	9.6	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	Hexachlorobenzene	9.6	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	Hexachlorobutadiene	9.6	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	Hexachlorocyclopentadiene	9.6	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	Hexachloroethane	9.6	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	Indeno(1,2,3-cd)pyrene	9.6	ug/L	U		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	Isophorone	9.6	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	Naphthalene	9.6	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	Nitrobenzene	9.6	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	N-Nitroso-di-n-propylamine	9.6	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	N-Nitrosodiphenylamine	9.6	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	P-Chloroaniline	19	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	Phenanthrene	9.6	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	Phenol	9.6	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	P-Nitroaniline	48	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	SVOCs	Pyrene	9.6	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Pesticides	4,4'-DDD	0.096	ug/L	U	UJ	S
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Pesticides	4,4'-DDE	0.096	ug/L	U	UJ	S
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Pesticides	4,4'-DDT	0.096	ug/L	U	UJ	S
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Pesticides	Aldrin	0.048	ug/L	U	UJ	S
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Pesticides	alpha-BHC	0.048	ug/L	U	UJ	S
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Pesticides	alpha-Chlordane	0.048	ug/L	U	UJ	S
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Pesticides	beta-BHC	0.048	ug/L	U	UJ	S
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Pesticides	delta-BHC	0.048	ug/L	U	UJ	S
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Pesticides	Dieldrin	0.096	ug/L	U	UJ	S
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Pesticides	Endosulfan I	0.048	ug/L	U	UJ	S
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Pesticides	Endosulfan II	0.096	ug/L	U	UJ	S
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Pesticides	Endosulfan Sulfate	0.096	ug/L	U	UJ	S
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Pesticides	Endrin	0.096	ug/L	U	UJ	S
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Pesticides	Endrin Aldehyde	0.096	ug/L	U	UJ	S
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Pesticides	Endrin Ketone	0.096	ug/L	U	UJ	S
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Pesticides	gamma-BHC (Lindane)	0.048	ug/L	U	UJ	S
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Pesticides	gamma-Chlordane	0.048	ug/L	U	UJ	S
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Pesticides	Heptachlor	0.048	ug/L	U	UJ	S
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Pesticides	Heptachlor Epoxide	0.048	ug/L	U	UJ	S
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Pesticides	Methoxychlor	0.48	ug/L	U	UJ	S
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Pesticides	Toxaphene	4.8	ug/L	U	UJ	S
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Herbicides	2,4,5-T	0.49	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Herbicides	2,4,5-TP (Silvex)	0.49	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Herbicides	2,4-D	0.47	ug/L	J		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Herbicides	2,4-DB	0.49	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Herbicides	Dalapon	9.7	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Herbicides	Dicamba	0.49	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Herbicides	Dichlorprop	0.14	ug/L	J	J	R
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Herbicides	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Herbicides	MCPP	120	ug/L	U	UJ	R
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Herbicides	Pentachlorophenol	0.24	ug/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Aluminum	1.5	mg/L			
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Aluminum (Dissolved)	0.2	mg/L	U		

Sauget Area 2
Groundwater Migration Control System
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Antimony	0.02	mg/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Antimony (Dissolved)	0.02	mg/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Arsenic	0.01	mg/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Arsenic (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Barium	0.069	mg/L			
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Barium (Dissolved)	0.056	mg/L			
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Beryllium	0.004	mg/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Beryllium (Dissolved)	0.004	mg/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Cadmium	0.005	mg/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Cadmium (Dissolved)	0.005	mg/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Calcium	64	mg/L			
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Calcium (Dissolved)	64	mg/L			
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Chromium	0.0022	mg/L	J		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Chromium (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Cobalt	0.01	mg/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Cobalt (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Copper	0.0024	mg/L	J		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Copper (Dissolved)	0.0019	mg/L	J		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Iron	1.7	mg/L			
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Iron (Dissolved)	0.05	mg/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Lead	0.0035	mg/L	J		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Lead (Dissolved)	0.005	mg/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Magnesium	27	mg/L			
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Magnesium (Dissolved)	27	mg/L			
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Manganese	0.13	mg/L			
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Manganese (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Mercury	0.0002	mg/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Mercury (Dissolved)	0.0002	mg/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Nickel	0.0026	mg/L	J		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Nickel (Dissolved)	0.04	mg/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Potassium	4.1	mg/L			
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Potassium (Dissolved)	3.8	mg/L			
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Selenium	0.01	mg/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Selenium (Dissolved)	0.0063	mg/L	J		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Silver	0.01	mg/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Silver (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Sodium	37	mg/L			
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Sodium (Dissolved)	39	mg/L			
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Thallium	0.025	mg/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Vanadium	0.0038	mg/L	J		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Vanadium (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Zinc	0.018	mg/L	J	J	P
Surface Water	RIVER	Station 2	SW-SA2-GMCS-STATION 2	3/14/06	Metals	Zinc (Dissolved)	0.0053	mg/L	J B		

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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	VOCs	1,1,1-Trichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	VOCs	1,1,2,2-Tetrachloroethane	1	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	VOCs	1,1,2-Trichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	VOCs	1,1-Dichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	VOCs	1,1-Dichloroethylene	1	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	VOCs	1,2-Dichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	VOCs	1,2-Dichloroethene (total)	2	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	VOCs	1,2-Dichloropropane	1	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	VOCs	2-Butanone (MEK)	10	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	VOCs	4-Methyl-2-pentanone (MIBK)	10	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	VOCs	Acetone	25	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	VOCs	Benzene	1	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	VOCs	Bromodichloromethane	1	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	VOCs	Bromoform	1	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	VOCs	Bromomethane	1	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	VOCs	Carbon Disulfide	2	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	VOCs	Carbon Tetrachloride	1	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	VOCs	Chlorobenzene	1	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	VOCs	Chlorodibromomethane	1	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	VOCs	Chloroethane	1	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	VOCs	Chloroform	1	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	VOCs	Chloromethane	1	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	VOCs	cis-1,3-Dichloropropene	1	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	VOCs	Dichloromethane	5	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	VOCs	Ethylbenzene	1	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	VOCs	Methyl N-Butyl Ketone	10	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	VOCs	Styrene (Monomer)	1	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	VOCs	Tetrachloroethene	1	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	VOCs	Toluene	1	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	VOCs	trans-1,3-Dichloropropene	1	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	VOCs	Trichloroethene	1	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	VOCs	Vinyl chloride	1	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	VOCs	Xylenes, Total	2	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	1,2,4-Trichlorobenzene	9.8	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	1,2-Dichlorobenzene	9.8	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	1,3-Dichlorobenzene	9.8	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	1,4-Dichlorobenzene	9.8	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	9.8	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	2,4,5-Trichlorophenol	9.8	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	2,4,6-Trichlorophenol	9.8	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	2,4-Dichlorophenol	9.8	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	2,4-Dimethylphenol	9.8	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	2,4-Dinitrophenol	49	ug/L	U	UJ	C

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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	2,4-Dinitrotoluene	9.8	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	2,6-Dinitrotoluene	9.8	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	2-Chloronaphthalene	9.8	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	2-Chlorophenol	9.8	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	2-Methylnaphthalene	9.8	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	2-Methylphenol (o-Cresol)	9.8	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	2-Nitroaniline	49	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	2-Nitrophenol	9.8	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	3 & 4 Methylphenol	9.8	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	3,3'-Dichlorobenzidine	20	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	3-Nitroaniline	49	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	4,6-Dinitro-2-methylphenol	49	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	4-Bromophenyl Phenyl Ether	9.8	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	4-Chloro-3-methylphenol	9.8	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	4-Chlorophenyl Phenyl Ether	9.8	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	4-Nitrophenol	49	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	Acenaphthene	9.8	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	Acenaphthylene	9.8	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	Anthracene	9.8	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	Benzo(a)anthracene	9.8	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	Benzo(a)pyrene	9.8	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	Benzo(b)fluoranthene	9.8	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	Benzo(g,h,i)perylene	9.8	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	Benzo(k)fluoranthene	9.8	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	Benzyl Butyl Phthalate	9.8	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	bis(2-Chloroethoxy)methane	9.8	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	bis(2-Chloroethyl)ether	9.8	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	bis(2-Ethylhexyl)phthalate	9.8	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	Carbazole	9.8	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	Chrysene	9.8	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	Dibenzo(a,h)anthracene	9.8	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	Dibenzofuran	9.8	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	Diethyl Phthalate	9.8	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	Dimethyl Phthalate	9.8	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	Di-n-butylphthalate	9.8	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	Di-n-octylphthalate	9.8	ug/L	U	UJ	C
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	Dinoseb	9.8	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	Fluoranthene	9.8	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	Fluorene	9.8	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	Hexachlorobenzene	9.8	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	Hexachlorobutadiene	9.8	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	Hexachlorocyclopentadiene	9.8	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	Hexachloroethane	9.8	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	Indeno(1,2,3-cd)pyrene	9.8	ug/L	U		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	Isophorone	9.8	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	Naphthalene	9.8	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	Nitrobenzene	9.8	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	N-Nitroso-di-n-propylamine	9.8	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	N-Nitrosodiphenylamine	9.8	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	P-Chloroaniline	20	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	Phenanthrene	9.8	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	Phenol	9.8	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	P-Nitroaniline	49	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	SVOCs	Pyrene	9.8	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Pesticides	4,4'-DDD	0.096	ug/L	U	UJ	S
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Pesticides	4,4'-DDE	0.096	ug/L	U	UJ	S
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Pesticides	4,4'-DDT	0.096	ug/L	U	UJ	S
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Pesticides	Aldrin	0.048	ug/L	U	UJ	S
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Pesticides	alpha-BHC	0.048	ug/L	U	UJ	S
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Pesticides	alpha-Chlordane	0.048	ug/L	U	UJ	S
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Pesticides	beta-BHC	0.048	ug/L	U	UJ	S
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Pesticides	delta-BHC	0.048	ug/L	U	UJ	S
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Pesticides	Dieldrin	0.096	ug/L	U	UJ	S
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Pesticides	Endosulfan I	0.048	ug/L	U	UJ	S
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Pesticides	Endosulfan II	0.096	ug/L	U	UJ	S
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Pesticides	Endosulfan Sulfate	0.096	ug/L	U	UJ	S
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Pesticides	Endrin	0.096	ug/L	U	UJ	S
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Pesticides	Endrin Aldehyde	0.096	ug/L	U	UJ	S
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Pesticides	Endrin Ketone	0.096	ug/L	U	UJ	S
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Pesticides	gamma-BHC (Lindane)	0.048	ug/L	U	UJ	S
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Pesticides	gamma-Chlordane	0.048	ug/L	U	UJ	S
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Pesticides	Heptachlor	0.048	ug/L	U	UJ	S
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Pesticides	Heptachlor Epoxide	0.048	ug/L	U	UJ	S
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Pesticides	Methoxychlor	0.48	ug/L	U	UJ	S
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Pesticides	Toxaphene	4.8	ug/L	U	UJ	S
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Herbicides	2,4,5-T	0.48	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Herbicides	2,4,5-TP (Silvex)	0.48	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Herbicides	2,4-D	0.48	ug/L	J		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Herbicides	2,4-DB	0.48	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Herbicides	Dalapon	9.6	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Herbicides	Dicamba	0.48	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Herbicides	Dichlorprop	0.13	ug/L	J	J	R
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Herbicides	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Herbicides	MCPP	120	ug/L	U	UJ	R
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Herbicides	Pentachlorophenol	0.24	ug/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Aluminum	1.3	mg/L			
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Aluminum (Dissolved)	0.2	mg/L	U		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Antimony	0.02	mg/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Antimony (Dissolved)	0.02	mg/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Arsenic	0.01	mg/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Arsenic (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Barium	0.061	mg/L			
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Barium (Dissolved)	0.057	mg/L			
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Beryllium	0.004	mg/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Beryllium (Dissolved)	0.004	mg/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Cadmium	0.005	mg/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Cadmium (Dissolved)	0.005	mg/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Calcium	56	mg/L			
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Calcium (Dissolved)	65	mg/L			
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Chromium	0.0018	mg/L	J		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Chromium (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Cobalt	0.00089	mg/L	J		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Cobalt (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Copper	0.0026	mg/L	J		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Copper (Dissolved)	0.002	mg/L	J		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Iron	1.5	mg/L			
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Iron (Dissolved)	0.05	mg/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Lead	0.0025	mg/L	J		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Lead (Dissolved)	0.005	mg/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Magnesium	23	mg/L			
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Magnesium (Dissolved)	28	mg/L			
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Manganese	0.11	mg/L			
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Manganese (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Mercury	0.0002	mg/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Mercury (Dissolved)	0.0002	mg/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Nickel	0.04	mg/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Nickel (Dissolved)	0.04	mg/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Potassium	3.6	mg/L			
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Potassium (Dissolved)	3.9	mg/L			
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Selenium	0.01	mg/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Selenium (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Silver	0.01	mg/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Silver (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Sodium	33	mg/L			
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Sodium (Dissolved)	40	mg/L			
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Thallium	0.025	mg/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Vanadium	0.0037	mg/L	J		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Vanadium (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Zinc	0.013	mg/L	J	J	P
Surface Water	RIVER	Station 3	SW-SA2-GMCS-STATION 3	3/14/06	Metals	Zinc (Dissolved)	0.0082	mg/L	J B		

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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	VOCs	1,1,1-Trichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	VOCs	1,1,2,2-Tetrachloroethane	1	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	VOCs	1,1,2-Trichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	VOCs	1,1-Dichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	VOCs	1,1-Dichloroethylene	1	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	VOCs	1,2-Dichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	VOCs	1,2-Dichloroethene (total)	2	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	VOCs	1,2-Dichloropropane	1	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	VOCs	2-Butanone (MEK)	10	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	VOCs	4-Methyl-2-pentanone (MIBK)	10	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	VOCs	Acetone	25	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	VOCs	Benzene	1	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	VOCs	Bromodichloromethane	1	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	VOCs	Bromoform	1	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	VOCs	Bromomethane	1	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	VOCs	Carbon Disulfide	2	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	VOCs	Carbon Tetrachloride	1	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	VOCs	Chlorobenzene	1	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	VOCs	Chlorodibromomethane	1	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	VOCs	Chloroethane	1	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	VOCs	Chloroform	1	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	VOCs	Chloromethane	1	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	VOCs	cis-1,3-Dichloropropene	1	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	VOCs	Dichloromethane	5	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	VOCs	Ethylbenzene	1	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	VOCs	Methyl N-Butyl Ketone	10	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	VOCs	Styrene (Monomer)	1	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	VOCs	Tetrachloroethene	1	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	VOCs	Toluene	1	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	VOCs	trans-1,3-Dichloropropene	1	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	VOCs	Trichloroethene	1	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	VOCs	Vinyl chloride	1	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	VOCs	Xylenes, Total	2	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	1,2,4-Trichlorobenzene	9.6	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	1,2-Dichlorobenzene	9.6	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	1,3-Dichlorobenzene	9.6	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	1,4-Dichlorobenzene	9.6	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	9.6	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	2,4,5-Trichlorophenol	9.6	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	2,4,6-Trichlorophenol	9.6	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	2,4-Dichlorophenol	9.6	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	2,4-Dimethylphenol	9.6	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	2,4-Dinitrophenol	48	ug/L	U	UJ	C

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	2,4-Dinitrotoluene	9.6	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	2,6-Dinitrotoluene	9.6	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	2-Chloronaphthalene	9.6	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	2-Chlorophenol	9.6	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	2-Methylnaphthalene	9.6	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	2-Methylphenol (o-Cresol)	9.6	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	2-Nitroaniline	48	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	2-Nitrophenol	9.6	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	3 & 4 Methylphenol	9.6	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	3,3'-Dichlorobenzidine	19	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	3-Nitroaniline	48	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	4,6-Dinitro-2-methylphenol	48	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	4-Bromophenyl Phenyl Ether	9.6	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	4-Chloro-3-methylphenol	9.6	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	4-Chlorophenyl Phenyl Ether	9.6	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	4-Nitrophenol	48	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	Acenaphthene	9.6	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	Acenaphthylene	9.6	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	Anthracene	9.6	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	Benzo(a)anthracene	9.6	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	Benzo(a)pyrene	9.6	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	Benzo(b)fluoranthene	9.6	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	Benzo(g,h,i)perylene	9.6	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	Benzo(k)fluoranthene	9.6	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	Benzyl Butyl Phthalate	9.6	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	bis(2-Chloroethoxy)methane	9.6	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	bis(2-Chloroethyl)ether	9.6	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	bis(2-Ethylhexyl)phthalate	9.6	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	Carbazole	9.6	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	Chrysene	9.6	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	Dibenzo(a,h)anthracene	9.6	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	Dibenzofuran	9.6	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	Diethyl Phthalate	9.6	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	Dimethyl Phthalate	9.6	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	Di-n-butylphthalate	9.6	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	Di-n-octylphthalate	9.6	ug/L	U	UJ	C
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	Dinoseb	9.6	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	Fluoranthene	9.6	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	Fluorene	9.6	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	Hexachlorobenzene	9.6	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	Hexachlorobutadiene	9.6	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	Hexachlorocyclopentadiene	9.6	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	Hexachloroethane	9.6	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	Indeno(1,2,3-cd)pyrene	9.6	ug/L	U		

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Groundwater Migration Control System
Surface Water Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	Isophorone	9.6	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	Naphthalene	9.6	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	Nitrobenzene	9.6	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	N-Nitroso-di-n-propylamine	9.6	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	N-Nitrosodiphenylamine	9.6	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	P-Chloroaniline	19	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	Phenanthrene	9.6	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	Phenol	9.6	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	P-Nitroaniline	48	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	SVOCs	Pyrene	9.6	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Pesticides	4,4'-DDD	0.097	ug/L	U	UJ	S
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Pesticides	4,4'-DDE	0.097	ug/L	U	UJ	S
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Pesticides	4,4'-DDT	0.097	ug/L	U	UJ	S
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Pesticides	Aldrin	0.049	ug/L	U	UJ	S
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Pesticides	alpha-BHC	0.049	ug/L	U	UJ	S
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Pesticides	alpha-Chlordane	0.049	ug/L	U	UJ	S
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Pesticides	beta-BHC	0.049	ug/L	U	UJ	S
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Pesticides	delta-BHC	0.049	ug/L	U	UJ	S
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Pesticides	Dieldrin	0.097	ug/L	U	UJ	S
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Pesticides	Endosulfan I	0.049	ug/L	U	UJ	S
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Pesticides	Endosulfan II	0.097	ug/L	U	UJ	S
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Pesticides	Endosulfan Sulfate	0.097	ug/L	U	UJ	S
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Pesticides	Endrin	0.097	ug/L	U	UJ	S
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Pesticides	Endrin Aldehyde	0.097	ug/L	U	UJ	S
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Pesticides	Endrin Ketone	0.097	ug/L	U	UJ	S
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Pesticides	gamma-BHC (Lindane)	0.049	ug/L	U	UJ	S
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Pesticides	gamma-Chlordane	0.049	ug/L	U	UJ	S
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Pesticides	Heptachlor	0.049	ug/L	U	UJ	S
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Pesticides	Heptachlor Epoxide	0.049	ug/L	U	UJ	S
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Pesticides	Methoxychlor	0.49	ug/L	U	UJ	S
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Pesticides	Toxaphene	4.9	ug/L	U	UJ	S
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Herbicides	2,4,5-T	0.49	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Herbicides	2,4,5-TP (Silvex)	0.49	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Herbicides	2,4-D	0.49	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Herbicides	2,4-DB	0.49	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Herbicides	Dalapon	9.7	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Herbicides	Dicamba	0.49	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Herbicides	Dichlorprop	0.49	ug/L	U	UJ	R
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Herbicides	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Herbicides	MCPP	120	ug/L	U	UJ	R
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Herbicides	Pentachlorophenol	0.24	ug/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Aluminum	1.5	mg/L			
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Aluminum (Dissolved)	0.2	mg/L	U		

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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Antimony	0.02	mg/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Antimony (Dissolved)	0.02	mg/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Arsenic	0.01	mg/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Arsenic (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Barium	0.069	mg/L			
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Barium (Dissolved)	0.058	mg/L			
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Beryllium	0.004	mg/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Beryllium (Dissolved)	0.004	mg/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Cadmium	0.005	mg/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Cadmium (Dissolved)	0.005	mg/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Calcium	62	mg/L			
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Calcium (Dissolved)	66	mg/L			
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Chromium	0.0022	mg/L	J		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Chromium (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Cobalt	0.01	mg/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Cobalt (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Copper	0.0029	mg/L	J		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Copper (Dissolved)	0.0018	mg/L	J		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Iron	1.8	mg/L			
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Iron (Dissolved)	0.05	mg/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Lead	0.0045	mg/L	J		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Lead (Dissolved)	0.005	mg/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Magnesium	26	mg/L			
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Magnesium (Dissolved)	29	mg/L			
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Manganese	0.13	mg/L			
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Manganese (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Mercury	0.0002	mg/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Mercury (Dissolved)	0.0002	mg/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Nickel	0.04	mg/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Nickel (Dissolved)	0.0023	mg/L	J		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Potassium	4	mg/L			
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Potassium (Dissolved)	4.1	mg/L			
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Selenium	0.01	mg/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Selenium (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Silver	0.01	mg/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Silver (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Sodium	36	mg/L			
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Sodium (Dissolved)	40	mg/L			
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Thallium	0.025	mg/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Vanadium	0.0042	mg/L	J		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Vanadium (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Zinc	0.018	mg/L	J	J	P
Surface Water	RIVER	Station 4	SW-SA2-GMCS-STATION 4	3/14/06	Metals	Zinc (Dissolved)	0.0049	mg/L	J B		

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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	VOCs	1,1,1-Trichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	VOCs	1,1,2,2-Tetrachloroethane	1	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	VOCs	1,1,2-Trichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	VOCs	1,1-Dichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	VOCs	1,1-Dichloroethylene	1	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	VOCs	1,2-Dichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	VOCs	1,2-Dichloroethene (total)	2	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	VOCs	1,2-Dichloropropane	1	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	VOCs	2-Butanone (MEK)	10	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	VOCs	4-Methyl-2-pentanone (MIBK)	10	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	VOCs	Acetone	25	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	VOCs	Benzene	1	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	VOCs	Bromodichloromethane	1	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	VOCs	Bromoform	1	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	VOCs	Bromomethane	1	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	VOCs	Carbon Disulfide	2	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	VOCs	Carbon Tetrachloride	1	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	VOCs	Chlorobenzene	1	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	VOCs	Chlorodibromomethane	1	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	VOCs	Chloroethane	1	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	VOCs	Chloroform	1	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	VOCs	Chloromethane	1	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	VOCs	cis-1,3-Dichloropropene	1	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	VOCs	Dichloromethane	5	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	VOCs	Ethylbenzene	1	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	VOCs	Methyl N-Butyl Ketone	10	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	VOCs	Styrene (Monomer)	1	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	VOCs	Tetrachloroethene	1	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	VOCs	Toluene	1	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	VOCs	trans-1,3-Dichloropropene	1	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	VOCs	Trichloroethene	1	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	VOCs	Vinyl chloride	1	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	VOCs	Xylenes, Total	2	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	1,2,4-Trichlorobenzene	9.6	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	1,2-Dichlorobenzene	9.6	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	1,3-Dichlorobenzene	9.6	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	1,4-Dichlorobenzene	9.6	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	9.6	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	2,4,5-Trichlorophenol	9.6	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	2,4,6-Trichlorophenol	9.6	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	2,4-Dichlorophenol	9.6	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	2,4-Dimethylphenol	9.6	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	2,4-Dinitrophenol	48	ug/L	U	UJ	C

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	2,4-Dinitrotoluene	9.6	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	2,6-Dinitrotoluene	9.6	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	2-Chloronaphthalene	9.6	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	2-Chlorophenol	9.6	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	2-Methylnaphthalene	9.6	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	2-Methylphenol (o-Cresol)	9.6	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	2-Nitroaniline	48	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	2-Nitrophenol	9.6	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	3 & 4 Methylphenol	9.6	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	3,3'-Dichlorobenzidine	19	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	3-Nitroaniline	48	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	4,6-Dinitro-2-methylphenol	48	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	4-Bromophenyl Phenyl Ether	9.6	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	4-Chloro-3-methylphenol	9.6	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	4-Chlorophenyl Phenyl Ether	9.6	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	4-Nitrophenol	48	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	Acenaphthene	9.6	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	Acenaphthylene	9.6	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	Anthracene	9.6	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	Benzo(a)anthracene	9.6	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	Benzo(a)pyrene	9.6	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	Benzo(b)fluoranthene	9.6	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	Benzo(g,h,i)perylene	9.6	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	Benzo(k)fluoranthene	9.6	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	Benzyl Butyl Phthalate	9.6	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	bis(2-Chloroethoxy)methane	9.6	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	bis(2-Chloroethyl)ether	9.6	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	bis(2-Ethylhexyl)phthalate	9.6	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	Carbazole	9.6	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	Chrysene	9.6	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	Dibenzo(a,h)anthracene	9.6	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	Dibenzofuran	9.6	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	Diethyl Phthalate	9.6	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	Dimethyl Phthalate	9.6	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	Di-n-butylphthalate	9.6	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	Di-n-octylphthalate	9.6	ug/L	U	UJ	C
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	Dinoseb	9.6	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	Fluoranthene	9.6	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	Fluorene	9.6	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	Hexachlorobenzene	9.6	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	Hexachlorobutadiene	9.6	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	Hexachlorocyclopentadiene	9.6	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	Hexachloroethane	9.6	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	Indeno(1,2,3-cd)pyrene	9.6	ug/L	U		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	Isophorone	9.6	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	Naphthalene	9.6	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	Nitrobenzene	9.6	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	N-Nitroso-di-n-propylamine	9.6	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	N-Nitrosodiphenylamine	9.6	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	P-Chloroaniline	19	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	Phenanthrene	9.6	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	Phenol	9.6	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	P-Nitroaniline	48	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	SVOCs	Pyrene	9.6	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Pesticides	4,4'-DDD	0.096	ug/L	U	UJ	S
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Pesticides	4,4'-DDE	0.096	ug/L	U	UJ	S
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Pesticides	4,4'-DDT	0.096	ug/L	U	UJ	S
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Pesticides	Aldrin	0.048	ug/L	U	UJ	S
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Pesticides	alpha-BHC	0.048	ug/L	U	UJ	S
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Pesticides	alpha-Chlordane	0.048	ug/L	U	UJ	S
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Pesticides	beta-BHC	0.048	ug/L	U	UJ	S
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Pesticides	delta-BHC	0.048	ug/L	U	UJ	S
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Pesticides	Dieldrin	0.096	ug/L	U	UJ	S
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Pesticides	Endosulfan I	0.048	ug/L	U	UJ	S
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Pesticides	Endosulfan II	0.096	ug/L	U	UJ	S
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Pesticides	Endosulfan Sulfate	0.096	ug/L	U	UJ	S
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Pesticides	Endrin	0.096	ug/L	U	UJ	S
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Pesticides	Endrin Aldehyde	0.096	ug/L	U	UJ	S
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Pesticides	Endrin Ketone	0.096	ug/L	U	UJ	S
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Pesticides	gamma-BHC (Lindane)	0.048	ug/L	U	UJ	S
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Pesticides	gamma-Chlordane	0.048	ug/L	U	UJ	S
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Pesticides	Heptachlor	0.048	ug/L	U	UJ	S
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Pesticides	Heptachlor Epoxide	0.048	ug/L	U	UJ	S
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Pesticides	Methoxychlor	0.48	ug/L	U	UJ	S
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Pesticides	Toxaphene	4.8	ug/L	U	UJ	S
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Herbicides	2,4,5-T	0.49	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Herbicides	2,4,5-TP (Silvex)	0.49	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Herbicides	2,4-D	0.49	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Herbicides	2,4-DB	0.49	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Herbicides	Dalapon	9.7	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Herbicides	Dicamba	0.49	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Herbicides	Dichlorprop	0.087	ug/L	J	J	R
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Herbicides	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Herbicides	MCPP	120	ug/L	U	UJ	R
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Herbicides	Pentachlorophenol	0.24	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Aluminum	2.4	mg/L			
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Aluminum (Dissolved)	0.2	mg/L	U		

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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Antimony	0.02	mg/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Antimony (Dissolved)	0.02	mg/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Arsenic	0.01	mg/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Arsenic (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Barium	0.078	mg/L			
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Barium (Dissolved)	0.056	mg/L			
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Beryllium	0.004	mg/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Beryllium (Dissolved)	0.004	mg/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Cadmium	0.005	mg/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Cadmium (Dissolved)	0.005	mg/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Calcium	62	mg/L			
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Calcium (Dissolved)	62	mg/L			
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Chromium	0.0034	mg/L	J		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Chromium (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Cobalt	0.001	mg/L	J		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Cobalt (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Copper	0.0032	mg/L	J		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Copper (Dissolved)	0.0018	mg/L	J		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Iron	2.6	mg/L			
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Iron (Dissolved)	0.05	mg/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Lead	0.0039	mg/L	J		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Lead (Dissolved)	0.005	mg/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Magnesium	26	mg/L			
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Magnesium (Dissolved)	26	mg/L			
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Manganese	0.15	mg/L			
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Manganese (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Mercury	0.0002	mg/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Mercury (Dissolved)	0.0002	mg/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Nickel	0.004	mg/L	J		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Nickel (Dissolved)	0.04	mg/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Potassium	4.2	mg/L			
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Potassium (Dissolved)	3.9	mg/L			
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Selenium	0.01	mg/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Selenium (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Silver	0.01	mg/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Silver (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Sodium	35	mg/L			
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Sodium (Dissolved)	37	mg/L			
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Thallium	0.025	mg/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Vanadium	0.0056	mg/L	J		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Vanadium (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Zinc	0.024	mg/L		J	P
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5	3/13/06	Metals	Zinc (Dissolved)	0.0046	mg/L	J B		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	1,1,1-Trichloroethane	1	ug/L	U		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
March 2006

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	1,1,2,2-Tetrachloroethane	1	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	1,1,2-Trichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	1,1-Dichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	1,1-Dichloroethylene	1	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	1,2-Dichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	1,2-Dichloroethene (total)	2	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	1,2-Dichloropropane	1	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	2-Butanone (MEK)	10	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	4-Methyl-2-pentanone (MIBK)	10	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	Acetone	25	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	Benzene	1	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	Bromodichloromethane	1	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	Bromoform	1	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	Bromomethane	1	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	Carbon Disulfide	2	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	Carbon Tetrachloride	1	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	Chlorobenzene	1	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	Chlorodibromomethane	1	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	Chloroethane	1	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	Chloroform	1	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	Chloromethane	1	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	cis-1,3-Dichloropropene	1	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	Dichloromethane	5	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	Ethylbenzene	1	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	Methyl N-Butyl Ketone	10	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	Styrene (Monomer)	1	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	Tetrachloroethene	1	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	Toluene	1	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	trans-1,3-Dichloropropene	1	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	Trichloroethene	1	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	Vinyl chloride	1	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	Xylenes, Total	2	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	1,2,4-Trichlorobenzene	9.8	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	1,2-Dichlorobenzene	9.8	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	1,3-Dichlorobenzene	9.8	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	1,4-Dichlorobenzene	9.8	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	9.8	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	2,4,5-Trichlorophenol	9.8	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	2,4,6-Trichlorophenol	9.8	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	2,4-Dichlorophenol	9.8	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	2,4-Dimethylphenol	9.8	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	2,4-Dinitrophenol	49	ug/L	U	UJ	C
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	2,4-Dinitrotoluene	9.8	ug/L	U		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
March 2006

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	2,6-Dinitrotoluene	9.8	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	2-Chloronaphthalene	9.8	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	2-Chlorophenol	9.8	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	2-Methylnaphthalene	9.8	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	2-Methylphenol (o-Cresol)	9.8	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	2-Nitroaniline	49	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	2-Nitrophenol	9.8	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	3 & 4 Methylphenol	9.8	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	3,3'-Dichlorobenzidine	20	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	3-Nitroaniline	49	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	4,6-Dinitro-2-methylphenol	49	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	4-Bromophenyl Phenyl Ether	9.8	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	4-Chloro-3-methylphenol	9.8	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	4-Chlorophenyl Phenyl Ether	9.8	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	4-Nitrophenol	49	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Acenaphthene	9.8	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Acenaphthylene	9.8	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Anthracene	9.8	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Benzo(a)anthracene	9.8	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Benzo(a)pyrene	9.8	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Benzo(b)fluoranthene	9.8	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Benzo(g,h,i)perylene	9.8	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Benzo(k)fluoranthene	9.8	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Benzyl Butyl Phthalate	9.8	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	bis(2-Chloroethoxy)methane	9.8	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	bis(2-Chloroethyl)ether	9.8	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	bis(2-Ethylhexyl)phthalate	9.8	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Carbazole	9.8	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Chrysene	9.8	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Dibenzo(a,h)anthracene	9.8	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Dibenzofuran	9.8	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Diethyl Phthalate	9.8	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Dimethyl Phthalate	9.8	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Di-n-butylphthalate	9.8	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Di-n-octylphthalate	9.8	ug/L	U	UJ	C
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Dinoseb	9.8	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Fluoranthene	9.8	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Fluorene	9.8	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Hexachlorobenzene	9.8	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Hexachlorobutadiene	9.8	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Hexachlorocyclopentadiene	9.8	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Hexachloroethane	9.8	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Indeno(1,2,3-cd)pyrene	9.8	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Isophorone	9.8	ug/L	U		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
March 2006

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Naphthalene	9.8	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Nitrobenzene	9.8	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	N-Nitroso-di-n-propylamine	9.8	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	N-Nitrosodiphenylamine	9.8	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	P-Chloroaniline	20	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Phenanthrene	9.8	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Phenol	9.8	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	P-Nitroaniline	49	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Pyrene	9.8	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Pesticides	4,4'-DDD	0.096	ug/L	U	UJ	S
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Pesticides	4,4'-DDE	0.096	ug/L	U	UJ	S
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Pesticides	4,4'-DDT	0.096	ug/L	U	UJ	S
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Pesticides	Aldrin	0.048	ug/L	U	UJ	S
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Pesticides	alpha-BHC	0.048	ug/L	U	UJ	S
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Pesticides	alpha-Chlordane	0.048	ug/L	U	UJ	S
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Pesticides	beta-BHC	0.048	ug/L	U	UJ	S
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Pesticides	delta-BHC	0.048	ug/L	U	UJ	S
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Pesticides	Dieldrin	0.096	ug/L	U	UJ	S
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Pesticides	Endosulfan I	0.048	ug/L	U	UJ	S
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Pesticides	Endosulfan II	0.096	ug/L	U	UJ	S
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Pesticides	Endosulfan Sulfate	0.096	ug/L	U	UJ	S
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Pesticides	Endrin	0.096	ug/L	U	UJ	S
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Pesticides	Endrin Aldehyde	0.096	ug/L	U	UJ	S
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Pesticides	Endrin Ketone	0.096	ug/L	U	UJ	S
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Pesticides	gamma-BHC (Lindane)	0.048	ug/L	U	UJ	S
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Pesticides	gamma-Chlordane	0.048	ug/L	U	UJ	S
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Pesticides	Heptachlor	0.048	ug/L	U	UJ	S
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Pesticides	Heptachlor Epoxide	0.048	ug/L	U	UJ	S
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Pesticides	Methoxychlor	0.48	ug/L	U	UJ	S
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Pesticides	Toxaphene	4.8	ug/L	U	UJ	S
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Herbicides	2,4,5-T	0.49	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Herbicides	2,4,5-TP (Silvex)	0.49	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Herbicides	2,4-D	0.49	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Herbicides	2,4-DB	0.49	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Herbicides	Dalapon	9.7	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Herbicides	Dicamba	0.49	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Herbicides	Dichlorprop	0.49	ug/L	U	UJ	R
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Herbicides	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Herbicides	MCPP	120	ug/L	U	UJ	R
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Herbicides	Pentachlorophenol	0.24	ug/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Aluminum	2.4	mg/L			
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Aluminum (Dissolved)	0.2	mg/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Antimony	0.02	mg/L	U		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
March 2006

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Antimony (Dissolved)	0.02	mg/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Arsenic	0.01	mg/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Arsenic (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Barium	0.079	mg/L			
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Barium (Dissolved)	0.058	mg/L			
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Beryllium	0.004	mg/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Beryllium (Dissolved)	0.004	mg/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Cadmium	0.005	mg/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Cadmium (Dissolved)	0.005	mg/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Calcium	61	mg/L			
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Calcium (Dissolved)	63	mg/L			
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Chromium	0.003	mg/L	J		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Chromium (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Cobalt	0.00071	mg/L	J		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Cobalt (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Copper	0.0033	mg/L	J		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Copper (Dissolved)	0.002	mg/L	J		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Iron	2.7	mg/L			
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Iron (Dissolved)	0.05	mg/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Lead	0.0055	mg/L			
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Lead (Dissolved)	0.005	mg/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Magnesium	26	mg/L			
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Magnesium (Dissolved)	27	mg/L			
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Manganese	0.16	mg/L			
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Manganese (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Mercury	0.0002	mg/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Mercury (Dissolved)	0.0002	mg/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Nickel	0.0031	mg/L	J		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Nickel (Dissolved)	0.04	mg/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Potassium	4.3	mg/L			
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Potassium (Dissolved)	3.9	mg/L			
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Selenium	0.01	mg/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Selenium (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Silver	0.01	mg/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Silver (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Sodium	35	mg/L			
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Sodium (Dissolved)	38	mg/L			
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Thallium	0.025	mg/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Vanadium	0.0059	mg/L	J		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Vanadium (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Zinc	0.019	mg/L	J	J	P
Surface Water	RIVER	Station 5	SW-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Zinc (Dissolved)	0.0056	mg/L	J B		

Sauget Area 2
Groundwater Migration Control System
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	VOCs	1,1,1-Trichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	VOCs	1,1,2,2-Tetrachloroethane	1	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	VOCs	1,1,2-Trichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	VOCs	1,1-Dichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	VOCs	1,1-Dichloroethylene	1	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	VOCs	1,2-Dichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	VOCs	1,2-Dichloroethene (total)	2	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	VOCs	1,2-Dichloropropane	1	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	VOCs	2-Butanone (MEK)	10	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	VOCs	4-Methyl-2-pentanone (MIBK)	10	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	VOCs	Acetone	25	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	VOCs	Benzene	1	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	VOCs	Bromodichloromethane	1	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	VOCs	Bromoform	1	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	VOCs	Bromomethane	1	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	VOCs	Carbon Disulfide	2	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	VOCs	Carbon Tetrachloride	1	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	VOCs	Chlorobenzene	1	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	VOCs	Chlorodibromomethane	1	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	VOCs	Chloroethane	1	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	VOCs	Chloroform	1	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	VOCs	Chloromethane	1	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	VOCs	cis-1,3-Dichloropropene	1	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	VOCs	Dichloromethane	5	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	VOCs	Ethylbenzene	1	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	VOCs	Methyl N-Butyl Ketone	10	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	VOCs	Styrene (Monomer)	1	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	VOCs	Tetrachloroethene	1	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	VOCs	Toluene	1	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	VOCs	trans-1,3-Dichloropropene	1	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	VOCs	Trichloroethene	1	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	VOCs	Vinyl chloride	1	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	VOCs	Xylenes, Total	2	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	1,2,4-Trichlorobenzene	9.6	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	1,2-Dichlorobenzene	9.6	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	1,3-Dichlorobenzene	9.6	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	1,4-Dichlorobenzene	9.6	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	9.6	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	2,4,5-Trichlorophenol	9.6	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	2,4,6-Trichlorophenol	9.6	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	2,4-Dichlorophenol	9.6	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	2,4-Dimethylphenol	9.6	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	2,4-Dinitrophenol	48	ug/L	U	UJ	C

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	2,4-Dinitrotoluene	9.6	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	2,6-Dinitrotoluene	9.6	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	2-Chloronaphthalene	9.6	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	2-Chlorophenol	9.6	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	2-Methylnaphthalene	9.6	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	2-Methylphenol (o-Cresol)	9.6	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	2-Nitroaniline	48	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	2-Nitrophenol	9.6	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	3 & 4 Methylphenol	9.6	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	3,3'-Dichlorobenzidine	19	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	3-Nitroaniline	48	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	4,6-Dinitro-2-methylphenol	48	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	4-Bromophenyl Phenyl Ether	9.6	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	4-Chloro-3-methylphenol	9.6	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	4-Chlorophenyl Phenyl Ether	9.6	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	4-Nitrophenol	48	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	Acenaphthene	9.6	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	Acenaphthylene	9.6	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	Anthracene	9.6	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	Benzo(a)anthracene	9.6	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	Benzo(a)pyrene	9.6	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	Benzo(b)fluoranthene	9.6	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	Benzo(g,h,i)perylene	9.6	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	Benzo(k)fluoranthene	9.6	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	Benzyl Butyl Phthalate	9.6	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	bis(2-Chloroethoxy)methane	9.6	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	bis(2-Chloroethyl)ether	9.6	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	bis(2-Ethylhexyl)phthalate	9.6	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	Carbazole	9.6	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	Chrysene	9.6	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	Dibenzo(a,h)anthracene	9.6	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	Dibenzofuran	9.6	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	Diethyl Phthalate	9.6	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	Dimethyl Phthalate	9.6	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	Di-n-butylphthalate	9.6	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	Di-n-octylphthalate	9.6	ug/L	U	UJ	C
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	Dinoseb	9.6	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	Fluoranthene	9.6	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	Fluorene	9.6	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	Hexachlorobenzene	9.6	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	Hexachlorobutadiene	9.6	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	Hexachlorocyclopentadiene	9.6	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	Hexachloroethane	9.6	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	Indeno(1,2,3-cd)pyrene	9.6	ug/L	U		

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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	Isophorone	9.6	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	Naphthalene	9.6	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	Nitrobenzene	9.6	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	N-Nitroso-di-n-propylamine	9.6	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	N-Nitrosodiphenylamine	9.6	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	P-Chloroaniline	19	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	Phenanthrene	9.6	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	Phenol	9.6	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	P-Nitroaniline	48	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	SVOCs	Pyrene	9.6	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Pesticides	4,4'-DDD	0.096	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Pesticides	4,4'-DDE	0.096	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Pesticides	4,4'-DDT	0.096	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Pesticides	Aldrin	0.048	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Pesticides	alpha-BHC	0.048	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Pesticides	alpha-Chlordane	0.048	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Pesticides	beta-BHC	0.048	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Pesticides	delta-BHC	0.048	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Pesticides	Dieldrin	0.096	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Pesticides	Endosulfan I	0.048	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Pesticides	Endosulfan II	0.096	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Pesticides	Endosulfan Sulfate	0.096	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Pesticides	Endrin	0.096	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Pesticides	Endrin Aldehyde	0.096	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Pesticides	Endrin Ketone	0.096	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Pesticides	gamma-BHC (Lindane)	0.048	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Pesticides	gamma-Chlordane	0.048	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Pesticides	Heptachlor	0.048	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Pesticides	Heptachlor Epoxide	0.048	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Pesticides	Methoxychlor	0.48	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Pesticides	Toxaphene	4.8	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Herbicides	2,4,5-T	0.48	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Herbicides	2,4,5-TP (Silvex)	0.48	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Herbicides	2,4-D	0.48	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Herbicides	2,4-DB	0.48	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Herbicides	Dalapon	9.6	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Herbicides	Dicamba	0.48	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Herbicides	Dichlorprop	0.48	ug/L	U	UJ	R
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Herbicides	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Herbicides	MCPP	120	ug/L	U	UJ	R
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Herbicides	Pentachlorophenol	0.24	ug/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Aluminum	1.5	mg/L			
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Aluminum (Dissolved)	0.2	mg/L	U		

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Groundwater Migration Control System
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Antimony	0.02	mg/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Antimony (Dissolved)	0.02	mg/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Arsenic	0.01	mg/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Arsenic (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Barium	0.068	mg/L			
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Barium (Dissolved)	0.056	mg/L			
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Beryllium	0.004	mg/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Beryllium (Dissolved)	0.004	mg/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Cadmium	0.005	mg/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Cadmium (Dissolved)	0.005	mg/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Calcium	63	mg/L			
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Calcium (Dissolved)	65	mg/L			
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Chromium	0.0019	mg/L	J		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Chromium (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Cobalt	0.01	mg/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Cobalt (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Copper	0.0025	mg/L	J		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Copper (Dissolved)	0.0024	mg/L	J		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Iron	1.7	mg/L			
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Iron (Dissolved)	0.05	mg/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Lead	0.0039	mg/L	J		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Lead (Dissolved)	0.005	mg/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Magnesium	26	mg/L			
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Magnesium (Dissolved)	28	mg/L			
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Manganese	0.13	mg/L			
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Manganese (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Mercury	0.0002	mg/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Mercury (Dissolved)	0.0002	mg/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Nickel	0.0024	mg/L	J		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Nickel (Dissolved)	0.0019	mg/L	J		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Potassium	4	mg/L			
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Potassium (Dissolved)	3.8	mg/L			
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Selenium	0.01	mg/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Selenium (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Silver	0.01	mg/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Silver (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Sodium	37	mg/L			
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Sodium (Dissolved)	39	mg/L			
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Thallium	0.025	mg/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Vanadium	0.004	mg/L	J		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Vanadium (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Zinc	0.015	mg/L	J	J	P
Surface Water	RIVER	Station 9	SW-SA2-GMCS-STATION 9	3/14/06	Metals	Zinc (Dissolved)	0.0045	mg/L	J B		

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	VOCs	1,1,1-Trichloroethane	13	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	VOCs	1,1,2,2-Tetrachloroethane	13	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	VOCs	1,1,2-Trichloroethane	13	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	VOCs	1,1-Dichloroethane	13	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	VOCs	1,1-Dichloroethylene	13	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	VOCs	1,2-Dichloroethane	13	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	VOCs	1,2-Dichloroethene (total)	27	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	VOCs	1,2-Dichloropropane	13	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	VOCs	2-Butanone (MEK)	62	ug/Kg	J		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	VOCs	4-Methyl-2-pentanone (MIBK)	66	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	VOCs	Acetone	280	ug/Kg			
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	VOCs	Benzene	65	ug/Kg			
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	VOCs	Bromodichloromethane	13	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	VOCs	Bromoform	13	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	VOCs	Bromomethane	13	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	VOCs	Carbon Disulfide	13	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	VOCs	Carbon Tetrachloride	13	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	VOCs	Chlorobenzene	19000	ug/Kg	D		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	VOCs	Chlorodibromomethane	13	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	VOCs	Chloroethane	13	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	VOCs	Chloroform	13	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	VOCs	Chloromethane	13	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	VOCs	cis-1,2-Dichloroethene	13	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	VOCs	cis-1,3-Dichloropropene	13	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	VOCs	Dichloromethane	13	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	VOCs	Ethylbenzene	95	ug/Kg			
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	VOCs	Methyl N-Butyl Ketone	66	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	VOCs	Styrene (Monomer)	13	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	VOCs	Tetrachloroethene	13	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	VOCs	Toluene	65	ug/Kg			
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	VOCs	trans-1,2-Dichloroethene	13	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	VOCs	trans-1,3-Dichloropropene	13	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	VOCs	Trichloroethene	13	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	VOCs	Vinyl chloride	13	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	VOCs	Xylenes, Total	89	ug/Kg			
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	1,2,4-Trichlorobenzene	3400	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	1,2-Dichlorobenzene	3400	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	1,3-Dichlorobenzene	3400	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	1,4-Dichlorobenzene	1200	ug/Kg	J		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	3400	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	2,4,5-Trichlorophenol	3400	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	2,4,6-Trichlorophenol	3400	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	2,4-Dichlorophenol	3400	ug/Kg	U		

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	2,4-Dimethylphenol	3400	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	2,4-Dinitrophenol	18000	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	2,4-Dinitrotoluene	3400	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	2,6-Dinitrotoluene	3400	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	2-Chloronaphthalene	3400	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	2-Chlorophenol	3400	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	2-Methylnaphthalene	3400	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	2-Methylphenol (o-Cresol)	3400	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	2-Nitroaniline	18000	ug/Kg	U	UJ	C
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	2-Nitrophenol	3400	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	3 & 4 Methylphenol	480	ug/Kg	J		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	3,3'-Dichlorobenzidine	6800	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	3-Nitroaniline	18000	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	4,6-Dinitro-2-methylphenol	18000	ug/Kg	U	UJ	C
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	4-Bromophenyl Phenyl Ether	3400	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	4-Chloro-3-methylphenol	3400	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	4-Chlorophenyl Phenyl Ether	3400	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	4-Nitrophenol	18000	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	Acenaphthene	3400	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	Acenaphthylene	3400	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	Anthracene	3400	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	Benzo(a)anthracene	3400	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	Benzo(a)pyrene	3400	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	Benzo(b)fluoranthene	3400	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	Benzo(g,h,i)perylene	3400	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	Benzo(k)fluoranthene	3400	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	Benzyl Butyl Phthalate	3400	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	bis(2-Chloroethoxy)methane	3400	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	bis(2-Chloroethyl)ether	3400	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	bis(2-Ethylhexyl)phthalate	3400	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	Carbazole	3400	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	Chrysene	3400	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	Dibenzo(a,h)anthracene	3400	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	Dibenzofuran	3400	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	Diethyl Phthalate	3400	ug/Kg	U	UJ	C
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	Dimethyl Phthalate	3400	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	Di-n-butylphthalate	3400	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	Di-n-octylphthalate	3400	ug/Kg	U	UJ	C
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	Dinoseb	3400	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	Fluoranthene	3400	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	Fluorene	3400	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	Hexachlorobenzene	3400	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	Hexachlorobutadiene	3400	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	Hexachlorocyclopentadiene	3400	ug/Kg	U		

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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	Hexachloroethane	3400	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	Indeno(1,2,3-cd)pyrene	3400	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	Isophorone	3400	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	Naphthalene	3400	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	Nitrobenzene	3400	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	N-Nitroso-di-n-propylamine	3400	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	N-Nitrosodiphenylamine	3400	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	P-Chloroaniline	6100	ug/Kg	J		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	Phenanthrene	3400	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	Phenol	3400	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	P-Nitroaniline	18000	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	SVOCs	Pyrene	3400	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Pesticides	4,4'-DDD	6.8	ug/Kg	U	UJ	C
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Pesticides	4,4'-DDE	6.8	ug/Kg	U	UJ	C
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Pesticides	4,4'-DDT	9.8	ug/Kg		J	C
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Pesticides	Aldrin	3.5	ug/Kg	U	UJ	C
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Pesticides	alpha-BHC	3.5	ug/Kg	U	UJ	C
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Pesticides	alpha-Chlordane	3.5	ug/Kg	U	UJ	C
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Pesticides	beta-BHC	3.5	ug/Kg	U	UJ	C
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Pesticides	delta-BHC	3.5	ug/Kg	U	UJ	C
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Pesticides	Dieldrin	6.8	ug/Kg	U	UJ	C
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Pesticides	Endosulfan I	3.5	ug/Kg	U	UJ	C
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Pesticides	Endosulfan II	6.8	ug/Kg	U	UJ	C
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Pesticides	Endosulfan Sulfate	6.8	ug/Kg	U	UJ	C
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Pesticides	Endrin	6.8	ug/Kg	U	UJ	C
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Pesticides	Endrin Aldehyde	6.8	ug/Kg	U	UJ	C
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Pesticides	Endrin Ketone	6.8	ug/Kg	U	UJ	C
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Pesticides	gamma-BHC (Lindane)	3.5	ug/Kg	U	UJ	C
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Pesticides	gamma-Chlordane	3.5	ug/Kg	U	UJ	C
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Pesticides	Heptachlor	3.5	ug/Kg	U	UJ	C
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Pesticides	Heptachlor Epoxide	3.5	ug/Kg	U	UJ	C
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Pesticides	Methoxychlor	35	ug/Kg	U	UJ	C
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Pesticides	Toxaphene	350	ug/Kg	U	UJ	C
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Herbicides	2,4,5-T	17	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Herbicides	2,4,5-TP (Silvex)	17	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Herbicides	2,4-D	17	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Herbicides	2,4-DB	17	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Herbicides	Dalapon	350	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Herbicides	Dicamba	17	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Herbicides	Dichlorprop	17	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Herbicides	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	4100	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Herbicides	MCPP	4100	ug/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Herbicides	Pentachlorophenol	8.7	ug/Kg	U		

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
March 2006

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Metals	Aluminum	11000	mg/Kg			
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Metals	Antimony	3.9	mg/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Metals	Arsenic	5.9	mg/Kg			
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Metals	Barium	190	mg/Kg			
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Metals	Beryllium	0.62	mg/Kg	J		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Metals	Cadmium	1.2	mg/Kg			
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Metals	Calcium	13000	mg/Kg			
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Metals	Chromium	17	mg/Kg			
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Metals	Cobalt	7.3	mg/Kg			
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Metals	Copper	20	mg/Kg			
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Metals	Iron	17000	mg/Kg			
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Metals	Lead	26	mg/Kg	B		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Metals	Magnesium	4200	mg/Kg			
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Metals	Manganese	550	mg/Kg			
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Metals	Mercury	0.047	mg/Kg			
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Metals	Nickel	18	mg/Kg			
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Metals	Potassium	1600	mg/Kg	B		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Metals	Selenium	4.8	mg/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Metals	Silver	1.9	mg/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Metals	Sodium	300	mg/Kg	B	U	P
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Metals	Thallium	4.8	mg/Kg	U		
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Metals	Vanadium	28	mg/Kg			
Sediment	RIVER	Station 2	SED-SA2-GMCS-STATION 2	3/14/06	Metals	Zinc	390	mg/Kg	B		

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	VOCs	1,1,1-Trichloroethane	14	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	VOCs	1,1,2,2-Tetrachloroethane	14	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	VOCs	1,1,2-Trichloroethane	14	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	VOCs	1,1-Dichloroethane	14	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	VOCs	1,1-Dichloroethylene	14	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	VOCs	1,2-Dichloroethane	14	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	VOCs	1,2-Dichloroethene (total)	29	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	VOCs	1,2-Dichloropropane	14	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	VOCs	2-Butanone (MEK)	58	ug/Kg	J		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	VOCs	4-Methyl-2-pentanone (MIBK)	71	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	VOCs	Acetone	600	ug/Kg			
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	VOCs	Benzene	7.7	ug/Kg	J		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	VOCs	Bromodichloromethane	14	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	VOCs	Bromoform	14	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	VOCs	Bromomethane	14	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	VOCs	Carbon Disulfide	14	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	VOCs	Carbon Tetrachloride	14	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	VOCs	Chlorobenzene	410	ug/Kg			
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	VOCs	Chlorodibromomethane	14	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	VOCs	Chloroethane	14	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	VOCs	Chloroform	14	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	VOCs	Chloromethane	14	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	VOCs	cis-1,2-Dichloroethene	14	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	VOCs	cis-1,3-Dichloropropene	14	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	VOCs	Dichloromethane	14	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	VOCs	Ethylbenzene	6.5	ug/Kg	J		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	VOCs	Methyl N-Butyl Ketone	71	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	VOCs	Styrene (Monomer)	14	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	VOCs	Tetrachloroethene	14	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	VOCs	Toluene	55	ug/Kg			
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	VOCs	trans-1,2-Dichloroethene	14	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	VOCs	trans-1,3-Dichloropropene	14	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	VOCs	Trichloroethene	14	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	VOCs	Vinyl chloride	14	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	VOCs	Xylenes, Total	17	ug/Kg	J		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	1,2,4-Trichlorobenzene	2900	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	1,2-Dichlorobenzene	310	ug/Kg	J		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	1,3-Dichlorobenzene	2900	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	1,4-Dichlorobenzene	2900	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	2900	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	2,4,5-Trichlorophenol	2900	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	2,4,6-Trichlorophenol	2900	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	2,4-Dichlorophenol	2900	ug/Kg	U		

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	2,4-Dimethylphenol	2900	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	2,4-Dinitrophenol	15000	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	2,4-Dinitrotoluene	2900	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	2,6-Dinitrotoluene	2900	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	2-Chloronaphthalene	2900	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	2-Chlorophenol	2900	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	2-Methylnaphthalene	2900	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	2-Methylphenol (o-Cresol)	2900	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	2-Nitroaniline	15000	ug/Kg	U	UJ	C
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	2-Nitrophenol	2900	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	3 & 4 Methylphenol	430	ug/Kg	J		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	3,3'-Dichlorobenzidine	5800	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	3-Nitroaniline	15000	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	4,6-Dinitro-2-methylphenol	15000	ug/Kg	U	UJ	C
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	4-Bromophenyl Phenyl Ether	2900	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	4-Chloro-3-methylphenol	2900	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	4-Chlorophenyl Phenyl Ether	2900	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	4-Nitrophenol	15000	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	Acenaphthene	2900	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	Acenaphthylene	2900	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	Anthracene	2900	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	Benzo(a)anthracene	2900	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	Benzo(a)pyrene	2900	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	Benzo(b)fluoranthene	2900	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	Benzo(g,h,i)perylene	2900	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	Benzo(k)fluoranthene	2900	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	Benzyl Butyl Phthalate	2900	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	bis(2-Chloroethoxy)methane	2900	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	bis(2-Chloroethyl)ether	2900	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	bis(2-Ethylhexyl)phthalate	2900	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	Carbazole	2900	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	Chrysene	2900	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	Dibenzo(a,h)anthracene	2900	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	Dibenzofuran	2900	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	Diethyl Phthalate	2900	ug/Kg	U	UJ	C
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	Dimethyl Phthalate	2900	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	Di-n-butylphthalate	2900	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	Di-n-octylphthalate	2900	ug/Kg	U	UJ	C
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	Dinoseb	2900	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	Fluoranthene	2900	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	Fluorene	2900	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	Hexachlorobenzene	2900	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	Hexachlorobutadiene	2900	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	Hexachlorocyclopentadiene	2900	ug/Kg	U		

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	Hexachloroethane	2900	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	Indeno(1,2,3-cd)pyrene	2900	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	Isophorone	2900	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	Naphthalene	2900	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	Nitrobenzene	2900	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	N-Nitroso-di-n-propylamine	2900	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	N-Nitrosodiphenylamine	2900	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	P-Chloroaniline	500	ug/Kg	J		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	Phenanthrene	2900	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	Phenol	2900	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	P-Nitroaniline	15000	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	SVOCs	Pyrene	2900	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Pesticides	4,4'-DDD	5.8	ug/Kg	U	UJ	C
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Pesticides	4,4'-DDE	5.8	ug/Kg	U	UJ	C
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Pesticides	4,4'-DDT	5.8	ug/Kg	U	UJ	C
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Pesticides	Aldrin	3	ug/Kg	U	UJ	C
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Pesticides	alpha-BHC	3	ug/Kg	U	UJ	C
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Pesticides	alpha-Chlordane	3	ug/Kg	U	UJ	C
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Pesticides	beta-BHC	3	ug/Kg	U	UJ	C
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Pesticides	delta-BHC	3	ug/Kg	U	UJ	C
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Pesticides	Dieldrin	5.8	ug/Kg	U	UJ	C
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Pesticides	Endosulfan I	3	ug/Kg	U	UJ	C
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Pesticides	Endosulfan II	5.8	ug/Kg	U	UJ	C
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Pesticides	Endosulfan Sulfate	5.8	ug/Kg	U	UJ	C
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Pesticides	Endrin	5.8	ug/Kg	U	UJ	C
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Pesticides	Endrin Aldehyde	5.8	ug/Kg	U	UJ	C
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Pesticides	Endrin Ketone	5.8	ug/Kg	U	UJ	C
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Pesticides	gamma-BHC (Lindane)	3	ug/Kg	U	UJ	C
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Pesticides	gamma-Chlordane	3	ug/Kg	U	UJ	C
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Pesticides	Heptachlor	3	ug/Kg	U	UJ	C
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Pesticides	Heptachlor Epoxide	3	ug/Kg	U	UJ	C
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Pesticides	Methoxychlor	30	ug/Kg	U	UJ	C
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Pesticides	Toxaphene	300	ug/Kg	U	UJ	C
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Herbicides	2,4,5-T	15	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Herbicides	2,4,5-TP (Silvex)	15	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Herbicides	2,4-D	4.4	ug/Kg	JP		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Herbicides	2,4-DB	15	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Herbicides	Dalapon	300	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Herbicides	Dicamba	15	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Herbicides	Dichlorprop	15	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Herbicides	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	3500	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Herbicides	MCPP	3500	ug/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Herbicides	Pentachlorophenol	7.4	ug/Kg	U		

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
March 2006

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Metals	Aluminum	7400	mg/Kg			
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Metals	Antimony	3.2	mg/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Metals	Arsenic	3.9	mg/Kg			
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Metals	Barium	170	mg/Kg			
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Metals	Beryllium	0.4	mg/Kg	J		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Metals	Cadmium	1.7	mg/Kg			
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Metals	Calcium	12000	mg/Kg			
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Metals	Chromium	13	mg/Kg			
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Metals	Cobalt	5.3	mg/Kg			
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Metals	Copper	16	mg/Kg			
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Metals	Iron	13000	mg/Kg			
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Metals	Lead	26	mg/Kg	B		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Metals	Magnesium	3500	mg/Kg			
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Metals	Manganese	500	mg/Kg			
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Metals	Mercury	0.034	mg/Kg	J		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Metals	Nickel	13	mg/Kg			
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Metals	Potassium	1000	mg/Kg	B		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Metals	Selenium	4	mg/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Metals	Silver	1.6	mg/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Metals	Sodium	240	mg/Kg	B	U	P
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Metals	Thallium	4	mg/Kg	U		
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Metals	Vanadium	21	mg/Kg			
Sediment	RIVER	Station 3	SED-SA2-GMCS-STATION 3	3/14/06	Metals	Zinc	370	mg/Kg	B		

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	VOCs	1,1,1-Trichloroethane	6.6	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	VOCs	1,1,2,2-Tetrachloroethane	6.6	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	VOCs	1,1,2-Trichloroethane	6.6	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	VOCs	1,1-Dichloroethane	6.6	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	VOCs	1,1-Dichloroethylene	6.6	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	VOCs	1,2-Dichloroethane	6.6	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	VOCs	1,2-Dichloroethene (total)	13	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	VOCs	1,2-Dichloropropane	6.6	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	VOCs	2-Butanone (MEK)	15	ug/Kg	J		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	VOCs	4-Methyl-2-pentanone (MIBK)	33	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	VOCs	Acetone	180	ug/Kg			
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	VOCs	Benzene	6.6	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	VOCs	Bromodichloromethane	6.6	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	VOCs	Bromoform	6.6	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	VOCs	Bromomethane	6.6	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	VOCs	Carbon Disulfide	6.6	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	VOCs	Carbon Tetrachloride	6.6	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	VOCs	Chlorobenzene	50	ug/Kg			
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	VOCs	Chlorodibromomethane	6.6	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	VOCs	Chloroethane	6.6	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	VOCs	Chloroform	6.6	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	VOCs	Chloromethane	6.6	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	VOCs	cis-1,2-Dichloroethene	6.6	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	VOCs	cis-1,3-Dichloropropene	6.6	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	VOCs	Dichloromethane	6.6	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	VOCs	Ethylbenzene	6.6	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	VOCs	Methyl N-Butyl Ketone	33	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	VOCs	Styrene (Monomer)	6.6	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	VOCs	Tetrachloroethene	6.6	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	VOCs	Toluene	6.6	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	VOCs	trans-1,2-Dichloroethene	6.6	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	VOCs	trans-1,3-Dichloropropene	6.6	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	VOCs	Trichloroethene	6.6	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	VOCs	Vinyl chloride	6.6	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	VOCs	Xylenes, Total	13	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	1,2,4-Trichlorobenzene	2300	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	1,2-Dichlorobenzene	2300	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	1,3-Dichlorobenzene	2300	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	1,4-Dichlorobenzene	2300	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	2300	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	2,4,5-Trichlorophenol	2300	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	2,4,6-Trichlorophenol	2300	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	2,4-Dichlorophenol	2300	ug/Kg	U		

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
March 2006

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	2,4-Dimethylphenol	2300	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	2,4-Dinitrophenol	12000	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	2,4-Dinitrotoluene	2300	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	2,6-Dinitrotoluene	2300	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	2-Chloronaphthalene	2300	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	2-Chlorophenol	2300	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	2-Methylnaphthalene	2300	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	2-Methylphenol (o-Cresol)	2300	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	2-Nitroaniline	12000	ug/Kg	U	UJ	C
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	2-Nitrophenol	2300	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	3 & 4 Methylphenol	2300	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	3,3'-Dichlorobenzidine	4600	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	3-Nitroaniline	12000	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	4,6-Dinitro-2-methylphenol	12000	ug/Kg	U	UJ	C
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	4-Bromophenyl Phenyl Ether	2300	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	4-Chloro-3-methylphenol	2300	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	4-Chlorophenyl Phenyl Ether	2300	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	4-Nitrophenol	12000	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	Acenaphthene	2300	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	Acenaphthylene	2300	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	Anthracene	2300	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	Benzo(a)anthracene	2300	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	Benzo(a)pyrene	2300	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	Benzo(b)fluoranthene	2300	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	Benzo(g,h,i)perylene	2300	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	Benzo(k)fluoranthene	2300	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	Benzyl Butyl Phthalate	2300	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	bis(2-Chloroethoxy)methane	2300	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	bis(2-Chloroethyl)ether	2300	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	bis(2-Ethylhexyl)phthalate	2300	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	Carbazole	2300	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	Chrysene	2300	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	Dibenzo(a,h)anthracene	2300	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	Dibenzofuran	2300	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	Diethyl Phthalate	2300	ug/Kg	U	UJ	C
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	Dimethyl Phthalate	2300	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	Di-n-butylphthalate	2300	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	Di-n-octylphthalate	2300	ug/Kg	U	UJ	C
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	Dinoseb	2300	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	Fluoranthene	2300	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	Fluorene	2300	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	Hexachlorobenzene	2300	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	Hexachlorobutadiene	2300	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	Hexachlorocyclopentadiene	2300	ug/Kg	U		

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	Hexachloroethane	2300	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	Indeno(1,2,3-cd)pyrene	2300	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	Isophorone	2300	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	Naphthalene	2300	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	Nitrobenzene	2300	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	N-Nitroso-di-n-propylamine	2300	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	N-Nitrosodiphenylamine	2300	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	P-Chloroaniline	4600	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	Phenanthrene	2300	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	Phenol	2300	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	P-Nitroaniline	12000	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	SVOCs	Pyrene	2300	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Pesticides	4,4'-DDD	4.5	ug/Kg	U	UJ	C
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Pesticides	4,4'-DDE	4.5	ug/Kg	U	UJ	C
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Pesticides	4,4'-DDT	4.5	ug/Kg	U	UJ	C
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Pesticides	Aldrin	2.3	ug/Kg	U	UJ	C
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Pesticides	alpha-BHC	2.3	ug/Kg	U	UJ	C
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Pesticides	alpha-Chlordane	2.3	ug/Kg	U	UJ	C
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Pesticides	beta-BHC	2.3	ug/Kg	U	UJ	C
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Pesticides	delta-BHC	2.3	ug/Kg	U	UJ	C
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Pesticides	Dieldrin	4.5	ug/Kg	U	UJ	C
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Pesticides	Endosulfan I	2.3	ug/Kg	U	UJ	C
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Pesticides	Endosulfan II	4.5	ug/Kg	U	UJ	C
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Pesticides	Endosulfan Sulfate	4.5	ug/Kg	U	UJ	C
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Pesticides	Endrin	4.5	ug/Kg	U	UJ	C
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Pesticides	Endrin Aldehyde	4.5	ug/Kg	U	UJ	C
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Pesticides	Endrin Ketone	4.5	ug/Kg	U	UJ	C
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Pesticides	gamma-BHC (Lindane)	2.3	ug/Kg	U	UJ	C
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Pesticides	gamma-Chlordane	2.3	ug/Kg	U	UJ	C
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Pesticides	Heptachlor	2.3	ug/Kg	U	UJ	C
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Pesticides	Heptachlor Epoxide	2.3	ug/Kg	U	UJ	C
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Pesticides	Methoxychlor	23	ug/Kg	U	UJ	C
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Pesticides	Toxaphene	230	ug/Kg	U	UJ	C
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Herbicides	2,4,5-T	11	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Herbicides	2,4,5-TP (Silvex)	11	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Herbicides	2,4-D	4.2	ug/Kg	JP		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Herbicides	2,4-DB	11	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Herbicides	Dalapon	230	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Herbicides	Dicamba	11	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Herbicides	Dichlorprop	11	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Herbicides	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2800	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Herbicides	MCPP	2800	ug/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Herbicides	Pentachlorophenol	5.8	ug/Kg	U		

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
March 2006

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Metals	Aluminum	3900	mg/Kg			
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Metals	Antimony	2.6	mg/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Metals	Arsenic	3.3	mg/Kg			
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Metals	Barium	98	mg/Kg			
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Metals	Beryllium	0.24	mg/Kg	J		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Metals	Cadmium	1.8	mg/Kg			
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Metals	Calcium	8500	mg/Kg			
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Metals	Chromium	7.6	mg/Kg			
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Metals	Cobalt	3.6	mg/Kg			
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Metals	Copper	10	mg/Kg			
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Metals	Iron	8000	mg/Kg			
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Metals	Lead	25	mg/Kg	B		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Metals	Magnesium	2200	mg/Kg			
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Metals	Manganese	280	mg/Kg			
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Metals	Mercury	0.034	mg/Kg			
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Metals	Nickel	8.5	mg/Kg			
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Metals	Potassium	630	mg/Kg	B		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Metals	Selenium	3.2	mg/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Metals	Silver	1.3	mg/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Metals	Sodium	190	mg/Kg	B	U	P
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Metals	Thallium	3.2	mg/Kg	U		
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Metals	Vanadium	12	mg/Kg			
Sediment	RIVER	Station 4	SED-SA2-GMCS-STATION 4	3/14/06	Metals	Zinc	480	mg/Kg	B		

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
March 2006

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	VOCs	1,1,1-Trichloroethane	4.6	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	VOCs	1,1,2,2-Tetrachloroethane	4.6	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	VOCs	1,1,2-Trichloroethane	4.6	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	VOCs	1,1-Dichloroethane	4.6	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	VOCs	1,1-Dichloroethylene	4.6	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	VOCs	1,2-Dichloroethane	4.6	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	VOCs	1,2-Dichloroethene (total)	9.2	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	VOCs	1,2-Dichloropropane	4.6	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	VOCs	2-Butanone (MEK)	23	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	VOCs	4-Methyl-2-pentanone (MIBK)	23	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	VOCs	Acetone	33	ug/Kg	J		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	VOCs	Benzene	4.6	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	VOCs	Bromodichloromethane	4.6	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	VOCs	Bromoform	4.6	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	VOCs	Bromomethane	4.6	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	VOCs	Carbon Disulfide	4.6	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	VOCs	Carbon Tetrachloride	4.6	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	VOCs	Chlorobenzene	2.4	ug/Kg	J		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	VOCs	Chlorodibromomethane	4.6	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	VOCs	Chloroethane	4.6	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	VOCs	Chloroform	4.6	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	VOCs	Chloromethane	4.6	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	VOCs	cis-1,2-Dichloroethene	4.6	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	VOCs	cis-1,3-Dichloropropene	4.6	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	VOCs	Dichloromethane	4.6	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	VOCs	Ethylbenzene	4.6	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	VOCs	Methyl N-Butyl Ketone	23	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	VOCs	Styrene (Monomer)	4.6	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	VOCs	Tetrachloroethene	4.6	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	VOCs	Toluene	4.6	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	VOCs	trans-1,2-Dichloroethene	4.6	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	VOCs	trans-1,3-Dichloropropene	4.6	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	VOCs	Trichloroethene	4.6	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	VOCs	Vinyl chloride	4.6	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	VOCs	Xylenes, Total	9.2	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	1,2,4-Trichlorobenzene	390	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	1,2-Dichlorobenzene	390	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	1,3-Dichlorobenzene	390	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	1,4-Dichlorobenzene	64	ug/Kg	J		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	390	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	2,4,5-Trichlorophenol	390	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	2,4,6-Trichlorophenol	390	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	2,4-Dichlorophenol	390	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	2,4-Dimethylphenol	390	ug/Kg	U		

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
March 2006

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	2,4-Dinitrophenol	2000	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	2,4-Dinitrotoluene	390	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	2,6-Dinitrotoluene	390	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	2-Chloronaphthalene	390	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	2-Chlorophenol	390	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	2-Methylnaphthalene	390	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	2-Methylphenol (o-Cresol)	390	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	2-Nitroaniline	2000	ug/Kg	U	UJ	C
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	2-Nitrophenol	390	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	3 & 4 Methylphenol	390	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	3,3'-Dichlorobenzidine	770	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	3-Nitroaniline	2000	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	4,6-Dinitro-2-methylphenol	2000	ug/Kg	U	UJ	C
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	4-Bromophenyl Phenyl Ether	390	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	4-Chloro-3-methylphenol	390	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	4-Chlorophenyl Phenyl Ether	390	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	4-Nitrophenol	2000	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	Acenaphthene	390	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	Acenaphthylene	390	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	Anthracene	390	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	Benzo(a)anthracene	390	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	Benzo(a)pyrene	390	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	Benzo(b)fluoranthene	390	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	Benzo(g,h,i)perylene	390	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	Benzo(k)fluoranthene	390	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	Benzyl Butyl Phthalate	390	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	bis(2-Chloroethoxy)methane	390	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	bis(2-Chloroethyl)ether	390	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	bis(2-Ethylhexyl)phthalate	390	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	Carbazole	390	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	Chrysene	390	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	Dibenzo(a,h)anthracene	390	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	Dibenzofuran	390	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	Diethyl Phthalate	390	ug/Kg	U	UJ	C
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	Dimethyl Phthalate	390	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	Di-n-butylphthalate	390	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	Di-n-octylphthalate	390	ug/Kg	U	UJ	C
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	Dinoseb	390	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	Fluoranthene	390	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	Fluorene	390	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	Hexachlorobenzene	390	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	Hexachlorobutadiene	390	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	Hexachlorocyclopentadiene	390	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	Hexachloroethane	390	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	Indeno(1,2,3-cd)pyrene	390	ug/Kg	U		

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
March 2006

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	Isophorone	390	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	Naphthalene	390	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	Nitrobenzene	390	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	N-Nitroso-di-n-propylamine	390	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	N-Nitrosodiphenylamine	390	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	P-Chloroaniline	410	ug/Kg	J		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	Phenanthrene	390	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	Phenol	390	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	P-Nitroaniline	2000	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	SVOCs	Pyrene	390	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Pesticides	4,4'-DDD	3.9	ug/Kg	U	UJ	C
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Pesticides	4,4'-DDE	3.9	ug/Kg	U	UJ	C
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Pesticides	4,4'-DDT	3.9	ug/Kg	U	UJ	C
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Pesticides	Aldrin	2	ug/Kg	U	UJ	C
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Pesticides	alpha-BHC	2	ug/Kg	U	UJ	C
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Pesticides	alpha-Chlordane	2	ug/Kg	U	UJ	C
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Pesticides	beta-BHC	2	ug/Kg	U	UJ	C
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Pesticides	delta-BHC	2	ug/Kg	U	UJ	C
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Pesticides	Dieldrin	3.9	ug/Kg	U	UJ	C
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Pesticides	Endosulfan I	2	ug/Kg	U	UJ	C
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Pesticides	Endosulfan II	3.9	ug/Kg	U	UJ	C
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Pesticides	Endosulfan Sulfate	3.9	ug/Kg	U	UJ	C
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Pesticides	Endrin	0.99	ug/Kg	J P	J	C
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Pesticides	Endrin Aldehyde	3.9	ug/Kg	U	UJ	C
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Pesticides	Endrin Ketone	3.9	ug/Kg	U	UJ	C
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Pesticides	gamma-BHC (Lindane)	2	ug/Kg	U	UJ	C
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Pesticides	gamma-Chlordane	2	ug/Kg	U	UJ	C
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Pesticides	Heptachlor	2	ug/Kg	U	UJ	C
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Pesticides	Heptachlor Epoxide	2	ug/Kg	U	UJ	C
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Pesticides	Methoxychlor	20	ug/Kg	U	UJ	C
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Pesticides	Toxaphene	200	ug/Kg	U	UJ	C
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Herbicides	2,4,5-T	9.8	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Herbicides	2,4,5-TP (Silvex)	9.8	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Herbicides	2,4-D	9.8	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Herbicides	2,4-DB	9.8	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Herbicides	Dalapon	200	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Herbicides	Dicamba	9.8	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Herbicides	Dichlorprop	9.8	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Herbicides	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2400	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Herbicides	MCPP	2400	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Herbicides	Pentachlorophenol	4.9	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Metals	Aluminum	2600	mg/Kg			
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Metals	Antimony	0.62	mg/Kg	J		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Metals	Arsenic	3.4	mg/Kg			

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Metals	Barium	91	mg/Kg			
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Metals	Beryllium	0.17	mg/Kg	J		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Metals	Cadmium	4.8	mg/Kg			
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Metals	Calcium	5900	mg/Kg			
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Metals	Chromium	6.6	mg/Kg			
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Metals	Cobalt	3.9	mg/Kg			
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Metals	Copper	21	mg/Kg			
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Metals	Iron	7200	mg/Kg			
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Metals	Lead	53	mg/Kg	B		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Metals	Magnesium	2300	mg/Kg			
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Metals	Manganese	210	mg/Kg			
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Metals	Mercury	0.024	mg/Kg			
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Metals	Nickel	8.7	mg/Kg			
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Metals	Potassium	460	mg/Kg	B		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Metals	Selenium	2.7	mg/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Metals	Silver	0.42	mg/Kg	J		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Metals	Sodium	190	mg/Kg	B	U	P
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Metals	Thallium	2.7	mg/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Metals	Vanadium	9.7	mg/Kg			
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5	3/13/06	Metals	Zinc	1000	mg/Kg	B		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	1,1,1-Trichloroethane	4.5	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	1,1,2,2-Tetrachloroethane	4.5	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	1,1,2-Trichloroethane	4.5	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	1,1-Dichloroethane	4.5	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	1,1-Dichloroethylene	4.5	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	1,2-Dichloroethane	4.5	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	1,2-Dichloroethene (total)	9.1	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	1,2-Dichloropropane	4.5	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	2-Butanone (MEK)	23	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	4-Methyl-2-pentanone (MIBK)	23	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	Acetone	25	ug/Kg	J		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	Benzene	4.5	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	Bromodichloromethane	4.5	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	Bromoform	4.5	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	Bromomethane	4.5	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	Carbon Disulfide	4.5	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	Carbon Tetrachloride	4.5	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	Chlorobenzene	1.2	ug/Kg	J		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	Chlorodibromomethane	4.5	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	Chloroethane	4.5	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	Chloroform	4.5	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	Chloromethane	4.5	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	cis-1,2-Dichloroethene	4.5	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	cis-1,3-Dichloropropene	4.5	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	Dichloromethane	4.5	ug/Kg	U		

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	Ethylbenzene	4.5	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	Methyl N-Butyl Ketone	23	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	Styrene (Monomer)	4.5	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	Tetrachloroethene	4.5	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	Toluene	4.5	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	trans-1,2-Dichloroethene	4.5	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	trans-1,3-Dichloropropene	4.5	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	Trichloroethene	4.5	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	Vinyl chloride	4.5	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	VOCs	Xylenes, Total	9.1	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	1,2,4-Trichlorobenzene	370	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	1,2-Dichlorobenzene	370	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	1,3-Dichlorobenzene	370	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	1,4-Dichlorobenzene	370	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	370	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	2,4,5-Trichlorophenol	370	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	2,4,6-Trichlorophenol	370	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	2,4-Dichlorophenol	370	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	2,4-Dimethylphenol	370	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	2,4-Dinitrophenol	1900	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	2,4-Dinitrotoluene	370	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	2,6-Dinitrotoluene	370	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	2-Chloronaphthalene	370	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	2-Chlorophenol	370	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	2-Methylnaphthalene	370	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	2-Methylphenol (o-Cresol)	370	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	2-Nitroaniline	1900	ug/Kg	U	UJ	C
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	2-Nitrophenol	370	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	3 & 4 Methylphenol	370	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	3,3'-Dichlorobenzidine	750	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	3-Nitroaniline	1900	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	4,6-Dinitro-2-methylphenol	1900	ug/Kg	U	UJ	C
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	4-Bromophenyl Phenyl Ether	370	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	4-Chloro-3-methylphenol	370	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	4-Chlorophenyl Phenyl Ether	370	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	4-Nitrophenol	1900	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Acenaphthene	370	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Acenaphthylene	370	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Anthracene	370	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Benzo(a)anthracene	370	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Benzo(a)pyrene	370	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Benzo(b)fluoranthene	370	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Benzo(g,h,i)perylene	370	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Benzo(k)fluoranthene	370	ug/Kg	U		

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Benzyl Butyl Phthalate	370	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	bis(2-Chloroethoxy)methane	370	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	bis(2-Chloroethyl)ether	370	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	bis(2-Ethylhexyl)phthalate	370	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Carbazole	370	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Chrysene	370	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Dibenzo(a,h)anthracene	370	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Dibenzofuran	370	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Diethyl Phthalate	370	ug/Kg	U	UJ	C
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Dimethyl Phthalate	370	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Di-n-butylphthalate	370	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Di-n-octylphthalate	370	ug/Kg	U	UJ	C
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Dinoseb	370	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Fluoranthene	370	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Fluorene	370	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Hexachlorobenzene	370	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Hexachlorobutadiene	370	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Hexachlorocyclopentadiene	370	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Hexachloroethane	370	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Indeno(1,2,3-cd)pyrene	370	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Isophorone	370	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Naphthalene	370	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Nitrobenzene	370	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	N-Nitroso-di-n-propylamine	370	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	N-Nitrosodiphenylamine	370	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	P-Chloroaniline	71	ug/Kg	J		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Phenanthrene	370	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Phenol	370	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	P-Nitroaniline	1900	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	SVOCs	Pyrene	370	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Pesticides	4,4'-DDD	3.8	ug/Kg	U	UJ	C
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Pesticides	4,4'-DDE	3.8	ug/Kg	U	UJ	C
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Pesticides	4,4'-DDT	3.8	ug/Kg	U	UJ	C
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Pesticides	Aldrin	1.9	ug/Kg	U	UJ	C
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Pesticides	alpha-BHC	1.9	ug/Kg	U	UJ	C
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Pesticides	alpha-Chlordane	1.9	ug/Kg	U	UJ	C
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Pesticides	beta-BHC	1.9	ug/Kg	U	UJ	C
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Pesticides	delta-BHC	1.9	ug/Kg	U	UJ	C
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Pesticides	Dieldrin	3.8	ug/Kg	U	UJ	C
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Pesticides	Endosulfan I	1.9	ug/Kg	U	UJ	C
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Pesticides	Endosulfan II	3.8	ug/Kg	U	UJ	C
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Pesticides	Endosulfan Sulfate	3.8	ug/Kg	U	UJ	C
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Pesticides	Endrin	3.8	ug/Kg	U	UJ	C
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Pesticides	Endrin Aldehyde	3.8	ug/Kg	U	UJ	C
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Pesticides	Endrin Ketone	3.8	ug/Kg	U	UJ	C

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Pesticides	gamma-BHC (Lindane)	1.9	ug/Kg	U	UJ	C
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Pesticides	gamma-Chlordane	1.9	ug/Kg	U	UJ	C
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Pesticides	Heptachlor	1.9	ug/Kg	U	UJ	C
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Pesticides	Heptachlor Epoxide	1.9	ug/Kg	U	UJ	C
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Pesticides	Methoxychlor	19	ug/Kg	U	UJ	C
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Pesticides	Toxaphene	190	ug/Kg	U	UJ	C
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Herbicides	2,4,5-T	9.5	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Herbicides	2,4,5-TP (Silvex)	9.5	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Herbicides	2,4-D	9.5	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Herbicides	2,4-DB	9.5	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Herbicides	Dalapon	190	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Herbicides	Dicamba	9.5	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Herbicides	Dichlorprop	9.5	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Herbicides	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2300	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Herbicides	MCPP	2300	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Herbicides	Pentachlorophenol	4.8	ug/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Aluminum	2400	mg/Kg		J	K
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Antimony	2.2	mg/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Arsenic	4.1	mg/Kg			
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Barium	77	mg/Kg			
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Beryllium	0.18	mg/Kg	J		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Cadmium	3.8	mg/Kg		J	M
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Calcium	5300	mg/Kg		J	K
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Chromium	5.7	mg/Kg			
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Cobalt	3.7	mg/Kg			
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Copper	13	mg/Kg		J	M
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Iron	7200	mg/Kg			
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Lead	37	mg/Kg	B	J	M
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Magnesium	1600	mg/Kg		J	K
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Manganese	190	mg/Kg		J	K
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Mercury	0.008	mg/Kg	J		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Nickel	8.3	mg/Kg			
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Potassium	410	mg/Kg	B	J	S
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Selenium	2.7	mg/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Silver	0.33	mg/Kg	J		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Sodium	170	mg/Kg	B	U	P
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Thallium	2.7	mg/Kg	U		
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Vanadium	9.3	mg/Kg			
Sediment	RIVER	Station 5	SED-SA2-GMCS-STATION 5 DUP	3/13/06	Metals	Zinc	570	mg/Kg	B	J	K

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	VOCs	1,1,1-Trichloroethane	5.4	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	VOCs	1,1,2,2-Tetrachloroethane	5.4	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	VOCs	1,1,2-Trichloroethane	5.4	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	VOCs	1,1-Dichloroethane	5.4	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	VOCs	1,1-Dichloroethylene	5.4	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	VOCs	1,2-Dichloroethane	5.4	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	VOCs	1,2-Dichloroethene (total)	11	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	VOCs	1,2-Dichloropropane	5.4	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	VOCs	2-Butanone (MEK)	27	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	VOCs	4-Methyl-2-pentanone (MIBK)	27	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	VOCs	Acetone	42	ug/Kg	J		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	VOCs	Benzene	5.4	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	VOCs	Bromodichloromethane	5.4	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	VOCs	Bromoform	5.4	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	VOCs	Bromomethane	5.4	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	VOCs	Carbon Disulfide	5.4	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	VOCs	Carbon Tetrachloride	5.4	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	VOCs	Chlorobenzene	13	ug/Kg			
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	VOCs	Chlorodibromomethane	5.4	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	VOCs	Chloroethane	5.4	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	VOCs	Chloroform	5.4	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	VOCs	Chloromethane	5.4	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	VOCs	cis-1,2-Dichloroethene	5.4	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	VOCs	cis-1,3-Dichloropropene	5.4	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	VOCs	Dichloromethane	5.4	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	VOCs	Ethylbenzene	5.4	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	VOCs	Methyl N-Butyl Ketone	27	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	VOCs	Styrene (Monomer)	5.4	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	VOCs	Tetrachloroethene	5.4	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	VOCs	Toluene	5.4	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	VOCs	trans-1,2-Dichloroethene	5.4	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	VOCs	trans-1,3-Dichloropropene	5.4	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	VOCs	Trichloroethene	5.4	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	VOCs	Vinyl chloride	5.4	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	VOCs	Xylenes, Total	11	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	SVOCs	1,2,4-Trichlorobenzene	400	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	SVOCs	1,2-Dichlorobenzene	400	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	SVOCs	1,3-Dichlorobenzene	400	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	SVOCs	1,4-Dichlorobenzene	400	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	400	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	SVOCs	2,4,5-Trichlorophenol	400	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	SVOCs	2,4,6-Trichlorophenol	400	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	SVOCs	2,4-Dichlorophenol	400	ug/Kg	U		

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	SVOCs	Hexachloroethane	400	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	SVOCs	Indeno(1,2,3-cd)pyrene	400	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	SVOCs	Isophorone	400	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	SVOCs	Naphthalene	400	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	SVOCs	Nitrobenzene	400	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	SVOCs	N-Nitroso-di-n-propylamine	400	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	SVOCs	N-Nitrosodiphenylamine	400	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	SVOCs	P-Chloroaniline	800	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	SVOCs	Phenanthrene	400	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	SVOCs	Phenol	400	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	SVOCs	P-Nitroaniline	2100	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	SVOCs	Pyrene	400	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Pesticides	4,4'-DDD	4	ug/Kg	U	UJ	C
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Pesticides	4,4'-DDE	4	ug/Kg	U	UJ	C
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Pesticides	4,4'-DDT	4	ug/Kg	U	UJ	C
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Pesticides	Aldrin	2.1	ug/Kg	U	UJ	C
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Pesticides	alpha-BHC	2.1	ug/Kg	U	UJ	C
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Pesticides	alpha-Chlordane	2.1	ug/Kg	U	UJ	C
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Pesticides	beta-BHC	2.1	ug/Kg	U	UJ	C
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Pesticides	delta-BHC	2.1	ug/Kg	U	UJ	C
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Pesticides	Dieldrin	4	ug/Kg	U	UJ	C
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Pesticides	Endosulfan I	2.1	ug/Kg	U	UJ	C
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Pesticides	Endosulfan II	4	ug/Kg	U	UJ	C
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Pesticides	Endosulfan Sulfate	4	ug/Kg	U	UJ	C
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Pesticides	Endrin	4	ug/Kg	U	UJ	C
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Pesticides	Endrin Aldehyde	4	ug/Kg	U	UJ	C
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Pesticides	Endrin Ketone	4	ug/Kg	U	UJ	C
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Pesticides	gamma-BHC (Lindane)	2.1	ug/Kg	U	UJ	C
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Pesticides	gamma-Chlordane	2.1	ug/Kg	U	UJ	C
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Pesticides	Heptachlor	2.1	ug/Kg	U	UJ	C
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Pesticides	Heptachlor Epoxide	2.1	ug/Kg	U	UJ	C
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Pesticides	Methoxychlor	21	ug/Kg	U	UJ	C
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Pesticides	Toxaphene	210	ug/Kg	U	UJ	C
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Herbicides	2,4,5-T	10	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Herbicides	2,4,5-TP (Silvex)	10	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Herbicides	2,4-D	10	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Herbicides	2,4-DB	10	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Herbicides	Dalapon	210	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Herbicides	Dicamba	10	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Herbicides	Dichlorprop	10	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Herbicides	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2400	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Herbicides	MCPP	2400	ug/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Herbicides	Pentachlorophenol	5.1	ug/Kg	U		

Sauget Area 2
Groundwater Migration Control System
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March 2006

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifier Code
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Metals	Aluminum	950	mg/Kg			
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Metals	Antimony	2.2	mg/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Metals	Arsenic	1.6	mg/Kg			
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Metals	Barium	30	mg/Kg			
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Metals	Beryllium	0.067	mg/Kg	J		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Metals	Cadmium	0.55	mg/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Metals	Calcium	1500	mg/Kg			
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Metals	Chromium	2.4	mg/Kg			
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Metals	Cobalt	2.1	mg/Kg			
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Metals	Copper	1.5	mg/Kg	J		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Metals	Iron	3400	mg/Kg			
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Metals	Lead	5.1	mg/Kg	B		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Metals	Magnesium	650	mg/Kg			
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Metals	Manganese	140	mg/Kg			
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Metals	Mercury	0.022	mg/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Metals	Nickel	4.7	mg/Kg			
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Metals	Potassium	160	mg/Kg	B		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Metals	Selenium	2.8	mg/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Metals	Silver	1.1	mg/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Metals	Sodium	130	mg/Kg	B	U	P
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Metals	Thallium	2.8	mg/Kg	U		
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Metals	Vanadium	3.6	mg/Kg			
Sediment	RIVER	Station 9	SED-SA2-GMCS-STATION 9	3/14/06	Metals	Zinc	58	mg/Kg	B		

URS

Qualifier Definition Table

Sauget Area 2
Groundwater Migration Control System
STL Data Qualifier Definitions

Qualifier	Definition	Notes:
Organic Chemicals		
*	LCS, LCSD, MS, MSD, MD or Surrogate exceeds the control limits	
A	Tentatively identified compound (TIC) is a suspected aldol condensation product.	Only present in SA-O-1-SB-3 (SDG G5E070192) for 1,2,3,4,7,8-HxCDD.
B	Compound is found in the associated method blank.	
CON	Confirmation Analysis	
D	Concentrations identified from analysis of the sample at a secondary dilution.	
E	Compounds whose concentrations exceed the upper calibration range of the instrument for that analysis.	
J	Estimated value - result reported is less than the reporting limit but greater than the instrument detection limit.	
P	Greater than 25% (40% for CLP) difference for detected concentrations between the two GC columns.	
U	Compound analyzed for but not detected at a concentration above the reporting limit.	
Inorganic Chemicals		
B	Compound is found in the associated method blank.	
J	Estimated value - result reported is less than the reporting limit but greater than the instrument detection limit.	
S	Indicates that the Method of Standard Additions (MSA) determined the reported value.	
U	Compound analyzed for but not detected at a concentration above the reporting limit.	
JA	Compound tentatively identified, using theoretical ratios.	

Revised - Data Validation Report

Groundwater Migration Control System Surface Water and Sediment Sampling Event - September 2006

Sauget Area 2

November 26, 2007

DRAFT

URS

November 26, 2007

Ms. Lisa Caraway
Solutia Inc.
575 Maryville Centre Drive
St. Louis, Missouri 63141

Re: REVISED - Data Validation Report Groundwater Migration Control System Surface Water and Sediment Sampling Event - September 2006
Sauget, Illinois
URS Project No. 21561391

Dear Steve:

URS is pleased to present this Data Validation Report for surface water and sediment sampling, conducted as part of the Groundwater Migration Control System Performance Verification Sampling Program. This report provides:

1. A brief summary of field activities
2. A figure showing the sampling locations
3. Detection Tables
4. Sample summary lists
5. Data validation checklists
6. Data tables
7. Qualifier definition tables.

SCOPE OF WORK

The surface water and sediment sampling field activities were conducted on September 20 and 21, 2006 in accordance with the Surface Water and Sediment Performance Verification Sampling Plan dated January 31, 2003. During the sampling event, surface water and sediment samples were collected from a total of five locations immediately adjacent to Site R, stations PDA-2,3,4,5 and 9 as defined in the Menzie Curra sampling effort in 2000.

1001 Highland Plaza Drive West, Suite 300
St. Louis, MO 63110
Phone: 314.429.0100
Fax: 314.429.0462

Surface Water Monitoring

Surface water samples were collected at the sediment-water interface (within one foot of the bottom) at all stations. Because of the volumes required and sampling limitations due to the fast currents, a peristaltic pump system was utilized using decontaminated tubing at each sample location.

Surface water samples were submitted to the laboratory unfiltered and analyzed for VOCs, SVOCs, pesticides, herbicides and metals; and one trip blank was submitted and analyzed for VOCs. VOC samples were collected by directly filling 3-40 mL VOA vials from the peristaltic pump tubing to minimize VOC and preservative loss. Samples for metals analysis were filtered and preserved at the laboratory and an additional sample was collected and submitted to the laboratory for trace metals analysis at each sample location. In addition, field measurements were recorded for temperature, pH dissolved oxygen and conductivity.

Surface water samples were appropriately labeled with the sample location, requested analysis, preservative, date and time sampled and sampler's initials. Samples were maintained at 4°C ± 2°C with ice and shipped in coolers to Severn Trent Laboratory (STL) in Savannah, Georgia. The chain-of-custody (COC) documentation was shipped with the samples to the laboratory.

Sediment Sampling

Sediment samples were collected using a Ponar Dredge sampler from the upper few inches (5 to 6 cm) at each sample location. This depth interval was selected as the zone most relevant to exposures for ecological receptors. Sediment samples were analyzed for VOCs, SVOCs, pesticides, herbicides, and metals; and a matrix spike/matrix spike duplicate (MS/MSD) sample was analyzed for SVOCs, pesticides, herbicides, and metals.

VOC samples were collected from the first grab using a 5 mL modified syringe/plunger. The plunger tube was inserted into the sediment below the surface and removed slowly to prevent sample loss. The plunger was then used to extrude the sample into pre-weighed sample vials. One sample vial contained sodium bisulfate preservative for low-level analysis and the other vial contained methanol for high-level analysis. Sediment samples for all other parameters were

collected from a composite of the upper few inches of sediment from additional grab samples at each sample location. Sediment was removed from

the sampler and homogenized in a stainless steel bowl using a stainless steel spoon. Once the sediment was homogenized, sample containers were filled using the stainless steel spoon. All sampling equipment was decontaminated before moving to the next sample location.

Sediment samples were appropriately labeled with the sample location, requested analysis, preservative, date and time sampled and sampler's initials. Samples were maintained at 4°C ± 2°C with ice and shipped to Severn Trent Laboratory (STL) in Savannah, Georgia. The chain-of-custody documentation was shipped with the samples to the laboratory.

Should you have any questions or comments regarding this Data Validation Report, please do not hesitate to contact me at 314.429.0100

Very truly yours,

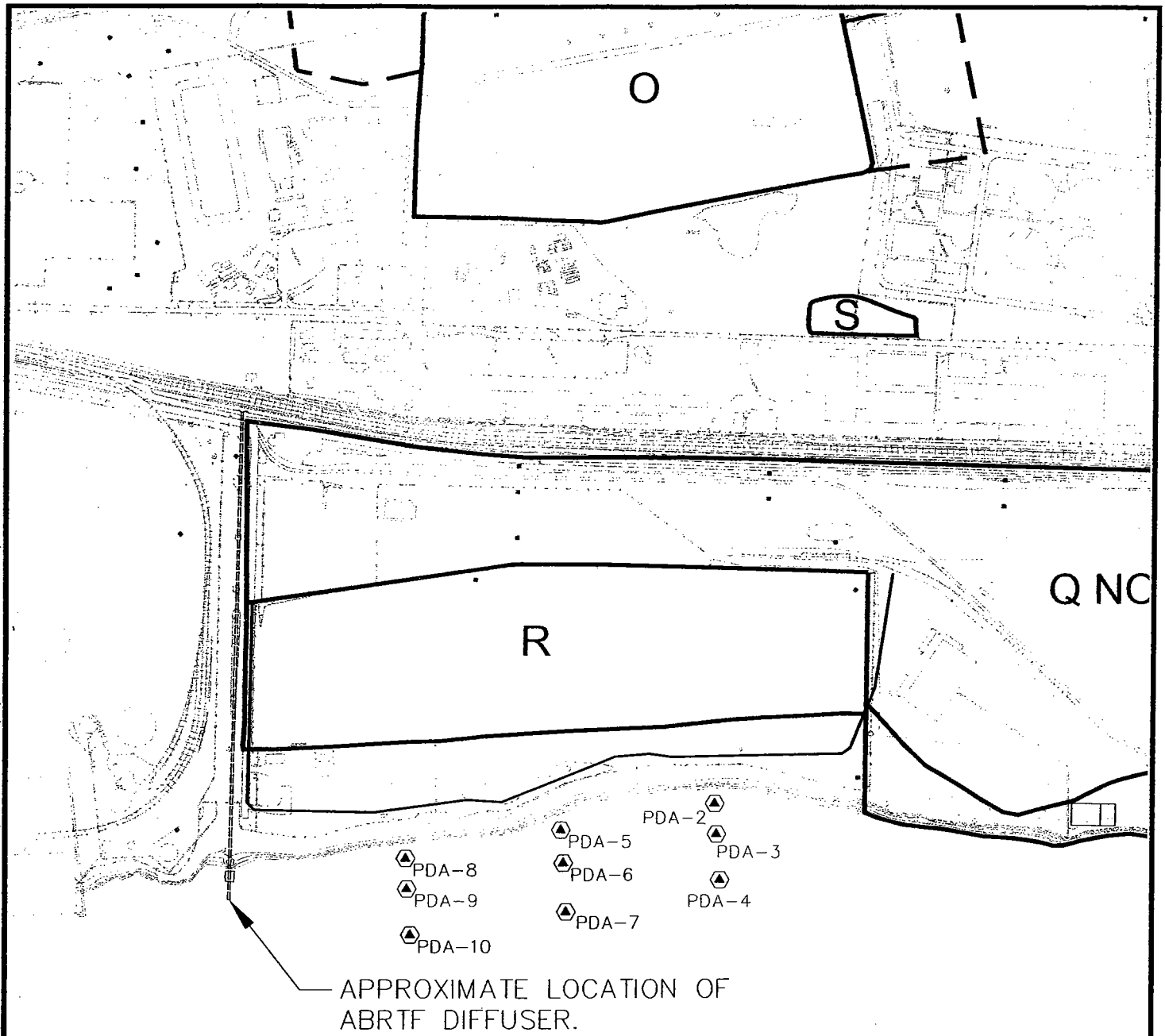
Robert Veenstra
Vice President

Enclosure

RBV/mlr

URS

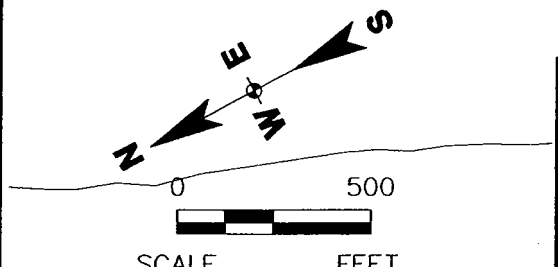
Figure



LEGEND

⊙ SURFACE WATER/SEDIMENT SAMPLE LOCATION (BARRIER WALL UAO)

⊛ SURFACE WATER/SEDIMENT SAMPLE LOCATION (2000 MENZIE CURRA)



SAUGET AREA 2 GROUNDWATER MIGRATION CONTROL SYSTEM SAUGET, ILLINOIS		PROJECT NO. 21561391
URS		
DRN. BY:djd 3-30-07 DSGN. BY:ss CHKD. BY:	Surface Water & Sediment Sampling Locations September 2006	FIG. NO. 1

File: P:\ENVIRONMENTAL\21581510 (SA2)\VALIDATION\SW & SED (SEPTEMBER 2006)\FIG 1 SURFACE WATER & SEDIMENT SAMPLING LOCATIONS (SEPT 06).DWG Last edited: 03/30/07 @ 10:29 a.m. WC-ST.LOUIS, MO

URS

Detection Tables

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Detections
September 2006

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	VOCs	Carbon Dioxide	760	ug/L	JN B		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	VOCs	Chlorobenzene	1.4	ug/L			
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Herbicides	2,4-D	0.32	ug/L	J		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Metals	Barium (Dissolved)	0.059	mg/L			
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Metals	Calcium (Dissolved)	48	mg/L			
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Metals	Magnesium (Dissolved)	24	mg/L			
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Metals	Nickel (Dissolved)	0.0019	mg/L	J		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Metals	Potassium (Dissolved)	4.2	mg/L			
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Metals	Sodium (Dissolved)	33	mg/L			

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Detections
September 2006

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	VOCs	Carbon Dioxide	850	ug/L	JN B		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	VOCs	Chlorobenzene	1.5	ug/L			
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	Metals	Barium (Dissolved)	0.06	mg/L			
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	Metals	Calcium (Dissolved)	49	mg/L			
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	Metals	Magnesium (Dissolved)	24	mg/L			
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	Metals	Potassium (Dissolved)	4.3	mg/L			
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	Metals	Sodium (Dissolved)	35	mg/L			

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Detections
September 2006

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	VOCs	Carbon Dioxide	830	ug/L	JN B		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	VOCs	Chlorobenzene	0.99	ug/L	J		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Herbicides	2,4-D	0.12	ug/L	JP		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Metals	Barium (Dissolved)	0.057	mg/L			
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Metals	Calcium (Dissolved)	47	mg/L			
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Metals	Magnesium (Dissolved)	23	mg/L			
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Metals	Nickel (Dissolved)	0.0023	mg/L	J		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Metals	Potassium (Dissolved)	4	mg/L			
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Metals	Sodium (Dissolved)	32	mg/L			

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Detections
September 2006

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	VOCs	Carbon Dioxide	890	ug/L	JN B		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Herbicides	2,4-D	0.11	ug/L	JP		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Metals	Barium (Dissolved)	0.058	mg/L			
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Metals	Calcium (Dissolved)	47	mg/L			
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Metals	Magnesium (Dissolved)	23	mg/L			
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Metals	Nickel (Dissolved)	0.0027	mg/L	J	J	D
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Metals	Potassium (Dissolved)	4.1	mg/L			
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Metals	Sodium (Dissolved)	33	mg/L			

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Detections
September 2006

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	VOCs	Carbon Dioxide	820	ug/L	JN B		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Herbicides	2,4-D	0.55	ug/L			
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Metals	Barium (Dissolved)	0.059	mg/L			
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Metals	Calcium (Dissolved)	49	mg/L			
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Metals	Magnesium (Dissolved)	24	mg/L			
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Metals	Nickel (Dissolved)	0.0022	mg/L	J		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Metals	Potassium (Dissolved)	4.2	mg/L			
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Metals	Sodium (Dissolved)	32	mg/L			

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Detections
September 2006

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	VOCs	1,1-Dichloroethane	2.7	ug/kg	J		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	VOCs	2-Butanone (MEK)	6.1	ug/kg	J		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	VOCs	Acetone	49	ug/kg	J		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	VOCs	Benzene	24	ug/kg	*	J	L
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	VOCs	Carbon Dioxide	42000	ug/kg	NJ B		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	VOCs	Carbon Disulfide	7	ug/kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	VOCs	Chlorobenzene	5700	ug/kg	D		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	VOCs	Ethylbenzene	1.8	ug/kg	J		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	VOCs	Toluene	3.7	ug/kg	J		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	1,4-Dichlorobenzene	730	ug/kg	J		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	2-Pentanone, 4-methoxy-4-methyl	25000	ug/kg	JN		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	Diphenyl sulfone	1100	ug/kg	JN		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	p-Hydroxybiphenyl	7100	ug/kg	JN		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Pesticides	4,4'-DDT	3.7	ug/kg	JP		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Herbicides	Dichlorprop	15	ug/kg	P		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Metals	Aluminum	5900	mg/kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Metals	Arsenic	3.1	mg/kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Metals	Barium	110	mg/kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Metals	Beryllium	0.32	mg/kg	J		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Metals	Cadmium	1.2	mg/kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Metals	Calcium	8600	mg/kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Metals	Chromium	10	mg/kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Metals	Cobalt	4.5	mg/kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Metals	Copper	13	mg/kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Metals	Iron	9900	mg/kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Metals	Lead	25	mg/kg	B		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Metals	Magnesium	2600	mg/kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Metals	Manganese	220	mg/kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Metals	Mercury	0.025	mg/kg	J		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Metals	Nickel	11	mg/kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Metals	Potassium	1000	mg/kg	B		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Metals	Silver	0.16	mg/kg	J		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Metals	Sodium	200	mg/kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Metals	Vanadium	17	mg/kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Metals	Zinc	330	mg/kg			

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Detections
September 2006

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	VOCs	2-Butanone (MEK)	4.2	ug/kg	J		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	VOCs	Acetone	59	ug/kg			
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	VOCs	Carbon Dioxide	890	ug/kg	JN B		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	VOCs	Carbon Disulfide	1.9	ug/kg	J		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	VOCs	Chlorobenzene	6.5	ug/kg			
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	2-Pentanone, 4-methoxy-4-methyl	23000	ug/kg	JN		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Pesticides	4,4'-DDT	0.82	ug/kg	J		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Metals	Aluminum	1700	mg/kg			
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Metals	Arsenic	1.5	mg/kg			
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Metals	Barium	35	mg/kg			
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Metals	Beryllium	0.11	mg/kg	J		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Metals	Cadmium	1.2	mg/kg			
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Metals	Calcium	22000	mg/kg			
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Metals	Chromium	5.2	mg/kg			
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Metals	Cobalt	2	mg/kg			
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Metals	Copper	4.8	mg/kg			
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Metals	Iron	4100	mg/kg			
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Metals	Lead	11	mg/kg	B		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Metals	Magnesium	960	mg/kg			
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Metals	Manganese	120	mg/kg			
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Metals	Mercury	0.0053	mg/kg	J		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Metals	Nickel	5.1	mg/kg			
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Metals	Potassium	340	mg/kg	B		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Metals	Sodium	190	mg/kg			
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Metals	Vanadium	8.3	mg/kg			
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Metals	Zinc	280	mg/kg			

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Detections
September 2006

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	VOCs	2-Butanone (MEK)	3.6	ug/kg	J		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	VOCs	Acetone	43	ug/kg	J		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	VOCs	Benzene	28	ug/kg	*	J	L
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	VOCs	Carbon Dioxide	990	ug/kg	JN B		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	VOCs	Carbon Disulfide	2	ug/kg	J		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	VOCs	Chlorobenzene	3500	ug/kg	D		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	VOCs	Toluene	4.2	ug/kg	J		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	2-Pentanone, 4-methoxy-4-methyl	21000	ug/kg	JN		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	P-Chloroaniline	680	ug/kg	J		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Herbicides	Dichlorprop	8.1	ug/kg	J		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Metals	Aluminum	1800	mg/kg			
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Metals	Arsenic	2.2	mg/kg			
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Metals	Barium	36	mg/kg			
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Metals	Beryllium	0.13	mg/kg	J		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Metals	Calcium	3100	mg/kg			
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Metals	Chromium	3.8	mg/kg			
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Metals	Cobalt	2.3	mg/kg			
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Metals	Copper	2.7	mg/kg			
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Metals	Iron	5800	mg/kg			
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Metals	Lead	33	mg/kg	B		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Metals	Magnesium	780	mg/kg			
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Metals	Manganese	110	mg/kg			
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Metals	Mercury	0.0058	mg/kg	J		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Metals	Nickel	5.3	mg/kg			
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Metals	Potassium	330	mg/kg	B		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Metals	Sodium	130	mg/kg			
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Metals	Vanadium	6.9	mg/kg			
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Metals	Zinc	40	mg/kg			

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Detections
September 2006

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	VOCs	Acetone	15	ug/kg	J		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	VOCs	Carbon Dioxide	800	ug/kg	JN B		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	VOCs	Chlorobenzene	3.8	ug/kg	J		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	2-Pentanone, 4-methoxy-4-methyl-	22000	ug/kg	JN		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	Benzo(a)anthracene	59	ug/kg	J		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	Benzo(a)pyrene	65	ug/kg	J		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	Benzo(b)fluoranthene	70	ug/kg	J		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	Benzo(g,h,i)perylene	38	ug/kg	J		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	Benzo(k)fluoranthene	43	ug/kg	J		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	Chrysene	63	ug/kg	J		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	Fluoranthene	78	ug/kg	J		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	Pyrene	78	ug/kg	J		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Metals	Aluminum	1900	mg/kg		J	D
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Metals	Arsenic	1.6	mg/kg			
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Metals	Barium	26	mg/kg		J	K
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Metals	Beryllium	0.1	mg/kg	J	J	D
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Metals	Cadmium	1.1	mg/kg			
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Metals	Calcium	2000	mg/kg		J	K
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Metals	Chromium	6.1	mg/kg		J	K
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Metals	Cobalt	3.4	mg/kg		J	D
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Metals	Copper	3.2	mg/kg		J	K
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Metals	Iron	5600	mg/kg			
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Metals	Lead	10	mg/kg	B	J	K
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Metals	Magnesium	1300	mg/kg		J	K
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Metals	Manganese	100	mg/kg		J	M
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Metals	Nickel	8.3	mg/kg		J	D
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Metals	Potassium	210	mg/kg	B		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Metals	Sodium	150	mg/kg			
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Metals	Vanadium	9.3	mg/kg			
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Metals	Zinc	330	mg/kg			

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Detections
September 2006

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	VOCs	Acetone	5.3	ug/kg	J		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	VOCs	Carbon Dioxide	650	ug/kg	JN B		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	2-Pentanone, 4-methoxy-4-methyl-	29000	ug/kg	N J		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Metals	Aluminum	770	mg/kg			
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Metals	Arsenic	1.4	mg/kg			
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Metals	Barium	19	mg/kg			
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Metals	Beryllium	0.08	mg/kg	J		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Metals	Calcium	1100	mg/kg			
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Metals	Chromium	5.5	mg/kg			
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Metals	Cobalt	2	mg/kg			
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Metals	Copper	0.6	mg/kg	J		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Metals	Iron	3600	mg/kg			
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Metals	Lead	2.8	mg/kg	B		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Metals	Magnesium	450	mg/kg			
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Metals	Manganese	96	mg/kg			
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Metals	Nickel	4.4	mg/kg			
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Metals	Potassium	140	mg/kg	B		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Metals	Sodium	100	mg/kg	J		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Metals	Vanadium	5.4	mg/kg			
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Metals	Zinc	17	mg/kg			

URS

Sample Summary List

Sauget Area 2
Groundwater Migration Control System
SAS051 Sample Summary List
September 2006

SDG	Sample ID	Sample Date	VOCs	SVOCs	PCBs	Pesticides	Herbicides	Dioxins	Metals	Other
SAS051	SW-SA2-GMCS-2	9/20/06	X	X		X	X		X	
SAS051	SW-SA2-GMCS-3	9/21/06	X	X		X	X		X	
SAS051	SW-SA2-GMCS-4	9/20/06	X	X		X	X		X	
SAS051	SW-SA2-GMCS-5	9/20/06	X	X		X	X		X	
SAS051	SW-SA2-GMCS-9	9/21/06	X	X		X	X		X	
SAS051	SED-SA2-GMCS-2	9/20/06	X	X		X	X		X	
SAS051	SED-SA2-GMCS-3	9/21/06	X	X		X	X		X	
SAS051	SED-SA2-GMCS-4	9/20/06	X	X		X	X		X	
SAS051	SED-SA2-GMCS-5	9/20/06	X	X		X	X		X	
SAS051	SED-SA2-GMCS-9	9/21/06	X	X		X	X		X	

URS

Checklists

DATA VALIDATION WORKSHEET
VOLATILE ORGANIC ANALYSIS

Reviewer: Tony Sedlacek
Date: 11/28/2006
Laboratory Severn Trent Laboratory - Savannah

Project Name: Site RGMCS
Project Number: 21561391.00001
SDG No.: SAS051
Review Level: Level III

Major Anomolies:

No samples were rejected

Minor Anomolies:

Samples were qualified due to LCS recoveries outside evaluation criteria.

Field IDs:

SW-SA2-GMCS-5	SED-SA2-GMCS-4	SED-SA2-GMCS-9
SW-SA2-GMCS-4	SED-SA2-GMCS-2	SED-SA2-GMCS-3
SW-SA2-GMCS-2	SW-SA2-GMCS-9	TRIP BLANK
SED-SA2-GMCS-5	SW-SA2-GMCS-3	

1.0 Chain of Custody/Sample Condition

		Yes	No	NA
1.1	Do Chain-of-Custody forms list all samples analyzed?	x		
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was maintained?	x		
1.3	Do the Traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data?	x		

Note: The laboratory case narrative indicated that LCS recoveries were outside evaluation criteria for trichloroethane, benzene and acetone. This issue is addressed further in the appropriate section below.

2.0 Holding Time/ Preservation (Code H)

		Yes	No	NA
2.1	Do sample preservation, collection and storage condition meet method requirement?	x		
	If sample preservation and/or temperature was inappropriate (i.e., <2° >6°C, etc.), comment in report. If unpreserved or temperature is outside the range 0° (but not frozen) to 10° flag all positive results with a "J" and all non-detects "UJ". If temperature exceeds 10°, flag positive detections "J" and non-detects "R".			
2.2	Have any technical holding times, determined from sampling to date of analysis, been exceeded? If yes, J(+)/UJ(-).		x	

Matrix	Preserved	Aromatic	All others
Aqueous	No	7 days	14 days
	Yes	14 days	14 days
Soil/Sediment	$4^{o}C \pm 2^{o}C$	14 days	14 days

		Yes	No	NA
2.3	Have any technical holding times been grossly (twice the holding time) exceeded? If yes, J(+)/R(-).		x	

Note: All holding times were met.

3.0 GC/MS Instrument Performance Check (Code T)

		Yes	No	NA
3.1	Are GC/MS Tuning and Mass Calibration forms present for bromofluorobenzene (BFB)?	x		x
3.2	Have all samples been analyzed within twelve hours of the BFB tune? If no, flag R.	x		x
3.3	Have ion abundance criteria for BFB been met for each instrument used? If no, flag R.	x		x

Note:

4.0 Blanks (Method Blanks, Field Blanks and Trip Blanks)

(Code X - Field Blank Contamination, Code Y - Trip blank contamination, Code Z - Method blank contamination)

		Yes	No	NA
4.1	Is a Method Blank Summary form present for each batch?			
4.2	Do any method blanks have positive VOA results (TCL and/or TIC)?			
4.3	Do any field/trip rinse/equipment blanks have positive VOA results (TCL and/or TIC)?			
	Action: Positive sample results <5X (or 10X for common volatile lab contaminants- methylene chloride, acetone, and 2-butanone) the blank concentration should be qualified "U". The result should be elevated to the RL for estimate (laboratory "J" flagged) concentrations.			
4.4	If Level IV, review raw data and verify all detections for blanks were reported.			x

Note: All blank met criteria.

5.0 GC/MS Initial Calibration (Code C)

		Yes	No	NA
5.1	Are Initial Calibration summary forms present and complete for each instrument used?			x
5.2	Are CCCs linear applying either %RSD < 30% and all other compounds <15% or >0.990?			x
	If not, J(+)/ UJ(-). In extreme cases, the reviewer may flag non-detects "R".			
5.3	Do any SPCC compounds have an RRF less than specification or any other compounds < 0.05 (use 0.01 for poor responders like ketones or alcohols)? If yes, J(+)/R(-).			x
5.4	Is the lowest standard at the same concentration, or lower, as the RL reported? If not, elevate RL.			x
5.5	If Level IV, recalculate a sample of RRFs and %RSDs to verify correct calculations are being made.			x

Note:

6.0 Continuing Calibration (Code C)

		Yes	No	NA
6.1	Are Continuing Calibration Summary forms present and complete?			x
6.2	Has a continuing calibration standard been analyzed every 12 hours?			x
6.3	Have all SPCCs and CCCs met method specifications? If not, comment in report, proceed to 6.4.			x
6.4	Do any compounds have a % difference (or % drift for quantitation from a curve) (%D) between initial and continuing calibration RRF outside QC limits (%D < 20%)?			x
	If yes, a marginal increase in response >20% then J(+) only; a decrease in response then J(+)/ UJ(-). For %D > 50%, flag R.			
6.5	Do any compounds have an RRF < 0.05 (use 0.01 for poor responders)? If yes, J(+)/R(-).			x
6.6	If Level IV, calculate a sample of RFs and %Ds from ave RF to verify correct calculations.			x

Note:

7.0 Surrogate Recovery (Code S)

		Yes	No	NA
7.1	Are all samples listed on the appropriate Surrogate Recovery Summary Form ?			
7.2	Are surrogate recoveries within acceptance criteria specified in the QAPP for all samples?			
7.3	If No in Section 7.2, were these sample(s) or method blank(s) reanalyzed?			x
7.4	If No in Section 7.3, is any sample dilution factor greater than 10? (Surrogate recoveries may be diluted out.)			x

Note: If SMC recoveries do not meet acceptance criteria in samples chosen for the MS/MSD or diluted

	> UCL	10% to LCL	< 10%
Positive	J	J	J
Non-detect	None	UJ	R

Note: All surrogate recoveries within evaluation criteria.

8.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD) or one MS with a Sample Duplicate (Recovery - Code M, RPD - Code D)

		Yes	No	NA
8.1	Is a Matrix Spike/Matrix Spike Duplicate recovery form present?		x	
8.2	Are MS/MSDs analyzed at the required frequency of one matrix spike per ten samples and a duplicate per twenty for each matrix?			x
8.3	Are all MS/MSD %Rs and RPDs within acceptance criteria Specified in the QAPP?			x
	Using informed professional judgment, the data reviewer should use the MS and MSD results in conjunction with other QC criteria and determine the need for qualification of the data for samples *from the same site/matrix*. Recoveries <10% may require rejection. RPD failures may be flagged "J" (+ only)			

Note: Samples were not spiked for VOCs.

9.0 Laboratory Control Sample (LCS/LCSD) (Recovery - Code L, RPD - Code E)

		Yes	No	NA
9.1	Is an LCS recovery form present?			
9.2	Is an LCS analyzed at the required frequency of one per twenty field samples for each matrix?			
9.3	Are all LCS %Rs and RPDs within acceptance criteria specified in the QAPP?		x	
9.4	If Level IV, verify the % recoveries are calculated correctly.			x
	Action for specific compound outside the acceptance criteria: %R>UCL, J(+) only; <LCL, J(+)/UJ(-); <30% J(+)/R(-). RPD failures should be flagged "J" (+ only)			

Note: LCS recoveries were outside evaluation criteria for trichloroethene (79%) with criteria (80-122%) and benzene (123%) with criteria (79-118%) in LCS 680-55963/9 and acetone (162%) with criteria (28-143%) and benzene (130%) with criteria (79-118%) in LCS 680-56048/4. LCS 680-56048/4 was analyzed as part of a dilution batch, and all acetone and benzene results were reported from the undiluted analysis; therefore no qualification of data was required. Qualifications associated with LCS 680-55963/9 are listed in the table below.

Field ID	Analyte(s)	Qualification	Code	Batch ID	Justification
SED-SA2-GMCS-5	Trichloroethene	UJ	L	680-55963	LCS recovery Low
SED-SA2-GMCS-4	Trichloroethene	UJ	L	680-55963	LCS recovery Low
SED-SA2-GMCS-4	Benzene	J	L	680-55963	LCS recovery High
SED-SA2-GMCS-2	Trichloroethene	UJ	L	680-55963	LCS recovery Low
SED-SA2-GMCS-2	Benzene	J	L	680-55963	LCS recovery High
SED-SA2-GMCS-9	Trichloroethene	UJ	L	680-55963	LCS recovery Low
SED-SA2-GMCS-3	Trichloroethene	UJ	L	680-55963	LCS recovery Low

10.0 Internal Standards (Code I)

		Yes	No	NA
10.1	Are internal standard areas for every sample and blank within upper and lower QC limits?			
	Area > +100% / Area < -50% / Area < -10%			
	Positive: J / J / J			
	Non-detect: None / UJ / R			
Note:	The method specification is for the continuing calibration to be compared to the mid-point initial calibration, not sample to continuing calibration. Thus, if all other QC specifications are met for a given sample, using informed professional judgment, the reviewer may choose not to flag individual samples in this case.			
10.2	Are retention times of internal standards within 30 seconds of the associated calibration standard?			
	Action: The chromatogram must be examined to determine if any false positives or negatives exist. For shift of a large magnitude, the reviewer may consider partial or total rejection of the data for non-detects in that sample/fraction.			

Note: All internal standard area counts and retention times within evaluation criteria.

11.0 TCL Identification (Code W)

		Yes	No	NA
11.1	Is the relative retention time (RRT) of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration?			x
11.2	Are the three ions of greatest intensity present in the standard mass spectrum also present in the sample mass spectrum; and do sample and standard relative ion intensities agree within 30%?			x

Note:

12.0 TCL/TIC Quantitation and Reported Detection limits (Code K)

		Yes	No	NA
12.1	Are RLs used consistent with those specified in the QAPP?			x
12.2	Are these limits adjusted to reflect dilutions and/ or percent solids as required?			x
12.3	Are TIC ions greater than ten percent in the reference spectrum also present in the sample spectrum?			x
12.4	Are any positives reported that exceed the linear range of the instrument? If yes, than flag "J".			x
12.5	If Level IV, calculate a sample of positive results to verify correct calculations			x

Note:

13.0 Field Duplicate Samples (Code F)

		Yes	No	NA
13.1	Were any field duplicates submitted for VOC analysis?		x	
13.2	Were all RPD or absolute difference values within the control limits outlined in the QAPP?			x
	Action: No qualifying action is taken based on field duplicate results, however the data validator should provide a qualitative assessment in the data validation report.			

Note: Field duplicate samples were not submitted for VOC analysis.

14.0 Data Completeness

			Yes	No	NA
14.1	Is % completeness within the control limits? (Control limit: Check QAPP or use 95% for aqueous sample,				
14.2	Number of samples:	11			
14.3	Number of target compounds in each analysis:	33			
14.4	Number of results rejected and not reported:	0			
	% Completeness = 100 x ((14.1 * 14.2) - 14.3) / (14.1 * 14.2)				
	% Completeness	**100**			

Note:

DATA VALIDATION WORKSHEET
SEMIVOLATILE ORGANIC ANALYSIS

Reviewer: Tony Sedlacek
Date: 11/28/2006
Laboratory Severn Trent Laboratory - Savannah

Project Name: Site RGMCS
Project Number: 21561391.00001
SDG No.: SAS051
Review Level: Level III

Major Anomolies:

No samples were rejected

Minor Anomolies:

Sample SW-SA2-GMCS-4 was qualified due to low internal standard recovery.

Field IDs:

SW-SA2-GMCS-5	SED-SA2-GMCS-4
SW-SA2-GMCS-4	SED-SA2-GMCS-2
SW-SA2-GMCS-2	SW-SA2-GMCS-9
SED-SA2-GMCS-5	SW-SA2-GMCS-3
SED-SA2-GMCS-9	SED-SA2-GMCS-3

1.0 Chain of Custody/Sample Condition

		Yes	No	NA
1.1	Do Chain-of-Custody forms list all samples analyzed?	x		
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was maintained?	x		
1.3	Do the Traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data?	x		

Note: The laboratory case narrative indicated that surrogates were diluted out in samples due to high levels of target analytes and internal standard recoveries were outside evaluation criteria. These issues are discussed further in the appropriate sections below.

2.0 Holding Time/ Preservation (Code H)

		Yes	No	NA
2.1	Do sample preservation, collection and storage condition meet method requirement?	x		
	If samples were not on ice or the ice was melted upon arrival at the laboratory and the temperature of the cooler was elevated (> 10 °C), then flag all positive results with a "J" and all non-detects "UJ".			
2.2	Have any technical holding times, determined from sampling to date of analysis, been exceeded? (See		x	
	Extraction: Soil/Sediment 14 days - aqueous 7 days Analysis: 40 days			
2.3	Have any technical holding times grossly (twice the holding time) been exceeded? If yes, J(+)/R(-).		x	

Note: All holding time criteria was met.

3.0 GC/MS Instrument Performance Check (Code T)

		Yes	No	NA
3.1	Are GC/MS Tuning and Mass Calibration forms present for DFTPP?	x		x
3.2	Have all samples been analyzed within twelve hours of the tune?	x		x
	If no, the data for the affected standards, blanks, field samples or QC samples are rejected "R".			
3.3	Have ion abundance criteria for DFTPP been met for each instrument used?	x		x
	If no, all standards, blanks, field samples and QC samples are rejected "R".			

Note:

4.0 Blanks (Method Blanks and Field Blanks) (Code X - Field Blank Contamination, Code Z - Method blank contamination)

		Yes	No	NA
4.1	Is a Method Blank Summary form present for each batch?			
4.2	Do any method/instrument/reagent blanks have positive results (TCL, and/or TIC)?			
4.3	Do any field equipment blanks have positive results (TCL, and/or TIC)?			x
	Action: Positive sample results <5X (or 10X for phthalate contaminants) the blank concentration should be qualified "U" and the detection limit elevated to the RL for estimate concentrations.			
4.4	If Level IV, review raw data and verify all detections for blanks were reported.			x

Note: All blanks met criteria.

5.0 GC/MS Initial Calibration (Code C)

		Yes	No	NA
5.1	Are Initial Calibration summary forms present and complete for each instrument used?			x
5.2	Are CCCs linear applying either %RSD 30% and all other compounds <15% or >0.990?			x
	If not, J(+)/ UJ(-). In extreme cases, the reviewer may flag non-detects "R".			x
5.3	Do any SPCC compounds have an RRF les than specification or any other compounds < 0.05 (use 0.01 for poor responders like amines and phenols)? If yes, J(+)/R(-).			x
5.4	Is the lowest standard at the same concentration, or lower, as the RL reported? If not, elevate RL.			x
5.5	If Level IV, recalculate a sample of RRFs and %RSDs to verify correct calculations are being made.			x

Note:

6.0 Continuing Calibration (Code C)

		Yes	No	NA
6.1	Are Continuing Calibration Summary forms present and complete?			x
6.2	Has a continuing calibration standard been analyzed every 12 hours?			x
6.3	Have all SPCCs and CCCs met method specifications? If not, comment in report, proceed to 6.4.			x
6.4	Do any compounds have a % difference (or % drift for quantitation from a curve) (%D) between initial and continuing calibration RRF outside QC limits (%D < 20%)?			x
	If yes, a marginal increase in response >20% then J(+) only; a decrease in response then J(+)/ UJ(-). For %D > 50%, flag R.			
6.5	Do any compounds have an RRF < 0.05 (use 0.01 for poor responders)? If yes, J(+)/R(-).			x
6.6	If Level IV, calculate a sample of RFs and %Ds from ave RF to verify correct calculations.			x

Note:

7.0 Surrogate Recovery (Code S)

		Yes	No	NA
7.1	Are all samples listed on the appropriate Surrogate Recovery Summary Form ?			
7.2	Are surrogate recoveries within acceptance criteria specified in the QAPP for all samples and method blanks?		x	
7.3	Are more than one of either fraction outside the acceptance criteria?	x		
7.4	If Yes in Section 7.3, are these sample(s) or method blank(s) reanalyzed?		x	
7.5	If Yes in Section 7.3, is any sample dilution factor greater than 10?		x	
	Note: If SMC recoveries display unacceptable recoveries in the MS and/ or diluted samples, then no reanalysis is required and acids and base/ neutrals are assessed separately.			
	> UCL / 10% to LCL / < 10%			
	Positive: J / J / J			
	Non-detect: None / UJ / R			

Note: Surrogates phenol-d5, 2-fluorophenol, nitrobenzene-d5, 2-fluorobiphenyl and terphenyl-d14 were diluted out and not recovered in samples SED-SA2-GMCS-2 and SED-SA2-GMCS-4. Therefore no qualification of data was required. All other surrogates were within evaluation criteria.

8.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD) or one MS with a Sample Duplicate (Recovery - Code M, RPD - Code D)

		Yes	No	NA
8.1	Is a Matrix Spike/Matrix Spike Duplicate recovery form present?	x		
8.2	Are MS/MSDs analyzed at the required frequency not to exceed twenty field samples for each matrix?	x		
8.3	Are all MS/MSD %Rs and RPDs within acceptance criteria provided by the laboratory?	x		
	Using informed professional judgment, the data reviewer should use the MS and MSD results in conjunction with other QC criteria and determine the need for qualification of the data for samples *from the same site/matrix*. Recoveries <10% may require rejection. RPD failures may be flagged "J" (+ only)			

Note: Sample SED-SA2-GMCS-9 was spiked and analyzed for SVOCs. All MS/MSD recoveries were within evaluation criteria.

9.0 Laboratory Control Sample (LCS/LCSD) (Recovery - Code L, RPD - Code E)

		Yes	No	NA
9.1	Is an LCS recovery form present?	x		
9.2	Is LCS analyzed at the required frequency for each matrix?	x		
9.3	Are all LCS %Rs (and RPDs) within acceptance criteria?	x		
	Action for specific compound outside the acceptance criteria: %R>UCL, J(+) only; <LCL, J(+)/UJ(-); <30% J(+)/R(-). RPD failures should be flagged "J" (+ only)			
9.4	If Level IV, verify the % recoveries are calculated correctly.			x

Note: All LCS recoveries were within evaluation criteria.

10.0 Internal Standards (Code I)

		Yes	No	NA
10.1	Are internal standard area of every sample and blank within upper and lower QC limits for each continuing		x	
	Area > +100% / Area < -50% / Area < -10%			
	Positive: J / J / J			
	Non-detect: None / UJ / R			
Note:	The method specification is for the continuing calibration to be compared to the mid-point initial calibration, not sample to continuing calibration. Thus, if all other QC specifications are met for a given sample, using informed professional judgment, the reviewer may choose not to flag individual samples in this case.			
10.2	Are retention times of internal standards within 30 seconds of the associated calibration standard?			
	Action: The chromatogram must be examined to determine if any false positives or negatives exist. For shift of a large magnitude, the reviewer may consider partial or total rejection of the data for non-detects in that sample/fraction.			

Note: Internal standard areas recovered outside evaluation criteria in sample SED-SA2-GMCS-9 MSD. MSD samples are quality control samples and are not qualified.
Internal standard areas recovered outside evaluation criteria for:1,4-Dichlorobenzene-d4 (76974) with criteria (92451-369806), naphthalene-d8 (322609) with criteria (407414-1629656), acenaphthene-d10 (205602) with criteria (254715-1018858), phenanthrene-d10 (396494) with criteria (422061-1688244), chrysene-d12 (460390) with criteria (476201-1904802) and perylene-d12 (417880) with criteria (505153-2020610) in sample SW-SA2-GMCS-4. All analytes were nondetect in sample SW-SA2-GMCS-4 and were qualified estimated nondetect "UJ".

Field ID	Analyte(s)	Qualification	Code	Batch #	Justification
SW-SA2-GMCS-4	All SVOCs	UJ	I	680-56227	Low internal standard recovery

11.0 TCL Identification (Code W)

		Yes	No	NA
11.1	Is the relative retention time (RRT) of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration?			x
11.2	Are the three ions of greatest intensity present in the standard mass spectrum also present in the sample mass spectrum; and do sample and standard relative ion intensities agree within 30%?			x

Note:

12.0 TCL/TIC Quantitation and Reported Detection limits (Code K)

		Yes	No	NA
12.1	Are RLs used consistent with those specified in the QAPP?			x
12.2	Are these limits adjusted to reflect dilutions and/ or percent solids as required?			x
12.3	Are TIC ions greater than ten percent in the reference spectrum also present in the sample spectrum?			x
12.4	Are any positives reported that exceed the linear range of the instrument? If yes, than flag "J".			x
12.5	If Level IV, calculate a sample of positive results to verify correct calculations			x

Note:

13.0 Field Duplicate Samples (Code F)

		Yes	No	NA
13.1	Were any field duplicates submitted for SVOC analysis?		x	
13.2	Were all RPD or absolute difference values within the control limits?			x
	No action is taken based on field duplicate results, however the data validator should provide a qualitative assessment in the data validation report.			

Note: Field duplicates were not submitted for SVOC analysis.

14.0 Data Completeness

			Yes	No	NA
14.1	Is % completeness within the control limits? (Control limit: Check QAPP or use 95% for aqueous sample,				
14.2	Number of samples:	10			
14.3	Number of target compounds in each analysis:	65			
14.4	Number of results rejected and not reported:	0			
	% Completeness = 100 x ((14.1 x 14.2) - 14.3) / (14.1 x 14.2)				
	% Completeness	**100**			

Note:

DATA VALIDATION WORKSHEET
PESTICIDES/PCBs ANALYSIS

Reviewer: Tony Sedlacek
Date: 11/29/2006
Laboratory Severn Trent Laboratory - Savannah

Project Name: Sauget - Area 2
Project Number: 21561391.00001
SDG No.: SAS051
Review Level: Level III

Major Anomolies:

No samples were rejected.

Minor Anomolies:

Samples were qualified due to surrogate and MS/MSD recoveries.

Field IDs:

SW-SA2-GMCS-5	SED-SA2-GMCS-4
SW-SA2-GMCS-4	SED-SA2-GMCS-2
SW-SA2-GMCS-2	SW-SA2-GMCS-9
SED-SA2-GMCS-5	SW-SA2-GMCS-3
SED-SA2-GMCS-9	SED-SA2-GMCS-3

1.0 Chain of Custody/Sample Condition

		Yes	No	NA
1.1	Do Chain-of-Custody forms list all samples analyzed?	x		
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was maintained?	x		
1.3	Do the Traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data?	x		

Note: The laboratory case narrative indicated that surrogate and MS/MSD recoveries were outside evaluation criteria.

2.0 Holding Time/ Preservation (Code h)

		Yes	No	NA
2.1	Do sample preservation, collection and storage condition meet method requirement?	x		
	If samples were not on ice or the ice was melted upon arrival at the laboratory and the temperature of the cooler was elevated (> 10 °C), then flag all positive results with a "J" and all non-detects "UJ".			
2.2	Have any technical holding times, determined from sampling to date of analysis, been exceeded? (See attached Holding Time Table for sample holding time) If yes, J(+)/UJ(-).		x	
	Extraction: Soil/Sediment 14 days - aqueous 7 days Analysis: 40 days			
2.3	Have any technical holding times grossly (twice the holding time) been exceeded? If yes, J(+)/R(-).		x	

Note: All holding time criteria was met.

3.0 Blanks (Method Blanks and Field Blanks) (Code x - Field Blank Contamination, Code z - Method blank contamination)

		Yes	No	NA
3.1	Is a Method Blank Summary form present for each batch?	x		
3.2	Do any method blanks have positive results (TCL)?		x	
3.3	Do any field/rinse/equipment blanks have positive results (TCL)?		x	x
	Action: Positive sample results <5X the blank concentration should be qualified "U". The result should be elevated to the RL for estimate (laboratory "J" flagged) concentrations.			
3.4	If Level IV, review raw data and verify all detections for blanks were reported.			x

Note: All blanks met criteria.

4.0 GC/ECD Instrument Performance Check (Code b)

		Yes	No	NA
4.1	Are Endrin and 4,4'-DDT breakdown forms present?			x
4.2	Have all samples been analyzed within twelve hours of the performance check sample?			x
	If no, the data for the affected standards, blanks, field samples or QC samples are rejected "R".			
4.3	Have percent breakdown criteria (15%) for endrin and 4,4'-DDT been met?			x
	If no, all standards, blanks, field samples and QC samples are rejected "R".			

Note:

5.0 Initial Calibration (Code r)

		Yes	No	NA
5.1	Are Initial Calibration summary forms present and complete for each instrument used?			x
5.2	Are response factors stable (%RSD values < 20% or >0.995) over the concentration range of the instrument			x
	If not, J(+)/ UJ(-). In extreme cases, the reviewer may flag non-detects "R".			
5.3	If Level IV, recalculate a sample of RRFs and %RSDs to verify correct calculations are being made.			x

Note:

6.0 Continuing Calibration (Code c)

		Yes	No	NA
6.1	Are Continuing Calibration Summary forms present and complete?			x
6.2	Has a continuing calibration standard been analyzed every 12 hours?			x
6.3	Do any compounds have a % difference (or % drift for quantitation from a curve) (%D) between initial and continuing calibration CF outside QC limits (%D < 15%)?			x
	If yes, a marginal increase in response >20% then J(+) only; a decrease in response then J(+)/ UJ(-). For %D > 50%, flag R.			
6.4	If Level IV, calculate a sample of CFs and %Ds to verify correct calculations.			x

Note:

7.0 Surrogate Recovery (Code s)

		Yes	No	NA
7.1	Are all samples listed on the appropriate Surrogate Recovery Summary Form ?			
7.2	Are surrogate recoveries within acceptance criteria specified in the QAPP for all samples?		x	
7.3	If No in Section 7.2, were these sample(s) or method blank(s) reanalyzed?		x	
7.4	If No in Section 7.3, is any sample dilution factor greater than 10? (Surrogate recoveries may be diluted out.)			x
	> UCL / 10% to LCL / < 10%			
	Positive: J / J / J			
	Non-detect: None / UJ / R			

Note: Surrogate recoveries were outside evaluation criteria for DCB Decachlorobiphenyl (24% and 18%) with criteria (30-150%) in samples SW-SA2-GMCS-5 and SW-SA2-GMCS-4 respectively. Surrogate recoveries were also outside evaluation criteria for tetrachloro-m-xylene (22%) with criteria (30-150%) in sample SED-SA2-GMCS-5 and (23% and 29%) in samples SED-SA2-GMCS-9 MS/MSD. MS/MSD samples are quality control samples and are not qualified. All analytes were nondetect and qualified estimated nondetect "UJ" in samples SW-SA2-GMCS-5, SW-SA2-GMCS-4 and SED-SA2-GMCS-5.

Field ID	Analyte(s)	Qualification	Code	Batch #	Justification
SW-SA2-GMCS-5	All Pesticides	UJ	s	680-56069	Surrogate recovery low
SW-SA2-GMCS-4	All Pesticides	UJ	s	680-56069	Surrogate recovery low
SED-SA2-GMCS-5	All Pesticides	UJ	s	680-56318	Surrogate recovery low

8.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD) or one MS with a Sample Duplicate (Code m - recovery, Code d - RPD)

		Yes	No	NA
8.1	Is a Matrix Spike/Matrix Spike Duplicate recovery form present?			
8.2	Are MS/MSDs analyzed at the required frequency of one matrix spike per ten samples and a duplicate per twen for each matrix?			
8.3	Are all MS/MSD %Rs and RPDs within acceptance criteria Specified in the QAPP?		x	
	Using informed professional judgment, the data reviewer should use the MS and MSD results in conjunction with other QC criteria and determine the need for qualification of the data for samples *from the same site/matrix* Recoveries <10% may require rejection. RPD failures may be flagged "J" (+ only)			

Note: Sample SED-SA2-GMCS-9 was spiked and analyzed for pesticides. The following compounds had MS/MSD recoveries outside evaluation criteria: delta-BHC (32/37%) with criteria (43-126%), aldrin (14/20%) with criteria (26-139%), heptachlor epoxide (21/39%) with criteria (43-132%), endosulfan I (13/22%) with criteria (31-124%), dieldrin (17/25%) with criteria (29-146%), 4,4'-DDE (17/25%) with criteria (35-122%), endosulfan II (21/25%) with criteria (31-127%) and endosulfan sulfate (46/51%) with criteria (55-136). The following compounds had MS recoveries outside evaluation criteria: endrin (40%) with criteria (45-148%) and alpha-chlordane (37%) with criteria (42-125%). The following compound had an MSD recovery outside evaluation criteria: endrin ketone (0%) with criteria (47-156%). Although all other quality control parameters were within criteria, professional judgment was used to qualify sample SED-SA2-GMCS-9 due to the number of analytes that were recovered outside evaluation criteria. All analytes were nondetect and qualified estimated nondetect "UJ".

Field ID	Analyte(s)	Qualification	Code	Batch #	Justification
SED-SA2-GMCS-9	All Pesticides	UJ	m	680-56318	MS/MSD recovery low

9.0 Laboratory Control Sample (LCS/LCSD) (Code l - LCS recovery Code e - RPD)

		Yes	No	NA
9.1	Is an LCS recovery form present?			
9.2	Is an LCS analyzed at the required frequency of one per twenty field samples for each matrix?			
9.3	Are all LCS %Rs and RPDs within acceptance criteria specified in the QAPP?			
9.4	If Level IV, verify the % recoveries are calculated correctly.			x
	Action for specific compound outside the acceptance criteria: %R>UCL, J(+) only; <LCL, J(+)/UJ(-); <30% J(+)/R(-). RPD failures should be flagged "J" (+ only)			

Note: The LCS were within evaluation criteria.

10.0 TCL Identification (Code w)

		Yes	No	NA
10.1	Is the relative retention time (RRT) of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration?			x

Note:

11.0 TCL Quantitation and Reported Detection limits (Code p)

		Yes	No	NA
11.1	Are RLs used consistent with those specified in the QAPP?			x
11.2	Are these limits adjusted to reflect dilutions and/ or percent solids as required?			x
11.3	Are any positives reported that exceed the linear range of the instrument? If yes, than flag "J".			x
11.4	If Level IV, calculate a sample of positive results to verify correct calculations			x

Note:

12.0 Field Duplicate Samples (Code f)

		Yes	No	NA
12.1	Were any field duplicates submitted for analysis?		x	
12.2	Were all RPD or absolute difference values within the control limits outlined in the QAPP?			x
	Action: No qualifying action is taken based on field duplicate results, however the data validator should provide a qualitative assessment in the data validation report.			

Note: Field duplicate samples were not submitted for pesticide analysis.

13.0 Data Completeness

			Yes	No	NA
13.1	Is % completeness within the control limits? (Control limit: Check QAPP or use 95% for aqueous sample, 90% for				
13.2	Number of samples:	10			
13.3	Number of target compounds in each analysis:	20			
13.4	Number of results rejected and not reported:	0			
	% Completeness = 100 x ((13.1 x 13.2) - 13.3) / (13.1 x 13.2)				
	% Completeness	**100**			

Note:

DATA VALIDATION WORKSHEET
HERBICIDES ANALYSIS

Reviewer: Tony Sedlacek
Date: 7/11/2005
Laboratory Severn Trent Laboratory - Savannah

Project Name: Site RGMCS
Project Number: 21561391.00001
SDG No.: SAS051
Review Level: Level III

Major Anomolies:

No samples were rejected

Minor Anomolies:

No samples required qualification in this SDG.

Field IDs:

SW-SA2-GMCS-5	SED-SA2-GMCS-4
SW-SA2-GMCS-4	SED-SA2-GMCS-2
SW-SA2-GMCS-2	SW-SA2-GMCS-9
SED-SA2-GMCS-5	SW-SA2-GMCS-3
SED-SA2-GMCS-9	SED-SA2-GMCS-3

1.0 Chain of Custody/Sample Condition

		Yes	No	NA
1.1	Do Chain-of-Custody forms list all samples analyzed?	X		
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was maintained?	X		
1.3	Do the Traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data?	x		

Note: The laboratory case narrative indicated that MSD recoveries and an MS/MSD RPD were outside evaluation criteria.

2.0 Holding Time/ Preservation (Code h)

		Yes	No	NA
2.1	Do sample preservation, collection and storage condition meet method requirement?	X		
	If samples were not on ice or the ice was melted upon arrival at the laboratory and the temperature of the cooler was elevated (> 10 ^{o}C), then flag all positive results with a "J" and all non-detects "UJ".			
2.2	Have any technical holding times, determined from sampling to date of analysis, been exceeded? (See attached Holding Time Table for sample holding time) If yes, J(+)/UJ(-).			
	Extraction: Soil/Sediment 14 days - aqueous 7 days Analysis: 40 days			
2.3	Have any technical holding times grossly (twice the holding time) been exceeded? If yes, J(+)/R(-).		X	

Note: All holding time criteria met criteria.

3.0 Blanks (Method Blanks and Field Blanks) (Code x - Field Blank Contamination, Code z - Method blank contamination)

		Yes	No	NA
3.1	Is a Method Blank Summary form present for each batch?	X		
3.2	Do any method blanks have positive results?		X	
3.3	Do any field/rinse/equipment blanks have positive results?			x
	Action: Positive sample results <5X the blank concentration should be qualified "U". The result should be elevated to the RL for estimate (laboratory "J" flagged) concentrations.			
3.4	If Level IV, review raw data and verify all detections for blanks were reported.			x

Note: All blanks met criteria.

4.0 Initial Calibration (Code r)

		Yes	No	NA
4.1	Are Initial Calibration summary forms present and complete for each instrument used?			x
4.2	Are calibration factors stable (%RSD values < 20% or >0.995) over the concentration range of the instrument			x
	If not, J(+)/ UJ(-). In extreme cases, the reviewer may flag non-detects "R".			
4.3	If Level IV, recalculate a sample of RRFs and %RSDs to verify correct calculations are being made.			x

Note:

5.0 Continuing Calibration (Code c)

		Yes	No	NA
5.1	Are Continuing Calibration Summary forms present and complete?			x
5.2	Has a continuing calibration standard been analyzed every 12 hours?			x
5.3	Do any compounds have a % difference (or % drift for quantitation from a curve) (%D) between initial and continuing calibration CF outside QC limits (%D < 20%)?			x
	If yes, a marginal increase in response >20% then J(+) only; a decrease in response then J(+)/ UJ(-). For %D > 50%, flag R.			
5.5	If Level IV, calculate a sample of CFs and %Ds from ave CF to verify correct calculations.			x

Note:

6.0 Surrogate Recovery (Code s)

		Yes	No	NA
6.1	Are all samples listed on the appropriate Surrogate Recovery Summary Form ?	X		
6.2	Are surrogate recoveries within acceptance criteria specified in the QAPP for all samples?	X		
6.3	If No in Section 6.2, were these sample(s) or method blank(s) reanalyzed?			x
6.4	If No in Section 6.3, is any sample dilution factor greater than 10? (Surrogate recoveries may be diluted out.)			x
	> UCL / 10% to LCL / < 10%			
	Positive: J / J / J			
	Non-detect: None / UJ / R			

Note: All surrogate recoveries were within evaluation criteria.

7.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD) or one MS with a Sample Duplicate (Code m - recovery, Code d - RPD)

		Yes	No	NA
7.1	Is a Matrix Spike/Matrix Spike Duplicate recovery form present?			
7.2	Are MS/MSDs analyzed at the required frequency of one matrix spike per ten samples and a duplicate per twenty for each matrix?			
7.3	Are all MS/MSD %Rs and RPDs within acceptance criteria Specified in the QAPP?		x	
	Using informed professional judgment, the data reviewer should use the MS and MSD results in conjunction with other QC criteria and determine the need for qualification of the data for samples *from the same site/matrix* . Recoveries <10% may require rejection. RPD failures may be flagged "J" (+ only)			

Note: Sample SED-SA2-GMCS-3 was spiked and analyzed for herbicides. MSD recovery was outside evaluation criteria for pentachlorophenol (43%) with criteria (44-108%) and 2,4-DB had an RPD of (55) with criteria (<50). All other quality control criteria was within criteria, therefore, no qualification of data was required.

8.0 Laboratory Control Sample (LCS/LCSD) (Code l - LCS recovery Code e - RPD)

		Yes	No	NA
8.1	Is an LCS recovery form present?			
8.2	Is an LCS analyzed at the required frequency of one per twenty field samples for each matrix?			
8.3	Are all LCS %Rs and RPDs within acceptance criteria specified in the QAPP?			
8.4	If Level IV, verify the % recoveries are calculated correctly.			x
	Action for specific compound outside the acceptance criteria: %R>UCL, J(+) only; <LCL, J(+)/UJ(-); <30% J(+)/R(-). RPD failures should be flagged "J" (+ only)			

Note: All LCS recoveries were within evaluation criteria.

9.0 TCL Identification (Code w)

		Yes	No	NA
9.1	Is the relative retention time (RRT) of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration?			x

Note:

10.0 TCL Quantitation and Reported Detection limits (Code p)

		Yes	No	NA
10.1	Are RLs used consistent with those specified in the QAPP?			x
10.2	Are these limits adjusted to reflect dilutions and/ or percent solids as required?			x
10.3	Are any positives reported that exceed the linear range of the instrument? If yes, than flag "J".			x
10.4	If Level IV, calculate a sample of positive results to verify correct calculations			x

Note:

11.0 Field Duplicate Samples (Code f)

		Yes	No	NA
11.1	Were any field duplicates submitted for herbicide analysis?		x	
11.2	Were all RPD or absolute difference values within the control limits outlined in the QAPP?			x
	Action: No qualifying action is taken based on field duplicate results, however the data validator should provide a qualitative assessment in the data validation report.			

Note: Field duplicates were not submitted for herbicide analysis.

12.0 Data Completeness

			Yes	No	NA
12.1	Is % completeness within the control limits? (Control limit: Check QAPP or use 95% for aqueous sample, 90%				
12.2	Number of samples:	10			
12.3	Number of target compounds in each analysis:	10			
12.4	Number of results rejected and not reported:	0			
	% Completeness = 100 x ((12.1 x 12.2) - 12.3) / (12.1 x 12.2)				
	% Completeness	**100**			

Note:

DATA VALIDATION WORKSHEET - Level III Review
Inorganic - ICP, ICP-MS, GFAA, and CVAA

Reviewer: Tony Sedlacek
Date: 11/29/2006
Laboratory Severn Trent Laboratory - Savannah

Project Name: Site RGMCS
Project Number: 21561391.00001
SDG No.: SAS051
Review Level: Level III

Major Anomolies:

No samples were rejected

Minor Anomolies:

Samples were qualified due to prep and calibration blanks, MS recoveries, matrix and laboratory duplicate RPDs.

Field IDs:

SW-SA2-GMCS-5	SED-SA2-GMCS-4
SW-SA2-GMCS-4	SED-SA2-GMCS-2
SW-SA2-GMCS-2	SW-SA2-GMCS-9
SED-SA2-GMCS-5	SW-SA2-GMCS-3
SED-SA2-GMCS-9	SED-SA2-GMCS-3

1.0 Chain of Custody/Sample Condition/Raw Data

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
1.1	Do Chain-of-Custody forms list all samples that were analyzed?	X			X			X			X		
* 1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was maint	X			X			X			X		
1.3	Do the traffic Reports, chain-of-custody,and lab narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data?	X										X	
1.4	Does sample preservation, collection and storage meet method requirement? (water samples: with Nitric Acid to pH < 2, and soil/sediment samples: 4 °C ± °C)	X			X			X			X		
1.5	Are the digestion logs present and complete with pH values, sample weights, dilutions, final volumes. % solids (for soil samples), and preparation dates? For any missing or incomplete documentation, contact the laboratory for explanation/resubmittal.	X			X			X			X		

Note: The laboratory case narrative indicated prep blank contamination and MS recoveries and matrix duplicate RPDs were outside evaluation criteria. Although, not stated in the laboratory case narrative calibration blanks and laboratory duplicate RPDs were outside evaluation criteria.

2.0 Holding Time (Code h)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
2.1	Have any technical holding times, determined from date of collection to date of analysis, been exceeded? (Hg: 28days, other metals: 6 months) See attached Holding Time Table. Action: J(+)/UJ(-). If the holding times are grossly exceeded (twice the holding time criteria) J(+)/R(-).		X			X			X			X	

Note: All holding time criteria was met.

3.0 Instrument Calibration (Code c)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
3.1	Are sufficient standards included in the calibration curve? (ICP/ICP-MS: blank + one standard; GFAA: blank + three standards; CVAA: blank + five standards)			x									
3.2	Are the correlation coefficients > 0.995? (for GFAA and CVAA) Action: J(+)/UJ(-).												x
3.3	Was an initial calibration verification (ICV) analyzed at the beginning of each analysis? Action: If no, use professional judgment to determine affect on the data and note in reviewer narrative.			x									x
3.4	Was continuing calibration verification (CCV) performed every 10 analysis or every 2 hours, whichever is more frequent? Action: If no, use professional judgment to determine affect on the data and note in reviewer narrative.			x									x
3.5	Are all calibration standard percent recoveries (ICV and CCV) within the control limits? Mercury (80%-120%) and other Metals (90%-110%).			x									x

Action:

	R(+/-)	J(+)/UJ(-)	J(+)	R(+)
Mercury	< 65%	65% - 79%	121% - 135%	> 135%
Other Metals	< 75%	75% - 89%	111% - 125%	> 125%

Note:

4.0 Blanks (Code o - Calibration blank failure, Code p - Preparation blank failure, Code x - Field blank failure)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
4.1	Were preparation blank (PB) prepared at the appropriate frequency (one per 20 samples, per batch, per matrix and per level)?												
4.2	Are there reported PB values > + IDL? Action: If yes, action level of 5 times the blank value are determined for positive and negative blank values.	x											
4.3	Were initial calibration blanks (ICB) analyzed? Action: If no, use professional judgment to determine affect on the data note in reviewer narrative.												
4.4	Were continuing calibration blanks (CCB) analyzed after every 10 samples or every 2 hours whichever is more frequent? Action: If no, use professional judgment to determine affect on the data to note in reviewer narrative.												
4.5	Are there reported ICB or CCB values > + IDL? Action: If yes, action level of 5 times the blank value are determined for positive and negative blank values.	x											
4.6	Are there samples with concentrations less than five times the highest level in associated blanks? Action: If yes, U at reported concentration.	x											
4.7	Are there samples with non-detect results or with concentrations less than five times the most negative value in associated blanks? Action; If yes, J(+)/UJ(-).												

Note: Lead (0.22 mg/Kg) and potassium (1.5 mg/Kg) were detected in prep blank 680-56002/7-A. Lead and potassium results in all associated samples were greater than five times (5X) the blank contamination, therefore no qualification of data was required. Prep blank 680-56110/6-B contained zinc (0.0068 mg/L), zinc results in samples SW-SA2-GMCS-5, SW-SA2-GMCS-4, SW-SA2-GMCS-2, SW-SA2-GMCS-9 and SW-SA2-GMCS-3 were less than five times (5X) the blank contamination and were qualified nondetect "U". Copper (.0022 mg/L) and vanadium (.0016 mg/L) were detected in calibration blanks and copper and vanadium results in all surface water samples were less than five times (5X) the blank contamination and were qualified nondetect "U".

Field ID	Analyte(s)	Qualification	Code	Batch #	Justification
SW-SA2-GMCS-5	Copper	U	o	680-56475	Cal. blank contamination
SW-SA2-GMCS-5	Vanadium	U	o	680-56475	Cal. blank contamination
SW-SA2-GMCS-5	Zinc	U	p	680-56475	Prep blank contamination
SW-SA2-GMCS-4	Copper	U	o	680-56475	Cal. blank contamination
SW-SA2-GMCS-4	Vanadium	U	o	680-56475	Cal. blank contamination
SW-SA2-GMCS-4	Zinc	U	p	680-56475	Prep blank contamination
SW-SA2-GMCS-2	Copper	U	o	680-56475	Cal. blank contamination
SW-SA2-GMCS-2	Vanadium	U	o	680-56475	Cal. blank contamination
SW-SA2-GMCS-2	Zinc	U	p	680-56475	Prep blank contamination
SW-SA2-GMCS-9	Copper	U	o	680-56475	Cal. blank contamination
SW-SA2-GMCS-9	Vanadium	U	o	680-56475	Cal. blank contamination
SW-SA2-GMCS-9	Zinc	U	p	680-56475	Prep blank contamination
SW-SA2-GMCS-3	Copper	U	o	680-56475	Cal. blank contamination
SW-SA2-GMCS-3	Vanadium	U	o	680-56475	Cal. blank contamination
SW-SA2-GMCS-3	Zinc	U	p	680-56475	Prep blank contamination

5.0 ICP Interference Check Sample (ICS) (Code n)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
5.1	Was ICS AB analyzed at beginning of each ICP run (or at least twice every 8 hours), and at the beginning or once every 8 hours (whichever is more frequent) for ICP-MS			x									
5.2	Are the ICS AB recoveries within 80% - 120%?			x									
5.3	Are the results for unspiked analytes (in ICS A) < + IDL?			x									
5.4	in the ICS?			x									
	Action: Not Spiked Analytes / Spiked analytes (ICS AB analytes)												
	< -IDL / > IDL / < 50% / 50% - 79% / > 120%												
	UJ(-) / J(+) / R(+/-) / J(+)/UJ(-) / J(+)												

Note:

6.0 Laboratory Control Sample (LCS) (Code l - Recovery, Code e - RPD)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
6.1	Was an LCS prepared and analyzed at the correct frequency (one per 20 samples, per batch, per matrix and per level)? Action: If no, J(+) any sample not associated with LCS results.												
6.2	Is any LCS recovery outside the control limits? (Aqueous limits: 80% - 120% - except Ag and Sb; Solid limits: as per EPA-EMSL/LV)												
	Action: Solid / Aqueous												
	< LCL / > UCL / < 50% / 50% - 79% / > 120%												
	J(+)/UJ(-) / J(+) / R(+/-) / J(+)/UJ(-) / J(+)												

Note: All recoveries were within evaluation criteria.

7.0 Laboratory Duplicates (Code k)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
7.1	Were Laboratory duplicates prepared and analyzed at the correct frequency (one per 20 samples, per batch, per matrix and per level)? Action: If no, J(+), with professional judgment, analytes not associated with Duplicate results.												
7.2	Was a field blank used for the duplicate analysis? Action: If yes, J(+) with professional judgment. Note in worksheet.												
7.3	Are all analyte duplicate results within control? (RPD values < 20% or difference < ± PQL for aqueous, and RPD < 35% or difference < ± 2 X PQL for solids)? Action: If no, J(+).		x										
	Note: RPD criteria is used when both sample and duplicate results are > 5 X IDL.												

Note: The laboratory duplicated sample SW-SA2-GMCS-4 for mercury and all RPDs were within evaluation criteria. Sample SED-SA2-GMCS-5 was duplicated and RPDs were outside evaluation criteria of (< 35) for barium (65.0), calcium (39.2), chromium (74.5), copper (86.3), lead (63.9) and magnesium (36.0). These metals were qualified estimated "J" in sample SED-SA2-GMCS-5.

Field ID	Analyte(s)	Qualification	Code	Batch #	Justification
SED-SA2-GMCS-5	Barium	J	k	680-56160	Lab duplicate RPD > 35
SED-SA2-GMCS-5	Calcium	J	k	680-56160	Lab duplicate RPD > 35
SED-SA2-GMCS-5	Chromium	J	k	680-56160	Lab duplicate RPD > 35
SED-SA2-GMCS-5	Copper	J	k	680-56160	Lab duplicate RPD > 35
SED-SA2-GMCS-5	Lead	J	k	680-56160	Lab duplicate RPD > 35
SED-SA2-GMCS-5	Magnesium	J	k	680-56160	Lab duplicate RPD > 35

8.0 Spike Sample Analysis -Pre-Digestion (Code m - Recovery, Code d - RPD)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
8.1	Was a spiked sample prepared and analyzed at the correct frequency (one per 20 samples, per batch, per matrix and per level)? Action: If no, J(+), with professional judgment, analytes not associated with matrix spike results.												
8.2	**Was a field blank used for the MS analysis? Action: If yes, J(+) with professional judgment. Note in worksheet.**												
	Note: Matrix spike analysis may be performed on a field blank when it is the only aqueous sample in an SDG.												
8.3	For all analytes with sample concentration < 4 x spike concentration, are spike recoveries within the control limit of 75-125%? (No control limit applies to analytes with concentration > 4 x spike concentration.)												
	%R > 125% / 30% < %R < 74% / %R < 30%												
	Positive: J / J / J												
	Non-detect: None / UJ / R												

Note: Sample SW-SA2-GMCS-5 was spiked and analyzed for metals and all MS recoveries were within evaluation criteria. Sample SW-SA2-GMCS-4 was spiked and analyzed for mercury and all MS recoveries were within evaluation criteria. Sample SED-SA2-GMCS-5 was spiked and analyzed for metals and MS recoveries were outside evaluation criteria (75-125%) for: calcium (410%), lead (249%), magnesium (20%), manganese (53%), aluminum (-49%), iron (-132%) and zinc (492%). Manganese was detected and qualified estimated "J" and metals results for aluminum, iron and zinc were greater than four times (4X) the spike concentration, therefore no qualification of data was required and calcium, lead, and magnesium were previously qualified due to laboratory duplicate RPDs in sample SED-SA2-GMCS-5. Sample SED-SA2-GMCS-5 matrix duplicate RPDs were outside evaluation criteria (≤20) for aluminum (24), barium (65), beryllium (30), calcium (39), chromium (75), cobalt (26), copper (86), lead (64), magnesium (36), manganese (29) and nickel (34). Barium, calcium, chromium, copper, lead and magnesium were previously qualified due to laboratory duplicate RPDs and manganese was previously qualified due to MS spike recovery, therefore no further qualification of data is required. Aluminum, cobalt, beryllium and nickel were detected and qualified estimated "J" in sample SED-SA2-GMCS-5. Sample SW-SA2-GMCS-5 matrix duplicate RPDs RPDs were outside evaluation criteria (≤20) for nickel (35) and zinc (112), nickel and zinc were qualified estimated "J" in sample SW-SA2-GMCS-5.

Field ID	Analyte(s)	Qualification	Code	Batch #	Justification
SED-SA2-GMCS-5	Manganese	J	m	680-56160	MS recovery low
SED-SA2-GMCS-5	Aluminum	J	d	680-56160	Matrix duplicate RPD > 20
SED-SA2-GMCS-5	Cobalt	J	d	680-56160	Matrix duplicate RPD > 20
SED-SA2-GMCS-5	Nickel	J	d	680-56160	Matrix duplicate RPD > 20
SED-SA2-GMCS-5	Beryllium	J	d	680-56160	Matrix duplicate RPD > 20
SW-SA2-GMCS-5	Nickel	J	d	680-56475	Matrix duplicate RPD > 20
SW-SA2-GMCS-5	Zinc	J	d	680-56475	Matrix duplicate RPD > 20

9.0 Instrument Detection Limits (IDL)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
9.1	Are all IDL equal to or less than the reporting limits specified?			x									x

Note:

10.0 ICP Serial Dilutions (Code s)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
10.1	Were serial dilutions performed?												
10.2	Was a five-fold dilution performed?												
10.3	Did the serial dilution results agree within 10% for analyte concentration> 50 x the IDL in the original sample? If no, J(+).												

Note: Samples SW-SA2-GMCS-5 and SED-SA2-GMCS-5 were diluted and were within evaluation criteria.

11.0 Field Duplicate Samples (Code f)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
11.1	Were any field duplicates submitted for metal analysis?		x									x	
11.2	Are all field duplicate results within control? (For aqueous sample, RPD values < 35% or difference < ±2 x PQL and For solids, RPD < 50% or difference ≤ ±4 x			x									x

Note: Field duplicate samples were not submitted for metals analysis.

12.0 Result Verification (Code Q)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
12.1	Were all results and detection limits for solid-matrix samples reported on a dry-weight basis?			x									x
12.2	Were all dilution reflected in the positive results and detection limits?			x									x

Note:

13.0 Data Completeness

13.1	Is % completeness within the control limits? (Control limit: Check QAPP or use 95% for aqueous sample, 90% for soil sample)										
13.2	Number of samples:	10			0			0			10
13.3	Number of target compounds in each analysis:	22			0			0			1
13.4	Number of results rejected and not reported:	0			0			0			0
	% Completeness = 100 x ((13.1 x 13.2) - 13.3) / (13.1 x 13.2)										
	% Completeness	**100**			**###**			**###**			**100**

Note:

URS

Data Tables

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
September 2006

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	VOCs	1,1,1-Trichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	VOCs	1,1,2,2-Tetrachloroethane	1	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	VOCs	1,1,2-Trichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	VOCs	1,1-Dichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	VOCs	1,1-Dichloroethylene	1	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	VOCs	1,2-Dichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	VOCs	1,2-Dichloropropane	1	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	VOCs	2-Butanone (MEK)	10	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	VOCs	4-Methyl-2-pentanone (MIBK)	10	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	VOCs	Acetone	25	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	VOCs	Benzene	1	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	VOCs	Bromodichloromethane	1	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	VOCs	Bromoform	1	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	VOCs	Bromomethane	1	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	VOCs	Carbon Dioxide	760	ug/L	JN B		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	VOCs	Carbon Disulfide	2	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	VOCs	Carbon Tetrachloride	1	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	VOCs	Chlorobenzene	1.4	ug/L			
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	VOCs	Chlorodibromomethane	1	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	VOCs	Chloroethane	1	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	VOCs	Chloroform	1	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	VOCs	Chloromethane	1	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	VOCs	cis-1,2-Dichloroethene	1	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	VOCs	cis-1,3-Dichloropropene	1	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	VOCs	Dichloromethane	5	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	VOCs	Ethylbenzene	1	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	VOCs	Methyl N-Butyl Ketone	10	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	VOCs	Styrene (Monomer)	1	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	VOCs	Tetrachloroethene	1	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	VOCs	Toluene	1	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	VOCs	trans-1,2-Dichloroethene	1	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	VOCs	trans-1,3-Dichloropropene	1	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	VOCs	Trichloroethene	1	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	VOCs	Vinyl chloride	1	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	VOCs	Xylenes, Total	2	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	1,2,4-Trichlorobenzene	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	1,2-Dichlorobenzene	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	1,3-Dichlorobenzene	9.6	ug/L	U		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
September 2006

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	1,4-Dichlorobenzene	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	2,4,5-Trichlorophenol	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	2,4,6-Trichlorophenol	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	2,4-Dichlorophenol	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	2,4-Dimethylphenol	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	2,4-Dinitrophenol	48	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	2,4-Dinitrotoluene	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	2,6-Dinitrotoluene	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	2-Chloronaphthalene	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	2-Chlorophenol	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	2-Methylnaphthalene	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	2-Methylphenol (o-Cresol)	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	2-Nitroaniline	48	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	2-Nitrophenol	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	3 & 4 Methylphenol	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	3,3'-Dichlorobenzidine	19	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	3-Nitroaniline	48	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	4,6-Dinitro-2-methylphenol	48	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	4-Bromophenyl Phenyl Ether	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	4-Chloro-3-methylphenol	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	4-Chlorophenyl Phenyl Ether	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	4-Nitrophenol	48	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	Acenaphthene	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	Acenaphthylene	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	Anthracene	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	Benzo(a)anthracene	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	Benzo(a)pyrene	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	Benzo(b)fluoranthene	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	Benzo(g,h,i)perylene	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	Benzo(k)fluoranthene	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	Benzyl Butyl Phthalate	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	bis(2-Chloroethoxy)methane	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	bis(2-Chloroethyl)ether	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	bis(2-Ethylhexyl)phthalate	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	Carbazole	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	Chrysene	9.6	ug/L	U		

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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	Dibenzo(a,h)anthracene	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	Dibenzofuran	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	Diethyl Phthalate	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	Dimethyl Phthalate	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	Di-n-butylphthalate	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	Di-n-octylphthalate	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	Dinoseb	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	Fluoranthene	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	Fluorene	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	Hexachlorobenzene	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	Hexachlorobutadiene	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	Hexachlorocyclopentadiene	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	Hexachloroethane	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	Indeno(1,2,3-cd)pyrene	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	Isophorone	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	Naphthalene	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	Nitrobenzene	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	N-Nitroso-di-n-propylamine	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	N-Nitrosodiphenylamine	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	P-Chloroaniline	19	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	Phenanthrene	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	Phenol	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	P-Nitroaniline	48	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	SVOCs	Pyrene	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Pesticides	4,4'-DDD	0.094	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Pesticides	4,4'-DDE	0.094	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Pesticides	4,4'-DDT	0.094	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Pesticides	Aldrin	0.047	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Pesticides	alpha-BHC	0.047	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Pesticides	alpha-Chlordane	0.047	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Pesticides	beta-BHC	0.047	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Pesticides	delta-BHC	0.047	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Pesticides	Dieldrin	0.094	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Pesticides	Endosulfan I	0.047	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Pesticides	Endosulfan II	0.094	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Pesticides	Endosulfan Sulfate	0.094	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Pesticides	Endrin	0.094	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Pesticides	Endrin Aldehyde	0.094	ug/L	U		

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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Pesticides	Endrin Ketone	0.094	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Pesticides	gamma-BHC (Lindane)	0.047	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Pesticides	gamma-Chlordane	0.047	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Pesticides	Heptachlor	0.047	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Pesticides	Heptachlor Epoxide	0.047	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Pesticides	Methoxychlor	0.47	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Pesticides	Toxaphene	4.7	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Herbicides	2,4,5-T	0.49	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Herbicides	2,4,5-TP (Silvex)	0.49	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Herbicides	2,4-D	0.32	ug/L	J		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Herbicides	2,4-DB	0.49	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Herbicides	Dalapon	9.7	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Herbicides	Dicamba	0.49	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Herbicides	Dichlorprop	0.49	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Herbicides	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Herbicides	MCPP	120	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Herbicides	Pentachlorophenol	0.24	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Metals	Aluminum (Dissolved)	0.2	mg/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Metals	Antimony (Dissolved)	0.02	mg/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Metals	Arsenic (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Metals	Barium (Dissolved)	0.059	mg/L			
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Metals	Beryllium (Dissolved)	0.004	mg/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Metals	Cadmium (Dissolved)	0.005	mg/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Metals	Calcium (Dissolved)	48	mg/L			
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Metals	Chromium (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Metals	Cobalt (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Metals	Copper (Dissolved)	0.002	mg/L	J	U	O
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Metals	Iron (Dissolved)	0.05	mg/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Metals	Lead (Dissolved)	0.005	mg/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Metals	Magnesium (Dissolved)	24	mg/L			
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Metals	Manganese (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Metals	Mercury (Dissolved)	0.0002	mg/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Metals	Nickel (Dissolved)	0.0019	mg/L	J		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Metals	Potassium (Dissolved)	4.2	mg/L			
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Metals	Selenium (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Metals	Silver (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Metals	Sodium (Dissolved)	33	mg/L			

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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Metals	Thallium	0.025	mg/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Metals	Vanadium (Dissolved)	0.0028	mg/L	J	U	O
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/20/06	Metals	Zinc (Dissolved)	0.0045	mg/L	J B	U	P

Sauget Area 2
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	VOCs	1,1,1-Trichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	VOCs	1,1,2,2-Tetrachloroethane	1	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	VOCs	1,1,2-Trichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	VOCs	1,1-Dichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	VOCs	1,1-Dichloroethylene	1	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	VOCs	1,2-Dichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	VOCs	1,2-Dichloropropane	1	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	VOCs	2-Butanone (MEK)	10	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	VOCs	4-Methyl-2-pentanone (MIBK)	10	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	VOCs	Acetone	25	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	VOCs	Benzene	1	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	VOCs	Bromodichloromethane	1	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	VOCs	Bromoform	1	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	VOCs	Bromomethane	1	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	VOCs	Carbon Dioxide	850	ug/L	JN B		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	VOCs	Carbon Disulfide	2	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	VOCs	Carbon Tetrachloride	1	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	VOCs	Chlorobenzene	1.5	ug/L			
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	VOCs	Chlorodibromomethane	1	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	VOCs	Chloroethane	1	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	VOCs	Chloroform	1	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	VOCs	Chloromethane	1	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	VOCs	cis-1,2-Dichloroethene	1	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	VOCs	cis-1,3-Dichloropropene	1	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	VOCs	Dichloromethane	5	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	VOCs	Ethylbenzene	1	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	VOCs	Methyl N-Butyl Ketone	10	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	VOCs	Styrene (Monomer)	1	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	VOCs	Tetrachloroethene	1	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	VOCs	Toluene	1	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	VOCs	trans-1,2-Dichloroethene	1	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	VOCs	trans-1,3-Dichloropropene	1	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	VOCs	Trichloroethene	1	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	VOCs	Vinyl chloride	1	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	VOCs	Xylenes, Total	2	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	1,2,4-Trichlorobenzene	9.6	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	1,2-Dichlorobenzene	9.6	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	1,3-Dichlorobenzene	9.6	ug/L	U		

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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	1,4-Dichlorobenzene	9.6	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	9.6	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	2,4,5-Trichlorophenol	9.6	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	2,4,6-Trichlorophenol	9.6	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	2,4-Dichlorophenol	9.6	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	2,4-Dimethylphenol	9.6	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	2,4-Dinitrophenol	48	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	2,4-Dinitrotoluene	9.6	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	2,6-Dinitrotoluene	9.6	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	2-Chloronaphthalene	9.6	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	2-Chlorophenol	9.6	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	2-Methylnaphthalene	9.6	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	2-Methylphenol (o-Cresol)	9.6	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	2-Nitroaniline	48	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	2-Nitrophenol	9.6	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	3 & 4 Methylphenol	9.6	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	3,3'-Dichlorobenzidine	19	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	3-Nitroaniline	48	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	4,6-Dinitro-2-methylphenol	48	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	4-Bromophenyl Phenyl Ether	9.6	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	4-Chloro-3-methylphenol	9.6	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	4-Chlorophenyl Phenyl Ether	9.6	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	4-Nitrophenol	48	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	Acenaphthene	9.6	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	Acenaphthylene	9.6	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	Anthracene	9.6	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	Benzo(a)anthracene	9.6	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	Benzo(a)pyrene	9.6	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	Benzo(b)fluoranthene	9.6	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	Benzo(g,h,i)perylene	9.6	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	Benzo(k)fluoranthene	9.6	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	Benzyl Butyl Phthalate	9.6	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	bis(2-Chloroethoxy)methane	9.6	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	bis(2-Chloroethyl)ether	9.6	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	bis(2-Ethylhexyl)phthalate	9.6	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	Carbazole	9.6	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	Chrysene	9.6	ug/L	U		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	Dibenzo(a,h)anthracene	9.6	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	Dibenzofuran	9.6	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	Diethyl Phthalate	9.6	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	Dimethyl Phthalate	9.6	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	Di-n-butylphthalate	9.6	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	Di-n-octylphthalate	9.6	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	Dinoseb	9.6	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	Fluoranthene	9.6	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	Fluorene	9.6	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	Hexachlorobenzene	9.6	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	Hexachlorobutadiene	9.6	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	Hexachlorocyclopentadiene	9.6	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	Hexachloroethane	9.6	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	Indeno(1,2,3-cd)pyrene	9.6	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	Isophorone	9.6	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	Naphthalene	9.6	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	Nitrobenzene	9.6	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	N-Nitroso-di-n-propylamine	9.6	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	N-Nitrosodiphenylamine	9.6	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	P-Chloroaniline	19	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	Phenanthrene	9.6	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	Phenol	9.6	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	P-Nitroaniline	48	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	SVOCs	Pyrene	9.6	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	Pesticide	4,4'-DDD	0.098	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	Pesticide	4,4'-DDE	0.098	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	Pesticide	4,4'-DDT	0.098	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	Pesticide	Aldrin	0.049	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	Pesticide	alpha-BHC	0.049	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	Pesticide	alpha-Chlordane	0.049	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	Pesticide	beta-BHC	0.049	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	Pesticide	delta-BHC	0.049	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	Pesticide	Dieldrin	0.098	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	Pesticide	Endosulfan I	0.049	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	Pesticide	Endosulfan II	0.098	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	Pesticide	Endosulfan Sulfate	0.098	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	Pesticide	Endrin	0.098	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	Pesticide	Endrin Aldehyde	0.098	ug/L	U		

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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	Pesticide	Endrin Ketone	0.098	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	Pesticide	gamma-BHC (Lindane)	0.049	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	Pesticide	gamma-Chlordane	0.049	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	Pesticide	Heptachlor	0.049	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	Pesticide	Heptachlor Epoxide	0.049	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	Pesticide	Methoxychlor	0.49	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	Pesticide	Toxaphene	4.9	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	Herbicide	2,4,5-T	0.49	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	Herbicide	2,4,5-TP (Silvex)	0.49	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	Herbicide	2,4-D	0.49	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	Herbicide	2,4-DB	0.49	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	Herbicide	Dalapon	9.7	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	Herbicide	Dicamba	0.49	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	Herbicide	Dichlorprop	0.49	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	Herbicides	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	Herbicide	MCPP	120	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	Herbicide	Pentachlorophenol	0.24	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	Metals	Aluminum (Dissolved)	0.2	mg/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	Metals	Antimony (Dissolved)	0.02	mg/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	Metals	Arsenic (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	Metals	Barium (Dissolved)	0.06	mg/L			
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	Metals	Beryllium (Dissolved)	0.004	mg/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	Metals	Cadmium (Dissolved)	0.005	mg/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	Metals	Calcium (Dissolved)	49	mg/L			
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	Metals	Chromium (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	Metals	Cobalt (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	Metals	Copper (Dissolved)	0.0022	mg/L	J	U	O
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	Metals	Iron (Dissolved)	0.05	mg/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	Metals	Lead (Dissolved)	0.005	mg/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	Metals	Magnesium (Dissolved)	24	mg/L			
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	Metals	Manganese (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	Metals	Mercury (Dissolved)	0.0002	mg/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	Metals	Nickel (Dissolved)	0.04	mg/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	Metals	Potassium (Dissolved)	4.3	mg/L			
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	Metals	Selenium (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	Metals	Silver (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	Metals	Sodium (Dissolved)	35	mg/L			

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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	Metals	Thallium	0.025	mg/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	Metals	Vanadium (Dissolved)	0.0032	mg/L	J	U	O
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/21/06	Metals	Zinc (Dissolved)	0.014	mg/L	J B	U	P

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	VOCs	1,1,1-Trichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	VOCs	1,1,2,2-Tetrachloroethane	1	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	VOCs	1,1,2-Trichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	VOCs	1,1-Dichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	VOCs	1,1-Dichloroethylene	1	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	VOCs	1,2-Dichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	VOCs	1,2-Dichloropropane	1	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	VOCs	2-Butanone (MEK)	10	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	VOCs	4-Methyl-2-pentanone (MIBK)	10	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	VOCs	Acetone	25	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	VOCs	Benzene	1	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	VOCs	Bromodichloromethane	1	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	VOCs	Bromoform	1	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	VOCs	Bromomethane	1	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	VOCs	Carbon Dioxide	830	ug/L	JN B		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	VOCs	Carbon Disulfide	2	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	VOCs	Carbon Tetrachloride	1	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	VOCs	Chlorobenzene	0.99	ug/L	J		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	VOCs	Chlorodibromomethane	1	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	VOCs	Chloroethane	1	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	VOCs	Chloroform	1	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	VOCs	Chloromethane	1	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	VOCs	cis-1,2-Dichloroethene	1	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	VOCs	cis-1,3-Dichloropropene	1	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	VOCs	Dichloromethane	5	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	VOCs	Ethylbenzene	1	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	VOCs	Methyl N-Butyl Ketone	10	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	VOCs	Styrene (Monomer)	1	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	VOCs	Tetrachloroethene	1	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	VOCs	Toluene	1	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	VOCs	trans-1,2-Dichloroethene	1	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	VOCs	trans-1,3-Dichloropropene	1	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	VOCs	Trichloroethene	1	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	VOCs	Vinyl chloride	1	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	VOCs	Xylenes, Total	2	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	1,2,4-Trichlorobenzene	9.4	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	1,2-Dichlorobenzene	9.4	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	1,3-Dichlorobenzene	9.4	ug/L	U	UJ	I

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Groundwater Migration Control System
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	1,4-Dichlorobenzene	9.4	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	9.4	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	2,4,5-Trichlorophenol	9.4	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	2,4,6-Trichlorophenol	9.4	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	2,4-Dichlorophenol	9.4	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	2,4-Dimethylphenol	9.4	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	2,4-Dinitrophenol	47	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	2,4-Dinitrotoluene	9.4	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	2,6-Dinitrotoluene	9.4	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	2-Chloronaphthalene	9.4	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	2-Chlorophenol	9.4	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	2-Methylnaphthalene	9.4	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	2-Methylphenol (o-Cresol)	9.4	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	2-Nitroaniline	47	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	2-Nitrophenol	9.4	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	3 & 4 Methylphenol	9.4	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	3,3'-Dichlorobenzidine	19	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	3-Nitroaniline	47	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	4,6-Dinitro-2-methylphenol	47	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	4-Bromophenyl Phenyl Ether	9.4	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	4-Chloro-3-methylphenol	9.4	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	4-Chlorophenyl Phenyl Ether	9.4	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	4-Nitrophenol	47	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	Acenaphthene	9.4	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	Acenaphthylene	9.4	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	Anthracene	9.4	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	Benzo(a)anthracene	9.4	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	Benzo(a)pyrene	9.4	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	Benzo(b)fluoranthene	9.4	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	Benzo(g,h,i)perylene	9.4	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	Benzo(k)fluoranthene	9.4	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	Benzyl Butyl Phthalate	9.4	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	bis(2-Chloroethoxy)methane	9.4	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	bis(2-Chloroethyl)ether	9.4	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	bis(2-Ethylhexyl)phthalate	9.4	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	Carbazole	9.4	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	Chrysene	9.4	ug/L	U	UJ	I

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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	Dibenzo(a,h)anthracene	9.4	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	Dibenzofuran	9.4	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	Diethyl Phthalate	9.4	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	Dimethyl Phthalate	9.4	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	Di-n-butylphthalate	9.4	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	Di-n-octylphthalate	9.4	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	Dinoseb	9.4	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	Fluoranthene	9.4	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	Fluorene	9.4	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	Hexachlorobenzene	9.4	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	Hexachlorobutadiene	9.4	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	Hexachlorocyclopentadiene	9.4	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	Hexachloroethane	9.4	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	Indeno(1,2,3-cd)pyrene	9.4	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	Isophorone	9.4	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	Naphthalene	9.4	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	Nitrobenzene	9.4	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	N-Nitroso-di-n-propylamine	9.4	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	N-Nitrosodiphenylamine	9.4	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	P-Chloroaniline	19	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	Phenanthrene	9.4	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	Phenol	9.4	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	P-Nitroaniline	47	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	SVOCs	Pyrene	9.4	ug/L	U	UJ	I
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Pesticide	4,4'-DDD	0.094	ug/L	U	UJ	S
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Pesticide	4,4'-DDE	0.094	ug/L	U	UJ	S
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Pesticide	4,4'-DDT	0.094	ug/L	U	UJ	S
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Pesticide	Aldrin	0.047	ug/L	U	UJ	S
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Pesticide	alpha-BHC	0.047	ug/L	U	UJ	S
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Pesticide	alpha-Chlordane	0.047	ug/L	U	UJ	S
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Pesticide	beta-BHC	0.047	ug/L	U	UJ	S
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Pesticide	delta-BHC	0.047	ug/L	U	UJ	S
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Pesticide	Dieldrin	0.094	ug/L	U	UJ	S
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Pesticide	Endosulfan I	0.047	ug/L	U	UJ	S
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Pesticide	Endosulfan II	0.094	ug/L	U	UJ	S
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Pesticide	Endosulfan Sulfate	0.094	ug/L	U	UJ	S
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Pesticide	Endrin	0.094	ug/L	U	UJ	S
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Pesticide	Endrin Aldehyde	0.094	ug/L	U	UJ	S

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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Pesticide	Endrin Ketone	0.094	ug/L	U	UJ	S
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Pesticide	gamma-BHC (Lindane)	0.047	ug/L	U	UJ	S
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Pesticide	gamma-Chlordane	0.047	ug/L	U	UJ	S
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Pesticide	Heptachlor	0.047	ug/L	U	UJ	S
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Pesticide	Heptachlor Epoxide	0.047	ug/L	U	UJ	S
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Pesticide	Methoxychlor	0.47	ug/L	U	UJ	S
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Pesticide	Toxaphene	4.7	ug/L	U	UJ	S
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Herbicide	2,4,5-T	0.48	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Herbicide	2,4,5-TP (Silvex)	0.48	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Herbicide	2,4-D	0.12	ug/L	JP		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Herbicide	2,4-DB	0.48	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Herbicide	Dalapon	9.6	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Herbicide	Dicamba	0.48	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Herbicide	Dichlorprop	0.48	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Herbicides	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Herbicide	MCPP	120	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Herbicide	Pentachlorophenol	0.24	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Metals	Aluminum (Dissolved)	0.2	mg/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Metals	Antimony (Dissolved)	0.02	mg/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Metals	Arsenic (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Metals	Barium (Dissolved)	0.057	mg/L			
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Metals	Beryllium (Dissolved)	0.004	mg/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Metals	Cadmium (Dissolved)	0.005	mg/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Metals	Calcium (Dissolved)	47	mg/L			
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Metals	Chromium (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Metals	Cobalt (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Metals	Copper (Dissolved)	0.0019	mg/L	J	U	O
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Metals	Iron (Dissolved)	0.05	mg/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Metals	Lead (Dissolved)	0.005	mg/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Metals	Magnesium (Dissolved)	23	mg/L			
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Metals	Manganese (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Metals	Mercury (Dissolved)	0.0002	mg/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Metals	Nickel (Dissolved)	0.0023	mg/L	J		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Metals	Potassium (Dissolved)	4	mg/L			
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Metals	Selenium (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Metals	Silver (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Metals	Sodium (Dissolved)	32	mg/L			

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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Metals	Thallium	0.025	mg/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Metals	Vanadium (Dissolved)	0.0031	mg/L	J	U	O
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/20/06	Metals	Zinc (Dissolved)	0.0038	mg/L	J B	U	P

Sauget Area 2
Groundwater Migration Control System
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	VOCs	1,1,1-Trichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	VOCs	1,1,2,2-Tetrachloroethane	1	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	VOCs	1,1,2-Trichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	VOCs	1,1-Dichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	VOCs	1,1-Dichloroethylene	1	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	VOCs	1,2-Dichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	VOCs	1,2-Dichloropropane	1	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	VOCs	2-Butanone (MEK)	10	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	VOCs	4-Methyl-2-pentanone (MIBK)	10	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	VOCs	Acetone	25	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	VOCs	Benzene	1	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	VOCs	Bromodichloromethane	1	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	VOCs	Bromoform	1	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	VOCs	Bromomethane	1	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	VOCs	Carbon Dioxide	890	ug/L	JN B		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	VOCs	Carbon Disulfide	2	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	VOCs	Carbon Tetrachloride	1	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	VOCs	Chlorobenzene	1	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	VOCs	Chlorodibromomethane	1	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	VOCs	Chloroethane	1	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	VOCs	Chloroform	1	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	VOCs	Chloromethane	1	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	VOCs	cis-1,2-Dichloroethene	1	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	VOCs	cis-1,3-Dichloropropene	1	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	VOCs	Dichloromethane	5	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	VOCs	Ethylbenzene	1	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	VOCs	Methyl N-Butyl Ketone	10	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	VOCs	Styrene (Monomer)	1	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	VOCs	Tetrachloroethene	1	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	VOCs	Toluene	1	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	VOCs	trans-1,2-Dichloroethene	1	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	VOCs	trans-1,3-Dichloropropene	1	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	VOCs	Trichloroethene	1	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	VOCs	Vinyl chloride	1	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	VOCs	Xylenes, Total	2	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	1,2,4-Trichlorobenzene	9.4	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	1,2-Dichlorobenzene	9.4	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	1,3-Dichlorobenzene	9.4	ug/L	U		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
September 2006

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	1,4-Dichlorobenzene	9.4	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	9.4	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	2,4,5-Trichlorophenol	9.4	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	2,4,6-Trichlorophenol	9.4	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	2,4-Dichlorophenol	9.4	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	2,4-Dimethylphenol	9.4	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	2,4-Dinitrophenol	47	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	2,4-Dinitrotoluene	9.4	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	2,6-Dinitrotoluene	9.4	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	2-Chloronaphthalene	9.4	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	2-Chlorophenol	9.4	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	2-Methylnaphthalene	9.4	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	2-Methylphenol (o-Cresol)	9.4	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	2-Nitroaniline	47	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	2-Nitrophenol	9.4	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	3 & 4 Methylphenol	9.4	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	3,3'-Dichlorobenzidine	19	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	3-Nitroaniline	47	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	4,6-Dinitro-2-methylphenol	47	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	4-Bromophenyl Phenyl Ether	9.4	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	4-Chloro-3-methylphenol	9.4	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	4-Chlorophenyl Phenyl Ether	9.4	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	4-Nitrophenol	47	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	Acenaphthene	9.4	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	Acenaphthylene	9.4	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	Anthracene	9.4	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	Benzo(a)anthracene	9.4	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	Benzo(a)pyrene	9.4	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	Benzo(b)fluoranthene	9.4	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	Benzo(g,h,i)perylene	9.4	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	Benzo(k)fluoranthene	9.4	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	Benzyl Butyl Phthalate	9.4	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	bis(2-Chloroethoxy)methane	9.4	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	bis(2-Chloroethyl)ether	9.4	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	bis(2-Ethylhexyl)phthalate	9.4	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	Carbazole	9.4	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	Chrysene	9.4	ug/L	U		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	Dibenzo(a,h)anthracene	9.4	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	Dibenzofuran	9.4	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	Diethyl Phthalate	9.4	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	Dimethyl Phthalate	9.4	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	Di-n-butylphthalate	9.4	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	Di-n-octylphthalate	9.4	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	Dinoseb	9.4	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	Fluoranthene	9.4	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	Fluorene	9.4	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	Hexachlorobenzene	9.4	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	Hexachlorobutadiene	9.4	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	Hexachlorocyclopentadiene	9.4	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	Hexachloroethane	9.4	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	Indeno(1,2,3-cd)pyrene	9.4	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	Isophorone	9.4	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	Naphthalene	9.4	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	Nitrobenzene	9.4	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	N-Nitroso-di-n-propylamine	9.4	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	N-Nitrosodiphenylamine	9.4	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	P-Chloroaniline	19	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	Phenanthrene	9.4	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	Phenol	9.4	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	P-Nitroaniline	47	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	SVOCs	Pyrene	9.4	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Pesticides	4,4'-DDD	0.094	ug/L	U	UJ	S
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Pesticides	4,4'-DDE	0.094	ug/L	U	UJ	S
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Pesticides	4,4'-DDT	0.094	ug/L	U	UJ	S
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Pesticides	Aldrin	0.047	ug/L	U	UJ	S
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Pesticides	alpha-BHC	0.047	ug/L	U	UJ	S
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Pesticides	alpha-Chlordane	0.047	ug/L	U	UJ	S
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Pesticides	beta-BHC	0.047	ug/L	U	UJ	S
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Pesticides	delta-BHC	0.047	ug/L	U	UJ	S
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Pesticides	Dieldrin	0.094	ug/L	U	UJ	S
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Pesticides	Endosulfan I	0.047	ug/L	U	UJ	S
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Pesticides	Endosulfan II	0.094	ug/L	U	UJ	S
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Pesticides	Endosulfan Sulfate	0.094	ug/L	U	UJ	S
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Pesticides	Endrin	0.094	ug/L	U	UJ	S
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Pesticides	Endrin Aldehyde	0.094	ug/L	U	UJ	S

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Pesticides	Endrin Ketone	0.094	ug/L	U	UJ	S
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Pesticides	gamma-BHC (Lindane)	0.047	ug/L	U	UJ	S
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Pesticides	gamma-Chlordane	0.047	ug/L	U	UJ	S
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Pesticides	Heptachlor	0.047	ug/L	U	UJ	S
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Pesticides	Heptachlor Epoxide	0.047	ug/L	U	UJ	S
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Pesticides	Methoxychlor	0.47	ug/L	U	UJ	S
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Pesticides	Toxaphene	4.7	ug/L	U	UJ	S
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Herbicide	2,4,5-T	0.48	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Herbicide	2,4,5-TP (Silvex)	0.48	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Herbicide	2,4-D	0.11	ug/L	JP		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Herbicide	2,4-DB	0.48	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Herbicide	Dalapon	9.5	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Herbicide	Dicamba	0.48	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Herbicide	Dichlorprop	0.48	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Herbicides	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	110	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Herbicide	MCPP	110	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Herbicide	Pentachlorophenol	0.24	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Metals	Aluminum (Dissolved)	0.2	mg/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Metals	Antimony (Dissolved)	0.02	mg/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Metals	Arsenic (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Metals	Barium (Dissolved)	0.058	mg/L			
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Metals	Beryllium (Dissolved)	0.004	mg/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Metals	Cadmium (Dissolved)	0.005	mg/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Metals	Calcium (Dissolved)	47	mg/L			
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Metals	Chromium (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Metals	Cobalt (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Metals	Copper (Dissolved)	0.0022	mg/L	J	U	O
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Metals	Iron (Dissolved)	0.05	mg/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Metals	Lead (Dissolved)	0.005	mg/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Metals	Magnesium (Dissolved)	23	mg/L			
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Metals	Manganese (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Metals	Mercury (Dissolved)	0.0002	mg/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Metals	Nickel (Dissolved)	0.0027	mg/L	J	J	D
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Metals	Potassium (Dissolved)	4.1	mg/L			
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Metals	Selenium (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Metals	Silver (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Metals	Sodium (Dissolved)	33	mg/L			

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Metals	Thallium	0.025	mg/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Metals	Vanadium (Dissolved)	0.0029	mg/L	J	U	O
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/20/06	Metals	Zinc (Dissolved)	0.0061	mg/L	J B	U	P

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	VOCs	1,1,1-Trichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	VOCs	1,1,2,2-Tetrachloroethane	1	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	VOCs	1,1,2-Trichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	VOCs	1,1-Dichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	VOCs	1,1-Dichloroethylene	1	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	VOCs	1,2-Dichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	VOCs	1,2-Dichloropropane	1	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	VOCs	2-Butanone (MEK)	10	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	VOCs	4-Methyl-2-pentanone (MIBK)	10	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	VOCs	Acetone	25	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	VOCs	Benzene	1	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	VOCs	Bromodichloromethane	1	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	VOCs	Bromoform	1	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	VOCs	Bromomethane	1	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	VOCs	Carbon Dioxide	820	ug/L	JN B		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	VOCs	Carbon Disulfide	2	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	VOCs	Carbon Tetrachloride	1	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	VOCs	Chlorobenzene	1	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	VOCs	Chlorodibromomethane	1	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	VOCs	Chloroethane	1	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	VOCs	Chloroform	1	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	VOCs	Chloromethane	1	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	VOCs	cis-1,2-Dichloroethene	1	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	VOCs	cis-1,3-Dichloropropene	1	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	VOCs	Dichloromethane	5	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	VOCs	Ethylbenzene	1	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	VOCs	Methyl N-Butyl Ketone	10	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	VOCs	Styrene (Monomer)	1	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	VOCs	Tetrachloroethene	1	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	VOCs	Toluene	1	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	VOCs	trans-1,2-Dichloroethene	1	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	VOCs	trans-1,3-Dichloropropene	1	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	VOCs	Trichloroethene	1	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	VOCs	Vinyl chloride	1	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	VOCs	Xylenes, Total	2	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	1,2,4-Trichlorobenzene	9.6	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	1,2-Dichlorobenzene	9.6	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	1,3-Dichlorobenzene	9.6	ug/L	U		

Sauget Area 2
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	1,4-Dichlorobenzene	9.6	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	9.6	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	2,4,5-Trichlorophenol	9.6	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	2,4,6-Trichlorophenol	9.6	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	2,4-Dichlorophenol	9.6	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	2,4-Dimethylphenol	9.6	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	2,4-Dinitrophenol	48	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	2,4-Dinitrotoluene	9.6	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	2,6-Dinitrotoluene	9.6	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	2-Chloronaphthalene	9.6	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	2-Chlorophenol	9.6	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	2-Methylnaphthalene	9.6	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	2-Methylphenol (o-Cresol)	9.6	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	2-Nitroaniline	48	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	2-Nitrophenol	9.6	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	3 & 4 Methylphenol	9.6	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	3,3'-Dichlorobenzidine	19	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	3-Nitroaniline	48	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	4,6-Dinitro-2-methylphenol	48	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	4-Bromophenyl Phenyl Ether	9.6	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	4-Chloro-3-methylphenol	9.6	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	4-Chlorophenyl Phenyl Ether	9.6	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	4-Nitrophenol	48	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	Acenaphthene	9.6	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	Acenaphthylene	9.6	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	Anthracene	9.6	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	Benzo(a)anthracene	9.6	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	Benzo(a)pyrene	9.6	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	Benzo(b)fluoranthene	9.6	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	Benzo(g,h,i)perylene	9.6	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	Benzo(k)fluoranthene	9.6	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	Benzyl Butyl Phthalate	9.6	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	bis(2-Chloroethoxy)methane	9.6	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	bis(2-Chloroethyl)ether	9.6	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	bis(2-Ethylhexyl)phthalate	9.6	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	Carbazole	9.6	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	Chrysene	9.6	ug/L	U		

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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	Dibenzo(a,h)anthracene	9.6	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	Dibenzofuran	9.6	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	Diethyl Phthalate	9.6	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	Dimethyl Phthalate	9.6	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	Di-n-butylphthalate	9.6	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	Di-n-octylphthalate	9.6	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	Dinoseb	9.6	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	Fluoranthene	9.6	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	Fluorene	9.6	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	Hexachlorobenzene	9.6	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	Hexachlorobutadiene	9.6	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	Hexachlorocyclopentadiene	9.6	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	Hexachloroethane	9.6	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	Indeno(1,2,3-cd)pyrene	9.6	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	Isophorone	9.6	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	Naphthalene	9.6	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	Nitrobenzene	9.6	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	N-Nitroso-di-n-propylamine	9.6	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	N-Nitrosodiphenylamine	9.6	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	P-Chloroaniline	19	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	Phenanthrene	9.6	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	Phenol	9.6	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	P-Nitroaniline	48	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	SVOCs	Pyrene	9.6	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Pesticide	4,4'-DDD	0.096	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Pesticide	4,4'-DDE	0.096	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Pesticide	4,4'-DDT	0.096	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Pesticide	Aldrin	0.048	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Pesticide	alpha-BHC	0.048	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Pesticide	alpha-Chlordane	0.048	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Pesticide	beta-BHC	0.048	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Pesticide	delta-BHC	0.048	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Pesticide	Dieldrin	0.096	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Pesticide	Endosulfan I	0.048	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Pesticide	Endosulfan II	0.096	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Pesticide	Endosulfan Sulfate	0.096	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Pesticide	Endrin	0.096	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Pesticide	Endrin Aldehyde	0.096	ug/L	U		

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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Pesticide	Endrin Ketone	0.096	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Pesticide	gamma-BHC (Lindane)	0.048	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Pesticide	gamma-Chlordane	0.048	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Pesticide	Heptachlor	0.048	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Pesticide	Heptachlor Epoxide	0.048	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Pesticide	Methoxychlor	0.48	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Pesticide	Toxaphene	4.8	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Herbicide	2,4,5-T	0.49	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Herbicide	2,4,5-TP (Silvex)	0.49	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Herbicide	2,4-D	0.55	ug/L			
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Herbicide	2,4-DB	0.49	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Herbicide	Dalapon	9.8	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Herbicide	Dicamba	0.49	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Herbicide	Dichlorprop	0.49	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Herbicides	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Herbicide	MCPP	120	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Herbicide	Pentachlorophenol	0.25	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Metals	Aluminum (Dissolved)	0.2	mg/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Metals	Antimony (Dissolved)	0.02	mg/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Metals	Arsenic (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Metals	Barium (Dissolved)	0.059	mg/L			
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Metals	Beryllium (Dissolved)	0.004	mg/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Metals	Cadmium (Dissolved)	0.005	mg/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Metals	Calcium (Dissolved)	49	mg/L			
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Metals	Chromium (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Metals	Cobalt (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Metals	Copper (Dissolved)	0.002	mg/L	J	U	O
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Metals	Iron (Dissolved)	0.05	mg/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Metals	Lead (Dissolved)	0.005	mg/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Metals	Magnesium (Dissolved)	24	mg/L			
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Metals	Manganese (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Metals	Mercury (Dissolved)	0.0002	mg/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Metals	Nickel (Dissolved)	0.0022	mg/L	J		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Metals	Potassium (Dissolved)	4.2	mg/L			
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Metals	Selenium (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Metals	Silver (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Metals	Sodium (Dissolved)	32	mg/L			

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Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Metals	Thallium	0.025	mg/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Metals	Vanadium (Dissolved)	0.0028	mg/L	J	U	O
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/21/06	Metals	Zinc (Dissolved)	0.004	mg/L	J B	U	P

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
September 2006

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	VOCs	1,1,1-Trichloroethane	6.1	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	VOCs	1,1,2,2-Tetrachloroethane	6.1	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	VOCs	1,1,2-Trichloroethane	6.1	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	VOCs	1,1-Dichloroethane	2.7	ug/kg	J		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	VOCs	1,1-Dichloroethylene	6.1	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	VOCs	1,2-Dichloroethane	6.1	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	VOCs	1,2-Dichloropropane	6.1	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	VOCs	2-Butanone (MEK)	6.1	ug/kg	J		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	VOCs	4-Methyl-2-pentanone (MIBK)	31	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	VOCs	Acetone	49	ug/kg	J		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	VOCs	Benzene	24	ug/kg	*	J	L
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	VOCs	Bromodichloromethane	6.1	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	VOCs	Bromoform	6.1	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	VOCs	Bromomethane	6.1	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	VOCs	Carbon Dioxide	42000	ug/kg	NJ B		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	VOCs	Carbon Disulfide	7	ug/kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	VOCs	Carbon Tetrachloride	6.1	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	VOCs	Chlorobenzene	5700	ug/kg	D		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	VOCs	Chlorodibromomethane	6.1	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	VOCs	Chloroethane	6.1	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	VOCs	Chloroform	6.1	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	VOCs	Chloromethane	6.1	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	VOCs	cis-1,2-Dichloroethene	6.1	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	VOCs	cis-1,3-Dichloropropene	6.1	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	VOCs	Dichloromethane	6.1	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	VOCs	Ethylbenzene	1.8	ug/kg	J		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	VOCs	Methyl N-Butyl Ketone	31	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	VOCs	Styrene (Monomer)	6.1	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	VOCs	Tetrachloroethene	6.1	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	VOCs	Toluene	3.7	ug/kg	J		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	VOCs	trans-1,2-Dichloroethene	6.1	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	VOCs	trans-1,3-Dichloropropene	6.1	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	VOCs	Trichloroethene	6.1	ug/kg	U *	UJ	L
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	VOCs	Vinyl chloride	6.1	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	VOCs	Xylenes, Total	12	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	1,2,4-Trichlorobenzene	2500	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	1,2-Dichlorobenzene	2500	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	1,3-Dichlorobenzene	2500	ug/kg	U		

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Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	1,4-Dichlorobenzene	730	ug/kg	J		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	2500	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	2,4,5-Trichlorophenol	2500	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	2,4,6-Trichlorophenol	2500	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	2,4-Dichlorophenol	2500	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	2,4-Dimethylphenol	2500	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	2,4-Dinitrophenol	13000	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	2,4-Dinitrotoluene	2500	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	2,6-Dinitrotoluene	2500	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	2-Chloronaphthalene	2500	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	2-Chlorophenol	2500	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	2-Methylnaphthalene	2500	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	2-Methylphenol (o-Cresol)	2500	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	2-Nitroaniline	13000	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	2-Nitrophenol	2500	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	2-Pentanone, 4-methoxy-4-methyl-	25000	ug/kg	JN		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	3 & 4 Methylphenol	2500	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	3,3'-Dichlorobenzidine	4900	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	3-Nitroaniline	13000	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	4,6-Dinitro-2-methylphenol	13000	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	4-Bromophenyl Phenyl Ether	2500	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	4-Chloro-3-methylphenol	2500	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	4-Chlorophenyl Phenyl Ether	2500	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	4-Nitrophenol	13000	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	Acenaphthene	2500	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	Acenaphthylene	2500	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	Anthracene	2500	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	Benzo(a)anthracene	2500	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	Benzo(a)pyrene	2500	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	Benzo(b)fluoranthene	2500	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	Benzo(g,h,i)perylene	2500	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	Benzo(k)fluoranthene	2500	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	Benzyl Butyl Phthalate	2500	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	bis(2-Chloroethoxy)methane	2500	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	bis(2-Chloroethyl)ether	2500	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	bis(2-Ethylhexyl)phthalate	2500	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	Carbazole	2500	ug/kg	U		

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Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	Chrysene	2500	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	Dibenzo(a,h)anthracene	2500	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	Dibenzofuran	2500	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	Diethyl Phthalate	2500	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	Dimethyl Phthalate	2500	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	Di-n-butylphthalate	2500	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	Di-n-octylphthalate	2500	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	Dinoseb	2500	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	Diphenyl sulfone	1100	ug/kg	JN		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	Fluoranthene	2500	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	Fluorene	2500	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	Hexachlorobenzene	2500	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	Hexachlorobutadiene	2500	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	Hexachlorocyclopentadiene	2500	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	Hexachloroethane	2500	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	Indeno(1,2,3-cd)pyrene	2500	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	Isophorone	2500	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	Naphthalene	2500	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	Nitrobenzene	2500	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	N-Nitroso-di-n-propylamine	2500	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	N-Nitrosodiphenylamine	2500	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	P-Chloroaniline	4900	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	Phenanthrene	2500	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	Phenol	2500	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	p-Hydroxybiphenyl	7100	ug/kg	JN		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	P-Nitroaniline	13000	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	SVOCs	Pyrene	2500	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Pesticides	4,4'-DDD	9.9	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Pesticides	4,4'-DDE	9.9	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Pesticides	4,4'-DDT	3.7	ug/kg	JP		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Pesticides	Aldrin	5.1	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Pesticides	alpha-BHC	5.1	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Pesticides	alpha-Chlordane	5.1	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Pesticides	beta-BHC	5.1	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Pesticides	delta-BHC	5.1	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Pesticides	Dieldrin	9.9	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Pesticides	Endosulfan I	5.1	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Pesticides	Endosulfan II	9.9	ug/kg	U		

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Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Pesticides	Endosulfan Sulfate	9.9	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Pesticides	Endrin	9.9	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Pesticides	Endrin Aldehyde	9.9	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Pesticides	Endrin Ketone	9.9	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Pesticides	gamma-BHC (Lindane)	5.1	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Pesticides	gamma-Chlordane	5.1	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Pesticides	Heptachlor	5.1	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Pesticides	Heptachlor Epoxide	5.1	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Pesticides	Methoxychlor	51	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Pesticides	Toxaphene	510	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Herbicides	2,4,5-T	12	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Herbicides	2,4,5-TP (Silvex)	12	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Herbicides	2,4-D	12	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Herbicides	2,4-DB	12	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Herbicides	Dalapon	250	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Herbicides	Dicamba	12	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Herbicides	Dichlorprop	15	ug/kg	P		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Herbicides	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	3000	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Herbicides	MCPP	3000	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Herbicides	Pentachlorophenol	6.3	ug/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Metals	Aluminum	5900	mg/kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Metals	Antimony	2.8	mg/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Metals	Arsenic	3.1	mg/kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Metals	Barium	110	mg/kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Metals	Beryllium	0.32	mg/kg	J		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Metals	Cadmium	1.2	mg/kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Metals	Calcium	8600	mg/kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Metals	Chromium	10	mg/kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Metals	Cobalt	4.5	mg/kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Metals	Copper	13	mg/kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Metals	Iron	9900	mg/kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Metals	Lead	25	mg/kg	B		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Metals	Magnesium	2600	mg/kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Metals	Manganese	220	mg/kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Metals	Mercury	0.025	mg/kg	J		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Metals	Nickel	11	mg/kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Metals	Potassium	1000	mg/kg	B		

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Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Metals	Selenium	3.5	mg/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Metals	Silver	0.16	mg/kg	J		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Metals	Sodium	200	mg/kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Metals	Thallium	3.5	mg/kg	U		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Metals	Vanadium	17	mg/kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/20/06	Metals	Zinc	330	mg/kg			

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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	VOCs	1,1,1-Trichloroethane	4.5	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	VOCs	1,1,2,2-Tetrachloroethane	4.5	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	VOCs	1,1,2-Trichloroethane	4.5	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	VOCs	1,1-Dichloroethane	4.5	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	VOCs	1,1-Dichloroethylene	4.5	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	VOCs	1,2-Dichloroethane	4.5	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	VOCs	1,2-Dichloropropane	4.5	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	VOCs	2-Butanone (MEK)	4.2	ug/kg	J		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	VOCs	4-Methyl-2-pentanone (MIBK)	22	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	VOCs	Acetone	59	ug/kg			
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	VOCs	Benzene	4.5	ug/kg	U *		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	VOCs	Bromodichloromethane	4.5	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	VOCs	Bromoform	4.5	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	VOCs	Bromomethane	4.5	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	VOCs	Carbon Dioxide	890	ug/kg	JN B		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	VOCs	Carbon Disulfide	1.9	ug/kg	J		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	VOCs	Carbon Tetrachloride	4.5	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	VOCs	Chlorobenzene	6.5	ug/kg			
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	VOCs	Chlorodibromomethane	4.5	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	VOCs	Chloroethane	4.5	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	VOCs	Chloroform	4.5	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	VOCs	Chloromethane	4.5	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	VOCs	cis-1,2-Dichloroethene	4.5	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	VOCs	cis-1,3-Dichloropropene	4.5	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	VOCs	Dichloromethane	4.5	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	VOCs	Ethylbenzene	4.5	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	VOCs	Methyl N-Butyl Ketone	22	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	VOCs	Styrene (Monomer)	4.5	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	VOCs	Tetrachloroethene	4.5	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	VOCs	Toluene	4.5	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	VOCs	trans-1,2-Dichloroethene	4.5	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	VOCs	trans-1,3-Dichloropropene	4.5	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	VOCs	Trichloroethene	4.5	ug/kg	U *	UJ	L
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	VOCs	Vinyl chloride	4.5	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	VOCs	Xylenes, Total	8.9	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	1,2,4-Trichlorobenzene	370	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	1,2-Dichlorobenzene	370	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	1,3-Dichlorobenzene	370	ug/kg	U		

Sauget Area 2
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	1,4-Dichlorobenzene	370	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	370	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	2,4,5-Trichlorophenol	370	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	2,4,6-Trichlorophenol	370	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	2,4-Dichlorophenol	370	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	2,4-Dimethylphenol	370	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	2,4-Dinitrophenol	1900	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	2,4-Dinitrotoluene	370	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	2,6-Dinitrotoluene	370	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	2-Chloronaphthalene	370	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	2-Chlorophenol	370	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	2-Methylnaphthalene	370	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	2-Methylphenol (o-Cresol)	370	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	2-Nitroaniline	1900	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	2-Nitrophenol	370	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	2-Pentanone, 4-methoxy-4-methyl-	23000	ug/kg	JN		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	3 & 4 Methylphenol	370	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	3,3'-Dichlorobenzidine	750	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	3-Nitroaniline	1900	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	4,6-Dinitro-2-methylphenol	1900	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	4-Bromophenyl Phenyl Ether	370	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	4-Chloro-3-methylphenol	370	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	4-Chlorophenyl Phenyl Ether	370	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	4-Nitrophenol	1900	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	Acenaphthene	370	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	Acenaphthylene	370	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	Anthracene	370	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	Benzo(a)anthracene	370	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	Benzo(a)pyrene	370	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	Benzo(b)fluoranthene	370	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	Benzo(g,h,i)perylene	370	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	Benzo(k)fluoranthene	370	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	Benzyl Butyl Phthalate	370	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	bis(2-Chloroethoxy)methane	370	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	bis(2-Chloroethyl)ether	370	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	bis(2-Ethylhexyl)phthalate	370	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	Carbazole	370	ug/kg	U		

Sauget Area 2
Groundwater Migration Control System
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	Chrysene	370	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	Dibenzo(a,h)anthracene	370	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	Dibenzofuran	370	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	Diethyl Phthalate	370	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	Dimethyl Phthalate	370	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	Di-n-butylphthalate	370	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	Di-n-octylphthalate	370	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	Dinoseb	370	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	Fluoranthene	370	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	Fluorene	370	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	Hexachlorobenzene	370	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	Hexachlorobutadiene	370	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	Hexachlorocyclopentadiene	370	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	Hexachloroethane	370	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	Indeno(1,2,3-cd)pyrene	370	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	Isophorone	370	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	Naphthalene	370	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	Nitrobenzene	370	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	N-Nitroso-di-n-propylamine	370	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	N-Nitrosodiphenylamine	370	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	P-Chloroaniline	750	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	Phenanthrene	370	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	Phenol	370	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	P-Nitroaniline	1900	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	SVOCs	Pyrene	370	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Pesticides	4,4'-DDD	3.8	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Pesticides	4,4'-DDE	3.8	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Pesticides	4,4'-DDT	0.82	ug/kg	J		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Pesticides	Aldrin	1.9	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Pesticides	alpha-BHC	1.9	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Pesticides	alpha-Chlordane	1.9	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Pesticides	beta-BHC	1.9	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Pesticides	delta-BHC	1.9	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Pesticides	Dieldrin	3.8	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Pesticides	Endosulfan I	1.9	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Pesticides	Endosulfan II	3.8	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Pesticides	Endosulfan Sulfate	3.8	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Pesticides	Endrin	3.8	ug/kg	U		

Sauget Area 2
Groundwater Migration Control System
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Pesticides	Endrin Aldehyde	3.8	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Pesticides	Endrin Ketone	3.8	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Pesticides	gamma-BHC (Lindane)	1.9	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Pesticides	gamma-Chlordane	1.9	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Pesticides	Heptachlor	1.9	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Pesticides	Heptachlor Epoxide	1.9	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Pesticides	Methoxychlor	19	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Pesticides	Toxaphene	190	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Herbicides	2,4,5-T	9.5	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Herbicides	2,4,5-TP (Silvex)	9.5	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Herbicides	2,4-D	9.5	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Herbicides	2,4-DB	9.5	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Herbicides	Dalapon	190	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Herbicides	Dicamba	9.5	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Herbicides	Dichlorprop	9.5	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Herbicides	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2300	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Herbicides	MCPP	2300	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Herbicides	Pentachlorophenol	4.8	ug/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Metals	Aluminum	1700	mg/kg			
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Metals	Antimony	2.2	mg/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Metals	Arsenic	1.5	mg/kg			
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Metals	Barium	35	mg/kg			
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Metals	Beryllium	0.11	mg/kg	J		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Metals	Cadmium	1.2	mg/kg			
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Metals	Calcium	22000	mg/kg			
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Metals	Chromium	5.2	mg/kg			
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Metals	Cobalt	2	mg/kg			
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Metals	Copper	4.8	mg/kg			
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Metals	Iron	4100	mg/kg			
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Metals	Lead	11	mg/kg	B		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Metals	Magnesium	960	mg/kg			
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Metals	Manganese	120	mg/kg			
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Metals	Mercury	0.0053	mg/kg	J		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Metals	Nickel	5.1	mg/kg			
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Metals	Potassium	340	mg/kg	B		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Metals	Selenium	2.8	mg/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Metals	Silver	1.1	mg/kg	U		

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Groundwater Migration Control System
Sediment Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Metals	Sodium	190	mg/kg			
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Metals	Thallium	2.8	mg/kg	U		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Metals	Vanadium	8.3	mg/kg			
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/21/06	Metals	Zinc	280	mg/kg			

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Groundwater Migration Control System
Sediment Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	VOCs	1,1,1-Trichloroethane	4.4	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	VOCs	1,1,2,2-Tetrachloroethane	4.4	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	VOCs	1,1,2-Trichloroethane	4.4	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	VOCs	1,1-Dichloroethane	4.4	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	VOCs	1,1-Dichloroethylene	4.4	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	VOCs	1,2-Dichloroethane	4.4	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	VOCs	1,2-Dichloropropane	4.4	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	VOCs	2-Butanone (MEK)	3.6	ug/kg	J		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	VOCs	4-Methyl-2-pentanone (MIBK)	22	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	VOCs	Acetone	43	ug/kg	J		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	VOCs	Benzene	28	ug/kg	*	J	L
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	VOCs	Bromodichloromethane	4.4	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	VOCs	Bromoform	4.4	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	VOCs	Bromomethane	4.4	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	VOCs	Carbon Dioxide	990	ug/kg	JN B		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	VOCs	Carbon Disulfide	2	ug/kg	J		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	VOCs	Carbon Tetrachloride	4.4	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	VOCs	Chlorobenzene	3500	ug/kg	D		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	VOCs	Chlorodibromomethane	4.4	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	VOCs	Chloroethane	4.4	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	VOCs	Chloroform	4.4	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	VOCs	Chloromethane	4.4	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	VOCs	cis-1,2-Dichloroethene	4.4	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	VOCs	cis-1,3-Dichloropropene	4.4	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	VOCs	Dichloromethane	4.4	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	VOCs	Ethylbenzene	4.4	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	VOCs	Methyl N-Butyl Ketone	22	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	VOCs	Styrene (Monomer)	4.4	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	VOCs	Tetrachloroethene	4.4	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	VOCs	Toluene	4.2	ug/kg	J		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	VOCs	trans-1,2-Dichloroethene	4.4	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	VOCs	trans-1,3-Dichloropropene	4.4	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	VOCs	Trichloroethene	4.4	ug/kg	U *	UJ	L
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	VOCs	Vinyl chloride	4.4	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	VOCs	Xylenes, Total	8.8	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	1,2,4-Trichlorobenzene	2000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	1,2-Dichlorobenzene	2000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	1,3-Dichlorobenzene	2000	ug/kg	U		

Sauget Area 2
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	1,4-Dichlorobenzene	2000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	2000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	2,4,5-Trichlorophenol	2000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	2,4,6-Trichlorophenol	2000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	2,4-Dichlorophenol	2000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	2,4-Dimethylphenol	2000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	2,4-Dinitrophenol	10000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	2,4-Dinitrotoluene	2000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	2,6-Dinitrotoluene	2000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	2-Chloronaphthalene	2000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	2-Chlorophenol	2000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	2-Methylnaphthalene	2000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	2-Methylphenol (o-Cresol)	2000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	2-Nitroaniline	10000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	2-Nitrophenol	2000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	2-Pentanone, 4-methoxy-4-methyl-	21000	ug/kg	JN		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	3 & 4 Methylphenol	2000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	3,3'-Dichlorobenzidine	4000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	3-Nitroaniline	10000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	4,6-Dinitro-2-methylphenol	10000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	4-Bromophenyl Phenyl Ether	2000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	4-Chloro-3-methylphenol	2000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	4-Chlorophenyl Phenyl Ether	2000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	4-Nitrophenol	10000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	Acenaphthene	2000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	Acenaphthylene	2000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	Anthracene	2000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	Benzo(a)anthracene	2000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	Benzo(a)pyrene	2000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	Benzo(b)fluoranthene	2000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	Benzo(g,h,i)perylene	2000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	Benzo(k)fluoranthene	2000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	Benzyl Butyl Phthalate	2000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	bis(2-Chloroethoxy)methane	2000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	bis(2-Chloroethyl)ether	2000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	bis(2-Ethylhexyl)phthalate	2000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	Carbazole	2000	ug/kg	U		

Sauget Area 2
Groundwater Migration Control System
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	Chrysene	2000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	Dibenzo(a,h)anthracene	2000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	Dibenzofuran	2000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	Diethyl Phthalate	2000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	Dimethyl Phthalate	2000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	Di-n-butylphthalate	2000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	Di-n-octylphthalate	2000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	Dinoseb	2000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	Fluoranthene	2000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	Fluorene	2000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	Hexachlorobenzene	2000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	Hexachlorobutadiene	2000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	Hexachlorocyclopentadiene	2000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	Hexachloroethane	2000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	Indeno(1,2,3-cd)pyrene	2000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	Isophorone	2000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	Naphthalene	2000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	Nitrobenzene	2000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	N-Nitroso-di-n-propylamine	2000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	N-Nitrosodiphenylamine	2000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	P-Chloroaniline	680	ug/kg	J		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	Phenanthrene	2000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	Phenol	2000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	P-Nitroaniline	10000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	SVOCs	Pyrene	2000	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Pesticides	4,4'-DDD	4	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Pesticides	4,4'-DDE	4	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Pesticides	4,4'-DDT	4	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Pesticides	Aldrin	2.1	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Pesticides	alpha-BHC	2.1	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Pesticides	alpha-Chlordane	2.1	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Pesticides	beta-BHC	2.1	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Pesticides	delta-BHC	2.1	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Pesticides	Dieldrin	4	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Pesticides	Endosulfan I	2.1	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Pesticides	Endosulfan II	4	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Pesticides	Endosulfan Sulfate	4	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Pesticides	Endrin	4	ug/kg	U		

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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Pesticides	Endrin Aldehyde	4	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Pesticides	Endrin Ketone	4	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Pesticides	gamma-BHC (Lindane)	2.1	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Pesticides	gamma-Chlordane	2.1	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Pesticides	Heptachlor	2.1	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Pesticides	Heptachlor Epoxide	2.1	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Pesticides	Methoxychlor	21	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Pesticides	Toxaphene	210	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Herbicides	2,4,5-T	10	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Herbicides	2,4,5-TP (Silvex)	10	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Herbicides	2,4-D	10	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Herbicides	2,4-DB	10	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Herbicides	Dalapon	210	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Herbicides	Dicamba	10	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Herbicides	Dichlorprop	8.1	ug/kg	J		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Herbicides	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2400	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Herbicides	MCPP	2400	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Herbicides	Pentachlorophenol	5.1	ug/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Metals	Aluminum	1800	mg/kg			
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Metals	Antimony	2.3	mg/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Metals	Arsenic	2.2	mg/kg			
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Metals	Barium	36	mg/kg			
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Metals	Beryllium	0.13	mg/kg	J		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Metals	Cadmium	0.59	mg/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Metals	Calcium	3100	mg/kg			
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Metals	Chromium	3.8	mg/kg			
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Metals	Cobalt	2.3	mg/kg			
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Metals	Copper	2.7	mg/kg			
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Metals	Iron	5800	mg/kg			
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Metals	Lead	33	mg/kg	B		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Metals	Magnesium	780	mg/kg			
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Metals	Manganese	110	mg/kg			
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Metals	Mercury	0.0058	mg/kg	J		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Metals	Nickel	5.3	mg/kg			
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Metals	Potassium	330	mg/kg	B		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Metals	Selenium	2.9	mg/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Metals	Silver	1.2	mg/kg	U		

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Groundwater Migration Control System
Sediment Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Metals	Sodium	130	mg/kg			
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Metals	Thallium	2.9	mg/kg	U		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Metals	Vanadium	6.9	mg/kg			
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/20/06	Metals	Zinc	40	mg/kg			

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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	VOCs	1,1,1-Trichloroethane	4.6	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	VOCs	1,1,2,2-Tetrachloroethane	4.6	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	VOCs	1,1,2-Trichloroethane	4.6	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	VOCs	1,1-Dichloroethane	4.6	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	VOCs	1,1-Dichloroethylene	4.6	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	VOCs	1,2-Dichloroethane	4.6	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	VOCs	1,2-Dichloropropane	4.6	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	VOCs	2-Butanone (MEK)	23	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	VOCs	4-Methyl-2-pentanone (MIBK)	23	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	VOCs	Acetone	15	ug/kg	J		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	VOCs	Benzene	4.6	ug/kg	U *		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	VOCs	Bromodichloromethane	4.6	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	VOCs	Bromoform	4.6	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	VOCs	Bromomethane	4.6	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	VOCs	Carbon Dioxide	800	ug/kg	JN B		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	VOCs	Carbon Disulfide	4.6	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	VOCs	Carbon Tetrachloride	4.6	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	VOCs	Chlorobenzene	3.8	ug/kg	J		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	VOCs	Chlorodibromomethane	4.6	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	VOCs	Chloroethane	4.6	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	VOCs	Chloroform	4.6	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	VOCs	Chloromethane	4.6	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	VOCs	cis-1,2-Dichloroethene	4.6	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	VOCs	cis-1,3-Dichloropropene	4.6	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	VOCs	Dichloromethane	4.6	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	VOCs	Ethylbenzene	4.6	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	VOCs	Methyl N-Butyl Ketone	23	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	VOCs	Styrene (Monomer)	4.6	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	VOCs	Tetrachloroethene	4.6	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	VOCs	Toluene	4.6	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	VOCs	trans-1,2-Dichloroethene	4.6	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	VOCs	trans-1,3-Dichloropropene	4.6	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	VOCs	Trichloroethene	4.6	ug/kg	U *	UJ	L
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	VOCs	Vinyl chloride	4.6	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	VOCs	Xylenes, Total	9.2	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	1,2,4-Trichlorobenzene	370	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	1,2-Dichlorobenzene	370	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	1,3-Dichlorobenzene	370	ug/kg	U		

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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	1,4-Dichlorobenzene	370	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	370	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	2,4,5-Trichlorophenol	370	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	2,4,6-Trichlorophenol	370	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	2,4-Dichlorophenol	370	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	2,4-Dimethylphenol	370	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	2,4-Dinitrophenol	1900	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	2,4-Dinitrotoluene	370	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	2,6-Dinitrotoluene	370	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	2-Chloronaphthalene	370	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	2-Chlorophenol	370	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	2-Methylnaphthalene	370	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	2-Methylphenol (o-Cresol)	370	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	2-Nitroaniline	1900	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	2-Nitrophenol	370	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	2-Pentanone, 4-methoxy-4-methyl-	22000	ug/kg	JN		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	3 & 4 Methylphenol	370	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	3,3'-Dichlorobenzidine	750	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	3-Nitroaniline	1900	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	4,6-Dinitro-2-methylphenol	1900	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	4-Bromophenyl Phenyl Ether	370	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	4-Chloro-3-methylphenol	370	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	4-Chlorophenyl Phenyl Ether	370	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	4-Nitrophenol	1900	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	Acenaphthene	370	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	Acenaphthylene	370	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	Anthracene	370	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	Benzo(a)anthracene	59	ug/kg	J		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	Benzo(a)pyrene	65	ug/kg	J		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	Benzo(b)fluoranthene	70	ug/kg	J		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	Benzo(g,h,i)perylene	38	ug/kg	J		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	Benzo(k)fluoranthene	43	ug/kg	J		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	Benzyl Butyl Phthalate	370	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	bis(2-Chloroethoxy)methane	370	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	bis(2-Chloroethyl)ether	370	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	bis(2-Ethylhexyl)phthalate	370	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	Carbazole	370	ug/kg	U		

Sauget Area 2
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	Chrysene	63	ug/kg	J		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	Dibenzo(a,h)anthracene	370	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	Dibenzofuran	370	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	Diethyl Phthalate	370	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	Dimethyl Phthalate	370	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	Di-n-butylphthalate	370	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	Di-n-octylphthalate	370	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	Dinoseb	370	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	Fluoranthene	78	ug/kg	J		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	Fluorene	370	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	Hexachlorobenzene	370	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	Hexachlorobutadiene	370	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	Hexachlorocyclopentadiene	370	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	Hexachloroethane	370	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	Indeno(1,2,3-cd)pyrene	370	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	Isophorone	370	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	Naphthalene	370	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	Nitrobenzene	370	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	N-Nitroso-di-n-propylamine	370	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	N-Nitrosodiphenylamine	370	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	P-Chloroaniline	750	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	Phenanthrene	370	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	Phenol	370	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	P-Nitroaniline	1900	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	SVOCs	Pyrene	78	ug/kg	J		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Pesticides	4,4'-DDD	3.7	ug/kg	U	UJ	S
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Pesticides	4,4'-DDE	3.7	ug/kg	U	UJ	S
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Pesticides	4,4'-DDT	3.7	ug/kg	U	UJ	S
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Pesticides	Aldrin	1.9	ug/kg	U	UJ	S
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Pesticides	alpha-BHC	1.9	ug/kg	U	UJ	S
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Pesticides	alpha-Chlordane	1.9	ug/kg	U	UJ	S
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Pesticides	beta-BHC	1.9	ug/kg	U	UJ	S
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Pesticides	delta-BHC	1.9	ug/kg	U	UJ	S
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Pesticides	Dieldrin	3.7	ug/kg	U	UJ	S
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Pesticides	Endosulfan I	1.9	ug/kg	U	UJ	S
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Pesticides	Endosulfan II	3.7	ug/kg	U	UJ	S
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Pesticides	Endosulfan Sulfate	3.7	ug/kg	U	UJ	S
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Pesticides	Endrin	3.7	ug/kg	U	UJ	S

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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Pesticides	Endrin Aldehyde	3.7	ug/kg	U	UJ	S
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Pesticides	Endrin Ketone	3.7	ug/kg	U	UJ	S
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Pesticides	gamma-BHC (Lindane)	1.9	ug/kg	U	UJ	S
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Pesticides	gamma-Chlordane	1.9	ug/kg	U	UJ	S
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Pesticides	Heptachlor	1.9	ug/kg	U	UJ	S
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Pesticides	Heptachlor Epoxide	1.9	ug/kg	U	UJ	S
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Pesticides	Methoxychlor	19	ug/kg	U	UJ	S
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Pesticides	Toxaphene	190	ug/kg	U	UJ	S
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Herbicides	2,4,5-T	9.4	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Herbicides	2,4,5-TP (Silvex)	9.4	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Herbicides	2,4-D	9.4	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Herbicides	2,4-DB	9.4	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Herbicides	Dalapon	190	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Herbicides	Dicamba	9.4	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Herbicides	Dichlorprop	9.4	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Herbicides	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2300	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Herbicides	MCPP	2300	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Herbicides	Pentachlorophenol	4.8	ug/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Metals	Aluminum	1900	mg/kg		J	D
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Metals	Antimony	2	mg/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Metals	Arsenic	1.6	mg/kg			
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Metals	Barium	26	mg/kg		J	K
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Metals	Beryllium	0.1	mg/kg	J	J	D
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Metals	Cadmium	1.1	mg/kg			
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Metals	Calcium	2000	mg/kg		J	K
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Metals	Chromium	6.1	mg/kg		J	K
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Metals	Cobalt	3.4	mg/kg		J	D
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Metals	Copper	3.2	mg/kg		J	K
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Metals	Iron	5600	mg/kg			
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Metals	Lead	10	mg/kg	B	J	K
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Metals	Magnesium	1300	mg/kg		J	K
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Metals	Manganese	100	mg/kg		J	M
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Metals	Mercury	0.021	mg/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Metals	Nickel	8.3	mg/kg		J	D
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Metals	Potassium	210	mg/kg	B		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Metals	Selenium	2.6	mg/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Metals	Silver	1	mg/kg	U		

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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Metals	Sodium	150	mg/kg			
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Metals	Thallium	2.6	mg/kg	U		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Metals	Vanadium	9.3	mg/kg			
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/20/06	Metals	Zinc	330	mg/kg			

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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	VOCs	1,1,1-Trichloroethane	4.9	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	VOCs	1,1,2,2-Tetrachloroethane	4.9	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	VOCs	1,1,2-Trichloroethane	4.9	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	VOCs	1,1-Dichloroethane	4.9	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	VOCs	1,1-Dichloroethylene	4.9	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	VOCs	1,2-Dichloroethane	4.9	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	VOCs	1,2-Dichloropropane	4.9	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	VOCs	2-Butanone (MEK)	24	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	VOCs	4-Methyl-2-pentanone (MIBK)	24	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	VOCs	Acetone	5.3	ug/kg	J		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	VOCs	Benzene	4.9	ug/kg	U *		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	VOCs	Bromodichloromethane	4.9	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	VOCs	Bromoform	4.9	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	VOCs	Bromomethane	4.9	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	VOCs	Carbon Dioxide	650	ug/kg	JN B		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	VOCs	Carbon Disulfide	4.9	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	VOCs	Carbon Tetrachloride	4.9	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	VOCs	Chlorobenzene	4.9	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	VOCs	Chlorodibromomethane	4.9	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	VOCs	Chloroethane	4.9	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	VOCs	Chloroform	4.9	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	VOCs	Chloromethane	4.9	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	VOCs	cis-1,2-Dichloroethene	4.9	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	VOCs	cis-1,3-Dichloropropene	4.9	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	VOCs	Dichloromethane	4.9	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	VOCs	Ethylbenzene	4.9	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	VOCs	Methyl N-Butyl Ketone	24	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	VOCs	Styrene (Monomer)	4.9	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	VOCs	Tetrachloroethene	4.9	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	VOCs	Toluene	4.9	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	VOCs	trans-1,2-Dichloroethene	4.9	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	VOCs	trans-1,3-Dichloropropene	4.9	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	VOCs	Trichloroethene	4.9	ug/kg	U *	UJ	L
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	VOCs	Vinyl chloride	4.9	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	VOCs	Xylenes, Total	9.8	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	1,2,4-Trichlorobenzene	370	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	1,2-Dichlorobenzene	370	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	1,3-Dichlorobenzene	370	ug/kg	U		

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Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	1,4-Dichlorobenzene	370	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	370	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	2,4,5-Trichlorophenol	370	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	2,4,6-Trichlorophenol	370	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	2,4-Dichlorophenol	370	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	2,4-Dimethylphenol	370	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	2,4-Dinitrophenol	1900	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	2,4-Dinitrotoluene	370	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	2,6-Dinitrotoluene	370	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	2-Chloronaphthalene	370	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	2-Chlorophenol	370	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	2-Methylnaphthalene	370	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	2-Methylphenol (o-Cresol)	370	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	2-Nitroaniline	1900	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	2-Nitrophenol	370	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	2-Pentanone, 4-methoxy-4-methyl-	29000	ug/kg	N J		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	3 & 4 Methylphenol	370	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	3,3'-Dichlorobenzidine	750	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	3-Nitroaniline	1900	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	4,6-Dinitro-2-methylphenol	1900	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	4-Bromophenyl Phenyl Ether	370	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	4-Chloro-3-methylphenol	370	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	4-Chlorophenyl Phenyl Ether	370	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	4-Nitrophenol	1900	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	Acenaphthene	370	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	Acenaphthylene	370	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	Anthracene	370	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	Benzo(a)anthracene	370	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	Benzo(a)pyrene	370	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	Benzo(b)fluoranthene	370	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	Benzo(g,h,i)perylene	370	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	Benzo(k)fluoranthene	370	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	Benzyl Butyl Phthalate	370	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	bis(2-Chloroethoxy)methane	370	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	bis(2-Chloroethyl)ether	370	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	bis(2-Ethylhexyl)phthalate	370	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	Carbazole	370	ug/kg	U		

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Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	Chrysene	370	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	Dibenzo(a,h)anthracene	370	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	Dibenzofuran	370	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	Diethyl Phthalate	370	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	Dimethyl Phthalate	370	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	Di-n-butylphthalate	370	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	Di-n-octylphthalate	370	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	Dinoseb	370	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	Fluoranthene	370	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	Fluorene	370	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	Hexachlorobenzene	370	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	Hexachlorobutadiene	370	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	Hexachlorocyclopentadiene	370	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	Hexachloroethane	370	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	Indeno(1,2,3-cd)pyrene	370	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	Isophorone	370	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	Naphthalene	370	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	Nitrobenzene	370	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	N-Nitroso-di-n-propylamine	370	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	N-Nitrosodiphenylamine	370	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	P-Chloroaniline	750	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	Phenanthrene	370	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	Phenol	370	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	P-Nitroaniline	1900	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	SVOCs	Pyrene	370	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Pesticides	4,4'-DDD	3.7	ug/kg	U	UJ	M
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Pesticides	4,4'-DDE	3.7	ug/kg	U	UJ	M
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Pesticides	4,4'-DDT	3.7	ug/kg	U	UJ	M
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Pesticides	Aldrin	1.9	ug/kg	U	UJ	M
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Pesticides	alpha-BHC	1.9	ug/kg	U	UJ	M
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Pesticides	alpha-Chlordane	1.9	ug/kg	U	UJ	M
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Pesticides	beta-BHC	1.9	ug/kg	U	UJ	M
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Pesticides	delta-BHC	1.9	ug/kg	U	UJ	M
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Pesticides	Dieldrin	3.7	ug/kg	U	UJ	M
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Pesticides	Endosulfan I	1.9	ug/kg	U	UJ	M
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Pesticides	Endosulfan II	3.7	ug/kg	U	UJ	M
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Pesticides	Endosulfan Sulfate	3.7	ug/kg	U	UJ	M
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Pesticides	Endrin	3.7	ug/kg	U	UJ	M

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Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Pesticides	Endrin Aldehyde	3.7	ug/kg	U	UJ	M
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Pesticides	Endrin Ketone	3.7	ug/kg	U	UJ	M
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Pesticides	gamma-BHC (Lindane)	1.9	ug/kg	U	UJ	M
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Pesticides	gamma-Chlordane	1.9	ug/kg	U	UJ	M
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Pesticides	Heptachlor	1.9	ug/kg	U	UJ	M
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Pesticides	Heptachlor Epoxide	1.9	ug/kg	U	UJ	M
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Pesticides	Methoxychlor	19	ug/kg	U	UJ	M
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Pesticides	Toxaphene	190	ug/kg	U	UJ	M
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Herbicides	2,4,5-T	9.4	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Herbicides	2,4,5-TP (Silvex)	9.4	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Herbicides	2,4-D	9.4	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Herbicides	2,4-DB	9.4	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Herbicides	Dalapon	190	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Herbicides	Dicamba	9.4	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Herbicides	Dichlorprop	9.4	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Herbicides	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	2300	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Herbicides	MCPP	2300	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Herbicides	Pentachlorophenol	4.8	ug/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Metals	Aluminum	770	mg/kg			
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Metals	Antimony	2.1	mg/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Metals	Arsenic	1.4	mg/kg			
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Metals	Barium	19	mg/kg			
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Metals	Beryllium	0.08	mg/kg	J		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Metals	Cadmium	0.52	mg/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Metals	Calcium	1100	mg/kg			
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Metals	Chromium	5.5	mg/kg			
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Metals	Cobalt	2	mg/kg			
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Metals	Copper	0.6	mg/kg	J		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Metals	Iron	3600	mg/kg			
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Metals	Lead	2.8	mg/kg	B		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Metals	Magnesium	450	mg/kg			
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Metals	Manganese	96	mg/kg			
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Metals	Mercury	0.019	mg/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Metals	Nickel	4.4	mg/kg			
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Metals	Potassium	140	mg/kg	B		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Metals	Selenium	2.6	mg/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Metals	Silver	1	mg/kg	U		

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
September 2006

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Metals	Sodium	100	mg/kg	J		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Metals	Thallium	2.6	mg/kg	U		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Metals	Vanadium	5.4	mg/kg			
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/21/06	Metals	Zinc	17	mg/kg			

URS

Qualifier Definition Table

Groundwater Migration Control System
STL Data Qualifier Definitions

Qualifier	Definition	Notes:
Organic Chemicals		
*	LCS, LCSD, MS, MSD, MD or Surrogate exceeds the control limits	
A	Tentatively identified compound (TIC) is a suspected aldol condensation product.	Only present in SA-O-1-SB-3 (SDG G5E070192) for 1,2,3,4,7,8-HxCDD.
B	Compound is found in the associated method blank.	
CON	Confirmation Analysis	
D	Concentrations identified from analysis of the sample at a secondary dilution.	
E	Compounds whose concentrations exceed the upper calibration range of the instrument for that analysis.	
J	Estimated value - result reported is less than the reporting limit but greater than the instrument detection limit.	
P	Greater than 25% (40% for CLP) difference for detected concentrations between the two GC columns.	
U	Compound analyzed for but not detected at a concentration above the reporting limit.	
Inorganic Chemicals		
B	Compound is found in the associated method blank.	
J	Estimated value - result reported is less than the reporting limit but greater than the instrument detection limit.	
S	Indicates that the Method of Standard Additions (MSA) determined the reported value.	
U	Compound analyzed for but not detected at a concentration above the reporting limit.	
JA	Compound tentatively identified, using theoretical ratios.	

Data Validation Report

Groundwater Migration Control System Surface Water and Sediment Sampling Event - March 2007

Sauget Area 2

July 5, 2007

DRAFT

URS

July 5, 2007

Mr. Steve Smith
Solutia Inc.
575 Maryville Centre Drive
St. Louis, Missouri 63141

Re: Data Validation Report Groundwater Migration Control System Surface Water and Sediment Sampling Event - March 2007 Sauget, Illinois URS Project No. 21561391

Dear Steve:

URS is pleased to present this Data Validation Report for surface water and sediment sampling, conducted as part of the Groundwater Migration Control System Performance Verification

Sampling Program. This report provides:

1. A brief summary of field activities
2. A figure showing the sampling locations
3. Detection tables
4. Sample summary lists
5. Data validation checklists
6. Data tables
7. Qualifier definition tables.

SCOPE OF WORK

The surface water and sediment sampling field activities were conducted on March 20 and 21, 2007 in accordance with the Surface Water and Sediment Performance Verification Sampling Plan dated January 31, 2003. During the sampling event, surface water and sediment samples were collected from a total of five locations immediately adjacent to Site R, stations PDA-2, -3, -4, -5 and -9 as defined in the Menzie Curra sampling effort in 2000.

1001 Highland Plaza Drive West, Suite 300
St. Louis, MO 63110
Phone: 314.429.0100
Fax: 314.429.0462

Surface Water Monitoring

Surface water samples were collected at the sediment-water interface (within one foot of the bottom) at all stations. Because of the volumes required and sampling limitations due to the fast currents, a peristaltic pump system was utilized using decontaminated tubing at each sample location.

Surface water samples were submitted to the laboratory unfiltered and analyzed for VOCs, SVOCs, pesticides, herbicides and metals; and one trip blank was submitted and analyzed for VOCs. VOC samples were collected by directly filling 3-40 mL VOA vials from the peristaltic pump tubing to minimize VOC and preservative loss. Samples for metals analysis were filtered and preserved at the laboratory and an additional sample was collected and submitted to the laboratory for trace metals analysis at each sample location. In addition, field measurements were recorded for temperature, pH dissolved oxygen and conductivity.

Surface water samples were appropriately labeled with the sample location, requested analysis, preservative, date and time sampled and sampler's initials. Samples were maintained at 4°C ± 2°C with ice and shipped in coolers to Severn Trent Laboratory (STL) in Savannah, Georgia. The chain-of-custody (COC) documentation was shipped with the samples to the laboratory.

Sediment Sampling

Sediment samples were collected using a Ponar Dredge sampler from the upper few inches (5 to 6 cm) at each sample location. This depth interval was selected as the zone most relevant of exposures to ecological receptors. Sediment samples were analyzed for VOCs, SVOCs, pesticides, herbicides, and metals; and a matrix spike/matrix spike duplicate (MS/MSD) sample was analyzed for pesticides, herbicides, and metals.

VOC samples were collected from the first grab using a 5 mL modified syringe/plunger. The plunger tube was inserted into the sediment below the surface and removed slowly to prevent sample loss. The plunger was then used to extrude the sample into pre-weighed sample vials. One sample vial contained sodium bisulfate preservative for low-level analysis and the other vial contained methanol for high-level analysis. Sediment samples for all other parameters were

collected from a composite of the upper few inches of sediment from additional grab samples at each sample location. Sediment was removed from

the sampler and homogenized in a stainless steel bowl using a stainless steel spoon. Once the sediment was homogenized, sample containers were filled using the stainless steel spoon. All sampling equipment was decontaminated before moving to the next sample location.

Sediment samples were appropriately labeled with the sample location, requested analysis, preservative, date and time sampled and sampler's initials. Samples were maintained at 4°C ± 2°C with ice and shipped to Severn Trent Laboratory (STL) in Savannah, Georgia. The chain-of-custody (COC) documentation was shipped with the samples to the laboratory.

Should you have any questions or comments regarding this Data Validation Report, please do not hesitate to contact me at 314.429.0100

Very truly yours,

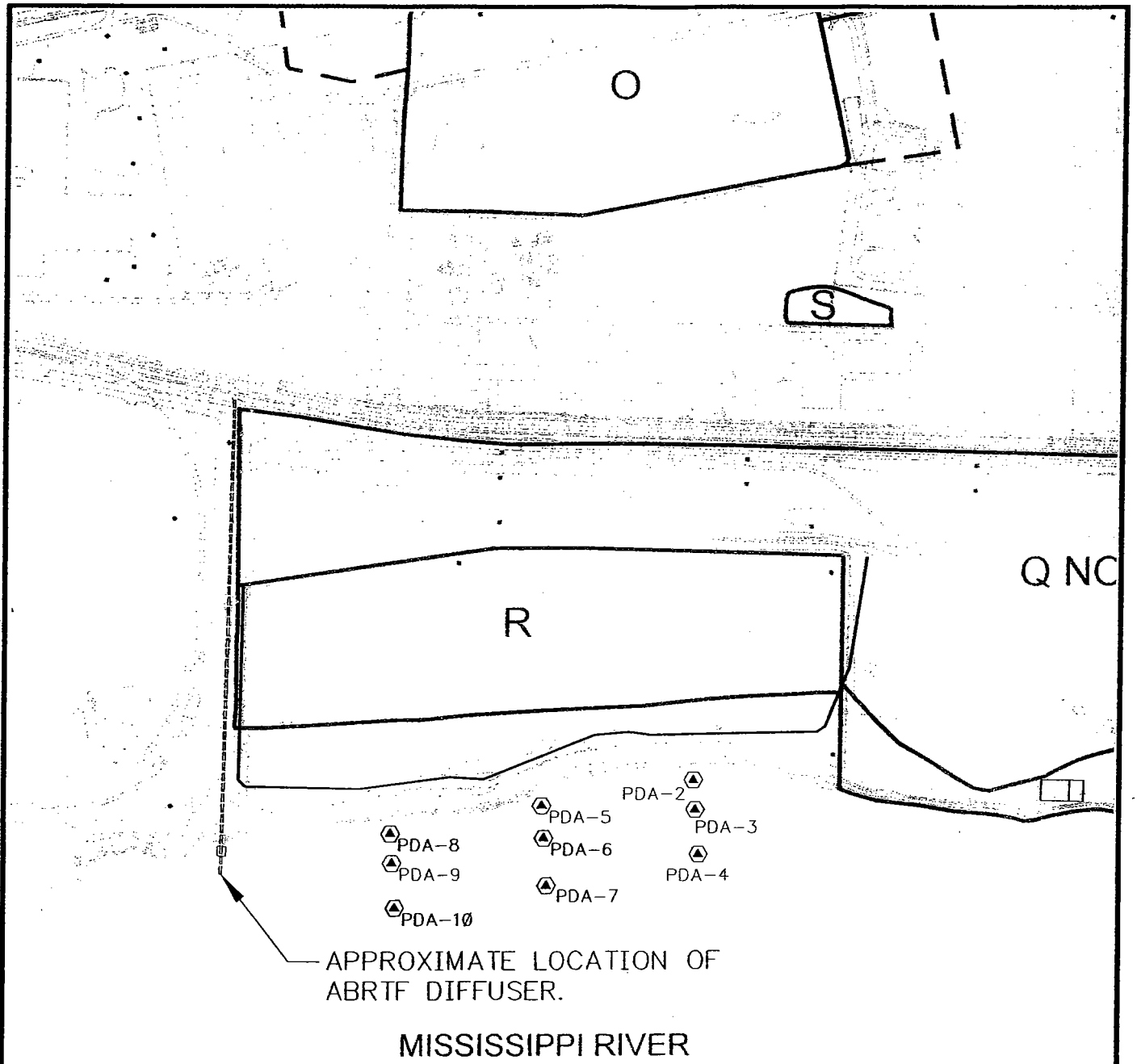
Robert Veenstra
Vice President

Enclosure

RBV/SJS:mlr

URS

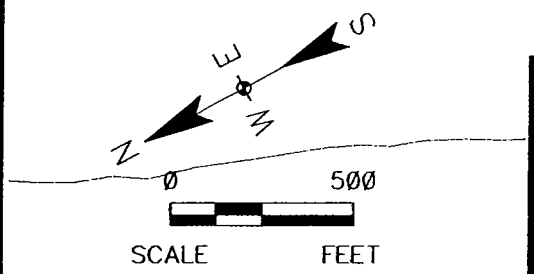
Figure



LEGEND

⊙ SURFACE WATER/SEDIMENT SAMPLE LOCATION (BARRIER WALL UAO)

⊛ SURFACE WATER/SEDIMENT SAMPLE LOCATION (2000 MENZIE CURRA)



SAUGET AREA 2 GROUNDWATER MIGRATION CONTROL SYSTEM SAUGET, ILLINOIS		PROJECT NO. 21561391
URS		
DRN. BY:djd 6/15/07 DSGN. BY:ss CHKD. BY:	Surface Water & Sediment Sampling Locations September 2006	FIG. NO. 1

File: P:\ENVIRONMENTAL\21561510 (SA2)\VALIDATION\SW & SED (SEPTEMBER 2006)\FIG 1 SURFACE WATER & SEDIMENT SAMPLING LOCATIONS (SEPT 06).DWG Last edited: 08/13/07 @ 1:12 p.m. WC-ST.LOUIS, MO

URS

Detection Tables

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Detections
March 2007

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	VOCs	Carbon Dioxide	47	ug/L	J N B		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	(Carbethoxyethylidine)triphenylphosphora	14	ug/L	J N		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	Octadecanoic acid, butyl ester	7.7	ug/L	J N		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	Herbicides	Dichlorprop	0.11	ug/L	JP		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	Metals	Barium (Dissolved)	0.065	mg/L			
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	Metals	Calcium (Dissolved)	58	mg/L	B		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	Metals	Iron (Dissolved)	0.03	mg/L	J		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	Metals	Magnesium (Dissolved)	21	mg/L			
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	Metals	Potassium (Dissolved)	4.5	mg/L			
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	Metals	Sodium (Dissolved)	32	mg/L			
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	Metals	Vanadium (Dissolved)	0.002	mg/L	J		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	VOCs	Carbon Dioxide	47	ug/L	N J B		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	(Carbethoxyethylidine)triphenylphosphora	14	ug/L	J N		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	Herbicides	Dichlorprop	0.12	ug/L	JP		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	Metals	Barium (Dissolved)	0.064	mg/L			
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	Metals	Calcium (Dissolved)	58	mg/L	B		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	Metals	Iron (Dissolved)	0.033	mg/L	J		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	Metals	Magnesium (Dissolved)	21	mg/L			
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	Metals	Potassium (Dissolved)	4.5	mg/L			
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	Metals	Sodium (Dissolved)	32	mg/L			
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	Metals	Vanadium (Dissolved)	0.0026	mg/L	J		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	VOCs	Carbon Dioxide	42	ug/L	J N B		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	(Carbethoxyethylidine)triphenylphosphora	16	ug/L	J N		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	Herbicides	Dichlorprop	0.16	ug/L	JP		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	Metals	Barium (Dissolved)	0.066	mg/L			
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	Metals	Calcium (Dissolved)	58	mg/L	B		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	Metals	Iron (Dissolved)	0.038	mg/L	J		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	Metals	Magnesium (Dissolved)	21	mg/L			
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	Metals	Nickel (Dissolved)	0.0021	mg/L	J		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	Metals	Potassium (Dissolved)	4.6	mg/L			
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	Metals	Sodium (Dissolved)	32	mg/L			
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	Metals	Vanadium (Dissolved)	0.0023	mg/L	J		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	VOCs	Carbon Dioxide	44	ug/L	J N B		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	Herbicides	Dichlorprop	0.11	ug/L	JP		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Detections
March 2007

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	Metals	Barium (Dissolved)	0.066	mg/L			
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	Metals	Calcium (Dissolved)	59	mg/L	B		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	Metals	Iron (Dissolved)	0.032	mg/L	J		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	Metals	Magnesium (Dissolved)	21	mg/L			
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	Metals	Potassium (Dissolved)	4.6	mg/L			
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	Metals	Sodium (Dissolved)	34	mg/L			
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	Metals	Vanadium (Dissolved)	0.0023	mg/L	J		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	VOCs	Carbon Dioxide	46	ug/L	J N B		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	Herbicides	Dichlorprop	0.095	ug/L	JP		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	Metals	Aluminum (Dissolved)	0.03	mg/L	J	J	O
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	Metals	Barium (Dissolved)	0.065	mg/L			
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	Metals	Calcium (Dissolved)	59	mg/L	B		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	Metals	Iron (Dissolved)	0.092	mg/L			
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	Metals	Magnesium (Dissolved)	21	mg/L			
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	Metals	Nickel (Dissolved)	0.0027	mg/L	J		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	Metals	Potassium (Dissolved)	4.5	mg/L			
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	Metals	Sodium (Dissolved)	34	mg/L			
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	Metals	Vanadium (Dissolved)	0.0022	mg/L	J		

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Detections
March 2007

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	VOCs	2-Butanone (MEK)	46	ug/Kg	J *		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	VOCs	Acetone	300	ug/Kg	*		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	VOCs	Acrolein	57	ug/Kg	J		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	VOCs	Benzene	27	ug/Kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	VOCs	Butanal, 3-methyl-	19	ug/Kg	J N		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	VOCs	Carbon Dioxide	4300	ug/Kg	J B N		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	VOCs	Carbon Disulfide	20	ug/Kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	VOCs	Chlorobenzene	19000	ug/Kg	D		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	VOCs	Ethylbenzene	8.4	ug/Kg	J		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	VOCs	Methyl acetate	23	ug/Kg	J		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	VOCs	Pentanal	56	ug/Kg	J N		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	VOCs	p-Xylene/m-Xylene	13	ug/Kg	J		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	VOCs	Toluene	200	ug/Kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	VOCs	Xylenes, Total	18	ug/Kg	J		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	SVOCs	(Carbethoxyethylidine)triphenylphosphora	1300	ug/Kg	J N		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	SVOCs	1,2-Dichlorobenzene	150	ug/Kg	J		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	SVOCs	1,3-Dichlorobenzene	170	ug/Kg	J		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	SVOCs	1,4-Dichlorobenzene	1200	ug/Kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	SVOCs	1-Eicosene	650	ug/Kg	J N		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	SVOCs	3 & 4 Methylphenol	100	ug/Kg	J		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	SVOCs	Anthracene	61	ug/Kg	J		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	SVOCs	Benzo(a)anthracene	120	ug/Kg	J		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	SVOCs	Benzo(a)pyrene	84	ug/Kg	J		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	SVOCs	Benzo(g,h,i)perylene	84	ug/Kg	J		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	SVOCs	Cholesterol	1900	ug/Kg	J N		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	SVOCs	Chrysene	130	ug/Kg	J		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	SVOCs	Desmosterol	1100	ug/Kg	J N		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	SVOCs	Di-n-octylphthalate	100	ug/Kg	J		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	SVOCs	Diphenyl sulfone	1400	ug/Kg	J N		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	SVOCs	Fluoranthene	260	ug/Kg	J		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	SVOCs	Hexadecanoic acid, hexadecyl ester	760	ug/Kg	J N		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	SVOCs	Indeno(1,2,3-cd)pyrene	71	ug/Kg	J		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	SVOCs	Oxacycloheptadecan-2-one	1200	ug/Kg	J N		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	SVOCs	P-Chloroaniline	1900	ug/Kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	SVOCs	Phenanthrene	170	ug/Kg	J		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	SVOCs	Phytol	1100	ug/Kg	J N		

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Detections
March 2007

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	SVOCs	Pregna-5,16-dien-20-one, 3-hydroxy-, (3.	1200	ug/Kg	J N		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	SVOCs	Pyrene	220	ug/Kg	J		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	SVOCs	Stigmasterol	1300	ug/Kg	J N		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	Pesticides	4,4'-DDD	8.8	ug/Kg	P		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	Pesticides	Dieldrin	0.98	ug/Kg	J P		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	Herbicides	Dichlorprop	56	ug/Kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	Metals	Aluminum	8700	mg/Kg	B		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	Metals	Antimony	0.78	mg/Kg	J		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	Metals	Arsenic	4.3	mg/Kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	Metals	Barium	160	mg/Kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	Metals	Beryllium	0.5	mg/Kg	J		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	Metals	Cadmium	2	mg/Kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	Metals	Calcium	14000	mg/Kg	B		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	Metals	Chromium	17	mg/Kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	Metals	Cobalt	6.3	mg/Kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	Metals	Copper	22	mg/Kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	Metals	Iron	15000	mg/Kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	Metals	Lead	27	mg/Kg	B		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	Metals	Magnesium	4100	mg/Kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	Metals	Manganese	440	mg/Kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	Metals	Mercury	0.041	mg/Kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	Metals	Nickel	16	mg/Kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	Metals	Potassium	1500	mg/Kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	Metals	Vanadium	26	mg/Kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	Metals	Zinc	370	mg/Kg			
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	3/20/07	VOCs	Acetone	20	ug/Kg	J *	J	C
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	3/20/07	VOCs	Carbon Dioxide	540	ug/Kg	N J B		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	3/20/07	VOCs	Chlorobenzene	1.9	ug/Kg	J		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	3/20/07	SVOCs	(Carbethoxyethylidine)triphenylphosphora	1100	ug/Kg	J N		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	3/20/07	SVOCs	Acenaphthene	32	ug/Kg	J		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	3/20/07	SVOCs	Anthracene	41	ug/Kg	J		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	3/20/07	SVOCs	Chrysene	42	ug/Kg	J		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	3/20/07	SVOCs	Dibenzofuran	29	ug/Kg	J		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	3/20/07	SVOCs	Fluoranthene	130	ug/Kg	J		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	3/20/07	SVOCs	Fluorene	49	ug/Kg	J		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	3/20/07	SVOCs	Phenanthrene	220	ug/Kg	J		

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Detections
March 2007

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	3/20/07	SVOCs	Pyrene	91	ug/Kg	J		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	3/20/07	Metals	Aluminum	1000	mg/Kg	B		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	3/20/07	Metals	Arsenic	1.2	mg/Kg			
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	3/20/07	Metals	Barium	43	mg/Kg			
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	3/20/07	Metals	Beryllium	0.08	mg/Kg	J		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	3/20/07	Metals	Calcium	1900	mg/Kg	B		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	3/20/07	Metals	Chromium	2.5	mg/Kg			
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	3/20/07	Metals	Cobalt	2.2	mg/Kg			
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	3/20/07	Metals	Copper	1.5	mg/Kg	J		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	3/20/07	Metals	Iron	3900	mg/Kg			
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	3/20/07	Metals	Lead	5.4	mg/Kg	B		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	3/20/07	Metals	Magnesium	930	mg/Kg			
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	3/20/07	Metals	Manganese	66	mg/Kg			
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	3/20/07	Metals	Nickel	4.9	mg/Kg			
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	3/20/07	Metals	Potassium	180	mg/Kg			
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	3/20/07	Metals	Vanadium	4	mg/Kg			
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	3/20/07	Metals	Zinc	83	mg/Kg			
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	3/20/07	VOCs	Acetone	14	ug/Kg	J *	J	C
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	3/20/07	VOCs	Carbon Dioxide	610	ug/Kg	N J B		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	3/20/07	VOCs	Carbon Disulfide	1.4	ug/Kg	J		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	3/20/07	VOCs	Chlorobenzene	1.5	ug/Kg	J		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	3/20/07	SVOCs	Diethyl Phthalate	65	ug/Kg	J		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	3/20/07	SVOCs	Phosphine oxide, triphenyl-	2800	ug/Kg	J N		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	3/20/07	Metals	Aluminum	990	mg/Kg	B		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	3/20/07	Metals	Arsenic	1.7	mg/Kg			
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	3/20/07	Metals	Barium	18	mg/Kg			
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	3/20/07	Metals	Beryllium	0.084	mg/Kg	J		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	3/20/07	Metals	Calcium	1000	mg/Kg	B		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	3/20/07	Metals	Chromium	3.8	mg/Kg			
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	3/20/07	Metals	Cobalt	3.1	mg/Kg			
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	3/20/07	Metals	Copper	1	mg/Kg	J		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	3/20/07	Metals	Iron	4300	mg/Kg			
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	3/20/07	Metals	Lead	3.3	mg/Kg	B		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	3/20/07	Metals	Magnesium	600	mg/Kg			
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	3/20/07	Metals	Manganese	63	mg/Kg			
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	3/20/07	Metals	Nickel	7.9	mg/Kg			

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Detections
March 2007

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	3/20/07	Metals	Potassium	190	mg/Kg			
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	3/20/07	Metals	Vanadium	4.7	mg/Kg			
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	3/20/07	Metals	Zinc	12	mg/Kg			

URS

Sample Summary List

Sauget Area 2
Groundwater Migration Control System
SAS051 Sample Summary List
March 2007

SDG	Sample ID	Sample Date	VOCs	SVOCs	PCBs	Pesticides	Herbicides	Dioxins	Metals	Other
SAS052	SED-SA2-GMCS-9	3/21/07	X	X		X	X		X	
SAS052	SED-SA2-GMCS-5	3/21/06	X	X		X	X		X	
SAS052	SED-SA2-GMCS-9	3/21/06	X	X		X	X		X	
SAS052	SED-SA2-GMCS-9	3/20/06	X	X		X	X		X	
SAS052	SED-SA2-GMCS-9	3/20/06	X	X		X	X		X	
SAS053	SED-SA2-GMCS-2	3/21/06	X	X		X	X		X	
SAS053	SED-SA2-GMCS-5	3/20/06	X	X		X	X		X	
SAS053	SED-SA2-GMCS-9	3/20/06	X	X		X	X		X	

URS

Checklists

DATA VALIDATION WORKSHEET
VOLATILE ORGANIC ANALYSIS

Reviewer: Tony Sedlacek
Date: 5/9/2007
Laboratory: Severn Trent Laboratory - Savannah

Project Name: Sauget - Area 2 Site R GMCS
Project Number: 21561391.00000
SDG No.: SAS052
Review Level: Level III

Major Anomolies:

No samples were rejected

Minor Anomolies:

No analytes required qualification based on this data review.

Field IDs:

SW-SA2-GMCS-9	SW-SA2-GMCS-2
SW-SA2-GMCS-5	EQBLK-SA2-GMCS
SW-SA2-GMCS-4	TRIP BLANK-SA2-GMCS
SW-SA2-GMCS-3	

1.0 Chain of Custody/Sample Condition

		Yes	No	NA
1.1	Do Chain-of-Custody forms list all samples analyzed?			
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was maintained?			
1.3	Do the Traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data?			

Note: The laboratory and cooler receipt form did not indicate any problems.

2.0 Holding Time/ Preservation (Code H)

		Yes	No	NA
2.1	Do sample preservation, collection and storage condition meet method requirement? If sample preservation and/or temperature was inappropriate (i.e., <2° >6° C, etc.), comment in report. If unpreserved or temperature is outside the range 0° (but not frozen) to 10° flag all positive results with a "J" and all non-detects "UJ". If temperature exceeds 10°, flag positive detections "J" and non-detects "R".			
2.2	Have any technical holding times, determined from sampling to date of analysis, been exceeded? If yes, J(+)/UJ(-).			
2.3	Have any technical holding times been grossly (twice the holding time) exceeded? If yes, J(+)/R(-).			

Matrix	Preserved	Aromatic	All others
Aqueous	No	7 days	14 days
	Yes	14 days	14 days
Soil/Sediment	4 °C ± 2 °C	14 days	14 days

Note: All holding time criteria were met.

3.0 GC/MS Instrument Performance Check (Code T)

		Yes	No	NA
3.1	Are GC/MS Tuning and Mass Calibration forms present for bromofluorobenzene (BFB)?			x
3.2	Have all samples been analyzed within twelve hours of the BFB tune? If no, flag R.			x
3.3	Have ion abundance criteria for BFB been met for each instrument used? If no, flag R.			x

Note:

4.0 Blanks (Method Blanks, Field Blanks and Trip Blanks)

(Code X - Field Blank Contamination, Code Y - Trip blank contamination, Code Z - Method blank contamination)

		Yes	No	NA
4.1	Is a Method Blank Summary form present for each batch?			
4.2	Do any method blanks have positive VOA results (TCL and/or TIC)?			
4.3	Do any field/trip rinse/equipment blanks have positive VOA results (TCL and/or TIC)?			
	Action: Positive sample results <5X (or 10X for common volatile lab contaminants- methylene chloride, acetone, and 2-butanone) the blank concentration should be qualified "U". The result should be elevated to the RL for estimate (laboratory "J" flagged) concentrations.			
4.4	If Level IV, review raw data and verify all detections for blanks were reported.			x

Note: All blank criteria were met.

5.0 GC/MS Initial Calibration (Code C)

		Yes	No	NA
5.1	Are Initial Calibration summary forms present and complete for each instrument used?			x
5.2	Are CCCs linear applying either %RSD < 30% and all other compounds <15% or >0.990?			x
	If not, J(+)/ UJ(-). In extreme cases, the reviewer may flag non-detects "R".			
5.3	Do any SPCC compounds have an RRF less than specification or any other compounds < 0.05 (use 0.01 for poor responders like ketones or alcohols)? If yes, J(+)/R(-).			x
5.4	Is the lowest standard at the same concentration, or lower, as the RL reported? If not, elevate RL.			x
5.5	If Level IV, recalculate a sample of RRFs and %RSDs to verify correct calculations are being made.			x

Note:

6.0 Continuing Calibration (Code C)

		Yes	No	NA
6.1	Are Continuing Calibration Summary forms present and complete?			x
6.2	Has a continuing calibration standard been analyzed every 12 hours?			x
6.3	Have all SPCCs and CCCs met method specifications? If not, comment in report, proceed to 6.4.			x
6.4	Do any compounds have a % difference (or % drift for quantitation from a curve) (%D) between initial and continuing calibration RRF outside QC limits (%D < 20%)?			x
	If yes, a marginal increase in response >20% then J(+) only; a decrease in response then J(+)/ UJ(-). For %D > 50%, flag R.			
6.5	Do any compounds have an RRF < 0.05 (use 0.01 for poor responders)? If yes, J(+)/R(-).			x
6.6	If Level IV, calculate a sample of RFs and %Ds from ave RF to verify correct calculations.			x

Note:

7.0 Surrogate Recovery (Code S)

		Yes	No	NA
7.1	Are all samples listed on the appropriate Surrogate Recovery Summary Form ?			
7.2	Are surrogate recoveries within acceptance criteria specified in the QAPP for all samples?			
7.3	If No in Section 7.2, were these sample(s) or method blank(s) reanalyzed?			x
7.4	If No in Section 7.3, is any sample dilution factor greater than 10? (Surrogate recoveries may be diluted out.)			x
	Note: If SMC recoveries do not meet acceptance criteria in samples chosen for the MS/MSD or diluted			

	> UCL	10% to LCL	< 10%
Positive	J	J	J
Non-detect	None	UJ	R

Note: All surrogate recoveries were within evaluation criteria.

8.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD) or one MS with a Sample Duplicate (Recovery - Code M, RPD - Code D)

		Yes	No	NA
8.1	Is a Matrix Spike/Matrix Spike Duplicate recovery form present?		x	
8.2	Are MS/MSDs analyzed at the required frequency of one matrix spike per ten samples and a duplicate per twenty for each matrix?			x
8.3	Are all MS/MSD %Rs and RPDs within acceptance criteria Specified in the QAPP?			x
	Using informed professional judgment, the data reviewer should use the MS and MSD results in conjunction with other QC criteria and determine the need for qualification of the data for samples *from the same site/matrix* . Recoveries <10% may require rejection. RPD failures may be flagged "J" (+ only)			

Note: MS/MSD samples were not submitted for analysis.

9.0 Laboratory Control Sample (LCS/LCSD) (Recovery - Code L, RPD - Code E)

		Yes	No	NA
9.1	Is an LCS recovery form present?			
9.2	Is an LCS analyzed at the required frequency of one per twenty field samples for each matrix?			
9.3	Are all LCS %Rs and RPDs within acceptance criteria specified in the QAPP?			
9.4	If Level IV, verify the % recoveries are calculated correctly.			x
	Action for specific compound outside the acceptance criteria: %R>UCL, J(+) only; <LCL, J(+)/UJ(-); <30% J(+)/R(-). RPD failures should be flagged "J" (+ only)			

Note: All LCS recoveries were within evaluation criteria.

10.0 Internal Standards (Code I)

		Yes	No	NA
10.1	Are internal standard areas for every sample and blank within upper and lower QC limits?			
	Area > +100% / Area < -50% / Area < -10%			
	Positive: J / J / J			
	Non-detect: None / UJ / R			
Note:	The method specification is for the continuing calibration to be compared to the mid-point initial calibration, not sample to continuing calibration. Thus, if all other QC specifications are met for a given sample, using informed professional judgment, the reviewer may choose not to flag individual samples in			
10.2	Are retention times of internal standards within 30 seconds of the associated calibration standard?			
	Action: The chromatogram must be examined to determine if any false positives or negatives exist. For shift of a large magnitude, the reviewer may consider partial or total rejection of the data for non-detects in that sample/fraction.			

Note: Internal standard area counts and retention times were within evaluation criteria.

11.0 TCL Identification (Code W)

		Yes	No	NA
11.1	Is the relative retention time (RRT) of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration?			x
11.2	Are the three ions of greatest intensity present in the standard mass spectrum also present in the sample mass spectrum; and do sample and standard relative ion intensities agree within 30%?			x

Note:

12.0 TCL/TIC Quantitation and Reported Detection limits (Code K)

		Yes	No	NA
12.1	Are RLs used consistent with those specified in the QAPP?			x
12.2	Are these limits adjusted to reflect dilutions and/ or percent solids as required?			x
12.3	Are TIC ions greater than ten percent in the reference spectrum also present in the sample spectrum?			x
12.4	Are any positives reported that exceed the linear range of the instrument? If yes, than flag "J".			x
12.5	If Level IV, calculate a sample of positive results to verify correct calculations			x

Note:

13.0 Field Duplicate Samples (Code F)

		Yes	No	NA
13.1	Were any field duplicates submitted for VOC analysis?		x	
13.2	Were all RPD or absolute difference values within the control limits outlined in the QAPP?			x
	Action: No qualifying action is taken based on field duplicate results, however the data validator should provide a qualitative assessment in the data validation report.			

Note: Field duplicate samples were not submitted for analysis.

14.0 Data Completeness

			Yes	No	NA
14.1	Is % completeness within the control limits? (Control limit: Check QAPP or use 95% for aqueous				
14.2	Number of samples:	7			
14.3	Number of target compounds in each analysis:	35			
14.4	Number of results rejected and not reported:	0			
	% Completeness = 100 x ((14.1 * 14.2) - 14.3) / (14.1 * 14.2)				
	% Completeness	**100**			

Note:

DATA VALIDATION WORKSHEET
SEMIVOLATILE ORGANIC ANALYSIS

Reviewer: Tony Sedlacek
Date: 5/9/2007
Laboratory: Severn Trent Laboratory - Savannah

Project Name: Sauget - Area 2 Site R GMCS
Project Number: 21561391.00000
SDG No.: SAS052
Review Level: Level III

Major Anomolies:

No samples were rejected

Minor Anomolies:

No analytes required qualification based on this data review.

Field IDs:

SW-SA2-GMCS-9	SW-SA2-GMCS-3
SW-SA2-GMCS-5	SW-SA2-GMCS-2
SW-SA2-GMCS-4	EQBLK-SA2-GMCS

1.0 Chain of Custody/Sample Condition

		Yes	No	NA
1.1	Do Chain-of-Custody forms list all samples analyzed?			
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was maintained?			
1.3	Do the Traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data?	x		

Note: The laboratory case narrative indicated that surrogate recovery for phenol-d_5 was outside evaluation criteria in sample SW-SA2-GMCS-5

2.0 Holding Time/ Preservation (Code H)

		Yes	No	NA
2.1	Do sample preservation, collection and storage condition meet method requirement?			
	If samples were not on ice or the ice was melted upon arrival at the laboratory and the temperature of the cooler was elevated (> 10 °C), then flag all positive results with a "J" and all non-detects "UJ".			
2.2	Have any technical holding times, determined from sampling to date of analysis, been exceeded? (See			
	Extraction: Soil/Sediment 14 days - aqueous 7 days Analysis: 40 days			
2.3	Have any technical holding times grossly (twice the holding time) been exceeded? If yes, J(+)/R(-).			

Note: All holding times criteria were met.

3.0 GC/MS Instrument Performance Check (Code T)

		Yes	No	NA
3.1	Are GC/MS Tuning and Mass Calibration forms present for DFTPP?			x
3.2	Have all samples been analyzed within twelve hours of the tune?			x
	If no, the data for the affected standards, blanks, field samples or QC samples are rejected "R".			
3.3	Have ion abundance criteria for DFTPP been met for each instrument used?			x
	If no, all standards, blanks, field samples and QC samples are rejected "R".			

Note:

4.0 Blanks (Method Blanks and Field Blanks)

(Code X - Field Blank Contamination, Code Z - Method blank contamination)

		Yes	No	NA
4.1	Is a Method Blank Summary form present for each batch?			
4.2	Do any method/instrument/reagent blanks have positive results (TCL, and/or TIC)?			
4.3	Do any field equipment blanks have positive results (TCL, and/or TIC)?			
	Action: Positive sample results <5X (or 10X for phthalate contaminants) the blank concentration should be qualified "U" and the detection limit elevated to the RL for estimate concentrations.			
4.4	If Level IV, review raw data and verify all detections for blanks were reported.			x

Note: All blank criteria were met.

5.0 GC/MS Initial Calibration (Code C)

		Yes	No	NA
5.1	Are Initial Calibration summary forms present and complete for each instrument used?			x
5.2	Are CCCs linear applying either %RSD 30% and all other compounds <15% or >0.990?			x
	If not, J(+)/ UJ(-). In extreme cases, the reviewer may flag non-detects "R".			x
5.3	Do any SPCC compounds have an RRF les than specification or any other compounds < 0.05 (use 0.01 for poor responders like amines and phenols)? If yes, J(+)/R(-).			x
5.4	Is the lowest standard at the same concentration, or lower, as the RL reported? If not, elevate RL.			x
5.5	If Level IV, recalculate a sample of RRFs and %RSDs to verify correct calculations are being made.			x

Note:

6.0 Continuing Calibration (Code C)

		Yes	No	NA
6.1	Are Continuing Calibration Summary forms present and complete?			x
6.2	Has a continuing calibration standard been analyzed every 12 hours?			x
6.3	Have all SPCCs and CCCs met method specifications? If not, comment in report, proceed to 6.4.			x
6.4	Do any compounds have a % difference (or % drift for quantitation from a curve) (%D) between initial and continuing calibration RRF outside QC limits (%D < 20%)?			x
	If yes, a marginal increase in response >20% then J(+) only; a decrease in response then J(+)/ UJ(-). For %D > 50%, flag R.			
6.5	Do any compounds have an RRF < 0.05 (use 0.01 for poor responders)? If yes, J(+)/R(-).			x
6.6	If Level IV, calculate a sample of RFs and %Ds from ave RF to verify correct calculations.			x

Note:

7.0 Surrogate Recovery (Code S)

		Yes	No	NA
7.1	Are all samples listed on the appropriate Surrogate Recovery Summary Form ?			
7.2	Are surrogate recoveries within acceptance criteria specified in the QAPP for all samples and method blanks?		x	
7.3	Are more than one of either fraction outside the acceptance criteria?			
7.4	If Yes in Section 7.3, are these sample(s) or method blank(s) reanalyzed?		x	
7.5	If Yes in Section 7.3, is any sample dilution factor greater than 10?			x
	Note: If SMC recoveries display unacceptable recoveries in the MS and/ or diluted samples, then no reanalysis is required and acids and base/ neutrals are assessed separately.			
	> UCL / 10% to LCL / < 10%			
	Positive: J / J / J			
	Non-detect: None / UJ / R			

Note: Surrogate recovery for phenol-d_5 (54%) was outside evaluation criteria (55-104%) in sample SW-SA2-GMCS-5. Since only one acid fraction surrogate was outside criteria and National Functional Guidelines indicates to qualify data if two or more surrogates per SVOC fraction are outside criteria; therefore, no qualification of the SVOC data was required.

8.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD) or one MS with a Sample Duplicate (Recovery - Code M, RPD - Code D)

		Yes	No	NA
8.1	Is a Matrix Spike/Matrix Spike Duplicate recovery form present?		x	
8.2	Are MS/MSDs analyzed at the required frequency not to exceed twenty field samples for each matrix?			x
8.3	Are all MS/MSD %Rs and RPDs within acceptance criteria provided by the laboratory?			x
	Using informed professional judgment, the data reviewer should use the MS and MSD results in conjunction with other QC criteria and determine the need for qualification of the data for samples *from the same site/matrix* . Recoveries <10% may require rejection. RPD failures may be flagged "J" (+ only)			

Note: MS/MSD samples were not submitted for analysis.

9.0 Laboratory Control Sample (LCS/LCSD) (Recovery - Code L, RPD - Code E)

		Yes	No	NA
9.1	Is an LCS recovery form present?			
9.2	Is LCS analyzed at the required frequency for each matrix?			
9.3	Are all LCS %Rs (and RPDs) within acceptance criteria?			
	Action for specific compound outside the acceptance criteria: %R>UCL, J(+) only; <LCL, J(+)/UJ(-); <30% J(+)/R(-). RPD failures should be flagged "J" (+ only)			
9.4	If Level IV, verify the % recoveries are calculated correctly.			x

Note: All LCS recoveries were within evaluation criteria.

10.0 Internal Standards (Code I)

		Yes	No	NA
10.1	Are internal standard area of every sample and blank within upper and lower QC limits for each continuing			
Note:	The method specification is for the continuing calibration to be compared to the mid-point initial calibration, not sample to continuing calibration. Thus, if all other QC specifications are met for a given sample, using informed professional judgment, the reviewer may choose not to flag individual samples in this case.			
10.2	Are retention times of internal standards within 30 seconds of the associated calibration standard?			
	Action: The chromatogram must be examined to determine if any false positives or negatives exist. For shift of a large magnitude, the reviewer may consider partial or total rejection of the data for non-detects in that sample/fraction.			

	Area > +100%	Area < -50%	Area < -10%
Positive	J	J	J
Non-detect	None	UJ	R

Note: Internal standard area counts and retention times were within evaluation criteria.

11.0 TCL Identification (Code W)

		Yes	No	NA
11.1	Is the relative retention time (RRT) of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration?			x
11.2	Are the three ions of greatest intensity present in the standard mass spectrum also present in the sample mass spectrum; and do sample and standard relative ion intensities agree within 30%?			x

Note:

12.0 TCL/TIC Quantitation and Reported Detection limits (Code K)

		Yes	No	NA
12.1	Are RLs used consistent with those specified in the QAPP?			x
12.2	Are these limits adjusted to reflect dilutions and/ or percent solids as required?			x
12.3	Are TIC ions greater than ten percent in the reference spectrum also present in the sample spectrum?			x
12.4	Are any positives reported that exceed the linear range of the instrument? If yes, than flag "J".			x
12.5	If Level IV, calculate a sample of positive results to verify correct calculations			x

Note:

13.0 Field Duplicate Samples (Code F)

		Yes	No	NA
13.1	Were any field duplicates submitted for SVOC analysis?		x	
13.2	Were all RPD or absolute difference values within the control limits?			x
	No action is taken based on field duplicate results, however the data validator should provide a qualitative assessment in the data validation report.			

Note: Field duplicate samples were not submitted for analysis.

14.0 Data Completeness

			Yes	No	NA
14.1	Is % completeness within the control limits? (Control limit: Check QAPP or use 95% for aqueous sample,				
14.2	Number of samples:	6			
14.3	Number of target compounds in each analysis:	65			
14.4	Number of results rejected and not reported:	0			
	% Completeness = 100 x ((14.1 x 14.2) - 14.3) / (14.1 x 14.2)				
	% Completeness	**100**			

Note:

DATA VALIDATION WORKSHEET
PESTICIDES ANALYSIS

Reviewer: Tony Sedlacek
Date: 5/9/2007
Laboratory: Severn Trent Laboratory - Savannah

Project Name: Sauget - Area 2 Site R GM'S
Project Number: 21561391.00000
SDG No.: SAS052
Review Level: Level III

Major Anomolies:

No samples were rejected.

Minor Anomolies:

Samples were qualified estimated nondetect "UJ" due to low surrogate recovery.

Field IDs:

SW-SA2-GMCS-9	SW-SA2-GMCS-3
SW-SA2-GMCS-5	SW-SA2-GMCS-2
SW-SA2-GMCS-4	EQBLK-SA2-GMCS

1.0 Chain of Custody/Sample Condition

		Yes	No	NA
1.1	Do Chain-of-Custody forms list all samples analyzed?			
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was maintained?			
1.3	Do the Traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data?	x		

Note: The laboratory case narrative indicated that surrogate recoveries were outside evaluation criteria in several samples.

2.0 Holding Time/ Preservation (Code h)

		Yes	No	NA
2.1	Do sample preservation, collection and storage condition meet method requirement?			
	If samples were not on ice or the ice was melted upon arrival at the laboratory and the temperature of the cooler was elevated (> 10 ^{o}C), then flag all positive results with a "J" and all non-detects "UJ".			
2.2	Have any technical holding times, determined from sampling to date of analysis, been exceeded? (See attached Holding Time Table for sample holding time) If yes, J(+)/UJ(-).			
	Extraction: Soil/Sediment 14 days - aqueous 7 days Analysis: 40 days			
2.3	Have any technical holding times grossly (twice the holding time) been exceeded? If yes, J(+)/R(-).			

Note: All holding times criteria were met.

3.0 Blanks (Method Blanks and Field Blanks)

(Code x - Field Blank Contamination, Code z - Method blank contamination)

		Yes	No	NA
3.1	Is a Method Blank Summary form present for each batch?			
3.2	Do any method blanks have positive results (TCL)?			
3.3	Do any field/rinse/equipment blanks have positive results (TCL)?			
	Action: Positive sample results <5X the blank concentration should be qualified "U". The result should be elevated to the RL for estimate (laboratory "J" flagged) concentrations.			
3.4	If Level IV, review raw data and verify all detections for blanks were reported.			x

Note: All blank criteria were met.

4.0 GC/ECD Instrument Performance Check (Code b)

		Yes	No	NA
4.1	Are Endrin and 4,4'-DDT breakdown forms present?			x
4.2	Have all samples been analyzed within twelve hours of the performance check sample?			x
	If no, the data for the affected standards, blanks, field samples or QC samples are rejected "R".			
4.3	Have percent breakdown criteria (15%) for endrin and 4,4'-DDT been met?			x
	If no, all standards, blanks, field samples and QC samples are rejected "R".			

Note:

5.0 Initial Calibration (Code r)

		Yes	No	NA
5.1	Are Initial Calibration summary forms present and complete for each instrument used?			x
5.2	Are response factors stable (%RSD values < 20% or >0.995) over the concentration range of the instrument			x
	If not, J(+)/ UJ(-). In extreme cases, the reviewer may flag non-detects "R".			
5.3	If Level IV, recalculate a sample of RRFs and %RSDs to verify correct calculations are being made.			x

Note:

6.0 Continuing Calibration (Code c)

		Yes	No	NA
6.1	Are Continuing Calibration Summary forms present and complete?			x
6.2	Has a continuing calibration standard been analyzed every 12 hours?			x
6.3	Do any compounds have a % difference (or % drift for quantitation from a curve) (%D) between initial and continuing calibration CF outside QC limits (%D < 15%)?			x
	If yes, a marginal increase in response >20% then J(+) only; a decrease in response then J(+)/ UJ(-). For %D > 50%, flag R.			
6.4	If Level IV, calculate a sample of CFs and %Ds to verify correct calculations.			x

Note:

7.0 Surrogate Recovery (Code s)

		Yes	No	NA
7.1	Are all samples listed on the appropriate Surrogate Recovery Summary Form ?			
7.2	Are surrogate recoveries within acceptance criteria specified in the QAPP for all samples?		x	
7.3	If No in Section 7.2, were these sample(s) or method blank(s) reanalyzed?		x	
7.4	If No in Section 7.3, is any sample dilution factor greater than 10? (Surrogate recoveries may be diluted out.)		x	
	> UCL / 10% to LCL / < 10%			
	Positive J / J / J			
	Non-detect None / UJ / R			

Note: Surrogate recoveries for DCB Decachlorobiphenyl were below evaluation criteria (30-150%) in samples SW-SA2-GMCS-9 (28%), SW-SA2-GMCS-5 (23%), SW-SA2-GMCS-4 (25%), SW-SA2-GMCS-3 (27%) and SW-SA2-GMCS-2 (20%). All analytes were nondetect and were qualified estimated nondetect "UJ" in all associated samples.

Sample ID	Analyte(s)	Qualification	Batch	Justification
SW-SA2-GMCS-9	All Pesticides	UJ	680-71011	Low surrogate recovery
SW-SA2-GMCS-5	All Pesticides	UJ	680-71011	Low surrogate recovery
SW-SA2-GMCS-4	All Pesticides	UJ	680-71011	Low surrogate recovery
SW-SA2-GMCS-3	All Pesticides	UJ	680-71011	Low surrogate recovery
SW-SA2-GMCS-2	All Pesticides	UJ	680-71011	Low surrogate recovery

8.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD) or one MS with a Sample Duplicate (Code m - recovery, Code d - RPD)

		Yes	No	NA
8.1	Is a Matrix Spike/Matrix Spike Duplicate recovery form present?		x	
8.2	Are MS/MSDs analyzed at the required frequency of one matrix spike per ten samples and a duplicate per twenty for each matrix?			x
8.3	Are all MS/MSD %Rs and RPDs within acceptance criteria Specified in the QAPP?			x
	Using informed professional judgment, the data reviewer should use the MS and MSD results in conjunction with other QC criteria and determine the need for qualification of the data for samples *from the same site/matrix*. Recoveries <10% may require rejection. RPD failures may be flagged "J" (+ only)			

Note: MS/MSD samples were not submitted for analysis.

9.0 Laboratory Control Sample (LCS/LCSD) (Code l - LCS recovery Code e - RPD)

		Yes	No	NA
9.1	Is an LCS recovery form present?			
9.2	Is an LCS analyzed at the required frequency of one per twenty field samples for each matrix?			
9.3	Are all LCS %Rs and RPDs within acceptance criteria specified in the QAPP?			
9.4	If Level IV, verify the % recoveries are calculated correctly.			x
	Action for specific compound outside the acceptance criteria: %R>UCL, J(+) only; <LCL, J(+)/UJ(-); <30% J(+)/R(-). RPD failures should be flagged "J" (+ only)			

Note: All LCS recoveries were within evaluation criteria.

10.0 TCL Identification (Code w)

		Yes	No	NA
10.1	Is the relative retention time (RRT) of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration?			x

Note:

11.0 TCL Quantitation and Reported Detection limits (Code p)

		Yes	No	NA
11.1	Are RLs used consistent with those specified in the QAPP?			x
11.2	Are these limits adjusted to reflect dilutions and/ or percent solids as required?			x
11.3	Are any positives reported that exceed the linear range of the instrument? If yes, than flag "J".			x
11.4	If Level IV, calculate a sample of positive results to verify correct calculations			x

Note:

12.0 Field Duplicate Samples (Code f)

		Yes	No	NA
12.1	Were any field duplicates submitted for analysis?		x	
12.2	Were all RPD or absolute difference values within the control limits outlined in the QAPP?			x
	Action: No qualifying action is taken based on field duplicate results, however the data validator should provide a qualitative assessment in the data validation report.			

Note: Field duplicates were not submitted for analysis.

13.0 Data Completeness

			Yes	No	NA
13.1	Is % completeness within the control limits? (Control limit: Check QAPP or use 95% for aqueous sample, 90%				
13.2	Number of samples:	6			
13.3	Number of target compounds in each analysis:	21			
13.4	Number of results rejected and not reported:	0			
	% Completeness = 100 x ((13.1 x 13.2) - 13.3) / (13.1 x 13.2)				
	% Completeness	**100**			

Note:

DATA VALIDATION WORKSHEET
HERBICIDES ANALYSIS

Reviewer: Tony Sedlacek
Date: 5/9/2007
Laboratory: Severn Trent Laboratory - Savannah

Project Name: Sauget - Area 2 Site R GMCS
Project Number: 21561391.00000
SDG No.: SAS052
Review Level: Level III

Major Anomolies:

No samples were rejected

Minor Anomolies:

No analytes required qualification based on this data review.

Field IDs:

SW-SA2-GMCS-9	SW-SA2-GMCS-3
SW-SA2-GMCS-5	SW-SA2-GMCS-2
SW-SA2-GMCS-4	EQBLK-SA2-GMCS

1.0 Chain of Custody/Sample Condition

		Yes	No	NA
1.1	Do Chain-of-Custody forms list all samples analyzed?			
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was maintained?			
1.3	Do the Traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data?			

Note: The laboratory case narrative did not indicate any problems.

2.0 Holding Time/ Preservation (Code h)

		Yes	No	NA
2.1	Do sample preservation, collection and storage condition meet method requirement?			
	If samples were not on ice or the ice was melted upon arrival at the laboratory and the temperature of the cooler was elevated (> 10 °C), then flag all positive results with a "J" and all non-detects "UJ".			
2.2	Have any technical holding times, determined from sampling to date of analysis, been exceeded? (See attached Holding Time Table for sample holding time) If yes, J(+)/UJ(-).			
	Extraction: Soil/Sediment 14 days - aqueous 7 days Analysis: 40 days			
2.3	Have any technical holding times grossly (twice the holding time) been exceeded? If yes, J(+)/R(-).			

Note: All holding time criteria were met.

3.0 Blanks (Method Blanks and Field Blanks)

(Code x - Field Blank Contamination, Code z - Method blank contamination)

		Yes	No	NA
3.1	Is a Method Blank Summary form present for each batch?			
3.2	Do any method blanks have positive results?			
3.3	Do any field/rinse/equipment blanks have positive results?			
	Action: Positive sample results <5X the blank concentration should be qualified "U". The result should be elevated to the RL for estimate (laboratory "J" flagged) concentrations.			
3.4	If Level IV, review raw data and verify all detections for blanks were reported.			x

Note: All blank criteria were met.

4.0 Initial Calibration (Code r)

		Yes	No	NA
4.1	Are Initial Calibration summary forms present and complete for each instrument used?			x
4.2	Are calibration factors stable (%RSD values < 20% or >0.995) over the concentration range of the instrument			x
	If not, J(+)/ UJ(-). In extreme cases, the reviewer may flag non-detects "R".			
4.3	If Level IV, recalculate a sample of RRFs and %RSDs to verify correct calculations are being made.			x

Note:

5.0 Continuing Calibration (Code c)

		Yes	No	NA
5.1	Are Continuing Calibration Summary forms present and complete?			x
5.2	Has a continuing calibration standard been analyzed every 12 hours?			x
5.3	Do any compounds have a % difference (or % drift for quantitation from a curve) (%D) between initial and continuing calibration CF outside QC limits (%D < 20%)?			x
	If yes, a marginal increase in response >20% then J(+) only; a decrease in response then J(+)/ UJ(-). For %D > 50%, flag R.			
5.5	If Level IV, calculate a sample of CFs and %Ds from ave CF to verify correct calculations.			x

Note:

6.0 Surrogate Recovery (Code s)

		Yes	No	NA
6.1	Are all samples listed on the appropriate Surrogate Recovery Summary Form ?			
6.2	Are surrogate recoveries within acceptance criteria specified in the QAPP for all samples?			
6.3	If No in Section 6.2, were these sample(s) or method blank(s) reanalyzed?			x
6.4	If No in Section 6.3, is any sample dilution factor greater than 10? (Surrogate recoveries may be diluted out.)			x
	> UCL / 10% to LCL / < 10%			
	Positive J / J / J			
	Non-detect None / UJ / R			

Note: All surrogate recoveries were within evaluation criteria.

7.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD) or one MS with a Sample Duplicate (Code m - recovery, Code d - RPD)

		Yes	No	NA
7.1	Is a Matrix Spike/Matrix Spike Duplicate recovery form present?		x	
7.2	Are MS/MSDs analyzed at the required frequency of one matrix spike per ten samples and a duplicate per twenty for each matrix?			x
7.3	Are all MS/MSD %Rs and RPDs within acceptance criteria Specified in the QAPP?			x
	Using informed professional judgment, the data reviewer should use the MS and MSD results in conjunction with other QC criteria and determine the need for qualification of the data for samples *from the same site/matrix* . Recoveries <10% may require rejection. RPD failures may be flagged "J" (+ only)			

Note: MS/MSD samples were not submitted for analysis.

8.0 Laboratory Control Sample (LCS/LCSD) (Code l - LCS recovery Code e - RPD)

		Yes	No	NA
8.1	Is an LCS recovery form present?			
8.2	Is an LCS analyzed at the required frequency of one per twenty field samples for each matrix?			
8.3	Are all LCS %Rs and RPDs within acceptance criteria specified in the QAPP?			
8.4	If Level IV, verify the % recoveries are calculated correctly.			x
	Action for specific compound outside the acceptance criteria: %R>UCL, J(+) only; <LCL, J(+)/UJ(-); <30% J(+)/R(-). RPD failures should be flagged "J" (+ only)			

Note: All LCS recoveries were within evaluation criteria.

9.0 TCL Identification (Code w)

		Yes	No	NA
9.1	Is the relative retention time (RRT) of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration?			x

Note:

10.0 TCL Quantitation and Reported Detection limits (Code p)

		Yes	No	NA
10.1	Are RLs used consistent with those specified in the QAPP?			x
10.2	Are these limits adjusted to reflect dilutions and/ or percent solids as required?			x
10.3	Are any positives reported that exceed the linear range of the instrument? If yes, than flag "J".			x
10.4	If Level IV, calculate a sample of positive results to verify correct calculations			x

Note:

11.0 Field Duplicate Samples (Code f)

		Yes	No	NA
11.1	Were any field duplicates submitted for herbicide analysis?		x	
11.2	Were all RPD or absolute difference values within the control limits outlined in the QAPP?			x
	Action: No qualifying action is taken based on field duplicate results, however the data validator should provide a qualitative assessment in the data validation report.			

Note: Field duplicate samples were not submitted for analysis.

12.0 Data Completeness

			Yes	No	NA
12.1	Is % completeness within the control limits? (Control limit: Check QAPP or use 95% for aqueous sample, 90% for				
12.2	Number of samples:	6			
12.3	Number of target compounds in each analysis:	10			
12.4	Number of results rejected and not reported:	0			
	% Completeness = 100 x ((12.1 x 12.2) - 12.3) / (12.1 x 12.2)				
	% Completeness	**100**			

Note:

DATA VALIDATION WORKSHEET - Level III Review
Inorganic - ICP, ICP-MS, GFAA, and CVAA

Reviewer: Tony Sedlacek
Date: 5/9/2007
Laboratory: Severn Trent Laboratory - Savannah

Project Name: Sauget - Area 2 Site R GMCS
Project Number: 21561391.00000
SDG No.: SAS052
Review Level: Level III

Major Anomolies:

No samples were rejected

Minor Anomolies:

Analytes were qualified due to analytes detected in preparation blanks, calibration blanks and equipment blanks.

Field IDs:

SW-SA2-GMCS-9	SW-SA2-GMCS-3
SW-SA2-GMCS-5	SW-SA2-GMCS-2
SW-SA2-GMCS-4	EQBK-SA2-GMCS

1.0 Chain of Custody/Sample Condition/Raw Data

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
1.1	Do Chain-of-Custody forms list all samples that were analyzed?												
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was main												
1.3	Do the traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data?	x											
1.4	Does sample preservation, collection and storage meet method requirement? (water samples: with Nitric Acid to pH < 2, and soil/sediment samples: 4 °C ± 2 °C)												
1.5	Are the digestion logs present and complete with pH values, sample weights, dilutions, final volumes. % solids (for soil samples), and preparation dates? For any missing or incomplete documentation, contact the laboratory for explanation/resubmittal.												

Note: The laboratory case narrative indicated that the MS/MSD recoveries were outside evaluation criteria. In addition, analytes were detected in the equipment and method blanks.

2.0 Holding Time (Code h)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
2.1	Have any technical holding times, determined from date of collection to date of analysis, been exceeded? (Hg: 28days, other metals: 6 months) See attached Holding Time Table. Action: J(+)/UJ(-). If the holding times are grossly exceeded (twice the holding time criteria) J(+)/R(-).												

Note: All samples were analyzed within holding time criteria.

3.0 Instrument Calibration (Code c)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
3.1	Are sufficient standards included in the calibration curve? (ICP/ICP-MS: blank + one standard; GFAA: blank + three standards; CVAA: blank + five standards)			x									
3.2	Are the correlation coefficients > 0.995? (for GFAA and CVAA) Action: J(+)/UJ(-).												x
3.3	Was an initial calibration verification (ICV) analyzed at the beginning of each analysis? Action: If no, use professional judgment to determine affect on the data and note in reviewer narrative.			x									x
3.4	Was continuing calibration verification (CCV) performed every 10 analysis or every 2 hours, whichever is more frequent? Action: If no, use professional judgment to determine affect on the data and note in reviewer narrative.			x									x
3.5	Are all calibration standard percent recoveries (ICV and CCV) within the control limits? Mercury (80%-120%) and other Metals (90%-110%).			x									x

Action:	R(+/-)	J(+)/UJ(-)	J(+)	R(+)
Mercury	< 65%	65% - 79%	121% - 135%	> 135%
Other Metals	< 75%	75% - 89%	111% - 125%	> 125%

Note:

4.0 Blanks (Code o - Calibration blank failure, Code p - Preparation blank failure, Code x - Field blank failure)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
4.1	Were preparation blank (PB) prepared at the appropriate frequency (one per 20 samples, per batch, per matrix and per level)?												
4.2	Are there reported PB values > + IDL? Action: If yes, action level of 5 times the blank value are determined for positive and negative blank values.										x		
4.3	Were initial calibration blanks (ICB) analyzed? Action: If no, use professional judgment to determine affect on the data note in reviewer narrative.												
4.4	2 hours whichever is more frequent? Action: If no, use professional judgment to determine affect on the data to note in reviewer narrative.												
4.5	Are there reported ICB or CCB values > + IDL? Action: If yes, action level of 5 times the blank value are determined for positive and negative blank values.												
4.6	Are there samples with concentrations less than five times the highest level in associated blanks? Action: If yes, U at reported concentration.	x											
4.7	Are there samples with non-detect results or with concentrations less than five times the most negative value in associated blanks? Action; If yes, J(+)/UJ(-).	x											

Note: The compounds calcium (0.12 mg/L), copper (0.0021 mg/L), magnesium (0.020 mg/L) and zinc (0.0082 mg/L) were detected in the equipment blank and calcium (0.060 mg/L) and zinc (0.0081 mg/L) were detected in the method blank. In addition, mercury (-0.000081 mg/L) was detected in the preparation blank and aluminum (-0.0639 mg/L) was detected in the continuing calibration blank. Analytical data that were reported at concentrations greater than five times (5X) the associated blank concentration did not require qualification.

Field ID	Analyte	Batch	Qualification	Code	Justification
SW-SA2-GMCS-9	Copper	680-71673	U	x	<5X the equipment blank
SW-SA2-GMCS-9	Zinc	680-71673	U	x	<5X the equipment blank
SW-SA2-GMCS-9	Aluminum	680-71673	J	o	<5X the CCB
SW-SA2-GMCS-9	Mercury	680-71628	UJ	p	< 5X the prep. Blank
SW-SA2-GMCS-5	Copper	680-71673	U	x	<5X the equipment blank
SW-SA2-GMCS-5	Zinc	680-71673	U	x	<5X the equipment blank
SW-SA2-GMCS-5	Aluminum	680-71673	UJ	o	<5X the CCB
SW-SA2-GMCS-5	Mercury	680-71628	UJ	p	< 5X the prep. Blank
SW-SA2-GMCS-4	Copper	680-71673	U	x	<5X the equipment blank
SW-SA2-GMCS-4	Zinc	680-71673	U	x	<5X the equipment blank
SW-SA2-GMCS-4	Aluminum	680-71673	UJ	o	<5X the CCB
SW-SA2-GMCS-4	Mercury	680-71628	UJ	p	< 5X the prep. Blank
SW-SA2-GMCS-3	Copper	680-71673	U	x	<5X the equipment blank
SW-SA2-GMCS-3	Zinc	680-71673	U	x	<5X the equipment blank
SW-SA2-GMCS-3	Aluminum	680-71673	UJ	o	<5X the CCB
SW-SA2-GMCS-3	Mercury	680-71628	UJ	p	< 5X the prep. Blank
SW-SA2-GMCS-2	Copper	680-71673	U	x	<5X the equipment blank
SW-SA2-GMCS-2	Zinc	680-71673	U	x	<5X the equipment blank
SW-SA2-GMCS-2	Aluminum	680-71673	UJ	o	<5X the CCB
SW-SA2-GMCS-2	Mercury	680-71628	UJ	p	< 5X the prep. Blank

5.0 ICP Interference Check Sample (ICS) (Code n)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
5.1	Was ICS AB analyzed at beginning of each ICP run (or at least twice every 8 hours), and at the beginning or once every 8 hours (whichever is more frequent) for ICP-MS?			x									
5.2	Are the ICS AB recoveries within 80% - 120%?			x									
5.3	Are the results for unspiked analytes (in ICS A) < + IDL?			x									
5.4	If not, are the associated sample Al, Ca, Fe, and Mg concentrations less than the			x									
	Action: Not Spiked Analytes < -IDL UJ(-) > IDL J(+) Spiked analytes (ICS AB < 50% R(+/-) 50% - 79% J(+)/UJ(-) >												

Note:

6.0 Laboratory Control Sample (LCS) (Code l - Recovery, Code e - RPD)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
6.1	Was an LCS prepared and analyzed at the correct frequency (one per 20 samples, per batch, per matrix and per level)? Action: If no, J(+) any sample not associated with LCS results.												
6.2	Is any LCS recovery outside the control limits? (Aqueous limits: 80% - 120% - except Ag and Sb; Solid limits: as per EPA-EMSL/LV)												
	Action: Solid < LCL J(+)/UJ(-) > UCL J(+) Aqueous < 50% R(+/-) 50% - 79% J(+)/UJ(-) > 120% J(+)												

Note: All recoveries were within evaluation criteria.

7.0 Laboratory Duplicates (Code k)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
7.1	Were Laboratory duplicates prepared and analyzed at the correct frequency (one per 20 samples, per batch, per matrix and per level)? Action: If no, J(+), with professional judgment, analytes not associated with Duplicate results.												
7.2	Was a field blank used for the duplicate analysis? Action: If yes, J(+) with professional judgment. Note in worksheet.												
7.3	Are all analyte duplicate results within control? (RPD values < 20% or difference < ± PQL for aqueous, and RPD < 35% or difference < ± 2 X PQL for solids)? Action: If no, J(+). Note: RPD criteria is used when both sample and duplicate results are > 5 X IDL.												

Note: Sample SW-SA2-GMCS-9 was duplicated for metals and sample EQBLK-SA2-GMCS was duplicated for mercury. Sample EQBLK-SA2--GMCS was an equipment blank. All duplicate criteria were met.

8.0 Spike Sample Analysis -Pre-Digestion (Code m - Recovery, Code d - RPD)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
8.1	Was a spiked sample prepared and analyzed at the correct frequency (one per 20 samples, per batch, per matrix and per level)? Action: If no, J(+), with professional judgment, analytes not associated with matrix spike results.												
8.2	**Was a field blank used for the MS analysis? Action: If yes, J(+) with professional judgment. Note in worksheet.** Note: Matrix spike analysis may be performed on a field blank when it is the only aqueous sample in an SDG.										x		
8.3	For all analytes with sample concentration < 4 x spike concentration, are spike recoveries within the control limit of 75-125%? (No control limit applies to analytes with concentration > 4 x spike concentration.) %R > 125% / 30% < %R < 74% / %R < 30% Positive: J / J / J Non-detect: None / UJ / R		x										

Note: Sample SW-SA2-GMCS-9 was spiked and analyzed for metals and sample EQBLK-SA2-GMCS was spiked and analyzed for mercury. Sample EQBLK-SA2-GMCS was an equipment blank, spiked by the laboratory. The MSD recovery for calcium (130%) was outside evaluation criteria (75-125%) in sample SW-SA2-GMCS-9. The The calcium concentration in sample SW-SA2-GMCS-9 was greater than four times (4X) the matrix spike concentration; therefore, no qualification of data was required.

9.0 Instrument Detection Limits (IDL)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
9.1	Are all IDL equal to or less than the reporting limits specified?			x									x

Note:

10.0 ICP Serial Dilutions (Code s)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
10.1	Were serial dilutions performed?												
10.2	Was a five-fold dilution performed?												
10.3	Did the serial dilution results agree within 10% for analyte concentration > 50 x the IDL in the original sample? If no, J(+).												

Note: Sample SW-SA2-GMCS-9 was diluted and analyzed, all %Ds were less than 10% for analytes with concentrations > 50X the IDL.

11.0 Field Duplicate Samples (Code f)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
11.1	Were any field duplicates submitted for metal analysis?		x									x	
11.2	Are all field duplicate results within control? (For aqueous sample, RPD values < 35% or difference < ± 2 x PQL and For solids, RPD < 50% or difference < ± 4 x PQL)			x									x

Note: Field duplicate samples were not submitted for analysis.

12.0 Result Verification (Code Q)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
12.1	Were all results and detection limits for solid-matrix samples reported on a dry-weight basis?			x									x
12.2	Were all dilution reflected in the positive results and detection limits?			x									x

Note:

13.0 Data Completeness

13.1	Is % completeness within the control limits? (Control limit: Check QAPP or use 95% for aqueous sample, 90% for soil sample)							
13.2	Number of samples:	6		0		0		6
13.3	Number of target compounds in each analysis:	22		0		0		1
13.4	Number of results rejected and not reported:	0		0		0		0
	% Completeness = 100 x ((13.1 x 13.2) - 13.3) / (13.1 x 13.2)							
	% Completeness	**100**		**###**		**###**		**100**

Note:

DATA VALIDATION WORKSHEET
VOLATILE ORGANIC ANALYSIS

Reviewer: Tony Sedlacek
Date: 5/10/2007
Laboratory: Severn Trent Laboratory - Savannah

Project Name: Sauget - Area 2 Site R GMCS
Project Number: 21561391.00000
SDG No.: SAS053
Review Level: Level III

Major Anomolies:

No samples were rejected

Minor Anomolies:

No analytes required qualification based on this data review.

Field IDs: SED-SA2-GMCS-9
SED-SA2-GMCS-5
SED-SA2-GMCS-2

1.0 Chain of Custody/Sample Condition

		Yes	No	NA
1.1	Do Chain-of-Custody forms list all samples analyzed?			
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was maintained?			
1.3	Do the Traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data?			

Note: The laboratory case narrative indicated that LCS and LCSD recoveries were outside evaluation criteria.

2.0 Holding Time/ Preservation (Code H)

		Yes	No	NA
2.1	Do sample preservation, collection and storage condition meet method requirement?			
	If sample preservation and/or temperature was inappropriate (i.e., <2° >6°C, etc.), comment in report. If unpreserved or temperature is outside the range 0° (but not frozen) to 10° flag all positive results with a "J" and all non-detects "UJ". If temperature exceeds 10°, flag positive detections "J" and non-detects			
2.2	Have any technical holding times, determined from sampling to date of analysis, been exceeded? If yes, J(+)/UJ(-).			

Matrix	Preserved	Aromatic	All others
Aqueous	No	7 days	14 days
	Yes	14 days	14 days
Soil/Sediment	4 °C ± 2 °C	14 days	14 days

		Yes	No	NA
2.3	Have any technical holding times been grossly (twice the holding time) exceeded? If yes, J(+)/R(-).			

Note: All holding time criteria were met.

3.0 GC/MS Instrument Performance Check (Code T)

		Yes	No	NA
3.1	Are GC/MS Tuning and Mass Calibration forms present for bromofluorobenzene (BFB)?			x
3.2	Have all samples been analyzed within twelve hours of the BFB tune? If no, flag R.			x
3.3	Have ion abundance criteria for BFB been met for each instrument used? If no, flag R.			x

Note:

4.0 Blanks (Method Blanks, Field Blanks and Trip Blanks)

(Code X - Field Blank Contamination, Code Y - Trip blank contamination, Code Z - Method blank contamination)

		Yes	No	NA
4.1	Is a Method Blank Summary form present for each batch?			
4.2	Do any method blanks have positive VOA results (TCL and/or TIC)?			
4.3	Do any field/trip rinse/equipment blanks have positive VOA results (TCL and/or TIC)?			
	Action: Positive sample results <5X (or 10X for common volatile lab contaminants- methylene chloride, acetone, and 2-butanone) the blank concentration should be qualified "U". The result should be elevated to the RL for estimate (laboratory "J" flagged) concentrations.			
4.4	If Level IV, review raw data and verify all detections for blanks were reported.			x

Note: All blank criteria were met.

5.0 GC/MS Initial Calibration (Code C)

		Yes	No	NA
5.1	Are Initial Calibration summary forms present and complete for each instrument used?			x
5.2	Are CCCs linear applying either %RSD < 30% and all other compounds <15% or >0.990?			x
	If not, J(+)/ UJ(-). In extreme cases, the reviewer may flag non-detects "R".			
5.3	Do any SPCC compounds have an RRF less than specification or any other compounds < 0.05 (use 0.01 for poor responders like ketones or alcohols)? If yes, J(+)/R(-).			x
5.4	Is the lowest standard at the same concentration, or lower, as the RL reported? If not, elevate RL.			x
5.5	If Level IV, recalculate a sample of RRFs and %RSDs to verify correct calculations are being made.			x

Note:

6.0 Continuing Calibration (Code C)

		Yes	No	NA
6.1	Are Continuing Calibration Summary forms present and complete?			x
6.2	Has a continuing calibration standard been analyzed every 12 hours?			x
6.3	Have all SPCCs and CCCs met method specifications? If not, comment in report, proceed to 6.4.			x
6.4	Do any compounds have a % difference (or % drift for quantitation from a curve) (%D) between initial and continuing calibration RRF outside QC limits (%D < 20%)?			x
	If yes, a marginal increase in response >20% then J(+) only; a decrease in response then J(+)/ UJ(-). For %D > 50%, flag R.			
6.5	Do any compounds have an RRF < 0.05 (use 0.01 for poor responders)? If yes, J(+)/R(-).			x
6.6	If Level IV, calculate a sample of RFs and %Ds from ave RF to verify correct calculations.			x

Note:

7.0 Surrogate Recovery (Code S)

		Yes	No	NA
7.1	Are all samples listed on the appropriate Surrogate Recovery Summary Form ?			
7.2	Are surrogate recoveries within acceptance criteria specified in the QAPP for all samples?			
7.3	If No in Section 7.2, were these sample(s) or method blank(s) reanalyzed?			x
7.4	If No in Section 7.3, is any sample dilution factor greater than 10? (Surrogate recoveries may be diluted out.)			x
	Note: If SMC recoveries do not meet acceptance criteria in samples chosen for the MS/MSD or diluted			

	> UCL	10% to LCL	< 10%
Positive	J	J	J
Non-detect	None	UJ	R

Note: All surrogate recoveries were within evaluation criteria.

8.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD) or one MS with a Sample Duplicate (Recovery - Code M, RPD - Code D)

		Yes	No	NA
8.1	Is a Matrix Spike/Matrix Spike Duplicate recovery form present?		x	
8.2	Are MS/MSDs analyzed at the required frequency of one matrix spike per ten samples and a duplicate per twenty for each matrix?			x
8.3	Are all MS/MSD %Rs and RPDs within acceptance criteria Specified in the QAPP?			x
	Using informed professional judgment, the data reviewer should use the MS and MSD results in conjunction with other QC criteria and determine the need for qualification of the data for samples *from the same site/matrix* . Recoveries <10% may require rejection. RPD failures may be flagged "J" (+ only)			

Note: MS/MSD samples were not submitted for analysis.

9.0 Laboratory Control Sample (LCS/LCSD) (Recovery - Code L, RPD - Code E)

		Yes	No	NA
9.1	Is an LCS recovery form present?			
9.2	Is an LCS analyzed at the required frequency of one per twenty field samples for each matrix?			
9.3	Are all LCS %Rs and RPDs within acceptance criteria specified in the QAPP?		x	
9.4	If Level IV, verify the % recoveries are calculated correctly.			x
	Action for specific compound outside the acceptance criteria: %R>UCL, J(+) only; <LCL, J(+)/UJ(-); <30% J(+)/R(-). RPD failures should be flagged "J" (+ only)			

Note: The LCS recovery for acetone (158%) with criteria (28-143%) and 2-butanone (157%) with criteria (30-149%) were outside evaluation criteria in LCS 680-71513. LCSD recovery for acetone (146%) with criteria (28-143%) was outside evaluation criteria in LCSD 680-71514. The LCSD recoveries and RPD were within evaluation criteria in LCS 680-71513 and the LCS recovery and RPD were within evaluation criteria in LCS 680-71514. Therefore, no qualification of data was required.

10.0 Internal Standards (Code I)

		Yes	No	NA
10.1	Are internal standard areas for every sample and blank within upper and lower QC limits?			
	Area > +100% / Area < -50% / Area < -10%			
	Positive: J / J / J			
	Non-detect: None / UJ / R			
Note:	The method specification is for the continuing calibration to be compared to the mid-point initial calibration, not sample to continuing calibration. Thus, if all other QC specifications are met for a given sample, using informed professional judgment, the reviewer may choose not to flag individual samples in			
10.2	Are retention times of internal standards within 30 seconds of the associated calibration standard?			
	Action: The chromatogram must be examined to determine if any false positives or negatives exist. For shift of a large magnitude, the reviewer may consider partial or total rejection of the data for non-detects in that sample/fraction.			

Note: Internal standard area counts and retention times were within evaluation criteria.

11.0 TCL Identification (Code W)

		Yes	No	NA
11.1	Is the relative retention time (RRT) of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration?			x
11.2	Are the three ions of greatest intensity present in the standard mass spectrum also present in the sample mass spectrum; and do sample and standard relative ion intensities agree within 30%?			x

Note:

12.0 TCL/TIC Quantitation and Reported Detection limits (Code K)

		Yes	No	NA
12.1	Are RLs used consistent with those specified in the QAPP?			x
12.2	Are these limits adjusted to reflect dilutions and/ or percent solids as required?			x
12.3	Are TIC ions greater than ten percent in the reference spectrum also present in the sample spectrum?			x
12.4	Are any positives reported that exceed the linear range of the instrument? If yes, than flag "J".			x
12.5	If Level IV, calculate a sample of positive results to verify correct calculations			x

Note:

13.0 Field Duplicate Samples (Code F)

		Yes	No	NA
13.1	Were any field duplicates submitted for VOC analysis?		x	
13.2	Were all RPD or absolute difference values within the control limits outlined in the QAPP?			x
	Action: No qualifying action is taken based on field duplicate results, however the data validator should provide a qualitative assessment in the data validation report.			

Note: Field duplicate samples were not submitted for analysis.

14.0 Data Completeness

			Yes	No	NA
14.1	Is % completeness within the control limits? (Control limit: Check QAPP or use 95% for aqueous				
14.2	Number of samples:	3			
14.3	Number of target compounds in each analysis:	35			
14.4	Number of results rejected and not reported:	0			
	% Completeness = 100 x ((14.1 * 14.2) - 14.3) / (14.1 * 14.2)				
	% Completeness	**100**			

Note:

DATA VALIDATION WORKSHEET
SEMIVOLATILE ORGANIC ANALYSIS

Reviewer: Tony Sedlacek
Date: 5/10/2007
Laboratory: Severn Trent Laboratory - Savannah

Project Name: Sauget - Area 2 Site R GMCS
Project Number: 21561391.00000
SDG No.: SAS053
Review Level: Level III

Major Anomolies:

No samples were rejected

Minor Anomolies:

No analytes required qualification based on this data review.

Field IDs: SED-SA2-GMCS-9
SED-SA2-GMCS-5
SED-SA2-GMCS-2

1.0 Chain of Custody/Sample Condition

		Yes	No	NA
1.1	Do Chain-of-Custody forms list all samples analyzed?			
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was maintained?			
1.3	Do the Traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data?			

Note: The laboratory case narrative did not indicate any problems.

2.0 Holding Time/ Preservation (Code H)

		Yes	No	NA
2.1	Do sample preservation, collection and storage condition meet method requirement?			
	If samples were not on ice or the ice was melted upon arrival at the laboratory and the temperature of the cooler was elevated (> 10 °C), then flag all positive results with a "J" and all non-detects "UJ".			
2.2	Have any technical holding times, determined from sampling to date of analysis, been exceeded? (See			
	Extraction: Soil/Sediment 14 days - aqueous 7 days Analysis: 40 days			
2.3	Have any technical holding times grossly (twice the holding time) been exceeded? If yes, J(+)/R(-).			

Note: All holding time criteria were met.

3.0 GC/MS Instrument Performance Check (Code T)

		Yes	No	NA
3.1	Are GC/MS Tuning and Mass Calibration forms present for DFTPP?			x
3.2	Have all samples been analyzed within twelve hours of the tune?			x
	If no, the data for the affected standards, blanks, field samples or QC samples are rejected "R".			
3.3	Have ion abundance criteria for DFTPP been met for each instrument used?			x
	If no, all standards, blanks, field samples and QC samples are rejected "R".			

Note:

4.0 Blanks (Method Blanks and Field Blanks)

(Code X - Field Blank Contamination, Code Z - Method blank contamination)

		Yes	No	NA
4.1	Is a Method Blank Summary form present for each batch?			
4.2	Do any method/instrument/reagent blanks have positive results (TCL, and/or TIC)?			
4.3	Do any field equipment blanks have positive results (TCL, and/or TIC)?			
	Action: Positive sample results <5X (or 10X for phthalate contaminants) the blank concentration should be qualified "U" and the detection limit elevated to the RL for estimate concentrations.			
4.4	If Level IV, review raw data and verify all detections for blanks were reported.			x

Note: All blank criteria were met.

5.0 GC/MS Initial Calibration (Code C)

		Yes	No	NA
5.1	Are Initial Calibration summary forms present and complete for each instrument used?			x
5.2	Are CCCs linear applying either %RSD 30% and all other compounds <15% or >0.990?			x
	If not, J(+)/ UJ(-). In extreme cases, the reviewer may flag non-detects "R".			x
5.3	Do any SPCC compounds have an RRF les than specification or any other compounds < 0.05 (use 0.01 for poor responders like amines and phenols)? If yes, J(+)/R(-).			x
5.4	Is the lowest standard at the same concentration, or lower, as the RL reported? If not, elevate RL.			x
5.5	If Level IV, recalculate a sample of RRFs and %RSDs to verify correct calculations are being made.			x

Note:

6.0 Continuing Calibration (Code C)

		Yes	No	NA
6.1	Are Continuing Calibration Summary forms present and complete?			x
6.2	Has a continuing calibration standard been analyzed every 12 hours?			x
6.3	Have all SPCCs and CCCs met method specifications? If not, comment in report, proceed to 6.4.			x
6.4	Do any compounds have a % difference (or % drift for quantitation from a curve) (%D) between initial and continuing calibration RRF outside QC limits (%D < 20%)?			x
	If yes, a marginal increase in response >20% then J(+) only; a decrease in response then J(+)/ UJ(-). For %D > 50%, flag R.			
6.5	Do any compounds have an RRF < 0.05 (use 0.01 for poor responders)? If yes, J(+)/R(-).			x
6.6	If Level IV, calculate a sample of RFs and %Ds from ave RF to verify correct calculations.			x

Note:

7.0 Surrogate Recovery (Code S)

		Yes	No	NA
7.1	Are all samples listed on the appropriate Surrogate Recovery Summary Form ?			
7.2	Are surrogate recoveries within acceptance criteria specified in the QAPP for all samples and method blanks?			
7.3	Are more than one of either fraction outside the acceptance criteria?			
7.4	If Yes in Section 7.3, are these sample(s) or method blank(s) reanalyzed?		x	
7.5	If Yes in Section 7.3, is any sample dilution factor greater than 10?			x
	Note: If SMC recoveries display unacceptable recoveries in the MS and/ or diluted samples, then no reanalysis is required and acids and base/ neutrals are assessed separately.			
	> UCL / 10% to LCL / < 10%			
	Positive: J / J / J			
	Non-detect: None / UJ / R			

Note: Surrogate recoveries were within evaluation criteria.

8.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD) or one MS with a Sample Duplicate (Recovery - Code M, RPD - Code D)

		Yes	No	NA
8.1	Is a Matrix Spike/Matrix Spike Duplicate recovery form present?		x	
8.2	Are MS/MSDs analyzed at the required frequency not to exceed twenty field samples for each matrix?			x
8.3	Are all MS/MSD %Rs and RPDs within acceptance criteria provided by the laboratory?			x
	Using informed professional judgment, the data reviewer should use the MS and MSD results in conjunction with other QC criteria and determine the need for qualification of the data for samples *from the same site/matrix* . Recoveries <10% may require rejection. RPD failures may be flagged "J" (+ only)			

Note: MS/MSD samples were not submitted for analysis.

9.0 Laboratory Control Sample (LCS/LCSD) (Recovery - Code L, RPD - Code E)

		Yes	No	NA
9.1	Is an LCS recovery form present?			
9.2	Is LCS analyzed at the required frequency for each matrix?			
9.3	Are all LCS %Rs (and RPDs) within acceptance criteria?			
	Action for specific compound outside the acceptance criteria: %R>UCL, J(+) only; <LCL, J(+)/UJ(-); <30% J(+)/R(-). RPD failures should be flagged "J" (+ only)			
9.4	If Level IV, verify the % recoveries are calculated correctly.			x

Note: All LCS recoveries were within evaluation criteria.

10.0 Internal Standards (Code I)

		Yes	No	NA
10.1	Are internal standard area of every sample and blank within upper and lower QC limits for each continuing			
	Area > +100% / Area < -50% / Area < -10%			
	Positive: J / J / J			
	Non-detect: None / UJ / R			
Note:	The method specification is for the continuing calibration to be compared to the mid-point initial calibration, not sample to continuing calibration. Thus, if all other QC specifications are met for a given sample, using informed professional judgment, the reviewer may choose not to flag individual samples in this case.			
10.2	Are retention times of internal standards within 30 seconds of the associated calibration standard?			
	Action: The chromatogram must be examined to determine if any false positives or negatives exist. For shift of a large magnitude, the reviewer may consider partial or total rejection of the data for non-detects in that sample/fraction.			

Note: Internal standard area counts and retention times were within evaluation criteria.

11.0 TCL Identification (Code W)

		Yes	No	NA
11.1	Is the relative retention time (RRT) of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration?			x
11.2	Are the three ions of greatest intensity present in the standard mass spectrum also present in the sample mass spectrum; and do sample and standard relative ion intensities agree within 30%?			x

Note:

12.0 TCL/TIC Quantitation and Reported Detection limits (Code K)

		Yes	No	NA
12.1	Are RLs used consistent with those specified in the QAPP?			x
12.2	Are these limits adjusted to reflect dilutions and/ or percent solids as required?			x
12.3	Are TIC ions greater than ten percent in the reference spectrum also present in the sample spectrum?			x
12.4	Are any positives reported that exceed the linear range of the instrument? If yes, than flag "J".			x
12.5	If Level IV, calculate a sample of positive results to verify correct calculations			x

Note:

13.0 Field Duplicate Samples (Code F)

		Yes	No	NA
13.1	Were any field duplicates submitted for SVOC analysis?		x	
13.2	Were all RPD or absolute difference values within the control limits?			x
	No action is taken based on field duplicate results, however the data validator should provide a qualitative assessment in the data validation report.			

Note: Field duplicate samples were not submitted for analysis.

14.0 Data Completeness

			Yes	No	NA
14.1	Is % completeness within the control limits? (Control limit: Check QAPP or use 95% for aqueous sample,				
14.2	Number of samples:	3			
14.3	Number of target compounds in each analysis:	65			
14.4	Number of results rejected and not reported:	0			
	% Completeness = 100 x ((14.1 x 14.2) - 14.3) / (14.1 x 14.2)				
	% Completeness	**100**			

Note:

DATA VALIDATION WORKSHEET
PESTICIDES ANALYSIS

Reviewer: Tony Sedlacek
Date: 5/10/2007
Laboratory: Severn Trent Laboratory - Savannah

Project Name: Sauget - Area 2 Site R GMCS
Project Number: 21561391.00000
SDG No.: SAS053
Review Level: Level III

Major Anomolies:

No samples were rejected.

Minor Anomolies:

No analytes required qualification based on this data review.

Field IDs: SED-SA2-GMCS-9
SED-SA2-GMCS-5
SED-SA2-GMCS-2

1.0 Chain of Custody/Sample Condition

		Yes	No	NA
1.1	Do Chain-of-Custody forms list all samples analyzed?			
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was maintained?			
1.3	Do the Traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data?	x		

Note: The laboratory case narrative indicated that LCS and MS recoveries were outside evaluation criteria.

2.0 Holding Time/ Preservation (Code h)

		Yes	No	NA
2.1	Do sample preservation, collection and storage condition meet method requirement?			
	If samples were not on ice or the ice was melted upon arrival at the laboratory and the temperature of the cooler was elevated (> 10 °C), then flag all positive results with a "J" and all non-detects "UJ".			
2.2	Have any technical holding times, determined from sampling to date of analysis, been exceeded? (See attached Holding Time Table for sample holding time) If yes, J(+)/UJ(-).			
	Extraction: Soil/Sediment 14 days - aqueous 7 days Analysis: 40 days			
2.3	Have any technical holding times grossly (twice the holding time) been exceeded? If yes, J(+)/R(-).			

Note: All holding times criteria were met.

3.0 Blanks (Method Blanks and Field Blanks)

(Code x - Field Blank Contamination, Code z - Method blank contamination)

		Yes	No	NA
3.1	Is a Method Blank Summary form present for each batch?			
3.2	Do any method blanks have positive results (TCL)?			
3.3	Do any field/rinse/equipment blanks have positive results (TCL)?			
	Action: Positive sample results <5X the blank concentration should be qualified "U". The result should be elevated to the RL for estimate (laboratory "J" flagged) concentrations.			
3.4	If Level IV, review raw data and verify all detections for blanks were reported.			x

Note: All blank criteria were met.

4.0 GC/ECD Instrument Performance Check (Code b)

		Yes	No	NA
4.1	Are Endrin and 4,4'-DDT breakdown forms present?			x
4.2	Have all samples been analyzed within twelve hours of the performance check sample?			x
	If no, the data for the affected standards, blanks, field samples or QC samples are rejected "R".			
4.3	Have percent breakdown criteria (15%) for endrin and 4,4'-DDT been met?			x
	If no, all standards, blanks, field samples and QC samples are rejected "R".			

Note:

5.0 Initial Calibration (Code r)

		Yes	No	NA
5.1	Are Initial Calibration summary forms present and complete for each instrument used?			x
5.2	Are response factors stable (%RSD values < 20% or >0.995) over the concentration range of the instrument			x
	If not, J(+)/ UJ(-). In extreme cases, the reviewer may flag non-detects "R".			
5.3	If Level IV, recalculate a sample of RRFs and %RSDs to verify correct calculations are being made.			x

Note:

6.0 Continuing Calibration (Code c)

		Yes	No	NA
6.1	Are Continuing Calibration Summary forms present and complete?			x
6.2	Has a continuing calibration standard been analyzed every 12 hours?			x
6.3	Do any compounds have a % difference (or % drift for quantitation from a curve) (%D) between initial and continuing calibration CF outside QC limits (%D < 15%)?			x
	If yes, a marginal increase in response >20% then J(+) only; a decrease in response then J(+)/ UJ(-). For %D > 50%, flag R.			
6.4	If Level IV, calculate a sample of CFs and %Ds to verify correct calculations.			x

Note:

7.0 Surrogate Recovery (Code s)

		Yes	No	NA
7.1	Are all samples listed on the appropriate Surrogate Recovery Summary Form ?			
7.2	Are surrogate recoveries within acceptance criteria specified in the QAPP for all samples?			
7.3	If No in Section 7.2, were these sample(s) or method blank(s) reanalyzed?			x
7.4	If No in Section 7.3, is any sample dilution factor greater than 10? (Surrogate recoveries may be diluted out.)		x	
	> UCL / 10% to LCL / < 10%			
	Positive: J / J / J			
	Non-detect: None / UJ / R			

Note: Surrogate recoveries were within evaluation criteria.

8.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD) or one MS with a Sample Duplicate (Code m - recovery, Code d - RPD)

		Yes	No	NA
8.1	Is a Matrix Spike/Matrix Spike Duplicate recovery form present?			
8.2	Are MS/MSDs analyzed at the required frequency of one matrix spike per ten samples and a duplicate per twenty for each matrix?			
8.3	Are all MS/MSD %Rs and RPDs within acceptance criteria Specified in the QAPP?		x	
	Using informed professional judgment, the data reviewer should use the MS and MSD results in conjunction with other QC criteria and determine the need for qualification of the data for samples *from the same site/matrix* . Recoveries <10% may require rejection. RPD failures may be flagged "J" (+ only)			

Note: Sample SED-SA2-GMCS-9 was spiked and analyzed for pesticides. The MS recovery for heptachlor epoxide (41%) was outside evaluation criteria (43-132%). The MSD and RPD were within evaluation criteria, and USEPA National Functional Guidelines for Organic Data Review indicates that pesticide data should not be qualified based on MS/MSD data alone and LCS recoveries were within evaluation criteria, therefore no qualification of the data was required.

9.0 Laboratory Control Sample (LCS/LCSD) (Code l - LCS recovery Code e - RPD)

		Yes	No	NA
9.1	Is an LCS recovery form present?			
9.2	Is an LCS analyzed at the required frequency of one per twenty field samples for each matrix?			
9.3	Are all LCS %Rs and RPDs within acceptance criteria specified in the QAPP?		x	
9.4	If Level IV, verify the % recoveries are calculated correctly.			x
	Action for specific compound outside the acceptance criteria: %R>UCL, J(+) only; <LCL, J(+)/UJ(-); <30% J(+)/R(-). RPD failures should be flagged "J" (+ only)			

Note: LCSD recovery for delta-BHC (42%) was outside evaluation criteria (43-123%) in LCS 680-71257. The LCS recovery and RPD were within evaluation criteria. Therefore, no qualification of data was required.

10.0 TCL Identification (Code w)

		Yes	No	NA
10.1	Is the relative retention time (RRT) of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration?			x

Note:

11.0 TCL Quantitation and Reported Detection limits (Code p)

		Yes	No	NA
11.1	Are RLs used consistent with those specified in the QAPP?			x
11.2	Are these limits adjusted to reflect dilutions and/ or percent solids as required?			x
11.3	Are any positives reported that exceed the linear range of the instrument? If yes, than flag "J".			x
11.4	If Level IV, calculate a sample of positive results to verify correct calculations			x

Note:

12.0 Field Duplicate Samples (Code f)

		Yes	No	NA
12.1	Were any field duplicates submitted for analysis?		x	
12.2	Were all RPD or absolute difference values within the control limits outlined in the QAPP?			x
	Action: No qualifying action is taken based on field duplicate results, however the data validator should provide a qualitative assessment in the data validation report.			

Note: Field duplicate samples were not submitted for analysis.

13.0 Data Completeness

			Yes	No	NA
13.1	Is % completeness within the control limits? (Control limit: Check QAPP or use 95% for aqueous sample, 90%				
13.2	Number of samples:	3			
13.3	Number of target compounds in each analysis:	21			
13.4	Number of results rejected and not reported:	0			
	% Completeness = 100 x ((13.1 x 13.2) - 13.3) / (13.1 x 13.2)				
	% Completeness	**100**			

Note:

DATA VALIDATION WORKSHEET
HERBICIDES ANALYSIS

Reviewer: Tony Sedlacek
Date: 5/10/2007
Laboratory: Severn Trent Laboratory - Savannah

Project Name: Sauget - Area 2 Site R GMCS
Project Number: 21561391.00000
SDG No.: SAS053
Review Level: Level III

Major Anomolies:

No samples were rejected

Minor Anomolies:

No analytes required qualification based on this data review.

Field IDs: SED-SA2-GMCS-9
SED-SA2-GMCS-5
SED-SA2-GMCS-2

1.0 Chain of Custody/Sample Condition

		Yes	No	NA
1.1	Do Chain-of-Custody forms list all samples analyzed?	X		
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was maintained?	X		
1.3	Do the Traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data?		X	

Note: The laboratory case narrative indicated that MS/MSD recoveries and RPD were outside evaluation criteria.

2.0 Holding Time/ Preservation (Code h)

		Yes	No	NA
2.1	Do sample preservation, collection and storage condition meet method requirement?	X		
	If samples were not on ice or the ice was melted upon arrival at the laboratory and the temperature of the cooler was elevated (> 10 °C), then flag all positive results with a "J" and all non-detects "UJ".			
2.2	Have any technical holding times, determined from sampling to date of analysis, been exceeded? (See attached Holding Time Table for sample holding time) If yes, J(+)/UJ(-).		X	
	Extraction: Soil/Sediment 14 days - aqueous 7 days Analysis: 40 days			
2.3	Have any technical holding times grossly (twice the holding time) been exceeded? If yes, J(+)/R(-).		X	

Note: All holding time criteria were met.

3.0 Blanks (Method Blanks and Field Blanks)

(Code x - Field Blank Contamination, Code z - Method blank contamination)

		Yes	No	NA
3.1	Is a Method Blank Summary form present for each batch?			
3.2	Do any method blanks have positive results?			
3.3	Do any field/rinse/equipment blanks have positive results?			
	Action: Positive sample results <5X the blank concentration should be qualified "U". The result should be elevated to the RL for estimate (laboratory "J" flagged) concentrations.			
3.4	If Level IV, review raw data and verify all detections for blanks were reported.			x

Note: All blank criteria were met.

4.0 Initial Calibration (Code r)

		Yes	No	NA
4.1	Are Initial Calibration summary forms present and complete for each instrument used?			x
4.2	Are calibration factors stable (%RSD values < 20% or >0.995) over the concentration range of the instrument			x
	If not, J(+)/ UJ(-). In extreme cases, the reviewer may flag non-detects "R".			
4.3	If Level IV, recalculate a sample of RRFs and %RSDs to verify correct calculations are being made.			x

Note:

5.0 Continuing Calibration (Code c)

		Yes	No	NA
5.1	Are Continuing Calibration Summary forms present and complete?			x
5.2	Has a continuing calibration standard been analyzed every 12 hours?			x
5.3	Do any compounds have a % difference (or % drift for quantitation from a curve) (%D) between initial and continuing calibration CF outside QC limits (%D < 20%)?			x
	If yes, a marginal increase in response >20% then J(+) only; a decrease in response then J(+)/ UJ(-). For %D > 50%, flag R.			
5.4	If Level IV, calculate a sample of CFs and %Ds from ave CF to verify correct calculations.			x

Note:

6.0 Surrogate Recovery (Code s)

		Yes	No	NA
6.1	Are all samples listed on the appropriate Surrogate Recovery Summary Form ?			
6.2	Are surrogate recoveries within acceptance criteria specified in the QAPP for all samples?			
6.3	If No in Section 6.2, were these sample(s) or method blank(s) reanalyzed?			x
6.4	If No in Section 6.3, is any sample dilution factor greater than 10? (Surrogate recoveries may be diluted out.)			x

	> UCL	10% to LCL	< 10%
Positive	J	J	J
Non-detect	None	UJ	R

Note: All surrogate recoveries were within evaluation criteria.

7.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD) or one MS with a Sample Duplicate (Code m - recovery, Code d - RPD)

		Yes	No	NA
7.1	Is a Matrix Spike/Matrix Spike Duplicate recovery form present?			
7.2	Are MS/MSDs analyzed at the required frequency of one matrix spike per ten samples and a duplicate per twenty for each matrix?			
7.3	Are all MS/MSD %Rs and RPDs within acceptance criteria Specified in the QAPP?		x	
	Using informed professional judgment, the data reviewer should use the MS and MSD results in conjunction with other QC criteria and determine the need for qualification of the data for samples *from the same site/matrix* . Recoveries <10% may require rejection. RPD failures may be flagged "J" (+ only)			

Note: The MS recovery for pentachlorophenol (33%) with criteria (44-108%), RPD (63) with criteria (<50) and MSD recovery for dichlorprop (131%) with criteria (44-101%) were outside evaluation criteria. USEPA National Functional Guidelines for Organic Data Review indicates that herbicide data should not be qualified based on MS/MSD data alone and LCS recoveries were within evaluation criteria; therefore, no

8.0 Laboratory Control Sample (LCS/LCSD) (Code l - LCS recovery Code e - RPD)

		Yes	No	NA
8.1	Is an LCS recovery form present?			
8.2	Is an LCS analyzed at the required frequency of one per twenty field samples for each matrix?			
8.3	Are all LCS %Rs and RPDs within acceptance criteria specified in the QAPP?			
8.4	If Level IV, verify the % recoveries are calculated correctly.			x
	Action for specific compound outside the acceptance criteria: %R>UCL, J(+) only; <LCL, J(+)/UJ(-); <30% J(+)/R(-). RPD failures should be flagged "J" (+ only)			

Note: All LCS recoveries were within evaluation criteria.

9.0 TCL Identification (Code w)

		Yes	No	NA
9.1	Is the relative retention time (RRT) of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration?			x

Note:

10.0 TCL Quantitation and Reported Detection limits (Code p)

		Yes	No	NA
10.1	Are RLs used consistent with those specified in the QAPP?			x
10.2	Are these limits adjusted to reflect dilutions and/ or percent solids as required?			x
10.3	Are any positives reported that exceed the linear range of the instrument? If yes, than flag "J".			x
10.4	If Level IV, calculate a sample of positive results to verify correct calculations			x

Note:

11.0 Field Duplicate Samples (Code f)

		Yes	No	NA
11.1	Were any field duplicates submitted for herbicide analysis?		x	
11.2	Were all RPD or absolute difference values within the control limits outlined in the QAPP?			x
	Action: No qualifying action is taken based on field duplicate results, however the data validator should provide a qualitative assessment in the data validation report.			

Note: Field duplicate samples were not submitted for analysis.

12.0 Data Completeness

			Yes	No	NA
12.1	Is % completeness within the control limits? (Control limit: Check QAPP or use 95% for aqueous sample, 90%				
12.2	Number of samples:	3			
12.3	Number of target compounds in each analysis:	10			
12.4	Number of results rejected and not reported:	0			
	% Completeness = 100 x ((12.1 x 12.2) - 12.3) / (12.1 x 12.2)				
	% Completeness	**100**			

Note:

DATA VALIDATION WORKSHEET - Level III Review
Inorganic - ICP, ICP-MS, GFAA, and CVAA

Reviewer: Tony Sedlacek
Date: 5/10/2007
Laboratory: Severn Trent Laboratory - Savannah

Project Name: Sauget - Area 2 Site R GMCS
Project Number: 21561391.00000
SDG No.: SAS053
Review Level: Level III

Major Anomolies:

No samples were rejected

Minor Anomolies:

Analytes were qualified due to analytes detected in the preparation blank and MS recovery and RPD for mercury.

Field IDs:

SED-SA2-GMCS-9
SED-SA2-GMCS-5
SED-SA2-GMCS-2

1.0 Chain of Custody/Sample Condition/Raw Data

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
1.1	Do Chain-of-Custody forms list all samples that were analyzed?												
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was mai												
1.3	Do the traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data?	x											
1.4	Does sample preservation, collection and storage meet method requirement? (water samples: with Nitric Acid to pH < 2, and soil/sediment samples: 4 °C ± 2 °C)												
1.5	Are the digestion logs present and complete with pH values, sample weights, dilutions, final volumes. % solids (for soil samples), and preparation dates? For any missing or incomplete documentation, contact the laboratory for explanation/resubmittal.												

Note: The laboratory case narrative indicated that the MS recovery, RPD and laboratory duplicate RPD were outside evaluation criteria. In addition, analytes were detected in the preparation blank.

2.0 Holding Time (Code h)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
2.1	Have any technical holding times, determined from date of collection to date of analysis, been exceeded? (Hg: 28days, other metals: 6 months) See attached Holding Time Table.												
	Action: J(+)/UJ(-). If the holding times are grossly exceeded (twice the holding time criteria) J(+)/R(-).												

Note: All samples were analyzed within holding time criteria.

3.0 Instrument Calibration (Code c)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
3.1	Are sufficient standards included in the calibration curve? (ICP/ICP-MS: blank + one standard; GFAA: blank + three standards; CVAA: blank + five standards)			x									
3.2	Are the correlation coefficients > 0.995? (for GFAA and CVAA) Action: J(+)/UJ(-).												x
3.3	Was an initial calibration verification (ICV) analyzed at the beginning of each analysis? Action: If no, use professional judgment to determine affect on the data and note in reviewer narrative.			x									x
3.4	Was continuing calibration verification (CCV) performed every 10 analysis or every 2 hours, whichever is more frequent? Action: If no, use professional judgment to determine affect on the data and note in reviewer narrative.			x									x
3.5	Are all calibration standard percent recoveries (ICV and CCV) within the control limits? Mercury (80%-120%) and other Metals (90%-110%).			x									x
	Action: R(+/-) J(+)/UJ(-) J(+)												
	Mercury < 65% 65% - 79% 121% - 135% >												
	Other Metals < 75% 75% - 89% 111% - 125% >												

Note:

4.0 Blanks (Code o - Calibration blank failure, Code p - Preparation blank failure, Code x - Field blank failure)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
4.1	Were preparation blank (PB) prepared at the appropriate frequency (one per 20 samples, per batch, per matrix and per level)?												
4.2	Are there reported PB values > + IDL? Action: If yes, action level of 5 times the blank value are determined for positive and negative blank values.	x											
4.3	Were initial calibration blanks (ICB) analyzed? Action: If no, use professional judgment to determine affect on the data note in reviewer narrative.												
4.4	Were continuing calibration blanks (CCB) analyzed after every 10 samples or every 2 hours whichever is more frequent? Action: If no, use professional judgment to determine affect on the data to note in reviewer narrative.												
4.5	Are there reported ICB or CCB values > + IDL? Action: If yes, action level of 5 times the blank value are determined for positive and negative blank values.												
4.6	Are there samples with concentrations less than five times the highest level in associated blanks? Action: If yes, U at reported concentration.	x											
4.7	Are there samples with non-detect results or with concentrations less than five times the most negative value in associated blanks? Action; If yes, J(+)/UJ(-).												

Note: The compounds aluminum (6.5 mg/kg), calcium (6.8 mg/kg), lead (0.33 mg/kg) and sodium (56 mg/kg) were detected in the preparation blank. Aluminum, calcium and lead sample values were greater that five times (5X) the preparation blank value; therefore, no qualification of data was required. Sodium was detected in samples SED-SA2-GMCS-9, SED-SA2-GMCS-5 and SED-SA2-GMCS-2 at less than five times (5X) the preparation blank value; therefore, sodium was qualified nondetect "U".

Sample ID	Analyte	Batch ID	Qualification	Code	Qualification
SED-SA2-GMCS-	Sodium	680-70826	U	p	<5X the preparation blank
SED-SA2-GMCS-	Sodium	680-70826	U	p	<5X the preparation blank
SED-SA2-GMCS-	Sodium	680-70826	U	p	<5X the preparation blank

5.0 ICP Interference Check Sample (ICS) (Code n)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
5.1	Was ICS AB analyzed at beginning of each ICP run (or at least twice every 8 hours), and at the beginning or once every 8 hours (whichever is more frequent) for ICP-MS?			x									
5.2	Are the ICS AB recoveries within 80% - 120%?			x									
5.3	Are the results for unspiked analytes (in ICS A) < + IDL?			x									
5.4	If not, are the associated sample Al, Ca, Fe, and Mg concentrations less than the			x									
	Action: Not Spiked Analytes < -IDL UJ(-) > IDL J(+) Spiked analytes (ICS AB < 50% R(+/-) 50% - 79% J(+)/UJ(-) >												

Note:

6.0 Laboratory Control Sample (LCS) (Code l - Recovery, Code e - RPD)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
6.1	Was an LCS prepared and analyzed at the correct frequency (one per 20 samples, per batch, per matrix and per level)? Action: If no, J(+) any sample not associated with LCS results.												
6.2	Is any LCS recovery outside the control limits? (Aqueous limits: 80% - 120% - except Ag and Sb; Solid limits: as per EPA-EMSL/LV) Action: Solid: < LCL J(+)/UJ(-); > UCL J(+). Aqueous: < 50% R(+/-); 50% - 79% J(+)/UJ(-); > 120% J(+)		X										

Note: All recoveries were within evaluation criteria.

7.0 Laboratory Duplicates (Code k)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
7.1	Were Laboratory duplicates prepared and analyzed at the correct frequency (one per 20 samples, per batch, per matrix and per level)? Action: If no, J(+), with professional judgment, analytes not associated with Duplicate results.												
7.2	Was a field blank used for the duplicate analysis? Action: If yes, J(+) with professional judgment. Note in worksheet.												
7.3	Are all analyte duplicate results within control? (RPD values < 20% or difference < ± PQL for aqueous, and RPD < 35% or difference < ± 2 X PQL for solids)? Action: If no, J(+). Note: RPD criteria is used when both sample and duplicate results are > 5 X IDL.												

Note: Sample SED-SA2-GMCS-5 was duplicated and analyzed for mercury. The RPD between the parent and duplicate value was 36%. Mercury was previously qualified due to matrix spike recovery, therefore no additional qualification of data was required evaluation criteria. Mercury was nondetect in SED-SA2-GMCS-5 and was qualified estimated nondetect "UJ".

8.0 Spike Sample Analysis -Pre-Digestion (Code m - Recovery, Code d - RPD)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
8.1	Was a spiked sample prepared and analyzed at the correct frequency (one per 20 samples, per batch, per matrix and per level)? Action: If no, J(+), with professional judgment, analytes not associated with matrix spike results.												
8.2	**Was a field blank used for the MS analysis? Action: If yes, J(+) with professional judgment. Note in worksheet.** Note: Matrix spike analysis may be performed on a field blank when it is the only aqueous sample in an SDG.		x								x		
8.3	For all analytes with sample concentration < 4 x spike concentration, are spike recoveries within the control limit of 75-125%? (No control limit applies to analytes with concentration > 4 x spike concentration.)		x										

	%R > 125%	30% < %R < 74%	%R < 30%
Positive	J	J	J
Non-detect	None	UJ	R

Note: Sample SED-SA2-GMCS-5 was spiked and analyzed for mercury. The MS recovery (69%) with criteria (80-120%) and RPD (36) with criteria (<20) were outside.

Field ID	Analyte	Batch	Qualification	Code	Justification
SED-SA2-GMCS-	Mercury	680-71640	UJ	m	Low MS recovery

9.0 Instrument Detection Limits (IDL)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
9.1	Are all IDL equal to or less than the reporting limits specified?			x									x

Note:

10.0 ICP Serial Dilutions (Code s)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
10.1	Were serial dilutions performed?												
10.2	Was a five-fold dilution performed?												
10.3	Did the serial dilution results agree within 10% for analyte concentration > 50 x the IDL in the original sample? If no, J(+).												

Note: Sample SW-SA2-GMCS-9 was diluted and analyzed, all %Ds were less than 10% for analytes with concentrations > 50X the IDL.

11.0 Field Duplicate Samples (Code f)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
11.1	Were any field duplicates submitted for metal analysis?		x									x	
11.2	Are all field duplicate results within control? (For aqueous sample, RPD values < 35% or difference < ± 2 x PQL and For solids, RPD < 50% or difference < ± 4 x			x									x

Note: Field duplicate samples were not submitted for analysis.

12.0 Result Verification (Code Q)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
12.1	Were all results and detection limits for solid-matrix samples reported on a dry-weight basis?			x									x
12.2	Were all dilution reflected in the positive results and detection limits?			x									x

Note:

13.0 Data Completeness

13.1	Is % completeness within the control limits? (Control limit: Check QAPP or use 95% for aqueous sample, 90% for soil sample)							
13.2	Number of samples:	3		0		0		3
13.3	Number of target compounds in each analysis:	22		0		0		1
13.4	Number of results rejected and not reported:	0		0		0		0
	% Completeness = 100 x ((13.1 x 13.2) - 13.3) / (13.1 x 13.2)							
	% Completeness	**100**		###		###		**100**

Note:

DATA VALIDATION WORKSHEET
VOLATILE ORGANIC ANALYSIS

Reviewer: Tony Sedlacek
Date: 5/10/2007
Laboratory Severn Trent Laboratory - Savannah

Project Name: Sauget - Area 2 Site R GMCS
Project Number: 21561391.00000
SDG No.: SAS053
Review Level: Level IV

Major Anomolies:

No samples were rejected

Minor Anomolies:

Analytes were qualified due to continuing calibration %D > 20%.

Field IDs: SED-SA2-GMCS-9
SED-SA2-GMCS-5

1.0 Chain of Custody/Sample Condition

		Yes	No	NA
1.1	Do Chain-of-Custody forms list all samples analyzed?			
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was maintained?			
1.3	Do the Traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data?			

Note: The laboratory case narrative indicated that LCS and LCSD recoveries were outside evaluation criteria.

2.0 Holding Time/ Preservation (Code H)

		Yes	No	NA
2.1	Do sample preservation, collection and storage condition meet method requirement?			
	If sample preservation and/or temperature was inappropriate (i.e., <2° >6°C, etc.), comment in report. If unpreserved or temperature is outside the range 0° (but not frozen) to 10° flag all positive results with a "J" and all non-detects "UJ". If temperature exceeds 10°, flag positive detections "J" and non-detects "R".			
2.2	Have any technical holding times, determined from sampling to date of analysis, been exceeded? If yes, J(+)/UJ(-).			

Matrix	Preserved	Aromatic	All others
Aqueous	No	7 days	14 days
	Yes	14 days	14 days
Soil/Sediment	4 °C ± 2 °C	14 days	14 days

		Yes	No	NA
2.3	Have any technical holding times been grossly (twice the holding time) exceeded? If yes, J(+)/R(-).			

Note: All holding time criteria were met.

3.0 GC/MS Instrument Performance Check (Code T)

		Yes	No	NA
3.1	Are GC/MS Tuning and Mass Calibration forms present for bromofluorobenzene (BFB)?			
3.2	Have all samples been analyzed within twelve hours of the BFB tune? If no, flag R.			
3.3	Have ion abundance criteria for BFB been met for each instrument used? If no, flag R.			

Note: All criteria were met.

4.0 Blanks (Method Blanks, Field Blanks and Trip Blanks)

(Code X - Field Blank Contamination, Code Y - Trip blank contamination, Code Z - Method blank contamination)

		Yes	No	NA
4.1	Is a Method Blank Summary form present for each batch?			
4.2	Do any method blanks have positive VOA results (TCL and/or TIC)?			
4.3	Do any field/trip rinse/equipment blanks have positive VOA results (TCL and/or TIC)?			
	Action: Positive sample results <5X (or 10X for common volatile lab contaminants- methylene chloride, acetone, and 2-butanone) the blank concentration should be qualified "U". The result should be elevated to the RL for estimate (laboratory "J" flagged) concentrations.			
4.4	If Level IV, review raw data and verify all detections for blanks were reported.			

Note: All blank criteria were met.

5.0 GC/MS Initial Calibration (Code C)

		Yes	No	NA
5.1	Are Initial Calibration summary forms present and complete for each instrument used?			
5.2	Are CCCs linear applying either %RSD < 30% and all other compounds <15% or >0.990?			
	If not, J(+)/ UJ(-). In extreme cases, the reviewer may flag non-detects "R".			
5.3	Do any SPCC compounds have an RRF less than specification or any other compounds < 0.05 (use 0.01 for poor responders like ketones or alcohols)? If yes, J(+)/R(-).			
5.4	Is the lowest standard at the same concentration, or lower, as the RL reported? If not, elevate RL.		x	
5.5	If Level IV, recalculate a sample of RRFs and %RSDs to verify correct calculations are being made.			

Note: Calibration check compounds 1,2-dichloropropane, toluene and ethylbenzene were determined using second order quadratic calibration and r^2 values were greater than 0.990. No qualification of data was required.

6.0 Continuing Calibration (Code C)

		Yes	No	NA
6.1	Are Continuing Calibration Summary forms present and complete?			
6.2	Has a continuing calibration standard been analyzed every 12 hours?			
6.3	Have all SPCCs and CCCs met method specifications? If not, comment in report, proceed to 6.4.			
6.4	Do any compounds have a % difference (or % drift for quantitation from a curve) (%D) between initial and continuing calibration RRF outside QC limits (%D < 20%)?	x		
	If yes, a marginal increase in response >20% then J(+) only; a decrease in response then J(+)/ UJ(-). For %D > 50%, flag R.			
6.5	Do any compounds have an RRF < 0.05 (use 0.01 for poor responders)? If yes, J(+)/R(-).			
6.6	If Level IV, calculate a sample of RFs and %Ds from ave RF to verify correct calculations.			

Note: The compounds acetone (35.7%), 2-butanone (29.8%) and 4-methyl-2-pentanone (-24.7%) had %D greater than 20%. Qualifications are summarized in the table below. The compound 2-butanone had a %D > 20% and was nondetect in all associated samples; therefore, no qualification of data was required.

Field ID	Analyte	Batch#	Qualification	Code	Justification
SED-SA2-GMCS-	Acetone	680-71513	J	C	%D > 20%
SED-SA2-GMCS-	4-Methyl-2-pentanone	680-71513	UJ	C	%D > 20%
SED-SA2-GMCS-	Acetone	680-71513	J	C	%D > 20%
SED-SA2-GMCS-	4-Methyl-2-pentanone	680-71513	UJ	C	%D > 20%

7.0 Surrogate Recovery (Code S)

		Yes	No	NA
7.1	Are all samples listed on the appropriate Surrogate Recovery Summary Form ?			
7.2	Are surrogate recoveries within acceptance criteria specified in the QAPP for all samples?			
7.3	If No in Section 7.2, were these sample(s) or method blank(s) reanalyzed?			x
7.4	If No in Section 7.3, is any sample dilution factor greater than 10? (Surrogate recoveries may be diluted out.)			x
	Note: If SMC recoveries do not meet acceptance criteria in samples chosen for the MS/MSD or diluted			
	> UCL 10% to LCL < 10%			
	Positive J J J			
	Non-detect None UJ R			

Note: All surrogate recoveries were within evaluation criteria.

8.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD) or one MS with a Sample Duplicate (Recovery - Code M, RPD - Code D)

		Yes	No	NA
8.1	Is a Matrix Spike/Matrix Spike Duplicate recovery form present?		x	
8.2	Are MS/MSDs analyzed at the required frequency of one matrix spike per ten samples and a duplicate per twenty for each matrix?			x
8.3	Are all MS/MSD %Rs and RPDs within acceptance criteria Specified in the QAPP?			x
	Using informed professional judgment, the data reviewer should use the MS and MSD results in conjunction with other QC criteria and determine the need for qualification of the data for samples *from the same site/matrix*. Recoveries <10% may require rejection. RPD failures may be flagged "J" (+ only)			

Note: MS/MSD samples were not submitted for analysis.

9.0 Laboratory Control Sample (LCS/LCSD) (Recovery - Code L, RPD - Code E)

		Yes	No	NA
9.1	Is an LCS recovery form present?			
9.2	Is an LCS analyzed at the required frequency of one per twenty field samples for each matrix?			
9.3	Are all LCS %Rs and RPDs within acceptance criteria specified in the QAPP?		x	
9.4	If Level IV, verify the % recoveries are calculated correctly.			
	Action for specific compound outside the acceptance criteria: %R>UCL, J(+) only; <LCL, J(+)/UJ(-); <30% J(+)/R(-). RPD failures should be flagged "J" (+ only)			

Note: The LCS recovery for acetone (158%) with criteria (28-143%) and 2-butanone (157%) with criteria (30-149%) were outside evaluation criteria in LCS 680-71513. LCSD recovery for acetone (146%) with criteria (28-143%) was outside evaluation criteria in LCSD 680-71514. The LCSD recoveries and RPD were within evaluation criteria in LCS 680-71513 and the LCS recovery and RPD were within evaluation criteria in LCS 680-71514. Therefore, no qualification of data was required.

10.0 Internal Standards (Code I)

		Yes	No	NA
10.1	Are internal standard areas for every sample and blank within upper and lower QC limits?			
	Area > +100% / Area < -50% / Area < -10%			
	Positive: J / J / J			
	Non-detect: None / UJ / R			
Note:	The method specification is for the continuing calibration to be compared to the mid-point initial calibration, not sample to continuing calibration. Thus, if all other QC specifications are met for a given sample, using informed professional judgment, the reviewer may choose not to flag individual samples in			
10.2	Are retention times of internal standards within 30 seconds of the associated calibration standard?			
	Action: The chromatogram must be examined to determine if any false positives or negatives exist. For shift of a large magnitude, the reviewer may consider partial or total rejection of the data for non-detects in that sample/fraction.			

Note: Internal standard area counts and retention times were within evaluation criteria.

11.0 TCL Identification (Code W)

		Yes	No	NA
11.1	Is the relative retention time (RRT) of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration?			
11.2	Are the three ions of greatest intensity present in the standard mass spectrum also present in the sample mass spectrum; and do sample and standard relative ion intensities agree within 30%?			

Note:

12.0 TCL/TIC Quantitation and Reported Detection limits (Code K)

		Yes	No	NA
12.1	Are RLs used consistent with those specified in the QAPP?			
12.2	Are these limits adjusted to reflect dilutions and/ or percent solids as required?			
12.3	Are TIC ions greater than ten percent in the reference spectrum also present in the sample spectrum?			
12.4	Are any positives reported that exceed the linear range of the instrument? If yes, than flag "J".	x		
12.5	If Level IV, calculate a sample of positive results to verify correct calculations			

Note: The sample result for compound chlorobenzene was determined by extrapolation of the second order quadratic calibration curve. This resulted in a negative chlorobenzene result in which an E flag was assigned. The sample was diluted by 100X and reanalyzed. No qualification of data was required. All analytes that were determined by linear calibration were nondetect in samples SED-SA2-GMCS-9 and SED-SA2-GMCS-5. Therefore, LCS samples were recalculated for the data validation.

13.0 Field Duplicate Samples (Code F)

		Yes	No	NA
13.1	Were any field duplicates submitted for VOC analysis?		x	
13.2	Were all RPD or absolute difference values within the control limits outlined in the QAPP?			x
	Action: No qualifying action is taken based on field duplicate results, however the data validator should provide a qualitative assessment in the data validation report.			

Note: Field duplicate samples were not submitted for analysis.

14.0 Data Completeness

			Yes	No	NA
14.1	Is % completeness within the control limits? (Control limit: Check QAPP or use 95% for aqueous				
14.2	Number of samples:	2			
14.3	Number of target compounds in each analysis:	35			
14.4	Number of results rejected and not reported:	0			
	% Completeness = 100 x ((14.1 * 14.2) - 14.3) / (14.1 * 14.2)				
	% Completeness	**100**			

Note:

DATA VALIDATION WORKSHEET
SEMIVOLATILE ORGANIC ANALYSIS

Reviewer: Tony Sedlacek
Date: 5/10/2007
Laboratory Severn Trent Laboratory - Savannah

Project Name: Sauget - Area 2 Site R GMCS
Project Number: 21561391.00000
SDG No.: SAS053
Review Level: Level IV

Major Anomolies:

No samples were rejected

Minor Anomolies:

No analytes required qualification based on this data validation.

Field IDs: SED-SA2-GMCS-9
SED-SA2-GMCS-5

1.0 Chain of Custody/Sample Condition

		Yes	No	NA
1.1	Do Chain-of-Custody forms list all samples analyzed?	X		
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was maintained?	X		
1.3	Do the Traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data?		X	

Note: The laboratory case narrative did not indicate any problems.

2.0 Holding Time/ Preservation (Code H)

		Yes	No	NA
2.1	Do sample preservation, collection and storage condition meet method requirement?	X		
	If samples were not on ice or the ice was melted upon arrival at the laboratory and the temperature of the cooler was elevated (> 10 °C), then flag all positive results with a "J" and all non-detects "UJ".			
2.2	Have any technical holding times, determined from sampling to date of analysis, been exceeded? (See		X	
	Extraction: Soil/Sediment 14 days - aqueous 7 days Analysis: 40 days			
2.3	Have any technical holding times grossly (twice the holding time) been exceeded? If yes, J(+)/R(-).		X	

Note: All holding time criteria were met.

3.0 GC/MS Instrument Performance Check (Code T)

		Yes	No	NA
3.1	Are GC/MS Tuning and Mass Calibration forms present for DFTPP?	X		
3.2	Have all samples been analyzed within twelve hours of the tune?	X		
	If no, the data for the affected standards, blanks, field samples or QC samples are rejected "R".			
3.3	Have ion abundance criteria for DFTPP been met for each instrument used?	X		
	If no, all standards, blanks, field samples and QC samples are rejected "R".			

Note: All criteria were met.

4.0 Blanks (Method Blanks and Field Blanks)

(Code X - Field Blank Contamination, Code Z - Method blank contamination)

		Yes	No	NA
4.1	Is a Method Blank Summary form present for each batch?			
4.2	Do any method/instrument/reagent blanks have positive results (TCL, and/or TIC)?			
4.3	Do any field equipment blanks have positive results (TCL, and/or TIC)?			
	Action: Positive sample results <5X (or 10X for phthalate contaminants) the blank concentration should be qualified "U" and the detection limit elevated to the RL for estimate concentrations.			
4.4	If Level IV, review raw data and verify all detections for blanks were reported.			

Note: All blank criteria were met.

5.0 GC/MS Initial Calibration (Code C)

		Yes	No	NA
5.1	Are Initial Calibration summary forms present and complete for each instrument used?			
5.2	Are CCCs linear applying either %RSD < 30% and all other compounds <15% or >0.990?			
	If not, J(+)/ UJ(-). In extreme cases, the reviewer may flag non-detects "R".			
5.3	Do any SPCC compounds have an RRF less than specification or any other compounds < 0.05 (use 0.01 for poor responders like amines and phenols)? If yes, J(+)/R(-).			
5.4	Is the lowest standard at the same concentration, or lower, as the RL reported? If not, elevate RL.			
5.5	If Level IV, recalculate a sample of RRFs and %RSDs to verify correct calculations are being made.			

Note: All criteria were met.

6.0 Continuing Calibration (Code C)

		Yes	No	NA
6.1	Are Continuing Calibration Summary forms present and complete?			
6.2	Has a continuing calibration standard been analyzed every 12 hours?			
6.3	Have all SPCCs and CCCs met method specifications? If not, comment in report, proceed to 6.4.			
6.4	Do any compounds have a % difference (or % drift for quantitation from a curve) (%D) between initial and continuing calibration RRF outside QC limits (%D < 20%)?			
	If yes, a marginal increase in response >20% then J(+) only; a decrease in response then J(+)/ UJ(-). For %D > 50%, flag R.			
6.5	Do any compounds have an RRF < 0.05 (use 0.01 for poor responders)? If yes, J(+)/R(-).			
6.6	If Level IV, calculate a sample of RFs and %Ds from ave RF to verify correct calculations.			

Note: All criteria were met.

7.0 Surrogate Recovery (Code S)

		Yes	No	NA
7.1	Are all samples listed on the appropriate Surrogate Recovery Summary Form ?			
7.2	Are surrogate recoveries within acceptance criteria specified in the QAPP for all samples and method blanks?			
7.3	Are more than one of either fraction outside the acceptance criteria?			
7.4	If Yes in Section 7.3, are these sample(s) or method blank(s) reanalyzed?		x	
7.5	If Yes in Section 7.3, is any sample dilution factor greater than 10?			x
	Note: If SMC recoveries display unacceptable recoveries in the MS and/ or diluted samples, then no reanalysis is required and acids and base/ neutrals are assessed separately.			

	> UCL	10% to LCL	< 10%
Positive	J	J	J
Non-detect	None	UJ	R

Note: Surrogate recoveries were within evaluation criteria.

8.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD) or one MS with a Sample Duplicate (Recovery - Code M, RPD - Code D)

		Yes	No	NA
8.1	Is a Matrix Spike/Matrix Spike Duplicate recovery form present?		x	
8.2	Are MS/MSDs analyzed at the required frequency not to exceed twenty field samples for each matrix?			x
8.3	Are all MS/MSD %Rs and RPDs within acceptance criteria provided by the laboratory?			x
	Using informed professional judgment, the data reviewer should use the MS and MSD results in conjunction with other QC criteria and determine the need for qualification of the data for samples *from the same site/matrix*. Recoveries <10% may require rejection. RPD failures may be flagged "J" (+ only)			

Note: MS/MSD samples were not submitted for analysis.

9.0 Laboratory Control Sample (LCS/LCSD) (Recovery - Code L, RPD - Code E)

		Yes	No	NA
9.1	Is an LCS recovery form present?			
9.2	Is LCS analyzed at the required frequency for each matrix?			
9.3	Are all LCS %Rs (and RPDs) within acceptance criteria?			
	Action for specific compound outside the acceptance criteria: %R>UCL, J(+) only; <LCL, J(+)/UJ(-); <30% J(+)/R(-). RPD failures should be flagged "J" (+ only)			
9.4	If Level IV, verify the % recoveries are calculated correctly.			

Note: All LCS recoveries were within evaluation criteria.

10.0 Internal Standards (Code I)

		Yes	No	NA
10.1	Are internal standard area of every sample and blank within upper and lower QC limits for each continuing			
	Area > +100% / Area < -50% / Area < -10% Positive: J / J / J Non-detect: None / UJ / R			
Note:	The method specification is for the continuing calibration to be compared to the mid-point initial calibration, not sample to continuing calibration. Thus, if all other QC specifications are met for a given sample, using informed professional judgment, the reviewer may choose not to flag individual samples in this case.			
10.2	Are retention times of internal standards within 30 seconds of the associated calibration standard?			
	Action: The chromatogram must be examined to determine if any false positives or negatives exist. For shift of a large magnitude, the reviewer may consider partial or total rejection of the data for non-detects in that sample/fraction.			

Note: Internal standard area counts and retention times were within evaluation criteria.

11.0 TCL Identification (Code W)

		Yes	No	NA
11.1	Is the relative retention time (RRT) of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration?			
11.2	Are the three ions of greatest intensity present in the standard mass spectrum also present in the sample mass spectrum; and do sample and standard relative ion intensities agree within 30%?			

Note:

12.0 TCL/TIC Quantitation and Reported Detection limits (Code K)

		Yes	No	NA
12.1	Are RLs used consistent with those specified in the QAPP?			
12.2	Are these limits adjusted to reflect dilutions and/ or percent solids as required?			
12.3	Are TIC ions greater than ten percent in the reference spectrum also present in the sample spectrum?			
12.4	Are any positives reported that exceed the linear range of the instrument? If yes, than flag "J".			
12.5	If Level IV, calculate a sample of positive results to verify correct calculations			

Note: Ten percent of positive results were recalculated and verified and no transcription errors were noted.

13.0 Field Duplicate Samples (Code F)

		Yes	No	NA
13.1	Were any field duplicates submitted for SVOC analysis?		x	
13.2	Were all RPD or absolute difference values within the control limits?			x
	No action is taken based on field duplicate results, however the data validator should provide a qualitative assessment in the data validation report.			

Note: Field duplicate samples were not submitted for analysis.

14.0 Data Completeness

			Yes	No	NA
14.1	Is % completeness within the control limits? (Control limit: Check QAPP or use 95% for aqueous sample,				
14.2	Number of samples:	2			
14.3	Number of target compounds in each analysis:	65			
14.4	Number of results rejected and not reported:	0			
	% Completeness = 100 x ((14.1 x 14.2) - 14.3) / (14.1 x 14.2)				
	% Completeness	**100**			

Note:

DATA VALIDATION WORKSHEET
PESTICIDES ANALYSIS

Reviewer: Tony Sedlacek
Date: 5/10/2007
Laboratory Severn Trent Laboratory - Savannah

Project Name: Sauget - Area 2 Site R GMCS
Project Number: 21561391.00000
SDG No.: SAS053
Review Level: Level IV

Major Anomolies:

No samples were rejected.

Minor Anomolies:

No analytes required qualification based on this data validation.

Field IDs: SED-SA2-GMCS-9
SED-SA2-GMCS-5

1.0 Chain of Custody/Sample Condition

		Yes	No	NA
1.1	Do Chain-of-Custody forms list all samples analyzed?			
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was maintained?			
1.3	Do the Traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data?	x		

Note: The laboratory case narrative indicated that the LCS and MS recoveries were outside evaluation criteria.

2.0 Holding Time/ Preservation (Code h)

		Yes	No	NA
2.1	Do sample preservation, collection and storage condition meet method requirement?			
	If samples were not on ice or the ice was melted upon arrival at the laboratory and the temperature of the cooler was elevated (> 10 ^{o}C), then flag all positive results with a "J" and all non-detects "UJ".			
2.2	Have any technical holding times, determined from sampling to date of analysis, been exceeded? (See attached Holding Time Table for sample holding time) If yes, J(+)/UJ(-).			
	Extraction: Soil/Sediment 14 days - aqueous 7 days Analysis: 40 days			
2.3	Have any technical holding times grossly (twice the holding time) been exceeded? If yes, J(+)/R(-).			

Note: All holding times criteria were met.

3.0 Blanks (Method Blanks and Field Blanks)

(Code x - Field Blank Contamination, Code z - Method blank contamination)

		Yes	No	NA
3.1	Is a Method Blank Summary form present for each batch?			
3.2	Do any method blanks have positive results (TCL)?			
3.3	Do any field/rinse/equipment blanks have positive results (TCL)?			
	Action: Positive sample results <5X the blank concentration should be qualified "U". The result should be elevated to the RL for estimate (laboratory "J" flagged) concentrations.			
3.4	If Level IV, review raw data and verify all detections for blanks were reported.			

Note: All blank criteria were met.

4.0 GC/ECD Instrument Performance Check (Code b)

		Yes	No	NA
4.1	Are Endrin and 4,4'-DDT breakdown forms present?			
4.2	Have all samples been analyzed within twelve hours of the performance check sample?			
	If no, the data for the affected standards, blanks, field samples or QC samples are rejected "R".			
4.3	Have percent breakdown criteria (15%) for endrin and 4,4'-DDT been met?			
	If no, all standards, blanks, field samples and QC samples are rejected "R".			

Note:

5.0 Initial Calibration (Code r)

		Yes	No	NA
5.1	Are Initial Calibration summary forms present and complete for each instrument used?			
5.2	Are response factors stable (%RSD values < 20% or >0.995) over the concentration range of the instrument			
	If not, J(+)/ UJ(-). In extreme cases, the reviewer may flag non-detects "R".			
5.3	If Level IV, recalculate a sample of RRFs and %RSDs to verify correct calculations are being made.			

Note: All criteria were met.

6.0 Continuing Calibration (Code c)

		Yes	No	NA
6.1	Are Continuing Calibration Summary forms present and complete?			
6.2	Has a continuing calibration standard been analyzed every 12 hours?			
6.3	Do any compounds have a % difference (or % drift for quantitation from a curve) (%D) between initial and continuing calibration CF outside QC limits (%D < 15%)?			
	If yes, a marginal increase in response >20% then J(+) only; a decrease in response then J(+)/ UJ(-). For %D > 50%, flag R.			
6.4	If Level IV, calculate a sample of CFs and %Ds to verify correct calculations.			

Note: All criteria were met.

7.0 Surrogate Recovery (Code s)

		Yes	No	NA
7.1	Are all samples listed on the appropriate Surrogate Recovery Summary Form ?			
7.2	Are surrogate recoveries within acceptance criteria specified in the QAPP for all samples?			
7.3	If No in Section 7.2, were these sample(s) or method blank(s) reanalyzed?			x
7.4	If No in Section 7.3, is any sample dilution factor greater than 10? (Surrogate recoveries may be diluted out.)		x	

	> UCL	10% to LCL	< 10%
Positive	J	J	J
Non-detect	None	UJ	R

Note: Surrogate recoveries were within evaluation criteria.

8.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD) or one MS with a Sample Duplicate (Code m - recovery, Code d - RPD)

		Yes	No	NA
8.1	Is a Matrix Spike/Matrix Spike Duplicate recovery form present?			
8.2	Are MS/MSDs analyzed at the required frequency of one matrix spike per ten samples and a duplicate per twenty for each matrix?			
8.3	Are all MS/MSD %Rs and RPDs within acceptance criteria Specified in the QAPP?		x	
	Using informed professional judgment, the data reviewer should use the MS and MSD results in conjunction with other QC criteria and determine the need for qualification of the data for samples *from the same site/matrix* . Recoveries <10% may require rejection. RPD failures may be flagged "J" (+ only)			

Note: Sample SED-SA2-GMCS-9 was spiked and analyzed for pesticides. The MS recovery for heptachlor epoxide (41%) was outside evaluation criteria (43-132%). The MSD and RPD were within evaluation criteria, and USEPA National Functional Guidelines for Organic Data Review indicates that pesticide data should not be qualified based on MS/MSD data alone and LCS recoveries were within evaluation criteria; therefore, no qualification of the data was required.

9.0 Laboratory Control Sample (LCS/LCSD) (Code l - LCS recovery Code e - RPD)

		Yes	No	NA
9.1	Is an LCS recovery form present?			
9.2	Is an LCS analyzed at the required frequency of one per twenty field samples for each matrix?			
9.3	Are all LCS %Rs and RPDs within acceptance criteria specified in the QAPP?		x	
9.4	If Level IV, verify the % recoveries are calculated correctly.			x
	Action for specific compound outside the acceptance criteria: %R>UCL, J(+) only; <LCL, J(+)/UJ(-); <30% J(+)/R(-). RPD failures should be flagged "J" (+ only)			

Note: LCSD recovery for delta-BHC (42%) was outside evaluation criteria (43-123%) in LCS 680-71257. The LCS recovery and RPD were within evaluation criteria. Therefore, no qualification of data was required.

10.0 TCL Identification (Code w)

		Yes	No	NA
10.1	Is the relative retention time (RRT) of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration?			

Note:

11.0 TCL Quantitation and Reported Detection limits (Code p)

		Yes	No	NA
11.1	Are RLs used consistent with those specified in the QAPP?			
11.2	Are these limits adjusted to reflect dilutions and/ or percent solids as required?			
11.3	Are any positives reported that exceed the linear range of the instrument? If yes, than flag "J".			
11.4	If Level IV, calculate a sample of positive results to verify correct calculations			

Note: All sample results were nondetect for samples SED-SA2-GMCS-9 and SED-SA2-GMCS-5; therefore, MS/MSD results were recalculated and no transcription errors were noted.

12.0 Field Duplicate Samples (Code f)

		Yes	No	NA
12.1	Were any field duplicates submitted for analysis?		x	
12.2	Were all RPD or absolute difference values within the control limits outlined in the QAPP?			x
	Action: No qualifying action is taken based on field duplicate results, however the data validator should provide a qualitative assessment in the data validation report.			

Note: Field duplicate samples were not submitted for analysis.

13.0 Data Completeness

			Yes	No	NA
13.1	Is % completeness within the control limits? (Control limit: Check QAPP or use 95% for aqueous sample, 90%				
13.2	Number of samples:	2			
13.3	Number of target compounds in each analysis:	21			
13.4	Number of results rejected and not reported:	0			
	% Completeness = 100 x ((13.1 x 13.2) - 13.3) / (13.1 x 13.2)				
	% Completeness	**100**			

Note:

DATA VALIDATION WORKSHEET
HERBICIDES ANALYSIS

Reviewer: Tony Sedlacek
Date: 5/10/2007
Laboratory Severn Trent Laboratory - Savannah

Project Name: Sauget - Area 2 Site R GMCS
Project Number: 21561391.00000
SDG No.: SAS053
Review Level: Level IV

Major Anomolies:

No samples were rejected

Minor Anomolies:

No analytes required qualification based on this data validation.

Field IDs: SED-SA2-GMCS-9
SED-SA2-GMCS-5

1.0 Chain of Custody/Sample Condition

		Yes	No	NA
1.1	Do Chain-of-Custody forms list all samples analyzed?			
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was maintained?			
1.3	Do the Traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data?			

Note: The laboratory case narrative indicated that MS/MSD recoveries and RPD were outside evaluation criteria.

2.0 Holding Time/ Preservation (Code h)

		Yes	No	NA
2.1	Do sample preservation, collection and storage condition meet method requirement?			
	If samples were not on ice or the ice was melted upon arrival at the laboratory and the temperature of the cooler was elevated (> 10 ^{o}C), then flag all positive results with a "J" and all non-detects "UJ".			
2.2	Have any technical holding times, determined from sampling to date of analysis, been exceeded? (See attached Holding Time Table for sample holding time) If yes, J(+)/UJ(-).			
	Extraction: Soil/Sediment 14 days - aqueous 7 days Analysis: 40 days			
2.3	Have any technical holding times grossly (twice the holding time) been exceeded? If yes, J(+)/R(-).			

Note: All holding time criteria were met.

3.0 Blanks (Method Blanks and Field Blanks)

(Code x - Field Blank Contamination, Code z - Method blank contamination)

		Yes	No	NA
3.1	Is a Method Blank Summary form present for each batch?			
3.2	Do any method blanks have positive results?			
3.3	Do any field/rinse/equipment blanks have positive results?			
	Action: Positive sample results <5X the blank concentration should be qualified "U". The result should be elevated to the RL for estimate (laboratory "J" flagged) concentrations.			
3.4	If Level IV, review raw data and verify all detections for blanks were reported.			

Note: All blank criteria were met.

4.0 Initial Calibration (Code r)

		Yes	No	NA
4.1	Are Initial Calibration summary forms present and complete for each instrument used?			
4.2	Are calibration factors stable (%RSD values < 20% or >0.995) over the concentration range of the instrument			
	If not, J(+)/ UJ(-). In extreme cases, the reviewer may flag non-detects "R".			
4.3	If Level IV, recalculate a sample of RRFs and %RSDs to verify correct calculations are being made.			

Note: All criteria were met.

5.0 Continuing Calibration (Code c)

		Yes	No	NA
5.1	Are Continuing Calibration Summary forms present and complete?			
5.2	Has a continuing calibration standard been analyzed every 12 hours?			
5.3	Do any compounds have a % difference (or % drift for quantitation from a curve) (%D) between initial and continuing calibration CF outside QC limits (%D < 20%)?	x		
	If yes, a marginal increase in response >20% then J(+) only; a decrease in response then J(+)/ UJ(-). For %D > 50%, flag R.			
5.5	If Level IV, calculate a sample of CFs and %Ds from ave CF to verify correct calculations.			

Note: The compounds MCPP (-21.0%) and 2,4-DB (-20.1%) had %Ds < 20% from the secondary column. All results were reported from the primary column; therefore, no qualification of data was required.

6.0 Surrogate Recovery (Code s)

		Yes	No	NA
6.1	Are all samples listed on the appropriate Surrogate Recovery Summary Form ?			
6.2	Are surrogate recoveries within acceptance criteria specified in the QAPP for all samples?			
6.3	If No in Section 6.2, were these sample(s) or method blank(s) reanalyzed?			x
6.4	If No in Section 6.3, is any sample dilution factor greater than 10? (Surrogate recoveries may be diluted out.)			x
	> UCL / 10% to LCL / < 10%			
	Positive: J / J / J			
	Non-detect: None / UJ / R			

Note: All surrogate recoveries were within evaluation criteria.

7.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD) or one MS with a Sample Duplicate (Code m - recovery, Code d - RPD)

		Yes	No	NA
7.1	Is a Matrix Spike/Matrix Spike Duplicate recovery form present?			
7.2	Are MS/MSDs analyzed at the required frequency of one matrix spike per ten samples and a duplicate per twenty for each matrix?			
7.3	Are all MS/MSD %Rs and RPDs within acceptance criteria Specified in the QAPP?		x	
	Using informed professional judgment, the data reviewer should use the MS and MSD results in conjunction with other QC criteria and determine the need for qualification of the data for samples *from the same site/matrix* . Recoveries <10% may require rejection. RPD failures may be flagged "J" (+ only)			

Note: The MS recovery for pentachlorophenol (33%) with criteria (44-108%), RPD (63) with criteria (<50) and MSD recovery for dichlorprop (131%) with criteria (44-101%) were outside evaluation criteria. USEPA National Functional Guidelines for Organic Data Review indicates that herbicide data should not be qualified based on MS/MSD data alone and LCS recoveries were within evaluation criteria; therefore, no qualification of the data was required.

8.0 Laboratory Control Sample (LCS/LCSD) (Code l - LCS recovery Code e - RPD)

		Yes	No	NA
8.1	Is an LCS recovery form present?			
8.2	Is an LCS analyzed at the required frequency of one per twenty field samples for each matrix?			
8.3	Are all LCS %Rs and RPDs within acceptance criteria specified in the QAPP?			
8.4	If Level IV, verify the % recoveries are calculated correctly.			
	Action for specific compound outside the acceptance criteria: %R>UCL, J(+) only; <LCL, J(+)/UJ(-); <30% J(+)/R(-). RPD failures should be flagged "J" (+ only)			

Note: All LCS recoveries were within evaluation criteria.

9.0 TCL Identification (Code w)

		Yes	No	NA
9.1	Is the relative retention time (RRT) of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration?			

Note:

10.0 TCL Quantitation and Reported Detection limits (Code p)

		Yes	No	NA
10.1	Are RLs used consistent with those specified in the QAPP?			
10.2	Are these limits adjusted to reflect dilutions and/ or percent solids as required?			
10.3	Are any positives reported that exceed the linear range of the instrument? If yes, than flag "J".			
10.4	If Level IV, calculate a sample of positive results to verify correct calculations			

Note: All sample results were nondetect for samples SED-SA2-GMCS-9 and SED-SA2-GMCS-5; therefore, MS/MSD results were recalculated and no transcription errors were noted.

11.0 Field Duplicate Samples (Code f)

		Yes	No	NA
11.1	Were any field duplicates submitted for herbicide analysis?		x	
11.2	Were all RPD or absolute difference values within the control limits outlined in the QAPP?			x
	Action: No qualifying action is taken based on field duplicate results, however the data validator should provide a qualitative assessment in the data validation report.			

Note: Field duplicate samples were not submitted for analysis.

12.0 Data Completeness

			Yes	No	NA
12.1	Is % completeness within the control limits? (Control limit: Check QAPP or use 95% for aqueous sample, 90%				
12.2	Number of samples:	2			
12.3	Number of target compounds in each analysis:	10			
12.4	Number of results rejected and not reported:	0			
	% Completeness = 100 x ((12.1 x 12.2) - 12.3) / (12.1 x 12.2)				
	% Completeness	**100**			

Note:

DATA VALIDATION WORKSHEET - Level III Review
Inorganic - ICP, ICP-MS, GFAA, and CVAA

Reviewer: Tony Sedlacek
Date: 5/10/2007
Laboratory: Severn Trent Laboratory - Savannah

Project Name: Sauget - Area 2 Site R GMCS
Project Number: 21561391.00000
SDG No.: SAS053
Review Level: Level IV

Major Anomolies:

No samples were rejected

Minor Anomolies:

Analytes were qualified due to analytes detected in the preparation blank and MS recovery and RPD for mercury.

Field IDs: SED-SA2-GMCS-9
SED-SA2-GMCS-5

1.0 Chain of Custody/Sample Condition/Raw Data

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
1.1	Do Chain-of-Custody forms list all samples that were analyzed?	X									X		
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was mai	X									X		
1.3	Do the traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data?	X											
1.4	Does sample preservation, collection and storage meet method requirement? (water samples: with Nitric Acid to pH < 2, and soil/sediment samples: 4 ^{o}C $\pm$ 2 ^{o}C)	X									X		
1.5	Are the digestion logs present and complete with pH values, sample weights, dilutions, final volumes. % solids (for soil samples), and preparation dates? For any missing or incomplete documentation, contact the laboratory for explanation/resubmittal.	X									X		

Note: The laboratory case narrative indicated that the MS recovery, RPD and laboratory duplicate were outside evaluation criteria. In addition, analytes were detected in the preparation blank.

2.0 Holding Time (Code h)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
2.1	Have any technical holding times, determined from date of collection to date of analysis, been exceeded? (Hg: 28days, other metals: 6 months) See attached Holding Time Table. Action: J(+)/UJ(-). If the holding times are grossly exceeded (twice the holding time criteria) J(+)/R(-).												

Note: All samples were analyzed within holding time criteria.

3.0 Instrument Calibration (Code c)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
3.1	Are sufficient standards included in the calibration curve? (ICP/ICP-MS: blank + one standard; GFAA: blank + three standards; CVAA: blank + five standards)												
3.2	Are the correlation coefficients > 0.995? (for GFAA and CVAA) Action: J(+)/UJ(-).												
3.3	Was an initial calibration verification (ICV) analyzed at the beginning of each analysis? Action: If no, use professional judgment to determine affect on the data and note in reviewer narrative.												
3.4	Was continuing calibration verification (CCV) performed every 10 analysis or every 2 hours, whichever is more frequent? Action: If no, use professional judgment to determine affect on the data and note in reviewer narrative.												
3.5	Are all calibration standard percent recoveries (ICV and CCV) within the control limits? Mercury (80%-120%) and other Metals (90%-110%). Action: R(+/-) J(+)/UJ(-) J(+) R(+) Mercury < 65% 65% - 79% 121% - 135% > 135% Other Metals < 75% 75% - 89% 111% - 125% > 125%												

Note: All criteria were met.

4.0 Blanks (Code o - Calibration blank failure, Code p - Preparation blank failure, Code x - Field blank failure)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
4.1	Were preparation blank (PB) prepared at the appropriate frequency (one per 20 samples, per batch, per matrix and per level)?	X			X			X			X		
4.2	Are there reported PB values > + IDL? Action: If yes, action level of 5 times the blank value are determined for positive and negative blank values.	x	X			X			X			X	
4.3	Were initial calibration blanks (ICB) analyzed? Action: If no, use professional judgment to determine affect on the data note in reviewer narrative.	X			X			X			X		
4.4	Were continuing calibration blanks (CCB) analyzed after every 10 samples or every 2 hours whichever is more frequent? Action: If no, use professional judgment to determine affect on the data to note in reviewer narrative.	X			X			X			X		
4.5	Are there reported ICB or CCB values > + IDL? Action: If yes, action level of 5 times the blank value are determined for positive and negative blank values.		X			X			X			X	
4.6	Are there samples with concentrations less than five times the highest level in associated blanks? Action: If yes, U at reported concentration.	x	X			X			X			X	
4.7	Are there samples with non-detect results or with concentrations less than five times the most negative value in associated blanks? Action; If yes, J(+)/UJ(-).		X			X			X			X	

Note: The compounds aluminum (6.5 mg/kg), calcium (6.8 mg/kg), lead (0.33 mg/kg) and sodium (56 mg/kg) were detected in the preparation blank. Aluminum, calcium and lead sample values were greater that five times (5X) the preparation blank value therefore; no qualification of data was required. Sodium was detected in samples SED-SA2-GMCS-9, SED-SA2-GMCS-5 and SED-SA2-GMCS-2 at less than five times (5X) the preparation blank value; therefore, sodium was qualified nondetect "U".

Field ID	Analyte	Batch #	Qualification	Code	Justification
ED-SA2-GMCS-	Sodium	680-70826	U	p	<5X the preparation blank
ED-SA2-GMCS-	Sodium	680-70826	U	p	<5X the preparation blank
ED-SA2-GMCS-	Sodium	680-70826	U	p	<5X the preparation blank

5.0 ICP Interference Check Sample (ICS) (Code n)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
5.1	Was ICS AB analyzed at beginning of each ICP run (or at least twice every 8 hours), and at the beginning or once every 8 hours (whichever is more frequent) for ICP-MS?												
5.2	Are the ICS AB recoveries within 80% - 120%?												
5.3	Are the results for unspiked analytes (in ICS A) < + IDL?												
5.4	If not, are the associated sample Al, Ca, Fe, and Mg concentrations less than the level in the ICS?			x									
	Action: Not Spiked Analytes Spiked analytes (ICS AB analytes)												
	< -IDL > IDL < 50% 50% - 79% > 120%												
	UJ(-) J(+) R(+/-) J(+)/UJ(-) J(+)												

Note: All criteria were met.

6.0 Laboratory Control Sample (LCS) (Code l - Recovery, Code e - RPD)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
6.1	Was an LCS prepared and analyzed at the correct frequency (one per 20 samples, per batch, per matrix and per level)? Action: If no, J(+) any sample not associated with LCS results.												
6.2	Is any LCS recovery outside the control limits? (Aqueous limits: 80% - 120% - except Ag and Sb; Solid limits: as per EPA-EMSL/LV)												
	Action: Solid Aqueous												
	120%												
	J(+)/UJ(-) J(+) R(+/-) J(+)/UJ(-) J(+)												

Note: All recoveries were within evaluation criteria.

7.0 Laboratory Duplicates (Code k)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
7.1	Were Laboratory duplicates prepared and analyzed at the correct frequency (one per 20 samples, per batch, per matrix and per level)? Action: If no, J(+), with professional judgment, analytes not associated with Duplicate results.												
7.2	Was a field blank used for the duplicate analysis? Action: If yes, J(+) with professional judgment. Note in worksheet.												
7.3	Are all analyte duplicate results within control? (RPD values < 20% or difference < ± PQL for aqueous, and RPD < 35% or difference < ± 2 X PQL for solids)? Action: If no, J(+). Note: RPD criteria is used when both sample and duplicate results are > 5 X IDL.												

Note: Sample SED-SA2-GMCS-5 was duplicated and analyzed for mercury. The RPD between the parent and duplicate value was 36%. Mercury was previously qualified due to matrix spike recovery, therefore no additional qualification of data was required.

8.0 Spike Sample Analysis -Pre-Digestion (Code m - Recovery, Code d - RPD)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
8.1	Was a spiked sample prepared and analyzed at the correct frequency (one per 20 samples, per batch, per matrix and per level)? Action: If no, J(+), with professional judgment, analytes not associated with matrix spike results.												
8.2	**Was a field blank used for the MS analysis? Action: If yes, J(+) with professional judgment. Note in worksheet.** Note: Matrix spike analysis may be performed on a field blank when it is the only aqueous sample in an SDG.										x		
8.3	For all analytes with sample concentration < 4 x spike concentration, are spike recoveries within the control limit of 75-125%? (No control limit applies to analytes with concentration > 4 x spike concentration.) %R > 125% / 30% < %R < 74% / %R < 30% Positive: J / J / J Non-detect: None / UJ / R		x										

Note: Sample SED-SA2-GMCS-5 was spiked and analyzed for mercury. The MS recovery (69%) with criteria (80-120%) and RPD (36) with criteria (<20) were outside evaluation criteria. Mercury was nondetect in SED-SA2-GMCS-5 and was qualified estimated nondetect "UJ".

Field ID	Analyte	Batch	Qualification	Code	Justification
ED-SA2-GMCS-	Mercury	680-71640	UJ	m	Low MS recovery

9.0 Instrument Detection Limits (IDL)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
9.1	Are all IDL equal to or less than the reporting limits specified?			x									x

Note:

10.0 ICP Serial Dilutions (Code s)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
10.1	Were serial dilutions performed?												
10.2	Was a five-fold dilution performed?												
10.3	IDL in the original sample? If no, J(+).												

Note: Sample SW-SA2-GMCS-9 was diluted and analyzed, all %Ds were within QC limits.

11.0 Field Duplicate Samples (Code f)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
11.1	Were any field duplicates submitted for metal analysis?		x									x	
11.2	Are all field duplicate results within control? (For aqueous sample, RPD values < 35% or difference < ± 2 x PQL and For solids, RPD < 50% or difference < ± 4 x			x									x

Note: Field duplicate samples were not submitted for analysis.

12.0 Result Verification (Code Q)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
12.1	Were all results and detection limits for solid-matrix samples reported on a dry-weight basis?												
12.2	Were all dilution reflected in the positive results and detection limits?			x									x

Note: Samples did not require a dilution.

13.0 Data Completeness

13.1	Is % completeness within the control limits? (Control limit: Check QAPP or use 95% for aqueous sample, 90% for soil sample)							
13.2	Number of samples:	2		0		0		2
13.3	Number of target compounds in each analysis:	22		0		0		1
13.4	Number of results rejected and not reported:	0		0		0		0
	% Completeness = 100 x ((13.1 x 13.2) - 13.3) / (13.1 x 13.2)							
	% Completeness	**100**		###		###		**100**

Note:

URS

Data Tables

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
March 2007

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	VOCs	1,1,1-Trichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	VOCs	1,1,2,2-Tetrachloroethane	1	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	VOCs	1,1,2-Trichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	VOCs	1,1-Dichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	VOCs	1,1-Dichloroethylene	1	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	VOCs	1,2-Dichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	VOCs	1,2-Dichloroethene (total)	2	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	VOCs	1,2-Dichloropropane	1	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	VOCs	2-Butanone (MEK)	10	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	VOCs	4-Methyl-2-pentanone (MIBK)	10	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	VOCs	Acetone	25	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	VOCs	Benzene	1	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	VOCs	Bromodichloromethane	1	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	VOCs	Bromoform	1	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	VOCs	Bromomethane	1	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	VOCs	Carbon Dioxide	47	ug/L	J N B		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	VOCs	Carbon Disulfide	2	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	VOCs	Carbon Tetrachloride	1	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	VOCs	Chlorobenzene	1	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	VOCs	Chlorodibromomethane	1	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	VOCs	Chloroethane	1	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	VOCs	Chloroform	1	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	VOCs	Chloromethane	1	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	VOCs	cis-1,2-Dichloroethene	1	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	VOCs	cis-1,3-Dichloropropene	1	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	VOCs	Dichloromethane	5	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	VOCs	Ethylbenzene	1	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	VOCs	Methyl N-Butyl Ketone	10	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	VOCs	Styrene (Monomer)	1	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	VOCs	Tetrachloroethene	1	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	VOCs	Toluene	1	ug/L	U		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
March 2007

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	VOCs	trans-1,2-Dichloroethene	1	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	VOCs	trans-1,3-Dichloropropene	1	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	VOCs	Trichloroethene	1	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	VOCs	Vinyl chloride	1	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	VOCs	Xylenes, Total	2	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	a	14	ug/L	J N		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	1,2,4-Trichlorobenzene	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	1,2-Dichlorobenzene	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	1,3-Dichlorobenzene	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	1,4-Dichlorobenzene	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	chloroisopropyl ether)	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	2,4,5-Trichlorophenol	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	2,4,6-Trichlorophenol	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	2,4-Dichlorophenol	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	2,4-Dimethylphenol	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	2,4-Dinitrophenol	48	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	2,4-Dinitrotoluene	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	2,6-Dinitrotoluene	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	2-Chloronaphthalene	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	2-Chlorophenol	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	2-Methylnaphthalene	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	2-Methylphenol (o-Cresol)	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	2-Nitroaniline	48	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	2-Nitrophenol	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	3 & 4 Methylphenol	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	3,3'-Dichlorobenzidine	19	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	3-Nitroaniline	48	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	4,6-Dinitro-2-methylphenol	48	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	4-Bromophenyl Phenyl Ether	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	4-Chloro-3-methylphenol	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	4-Chlorophenyl Phenyl Ether	9.6	ug/L	U		

Sauget Area 2
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	4-Nitrophenol	48	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	Acenaphthene	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	Acenaphthylene	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	Anthracene	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	Benzo(a)anthracene	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	Benzo(a)pyrene	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	Benzo(b)fluoranthene	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	Benzo(g,h,i)perylene	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	Benzo(k)fluoranthene	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	Benzyl Butyl Phthalate	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	bis(2-Chloroethoxy)methane	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	bis(2-Chloroethyl)ether	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	bis(2-Ethylhexyl)phthalate	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	Carbazole	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	Chrysene	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	Dibenzo(a,h)anthracene	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	Dibenzofuran	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	Diethyl Phthalate	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	Dimethyl Phthalate	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	Di-n-butylphthalate	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	Di-n-octylphthalate	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	Dinoseb	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	Fluoranthene	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	Fluorene	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	Hexachlorobenzene	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	Hexachlorobutadiene	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	Hexachlorocyclopentadiene	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	Hexachloroethane	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	Indeno(1,2,3-cd)pyrene	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	Isophorone	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	Naphthalene	9.6	ug/L	U		

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Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	Nitrobenzene	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	N-Nitroso-di-n-propylamine	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	N-Nitrosodiphenylamine	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	Octadecanoic acid, butyl ester	7.7	ug/L	J N		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	P-Chloroaniline	19	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	Phenanthrene	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	Phenol	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	P-Nitroaniline	48	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	SVOCs	Pyrene	9.6	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	Pesticides	4,4'-DDD	0.098	ug/L	U	UJ	S
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	Pesticides	4,4'-DDE	0.098	ug/L	U	UJ	S
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	Pesticides	4,4'-DDT	0.098	ug/L	U	UJ	S
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	Pesticides	Aldrin	0.049	ug/L	U	UJ	S
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	Pesticides	alpha-BHC	0.049	ug/L	U	UJ	S
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	Pesticides	alpha-Chlordane	0.049	ug/L	U	UJ	S
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	Pesticides	beta-BHC	0.049	ug/L	U	UJ	S
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	Pesticides	delta-BHC	0.049	ug/L	U	UJ	S
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	Pesticides	Dieldrin	0.098	ug/L	U	UJ	S
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	Pesticides	Endosulfan I	0.049	ug/L	U	UJ	S
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	Pesticides	Endosulfan II	0.098	ug/L	U	UJ	S
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	Pesticides	Endosulfan Sulfate	0.098	ug/L	U	UJ	S
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	Pesticides	Endrin	0.098	ug/L	U	UJ	S
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	Pesticides	Endrin Aldehyde	0.098	ug/L	U	UJ	S
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	Pesticides	Endrin Ketone	0.098	ug/L	U	UJ	S
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	Pesticides	gamma-BHC (Lindane)	0.049	ug/L	U	UJ	S
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	Pesticides	gamma-Chlordane	0.049	ug/L	U	UJ	S
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	Pesticides	Heptachlor	0.049	ug/L	U	UJ	S
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	Pesticides	Heptachlor Epoxide	0.049	ug/L	U	UJ	S
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	Pesticides	Methoxychlor	0.49	ug/L	U	UJ	S
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	Pesticides	Toxaphene	4.9	ug/L	U	UJ	S
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	s	2,4,5-T	0.5	ug/L	U		

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Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	s	2,4,5-TP (Silvex)	0.5	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	s	2,4-D	0.5	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	s	2,4-DB	0.5	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	s	Dalapon	9.9	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	s	Dicamba	0.5	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	s	Dichlorprop	0.11	ug/L	JP		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	s	Acid)	120	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	s	MCPP	120	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	s	Pentachlorophenol	0.25	ug/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	Metals	Aluminum (Dissolved)	0.2	mg/L	U	UJ	O
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	Metals	Antimony (Dissolved)	0.02	mg/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	Metals	Arsenic (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	Metals	Barium (Dissolved)	0.065	mg/L			
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	Metals	Beryllium (Dissolved)	0.004	mg/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	Metals	Cadmium (Dissolved)	0.005	mg/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	Metals	Calcium (Dissolved)	58	mg/L	B		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	Metals	Chromium (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	Metals	Cobalt (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	Metals	Copper (Dissolved)	0.0036	mg/L	J	U	X
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	Metals	Iron (Dissolved)	0.03	mg/L	J		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	Metals	Lead (Dissolved)	0.005	mg/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	Metals	Magnesium (Dissolved)	21	mg/L			
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	Metals	Manganese (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	Metals	Mercury (Dissolved)	0.0002	mg/L	U	UJ	P
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	Metals	Nickel (Dissolved)	0.04	mg/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	Metals	Potassium (Dissolved)	4.5	mg/L			
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	Metals	Selenium (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	Metals	Silver (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	Metals	Sodium (Dissolved)	32	mg/L			
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	Metals	Thallium (Dissolved)	0.025	mg/L	U		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	Metals	Vanadium (Dissolved)	0.002	mg/L	J		

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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	3/21/07	Metals	Zinc (Dissolved)	0.0055	mg/L	J B	U	X
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	VOCs	1,1,1-Trichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	VOCs	1,1,2,2-Tetrachloroethane	1	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	VOCs	1,1,2-Trichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	VOCs	1,1-Dichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	VOCs	1,1-Dichloroethylene	1	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	VOCs	1,2-Dichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	VOCs	1,2-Dichloroethene (total)	2	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	VOCs	1,2-Dichloropropane	1	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	VOCs	2-Butanone (MEK)	10	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	VOCs	4-Methyl-2-pentanone (MIBK)	10	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	VOCs	Acetone	25	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	VOCs	Benzene	1	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	VOCs	Bromodichloromethane	1	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	VOCs	Bromoform	1	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	VOCs	Bromomethane	1	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	VOCs	Carbon Dioxide	47	ug/L	N J B		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	VOCs	Carbon Disulfide	2	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	VOCs	Carbon Tetrachloride	1	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	VOCs	Chlorobenzene	1	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	VOCs	Chlorodibromomethane	1	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	VOCs	Chloroethane	1	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	VOCs	Chloroform	1	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	VOCs	Chloromethane	1	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	VOCs	cis-1,2-Dichloroethene	1	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	VOCs	cis-1,3-Dichloropropene	1	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	VOCs	Dichloromethane	5	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	VOCs	Ethylbenzene	1	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	VOCs	Methyl N-Butyl Ketone	10	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	VOCs	Styrene (Monomer)	1	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	VOCs	Tetrachloroethene	1	ug/L	U		

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Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	VOCs	Toluene	1	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	VOCs	trans-1,2-Dichloroethene	1	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	VOCs	trans-1,3-Dichloropropene	1	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	VOCs	Trichloroethene	1	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	VOCs	Vinyl chloride	1	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	VOCs	Xylenes, Total	2	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	a	14	ug/L	J N		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	1,2,4-Trichlorobenzene	9.4	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	1,2-Dichlorobenzene	9.4	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	1,3-Dichlorobenzene	9.4	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	1,4-Dichlorobenzene	9.4	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	chloroisopropyl ether)	9.4	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	2,4,5-Trichlorophenol	9.4	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	2,4,6-Trichlorophenol	9.4	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	2,4-Dichlorophenol	9.4	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	2,4-Dimethylphenol	9.4	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	2,4-Dinitrophenol	47	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	2,4-Dinitrotoluene	9.4	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	2,6-Dinitrotoluene	9.4	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	2-Chloronaphthalene	9.4	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	2-Chlorophenol	9.4	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	2-Methylnaphthalene	9.4	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	2-Methylphenol (o-Cresol)	9.4	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	2-Nitroaniline	47	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	2-Nitrophenol	9.4	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	3 & 4 Methylphenol	9.4	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	3,3'-Dichlorobenzidine	19	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	3-Nitroaniline	47	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	4,6-Dinitro-2-methylphenol	47	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	4-Bromophenyl Phenyl Ether	9.4	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	4-Chloro-3-methylphenol	9.4	ug/L	U		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	4-Chlorophenyl Phenyl Ether	9.4	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	4-Nitrophenol	47	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	Acenaphthene	9.4	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	Acenaphthylene	9.4	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	Anthracene	9.4	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	Benzo(a)anthracene	9.4	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	Benzo(a)pyrene	9.4	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	Benzo(b)fluoranthene	9.4	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	Benzo(g,h,i)perylene	9.4	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	Benzo(k)fluoranthene	9.4	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	Benzyl Butyl Phthalate	9.4	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	bis(2-Chloroethoxy)methane	9.4	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	bis(2-Chloroethyl)ether	9.4	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	bis(2-Ethylhexyl)phthalate	9.4	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	Carbazole	9.4	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	Chrysene	9.4	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	Dibenzo(a,h)anthracene	9.4	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	Dibenzofuran	9.4	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	Diethyl Phthalate	9.4	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	Dimethyl Phthalate	9.4	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	Di-n-butylphthalate	9.4	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	Di-n-octylphthalate	9.4	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	Dinoseb	9.4	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	Fluoranthene	9.4	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	Fluorene	9.4	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	Hexachlorobenzene	9.4	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	Hexachlorobutadiene	9.4	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	Hexachlorocyclopentadiene	9.4	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	Hexachloroethane	9.4	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	Indeno(1,2,3-cd)pyrene	9.4	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	Isophorone	9.4	ug/L	U		

Sauget Area 2
Groundwater Migration Control System
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	Naphthalene	9.4	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	Nitrobenzene	9.4	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	N-Nitroso-di-n-propylamine	9.4	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	N-Nitrosodiphenylamine	9.4	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	P-Chloroaniline	19	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	Phenanthrene	9.4	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	Phenol	9.4	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	P-Nitroaniline	47	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	SVOCs	Pyrene	9.4	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	Pesticides	4,4'-DDD	0.096	ug/L	U	UJ	S
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	Pesticides	4,4'-DDE	0.096	ug/L	U	UJ	S
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	Pesticides	4,4'-DDT	0.096	ug/L	U	UJ	S
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	Pesticides	Aldrin	0.048	ug/L	U	UJ	S
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	Pesticides	alpha-BHC	0.048	ug/L	U	UJ	S
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	Pesticides	alpha-Chlordane	0.048	ug/L	U	UJ	S
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	Pesticides	beta-BHC	0.048	ug/L	U	UJ	S
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	Pesticides	delta-BHC	0.048	ug/L	U	UJ	S
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	Pesticides	Dieldrin	0.096	ug/L	U	UJ	S
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	Pesticides	Endosulfan I	0.048	ug/L	U	UJ	S
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	Pesticides	Endosulfan II	0.096	ug/L	U	UJ	S
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	Pesticides	Endosulfan Sulfate	0.096	ug/L	U	UJ	S
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	Pesticides	Endrin	0.096	ug/L	U	UJ	S
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	Pesticides	Endrin Aldehyde	0.096	ug/L	U	UJ	S
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	Pesticides	Endrin Ketone	0.096	ug/L	U	UJ	S
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	Pesticides	gamma-BHC (Lindane)	0.048	ug/L	U	UJ	S
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	Pesticides	gamma-Chlordane	0.048	ug/L	U	UJ	S
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	Pesticides	Heptachlor	0.048	ug/L	U	UJ	S
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	Pesticides	Heptachlor Epoxide	0.048	ug/L	U	UJ	S
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	Pesticides	Methoxychlor	0.48	ug/L	U	UJ	S
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	Pesticides	Toxaphene	4.8	ug/L	U	UJ	S
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	s	2,4,5-T	0.49	ug/L	U		

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Groundwater Migration Control System
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	s	2,4,5-TP (Silvex)	0.49	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	s	2,4-D	0.49	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	s	2,4-DB	0.49	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	s	Dalapon	9.8	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	s	Dicamba	0.49	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	s	Dichlorprop	0.12	ug/L	JP		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	s	Acid)	120	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	s	MCPP	120	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	s	Pentachlorophenol	0.25	ug/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	Metals	Aluminum (Dissolved)	0.2	mg/L	U	UJ	O
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	Metals	Antimony (Dissolved)	0.02	mg/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	Metals	Arsenic (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	Metals	Barium (Dissolved)	0.064	mg/L			
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	Metals	Beryllium (Dissolved)	0.004	mg/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	Metals	Cadmium (Dissolved)	0.005	mg/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	Metals	Calcium (Dissolved)	58	mg/L	B		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	Metals	Chromium (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	Metals	Cobalt (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	Metals	Copper (Dissolved)	0.0036	mg/L	J	U	X
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	Metals	Iron (Dissolved)	0.033	mg/L	J		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	Metals	Lead (Dissolved)	0.005	mg/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	Metals	Magnesium (Dissolved)	21	mg/L			
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	Metals	Manganese (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	Metals	Mercury (Dissolved)	0.0002	mg/L	U	UJ	P
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	Metals	Nickel (Dissolved)	0.04	mg/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	Metals	Potassium (Dissolved)	4.5	mg/L			
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	Metals	Selenium (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	Metals	Silver (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	Metals	Sodium (Dissolved)	32	mg/L			
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	Metals	Thallium (Dissolved)	0.025	mg/L	U		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	Metals	Vanadium (Dissolved)	0.0026	mg/L	J		

Sauget Area 2
Groundwater Migration Control System
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	3/21/07	Metals	Zinc (Dissolved)	0.005	mg/L	J B	U	X
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	VOCs	1,1,1-Trichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	VOCs	1,1,2,2-Tetrachloroethane	1	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	VOCs	1,1,2-Trichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	VOCs	1,1-Dichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	VOCs	1,1-Dichloroethylene	1	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	VOCs	1,2-Dichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	VOCs	1,2-Dichloroethene (total)	2	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	VOCs	1,2-Dichloropropane	1	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	VOCs	2-Butanone (MEK)	10	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	VOCs	4-Methyl-2-pentanone (MIBK)	10	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	VOCs	Acetone	25	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	VOCs	Benzene	1	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	VOCs	Bromodichloromethane	1	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	VOCs	Bromoform	1	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	VOCs	Bromomethane	1	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	VOCs	Carbon Dioxide	42	ug/L	J N B		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	VOCs	Carbon Disulfide	2	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	VOCs	Carbon Tetrachloride	1	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	VOCs	Chlorobenzene	1	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	VOCs	Chlorodibromomethane	1	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	VOCs	Chloroethane	1	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	VOCs	Chloroform	1	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	VOCs	Chloromethane	1	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	VOCs	cis-1,2-Dichloroethene	1	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	VOCs	cis-1,3-Dichloropropene	1	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	VOCs	Dichloromethane	5	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	VOCs	Ethylbenzene	1	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	VOCs	Methyl N-Butyl Ketone	10	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	VOCs	Styrene (Monomer)	1	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	VOCs	Tetrachloroethene	1	ug/L	U		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
March 2007

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	VOCs	Toluene	1	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	VOCs	trans-1,2-Dichloroethene	1	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	VOCs	trans-1,3-Dichloropropene	1	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	VOCs	Trichloroethene	1	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	VOCs	Vinyl chloride	1	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	VOCs	Xylenes, Total	2	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	a	16	ug/L	J N		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	1,2,4-Trichlorobenzene	9.8	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	1,2-Dichlorobenzene	9.8	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	1,3-Dichlorobenzene	9.8	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	1,4-Dichlorobenzene	9.8	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	chloroisopropyl ether)	9.8	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	2,4,5-Trichlorophenol	9.8	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	2,4,6-Trichlorophenol	9.8	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	2,4-Dichlorophenol	9.8	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	2,4-Dimethylphenol	9.8	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	2,4-Dinitrophenol	49	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	2,4-Dinitrotoluene	9.8	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	2,6-Dinitrotoluene	9.8	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	2-Chloronaphthalene	9.8	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	2-Chlorophenol	9.8	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	2-Methylnaphthalene	9.8	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	2-Methylphenol (o-Cresol)	9.8	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	2-Nitroaniline	49	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	2-Nitrophenol	9.8	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	3 & 4 Methylphenol	9.8	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	3,3'-Dichlorobenzidine	20	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	3-Nitroaniline	49	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	4,6-Dinitro-2-methylphenol	49	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	4-Bromophenyl Phenyl Ether	9.8	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	4-Chloro-3-methylphenol	9.8	ug/L	U		

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Surface Water Sample Results
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Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	4-Chlorophenyl Phenyl Ether	9.8	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	4-Nitrophenol	49	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	Acenaphthene	9.8	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	Acenaphthylene	9.8	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	Anthracene	9.8	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	Benzo(a)anthracene	9.8	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	Benzo(a)pyrene	9.8	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	Benzo(b)fluoranthene	9.8	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	Benzo(g,h,i)perylene	9.8	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	Benzo(k)fluoranthene	9.8	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	Benzyl Butyl Phthalate	9.8	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	bis(2-Chloroethoxy)methane	9.8	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	bis(2-Chloroethyl)ether	9.8	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	bis(2-Ethylhexyl)phthalate	9.8	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	Carbazole	9.8	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	Chrysene	9.8	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	Dibenzo(a,h)anthracene	9.8	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	Dibenzofuran	9.8	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	Diethyl Phthalate	9.8	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	Dimethyl Phthalate	9.8	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	Di-n-butylphthalate	9.8	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	Di-n-octylphthalate	9.8	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	Dinoseb	9.8	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	Fluoranthene	9.8	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	Fluorene	9.8	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	Hexachlorobenzene	9.8	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	Hexachlorobutadiene	9.8	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	Hexachlorocyclopentadiene	9.8	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	Hexachloroethane	9.8	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	Indeno(1,2,3-cd)pyrene	9.8	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	Isophorone	9.8	ug/L	U		

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Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	Naphthalene	9.8	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	Nitrobenzene	9.8	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	N-Nitroso-di-n-propylamine	9.8	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	N-Nitrosodiphenylamine	9.8	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	P-Chloroaniline	20	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	Phenanthrene	9.8	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	Phenol	9.8	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	P-Nitroaniline	49	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	SVOCs	Pyrene	9.8	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	Pesticides	4,4'-DDD	0.098	ug/L	U	UJ	S
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	Pesticides	4,4'-DDE	0.098	ug/L	U	UJ	S
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	Pesticides	4,4'-DDT	0.098	ug/L	U	UJ	S
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	Pesticides	Aldrin	0.049	ug/L	U	UJ	S
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	Pesticides	alpha-BHC	0.049	ug/L	U	UJ	S
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	Pesticides	alpha-Chlordane	0.049	ug/L	U	UJ	S
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	Pesticides	beta-BHC	0.049	ug/L	U	UJ	S
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	Pesticides	delta-BHC	0.049	ug/L	U	UJ	S
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	Pesticides	Dieldrin	0.098	ug/L	U	UJ	S
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	Pesticides	Endosulfan I	0.049	ug/L	U	UJ	S
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	Pesticides	Endosulfan II	0.098	ug/L	U	UJ	S
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	Pesticides	Endosulfan Sulfate	0.098	ug/L	U	UJ	S
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	Pesticides	Endrin	0.098	ug/L	U	UJ	S
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	Pesticides	Endrin Aldehyde	0.098	ug/L	U	UJ	S
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	Pesticides	Endrin Ketone	0.098	ug/L	U	UJ	S
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	Pesticides	gamma-BHC (Lindane)	0.049	ug/L	U	UJ	S
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	Pesticides	gamma-Chlordane	0.049	ug/L	U	UJ	S
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	Pesticides	Heptachlor	0.049	ug/L	U	UJ	S
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	Pesticides	Heptachlor Epoxide	0.049	ug/L	U	UJ	S
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	Pesticides	Methoxychlor	0.49	ug/L	U	UJ	S
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	Pesticides	Toxaphene	4.9	ug/L	U	UJ	S
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	s	2,4,5-T	0.49	ug/L	U		

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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	s	2,4,5-TP (Silvex)	0.49	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	s	2,4-D	0.49	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	s	2,4-DB	0.49	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	s	Dalapon	9.7	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	s	Dicamba	0.49	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	s	Dichlorprop	0.16	ug/L	JP		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	s	Acid)	120	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	s	MCPP	120	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	s	Pentachlorophenol	0.24	ug/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	Metals	Aluminum (Dissolved)	0.2	mg/L	U	UJ	O
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	Metals	Antimony (Dissolved)	0.02	mg/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	Metals	Arsenic (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	Metals	Barium (Dissolved)	0.066	mg/L			
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	Metals	Beryllium (Dissolved)	0.004	mg/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	Metals	Cadmium (Dissolved)	0.005	mg/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	Metals	Calcium (Dissolved)	58	mg/L	B		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	Metals	Chromium (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	Metals	Cobalt (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	Metals	Copper (Dissolved)	0.0038	mg/L	J	U	X
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	Metals	Iron (Dissolved)	0.038	mg/L	J		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	Metals	Lead (Dissolved)	0.005	mg/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	Metals	Magnesium (Dissolved)	21	mg/L			
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	Metals	Manganese (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	Metals	Mercury (Dissolved)	0.0002	mg/L	U	UJ	P
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	Metals	Nickel (Dissolved)	0.0021	mg/L	J		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	Metals	Potassium (Dissolved)	4.6	mg/L			
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	Metals	Selenium (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	Metals	Silver (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	Metals	Sodium (Dissolved)	32	mg/L			
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	Metals	Thallium (Dissolved)	0.025	mg/L	U		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	Metals	Vanadium (Dissolved)	0.0023	mg/L	J		

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Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	3/21/07	Metals	Zinc (Dissolved)	0.0059	mg/L	J B	U	X
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	VOCs	1,1,1-Trichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	VOCs	1,1,2,2-Tetrachloroethane	1	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	VOCs	1,1,2-Trichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	VOCs	1,1-Dichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	VOCs	1,1-Dichloroethylene	1	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	VOCs	1,2-Dichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	VOCs	1,2-Dichloroethene (total)	2	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	VOCs	1,2-Dichloropropane	1	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	VOCs	2-Butanone (MEK)	10	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	VOCs	4-Methyl-2-pentanone (MIBK)	10	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	VOCs	Acetone	25	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	VOCs	Benzene	1	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	VOCs	Bromodichloromethane	1	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	VOCs	Bromoform	1	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	VOCs	Bromomethane	1	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	VOCs	Carbon Dioxide	44	ug/L	J N B		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	VOCs	Carbon Disulfide	2	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	VOCs	Carbon Tetrachloride	1	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	VOCs	Chlorobenzene	1	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	VOCs	Chlorodibromomethane	1	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	VOCs	Chloroethane	1	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	VOCs	Chloroform	1	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	VOCs	Chloromethane	1	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	VOCs	cis-1,2-Dichloroethene	1	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	VOCs	cis-1,3-Dichloropropene	1	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	VOCs	Dichloromethane	5	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	VOCs	Ethylbenzene	1	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	VOCs	Methyl N-Butyl Ketone	10	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	VOCs	Styrene (Monomer)	1	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	VOCs	Tetrachloroethene	1	ug/L	U		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
March 2007

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	VOCs	Toluene	1	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	VOCs	trans-1,2-Dichloroethene	1	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	VOCs	trans-1,3-Dichloropropene	1	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	VOCs	Trichloroethene	1	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	VOCs	Vinyl chloride	1	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	VOCs	Xylenes, Total	2	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	1,2,4-Trichlorobenzene	9.7	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	1,2-Dichlorobenzene	9.7	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	1,3-Dichlorobenzene	9.7	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	1,4-Dichlorobenzene	9.7	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	chloroisopropyl ether)	9.7	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	2,4,5-Trichlorophenol	9.7	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	2,4,6-Trichlorophenol	9.7	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	2,4-Dichlorophenol	9.7	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	2,4-Dimethylphenol	9.7	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	2,4-Dinitrophenol	49	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	2,4-Dinitrotoluene	9.7	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	2,6-Dinitrotoluene	9.7	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	2-Chloronaphthalene	9.7	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	2-Chlorophenol	9.7	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	2-Methylnaphthalene	9.7	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	2-Methylphenol (o-Cresol)	9.7	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	2-Nitroaniline	49	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	2-Nitrophenol	9.7	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	3 & 4 Methylphenol	9.7	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	3,3'-Dichlorobenzidine	19	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	3-Nitroaniline	49	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	4,6-Dinitro-2-methylphenol	49	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	4-Bromophenyl Phenyl Ether	9.7	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	4-Chloro-3-methylphenol	9.7	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	4-Chlorophenyl Phenyl Ether	9.7	ug/L	U		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	4-Nitrophenol	49	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	Acenaphthene	9.7	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	Acenaphthylene	9.7	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	Anthracene	9.7	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	Benzo(a)anthracene	9.7	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	Benzo(a)pyrene	9.7	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	Benzo(b)fluoranthene	9.7	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	Benzo(g,h,i)perylene	9.7	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	Benzo(k)fluoranthene	9.7	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	Benzyl Butyl Phthalate	9.7	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	bis(2-Chloroethoxy)methane	9.7	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	bis(2-Chloroethyl)ether	9.7	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	bis(2-Ethylhexyl)phthalate	9.7	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	Carbazole	9.7	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	Chrysene	9.7	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	Dibenzo(a,h)anthracene	9.7	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	Dibenzofuran	9.7	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	Diethyl Phthalate	9.7	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	Dimethyl Phthalate	9.7	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	Di-n-butylphthalate	9.7	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	Di-n-octylphthalate	9.7	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	Dinoseb	9.7	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	Fluoranthene	9.7	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	Fluorene	9.7	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	Hexachlorobenzene	9.7	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	Hexachlorobutadiene	9.7	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	Hexachlorocyclopentadiene	9.7	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	Hexachloroethane	9.7	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	Indeno(1,2,3-cd)pyrene	9.7	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	Isophorone	9.7	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	Naphthalene	9.7	ug/L	U		

Sauget Area 2
Groundwater Migration Control System
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	Nitrobenzene	9.7	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	N-Nitroso-di-n-propylamine	9.7	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	N-Nitrosodiphenylamine	9.7	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	P-Chloroaniline	19	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	Phenanthrene	9.7	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	Phenol	9.7	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	P-Nitroaniline	49	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	SVOCs	Pyrene	9.7	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	Pesticides	4,4'-DDD	0.098	ug/L	U	UJ	S
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	Pesticides	4,4'-DDE	0.098	ug/L	U	UJ	S
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	Pesticides	4,4'-DDT	0.098	ug/L	U	UJ	S
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	Pesticides	Aldrin	0.049	ug/L	U	UJ	S
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	Pesticides	alpha-BHC	0.049	ug/L	U	UJ	S
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	Pesticides	alpha-Chlordane	0.049	ug/L	U	UJ	S
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	Pesticides	beta-BHC	0.049	ug/L	U	UJ	S
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	Pesticides	delta-BHC	0.049	ug/L	U	UJ	S
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	Pesticides	Dieldrin	0.098	ug/L	U	UJ	S
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	Pesticides	Endosulfan I	0.049	ug/L	U	UJ	S
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	Pesticides	Endosulfan II	0.098	ug/L	U	UJ	S
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	Pesticides	Endosulfan Sulfate	0.098	ug/L	U	UJ	S
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	Pesticides	Endrin	0.098	ug/L	U	UJ	S
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	Pesticides	Endrin Aldehyde	0.098	ug/L	U	UJ	S
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	Pesticides	Endrin Ketone	0.098	ug/L	U	UJ	S
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	Pesticides	gamma-BHC (Lindane)	0.049	ug/L	U	UJ	S
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	Pesticides	gamma-Chlordane	0.049	ug/L	U	UJ	S
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	Pesticides	Heptachlor	0.049	ug/L	U	UJ	S
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	Pesticides	Heptachlor Epoxide	0.049	ug/L	U	UJ	S
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	Pesticides	Methoxychlor	0.49	ug/L	U	UJ	S
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	Pesticides	Toxaphene	4.9	ug/L	U	UJ	S
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	s	2,4,5-T	0.49	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	s	2,4,5-TP (Silvex)	0.49	ug/L	U		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	s	2,4-D	0.49	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	s	2,4-DB	0.49	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	s	Dalapon	9.7	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	s	Dicamba	0.49	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	s	Dichlorprop	0.11	ug/L	JP		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	s	Acid)	120	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	s	MCPP	120	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	s	Pentachlorophenol	0.24	ug/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	Metals	Aluminum (Dissolved)	0.2	mg/L	U	UJ	O
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	Metals	Antimony (Dissolved)	0.02	mg/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	Metals	Arsenic (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	Metals	Barium (Dissolved)	0.066	mg/L			
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	Metals	Beryllium (Dissolved)	0.004	mg/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	Metals	Cadmium (Dissolved)	0.005	mg/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	Metals	Calcium (Dissolved)	59	mg/L	B		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	Metals	Chromium (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	Metals	Cobalt (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	Metals	Copper (Dissolved)	0.0037	mg/L	J	U	X
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	Metals	Iron (Dissolved)	0.032	mg/L	J		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	Metals	Lead (Dissolved)	0.005	mg/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	Metals	Magnesium (Dissolved)	21	mg/L			
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	Metals	Manganese (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	Metals	Mercury (Dissolved)	0.0002	mg/L	U	UJ	P
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	Metals	Nickel (Dissolved)	0.04	mg/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	Metals	Potassium (Dissolved)	4.6	mg/L			
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	Metals	Selenium (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	Metals	Silver (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	Metals	Sodium (Dissolved)	34	mg/L			
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	Metals	Thallium (Dissolved)	0.025	mg/L	U		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	Metals	Vanadium (Dissolved)	0.0023	mg/L	J		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	3/20/07	Metals	Zinc (Dissolved)	0.0068	mg/L	J B	U	X

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	VOCs	1,1,1-Trichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	VOCs	1,1,2,2-Tetrachloroethane	1	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	VOCs	1,1,2-Trichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	VOCs	1,1-Dichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	VOCs	1,1-Dichloroethylene	1	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	VOCs	1,2-Dichloroethane	1	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	VOCs	1,2-Dichloroethene (total)	2	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	VOCs	1,2-Dichloropropane	1	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	VOCs	2-Butanone (MEK)	10	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	VOCs	4-Methyl-2-pentanone (MIBK)	10	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	VOCs	Acetone	25	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	VOCs	Benzene	1	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	VOCs	Bromodichloromethane	1	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	VOCs	Bromoform	1	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	VOCs	Bromomethane	1	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	VOCs	Carbon Dioxide	46	ug/L	J N B		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	VOCs	Carbon Disulfide	2	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	VOCs	Carbon Tetrachloride	1	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	VOCs	Chlorobenzene	1	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	VOCs	Chlorodibromomethane	1	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	VOCs	Chloroethane	1	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	VOCs	Chloroform	1	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	VOCs	Chloromethane	1	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	VOCs	cis-1,2-Dichloroethene	1	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	VOCs	cis-1,3-Dichloropropene	1	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	VOCs	Dichloromethane	5	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	VOCs	Ethylbenzene	1	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	VOCs	Methyl N-Butyl Ketone	10	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	VOCs	Styrene (Monomer)	1	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	VOCs	Tetrachloroethene	1	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	VOCs	Toluene	1	ug/L	U		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
March 2007

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	VOCs	trans-1,2-Dichloroethene	1	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	VOCs	trans-1,3-Dichloropropene	1	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	VOCs	Trichloroethene	1	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	VOCs	Vinyl chloride	1	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	VOCs	Xylenes, Total	2	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	1,2,4-Trichlorobenzene	9.7	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	1,2-Dichlorobenzene	9.7	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	1,3-Dichlorobenzene	9.7	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	1,4-Dichlorobenzene	9.7	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	chloroisopropyl ether)	9.7	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	2,4,5-Trichlorophenol	9.7	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	2,4,6-Trichlorophenol	9.7	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	2,4-Dichlorophenol	9.7	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	2,4-Dimethylphenol	9.7	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	2,4-Dinitrophenol	49	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	2,4-Dinitrotoluene	9.7	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	2,6-Dinitrotoluene	9.7	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	2-Chloronaphthalene	9.7	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	2-Chlorophenol	9.7	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	2-Methylnaphthalene	9.7	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	2-Methylphenol (o-Cresol)	9.7	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	2-Nitroaniline	49	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	2-Nitrophenol	9.7	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	3 & 4 Methylphenol	9.7	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	3,3'-Dichlorobenzidine	19	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	3-Nitroaniline	49	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	4,6-Dinitro-2-methylphenol	49	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	4-Bromophenyl Phenyl Ether	9.7	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	4-Chloro-3-methylphenol	9.7	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	4-Chlorophenyl Phenyl Ether	9.7	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	4-Nitrophenol	49	ug/L	U		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
March 2007

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	Acenaphthene	9.7	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	Acenaphthylene	9.7	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	Anthracene	9.7	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	Benzo(a)anthracene	9.7	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	Benzo(a)pyrene	9.7	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	Benzo(b)fluoranthene	9.7	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	Benzo(g,h,i)perylene	9.7	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	Benzo(k)fluoranthene	9.7	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	Benzyl Butyl Phthalate	9.7	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	bis(2-Chloroethoxy)methane	9.7	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	bis(2-Chloroethyl)ether	9.7	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	bis(2-Ethylhexyl)phthalate	9.7	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	Carbazole	9.7	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	Chrysene	9.7	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	Dibenzo(a,h)anthracene	9.7	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	Dibenzofuran	9.7	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	Diethyl Phthalate	9.7	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	Dimethyl Phthalate	9.7	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	Di-n-butylphthalate	9.7	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	Di-n-octylphthalate	9.7	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	Dinoseb	9.7	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	Fluoranthene	9.7	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	Fluorene	9.7	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	Hexachlorobenzene	9.7	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	Hexachlorobutadiene	9.7	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	Hexachlorocyclopentadiene	9.7	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	Hexachloroethane	9.7	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	Indeno(1,2,3-cd)pyrene	9.7	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	Isophorone	9.7	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	Naphthalene	9.7	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	Nitrobenzene	9.7	ug/L	U		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
March 2007

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	N-Nitroso-di-n-propylamine	9.7	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	N-Nitrosodiphenylamine	9.7	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	P-Chloroaniline	19	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	Phenanthrene	9.7	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	Phenol	9.7	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	P-Nitroaniline	49	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	SVOCs	Pyrene	9.7	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	Pesticides	4,4'-DDD	0.097	ug/L	U	UJ	S
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	Pesticides	4,4'-DDE	0.097	ug/L	U	UJ	S
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	Pesticides	4,4'-DDT	0.097	ug/L	U	UJ	S
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	Pesticides	Aldrin	0.049	ug/L	U	UJ	S
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	Pesticides	alpha-BHC	0.049	ug/L	U	UJ	S
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	Pesticides	alpha-Chlordane	0.049	ug/L	U	UJ	S
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	Pesticides	beta-BHC	0.049	ug/L	U	UJ	S
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	Pesticides	delta-BHC	0.049	ug/L	U	UJ	S
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	Pesticides	Dieldrin	0.097	ug/L	U	UJ	S
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	Pesticides	Endosulfan I	0.049	ug/L	U	UJ	S
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	Pesticides	Endosulfan II	0.097	ug/L	U	UJ	S
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	Pesticides	Endosulfan Sulfate	0.097	ug/L	U	UJ	S
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	Pesticides	Endrin	0.097	ug/L	U	UJ	S
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	Pesticides	Endrin Aldehyde	0.097	ug/L	U	UJ	S
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	Pesticides	Endrin Ketone	0.097	ug/L	U	UJ	S
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	Pesticides	gamma-BHC (Lindane)	0.049	ug/L	U	UJ	S
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	Pesticides	gamma-Chlordane	0.049	ug/L	U	UJ	S
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	Pesticides	Heptachlor	0.049	ug/L	U	UJ	S
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	Pesticides	Heptachlor Epoxide	0.049	ug/L	U	UJ	S
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	Pesticides	Methoxychlor	0.49	ug/L	U	UJ	S
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	Pesticides	Toxaphene	4.9	ug/L	U	UJ	S
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	s	2,4,5-T	0.5	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	s	2,4,5-TP (Silvex)	0.5	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	s	2,4-D	0.5	ug/L	U		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
March 2007

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	s	2,4-DB	0.5	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	s	Dalapon	10	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	s	Dicamba	0.5	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	s	Dichlorprop	0.095	ug/L	JP		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	s	Acid)	120	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	s	MCPP	120	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	s	Pentachlorophenol	0.25	ug/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	Metals	Aluminum (Dissolved)	0.03	mg/L	J	J	O
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	Metals	Antimony (Dissolved)	0.02	mg/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	Metals	Arsenic (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	Metals	Barium (Dissolved)	0.065	mg/L			
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	Metals	Beryllium (Dissolved)	0.004	mg/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	Metals	Cadmium (Dissolved)	0.005	mg/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	Metals	Calcium (Dissolved)	59	mg/L	B		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	Metals	Chromium (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	Metals	Cobalt (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	Metals	Copper (Dissolved)	0.0039	mg/L	J	U	X
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	Metals	Iron (Dissolved)	0.092	mg/L			
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	Metals	Lead (Dissolved)	0.005	mg/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	Metals	Magnesium (Dissolved)	21	mg/L			
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	Metals	Manganese (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	Metals	Mercury (Dissolved)	0.0002	mg/L	U	UJ	P
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	Metals	Nickel (Dissolved)	0.0027	mg/L	J		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	Metals	Potassium (Dissolved)	4.5	mg/L			
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	Metals	Selenium (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	Metals	Silver (Dissolved)	0.01	mg/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	Metals	Sodium (Dissolved)	34	mg/L			
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	Metals	Thallium (Dissolved)	0.025	mg/L	U		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	Metals	Vanadium (Dissolved)	0.0022	mg/L	J		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	3/20/07	Metals	Zinc (Dissolved)	0.0063	mg/L	J B	U	X

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Detections
March 2007

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	VOCs	2-Butanone (MEK)	46	ug/Kg	J *		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	VOCs	Acetone	300	ug/Kg	*		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	VOCs	Acrolein	57	ug/Kg	J		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	VOCs	Benzene	27	ug/Kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	VOCs	Butanal, 3-methyl-	19	ug/Kg	J N		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	VOCs	Carbon Dioxide	4300	ug/Kg	J B N		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	VOCs	Carbon Disulfide	20	ug/Kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	VOCs	Chlorobenzene	19000	ug/Kg	D		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	VOCs	Ethylbenzene	8.4	ug/Kg	J		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	VOCs	Methyl acetate	23	ug/Kg	J		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	VOCs	Pentanal	56	ug/Kg	J N		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	VOCs	p-Xylene/m-Xylene	13	ug/Kg	J		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	VOCs	Toluene	200	ug/Kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	VOCs	Xylenes, Total	18	ug/Kg	J		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	SVOCs	(Carbethoxyethylidine) triphenylphosphora	1300	ug/Kg	J N		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	SVOCs	1,2-Dichlorobenzene	150	ug/Kg	J		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	SVOCs	1,3-Dichlorobenzene	170	ug/Kg	J		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	SVOCs	1,4-Dichlorobenzene	1200	ug/Kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	SVOCs	1-Eicosene	650	ug/Kg	J N		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	SVOCs	3 & 4 Methylphenol	100	ug/Kg	J		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	SVOCs	Anthracene	61	ug/Kg	J		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	SVOCs	Benzo(a)anthracene	120	ug/Kg	J		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	SVOCs	Benzo(a)pyrene	84	ug/Kg	J		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	SVOCs	Benzo(g,h,i)perylene	84	ug/Kg	J		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	SVOCs	Cholesterol	1900	ug/Kg	J N		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	SVOCs	Chrysene	130	ug/Kg	J		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	SVOCs	Desmosterol	1100	ug/Kg	J N		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	SVOCs	Di-n-octylphthalate	100	ug/Kg	J		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	SVOCs	Diphenyl sulfone	1400	ug/Kg	J N		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	SVOCs	Fluoranthene	260	ug/Kg	J		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	SVOCs	Hexadecanoic acid, hexadecyl ester	760	ug/Kg	J N		

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Detections
March 2007

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	SVOCs	Indeno(1,2,3-cd)pyrene	71	ug/Kg	J		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	SVOCs	Oxacycloheptadecan-2-one	1200	ug/Kg	J N		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	SVOCs	P-Chloroaniline	1900	ug/Kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	SVOCs	Phenanthrene	170	ug/Kg	J		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	SVOCs	Phytol	1100	ug/Kg	J N		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	SVOCs	Pregna-5,16-dien-20-one, 3-hydroxy-, (3)	1200	ug/Kg	J N		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	SVOCs	Pyrene	220	ug/Kg	J		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	SVOCs	Stigmasterol	1300	ug/Kg	J N		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	Pesticides	4,4'-DDD	8.8	ug/Kg	P		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	Pesticides	Dieldrin	0.98	ug/Kg	J P		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	Herbicides	Dichlorprop	56	ug/Kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	Metals	Aluminum	8700	mg/Kg	B		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	Metals	Antimony	0.78	mg/Kg	J		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	Metals	Arsenic	4.3	mg/Kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	Metals	Barium	160	mg/Kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	Metals	Beryllium	0.5	mg/Kg	J		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	Metals	Cadmium	2	mg/Kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	Metals	Calcium	14000	mg/Kg	B		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	Metals	Chromium	17	mg/Kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	Metals	Cobalt	6.3	mg/Kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	Metals	Copper	22	mg/Kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	Metals	Iron	15000	mg/Kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	Metals	Lead	27	mg/Kg	B		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	Metals	Magnesium	4100	mg/Kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	Metals	Manganese	440	mg/Kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	Metals	Mercury	0.041	mg/Kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	Metals	Nickel	16	mg/Kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	Metals	Potassium	1500	mg/Kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	Metals	Vanadium	26	mg/Kg			
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	3/21/07	Metals	Zinc	370	mg/Kg			
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	3/20/07	VOCs	Acetone	20	ug/Kg	J *	J	C

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Detections
March 2007

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	3/20/07	VOCs	Carbon Dioxide	540	ug/Kg	N J B		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	3/20/07	VOCs	Chlorobenzene	1.9	ug/Kg	J		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	3/20/07	SVOCs	(Carbethoxyethylidine)triphenylphosphora	1100	ug/Kg	J N		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	3/20/07	SVOCs	Acenaphthene	32	ug/Kg	J		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	3/20/07	SVOCs	Anthracene	41	ug/Kg	J		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	3/20/07	SVOCs	Chrysene	42	ug/Kg	J		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	3/20/07	SVOCs	Dibenzofuran	29	ug/Kg	J		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	3/20/07	SVOCs	Fluoranthene	130	ug/Kg	J		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	3/20/07	SVOCs	Fluorene	49	ug/Kg	J		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	3/20/07	SVOCs	Phenanthrene	220	ug/Kg	J		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	3/20/07	SVOCs	Pyrene	91	ug/Kg	J		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	3/20/07	Metals	Aluminum	1000	mg/Kg	B		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	3/20/07	Metals	Arsenic	1.2	mg/Kg			
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	3/20/07	Metals	Barium	43	mg/Kg			
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	3/20/07	Metals	Beryllium	0.08	mg/Kg	J		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	3/20/07	Metals	Calcium	1900	mg/Kg	B		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	3/20/07	Metals	Chromium	2.5	mg/Kg			
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	3/20/07	Metals	Cobalt	2.2	mg/Kg			
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	3/20/07	Metals	Copper	1.5	mg/Kg	J		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	3/20/07	Metals	Iron	3900	mg/Kg			
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	3/20/07	Metals	Lead	5.4	mg/Kg	B		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	3/20/07	Metals	Magnesium	930	mg/Kg			
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	3/20/07	Metals	Manganese	66	mg/Kg			
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	3/20/07	Metals	Nickel	4.9	mg/Kg			
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	3/20/07	Metals	Potassium	180	mg/Kg			
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	3/20/07	Metals	Vanadium	4	mg/Kg			
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	3/20/07	Metals	Zinc	83	mg/Kg			
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	3/20/07	VOCs	Acetone	14	ug/Kg	J *	J	C
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	3/20/07	VOCs	Carbon Dioxide	610	ug/Kg	N J B		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	3/20/07	VOCs	Carbon Disulfide	1.4	ug/Kg	J		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	3/20/07	VOCs	Chlorobenzene	1.5	ug/Kg	J		

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Detections
March 2007

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers	URS Qualifer Code
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	3/20/07	SVOCs	Diethyl Phthalate	65	ug/Kg	J		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	3/20/07	SVOCs	Phosphine oxide, triphenyl	2800	ug/Kg	J N		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	3/20/07	Metals	Aluminum	990	mg/Kg	B		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	3/20/07	Metals	Arsenic	1.7	mg/Kg			
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	3/20/07	Metals	Barium	18	mg/Kg			
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	3/20/07	Metals	Beryllium	0.084	mg/Kg	J		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	3/20/07	Metals	Calcium	1000	mg/Kg	B		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	3/20/07	Metals	Chromium	3.8	mg/Kg			
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	3/20/07	Metals	Cobalt	3.1	mg/Kg			
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	3/20/07	Metals	Copper	1	mg/Kg	J		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	3/20/07	Metals	Iron	4300	mg/Kg			
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	3/20/07	Metals	Lead	3.3	mg/Kg	B		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	3/20/07	Metals	Magnesium	600	mg/Kg			
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	3/20/07	Metals	Manganese	63	mg/Kg			
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	3/20/07	Metals	Nickel	7.9	mg/Kg			
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	3/20/07	Metals	Potassium	190	mg/Kg			
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	3/20/07	Metals	Vanadium	4.7	mg/Kg			
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	3/20/07	Metals	Zinc	12	mg/Kg			

URS

Qualifier Definition Table

Sauget Area 2
Groundwater Migration Control System
STL Data Qualifier Definitions

Qualifier	Definition	Notes
*	LCS, LCSD, MS, MSD or Surrogate exceeds the control limits	
A	Tentatively identified compound (TIC) is a suspected aldol condensation product.	Only present in SA-O-1-SB-3 (SDG G5E070192) for 1,2,3,4,7,8-HxCDD.
B	Compound is found in the associated method blanks.	
CON	Confirmation Analysis	
D	Concentrations identified from analysis of the sample at a secondary dilution.	
E	Compounds whose concentrations exceed the upper calibration range of the instrument for that analysis.	
J	Estimated value – result reported is less than the reporting limit but greater than the instrument detection limit.	
P	Greater than 25% (40% for CLP) difference for detected concentrations between the two GC columns.	
U	Compounds analyzed for but not detected at a concentration above the reporting limit.	
Inorganic Chemicals		
B	Compound is found in the associated method blank.	
J	Estimated value – result reported is less than the reporting limit but greater than the instrument detection limit.	
S	Indicates that the Method of Standard Additions (MSA) determined the reported value.	
U	Compounds analyzed for but not detected at a concentration above the reporting limit.	
JA	Compound tentatively identified, using theoretical ratios.	

Data Validation Report

Groundwater Migration Control System Surface Water and Sediment Sampling Event - September 2007

Sauget Area 2

November 29, 2007

DRAFT

URS

November 29, 2007

Ms. Lisa Carraway
Solutia Inc.
575 Maryville Centre Drive
St. Louis, Missouri 63141

Re: Data Validation Report Groundwater Migration Control System Surface Water and Sediment Sampling Event - September 2007 Sauget, Illinois URS Project No. 21561391

Dear Lisa:

URS is pleased to present this Data Validation Report for surface water and sediment sampling, conducted as part of the Groundwater Migration Control System Performance Verification Sampling Program. This report provides:

1. A brief summary of field activities
2. A figure showing the sampling locations
3. Detection Tables
4. Sample summary lists
5. Data validation checklists
6. Data tables
7. Qualifier definition tables.

SCOPE OF WORK

The surface water and sediment sampling field activities were conducted on September 17 and 18, 2007 in accordance with the Surface Water and Sediment Performance Verification Sampling Plan dated January 31, 2003. During the sampling event, surface water and sediment samples were collected from a total of five locations immediately adjacent to Site R, stations PDA-2,3,4,5 and 9 as defined in the Menzie Curra sampling effort in 2000.

1001 Highland Plaza Drive West, Suite 300
St. Louis, MO 63110
Phone: 314.429.0100
Fax: 314.429.0462

Surface Water Monitoring

Surface water samples were collected at the sediment-water interface (within one foot of the bottom) at all stations. Because of the volumes required and sampling limitations due to the fast currents, a peristaltic pump system was utilized using decontaminated tubing at each sample location.

Surface water samples were submitted to the laboratory unfiltered and analyzed for VOCs, SVOCs, pesticides, herbicides and metals; and one trip blank was submitted and analyzed for VOCs. VOC samples were collected by directly filling 3-40 mL VOA vials from the peristaltic pump tubing to minimize VOC and preservative loss. Samples for metals analysis were filtered and preserved at the laboratory and an additional sample was collected and submitted to the laboratory for trace metals analysis at each sample location. In addition, field measurements were recorded for temperature, pH dissolved oxygen and conductivity.

Surface water samples were appropriately labeled with the sample location, requested analysis, preservative, date and time sampled and sampler's initials. Samples were maintained at 4°C ± 2°C with ice and shipped in coolers to Severn Trent Laboratory (STL) in Savannah, Georgia. The chain-of-custody (COC) documentation was shipped with the samples to the laboratory.

Sediment Sampling

Sediment samples were collected using a Ponar Dredge sampler from the upper few inches (5 to 6 cm) at each sample location. This depth interval was selected as the zone most relevant to exposures for ecological receptors. Sediment samples were analyzed for VOCs, SVOCs, pesticides, herbicides, and metals; and a matrix spike/matrix spike duplicate (MS/MSD) sample was analyzed for SVOCs, pesticides, herbicides, and metals.

VOC samples were collected from the first grab using a 5 mL modified syringe/plunger. The plunger tube was inserted into the sediment below the surface and removed slowly to prevent sample loss. The plunger was then used to extrude the sample into pre-weighed sample vials. One sample vial contained sodium bisulfate preservative for low-level analysis and the other vial contained methanol for high-level analysis. Sediment samples for all other parameters were

collected from a composite of the upper few inches of sediment from additional grab samples at each sample location. Sediment was removed from

the sampler and homogenized in a stainless steel bowl using a stainless steel spoon. Once the sediment was homogenized, sample containers were filled using the stainless steel spoon. All sampling equipment was decontaminated before moving to the next sample location.

Sediment samples were appropriately labeled with the sample location, requested analysis, preservative, date and time sampled and sampler's initials. Samples were maintained at 4°C ± 2°C with ice and shipped to Severn Trent Laboratory (STL) in Savannah, Georgia. The chain-of-custody documentation was shipped with the samples to the laboratory.

Should you have any questions or comments regarding this Data Validation Report, please do not hesitate to contact me at 314.429.0100

Very truly yours,

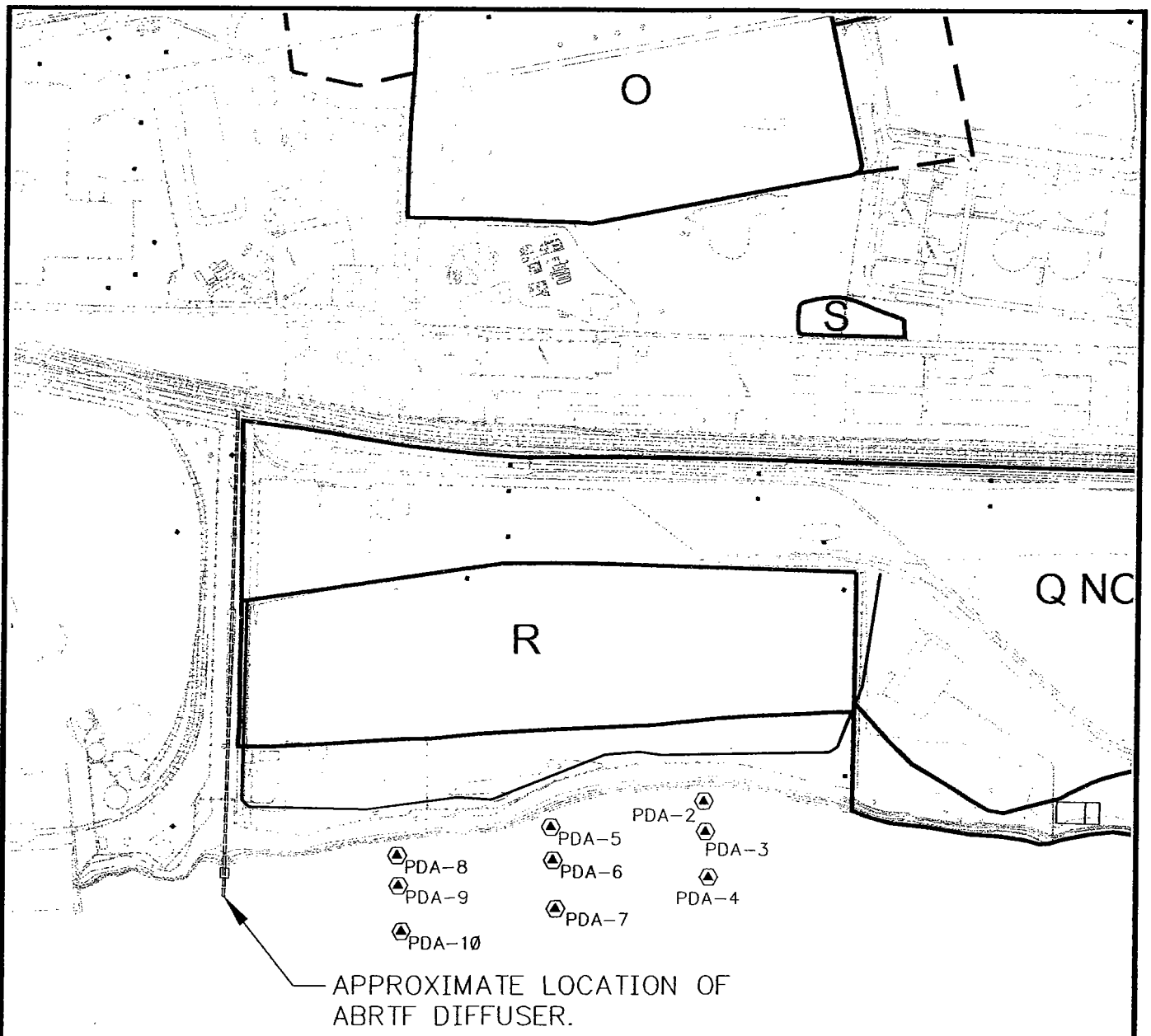
Robert Veenstra
Vice President

Enclosure

RBV/mlr

URS

Figure



LEGEND

⊙ SURFACE WATER/SEDIMENT SAMPLE LOCATION (BARRIER WALL UAO)

⊛ SURFACE WATER/SEDIMENT SAMPLE LOCATION (2000 MENZIE CURRA)

N E S W

0 500

SCALE FEET

SAUGET AREA 2 GROUNDWATER MIGRATION CONTROL SYSTEM SAUGET, ILLINOIS	PROJECT NO. 21561391
URS	
DRN. BY:djd 6/15/07 DSGN. BY:ss CHKD. BY:	Surface Water & Sediment Sampling Locations September 2007
FIG. NO. 1	

File: P:\ENVIRONMENTAL\21561510 (SA2)\VALIDATION\SW & SED (SEPTEMBER 2006)\FIG 1 SURFACE WATER & SEDIMENT SAMPLING LOCATIONS (SEPT 06).DWG Last edited: 11/28/07 @ 10:00 a.m. WC-ST.LOUIS, MO

URS

Detection Tables

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Detections
September 2007

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	VOCs	Carbon Dioxide	2300	ug/Kg	B J N	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	VOCs	Carbon Disulfide	0.55	ug/Kg	J	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	VOCs	Chlorobenzene	12	ug/Kg		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	VOCs	Toluene	0.75	ug/Kg	J	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Metals	Aluminum	1400	mg/Kg		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Metals	Arsenic	1.6	mg/Kg		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Metals	Barium	21	mg/Kg		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Metals	Beryllium	0.088	mg/Kg	J	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Metals	Calcium	2100	mg/Kg		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Metals	Chromium	3.8	mg/Kg		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Metals	Cobalt	3	mg/Kg		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Metals	Copper	2.4	mg/Kg		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Metals	Iron	4300	mg/Kg		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Metals	Lead	5.3	mg/Kg	B	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Metals	Magnesium	950	mg/Kg		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Metals	Manganese	72	mg/Kg		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Metals	Nickel	7.2	mg/Kg		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Metals	Potassium	220	mg/Kg		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Metals	Silver	0.073	mg/Kg	J B	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Metals	Sodium	120	mg/Kg		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Metals	Vanadium	5.5	mg/Kg		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Metals	Zinc	59	mg/Kg		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	VOCs	Chlorobenzene	0.79	ug/Kg	J	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Metals	Aluminum	710	mg/Kg		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Metals	Arsenic	0.59	mg/Kg	J	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Metals	Barium	11	mg/Kg		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Metals	Calcium	710	mg/Kg		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Metals	Chromium	1.8	mg/Kg		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Metals	Cobalt	1.3	mg/Kg		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Metals	Copper	0.53	mg/Kg	J	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Metals	Iron	2600	mg/Kg		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Metals	Lead	2.2	mg/Kg	B	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Metals	Magnesium	320	mg/Kg		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Metals	Manganese	46	mg/Kg		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Metals	Nickel	2.9	mg/Kg	J	

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Detections
September 2007

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Metals	Potassium	150	mg/Kg		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Metals	Sodium	95	mg/Kg	J	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Metals	Thallium	0.5	mg/Kg	J	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Metals	Vanadium	5	mg/Kg		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Metals	Zinc	5.9	mg/Kg		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	VOCs	Chlorobenzene	0.96	ug/Kg	J	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	VOCs	Tetrachloroethene	1.4	ug/Kg	J	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Metals	Aluminum	1300	mg/Kg		J
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Metals	Arsenic	3.2	mg/Kg		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Metals	Barium	24	mg/Kg		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Metals	Beryllium	0.11	mg/Kg	J	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Metals	Cadmium	0.12	mg/Kg	J	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Metals	Calcium	3200	mg/Kg		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Metals	Chromium	6.7	mg/Kg		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Metals	Cobalt	3.2	mg/Kg		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Metals	Copper	1.9	mg/Kg		J
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Metals	Iron	7700	mg/Kg		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Metals	Lead	140	mg/Kg	B	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Metals	Magnesium	1400	mg/Kg		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Metals	Manganese	88	mg/Kg		J
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Metals	Nickel	9	mg/Kg		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Metals	Potassium	170	mg/Kg		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Metals	Sodium	130	mg/Kg		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Metals	Vanadium	12	mg/Kg		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Metals	Zinc	68	mg/Kg		J
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	VOCs	Carbon Dioxide	460	ug/Kg	B J N	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	VOCs	Carbon Disulfide	0.44	ug/Kg	J	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Metals	Aluminum	1000	mg/Kg		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Metals	Arsenic	1.1	mg/Kg		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Metals	Barium	15	mg/Kg		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Metals	Beryllium	0.077	mg/Kg	J	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Metals	Calcium	1100	mg/Kg		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Metals	Chromium	4.9	mg/Kg		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Metals	Cobalt	2.2	mg/Kg		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Metals	Copper	0.67	mg/Kg	J	

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Detections
September 2007

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Metals	Iron	3900	mg/Kg		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Metals	Lead	2.5	mg/Kg	B	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Metals	Magnesium	530	mg/Kg		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Metals	Manganese	59	mg/Kg		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Metals	Nickel	5.5	mg/Kg		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Metals	Potassium	160	mg/Kg		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Metals	Sodium	96	mg/Kg	J	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Metals	Vanadium	5.5	mg/Kg		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Metals	Zinc	8.3	mg/Kg		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Herbicid	Dichlorprop	3.5	ug/Kg	J	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Metals	Aluminum	1200	mg/Kg		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Metals	Arsenic	0.9	mg/Kg	J	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Metals	Barium	23	mg/Kg		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Metals	Beryllium	0.11	mg/Kg	J	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Metals	Calcium	2100	mg/Kg		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Metals	Chromium	3	mg/Kg		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Metals	Cobalt	1.9	mg/Kg		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Metals	Copper	0.69	mg/Kg	J	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Metals	Iron	3500	mg/Kg		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Metals	Lead	2.1	mg/Kg	B	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Metals	Magnesium	730	mg/Kg		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Metals	Manganese	64	mg/Kg		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Metals	Nickel	4.8	mg/Kg		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Metals	Potassium	180	mg/Kg		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Metals	Sodium	96	mg/Kg	J	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Metals	Vanadium	4.1	mg/Kg		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Metals	Zinc	8	mg/Kg		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Detections
September 2007

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	VOCs	Carbon Dioxide	76	ug/L	B J N	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	VOCs	Chlorobenzene	1	ug/L		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	VOCs	Toluene	0.32	ug/L	J	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	VOCs	Carbon Dioxide	80	ug/L	B J N	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	VOCs	Carbon Disulfide	0.35	ug/L	J	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Metals	Barium (Dissolved)	0.073	mg/L		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Metals	Calcium (Dissolved)	64	mg/L		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Metals	Magnesium (Dissolved)	24	mg/L		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Metals	Nickel (Dissolved)	0.0027	mg/L	J	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Metals	Potassium (Dissolved)	5	mg/L		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Metals	Sodium (Dissolved)	28	mg/L		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Metals	Vanadium (Dissolved)	0.003	mg/L	J	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	VOCs	Carbon Dioxide	91	ug/L	B J N	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Metals	Antimony (Dissolved)	0.006	mg/L	J	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Metals	Barium (Dissolved)	0.072	mg/L		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Metals	Calcium (Dissolved)	63	mg/L		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Metals	Magnesium (Dissolved)	24	mg/L		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Metals	Potassium (Dissolved)	5	mg/L		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Metals	Sodium (Dissolved)	27	mg/L		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Metals	Vanadium (Dissolved)	0.0029	mg/L	J	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	VOCs	Carbon Dioxide	110	ug/L	B J N	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	Metals	Barium (Dissolved)	0.073	mg/L		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	Metals	Calcium (Dissolved)	63	mg/L		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	Metals	Magnesium (Dissolved)	24	mg/L		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	Metals	Potassium (Dissolved)	4.9	mg/L		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	Metals	Sodium (Dissolved)	27	mg/L		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	Metals	Vanadium (Dissolved)	0.003	mg/L	J	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	VOCs	Carbon Dioxide	80	ug/L	J B N	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	VOCs	Toluene	1.6	ug/L		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Metals	Aluminum (Dissolved)	0.06	mg/L	J	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Metals	Barium (Dissolved)	0.07	mg/L		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Metals	Calcium (Dissolved)	62	mg/L		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Metals	Magnesium (Dissolved)	23	mg/L		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Metals	Potassium (Dissolved)	4.9	mg/L		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Metals	Sodium (Dissolved)	28	mg/L		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Metals	Vanadium (Dissolved)	0.0033	mg/L	J	

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Detections
September 2007

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	VOCs	Carbon Dioxide	79	ug/L	J B N	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	VOCs	Toluene	0.88	ug/L	J	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Metals	Aluminum (Dissolved)	0.049	mg/L	J	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Metals	Arsenic (Dissolved)	0.0031	mg/L	J	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Metals	Barium (Dissolved)	0.072	mg/L		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Metals	Calcium (Dissolved)	62	mg/L		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Metals	Magnesium (Dissolved)	23	mg/L		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Metals	Potassium (Dissolved)	4.9	mg/L		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Metals	Sodium (Dissolved)	25	mg/L		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Metals	Vanadium (Dissolved)	0.0028	mg/L	J	

URS

Sample Summary List

Sauget Area 2
Groundwater Migration Control System
SAS054 and SAS055 Sample Summary List
September 2007

SDG	Sample ID	Sample Date	VOCs	SVOCs	PCBs	Pesticides	Herbicides	Dioxins	Metals	Other
SAS054	SW-SA2-GMCS-STATION 2	9/18/06	X	X		X	X			
SAS054	SW-SA2-GMCS-STATION 3	9/18/06	X	X		X	X		X	
SAS054	SW-SA2-GMCS-STATION 4	9/18/06	X	X		X	X		X	
SAS054	SW-SA2-GMCS-STATION 5	9/18/06	X	X		X	X		X	
SAS054	SW-SA2-GMCS-STATION 9	9/17/06	X	X		X	X		X	
SAS055	SED-SA2-GMCS-STATION 3	9/18/06	X	X		X	X		X	
SAS055	SED-SA2-GMCS-STATION 4	9/18/06	X	X		X	X		X	
SAS055	SED-SA2-GMCS-STATION 5	9/18/06	X	X		X	X		X	
SAS055	SED-SA2-GMCS-STATION 9	9/17/06	X	X		X	X		X	

URS

Checklists

DATA VALIDATION WORKSHEET
VOLATILE ORGANIC ANALYSIS

Reviewer: Tony Sedlacek
Date: 11/10/2007
Laboratory Severn Trent Laboratory - Savannah

Project Name: Sauget - Area 2 Site R GMCS
Project Number: 21561391.00000
SDG No.: SAS054
Review Level: Level III

Major Anomolies:

No samples were rejected

Minor Anomolies:

No analytes required qualification based on this data review.

Field IDs:

SW-SA2-GMCS-9	SW-SA2-GMCS-STATION 4	SW-SA2-GMCS-STATION 2 EB
SW-SA2-GMCS-9 DUP	SW-SA2-GMCS-STATION 3	SED-SA2-GMCS-STATION 2 EB
TRIP BLANK 091707	SW-SA2-GMCS-STATION 2	
SW-SA2-GMCS-STATION 5	TRIP BLANK 091807	

1.0 Chain of Custody/Sample Condition

		Yes	No	NA
1.1	Do Chain-of-Custody forms list all samples analyzed?			
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was maintained?			
1.3	Do the Traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data?	x		

Note: The laboratory case narrative indicated that sulfur dioxide was identified as a tentatively identified compound (TIC) at high concentrations in the investigative samples at a retention time of 1.29 minutes and MS/MSD samples. When sulfur dioxide was present at high concentrations the peak spanned the retention times of chloroethane and chloromethane, which inhibited accurate quantitation of these compounds. Therefore, professional judgment was used to qualifiy chloroethane and chloromethane in the samples summarized in the table below. Additionally, carbon disulfide was detected in the method blank, chloroethane and chloromethane were not recovered in the MS/MSD due to sulfur dioxide interference and the LCS recovery for bromomethane was outside evaluation criteria. The cooler receipt did not indicate any problems.

SW-SA2-GMCS-9	Chloromethane	680-86856	UJ
SW-SA2-GMCS-9	Chloroethane	680-86856	UJ
SW-SA2-GMCS-9 DUP	Chloromethane	680-86856	UJ
SW-SA2-GMCS-9 DUP	Chloroethane	680-86856	UJ
SW-SA2-GMCS-STATION 5	Chloromethane	680-87020	UJ
SW-SA2-GMCS-STATION 5	Chloroethane	680-87020	UJ
SW-SA2-GMCS-STATION 4	Chloromethane	680-87020	UJ
SW-SA2-GMCS-STATION 4	Chloroethane	680-87020	UJ
SW-SA2-GMCS-STATION 3	Chloromethane	680-87020	UJ
SW-SA2-GMCS-STATION 3	Chloroethane	680-87020	UJ
SW-SA2-GMCS-STATION 2	Chloromethane	680-87020	UJ
SW-SA2-GMCS-STATION 2	Chloroethane	680-87020	UJ

2.0 Holding Time/ Preservation (Code H)

		Yes	No	NA
2.1	Do sample preservation, collection and storage condition meet method requirement?			
	If sample preservation and/or temperature was inappropriate (i.e., <2° >6°C, etc.), comment in report. If unpreserved or temperature is outside the range 0° (but not frozen) to 10° flag all positive results with a "J" and all non-detects "UJ". If temperature exceeds 10°, flag positive detections "J" and non-detects "R".			
2.2	Have any technical holding times, determined from sampling to date of analysis, been exceeded? If yes, J(+)/UJ(-).			
	Matrix / Preserved / Aromatic / All others			
	Aqueous / No / 7 days / 14 days			
	Yes / 14 days / 14 days			
	Soil/Sediment / 4 °C ± 2 °C / 14 days / 14 days			
2.3	Have any technical holding times been grossly (twice the holding time) exceeded? If yes, J(+)/R(-).			

Note: All holding time criteria were met.

3.0 GC/MS Instrument Performance Check (Code T)

		Yes	No	NA
3.1	Are GC/MS Tuning and Mass Calibration forms present for bromofluorobenzene (BFB)?			x
3.2	Have all samples been analyzed within twelve hours of the BFB tune? If no, flag R.			x
3.3	Have ion abundance criteria for BFB been met for each instrument used? If no, flag R.			x

Note:

4.0 Blanks (Method Blanks, Field Blanks and Trip Blanks)

(Code X - Field Blank Contamination, Code Y - Trip blank contamination, Code Z - Method blank contamination)

		Yes	No	NA
4.1	Is a Method Blank Summary form present for each batch?			
4.2	Do any method blanks have positive VOA results (TCL and/or TIC)?	x		
4.3	Do any field/trip rinse/equipment blanks have positive VOA results (TCL and/or TIC)?			
	Action: Positive sample results <5X (or 10X for common volatile lab contaminants- methylene chloride, acetone, and 2-butanone) the blank concentration should be qualified "U". The result should be elevated to the RL for estimate (laboratory "J" flagged) concentrations.			
4.4	If Level IV, review raw data and verify all detections for blanks were reported.			x

Note: The compound carbon disulfide (0.40 µg/L) was detected in method blank 680-86856. Carbon disulfide was nondetect in all associated samples; therefore, no qualification of data was required.

5.0 GC/MS Initial Calibration (Code C)

		Yes	No	NA
5.1	Are Initial Calibration summary forms present and complete for each instrument used?			x
5.2	Are CCCs linear applying either %RSD < 30% and all other compounds <15% or >0.990?			x
	If not, J(+)/ UJ(-). In extreme cases, the reviewer may flag non-detects "R".			
5.3	Do any SPCC compounds have an RRF less than specification or any other compounds < 0.05 (use 0.01 for poor responders like ketones or alcohols)? If yes, J(+)/R(-).			x
5.4	Is the lowest standard at the same concentration, or lower, as the RL reported? If not, elevate RL.			x
5.5	If Level IV, recalculate a sample of RRFs and %RSDs to verify correct calculations are being made.			x

Note:

6.0 Continuing Calibration (Code C)

		Yes	No	NA
6.1	Are Continuing Calibration Summary forms present and complete?			x
6.2	Has a continuing calibration standard been analyzed every 12 hours?			x
6.3	Have all SPCCs and CCCs met method specifications? If not, comment in report, proceed to 6.4.			x
6.4	Do any compounds have a % difference (or % drift for quantitation from a curve) (%D) between initial and continuing calibration RRF outside QC limits (%D < 20%)?			x
	If yes, a marginal increase in response >20% then J(+) only; a decrease in response then J(+)/ UJ(-). For %D > 50%, flag R.			
6.5	Do any compounds have an RRF < 0.05 (use 0.01 for poor responders)? If yes, J(+)/R(-).			x
6.6	If Level IV, calculate a sample of RFs and %Ds from ave RF to verify correct calculations.			x

Note:

7.0 Surrogate Recovery (Code S)

		Yes	No	NA
7.1	Are all samples listed on the appropriate Surrogate Recovery Summary Form ?			
7.2	Are surrogate recoveries within acceptance criteria specified in the QAPP for all samples?			
7.3	If No in Section 7.2, were these sample(s) or method blank(s) reanalyzed?			x
7.4	If No in Section 7.3, is any sample dilution factor greater than 10? (Surrogate recoveries may be diluted out.)			x
	Note: If SMC recoveries do not meet acceptance criteria in samples chosen for the MS/MSD or diluted			
	> UCL / 10% to LCL / < 10%			
	Positive: J / J / J			
	Non-detect: None / UJ / R			

Note: All surrogate recoveries were within evaluation criteria.

8.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD) or one MS with a Sample Duplicate (Recovery - Code M, RPD - Code D)

		Yes	No	NA
8.1	Is a Matrix Spike/Matrix Spike Duplicate recovery form present?			
8.2	Are MS/MSDs analyzed at the required frequency of one matrix spike per ten samples and a duplicate per twenty for each matrix?			
8.3	Are all MS/MSD %Rs and RPDs within acceptance criteria Specified in the QAPP?		x	
	Using informed professional judgment, the data reviewer should use the MS and MSD results in conjunction with other QC criteria and determine the need for qualification of the data for samples *from the same site/matrix*. Recoveries <10% may require rejection. RPD failures may be flagged "J" (+ only)			

Note: Sample SW-SA2-GMCS-STATION 5 was spiked and analyzed for VOCs. Chloromethane (0%) and chloroethane (0%) were not recovered due to matrix interference from sulfur dioxide. The sulfur dioxide peak in the chromatogram did not allow chloromethane and chloroethane to be quantitated. No qualification of data was required.

9.0 Laboratory Control Sample (LCS/LCSD) (Recovery - Code L, RPD - Code E)

		Yes	No	NA
9.1	Is an LCS recovery form present?			
9.2	Is an LCS analyzed at the required frequency of one per twenty field samples for each matrix?			
9.3	Are all LCS %Rs and RPDs within acceptance criteria specified in the QAPP?			
9.4	If Level IV, verify the % recoveries are calculated correctly.			x
	Action for specific compound outside the acceptance criteria: %R>UCL, J(+) only; <LCL, J(+)/UJ(-); <30% J(+)/R(-). RPD failures should be flagged "J" (+ only)			

Note: The LCS recovery for bromomethane (192%) was above evaluation criteria (12-184%) indicating a high bias. Bromomethane was nondetect in all associated samples; therefore, no qualification of data was required.

10.0 Internal Standards (Code I)

		Yes	No	NA
10.1	Are internal standard areas for every sample and blank within upper and lower QC limits?			
	Area > +100% / Area < -50% / Area < -10%			
	Positive: J / J / J			
	Non-detect: None / UJ / R			
Note:	calibration, not sample to continuing calibration. Thus, if all other QC specifications are met for a given sample, using informed professional judgment, the reviewer may choose not to flag individual samples in this case.			
10.2	Are retention times of internal standards within 30 seconds of the associated calibration standard?			
	Action: The chromatogram must be examined to determine if any false positives or negatives exist. For shift of a large magnitude, the reviewer may consider partial or total rejection of the data for non-detects in that sample/fraction.			

Note: Internal standard area counts and retention times were within evaluation criteria.

11.0 TCL Identification (Code W)

		Yes	No	NA
11.1	Is the relative retention time (RRT) of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration?			x
11.2	Are the three ions of greatest intensity present in the standard mass spectrum also present in the sample mass spectrum; and do sample and standard relative ion intensities agree within 30%?			x

Note:

12.0 TCL/TIC Quantitation and Reported Detection limits (Code K)

		Yes	No	NA
12.1	Are RLs used consistent with those specified in the QAPP?			x
12.2	Are these limits adjusted to reflect dilutions and/ or percent solids as required?			x
12.3	Are TIC ions greater than ten percent in the reference spectrum also present in the sample spectrum?			x
12.4	Are any positives reported that exceed the linear range of the instrument? If yes, than flag "J".			x
12.5	If Level IV, calculate a sample of positive results to verify correct calculations			x

Note:

13.0 Field Duplicate Samples (Code F)

		Yes	No	NA
13.1	Were any field duplicates submitted for VOC analysis?			
13.2	Were all RPD or absolute difference values within the control limits outlined in the QAPP?			
	Action: No qualifying action is taken based on field duplicate results, however the data validator should provide a qualitative assessment in the data validation report.			

Note: Sample SW-SA2-GMCA-9 DUP was a duplicate of sample SW-SA2-GMCS-9 and was analyzed for VOCs.

14.0 Data Completeness

			Yes	No	NA
14.1	Is % completeness within the control limits? (Control limit: Check QAPP or use 95% for aqueous				
14.2	Number of samples:	6			
14.3	Number of target compounds in each analysis:	35			
14.4	Number of results rejected and not reported:	0			
	% Completeness = 100 x ((14.1 * 14.2) - 14.3) / (14.1 * 14.2)				
	% Completeness	**100**			

Note:

DATA VALIDATION WORKSHEET
SEMIVOLATILE ORGANIC ANALYSIS

Reviewer: Tony Sedlacek
Date: 11/10/2007
Laboratory Severn Trent Laboratory - Savannah

Project Name: Sauget - Area 2 Site R GMCS
Project Number: 21561391.00000
SDG No.: SAS054
Review Level: Level III

Major Anomolies:

No samples were rejected

Minor Anomolies:

No analytes required qualification based on this data review.

Field IDs:

SW-SA2-GMCS-9	SW-SA2-GMCS-STATION 4	SW-SA2-GMCS-STATION 2 EB
SW-SA2-GMCS-9 DUP	SW-SA2-GMCS-STATION 3	SED-SA2-GMCS-STATION 2 EB
SW-SA2-GMCS-STATION 5	SW-SA2-GMCS-STATION 2	

1.0 Chain of Custody/Sample Condition

		Yes	No	NA
1.1	Do Chain-of-Custody forms list all samples analyzed?	X		
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was maintained?	X		
1.3	Do the Traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data?	x		

Note: The laboratory case narrative indicated that LCS recoveries were outside evaluation criteria. The cooler receipt form did not indicate any problems.

2.0 Holding Time/ Preservation (Code H)

		Yes	No	NA
2.1	Do sample preservation, collection and storage condition meet method requirement?	X		
	If samples were not on ice or the ice was melted upon arrival at the laboratory and the temperature of the cooler was elevated (> 10 ^{o}C), then flag all positive results with a "J" and all non-detects "UJ".			
2.2	Have any technical holding times, determined from sampling to date of analysis, been exceeded? (See attached		X	
	Extraction: Soil/Sediment 14 days - aqueous 7 days Analysis: 40 days			
2.3	Have any technical holding times grossly (twice the holding time) been exceeded? If yes, J(+)/R(-).		X	

Note: All holding times criteria were met.

3.0 GC/MS Instrument Performance Check (Code T)

		Yes	No	NA
3.1	Are GC/MS Tuning and Mass Calibration forms present for DFTPP?			x
3.2	Have all samples been analyzed within twelve hours of the tune?			x
	If no, the data for the affected standards, blanks, field samples or QC samples are rejected "R".			
3.3	Have ion abundance criteria for DFTPP been met for each instrument used?			x
	If no, all standards, blanks, field samples and QC samples are rejected "R".			

Note:

4.0 Blanks (Method Blanks and Field Blanks)(Code X - Field Blank Contamination, Code Z - Method blank contamination)

		Yes	No	NA
4.1	Is a Method Blank Summary form present for each batch?			
4.2	Do any method/instrument/reagent blanks have positive results (TCL, and/or TIC)?			
4.3	Do any field equipment blanks have positive results (TCL, and/or TIC)?			
	Action: Positive sample results <5X (or 10X for phthalate contaminants) the blank concentration should be qualified "U" and the detection limit elevated to the RL for estimate concentrations.			
4.4	If Level IV, review raw data and verify all detections for blanks were reported.			x

Note: All blank criteria were met.

5.0 GC/MS Initial Calibration (Code C)

		Yes	No	NA
5.1	Are Initial Calibration summary forms present and complete for each instrument used?			x
5.2	Are CCCs linear applying either %RSD 30% and all other compounds <15% or >0.990?			x
	If not, J(+)/ UJ(-). In extreme cases, the reviewer may flag non-detects "R".			x
5.3	Do any SPCC compounds have an RRF les than specification or any other compounds < 0.05 (use 0.01 for poor responders like amines and phenols)? If yes, J(+)/R(-).			x
5.4	Is the lowest standard at the same concentration, or lower, as the RL reported? If not, elevate RL.			x
5.5	If Level IV, recalculate a sample of RRFs and %RSDs to verify correct calculations are being made.			x

Note:

6.0 Continuing Calibration (Code C)

		Yes	No	NA
6.1	Are Continuing Calibration Summary forms present and complete?			x
6.2	Has a continuing calibration standard been analyzed every 12 hours?			x
6.3	Have all SPCCs and CCCs met method specifications? If not, comment in report, proceed to 6.4.			x
6.4	Do any compounds have a % difference (or % drift for quantitation from a curve) (%D) between initial and continuing calibration RRF outside QC limits (%D < 20%)?			x
	If yes, a marginal increase in response >20% then J(+) only; a decrease in response then J(+)/ UJ(-). For %D > 50%, flag R.			
6.5	Do any compounds have an RRF < 0.05 (use 0.01 for poor responders)? If yes, J(+)/R(-).			x
6.6	If Level IV, calculate a sample of RFs and %Ds from ave RF to verify correct calculations.			x

Note:

7.0 Surrogate Recovery (Code S)

		Yes	No	NA
7.1	Are all samples listed on the appropriate Surrogate Recovery Summary Form ?	X		
7.2	Are surrogate recoveries within acceptance criteria specified in the QAPP for all samples and method blanks?	X		
7.3	Are more than one of either fraction outside the acceptance criteria?		X	
7.4	If Yes in Section 7.3, are these sample(s) or method blank(s) reanalyzed?			x
7.5	If Yes in Section 7.3, is any sample dilution factor greater than 10?			x
	Note: If SMC recoveries display unacceptable recoveries in the MS and/ or diluted samples, then no reanalysis is required and acids and base/ neutrals are assessed separately.			
	> UCL 10% to LCL < 10%			
	Positive J J J			
	Non-detect None UJ R			

Note: All surrogate recoveries were within evaluation criteria.

8.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD) or one MS with a Sample Duplicate (Recovery - Code M, RPD - Code D)

		Yes	No	NA
8.1	Is a Matrix Spike/Matrix Spike Duplicate recovery form present?	X		
8.2	Are MS/MSDs analyzed at the required frequency not to exceed twenty field samples for each matrix?	X		
8.3	Are all MS/MSD %Rs and RPDs within acceptance criteria provided by the laboratory?	X		
	Using informed professional judgment, the data reviewer should use the MS and MSD results in conjunction with other QC criteria and determine the need for qualification of the data for samples *from the same site/matrix*. Recoveries <10% may require rejection. RPD failures may be flagged "J" (+ only)			

Note: Sample SW-SA2-GMCS-STATION 5 was spiked and analyzed for SVOCs. All MS/MSD recoveries were within evaluation criteria.

9.0 Laboratory Control Sample (LCS/LCSD) (Recovery - Code L, RPD - Code E)

		Yes	No	NA
9.1	Is an LCS recovery form present?	X		
9.2	Is LCS analyzed at the required frequency for each matrix?	X		
9.3	Are all LCS %Rs (and RPDs) within acceptance criteria?	X		
	Action for specific compound outside the acceptance criteria: %R>UCL, J(+) only; <LCL, J(+)/UJ(-); <30% J(+)/R(-). RPD failures should be flagged "J" (+ only)			
9.4	If Level IV, verify the % recoveries are calculated correctly.			x

Note: The LCS recoveries for N-Nitrosodi-n-propylamine (113%) with criteria (45-112%) and 4-nitrophenol (134%) with criteria (30-122%) were above evaluation criteria, indicating a high bias. These compounds were nondetect in all associated samples; therefore, no qualification of data was required.

10.0 Internal Standards (Code I)

		Yes	No	NA
10.1	Are internal standard area of every sample and blank within upper and lower QC limits for each continuing	X		
	Area > +100% / Area < -50% / Area < -10%			
	Positive: J / J / J			
	Non-detect: None / UJ / R			
Note:	The method specification is for the continuing calibration to be compared to the mid-point initial calibration, not sample to continuing calibration. Thus, if all other QC specifications are met for a given sample, using informed professional judgment, the reviewer may choose not to flag individual samples in this case.			
10.2	Are retention times of internal standards within 30 seconds of the associated calibration standard?	X		
	Action: The chromatogram must be examined to determine if any false positives or negatives exist. For shift of a large magnitude, the reviewer may consider partial or total rejection of the data for non-detects in that sample/fraction.			

Note: Internal standard area counts and retention times were within evaluation criteria.

11.0 TCL Identification (Code W)

		Yes	No	NA
11.1	Is the relative retention time (RRT) of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration?			x
11.2	Are the three ions of greatest intensity present in the standard mass spectrum also present in the sample mass spectrum; and do sample and standard relative ion intensities agree within 30%?			x

Note:

12.0 TCL/TIC Quantitation and Reported Detection limits (Code K)

		Yes	No	NA
12.1	Are RLs used consistent with those specified in the QAPP?			x
12.2	Are these limits adjusted to reflect dilutions and/ or percent solids as required?			x
12.3	Are TIC ions greater than ten percent in the reference spectrum also present in the sample spectrum?			x
12.4	Are any positives reported that exceed the linear range of the instrument? If yes, than flag "J".			x
12.5	If Level IV, calculate a sample of positive results to verify correct calculations			x

Note:

13.0 Field Duplicate Samples (Code F)

		Yes	No	NA
13.1	Were any field duplicates submitted for SVOC analysis?			
13.2	Were all RPD or absolute difference values within the control limits?			
	No action is taken based on field duplicate results, however the data validator should provide a qualitative assessment in the data validation report.			

Note: Sample SW-SA2-GMCA-9 DUP was a duplicate of sample SW-SA2-GMCS-9 and was analyzed for SVOCs.

14.0 Data Completeness

			Yes	No	NA
14.1	Is % completeness within the control limits? (Control limit: Check QAPP or use 95% for aqueous sample,				
14.2	Number of samples:	6			
14.3	Number of target compounds in each analysis:	65			
14.4	Number of results rejected and not reported:	0			
	% Completeness = 100 x ((14.1 x 14.2) - 14.3) / (14.1 x 14.2)				
	% Completeness	**100**			

Note:

DATA VALIDATION WORKSHEET
HERBICIDES ANALYSIS

Reviewer: Tony Sedlacek
Date: 11/10/2007
Laboratory Severn Trent Laboratory - Savannah

Project Name: Sauget - Area 2 Site R GMCS
Project Number: 21561391.00000
SDG No.: SAS054
Review Level: Level III

Major Anomolies:

No samples were rejected

Minor Anomolies:

No analytes required qualification based on this data review.

Field IDs:

SW-SA2-GMCS-9	SW-SA2-GMCS-STATION 4	SW-SA2-GMCS STATION 2 EB
SW-SA2-GMCS-9 DUP	SW-SA2-GMCS STATION 3	SED-SA2-GMCS STATION 2 EB
SW-SA2-GMCS-STATION 5	SW-SA2-GMCSSTATION 2	

1.0 Chain of Custody/Sample Condition

		Yes	No	NA
1.1	Do Chain-of-Custody forms list all samples analyzed?			
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was maintained?			
1.3	Do the Traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data?			

Note: The laboratory case narrative did not indicate any problems.

2.0 Holding Time/ Preservation (Code h)

		Yes	No	NA
2.1	Do sample preservation, collection and storage condition meet method requirement?			
	If samples were not on ice or the ice was melted upon arrival at the laboratory and the temperature of the cooler was elevated (> 10 ^{o}C), then flag all positive results with a "J" and all non-detects "UJ".			
2.2	Have any technical holding times, determined from sampling to date of analysis, been exceeded? (See attached Holding Time Table for sample holding time) If yes, J(+)/UJ(-).			
	Extraction: Soil/Sediment 14 days - aqueous 7 days Analysis: 40 days			
2.3	Have any technical holding times grossly (twice the holding time) been exceeded? If yes, J(+)/R(-).			

Note: All holding time criteria were met.

3.0 Blanks (Method Blanks and Field Blanks)(Code x - Field Blank Contamination, Code z - Method blank contamination)

		Yes	No	NA
3.1	Is a Method Blank Summary form present for each batch?			
3.2	Do any method blanks have positive results?			
3.3	Do any field/rinse/equipment blanks have positive results?			
	Action: Positive sample results <5X the blank concentration should be qualified "U". The result should be elevated to the RL for estimate (laboratory "J" flagged) concentrations.			
3.4	If Level IV, review raw data and verify all detections for blanks were reported.			x

Note: All blank criteria were met.

4.0 Initial Calibration (Code r)

		Yes	No	NA
4.1	Are Initial Calibration summary forms present and complete for each instrument used?			x
4.2	Are calibration factors stable (%RSD values < 20% or >0.995) over the concentration range of the instrument			x
	If not, J(+)/ UJ(-). In extreme cases, the reviewer may flag non-detects "R".			
4.3	If Level IV, recalculate a sample of RRFs and %RSDs to verify correct calculations are being made.			x

Note:

5.0 Continuing Calibration (Code c)

		Yes	No	NA
5.1	Are Continuing Calibration Summary forms present and complete?			x
5.2	Has a continuing calibration standard been analyzed every 12 hours?			x
5.3	Do any compounds have a % difference (or % drift for quantitation from a curve) (%D) between initial and continuing calibration CF outside QC limits (%D < 20%)?			x
	If yes, a marginal increase in response >20% then J(+) only; a decrease in response then J(+)/ UJ(-). For %D > 50%, flag R.			
5.5	If Level IV, calculate a sample of CFs and %Ds from ave CF to verify correct calculations.			x

Note:

6.0 Surrogate Recovery (Code s)

		Yes	No	NA
6.1	Are all samples listed on the appropriate Surrogate Recovery Summary Form ?			
6.2	Are surrogate recoveries within acceptance criteria specified in the QAPP for all samples?			
6.3	If No in Section 6.2, were these sample(s) or method blank(s) reanalyzed?			x
6.4	If No in Section 6.3, is any sample dilution factor greater than 10? (Surrogate recoveries may be diluted out.)			x
	> UCL / 10% to LCL / < 10%			
	Positive: J / J / J			
	Non-detect: None / UJ / R			

Note: All surrogate recoveries were within evaluation criteria.

7.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD) or one MS with a Sample Duplicate (Code m - recovery, Code d - RPD)

		Yes	No	NA
7.1	Is a Matrix Spike/Matrix Spike Duplicate recovery form present?			
7.2	Are MS/MSDs analyzed at the required frequency of one matrix spike per ten samples and a duplicate per twenty for each matrix?			
7.3	Are all MS/MSD %Rs and RPDs within acceptance criteria Specified in the QAPP?			
	Using informed professional judgment, the data reviewer should use the MS and MSD results in conjunction with other QC criteria and determine the need for qualification of the data for samples *from the same site/matrix*. Recoveries <10% may require rejection. RPD failures may be flagged "J" (+ only)			

Note: Sample SW-SA2-GMCS-STATION 5 was spiked and analyzed for herbicides. All MS/MSD recoveries were within evaluation criteria.

8.0 Laboratory Control Sample (LCS/LCSD) (Code l - LCS recovery Code e - RPD)

		Yes	No	NA
8.1	Is an LCS recovery form present?			
8.2	Is an LCS analyzed at the required frequency of one per twenty field samples for each matrix?			
8.3	Are all LCS %Rs and RPDs within acceptance criteria specified in the QAPP?			
8.4	If Level IV, verify the % recoveries are calculated correctly.			x
	Action for specific compound outside the acceptance criteria: %R>UCL, J(+) only; <LCL, J(+)/UJ(-); <30% J(+)/R(-). RPD failures should be flagged "J" (+ only)			

Note: All LCS recoveries were within evaluation criteria.

9.0 TCL Identification (Code w)

		Yes	No	NA
9.1	Is the relative retention time (RRT) of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration?			x

Note:

10.0 TCL Quantitation and Reported Detection limits (Code p)

		Yes	No	NA
10.1	Are RLs used consistent with those specified in the QAPP?			x
10.2	Are these limits adjusted to reflect dilutions and/ or percent solids as required?			x
10.3	Are any positives reported that exceed the linear range of the instrument? If yes, than flag "J".			x
10.4	If Level IV, calculate a sample of positive results to verify correct calculations			x

Note:

11.0 Field Duplicate Samples (Code f)

		Yes	No	NA
11.1	Were any field duplicates submitted for herbicide analysis?			
11.2	Were all RPD or absolute difference values within the control limits outlined in the QAPP?			
	Action: No qualifying action is taken based on field duplicate results, however the data validator should provide a qualitative assessment in the data validation report.			

Note: Sample SW-SA2-GMCA-9 DUP was a duplicate of sample SW-SA2-GMCS-9 and was analyzed for herbicides. All evaluation criteria were met.

12.0 Data Completeness

			Yes	No	NA
12.1	Is % completeness within the control limits? (Control limit: Check QAPP or use 95% for aqueous sample, 90%				
12.2	Number of samples:	6			
12.3	Number of target compounds in each analysis:	10			
12.4	Number of results rejected and not reported:	0			
	% Completeness = 100 x ((12.1 x 12.2) - 12.3) / (12.1 x 12.2)				
	% Completeness	**100**			

Note:

DATA VALIDATION WORKSHEET
PESTICIDES ANALYSIS

Reviewer: Tony Sedlacek
Date: 11/10/2007
Laboratory Severn Trent Laboratory - Savannah

Project Name: Sauget - Area 2 Site R GM'S
Project Number: 21561391.00000
SDG No.: SAS054
Review Level: Level III

Major Anomolies:

No samples were rejected.

Minor Anomolies:

Samples did not require qualification.

Field IDs:

SW-SA2-GMCS-9	SW-SA2-GMCS-STATION 4	SW-SA2-GMCS STATION 2 EB
SW-SA2-GMCS-9 DUP	SW-SA2-GMCS STATION 3	SED-SA2-GMCS STATION 2 EB
SW-SA2-GMCS-STATION 5	SW-SA2-GMCSSTATION 2	

1.0 Chain of Custody/Sample Condition

		Yes	No	NA
1.1	Do Chain-of-Custody forms list all samples analyzed?			
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was maintained?			
1.3	Do the Traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data?	x		

Note: The laboratory case narrative indicated the surrogate recovery for decachlorobiphenyl was outside evaluation criteria in equipment blank SED-SA2-GMCS-Station 2. Equipment blank samples are quality control samples and are not qualified.

2.0 Holding Time/ Preservation (Code h)

		Yes	No	NA
2.1	Do sample preservation, collection and storage condition meet method requirement?			
	If samples were not on ice or the ice was melted upon arrival at the laboratory and the temperature of the cooler was elevated (> 10 ^{o}C), then flag all positive results with a "J" and all non-detects "UJ".			
2.2	Have any technical holding times, determined from sampling to date of analysis, been exceeded? (See attached Holding Time Table for sample holding time) If yes, J(+)/UJ(-).			
	Extraction: Soil/Sediment 14 days - aqueous 7 days Analysis: 40 days			
2.3	Have any technical holding times grossly (twice the holding time) been exceeded? If yes, J(+)/R(-).			

Note: All holding times criteria were met.

3.0 Blanks (Method Blanks and Field Blanks)

(Code x - Field Blank Contamination, Code z - Method blank contamination)

		Yes	No	NA
3.1	Is a Method Blank Summary form present for each batch?			
3.2	Do any method blanks have positive results (TCL)?			
3.3	Do any field/rinse/equipment blanks have positive results (TCL)?			
	Action: Positive sample results <5X the blank concentration should be qualified "U". The result should be elevated to the RL for estimate (laboratory "J" flagged) concentrations.			
3.4	If Level IV, review raw data and verify all detections for blanks were reported.			x

Note: All blank criteria were met.

4.0 GC/ECD Instrument Performance Check (Code b)

		Yes	No	NA
4.1	Are Endrin and 4,4'-DDT breakdown forms present?			x
4.2	Have all samples been analyzed within twelve hours of the performance check sample?			x
	If no, the data for the affected standards, blanks, field samples or QC samples are rejected "R".			
4.3	Have percent breakdown criteria (15%) for endrin and 4,4'-DDT been met?			x
	If no, all standards, blanks, field samples and QC samples are rejected "R".			

Note:

5.0 Initial Calibration (Code r)

		Yes	No	NA
5.1	Are Initial Calibration summary forms present and complete for each instrument used?			x
5.2	Are response factors stable (%RSD values < 20% or >0.995) over the concentration range of the instrument			x
	If not, J(+)/ UJ(-). In extreme cases, the reviewer may flag non-detects "R".			
5.3	If Level IV, recalculate a sample of RRFs and %RSDs to verify correct calculations are being made.			x

Note:

6.0 Continuing Calibration (Code c)

		Yes	No	NA
6.1	Are Continuing Calibration Summary forms present and complete?			x
6.2	Has a continuing calibration standard been analyzed every 12 hours?			x
6.3	Do any compounds have a % difference (or % drift for quantitation from a curve) (%D) between initial and continuing calibration CF outside QC limits (%D < 15%)?			x
	If yes, a marginal increase in response >20% then J(+) only; a decrease in response then J(+)/ UJ(-). For %D > 50%, flag R.			
6.4	If Level IV, calculate a sample of CFs and %Ds to verify correct calculations.			x

Note:

7.0 Surrogate Recovery (Code s)

		Yes	No	NA
7.1	Are all samples listed on the appropriate Surrogate Recovery Summary Form ?			
7.2	Are surrogate recoveries within acceptance criteria specified in the QAPP for all samples?		x	
7.3	If No in Section 7.2, were these sample(s) or method blank(s) reanalyzed?		x	
7.4	If No in Section 7.3, is any sample dilution factor greater than 10? (Surrogate recoveries may be diluted out.)		x	
	> UCL / 10% to LCL / < 10%			
	Positive: J / J / J			
	Non-detect: None / UJ / R			

Note: Surrogate recovery for DCB Decachlorobiphenyl was below evaluation criteria (14-115%) in sample SED-SA2-GMCS-Station-2 EB. Sample SED-SA2-GMCS-Station 2 EB is an equipment blank and quality control sample which does not require qualification.

8.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD) or one MS with a Sample Duplicate (Code m - recovery, Code d - RPD)

		Yes	No	NA
8.1	Is a Matrix Spike/Matrix Spike Duplicate recovery form present?			
8.2	Are MS/MSDs analyzed at the required frequency of one matrix spike per ten samples and a duplicate per twenty for each matrix?			
8.3	Are all MS/MSD %Rs and RPDs within acceptance criteria Specified in the QAPP?			
	Using informed professional judgment, the data reviewer should use the MS and MSD results in conjunction with other QC criteria and determine the need for qualification of the data for samples *from the same site/matrix*. Recoveries <10% may require rejection. RPD failures may be flagged "J" (+ only)			

Note: Sample SW-SA2-GMCS-STATION 5 was spiked and analyzed for pesticides. All MS/MSD recoveries were within evaluation criteria.

9.0 Laboratory Control Sample (LCS/LCSD) (Code l - LCS recovery Code e - RPD)

		Yes	No	NA
9.1	Is an LCS recovery form present?			
9.2	Is an LCS analyzed at the required frequency of one per twenty field samples for each matrix?			
9.3	Are all LCS %Rs and RPDs within acceptance criteria specified in the QAPP?			
9.4	If Level IV, verify the % recoveries are calculated correctly.			x
	Action for specific compound outside the acceptance criteria: %R>UCL, J(+) only; <LCL, J(+)/UJ(-); <30% J(+)/R(-). RPD failures should be flagged "J" (+ only)			

Note: All LCS recoveries were within evaluation criteria.

10.0 TCL Identification (Code w)

		Yes	No	NA
10.1	Is the relative retention time (RRT) of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration?			x

Note:

11.0 TCL Quantitation and Reported Detection limits (Code p)

		Yes	No	NA
11.1	Are RLs used consistent with those specified in the QAPP?			x
11.2	Are these limits adjusted to reflect dilutions and/ or percent solids as required?			x
11.3	Are any positives reported that exceed the linear range of the instrument? If yes, than flag "J".			x
11.4	If Level IV, calculate a sample of positive results to verify correct calculations			x

Note:

12.0 Field Duplicate Samples (Code f)

		Yes	No	NA
12.1	Were any field duplicates submitted for analysis?		x	
12.2	Were all RPD or absolute difference values within the control limits outlined in the QAPP?			x
	Action: No qualifying action is taken based on field duplicate results, however the data validator should provide a qualitative assessment in the data validation report.			

Note: Sample SW-SA2-GMCA-9 DUP was a duplicate of sample SW-SA2-GMCS-9 and was analyzed for SVOCs. All evaluation criteria were met.

13.0 Data Completeness

			Yes	No	NA
13.1	Is % completeness within the control limits? (Control limit: Check QAPP or use 95% for aqueous sample, 90%				
13.2	Number of samples:	6			
13.3	Number of target compounds in each analysis:	21			
13.4	Number of results rejected and not reported:	0			
	% Completeness = 100 x ((13.1 x 13.2) - 13.3) / (13.1 x 13.2)				
	% Completeness	**100**			

Note:

DATA VALIDATION WORKSHEET - Level III Review
Inorganic - ICP, ICP-MS, GFAA, and CVAA

Reviewer: Tony Sedlacek
Date: 11/10/2007
Laboratory Severn Trent Laboratory - Savannah

Project Name: Sauget - Area 2 Site R GMCS
Project Number: 21561391.00000
SDG No.: SAS054
Review Level: Level III

Major Anomolies:

No samples were rejected

Minor Anomolies:

Analytes were qualified due to analytes detected calibration blanks.

Field IDs:

SW-SA2-GMCS-9
SW-SA2-GMCS-9 DUP
SW-SA2-GMCS-STATION 5
SW-SA2-GMCS-STATION 4
SW-SA2-GMCS-STATION 3
SW-SA2-GMCS-STATION 2 EB
SED-SA2-GMCS-STATION 2 EB

1.0 Chain of Custody/Sample Condition/Raw Data

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
1.1	Do Chain-of-Custody forms list all samples that were analyzed?	X											
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was main	X											
1.3	Do the traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data?	X											
1.4	Does sample preservation, collection and storage meet method requirement? (water samples: with Nitric Acid to pH < 2, and soil/sediment samples: 4 ^{o}C $\pm$ 2 ^{o}C)	X											
1.5	Are the digestion logs present and complete with pH values, sample weights, dilutions, final volumes. % solids (for soil samples), and preparation dates? For any missing or incomplete documentation, contact the laboratory for explanation/resubmittal.	X											

Note: The laboratory case narrative indicated that the MS/MSD recoveries were outside evaluation criteria. In addition, analytes were detected in the equipment, preparation and calibration blanks.

2.0 Holding Time (Code h)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
2.1	Have any technical holding times, determined from date of collection to date of analysis, been exceeded? (Hg: 28days, other metals: 6 months) See attached Holding Time Table.												
	Action: J(+)/UJ(-). If the holding times are grossly exceeded (twice the holding time criteria) J(+)/R(-).												

Note: All samples were analyzed within holding time criteria.

3.0 Instrument Calibration (Code c)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
3.1	Are sufficient standards included in the calibration curve? (ICP/ICP-MS: blank + one standard; GFAA: blank + three standards; CVAA: blank + five standards)			x									
3.2	Are the correlation coefficients > 0.995? (for GFAA and CVAA) Action: J(+)/UJ(-).												x
3.3	Was an initial calibration verification (ICV) analyzed at the beginning of each analysis? Action: If no, use professional judgment to determine affect on the data and note in reviewer narrative.			x									x
3.4	Was continuing calibration verification (CCV) performed every 10 analysis or every 2 hours, whichever is more frequent? Action: If no, use professional judgment to determine affect on the data and note in reviewer narrative.			x									x
3.5	Are all calibration standard percent recoveries (ICV and CCV) within the control limits? Mercury (80%-120%) and other Metals (90%-110%).			x									x
	Action: R(+/-) J(+)/UJ(-) J(+) R(+)												
	Mercury < 65% 65% - 79% 121% - 135% > 135%												
	Other Metals < 75% 75% - 89% 111% - 125% > 125%												

Note:

4.0 Blanks (Code o - Calibration blank failure, Code p - Preparation blank failure, Code x - Field blank failure)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
4.1	Were preparation blank (PB) prepared at the appropriate frequency (one per 20 samples, per batch, per matrix and per level)?	x											
4.2	Are there reported PB values > + IDL? Action: If yes, action level of 5 times the blank value are determined for positive and negative blank values.		x										
4.3	Were initial calibration blanks (ICB) analyzed? Action: If no, use professional judgment to determine affect on the data note in reviewer narrative.	x											
4.4	Were continuing calibration blanks (CCB) analyzed after every 10 samples or every 2 hours whichever is more frequent? Action: If no, use professional judgment to determine affect on the data to note in reviewer narrative.	x											
4.5	Are there reported ICB or CCB values > + IDL? Action: If yes, action level of 5 times the blank value are determined for positive and negative blank values.	x											
4.6	Are there samples with concentrations less than five times the highest level in associated blanks? Action: If yes, U at reported concentration.	x											
4.7	Are there samples with non-detect results or with concentrations less than five times the most negative value in associated blanks? Action; If yes, J(+)/UJ(-).	x											

Note: The compounds calcium (0.099 mg/L), magnesium (0.024 mg/L) and zinc (0.010 mg/L) were detected in the equipment blank and arsenic (0.0028 mg/L) was detected in the preparation blank. In addition, chromium (0.0018 mg/L), magnesium (0.0089 mg/L), thallium (0.0040 mg/L) and vanadium (0.0016 mg/L) were detected in the continuing calibration blanks. Analytical data that were reported at concentrations greater than

Field ID	Analyte	Batch #	Qualification	Code	Justification
SW-SA2-GMCS-9	Vanadium	680-71673	U	o	<5X the CCB
SW-SA2-GMCS-9 DUP	Vanadium	680-71673	U	o	<5X the CCB

5.0 ICP Interference Check Sample (ICS) (Code n)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
5.1	Was ICS AB analyzed at beginning of each ICP run (or at least twice every 8 hours), and at the beginning or once every 8 hours (whichever is more frequent) for ICP-MS?			x									
5.2	Are the ICS AB recoveries within 80% - 120%?			x									
5.3	Are the results for unspiked analytes (in ICS A) < + IDL?			x									
5.4	If not, are the associated sample Al, Ca, Fe, and Mg concentrations less than the			x									
	Action: Not Spiked Analytes / Spiked analytes (ICS AB analytes)												
	< -IDL / > IDL / < 50% / 50% - 79% / > 120%												
	UJ(-) / J(+) / R(+/-) / J(+)/UJ(-) / J(+)												

Note:

6.0 Laboratory Control Sample (LCS) (Code l - Recovery, Code e - RPD)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
6.1	Was an LCS prepared and analyzed at the correct frequency (one per 20 samples, per batch, per matrix and per level)? Action: If no, J(+) any sample not associated with LCS results.	X											
6.2	Is any LCS recovery outside the control limits? (Aqueous limits: 80% - 120% - except Ag and Sb; Solid limits: as per EPA-EMSL/LV)		X										
	Action: Solid / Aqueous												
	< LCL / > UCL / < 50% / 50% - 79% / > 120%												
	J(+)/UJ(-) / J(+) / R(+/-) / J(+)/UJ(-) / J(+)												

Note: All recoveries were within evaluation criteria.

7.0 Laboratory Duplicates (Code k)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
7.1	Were Laboratory duplicates prepared and analyzed at the correct frequency (one per 20 samples, per batch, per matrix and per level)? Action: If no, J(+), with professional judgment, analytes not associated with Duplicate results.	X											
7.2	Was a field blank used for the duplicate analysis? Action: If yes, J(+) with professional judgment. Note in worksheet.		X										
7.3	Are all analyte duplicate results within control? (RPD values < 20% or difference < ± PQL for aqueous, and RPD < 35% or difference < ± 2 X PQL for solids)? Action: If no, J(+). Note: RPD criteria is used when both sample and duplicate results are > 5 X IDL.	X											

Note: Sample SW-SA2-GMCS-STATION 5 was duplicated for metals and mercury. All duplicate criteria were met.

8.0 Spike Sample Analysis -Pre-Digestion (Code m - Recovery, Code d - RPD)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
8.1	Was a spiked sample prepared and analyzed at the correct frequency (one per 20 samples, per batch, per matrix and per level)? Action: If no, J(+), with professional judgment, analytes not associated with matrix spike results.												
8.2	**Was a field blank used for the MS analysis? Action: If yes, J(+) with professional judgment. Note in worksheet.**												
	Note: Matrix spike analysis may be performed on a field blank when it is the only aqueous sample in an SDG.												
8.3	For all analytes with sample concentration < 4 x spike concentration, are spike recoveries within the control limit of 75-125%? (No control limit applies to analytes with concentration > 4 x spike concentration.)												
	%R > 125% / 30% < %R < 74% / %R < 30%												
	Positive: J / J / J												
	Non-detect: None / UJ / R												

Note: Sample SW-SA2-GMCS-STATION 5 was spiked and analyzed for metals. Analytes with sample concentrations greater than 4X the spike concentrations did not require evaluation or qualification. All evaluation criteria were met.

9.0 Instrument Detection Limits (IDL)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
9.1	Are all IDL equal to or less than the reporting limits specified?			x									x

Note:

10.0 ICP Serial Dilutions (Code s)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
10.1	Were serial dilutions performed?	x											
10.2	Was a five-fold dilution performed?	x											
10.3	Did the serial dilution results agree within 10% for analyte concentration > 50 x the IDL in the original sample? If no, J(+).	x											

Note: Sample SW-SA2-GMCS-STATION 5 was diluted and analyzed, all %Ds were less than 10% for analytes with concentrations > 50X the IDL.

11.0 Field Duplicate Samples (Code f)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
11.1	Were any field duplicates submitted for metal analysis?												
11.2	Are all field duplicate results within control? (For aqueous sample, RPD values < 35% or difference < ± 2 x PQL and For solids, RPD < 50% or difference < ± 4 x												

Note: Sample SW-SA2-GMCS-STATION 9 DUP was a duplicate of sample SW-SA2-GMCS-STATION 9. All evaluation criteria were met.

12.0 Result Verification (Code Q)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
12.1	Were all results and detection limits for solid-matrix samples reported on a dry-weight basis?			x									x
12.2	Were all dilution reflected in the positive results and detection limits?			x									x

Note:

13.0 Data Completeness

13.1	Is % completeness within the control limits? (Control limit: Check QAPP or use 95% for aqueous sample, 90% for soil sample)							
13.2	Number of samples:	5		0		0		5
13.3	Number of target compounds in each analysis:	22		0		0		1
13.4	Number of results rejected and not reported:	0		0		0		0
	% Completeness = 100 x ((13.1 x 13.2) - 13.3) / (13.1 x 13.2)							
	% Completeness	**100**		**###**		**##**		**100**

Note:

DATA VALIDATION WORKSHEET
VOLATILE ORGANIC ANALYSIS

Reviewer: Tony Sedlacek
Date: 11/12/2007
Laboratory Severn Trent Laboratory - Savannah

Project Name: Sauget - Area 2 Site R GMCS
Project Number: 21561391.00000
SDG No.: SAS055
Review Level: Level III

Major Anomolies:

No samples were rejected

Minor Anomolies:

Acetone was qualified nondetect in sample SED-SA2-GMCS-9 based on this data review.

Field IDs:

SED-SA2-GMCS-9
SED-SA2-GMCS-9 DUP
SED-SA2-GMCS-STATION 5
SED-SA2-GMCS-STATION 4
SED-SA2-GMCS- STATION 3

1.0 Chain of Custody/Sample Condition

		Yes	No	NA
1.1	Do Chain-of-Custody forms list all samples analyzed?			
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was maintained?			
1.3	Do the Traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data?	x		

Note: The laboratory case narrative indicated several MS/MSD recoveries were outside evaluation criteria. Professional judgment was used to qualify common laboratory contaminant nondetect. The cooler receipt form did not indicate any problems.

Field ID	Analyte	Qualification
SED-SA2-GMCS-9	Acetone	U

2.0 Holding Time/ Preservation (Code H)

		Yes	No	NA
2.1	Do sample preservation, collection and storage condition meet method requirement?			
	If sample preservation and/or temperature was inappropriate (i.e., <2° >6°C, etc.), comment in report. If unpreserved or temperature is outside the range 0° (but not frozen) to 10° flag all positive results with a "J" and all non-detects "UJ". If temperature exceeds 10°, flag positive detections "J" and non-detects "R".			
2.2	Have any technical holding times, determined from sampling to date of analysis, been exceeded? If yes, J(+)/UJ(-).			

Matrix	Preserved	Aromatic	All others
Aqueous	No	7 days	14 days
	Yes	14 days	14 days
Soil/Sediment	4 °C ± 2 °C	14 days	14 days

		Yes	No	NA
2.3	Have any technical holding times been grossly (twice the holding time) exceeded? If yes, J(+)/R(-).			

Note: All holding time criteria were met.

3.0 GC/MS Instrument Performance Check (Code T)

		Yes	No	NA
3.1	Are GC/MS Tuning and Mass Calibration forms present for bromofluorobenzene (BFB)?			x
3.2	Have all samples been analyzed within twelve hours of the BFB tune? If no, flag R.			x
3.3	Have ion abundance criteria for BFB been met for each instrument used? If no, flag R.			x

Note:

4.0 Blanks (Method Blanks, Field Blanks and Trip Blanks)

(Code X - Field Blank Contamination, Code Y - Trip blank contamination, Code Z - Method blank contamination)

		Yes	No	NA
4.1	Is a Method Blank Summary form present for each batch?			
4.2	Do any method blanks have positive VOA results (TCL and/or TIC)?			
4.3	Do any field/trip rinse/equipment blanks have positive VOA results (TCL and/or TIC)?			x
	Action: Positive sample results <5X (or 10X for common volatile lab contaminants- methylene chloride, acetone, and 2-butanone) the blank concentration should be qualified "U". The result should be elevated to the RL for estimate (laboratory "J" flagged) concentrations.			
4.4	If Level IV, review raw data and verify all detections for blanks were reported.			x

Note: All blank criteria were met.

5.0 GC/MS Initial Calibration (Code C)

		Yes	No	NA
5.1	Are Initial Calibration summary forms present and complete for each instrument used?			x
5.2	Are CCCs linear applying either %RSD < 30% and all other compounds <15% or >0.990?			x
	If not, J(+)/ UJ(-). In extreme cases, the reviewer may flag non-detects "R".			
5.3	Do any SPCC compounds have an RRF less than specification or any other compounds < 0.05 (use 0.01 for poor responders like ketones or alcohols)? If yes, J(+)/R(-).			x
5.4	Is the lowest standard at the same concentration, or lower, as the RL reported? If not, elevate RL.			x
5.5	If Level IV, recalculate a sample of RRFs and %RSDs to verify correct calculations are being made.			x

Note:

6.0 Continuing Calibration (Code C)

		Yes	No	NA
6.1	Are Continuing Calibration Summary forms present and complete?			x
6.2	Has a continuing calibration standard been analyzed every 12 hours?			x
6.3	Have all SPCCs and CCCs met method specifications? If not, comment in report, proceed to 6.4.			x
6.4	Do any compounds have a % difference (or % drift for quantitation from a curve) (%D) between initial and continuing calibration RRF outside QC limits (%D < 20%)?			x
	If yes, a marginal increase in response >20% then J(+) only; a decrease in response then J(+)/ UJ(-). For %D > 50%, flag R.			
6.5	Do any compounds have an RRF < 0.05 (use 0.01 for poor responders)? If yes, J(+)/R(-).			x
6.6	If Level IV, calculate a sample of RFs and %Ds from ave RF to verify correct calculations.			x

Note:

7.0 Surrogate Recovery (Code S)

		Yes	No	NA
7.1	Are all samples listed on the appropriate Surrogate Recovery Summary Form ?			
7.2	Are surrogate recoveries within acceptance criteria specified in the QAPP for all samples?			
7.3	If No in Section 7.2, were these sample(s) or method blank(s) reanalyzed?			x
7.4	If No in Section 7.3, is any sample dilution factor greater than 10? (Surrogate recoveries may be diluted out.)			x
	Note: If SMC recoveries do not meet acceptance criteria in samples chosen for the MS/MSD or diluted			
	> UCL 10% to LCL < 10%			
	Positive J J J			
	Non-detect None UJ R			

Note: All surrogate recoveries were within evaluation criteria.

8.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD) or one MS with a Sample Duplicate (Recovery - Code M, RPD - Code D)

		Yes	No	NA
8.1	Is a Matrix Spike/Matrix Spike Duplicate recovery form present?			
8.2	Are MS/MSDs analyzed at the required frequency of one matrix spike per ten samples and a duplicate per twenty for each matrix?			
8.3	Are all MS/MSD %Rs and RPDs within acceptance criteria Specified in the QAPP?		x	
	Using informed professional judgment, the data reviewer should use the MS and MSD results in conjunction with other QC criteria and determine the need for qualification of the data for samples *from the same site/matrix*. Recoveries <10% may require rejection. RPD failures may be flagged "J" (+ only)			

Note: Sample SED-SA2-GMCS-STATION 5 was spiked and analyzed for VOCs. MS/MSD recoveries were outside evaluation criteria for chloromethane (2/2%) with criteria (46-137%),vinyl chloride (6/6%) with criteria (56-139%), carbon disulfide (36/35%) with criteria (46-134%), and 1,1-dichloroethene (56/56%) with criteria (59-137%) were outside evaluation criteria. Additionally, MSD recoveries for methyl isobutyl ketone (149%) with criteria (50-148%) and tetrachloroethene (75%) with criteria 76-120%). Organic data is not qualified due to MS/MSD recoveries alone, LCS recoveries were within evaluation criteria; therefore, no qualification of data was required.

9.0 Laboratory Control Sample (LCS/LCSD) (Recovery - Code L, RPD - Code E)

		Yes	No	NA
9.1	Is an LCS recovery form present?			
9.2	Is an LCS analyzed at the required frequency of one per twenty field samples for each matrix?			
9.3	Are all LCS %Rs and RPDs within acceptance criteria specified in the QAPP?			
9.4	If Level IV, verify the % recoveries are calculated correctly.			x
	Action for specific compound outside the acceptance criteria: %R>UCL, J(+) only; <LCL, J(+)/UJ(-); <30% J(+)/R(-). RPD failures should be flagged "J" (+ only)			

Note: All LCS recoveries were within evaluation criteria.

10.0 Internal Standards (Code I)

		Yes	No	NA
10.1	Are internal standard areas for every sample and blank within upper and lower QC limits?			
	Area > +100% / Area < -50% / Area < -10%			
	Positive: J / J / J			
	Non-detect: None / UJ / R			
Note:	calibration, not sample to continuing calibration. Thus, if all other QC specifications are met for a given sample, using informed professional judgment, the reviewer may choose not to flag individual samples in this case.			
10.2	Are retention times of internal standards within 30 seconds of the associated calibration standard?			
	Action: The chromatogram must be examined to determine if any false positives or negatives exist. For shift of a large magnitude, the reviewer may consider partial or total rejection of the data for non-detects in that sample/fraction.			

Note: Internal standard area counts and retention times were within evaluation criteria.

11.0 TCL Identification (Code W)

		Yes	No	NA
11.1	Is the relative retention time (RRT) of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration?			x
11.2	Are the three ions of greatest intensity present in the standard mass spectrum also present in the sample mass spectrum; and do sample and standard relative ion intensities agree within 30%?			x

Note:

12.0 TCL/TIC Quantitation and Reported Detection limits (Code K)

		Yes	No	NA
12.1	Are RLs used consistent with those specified in the QAPP?			x
12.2	Are these limits adjusted to reflect dilutions and/ or percent solids as required?			x
12.3	Are TIC ions greater than ten percent in the reference spectrum also present in the sample spectrum?			x
12.4	Are any positives reported that exceed the linear range of the instrument? If yes, than flag "J".			x
12.5	If Level IV, calculate a sample of positive results to verify correct calculations			x

Note:

13.0 Field Duplicate Samples (Code F)

		Yes	No	NA
13.1	Were any field duplicates submitted for VOC analysis?			
13.2	Were all RPD or absolute difference values within the control limits outlined in the QAPP?			
	Action: No qualifying action is taken based on field duplicate results, however the data validator should provide a qualitative assessment in the data validation report.			

Note: Sample SED-SA2-GMCS-9 DUP was a duplicate of sample SED-SA2-GMCS-9.

14.0 Data Completeness

			Yes	No	NA
14.1	Is % completeness within the control limits? (Control limit: Check QAPP or use 95% for aqueous				
14.2	Number of samples:	5			
14.3	Number of target compounds in each analysis:	35			
14.4	Number of results rejected and not reported:	0			
	% Completeness = 100 x ((14.1 * 14.2) - 14.3) / (14.1 * 14.2)				
	% Completeness	**100**			

Note:

DATA VALIDATION WORKSHEET
VOLATILE ORGANIC ANALYSIS

Reviewer: Tony Sedlacek
Date: 11/12/2007
Laboratory Severn Trent Laboratory - Savannah

Project Name: Sauget - Area 2 Site R GMCS
Project Number: 21561391.00000
SDG No.: SAS055
Review Level: Level IV

Major Anomolies:

No samples were rejected

Minor Anomolies:

Chloroethane was qualified in both validated samples due to calibration verification %D > 20%.

Field IDs: SED-SA2-GMCS-STATION 5
SED-SA2-GMCS- STATION 3

1.0 Chain of Custody/Sample Condition

		Yes	No	NA
1.1	Do Chain-of-Custody forms list all samples analyzed?	x		
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was maintained?	x		
1.3	Do the Traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data?	x		

Note: The laboratory case narrative indicated several MS/MSD recoveries were outside evaluation criteria. Professional judgment was used to qualify common laboratory contaminant nondetect. The cooler receipt form did not indicate any problems.

2.0 Holding Time/ Preservation (Code H)

		Yes	No	NA
2.1	Do sample preservation, collection and storage condition meet method requirement?	x		
	If sample preservation and/or temperature was inappropriate (i.e., <2° >6°C, etc.), comment in report. If unpreserved or temperature is outside the range 0° (but not frozen) to 10° flag all positive results with a "J" and all non-detects "UJ". If temperature exceeds 10°, flag positive detections "J" and non-detects "R".			
2.2	Have any technical holding times, determined from sampling to date of analysis, been exceeded? If yes, J(+)/UJ(-).		x	

Matrix	Preserved	Aromatic	All others
Aqueous	No	7 days	14 days
	Yes	14 days	14 days
Soil/Sediment	4 ^{o}C ± 2 ^{o}C	14 days	14 days

		Yes	No	NA
2.3	Have any technical holding times been grossly (twice the holding time) exceeded? If yes, J(+)/R(-).		x	

Note: All holding time criteria were met.

3.0 GC/MS Instrument Performance Check (Code T)

		Yes	No	NA
3.1	Are GC/MS Tuning and Mass Calibration forms present for bromofluorobenzene (BFB)?			
3.2	Have all samples been analyzed within twelve hours of the BFB tune? If no, flag R.			
3.3	Have ion abundance criteria for BFB been met for each instrument used? If no, flag R.			

Note: All tuning criteria were met.

4.0 Blanks (Method Blanks, Field Blanks and Trip Blanks)

(Code X - Field Blank Contamination, Code Y - Trip blank contamination, Code Z - Method blank contamination)

		Yes	No	NA
4.1	Is a Method Blank Summary form present for each batch?			
4.2	Do any method blanks have positive VOA results (TCL and/or TIC)?			
4.3	Do any field/trip rinse/equipment blanks have positive VOA results (TCL and/or TIC)?			
	Action: Positive sample results <5X (or 10X for common volatile lab contaminants- methylene chloride, acetone, and 2-butanone) the blank concentration should be qualified "U". The result should be elevated to the RL for estimate (laboratory "J" flagged) concentrations.			
4.4	If Level IV, review raw data and verify all detections for blanks were reported.			

Note: All blank criteria were met.

5.0 GC/MS Initial Calibration (Code C)

		Yes	No	NA
5.1	Are Initial Calibration summary forms present and complete for each instrument used?			
5.2	Are CCCs linear applying either %RSD < 30% and all other compounds <15% or >0.990?			
	If not, J(+)/ UJ(-). In extreme cases, the reviewer may flag non-detects "R".			
5.3	Do any SPCC compounds have an RRF less than specification or any other compounds < 0.05 (use 0.01 for poor responders like ketones or alcohols)? If yes, J(+)/R(-).			
5.4	Is the lowest standard at the same concentration, or lower, as the RL reported? If not, elevate RL.			
5.5	If Level IV, recalculate a sample of RRFs and %RSDs to verify correct calculations are being made.			

Note: All initial calibration evaluation were met. Recalculation of the RFs and %Ds was completed and no errors in calculation were noted. No qualification of data was required.

6.0 Continuing Calibration (Code C)

		Yes	No	NA
6.1	Are Continuing Calibration Summary forms present and complete?			
6.2	Has a continuing calibration standard been analyzed every 12 hours?			
6.3	Have all SPCCs and CCCs met method specifications? If not, comment in report, proceed to 6.4.			
6.4	Do any compounds have a % difference (or % drift for quantitation from a curve) (%D) between initial and continuing calibration RRF outside QC limits (%D < 20%)?	x		
	If yes, a marginal increase in response >20% then J(+) only; a decrease in response then J(+)/ UJ(-). For %D > 50%, flag R.			
6.5	Do any compounds have an RRF < 0.05 (use 0.01 for poor responders)? If yes, J(+)/R(-).			
6.6	If Level IV, calculate a sample of RFs and %Ds from ave RF to verify correct calculations.			

Note: The compound chloroethane (-31.7%) had a %D greater than 20%. Chloroethane was nondetect in samples SED-SA2-GMCS-STATION-5 and SED-SA2@-GMCS-STATION-3 and was qualified estimated nondetect "UJ" in both samples. Recalculation of the RFs and %Ds was completed and no errors in calculation were noted.

7.0 Surrogate Recovery (Code S)

		Yes	No	NA
7.1	Are all samples listed on the appropriate Surrogate Recovery Summary Form ?			
7.2	Are surrogate recoveries within acceptance criteria specified in the QAPP for all samples?			
7.3	If No in Section 7.2, were these sample(s) or method blank(s) reanalyzed?			x
7.4	If No in Section 7.3, is any sample dilution factor greater than 10? (Surrogate recoveries may be diluted out.)			x
	Note: If SMC recoveries do not meet acceptance criteria in samples chosen for the MS/MSD or diluted			
	> UCL 10% to LCL < 10%			
	Positive J J J			
	Non-detect None UJ R			

Note: All surrogate recoveries were within evaluation criteria.

8.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD) or one MS with a Sample Duplicate (Recovery - Code M, RPD - Code D)

		Yes	No	NA
8.1	Is a Matrix Spike/Matrix Spike Duplicate recovery form present?			
8.2	Are MS/MSDs analyzed at the required frequency of one matrix spike per ten samples and a duplicate per twenty for each matrix?			
8.3	Are all MS/MSD %Rs and RPDs within acceptance criteria Specified in the QAPP?		x	
	Using informed professional judgment, the data reviewer should use the MS and MSD results in conjunction with other QC criteria and determine the need for qualification of the data for samples *from the same site/matrix*. Recoveries <10% may require rejection. RPD failures may be flagged "J" (+ only)			

Note: Sample SED-SA2-GMCS-STATION 5 was spiked and analyzed for VOCs. MS/MSD recoveries were outside evaluation criteria for chloromethane (2/2%) with criteria (46-137%),vinyl chloride (6/6%) with criteria (56-139%), carbon disulfide (36/35%) with criteria (46-134%), and 1,1-dichloroethene (56/56%) with criteria (59-137%) were outside evaluation criteria. Additionally, MSD recoveries for methyl isobutyl ketone (149%) with criteria (50-148%) and tetrachloroethene (75%) with criteria (76-120%). Organic data is not qualified due to MS/MSD recoveries alone, LCS recoveries were within evaluation criteria; therefore, no qualification of data was required.

9.0 Laboratory Control Sample (LCS/LCSD) (Recovery - Code L, RPD - Code E)

		Yes	No	NA
9.1	Is an LCS recovery form present?			
9.2	Is an LCS analyzed at the required frequency of one per twenty field samples for each matrix?			
9.3	Are all LCS %Rs and RPDs within acceptance criteria specified in the QAPP?			
9.4	If Level IV, verify the % recoveries are calculated correctly.			
	Action for specific compound outside the acceptance criteria: %R>UCL, J(+) only; <LCL, J(+)/UJ(-); <30% J(+)/R(-). RPD failures should be flagged "J" (+ only)			

Note: All LCS recoveries were within evaluation criteria. LCS were recalculated from the raw data and verified using the LCS summary forms, and no calculation or transcription errors were noted.

10.0 Internal Standards (Code I)

		Yes	No	NA
10.1	Are internal standard areas for every sample and blank within upper and lower QC limits?			
	Area > +100% / Area < -50% / Area < -10%			
	Positive: J / J / J			
	Non-detect: None / UJ / R			
Note:	calibration, not sample to continuing calibration. Thus, if all other QC specifications are met for a given sample, using informed professional judgment, the reviewer may choose not to flag individual samples in this case.			
10.2	Are retention times of internal standards within 30 seconds of the associated calibration standard?			
	Action: The chromatogram must be examined to determine if any false positives or negatives exist. For shift of a large magnitude, the reviewer may consider partial or total rejection of the data for non-detects in that sample/fraction.			

Note: Internal standard area counts and retention times were within evaluation criteria.

11.0 TCL Identification (Code W)

		Yes	No	NA
11.1	Is the relative retention time (RRT) of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration?	X		
11.2	Are the three ions of greatest intensity present in the standard mass spectrum also present in the sample mass spectrum; and do sample and standard relative ion intensities agree within 30%?	X		

Note:

12.0 TCL/TIC Quantitation and Reported Detection limits (Code K)

		Yes	No	NA
12.1	Are RLs used consistent with those specified in the QAPP?	X		
12.2	Are these limits adjusted to reflect dilutions and/ or percent solids as required?	X		
12.3	Are TIC ions greater than ten percent in the reference spectrum also present in the sample spectrum?	X		
12.4	Are any positives reported that exceed the linear range of the instrument? If yes, than flag "J".		X	
12.5	If Level IV, calculate a sample of positive results to verify correct calculations	X		

Note: Positive results were recalculated from the raw data , and no calculation errors were noted.

13.0 Field Duplicate Samples (Code F)

		Yes	No	NA
13.1	Were any field duplicates submitted for VOC analysis?	X		
13.2	Were all RPD or absolute difference values within the control limits outlined in the QAPP?	X		
	Action: No qualifying action is taken based on field duplicate results, however the data validator should provide a qualitative assessment in the data validation report.			

Note: Sample SED-SA2-GMCS-9 DUP was a duplicate of sample SED-SA2-GMCS-9.

14.0 Data Completeness

			Yes	No	NA
14.1	Is % completeness within the control limits? (Control limit: Check QAPP or use 95% for aqueous		X		
14.2	Number of samples:	2			
14.3	Number of target compounds in each analysis:	35			
14.4	Number of results rejected and not reported:	0			
	% Completeness = 100 x ((14.1 * 14.2) - 14.3) / (14.1 * 14.2)				
	% Completeness	**100**			

Note:

DATA VALIDATION WORKSHEET
SEMIVOLATILE ORGANIC ANALYSIS

Reviewer: Tony Sedlacek
Date: 11/12/2007
Laboratory Severn Trent Laboratory - Savannah

Project Name: Sauget - Area 2 Site R GMCS
Project Number: 21561391.00000
SDG No.: SAS055
Review Level: Level III

Major Anomolies:

The compound 2,4-dinitrophenol was qualified rejected "R" in all samples due to low LCS recovery

Minor Anomolies:

No additional qualifications were required based on this data review.

Field IDs:

SED-SA2-GMCS-9
SED-SA2-GMCS-9 DUP
SED-SA2-GMCS-STATION 5
SED-SA2-GMCS-STATION 4
SED-SA2-GMCS- STATION 3

1.0 Chain of Custody/Sample Condition

		Yes	No	NA
1.1	Do Chain-of-Custody forms list all samples analyzed?			
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was maintained?			
1.3	Do the Traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data?	x		

Note: The laboratory case narrative indicated that surrogate recovery for nitrobenzene-d_5 was outside evaluation criteria in sample SW-SA2-GMCS-9. Also, LCS and MS recoveries for 2,4-dinitrophenol were outside evaluation criteria.

2.0 Holding Time/ Preservation (Code H)

		Yes	No	NA
2.1	Do sample preservation, collection and storage condition meet method requirement?			
	If samples were not on ice or the ice was melted upon arrival at the laboratory and the temperature of the cooler was elevated (> 10 ^{o}C), then flag all positive results with a "J" and all non-detects "UJ".			
2.2	Have any technical holding times, determined from sampling to date of analysis, been exceeded? (See attached			
	Extraction: Soil/Sediment 14 days - aqueous 7 days Analysis: 40 days			
2.3	Have any technical holding times grossly (twice the holding time) been exceeded? If yes, J(+)/R(-).			

Note: All holding times criteria were met.

3.0 GC/MS Instrument Performance Check (Code T)

		Yes	No	NA
3.1	Are GC/MS Tuning and Mass Calibration forms present for DFTPP?			x
3.2	Have all samples been analyzed within twelve hours of the tune?			x
	If no, the data for the affected standards, blanks, field samples or QC samples are rejected "R".			
3.3	Have ion abundance criteria for DFTPP been met for each instrument used?			x
	If no, all standards, blanks, field samples and QC samples are rejected "R".			

Note:

4.0 Blanks (Method Blanks and Field Blanks)

(Code X - Field Blank Contamination, Code Z - Method blank contamination)

		Yes	No	NA
4.1	Is a Method Blank Summary form present for each batch?			
4.2	Do any method/instrument/reagent blanks have positive results (TCL, and/or TIC)?			
4.3	Do any field equipment blanks have positive results (TCL, and/or TIC)?			
	Action: Positive sample results <5X (or 10X for phthalate contaminants) the blank concentration should be qualified "U" and the detection limit elevated to the RL for estimate concentrations.			
4.4	If Level IV, review raw data and verify all detections for blanks were reported.			x

Note: All blank criteria were met.

5.0 GC/MS Initial Calibration (Code C)

		Yes	No	NA
5.1	Are Initial Calibration summary forms present and complete for each instrument used?			x
5.2	Are CCCs linear applying either %RSD 30% and all other compounds <15% or >0.990?			x
	If not, J(+)/ UJ(-). In extreme cases, the reviewer may flag non-detects "R".			x
5.3	Do any SPCC compounds have an RRF les than specification or any other compounds < 0.05 (use 0.01 for poor responders like amines and phenols)? If yes, J(+)/R(-).			x
5.4	Is the lowest standard at the same concentration, or lower, as the RL reported? If not, elevate RL.			x
5.5	If Level IV, recalculate a sample of RRFs and %RSDs to verify correct calculations are being made.			x

Note:

6.0 Continuing Calibration (Code C)

		Yes	No	NA
6.1	Are Continuing Calibration Summary forms present and complete?			x
6.2	Has a continuing calibration standard been analyzed every 12 hours?			x
6.3	Have all SPCCs and CCCs met method specifications? If not, comment in report, proceed to 6.4.			x
6.4	Do any compounds have a % difference (or % drift for quantitation from a curve) (%D) between initial and continuing calibration RRF outside QC limits (%D < 20%)?			x
	If yes, a marginal increase in response >20% then J(+) only; a decrease in response then J(+)/ UJ(-). For %D > 50%, flag R.			
6.5	Do any compounds have an RRF < 0.05 (use 0.01 for poor responders)? If yes, J(+)/R(-).			x
6.6	If Level IV, calculate a sample of RFs and %Ds from ave RF to verify correct calculations.			x

Note:

7.0 Surrogate Recovery (Code S)

		Yes	No	NA
7.1	Are all samples listed on the appropriate Surrogate Recovery Summary Form ?			
7.2	Are surrogate recoveries within acceptance criteria specified in the QAPP for all samples and method blanks?		x	
7.3	Are more than one of either fraction outside the acceptance criteria?			
7.4	If Yes in Section 7.3, are these sample(s) or method blank(s) reanalyzed?		x	
7.5	If Yes in Section 7.3, is any sample dilution factor greater than 10?			x
	Note: If SMC recoveries display unacceptable recoveries in the MS and/ or diluted samples, then no reanalysis is required and acids and base/ neutrals are assessed separately.			
	> UCL / 10% to LCL / < 10%			
	Positive: J / J / J			
	Non-detect: None / UJ / R			

Note: Surrogate recovery for nitrobenzene-d_5 (35%) was outside evaluation criteria (36-110%) in sample SW-SA2-GMCS-9. Since only one base fraction surrogate was outside criteria and National Functional Guidelines indicates to qualify data if two or more surrogates per SVOC fraction are outside criteria; therefore, no qualification of the SVOC data was required.

8.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD) or one MS with a Sample Duplicate (Recovery - Code M, RPD - Code D)

		Yes	No	NA
8.1	Is a Matrix Spike/Matrix Spike Duplicate recovery form present?			
8.2	Are MS/MSDs analyzed at the required frequency not to exceed twenty field samples for each matrix?			
8.3	Are all MS/MSD %Rs and RPDs within acceptance criteria provided by the laboratory?		x	
	Using informed professional judgment, the data reviewer should use the MS and MSD results in conjunction with other QC criteria and determine the need for qualification of the data for samples *from the same site/matrix*. Recoveries <10% may require rejection. RPD failures may be flagged "J" (+ only)			

Note: Sample SED-SA2-GMCS-STATION 5 was spiked and analyzed for SVOCs. The MS recovery for 2,4-dinitrophenol (8%) was outside evaluation criteria (10-119%). Samples are not qualified due to MS/MSD recovery alone, 2,4-dinitrophenol was previously qualified due to LCS recovery; therefore no additional qualification of data was needed.

9.0 Laboratory Control Sample (LCS/LCSD) (Recovery - Code L, RPD - Code E)

		Yes	No	NA
9.1	Is an LCS recovery form present?			
9.2	Is LCS analyzed at the required frequency for each matrix?			
9.3	Are all LCS %Rs (and RPDs) within acceptance criteria?		x	
	Action for specific compound outside the acceptance criteria: %R>UCL, J(+) only; <LCL, J(+)/UJ(-); <30% J(+)/R(-). RPD failures should be flagged "J" (+ only)			
9.4	If Level IV, verify the % recoveries are calculated correctly.			x

Note: LCS recovery was outside evaluation criteria for 2,4-dinitrophenol (6%) with criteria (10-119%). The compound 2,4-dinitrophenol was nondetect in all associated samples and qualified rejected "R".

Field ID	Analyte	Qualification	Code	Batch #	Justification
SED-SA2-GMCS-9	2,4-dinitrophneol	R	L	680-86291	LCS recovery < 10%
SED-SA2-GMCS-9 DUP	2,4-dinitrophneol	R	L	680-86291	LCS recovery < 10%
SED-SA2-GMCS-STATION 5	2,4-dinitrophneol	R	L	680-86291	LCS recovery < 10%
SED-SA2-GMCS-STATION 4	2,4-dinitrophneol	R	L	680-86291	LCS recovery < 10%
SED-SA2-GMCS- STATION 3	2,4-dinitrophneol	R	L	680-86291	LCS recovery < 10%

10.0 Internal Standards (Code I)

		Yes	No	NA
10.1	Are internal standard area of every sample and blank within upper and lower QC limits for each continuing			
	Area > +100% Area < -50% Area < -10%			
	Positive J J J			
	Non-detect None UJ R			
Note:	The method specification is for the continuing calibration to be compared to the mid-point initial calibration, not sample to continuing calibration. Thus, if all other QC specifications are met for a given sample, using informed professional judgment, the reviewer may choose not to flag individual samples in this case.			
10.2	Are retention times of internal standards within 30 seconds of the associated calibration standard?			
	Action: The chromatogram must be examined to determine if any false positives or negatives exist. For shift of a large magnitude, the reviewer may consider partial or total rejection of the data for non-detects in that sample/fraction.			

Note: Internal standard area counts and retention times were within evaluation criteria.

11.0 TCL Identification (Code W)

		Yes	No	NA
11.1	Is the relative retention time (RRT) of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration?			x
11.2	Are the three ions of greatest intensity present in the standard mass spectrum also present in the sample mass spectrum; and do sample and standard relative ion intensities agree within 30%?			x

Note:

12.0 TCL/TIC Quantitation and Reported Detection limits (Code K)

		Yes	No	NA
12.1	Are RLs used consistent with those specified in the QAPP?			x
12.2	Are these limits adjusted to reflect dilutions and/ or percent solids as required?			x
12.3	Are TIC ions greater than ten percent in the reference spectrum also present in the sample spectrum?			x
12.4	Are any positives reported that exceed the linear range of the instrument? If yes, than flag "J".			x
12.5	If Level IV, calculate a sample of positive results to verify correct calculations			x

Note:

13.0 Field Duplicate Samples (Code F)

		Yes	No	NA
13.1	Were any field duplicates submitted for SVOC analysis?	X		
13.2	Were all RPD or absolute difference values within the control limits?	X		
	No action is taken based on field duplicate results, however the data validator should provide a qualitative assessment in the data validation report.			

Note: Sample SED-SA2-GMCS-9 DUP was a duplicate of sample SED-SA2-GMCS-9. All duplicate criteria were met.

14.0 Data Completeness

			Yes	No	NA
14.1	Is % completeness within the control limits? (Control limit: Check QAPP or use 95% for aqueous sample,		X		
14.2	Number of samples:	5			
14.3	Number of target compounds in each analysis:	65			
14.4	Number of results rejected and not reported:	5			
	% Completeness = 100 x ((14.1 x 14.2) - 14.3) / (14.1 x 14.2)				
	% Completeness	**98.46153846**			

Note:

DATA VALIDATION WORKSHEET
SEMIVOLATILE ORGANIC ANALYSIS

Reviewer:	Tony Sedlacek	**Project Name:**	Sauget - Area 2 Site R GMCS
Date:	11/12/2007	**Project Number:**	21561391.00000
Laboratory	Severn Trent Laboratory - Savannah	**SDG No.:**	SAS055
		Review Level:	Level IV

Major Anomolies:

The compound 2,4-dinitrophenol was qualified rejected "**R**" in all samples due to low LCS recovery

Minor Anomolies:

Compounds 3&4 methylphenol and isophorone were qualified due to calibration verification %Ds > 20%.

Field IDs: SED-SA2-GMCS-STATION 5
SED-SA2-GMCS- STATION 3

1.0 Chain of Custody/Sample Condition

		Yes	No	NA
1.1	Do Chain-of-Custody forms list all samples analyzed?	X		
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was maintained?	X		
1.3	Do the Traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data?	x		

Note: The laboratory case narrative indicated that surrogate recovery for nitrobenzene-d_5 was outside evaluation criteria in sample SW-SA2-GMCS-9. Also, LCS and MS recoveries for 2,4-dinitrophenol were outside evaluation criteria.

2.0 Holding Time/ Preservation (Code H)

		Yes	No	NA
2.1	Do sample preservation, collection and storage condition meet method requirement?	X		
	If samples were not on ice or the ice was melted upon arrival at the laboratory and the temperature of the cooler was elevated (> 10 ^{o}C), then flag all positive results with a "J" and all non-detects "UJ".			
2.2	Have any technical holding times, determined from sampling to date of analysis, been exceeded? (See attached		X	
	Extraction: Soil/Sediment 14 days - aqueous 7 days Analysis: 40 days			
2.3	Have any technical holding times grossly (twice the holding time) been exceeded? If yes, J(+)/R(-).		X	

Note: All holding times criteria were met.

3.0 GC/MS Instrument Performance Check (Code T)

		Yes	No	NA
3.1	Are GC/MS Tuning and Mass Calibration forms present for DFTPP?	X		
3.2	Have all samples been analyzed within twelve hours of the tune?	X		
	If no, the data for the affected standards, blanks, field samples or QC samples are rejected "R".			
3.3	Have ion abundance criteria for DFTPP been met for each instrument used?	X		
	If no, all standards, blanks, field samples and QC samples are rejected "R".			

Note: All tuning criteria were met.

4.0 Blanks (Method Blanks and Field Blanks)

(Code X - Field Blank Contamination, Code Z - Method blank contamination)

		Yes	No	NA
4.1	Is a Method Blank Summary form present for each batch?			
4.2	Do any method/instrument/reagent blanks have positive results (TCL, and/or TIC)?			
4.3	Do any field equipment blanks have positive results (TCL, and/or TIC)?			
	Action: Positive sample results <5X (or 10X for phthalate contaminants) the blank concentration should be qualified "U" and the detection limit elevated to the RL for estimate concentrations.			
4.4	If Level IV, review raw data and verify all detections for blanks were reported.			

Note: All blank criteria were met. Review of chromatograms indicated all peaks present were either surrogate compounds, internal standards or the concentration were below the method detection limit.

5.0 GC/MS Initial Calibration (Code C)

		Yes	No	NA
5.1	Are Initial Calibration summary forms present and complete for each instrument used?			
5.2	Are CCCs linear applying either %RSD 30% and all other compounds <15% or >0.990?			
	If not, J(+)/ UJ(-). In extreme cases, the reviewer may flag non-detects "R".			
5.3	Do any SPCC compounds have an RRF les than specification or any other compounds < 0.05 (use 0.01 for poor responders like amines and phenols)? If yes, J(+)/R(-).			
5.4	Is the lowest standard at the same concentration, or lower, as the RL reported? If not, elevate RL.			
5.5	If Level IV, recalculate a sample of RRFs and %RSDs to verify correct calculations are being made.			

Note: All initial calibration evaluation were met. Recalculation of the RFs and %Ds was completed and no errors in calculation were noted. No qualification of data was required.

6.0 Continuing Calibration (Code C)

		Yes	No	NA
6.1	Are Continuing Calibration Summary forms present and complete?			
6.2	Has a continuing calibration standard been analyzed every 12 hours?			
6.3	Have all SPCCs and CCCs met method specifications? If not, comment in report, proceed to 6.4.			
6.4	Do any compounds have a % difference (or % drift for quantitation from a curve) (%D) between initial and continuing calibration RRF outside QC limits (%D < 20%)?		x	
	If yes, a marginal increase in response >20% then J(+) only; a decrease in response then J(+)/ UJ(-). For %D > 50%, flag R.			
6.5	Do any compounds have an RRF < 0.05 (use 0.01 for poor responders)? If yes, J(+)/R(-).			
6.6	If Level IV, calculate a sample of RFs and %Ds from ave RF to verify correct calculations.			

Note: The compounds 3&4 methylphenol (-23.6%) and isophorone (-22.8%) had %Ds greater than 20%. Compounds 3&4 methylphenol and isophorone were nondetect in samples SED-SA2-GMCS-STATION 5 and SED-SA2-GMCS-STATION 3 and were qualified estimated nondetect "UJ" in both samples. Recalculation of the RFs and %Ds was completed and no errors in calculation were noted. No qualification of data was required.

7.0 Surrogate Recovery (Code S)

		Yes	No	NA
7.1	Are all samples listed on the appropriate Surrogate Recovery Summary Form ?			
7.2	Are surrogate recoveries within acceptance criteria specified in the QAPP for all samples and method blanks?			
7.3	Are more than one of either fraction outside the acceptance criteria?			
7.4	If Yes in Section 7.3, are these sample(s) or method blank(s) reanalyzed?		x	
7.5	If Yes in Section 7.3, is any sample dilution factor greater than 10?			x
	Note: If SMC recoveries display unacceptable recoveries in the MS and/ or diluted samples, then no reanalysis is required and acids and base/ neutrals are assessed separately.			
	> UCL / 10% to LCL / < 10%			
	Positive: J / J / J			
	Non-detect: None / UJ / R			

Note: Surrogate recoveries were within evaluation criteria for the validated samples.

8.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD) or one MS with a Sample Duplicate (Recovery - Code M, RPD - Code D)

		Yes	No	NA
8.1	Is a Matrix Spike/Matrix Spike Duplicate recovery form present?			
8.2	Are MS/MSDs analyzed at the required frequency not to exceed twenty field samples for each matrix?			
8.3	Are all MS/MSD %Rs and RPDs within acceptance criteria provided by the laboratory?		x	
	Using informed professional judgment, the data reviewer should use the MS and MSD results in conjunction with other QC criteria and determine the need for qualification of the data for samples *from the same site/matrix*. Recoveries <10% may require rejection. RPD failures may be flagged "J" (+ only)			

Note: Sample SED-SA2-GMCS-STATION 5 was spiked and analyzed for SVOCs. The MS recovery for 2,4-dinitrophenol (8%) was outside evaluation criteria (10-119%). Samples are not qualified due to MS/MSD recovery alone, 2,4-dinitrophenol was previously qualified due to LCS recovery; therefore no additional qualification of data was needed.

9.0 Laboratory Control Sample (LCS/LCSD) (Recovery - Code L, RPD - Code E)

		Yes	No	NA
9.1	Is an LCS recovery form present?			
9.2	Is LCS analyzed at the required frequency for each matrix?			
9.3	Are all LCS %Rs (and RPDs) within acceptance criteria?		x	
	Action for specific compound outside the acceptance criteria: %R>UCL, J(+) only; <LCL, J(+)/UJ(-); <30% J(+)/R(-). RPD failures should be flagged "J" (+ only)			
9.4	If Level IV, verify the % recoveries are calculated correctly.	x		

Note: associated samples and qualified rejected "R". LCS were recalculated from the raw data and verified using the LCS summary forms, and no calculation or transcription errors were noted.

Field ID	Analyte(s)	Qualification	Code	Batch	Justification
SED-SA2-GMCS-STATION 5	2,4-dinitrophneol	R	L	580-86291	LCS recovery < 10%
SED-SA2-GMCS- STATION 3	2,4-dinitrophneol	R	L	580-86291	LCS recovery < 10%

10.0 Internal Standards (Code I)

		Yes	No	NA
10.1	Are internal standard area of every sample and blank within upper and lower QC limits for each continuing			
	Area > +100% / Area < -50% / Area < -10%			
	Positive: J / J / J			
	Non-detect: None / UJ / R			
Note:	The method specification is for the continuing calibration to be compared to the mid-point initial calibration, not sample to continuing calibration. Thus, if all other QC specifications are met for a given sample, using informed professional judgment, the reviewer may choose not to flag individual samples in this case.			
10.2	Are retention times of internal standards within 30 seconds of the associated calibration standard?			
	Action: The chromatogram must be examined to determine if any false positives or negatives exist. For shift of a large magnitude, the reviewer may consider partial or total rejection of the data for non-detects in that sample/fraction.			

Note: Internal standard area counts and retention times were within evaluation criteria.

11.0 TCL Identification (Code W)

		Yes	No	NA
11.1	Is the relative retention time (RRT) of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration?			
11.2	Are the three ions of greatest intensity present in the standard mass spectrum also present in the sample mass spectrum; and do sample and standard relative ion intensities agree within 30%?			

Note:

12.0 TCL/TIC Quantitation and Reported Detection limits (Code K)

		Yes	No	NA
12.1	Are RLs used consistent with those specified in the QAPP?			
12.2	Are these limits adjusted to reflect dilutions and/ or percent solids as required?			
12.3	Are TIC ions greater than ten percent in the reference spectrum also present in the sample spectrum?			
12.4	Are any positives reported that exceed the linear range of the instrument? If yes, than flag "J".			
12.5	If Level IV, calculate a sample of positive results to verify correct calculations	x		

Note: All analytes were nondetect; therefore, LCS spiking compounds were recalculated and no calculation errors were noted.

13.0 Field Duplicate Samples (Code F)

		Yes	No	NA
13.1	Were any field duplicates submitted for SVOC analysis?			
13.2	Were all RPD or absolute difference values within the control limits?			
	No action is taken based on field duplicate results, however the data validator should provide a qualitative assessment in the data validation report.			

Note: Sample SED-SA2-GMCS-9 DUP was a duplicate of sample SED-SA2-GMCS-9. All duplicate criteria were met.

14.0 Data Completeness

			Yes	No	NA
14.1	Is % completeness within the control limits? (Control limit: Check QAPP or use 95% for aqueous sample,				
14.2	Number of samples:	5			
14.3	Number of target compounds in each analysis:	65			
14.4	Number of results rejected and not reported:	2			
	% Completeness = 100 x ((14.1 x 14.2) - 14.3) / (14.1 x 14.2)				
	% Completeness	**99.38461538**			

Note:

DATA VALIDATION WORKSHEET
HERBICIDES ANALYSIS

Reviewer: Tony Sedlacek
Date: 11/12/2007
Laboratory Severn Trent Laboratory - Savannah

Project Name: Sauget - Area 2 Site R GMCS
Project Number: 21561391.00000
SDG No.: SAS055
Review Level: Level III

Major Anomolies:

No samples were rejected

Minor Anomolies:

No analytes required qualification based on this data review.

Field IDs:

SED-SA2-GMCS-9
SED-SA2-GMCS-9 DUP
SED-SA2-GMCS-STATION 5
SED-SA2-GMCS-STATION 4
SED-SA2-GMCS- STATION 3

1.0 Chain of Custody/Sample Condition

		Yes	No	NA
1.1	Do Chain-of-Custody forms list all samples analyzed?	X		
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was maintained?	X		
1.3	Do the Traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data?		X	

Note: The laboratory case narrative and cooler receipt form did not indicate any problems.

2.0 Holding Time/ Preservation (Code h)

		Yes	No	NA
2.1	Do sample preservation, collection and storage condition meet method requirement?	X		
	If samples were not on ice or the ice was melted upon arrival at the laboratory and the temperature of the cooler was elevated (> 10 ^{o}C), then flag all positive results with a "J" and all non-detects "UJ".			
2.2	Have any technical holding times, determined from sampling to date of analysis, been exceeded? (See attached Holding Time Table for sample holding time) If yes, J(+)/UJ(-).		X	
	Extraction: Soil/Sediment 14 days - aqueous 7 days Analysis: 40 days			
2.3	Have any technical holding times grossly (twice the holding time) been exceeded? If yes, J(+)/R(-).		X	

Note: All holding time criteria were met.

3.0 Blanks (Method Blanks and Field Blanks)

(Code x - Field Blank Contamination, Code z - Method blank contamination)

		Yes	No	NA
3.1	Is a Method Blank Summary form present for each batch?			
3.2	Do any method blanks have positive results?			
3.3	Do any field/rinse/equipment blanks have positive results?			
	Action: Positive sample results <5X the blank concentration should be qualified "U". The result should be elevated to the RL for estimate (laboratory "J" flagged) concentrations.			
3.4	If Level IV, review raw data and verify all detections for blanks were reported.			x

Note: All blank criteria were met.

4.0 Initial Calibration (Code r)

		Yes	No	NA
4.1	Are Initial Calibration summary forms present and complete for each instrument used?			x
4.2	Are calibration factors stable (%RSD values < 20% or >0.995) over the concentration range of the instrument			x
	If not, J(+)/ UJ(-). In extreme cases, the reviewer may flag non-detects "R".			
4.3	If Level IV, recalculate a sample of RRFs and %RSDs to verify correct calculations are being made.			x

Note:

5.0 Continuing Calibration (Code c)

		Yes	No	NA
5.1	Are Continuing Calibration Summary forms present and complete?			x
5.2	Has a continuing calibration standard been analyzed every 12 hours?			x
5.3	Do any compounds have a % difference (or % drift for quantitation from a curve) (%D) between initial and continuing calibration CF outside QC limits (%D < 20%)?			x
	If yes, a marginal increase in response >20% then J(+) only; a decrease in response then J(+)/ UJ(-). For %D > 50%, flag R.			
5.5	If Level IV, calculate a sample of CFs and %Ds from ave CF to verify correct calculations.			x

Note:

6.0 Surrogate Recovery (Code s)

		Yes	No	NA
6.1	Are all samples listed on the appropriate Surrogate Recovery Summary Form ?			
6.2	Are surrogate recoveries within acceptance criteria specified in the QAPP for all samples?			
6.3	If No in Section 6.2, were these sample(s) or method blank(s) reanalyzed?			x
6.4	If No in Section 6.3, is any sample dilution factor greater than 10? (Surrogate recoveries may be diluted out.)			x
	> UCL / 10% to LCL / < 10%			
	Positive: J / J / J			
	Non-detect: None / UJ / R			

Note: All surrogate recoveries were within evaluation criteria.

7.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD) or one MS with a Sample Duplicate (Code m - recovery, Code d - RPD)

		Yes	No	NA
7.1	Is a Matrix Spike/Matrix Spike Duplicate recovery form present?			
7.2	Are MS/MSDs analyzed at the required frequency of one matrix spike per ten samples and a duplicate per twenty for each matrix?			
7.3	Are all MS/MSD %Rs and RPDs within acceptance criteria Specified in the QAPP?			
	Using informed professional judgment, the data reviewer should use the MS and MSD results in conjunction with other QC criteria and determine the need for qualification of the data for samples *from the same site/matrix*. Recoveries <10% may require rejection. RPD failures may be flagged "J" (+ only)			

Note: Sample SED-SA2-GMCS-STATION 5 was spiked and analyzed for herbicides.

8.0 Laboratory Control Sample (LCS/LCSD) (Code l - LCS recovery Code e - RPD)

		Yes	No	NA
8.1	Is an LCS recovery form present?			
8.2	Is an LCS analyzed at the required frequency of one per twenty field samples for each matrix?			
8.3	Are all LCS %Rs and RPDs within acceptance criteria specified in the QAPP?			
8.4	If Level IV, verify the % recoveries are calculated correctly.			x
	Action for specific compound outside the acceptance criteria: %R>UCL, J(+) only; <LCL, J(+)/UJ(-); <30% J(+)/R(-). RPD failures should be flagged "J" (+ only)			

Note: All LCS recoveries were within evaluation criteria.

9.0 TCL Identification (Code w)

		Yes	No	NA
9.1	Is the relative retention time (RRT) of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration?			x

Note:

10.0 TCL Quantitation and Reported Detection limits (Code p)

		Yes	No	NA
10.1	Are RLs used consistent with those specified in the QAPP?			x
10.2	Are these limits adjusted to reflect dilutions and/ or percent solids as required?			x
10.3	Are any positives reported that exceed the linear range of the instrument? If yes, than flag "J".			x
10.4	If Level IV, calculate a sample of positive results to verify correct calculations			x

Note:

11.0 Field Duplicate Samples (Code f)

		Yes	No	NA
11.1	Were any field duplicates submitted for herbicide analysis?			
11.2	Were all RPD or absolute difference values within the control limits outlined in the QAPP?			
	Action: No qualifying action is taken based on field duplicate results, however the data validator should provide a qualitative assessment in the data validation report.			

Note: Sample SED-SA2-GMCS-9 DUP was a duplicate of sample SED-SA2-GMCS-9. All duplicate criteria were met.

12.0 Data Completeness

			Yes	No	NA
12.1	Is % completeness within the control limits? (Control limit: Check QAPP or use 95% for aqueous sample, 90%				
12.2	Number of samples:	5			
12.3	Number of target compounds in each analysis:	10			
12.4	Number of results rejected and not reported:	0			
	% Completeness = 100 x ((12.1 x 12.2) - 12.3) / (12.1 x 12.2)				
	% Completeness	**100**			

Note:

DATA VALIDATION WORKSHEET
HERBICIDES ANALYSIS

Reviewer: Tony Sedlacek
Date: 11/12/2007
Laboratory Severn Trent Laboratory - Savannah

Project Name: Sauget - Area 2 Site R GMCS
Project Number: 21561391.00000
SDG No.: SAS055
Review Level: Level IV

Major Anomolies:

No samples were rejected

Minor Anomolies:

No analytes required qualification based on this data review.

Field IDs: SED-SA2-GMCS-STATION 5
SED-SA2-GMCS- STATION 3

1.0 Chain of Custody/Sample Condition

		Yes	No	NA
1.1	Do Chain-of-Custody forms list all samples analyzed?	X		
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was maintained?	X		
1.3	Do the Traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data?		X	

Note: The laboratory case narrative and cooler receipt form did not indicate any problems.

2.0 Holding Time/ Preservation (Code h)

		Yes	No	NA
2.1	Do sample preservation, collection and storage condition meet method requirement?	X		
	If samples were not on ice or the ice was melted upon arrival at the laboratory and the temperature of the cooler was elevated (> 10 ^{o}C), then flag all positive results with a "J" and all non-detects "UJ".			
2.2	Have any technical holding times, determined from sampling to date of analysis, been exceeded? (See attached Holding Time Table for sample holding time) If yes, J(+)/UJ(-).		X	
	Extraction: Soil/Sediment 14 days - aqueous 7 days Analysis: 40 days			
2.3	Have any technical holding times grossly (twice the holding time) been exceeded? If yes, J(+)/R(-).		X	

Note: All holding time criteria were met.

3.0 Blanks (Method Blanks and Field Blanks)(Code x - Field Blank Contamination, Code z - Method blank contamination)

		Yes	No	NA
3.1	Is a Method Blank Summary form present for each batch?			
3.2	Do any method blanks have positive results?			
3.3	Do any field/rinse/equipment blanks have positive results?			
	Action: Positive sample results <5X the blank concentration should be qualified "U". The result should be elevated to the RL for estimate (laboratory "J" flagged) concentrations.			
3.4	If Level IV, review raw data and verify all detections for blanks were reported.			

Note: All blank criteria were met. Review of chromatograms indicated all peaks present were either surrogate compounds, internal standards or the concentration were below the method detection limit.

4.0 Initial Calibration (Code r)

		Yes	No	NA
4.1	Are Initial Calibration summary forms present and complete for each instrument used?			
4.2	Are calibration factors stable (%RSD values < 20% or >0.995) over the concentration range of the instrument			
	If not, J(+)/ UJ(-). In extreme cases, the reviewer may flag non-detects "R".			
4.3	If Level IV, recalculate a sample of RRFs and %RSDs to verify correct calculations are being made.			

Note: All initial calibration evaluation were met. Recalculation of the RFs and %Ds was completed and no errors in calculation were noted. No qualification of data was required.

5.0 Continuing Calibration (Code c)

		Yes	No	NA
5.1	Are Continuing Calibration Summary forms present and complete?			
5.2	Has a continuing calibration standard been analyzed every 12 hours?			
5.3	Do any compounds have a % difference (or % drift for quantitation from a curve) (%D) between initial and continuing calibration CF outside QC limits (%D < 20%)?			
	If yes, a marginal increase in response >20% then J(+) only; a decrease in response then J(+)/ UJ(-). For %D > 50%, flag R.			
5.5	If Level IV, calculate a sample of CFs and %Ds from ave CF to verify correct calculations.			

Note: All continuing calibration evaluation were met. Recalculation of the RFs and %Ds was completed and no errors in calculation were noted. No qualification of data was required.

6.0 Surrogate Recovery (Code s)

		Yes	No	NA
6.1	Are all samples listed on the appropriate Surrogate Recovery Summary Form ?			
6.2	Are surrogate recoveries within acceptance criteria specified in the QAPP for all samples?			
6.3	If No in Section 6.2, were these sample(s) or method blank(s) reanalyzed?			x
6.4	If No in Section 6.3, is any sample dilution factor greater than 10? (Surrogate recoveries may be diluted out.)			x
	> UCL / 10% to LCL / < 10%			
	Positive: J / J / J			
	Non-detect: None / UJ / R			

Note: All surrogate recoveries were within evaluation criteria.

7.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD) or one MS with a Sample Duplicate (Code m - recovery, Code d - RPD)

		Yes	No	NA
7.1	Is a Matrix Spike/Matrix Spike Duplicate recovery form present?			
7.2	Are MS/MSDs analyzed at the required frequency of one matrix spike per ten samples and a duplicate per twenty for each matrix?			
7.3	Are all MS/MSD %Rs and RPDs within acceptance criteria Specified in the QAPP?			
	Using informed professional judgment, the data reviewer should use the MS and MSD results in conjunction with other QC criteria and determine the need for qualification of the data for samples *from the same site/matrix*. Recoveries <10% may require rejection. RPD failures may be flagged "J" (+ only)			

Note: Sample SED-SA2-GMCS-STATION 5 was spiked and analyzed for herbicides.

8.0 Laboratory Control Sample (LCS/LCSD) (Code l - LCS recovery Code e - RPD)

		Yes	No	NA
8.1	Is an LCS recovery form present?			
8.2	Is an LCS analyzed at the required frequency of one per twenty field samples for each matrix?			
8.3	Are all LCS %Rs and RPDs within acceptance criteria specified in the QAPP?			
8.4	If Level IV, verify the % recoveries are calculated correctly.			
	Action for specific compound outside the acceptance criteria: %R>UCL, J(+) only; <LCL, J(+)/UJ(-); <30% J(+)/R(-). RPD failures should be flagged "J" (+ only)			

Note: All LCS recoveries were within evaluation criteria. LCS were recalculated from the raw data and verified using the LCS summary forms, and no calculation or transcription errors were noted.

9.0 TCL Identification (Code w)

		Yes	No	NA
9.1	Is the relative retention time (RRT) of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration?			

Note:

10.0 TCL Quantitation and Reported Detection limits (Code p)

		Yes	No	NA
10.1	Are RLs used consistent with those specified in the QAPP?			
10.2	Are these limits adjusted to reflect dilutions and/ or percent solids as required?			
10.3	Are any positives reported that exceed the linear range of the instrument? If yes, than flag "J".			
10.4	If Level IV, calculate a sample of positive results to verify correct calculations			

Note: All analytes were nondetect; therefore, MS/MSD spiking compounds were recalculated and no calculation errors were noted.

11.0 Field Duplicate Samples (Code f)

		Yes	No	NA
11.1	Were any field duplicates submitted for herbicide analysis?			
11.2	Were all RPD or absolute difference values within the control limits outlined in the QAPP?			
	Action: No qualifying action is taken based on field duplicate results, however the data validator should provide a qualitative assessment in the data validation report.			

Note: Sample SED-SA2-GMCS-9 DUP was a duplicate of sample SED-SA2-GMCS-9. All duplicate criteria were met.

12.0 Data Completeness

			Yes	No	NA
12.1	Is % completeness within the control limits? (Control limit: Check QAPP or use 95% for aqueous sample, 90%				
12.2	Number of samples:	5			
12.3	Number of target compounds in each analysis:	10			
12.4	Number of results rejected and not reported:	0			
	% Completeness = 100 x ((12.1 x 12.2) - 12.3) / (12.1 x 12.2)				
	% Completeness	**100**			

Note:

DATA VALIDATION WORKSHEET
PESTICIDES ANALYSIS

Reviewer: Tony Sedlacek
Date: 11/12/2007
Laboratory Severn Trent Laboratory - Savannah

Project Name: Sauget - Area 2 Site R GM'S
Project Number: 21561391.00000
SDG No.: SAS055
Review Level: Level III

Major Anomolies:

No samples were rejected.

Minor Anomolies:

Samples were qualified estimated nondetect "UJ" due to low surrogate recovery.

Field IDs:

SED-SA2-GMCS-9
SED-SA2-GMCS-9 DUP
SED-SA2-GMCS-STATION 5
SED-SA2-GMCS-STATION 4
SED-SA2-GMCS- STATION 3

1.0 Chain of Custody/Sample Condition

		Yes	No	NA
1.1	Do Chain-of-Custody forms list all samples analyzed?			
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was maintained?			
1.3	Do the Traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data?	x		

Note: The laboratory case narrative indicated that surrogate recoveries were outside evaluation criteria in several samples. Also, MS/MSD recoveries were outside evaluation criteria in sample SED-SA2-GMCS-STATION 5.

2.0 Holding Time/ Preservation (Code h)

		Yes	No	NA
2.1	Do sample preservation, collection and storage condition meet method requirement?			
	If samples were not on ice or the ice was melted upon arrival at the laboratory and the temperature of the cooler was elevated (> 10 ^{o}C), then flag all positive results with a "J" and all non-detects "UJ".			
2.2	Have any technical holding times, determined from sampling to date of analysis, been exceeded? (See attached Holding Time Table for sample holding time) If yes, J(+)/UJ(-).			
	Extraction: Soil/Sediment 14 days - aqueous 7 days Analysis: 40 days			
2.3	Have any technical holding times grossly (twice the holding time) been exceeded? If yes, J(+)/R(-).			

Note: All holding times criteria were met.

3.0 Blanks (Method Blanks and Field Blanks)(Code x - Field Blank Contamination, Code z - Method blank contamination)

		Yes	No	NA
3.1	Is a Method Blank Summary form present for each batch?			
3.2	Do any method blanks have positive results (TCL)?			
3.3	Do any field/rinse/equipment blanks have positive results (TCL)?			
	Action: Positive sample results <5X the blank concentration should be qualified "U". The result should be elevated to the RL for estimate (laboratory "J" flagged) concentrations.			
3.4	If Level IV, review raw data and verify all detections for blanks were reported.			x

Note: All blank criteria were met.

4.0 GC/ECD Instrument Performance Check (Code b)

		Yes	No	NA
4.1	Are Endrin and 4,4'-DDT breakdown forms present?			x
4.2	Have all samples been analyzed within twelve hours of the performance check sample?			x
	If no, the data for the affected standards, blanks, field samples or QC samples are rejected "R".			
4.3	Have percent breakdown criteria (15%) for endrin and 4,4'-DDT been met?			x
	If no, all standards, blanks, field samples and QC samples are rejected "R".			

Note:

5.0 Initial Calibration (Code r)

		Yes	No	NA
5.1	Are Initial Calibration summary forms present and complete for each instrument used?			x
5.2	Are response factors stable (%RSD values < 20% or >0.995) over the concentration range of the instrument			x
	If not, J(+)/ UJ(-). In extreme cases, the reviewer may flag non-detects "R".			
5.3	If Level IV, recalculate a sample of RRFs and %RSDs to verify correct calculations are being made.			x

Note:

6.0 Continuing Calibration (Code c)

		Yes	No	NA
6.1	Are Continuing Calibration Summary forms present and complete?			x
6.2	Has a continuing calibration standard been analyzed every 12 hours?			x
6.3	Do any compounds have a % difference (or % drift for quantitation from a curve) (%D) between initial and continuing calibration CF outside QC limits (%D < 15%)?			x
	If yes, a marginal increase in response >20% then J(+) only; a decrease in response then J(+)/ UJ(-). For %D > 50%, flag R.			
6.4	If Level IV, calculate a sample of CFs and %Ds to verify correct calculations.			x

Note:

7.0 Surrogate Recovery (Code s)

		Yes	No	NA
7.1	Are all samples listed on the appropriate Surrogate Recovery Summary Form ?			
7.2	Are surrogate recoveries within acceptance criteria specified in the QAPP for all samples?		x	
7.3	If No in Section 7.2, were these sample(s) or method blank(s) reanalyzed?		x	
7.4	If No in Section 7.3, is any sample dilution factor greater than 10? (Surrogate recoveries may be diluted out.)		x	
	> UCL / 10% to LCL / < 10%			
	Positive: J / J / J			
	Non-detect: None / UJ / R			

Note: Surrogate recoveries for tetrachloro-m-xylene were below evaluation criteria (26-140%) in samples SED-SA2-GMCS-9 (23%), SED-SA2-GMCS-9 DUP (16%), SED-SA2-GMCS-STATION 5 (13%), SED-SA2-GMCS-STATION 4 (15%) and SED-SA2-GMCS-STATION 3 (21%). All analytes were nondetect and were qualified estimated nondetect "UJ" in all associated samples. Surrogate recoveries for tetrachloro-m-xylene were also below evaluation criteria in MS/MSD sample SED-SA2-GMCS-STATION 5 (21/15%) with criteria (26-140%). MS/MSD samples are quality control samples and are not qualified due to surrogate recovery.

Field ID	Analyte(s)	Qualification	Code	Batch	Justification
SED-SA2-GMCS-9	All Pesticides	UJ	s	680-86513	Low surrogate recovery
SED-SA2-GMCS-9 DUP	All Pesticides	UJ	s	680-86513	Low surrogate recovery
SED-SA2-GMCS-STATION 5	All Pesticides	UJ	s	680-86513	Low surrogate recovery
SED-SA2-GMCS-STATION 4	All Pesticides	UJ	s	680-86513	Low surrogate recovery
SED-SA2-GMCS-STATION 3	All Pesticides	UJ	s	680-86513	Low surrogate recovery

8.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD) or one MS with a Sample Duplicate (Code m - recovery, Code d - RPD)

		Yes	No	NA
8.1	Is a Matrix Spike/Matrix Spike Duplicate recovery form present?			
8.2	Are MS/MSDs analyzed at the required frequency of one matrix spike per ten samples and a duplicate per twenty for each matrix?			
8.3	Are all MS/MSD %Rs and RPDs within acceptance criteria Specified in the QAPP?		x	
	Using informed professional judgment, the data reviewer should use the MS and MSD results in conjunction with other QC criteria and determine the need for qualification of the data for samples *from the same site/matrix*. Recoveries <10% may require rejection. RPD failures may be flagged "J" (+ only)			

Note: Sample SED-SA2-GMCS-STATION 5 was spiked and analyzed for pesticides. MSD recovery was outside evaluation criteria for alpha-BHC (15%) with criteria (24-118%) and MS/MSD recoveries were outside evaluation criteria for gamma-BHC (Lindane) (29/18%) with criteria (30-121%), heptachlor (28/18%) with criteria (32-130%), aldrin (24/19%) with criteria (29-116%), and dieldrin (40/32%) with criteria (41-128%). Pesticides are not qualified due to MS/MSD recoveries alone and LCS recoveries were within evaluation criteria; therefore, no qualification of data was required.

9.0 Laboratory Control Sample (LCS/LCSD) (Code l - LCS recovery Code e - RPD)

		Yes	No	NA
9.1	Is an LCS recovery form present?			
9.2	Is an LCS analyzed at the required frequency of one per twenty field samples for each matrix?			
9.3	Are all LCS %Rs and RPDs within acceptance criteria specified in the QAPP?			
9.4	If Level IV, verify the % recoveries are calculated correctly.			x
	Action for specific compound outside the acceptance criteria: %R>UCL, J(+) only; <LCL, J(+)/UJ(-); <30% J(+)/R(-). RPD failures should be flagged "J" (+ only)			

Note: All LCS recoveries were within evaluation criteria.

10.0 TCL Identification (Code w)

		Yes	No	NA
10.1	Is the relative retention time (RRT) of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration?			x

Note:

11.0 TCL Quantitation and Reported Detection limits (Code p)

		Yes	No	NA
11.1	Are RLs used consistent with those specified in the QAPP?			x
11.2	Are these limits adjusted to reflect dilutions and/ or percent solids as required?			x
11.3	Are any positives reported that exceed the linear range of the instrument? If yes, than flag "J".			x
11.4	If Level IV, calculate a sample of positive results to verify correct calculations			x

Note:

12.0 Field Duplicate Samples (Code f)

		Yes	No	NA
12.1	Were any field duplicates submitted for analysis?			
12.2	Were all RPD or absolute difference values within the control limits outlined in the QAPP?			
	Action: No qualifying action is taken based on field duplicate results, however the data validator should provide a qualitative assessment in the data validation report.			

Note: Sample SED-SA2-GMCS-9 DUP was a duplicate of sample SED-SA2-GMCS-9. All duplicate criteria were met.

13.0 Data Completeness

			Yes	No	NA
13.1	Is % completeness within the control limits? (Control limit: Check QAPP or use 95% for aqueous sample, 90%				
13.2	Number of samples:	5			
13.3	Number of target compounds in each analysis:	21			
13.4	Number of results rejected and not reported:	0			
	% Completeness = 100 x ((13.1 x 13.2) - 13.3) / (13.1 x 13.2)				
	% Completeness	**100**			

Note:

DATA VALIDATION WORKSHEET - Level III Review
Inorganic - ICP, ICP-MS, GFAA, and CVAA

Reviewer: Tony Sedlacek
Date: 11/12/2007
Laboratory Severn Trent Laboratory - Savannah

Project Name: Sauget - Area 2 Site R GMCS
Project Number: 21561391.00000
SDG No.: SAS055
Review Level: Level III

Major Anomolies:

No samples were rejected

Minor Anomolies:

Analytes were qualified due to analytes detected calibration blanks and field duplicate RPD.

Field IDs:

SED-SA2-GMCS-9
SED-SA2-GMCS-9 DUP
SED-SA2-GMCS-STATION 5
SED-SA2-GMCS-STATION 4
SED-SA2-GMCS-STATION 3

1.0 Chain of Custody/Sample Condition/Raw Data

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
1.1	Do Chain-of-Custody forms list all samples that were analyzed?												
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was mair												
1.3	Do the traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data?	x											
1.4	Does sample preservation, collection and storage meet method requirement? (water samples: with Nitric Acid to pH < 2, and soil/sediment samples: 4 $^{o}C \pm 2\ ^{o}C$)												
1.5	Are the digestion logs present and complete with pH values, sample weights, dilutions, final volumes. % solids (for soil samples), and preparation dates? For any missing or incomplete documentation, contact the laboratory for explanation/resubmittal.												

Note: The laboratory case narrative indicated that the MS/MSD recoveries were outside evaluation criteria. In addition, analytes were detected in the equipment, preparation and calibration blanks. Calcium was qualified due to field duplicate RPD.

2.0 Holding Time (Code h)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
2.1	Have any technical holding times, determined from date of collection to date of analysis, been exceeded? (Hg: 28days, other metals: 6 months) See attached Holding Time Table.												
	Action: J(+)/UJ(-). If the holding times are grossly exceeded (twice the holding time criteria) J(+)/R(-).												

Note: All samples were analyzed within holding time criteria.

3.0 Instrument Calibration (Code c)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
3.1	Are sufficient standards included in the calibration curve? (ICP/ICP-MS: blank + one standard; GFAA: blank + three standards; CVAA: blank + five standards)			x									
3.2	Are the correlation coefficients > 0.995? (for GFAA and CVAA) Action: J(+)/UJ(-).												x
3.3	Was an initial calibration verification (ICV) analyzed at the beginning of each analysis? Action: If no, use professional judgment to determine affect on the data and note in reviewer narrative.			x									x
3.4	Was continuing calibration verification (CCV) performed every 10 analysis or every 2 hours, whichever is more frequent? Action: If no, use professional judgment to determine affect on the data and note in reviewer narrative.			x									x
3.5	Are all calibration standard percent recoveries (ICV and CCV) within the control limits? Mercury (80%-120%) and other Metals (90%-110%).			x									x
	Action: R(+/-) J(+)/UJ(-) J(+) R(+)												
	Mercury < 65% 65% - 79% 121% - 135% > 135%												
	Other Metals < 75% 75% - 89% 111% - 125% > 125%												

Note:

4.0 Blanks (Code o - Calibration blank failure, Code p - Preparation blank failure, Code x - Field blank failure)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
4.1	Were preparation blank (PB) prepared at the appropriate frequency (one per 20 samples, per batch, per matrix and per level)?												
4.2	Are there reported PB values > + IDL? Action: If yes, action level of 5 times the blank value are determined for positive and negative blank values.	x											
4.3	Were initial calibration blanks (ICB) analyzed? Action: If no, use professional judgment to determine affect on the data note in reviewer narrative.												
4.4	Were continuing calibration blanks (CCB) analyzed after every 10 samples or every 2 hours whichever is more frequent? Action: If no, use professional judgment to determine affect on the data to note in reviewer narrative.												
4.5	Are there reported ICB or CCB values > + IDL? Action: If yes, action level of 5 times the blank value are determined for positive and negative blank values.												
4.6	Are there samples with concentrations less than five times the highest level in associated blanks? Action: If yes, U at reported concentration.	x											
4.7	Are there samples with non-detect results or with concentrations less than five times the most negative value in associated blanks? Action; If yes, J(+)/UJ(-).												

Note: The compounds lead (0.25 mg/kg) and silver (0.0044 mg/kg) were detected in the preparation blank. Additionally, arsenic (0.0036 mg/L), calcium (0.0851 mg/L), selenium (0.0036 mg/L) and thallium (0.0060 mg/L) were detected in the continuing calibration blanks. Analytical data that were reported at concentrations greater than five times (5X) the associated blank concentration did not require qualification.

Field ID	Analyte	Batch #	Qualification	Code	Justification
SED-SA2-GMCS-STATION 3	Silver	680-85994	U	p	<5X the prep blank

5.0 ICP Interference Check Sample (ICS) (Code n)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
5.1	Was ICS AB analyzed at beginning of each ICP run (or at least twice every 8 hours), and at the beginning or once every 8 hours (whichever is more frequent) for ICP-MS?			x									
5.2	Are the ICS AB recoveries within 80% - 120%?			x									
5.3	Are the results for unspiked analytes (in ICS A) < + IDL?			x									
5.4	level in the ICS?			x									
	Action: Not Spiked Analytes / Spiked analytes (ICS AB analytes)												
	< -IDL / > IDL / < 50% / 50% - 79% / > 120%												
	UJ(-) / J(+) / R(+/-) / J(+)/UJ(-) / J(+)												

Note:

6.0 Laboratory Control Sample (LCS) (Code l - Recovery, Code e - RPD)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
6.1	Was an LCS prepared and analyzed at the correct frequency (one per 20 samples, per batch, per matrix and per level)? Action: If no, J(+) any sample not associated with LCS results.												
6.2	Is any LCS recovery outside the control limits? (Aqueous limits: 80% - 120% - except Ag and Sb; Solid limits: as per EPA-EMSL/LV)												
	Action: Solid / Aqueous												
	< LCL / > UCL / < 50% / 50% - 79% / > 120%												
	J(+)/UJ(-) / J(+) / R(+/-) / J(+)/UJ(-) / J(+)												

Note: All recoveries were within evaluation criteria.

7.0 Laboratory Duplicates (Code k)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
7.1	Were Laboratory duplicates prepared and analyzed at the correct frequency (one per 20 samples, per batch, per matrix and per level)? Action: If no, J(+), with professional judgment, analytes not associated with Duplicate results.												
7.2	Was a field blank used for the duplicate analysis? Action: If yes, J(+) with professional judgment. Note in worksheet.												
7.3	Are all analyte duplicate results within control? (RPD values < 20% or difference < ± PQL for aqueous, and RPD < 35% or difference < ± 2 X PQL for solids)? Action: If no, J(+).		x										
	Note: RPD criteria is used when both sample and duplicate results are > 5 X IDL.												

Note: Sample SED-SA2-GMCS-STATION 5 was duplicated for metals and mercury. RPDs were greater than 35% for aluminum (44.4%) and copper (52%). Aluminum and copper were detected in sample SED-SA2-GMCS-STATION 5 and were qualified estimated "J".

8.0 Spike Sample Analysis -Pre-Digestion (Code m - Recovery, Code d - RPD)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
8.1	Was a spiked sample prepared and analyzed at the correct frequency (one per 20 samples, per batch, per matrix and per level)? Action: If no, J(+), with professional judgment, analytes not associated with matrix spike results.												
8.2	**Was a field blank used for the MS analysis? Action: If yes, J(+) with professional judgment. Note in worksheet.**												
	Note: Matrix spike analysis may be performed on a field blank when it is the only aqueous sample in an SDG.												
8.3	For all analytes with sample concentration < 4 x spike concentration, are spike recoveries within the control limit of 75-125%? (No control limit applies to analytes with concentration > 4 x spike concentration.)		x										
	%R > 125% / 30% < %R < 74% / %R < 30%												
	Positive: J / J / J												
	Non-detect: None / UJ / R												

Note: Sample SED-SA2-GMCS-STATION 5 was spiked and analyzed for metals and mercury. Analytes with sample concentrations greater than 4X the spike concentrations did not require evaluation or qualification. MS/MSD recoveries were outside evaluation criteria (75-125%) for copper (202/115%) , manganese (58/68%) and MSD recovery for zinc (54%)and RPD for zinc (29) with criteria (>20). Additionally, the MSD recovery for mercury (122%) was outside evaluation criteria (80-120%). Mercury was nondetect in sample SED-SA2-GMCS-STATION 5; therefore, no qualification of data was required. Copper was previously qualified due to laboratory duplicate RPD, no additional qualification is needed. Manganese and zinc were detected in sample SED-SA2-GMCS-STATION 5 and were qualified estimated "J". The MS/MSD recoveries for lead and magnesium were also outside evaluation criteria, although professional judgment was used not to qualify these analytes in sample SED-SA2-GMCS-STATION 5 due high native concentrations in the parent sample.

9.0 Instrument Detection Limits (IDL)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
9.1	Are all IDL equal to or less than the reporting limits specified?			x									x

Note:

10.0 ICP Serial Dilutions (Code s)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
10.1	Were serial dilutions performed?												
10.2	Was a five-fold dilution performed?												
10.3	Did the serial dilution results agree within 10% for analyte concentration > 50 x the IDL in the original sample? If no, J(+).												

Note: Sample SED-SA2-GMCS-STATION 5 was diluted and analyzed, all %Ds were less than 10% for analytes with concentrations > 50X the IDL.

11.0 Field Duplicate Samples (Code f)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
11.1	Were any field duplicates submitted for metal analysis?												
11.2	35% or difference < ± 2 x PQL and For solids, RPD < 50% or difference < ± 4 x PQL)		x										

Note: Sample SED-SA2-GMCS-STATION 9 DUP was a duplicate of sample SED-SA2-GMCS-STATION 9. Calcium (62.5) had an RPD greater than 50%. Calcium was detected and qualified estimated "J" in both samples.

12.0 Result Verification (Code Q)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
12.1	Were all results and detection limits for solid-matrix samples reported on a dry-weight basis?			x									x
12.2	Were all dilution reflected in the positive results and detection limits?			x									x

Note:

13.0 Data Completeness

13.1	Is % completeness within the control limits? (Control limit: Check QAPP or use 95% for aqueous sample, 90% for soil sample)							
13.2	Number of samples:	5		0		0		5
13.3	Number of target compounds in each analysis:	22		0		0		1
13.4	Number of results rejected and not reported:	0		0		0		0
	% Completeness = 100 x ((13.1 x 13.2) - 13.3) / (13.1 x 13.2)							
	% Completeness	**100**		###		###		**100**

Note:

DATA VALIDATION WORKSHEET - Level III Review
Inorganic - ICP, ICP-MS, GFAA, and CVAA

Reviewer: Tony Sedlacek
Date: 11/12/2007
Laboratory Severn Trent Laboratory - Savannah

Project Name: Sauget - Area 2 Site R GMCS
Project Number: 21561391.00000
SDG No.: SAS055
Review Level: Level IV

Major Anomolies:

No samples were rejected

Minor Anomolies:

Analytes were qualified due to analytes detected calibration blanks and field duplicate RPD.

Field IDs:

SED-SA2-GMCS-9
SED-SA2-GMCS-9 DUP
SED-SA2-GMCS-STATION 5
SED-SA2-GMCS-STATION 4
SED-SA2-GMCS-STATION 3

1.0 Chain of Custody/Sample Condition/Raw Data

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
1.1	Do Chain-of-Custody forms list all samples that were analyzed?	x											
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was mair	x											
1.3	Do the traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data?	x											
1.4	Does sample preservation, collection and storage meet method requirement? (water samples: with Nitric Acid to pH < 2, and soil/sediment samples: 4 $^{o}C \pm 2\ ^{o}C$)	x											
1.5	Are the digestion logs present and complete with pH values, sample weights, dilutions, final volumes. % solids (for soil samples), and preparation dates? For any missing or incomplete documentation, contact the laboratory for explanation/resubmittal.	x											

Note: The laboratory case narrative indicated that the MS/MSD recoveries were outside evaluation criteria. In addition, analytes were detected in the equipment, preparation and calibration blanks.

2.0 Holding Time (Code h)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
2.1	Have any technical holding times, determined from date of collection to date of analysis, been exceeded? (Hg: 28days, other metals: 6 months) See attached Holding Time Table.												
	Action: J(+)/UJ(-). If the holding times are grossly exceeded (twice the holding time criteria) J(+)/R(-).												

Note: All samples were analyzed within holding time criteria.

3.0 Instrument Calibration (Code c)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
3.1	Are sufficient standards included in the calibration curve? (ICP/ICP-MS: blank + one standard; GFAA: blank + three standards; CVAA: blank + five standards)	x									x		
3.2	Are the correlation coefficients > 0.995? (for GFAA and CVAA) Action: J(+)/UJ(-).										x		
3.3	Was an initial calibration verification (ICV) analyzed at the beginning of each analysis? Action: If no, use professional judgment to determine affect on the data and note in reviewer narrative.	x									x		
3.4	Was continuing calibration verification (CCV) performed every 10 analysis or every 2 hours, whichever is more frequent? Action: If no, use professional judgment to determine affect on the data and note in reviewer narrative.	x									x		
3.5	Are all calibration standard percent recoveries (ICV and CCV) within the control limits? Mercury (80%-120%) and other Metals (90%-110%).	x									x		

Action:	R(+/-)	J(+)/UJ(-)	J(+)	R(+)
Mercury	< 65%	65% - 79%	121% - 135%	> 135%
Other Metals	< 75%	75% - 89%	111% - 125%	> 125%

Note: All calibration evaluation criteria were met. Calibration standard percent recoveries were recalculated, no errors were noted.

4.0 Blanks (Code o - Calibration blank failure, Code p - Preparation blank failure, Code x - Field blank failure)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
4.1	Were preparation blank (PB) prepared at the appropriate frequency (one per 20 samples, per batch, per matrix and per level)?	x			x			x			x		
4.2	Are there reported PB values > + IDL? Action: If yes, action level of 5 times the blank value are determined for positive and negative blank values.	x											
4.3	Were initial calibration blanks (ICB) analyzed? Action: If no, use professional judgment to determine affect on the data note in reviewer narrative.	x			x			x			x		
4.4	Were continuing calibration blanks (CCB) analyzed after every 10 samples or every 2 hours whichever is more frequent? Action: If no, use professional judgment to determine affect on the data to note in reviewer narrative.	x			x			x			x		
4.5	Are there reported ICB or CCB values > + IDL? Action: If yes, action level of 5 times the blank value are determined for positive and negative blank values.												
4.6	Are there samples with concentrations less than five times the highest level in associated blanks? Action: If yes, U at reported concentration.	x											
4.7	Are there samples with non-detect results or with concentrations less than five times the most negative value in associated blanks? Action; If yes, J(+)/UJ(-).												

Note: The compounds lead (0.25 mg/kg) and silver (0.0044 mg/kg) were detected in the preparation blank. Additionally, arsenic (0.0036 mg/L), calcium (0.0851 mg/L), selenium (0.0036 mg/L) and thallium (0.0060 mg/L) were detected in the continuing calibration blanks. Analytical data that were reported at concentrations greater than five times (5X) the associated blank concentration did not require qualification.

Field ID	Analyte	Batch #	Qualification	Code	Justification
SED-SA2-GMCS-STATION 3	Silver	680-85994	U	p	<5X the prep blank

5.0 ICP Interference Check Sample (ICS) (Code n)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
5.1	Was ICS AB analyzed at beginning of each ICP run (or at least twice every 8 hours), and at the beginning or once every 8 hours (whichever is more frequent) for ICP-MS?	x											
5.2	Are the ICS AB recoveries within 80% - 120%?	x											
5.3	Are the results for unspiked analytes (in ICS A) < + IDL?	x											
5.4	level in the ICS?												
	Action: Not Spiked Analytes / Spiked analytes (ICS AB analytes)												
	< -IDL / > IDL / < 50% / 50% - 79% / > 120%												
	UJ(-) / J(+) / R(+/-) / J(+)/UJ(-) / J(+)												

Note:

6.0 Laboratory Control Sample (LCS) (Code l - Recovery, Code e - RPD)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
6.1	Was an LCS prepared and analyzed at the correct frequency (one per 20 samples, per batch, per matrix and per level)? Action: If no, J(+) any sample not associated with LCS results.	x											
6.2	Is any LCS recovery outside the control limits? (Aqueous limits: 80% - 120% - except Ag and Sb; Solid limits: as per EPA-EMSL/LV)		x										
	Action: Solid / Aqueous												
	< LCL / > UCL / < 50% / 50% - 79% / > 120%												
	J(+)/UJ(-) / J(+) / R(+/-) / J(+)/UJ(-) / J(+)												

Note: All recoveries were within evaluation criteria.

7.0 Laboratory Duplicates (Code k)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
7.1	Were Laboratory duplicates prepared and analyzed at the correct frequency (one per 20 samples, per batch, per matrix and per level)? Action: If no, J(+), with professional judgment, analytes not associated with Duplicate results.	x											
7.2	Was a field blank used for the duplicate analysis? Action: If yes, J(+) with professional judgment. Note in worksheet.		x										
7.3	Are all analyte duplicate results within control? (RPD values < 20% or difference < ± PQL for aqueous, and RPD < 35% or difference < ± 2 X PQL for solids)? Action: If no, J(+).		x										
	Note: RPD criteria is used when both sample and duplicate results are > 5 X IDL.												

Note: Sample SED-SA2-GMCS-STATION 5 was duplicated for metals and mercury. RPDs were greater than 35% for aluminum (44.4%) and copper (52%). Aluminum and copper were detected in sample SED-SA2-GMCS-STATION 5 and were qualified estimated "J".

8.0 Spike Sample Analysis -Pre-Digestion (Code m - Recovery, Code d - RPD)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
8.1	Was a spiked sample prepared and analyzed at the correct frequency (one per 20 samples, per batch, per matrix and per level)? Action: If no, J(+), with professional judgment, analytes not associated with matrix spike results.												
8.2	**Was a field blank used for the MS analysis? Action: If yes, J(+) with professional judgment. Note in worksheet.**												
	Note: Matrix spike analysis may be performed on a field blank when it is the only aqueous sample in an SDG.												
8.3	For all analytes with sample concentration < 4 x spike concentration, are spike recoveries within the control limit of 75-125%? (No control limit applies to analytes with concentration > 4 x spike concentration.)		x										
	%R > 125% / 30% < %R < 74% / %R < 30%												
	Positive: J / J / J												
	Non-detect: None / UJ / R												

Note: Sample SED-SA2-GMCS-STATION 5 was spiked and analyzed for metals and mercury. Analytes with sample concentrations greater than 4X the spike concentrations did not require evaluation or qualification. MS/MSD recoveries were outside evaluation criteria (75-125%) for copper (202/115%) , manganese (58/68%) and MSD recovery for zinc (54%)and RPD for zinc (29) with criteria (>20). Additionally, the MSD recovery for mercury (122%) was outside evaluation criteria (80-120%). Mercury was nondetect in sample SED-SA2-GMCS-STATION 5; therefore, no qualification of data was required. Copper was previously qualified due to laboratory duplicate RPD, no additional qualification is needed. Manganese and zinc were detected in sample SED-SA2-GMCS-STATION 5 and were qualified estimated "J". The MS/MSD recoveries for lead and magnesium were also outside evaluation criteria, although professional judgment was used not to qualify these analytes in sample SED-SA2-GMCS-STATION 5 due high native concentrations in the parent sample.

9.0 Instrument Detection Limits (IDL)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
9.1	Are all IDL equal to or less than the reporting limits specified?												

Note:

10.0 ICP Serial Dilutions (Code s)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
10.1	Were serial dilutions performed?												
10.2	Was a five-fold dilution performed?												
10.3	Did the serial dilution results agree within 10% for analyte concentration > 50 x the IDL in the original sample? If no, J(+).												

Note:

Sample SED-SA2-GMCS-STATION 5 was diluted and analyzed, all %Ds were less than 10% for analytes with concentrations > 50X the IDL.

11.0 Field Duplicate Samples (Code f)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
11.1	Were any field duplicates submitted for metal analysis?												
11.2	Are all field duplicate results within control? (For aqueous sample, RPD values < 35% or difference < ± 2 x PQL and For solids, RPD < 50% or difference < ± 4 x		x										

Note: Sample SED-SA2-GMCS-STATION 9 DUP was a duplicate of sample SED-SA2-GMCS-STATION 9. Calcium (62.5) had an RPD greater than 50%. Calcium was detected and qualified estimated "J" in both samples as part of the data review.

12.0 Result Verification (Code Q)

		ICP			ICP-MS			GFAA			CVAA-Hg		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
12.1	Were all results and detection limits for solid-matrix samples reported on a dry-weight basis?												
12.2	Were all dilution reflected in the positive results and detection limits?												

Note:

13.0 Data Completeness

13.1	Is % completeness within the control limits? (Control limit: Check QAPP or use 95% for aqueous sample, 90% for soil sample)							
13.2	Number of samples:	5		0		0		5
13.3	Number of target compounds in each analysis:	22		0		0		1
13.4	Number of results rejected and not reported:	0		0		0		0
	% Completeness = 100 x ((13.1 x 13.2) - 13.3) / (13.1 x 13.2)							
	% Completeness	**100**		###		###		**100**

URS

Data Tables

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
September 2007

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	VOCs	1,1,1-Trichloroethane	1	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	VOCs	1,1,2,2-Tetrachloroethane	1	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	VOCs	1,1,2-Trichloroethane	1	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	VOCs	1,1-Dichloroethane	1	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	VOCs	1,1-Dichloroethylene	1	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	VOCs	1,2-Dichloroethane	1	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	VOCs	1,2-Dichloroethene (total)	2	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	VOCs	1,2-Dichloropropane	1	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	VOCs	2-Butanone (MEK)	10	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	VOCs	4-Methyl-2-pentanone (MIBK)	10	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	VOCs	Acetone	25	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	VOCs	Benzene	1	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	VOCs	Bromodichloromethane	1	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	VOCs	Bromoform	1	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	VOCs	Bromomethane	1	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	VOCs	Carbon Dioxide	76	ug/L	B J N	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	VOCs	Carbon Disulfide	2	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	VOCs	Carbon Tetrachloride	1	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	VOCs	Chlorobenzene	1	ug/L		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	VOCs	Chlorodibromomethane	1	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	VOCs	Chloroethane	1	ug/L	U*	UJ
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	VOCs	Chloroform	1	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	VOCs	Chloromethane	1	ug/L	U*	UJ
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	VOCs	cis-1,2-Dichloroethene	1	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	VOCs	cis-1,3-Dichloropropene	1	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	VOCs	Dichloromethane	5	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	VOCs	Ethylbenzene	1	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	VOCs	Methyl N-Butyl Ketone	10	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	VOCs	Styrene (Monomer)	1	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	VOCs	Tetrachloroethene	1	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	VOCs	Toluene	0.32	ug/L	J	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	VOCs	trans-1,2-Dichloroethene	1	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	VOCs	trans-1,3-Dichloropropene	1	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	VOCs	Trichloroethene	1	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	VOCs	Vinyl chloride	1	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	VOCs	Xylenes, Total	2	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	1,2,4-Trichlorobenzene	9.7	ug/L	U	

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
September 2007

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	1,2-Dichlorobenzene	9.7	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	1,3-Dichlorobenzene	9.7	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	1,4-Dichlorobenzene	9.7	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	9.7	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	2,4,5-Trichlorophenol	9.7	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	2,4,6-Trichlorophenol	9.7	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	2,4-Dichlorophenol	9.7	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	2,4-Dimethylphenol	9.7	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	2,4-Dinitrophenol	49	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	2,4-Dinitrotoluene	9.7	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	2,6-Dinitrotoluene	9.7	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	2-Chloronaphthalene	9.7	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	2-Chlorophenol	9.7	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	2-Methylnaphthalene	9.7	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	2-Methylphenol (o-Cresol)	9.7	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	2-Nitroaniline	49	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	2-Nitrophenol	9.7	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	3 & 4 Methylphenol	9.7	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	3,3'-Dichlorobenzidine	19	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	3-Nitroaniline	49	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	4,6-Dinitro-2-methylphenol	49	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	4-Bromophenyl Phenyl Ether	9.7	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	4-Chloro-3-methylphenol	9.7	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	4-Chlorophenyl Phenyl Ether	9.7	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	4-Nitrophenol	49	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	Acenaphthene	9.7	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	Acenaphthylene	9.7	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	Anthracene	9.7	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	Benzo(a)anthracene	9.7	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	Benzo(a)pyrene	9.7	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	Benzo(b)fluoranthene	9.7	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	Benzo(g,h,i)perylene	9.7	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	Benzo(k)fluoranthene	9.7	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	Benzyl Butyl Phthalate	9.7	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	bis(2-Chloroethoxy)methane	9.7	ug/L	U	

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
September 2007

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	bis(2-Chloroethyl)ether	9.7	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	bis(2-Ethylhexyl)phthalate	9.7	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	Carbazole	9.7	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	Chrysene	9.7	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	Dibenzo(a,h)anthracene	9.7	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	Dibenzofuran	9.7	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	Diethyl Phthalate	9.7	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	Dimethyl Phthalate	9.7	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	Di-n-butylphthalate	9.7	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	Di-n-octylphthalate	9.7	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	Dinoseb	9.7	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	Fluoranthene	9.7	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	Fluorene	9.7	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	Hexachlorobenzene	9.7	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	Hexachlorobutadiene	9.7	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	Hexachlorocyclopentadiene	9.7	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	Hexachloroethane	9.7	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	Indeno(1,2,3-cd)pyrene	9.7	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	Isophorone	9.7	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	Naphthalene	9.7	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	Nitrobenzene	9.7	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	N-Nitroso-di-n-propylamine	9.7	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	N-Nitrosodiphenylamine	9.7	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	P-Chloroaniline	19	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	Phenanthrene	9.7	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	Phenol	9.7	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	P-Nitroaniline	49	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	SVOCs	Pyrene	9.7	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	Pesticides	4,4'-DDD	0.097	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	Pesticides	4,4'-DDE	0.097	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	Pesticides	4,4'-DDT	0.097	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	Pesticides	Aldrin	0.049	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	Pesticides	alpha-BHC	0.049	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	Pesticides	alpha-Chlordane	0.049	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	Pesticides	beta-BHC	0.049	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	Pesticides	delta-BHC	0.049	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	Pesticides	Dieldrin	0.097	ug/L	U	

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
September 2007

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	Pesticides	Endosulfan I	0.049	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	Pesticides	Endosulfan II	0.097	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	Pesticides	Endosulfan Sulfate	0.097	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	Pesticides	Endrin	0.097	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	Pesticides	Endrin Aldehyde	0.097	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	Pesticides	Endrin Ketone	0.097	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	Pesticides	gamma-BHC (Lindane)	0.049	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	Pesticides	gamma-Chlordane	0.049	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	Pesticides	Heptachlor	0.049	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	Pesticides	Heptachlor Epoxide	0.049	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	Pesticides	Methoxychlor	0.49	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	Pesticides	Toxaphene	4.9	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	Herbicides	2,4,5-T	0.49	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	Herbicides	2,4,5-TP (Silvex)	0.49	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	Herbicides	2,4-D	0.49	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	Herbicides	2,4-DB	0.49	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	Herbicides	Dalapon	9.8	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	Herbicides	Dicamba	0.49	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	Herbicides	Dichlorprop	0.49	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	Herbicides	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	Herbicides	MCPP	120	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-STATION 2	9/18/07	Herbicides	Pentachlorophenol	0.25	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	VOCs	1,1,1-Trichloroethane	1	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	VOCs	1,1,2,2-Tetrachloroethane	1	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	VOCs	1,1,2-Trichloroethane	1	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	VOCs	1,1-Dichloroethane	1	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	VOCs	1,1-Dichloroethylene	1	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	VOCs	1,2-Dichloroethane	1	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	VOCs	1,2-Dichloroethene (total)	2	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	VOCs	1,2-Dichloropropane	1	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	VOCs	2-Butanone (MEK)	10	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	VOCs	4-Methyl-2-pentanone (MIBK)	10	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	VOCs	Acetone	25	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	VOCs	Benzene	1	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	VOCs	Bromodichloromethane	1	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	VOCs	Bromoform	1	ug/L	U	

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
September 2007

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	VOCs	Bromomethane	1	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	VOCs	Carbon Dioxide	80	ug/L	B J N	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	VOCs	Carbon Disulfide	0.35	ug/L	J	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	VOCs	Carbon Tetrachloride	1	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	VOCs	Chlorobenzene	1	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	VOCs	Chlorodibromomethane	1	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	VOCs	Chloroethane	1	ug/L	U*	UJ
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	VOCs	Chloroform	1	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	VOCs	Chloromethane	1	ug/L	U*	UJ
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	VOCs	cis-1,2-Dichloroethene	1	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	VOCs	cis-1,3-Dichloropropene	1	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	VOCs	Dichloromethane	5	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	VOCs	Ethylbenzene	1	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	VOCs	Methyl N-Butyl Ketone	10	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	VOCs	Styrene (Monomer)	1	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	VOCs	Tetrachloroethene	1	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	VOCs	Toluene	1	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	VOCs	trans-1,2-Dichloroethene	1	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	VOCs	trans-1,3-Dichloropropene	1	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	VOCs	Trichloroethene	1	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	VOCs	Vinyl chloride	1	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	VOCs	Xylenes, Total	2	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	1,2,4-Trichlorobenzene	9.7	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	1,2-Dichlorobenzene	9.7	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	1,3-Dichlorobenzene	9.7	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	1,4-Dichlorobenzene	9.7	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	9.7	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	2,4,5-Trichlorophenol	9.7	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	2,4,6-Trichlorophenol	9.7	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	2,4-Dichlorophenol	9.7	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	2,4-Dimethylphenol	9.7	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	2,4-Dinitrophenol	49	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	2,4-Dinitrotoluene	9.7	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	2,6-Dinitrotoluene	9.7	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	2-Chloronaphthalene	9.7	ug/L	U	

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	2-Chlorophenol	9.7	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	2-Methylnaphthalene	9.7	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	2-Methylphenol (o-Cresol)	9.7	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	2-Nitroaniline	49	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	2-Nitrophenol	9.7	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	3 & 4 Methylphenol	9.7	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	3,3'-Dichlorobenzidine	19	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	3-Nitroaniline	49	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	4,6-Dinitro-2-methylphenol	49	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	4-Bromophenyl Phenyl Ether	9.7	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	4-Chloro-3-methylphenol	9.7	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	4-Chlorophenyl Phenyl Ether	9.7	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	4-Nitrophenol	49	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	Acenaphthene	9.7	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	Acenaphthylene	9.7	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	Anthracene	9.7	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	Benzo(a)anthracene	9.7	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	Benzo(a)pyrene	9.7	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	Benzo(b)fluoranthene	9.7	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	Benzo(g,h,i)perylene	9.7	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	Benzo(k)fluoranthene	9.7	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	Benzyl Butyl Phthalate	9.7	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	bis(2-Chloroethoxy)methane	9.7	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	bis(2-Chloroethyl)ether	9.7	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	bis(2-Ethylhexyl)phthalate	9.7	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	Carbazole	9.7	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	Chrysene	9.7	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	Dibenzo(a,h)anthracene	9.7	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	Dibenzofuran	9.7	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	Diethyl Phthalate	9.7	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	Dimethyl Phthalate	9.7	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	Di-n-butylphthalate	9.7	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	Di-n-octylphthalate	9.7	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	Dinoseb	9.7	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	Fluoranthene	9.7	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	Fluorene	9.7	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	Hexachlorobenzene	9.7	ug/L	U	

Sauget Area 2
Groundwater Migration Control System
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	Hexachlorobutadiene	9.7	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	Hexachlorocyclopentadiene	9.7	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	Hexachloroethane	9.7	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	Indeno(1,2,3-cd)pyrene	9.7	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	Isophorone	9.7	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	Naphthalene	9.7	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	Nitrobenzene	9.7	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	N-Nitroso-di-n-propylamine	9.7	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	N-Nitrosodiphenylamine	9.7	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	P-Chloroaniline	19	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	Phenanthrene	9.7	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	Phenol	9.7	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	P-Nitroaniline	49	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	SVOCs	Pyrene	9.7	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Pesticides	4,4'-DDD	0.097	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Pesticides	4,4'-DDE	0.097	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Pesticides	4,4'-DDT	0.097	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Pesticides	Aldrin	0.049	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Pesticides	alpha-BHC	0.049	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Pesticides	alpha-Chlordane	0.049	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Pesticides	beta-BHC	0.049	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Pesticides	delta-BHC	0.049	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Pesticides	Dieldrin	0.097	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Pesticides	Endosulfan I	0.049	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Pesticides	Endosulfan II	0.097	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Pesticides	Endosulfan Sulfate	0.097	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Pesticides	Endrin	0.097	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Pesticides	Endrin Aldehyde	0.097	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Pesticides	Endrin Ketone	0.097	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Pesticides	gamma-BHC (Lindane)	0.049	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Pesticides	gamma-Chlordane	0.049	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Pesticides	Heptachlor	0.049	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Pesticides	Heptachlor Epoxide	0.049	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Pesticides	Methoxychlor	0.49	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Pesticides	Toxaphene	4.9	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Herbicides	2,4,5-T	0.5	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Herbicides	2,4,5-TP (Silvex)	0.5	ug/L	U	

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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Herbicides	2,4-D	0.5	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Herbicides	2,4-DB	0.5	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Herbicides	Dalapon	9.9	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Herbicides	Dicamba	0.5	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Herbicides	Dichlorprop	0.5	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Herbicides	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Herbicides	MCPP	120	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Herbicides	Pentachlorophenol	0.25	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Metals	Aluminum (Dissolved)	0.2	mg/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Metals	Antimony (Dissolved)	0.02	mg/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Metals	Arsenic (Dissolved)	0.01	mg/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Metals	Barium (Dissolved)	0.073	mg/L		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Metals	Beryllium (Dissolved)	0.004	mg/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Metals	Cadmium (Dissolved)	0.005	mg/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Metals	Calcium (Dissolved)	64	mg/L		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Metals	Chromium (Dissolved)	0.01	mg/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Metals	Cobalt (Dissolved)	0.01	mg/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Metals	Copper (Dissolved)	0.02	mg/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Metals	Iron (Dissolved)	0.05	mg/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Metals	Lead (Dissolved)	0.005	mg/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Metals	Magnesium (Dissolved)	24	mg/L		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Metals	Manganese (Dissolved)	0.01	mg/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Metals	Mercury (Dissolved)	0.0002	mg/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Metals	Nickel (Dissolved)	0.0027	mg/L	J	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Metals	Potassium (Dissolved)	5	mg/L		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Metals	Selenium (Dissolved)	0.01	mg/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Metals	Silver (Dissolved)	0.01	mg/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Metals	Sodium (Dissolved)	28	mg/L		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Metals	Thallium (Dissolved)	0.025	mg/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Metals	Vanadium (Dissolved)	0.003	mg/L	J	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-STATION 3	9/18/07	Metals	Zinc (Dissolved)	0.02	mg/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	VOCs	1,1,1-Trichloroethane	1	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	VOCs	1,1,2,2-Tetrachloroethane	1	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	VOCs	1,1,2-Trichloroethane	1	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	VOCs	1,1-Dichloroethane	1	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	VOCs	1,1-Dichloroethylene	1	ug/L	U	

Sauget Area 2
Groundwater Migration Control System
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	VOCs	1,2-Dichloroethane	1	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	VOCs	1,2-Dichloroethene (total)	2	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	VOCs	1,2-Dichloropropane	1	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	VOCs	2-Butanone (MEK)	10	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	VOCs	4-Methyl-2-pentanone (MIBK)	10	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	VOCs	Acetone	25	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	VOCs	Benzene	1	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	VOCs	Bromodichloromethane	1	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	VOCs	Bromoform	1	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	VOCs	Bromomethane	1	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	VOCs	Carbon Dioxide	91	ug/L	B J N	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	VOCs	Carbon Disulfide	2	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	VOCs	Carbon Tetrachloride	1	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	VOCs	Chlorobenzene	1	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	VOCs	Chlorodibromomethane	1	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	VOCs	Chloroethane	1	ug/L	U*	UJ
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	VOCs	Chloroform	1	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	VOCs	Chloromethane	1	ug/L	U*	UJ
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	VOCs	cis-1,2-Dichloroethene	1	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	VOCs	cis-1,3-Dichloropropene	1	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	VOCs	Dichloromethane	5	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	VOCs	Ethylbenzene	1	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	VOCs	Methyl N-Butyl Ketone	10	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	VOCs	Styrene (Monomer)	1	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	VOCs	Tetrachloroethene	1	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	VOCs	Toluene	1	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	VOCs	trans-1,2-Dichloroethene	1	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	VOCs	trans-1,3-Dichloropropene	1	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	VOCs	Trichloroethene	1	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	VOCs	Vinyl chloride	1	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	VOCs	Xylenes, Total	2	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	1,2,4-Trichlorobenzene	9.7	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	1,2-Dichlorobenzene	9.7	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	1,3-Dichlorobenzene	9.7	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	1,4-Dichlorobenzene	9.7	ug/L	U	

Sauget Area 2
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	9.7	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	2,4,5-Trichlorophenol	9.7	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	2,4,6-Trichlorophenol	9.7	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	2,4-Dichlorophenol	9.7	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	2,4-Dimethylphenol	9.7	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	2,4-Dinitrophenol	49	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	2,4-Dinitrotoluene	9.7	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	2,6-Dinitrotoluene	9.7	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	2-Chloronaphthalene	9.7	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	2-Chlorophenol	9.7	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	2-Methylnaphthalene	9.7	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	2-Methylphenol (o-Cresol)	9.7	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	2-Nitroaniline	49	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	2-Nitrophenol	9.7	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	3 & 4 Methylphenol	9.7	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	3,3'-Dichlorobenzidine	19	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	3-Nitroaniline	49	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	4,6-Dinitro-2-methylphenol	49	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	4-Bromophenyl Phenyl Ether	9.7	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	4-Chloro-3-methylphenol	9.7	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	4-Chlorophenyl Phenyl Ether	9.7	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	4-Nitrophenol	49	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	Acenaphthene	9.7	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	Acenaphthylene	9.7	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	Anthracene	9.7	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	Benzo(a)anthracene	9.7	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	Benzo(a)pyrene	9.7	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	Benzo(b)fluoranthene	9.7	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	Benzo(g,h,i)perylene	9.7	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	Benzo(k)fluoranthene	9.7	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	Benzyl Butyl Phthalate	9.7	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	bis(2-Chloroethoxy)methane	9.7	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	bis(2-Chloroethyl)ether	9.7	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	bis(2-Ethylhexyl)phthalate	9.7	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	Carbazole	9.7	ug/L	U	

Sauget Area 2
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	Chrysene	9.7	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	Dibenzo(a,h)anthracene	9.7	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	Dibenzofuran	9.7	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	Diethyl Phthalate	9.7	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	Dimethyl Phthalate	9.7	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	Di-n-butylphthalate	9.7	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	Di-n-octylphthalate	9.7	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	Dinoseb	9.7	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	Fluoranthene	9.7	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	Fluorene	9.7	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	Hexachlorobenzene	9.7	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	Hexachlorobutadiene	9.7	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	Hexachlorocyclopentadiene	9.7	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	Hexachloroethane	9.7	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	Indeno(1,2,3-cd)pyrene	9.7	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	Isophorone	9.7	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	Naphthalene	9.7	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	Nitrobenzene	9.7	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	N-Nitroso-di-n-propylamine	9.7	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	N-Nitrosodiphenylamine	9.7	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	P-Chloroaniline	19	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	Phenanthrene	9.7	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	Phenol	9.7	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	P-Nitroaniline	49	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	SVOCs	Pyrene	9.7	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Pesticides	4,4'-DDD	0.097	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Pesticides	4,4'-DDE	0.097	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Pesticides	4,4'-DDT	0.097	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Pesticides	Aldrin	0.049	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Pesticides	alpha-BHC	0.049	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Pesticides	alpha-Chlordane	0.049	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Pesticides	beta-BHC	0.049	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Pesticides	delta-BHC	0.049	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Pesticides	Dieldrin	0.097	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Pesticides	Endosulfan I	0.049	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Pesticides	Endosulfan II	0.097	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Pesticides	Endosulfan Sulfate	0.097	ug/L	U	

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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Pesticides	Endrin	0.097	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Pesticides	Endrin Aldehyde	0.097	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Pesticides	Endrin Ketone	0.097	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Pesticides	gamma-BHC (Lindane)	0.049	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Pesticides	gamma-Chlordane	0.049	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Pesticides	Heptachlor	0.049	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Pesticides	Heptachlor Epoxide	0.049	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Pesticides	Methoxychlor	0.49	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Pesticides	Toxaphene	4.9	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Herbicides	2,4,5-T	0.5	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Herbicides	2,4,5-TP (Silvex)	0.5	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Herbicides	2,4-D	0.5	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Herbicides	2,4-DB	0.5	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Herbicides	Dalapon	9.9	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Herbicides	Dicamba	0.5	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Herbicides	Dichlorprop	0.5	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Herbicides	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Herbicides	MCPP	120	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Herbicides	Pentachlorophenol	0.25	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Metals	Aluminum (Dissolved)	0.2	mg/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Metals	Antimony (Dissolved)	0.006	mg/L	J	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Metals	Arsenic (Dissolved)	0.01	mg/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Metals	Barium (Dissolved)	0.072	mg/L		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Metals	Beryllium (Dissolved)	0.004	mg/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Metals	Cadmium (Dissolved)	0.005	mg/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Metals	Calcium (Dissolved)	63	mg/L		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Metals	Chromium (Dissolved)	0.01	mg/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Metals	Cobalt (Dissolved)	0.01	mg/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Metals	Copper (Dissolved)	0.02	mg/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Metals	Iron (Dissolved)	0.05	mg/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Metals	Lead (Dissolved)	0.005	mg/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Metals	Magnesium (Dissolved)	24	mg/L		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Metals	Manganese (Dissolved)	0.01	mg/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Metals	Mercury (Dissolved)	0.0002	mg/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Metals	Nickel (Dissolved)	0.04	mg/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Metals	Potassium (Dissolved)	5	mg/L		

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
September 2007

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Metals	Selenium (Dissolved)	0.01	mg/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Metals	Silver (Dissolved)	0.01	mg/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Metals	Sodium (Dissolved)	27	mg/L		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Metals	Thallium (Dissolved)	0.025	mg/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Metals	Vanadium (Dissolved)	0.0029	mg/L	J	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-STATION 4	9/18/07	Metals	Zinc (Dissolved)	0.02	mg/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	VOCs	1,1,1-Trichloroethane	1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	VOCs	1,1,2,2-Tetrachloroethane	1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	VOCs	1,1,2-Trichloroethane	1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	VOCs	1,1-Dichloroethane	1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	VOCs	1,1-Dichloroethylene	1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	VOCs	1,2-Dichloroethane	1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	VOCs	1,2-Dichloroethene (total)	2	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	VOCs	1,2-Dichloropropane	1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	VOCs	2-Butanone (MEK)	10	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	VOCs	4-Methyl-2-pentanone (MIBK)	10	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	VOCs	Acetone	25	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	VOCs	Benzene	1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	VOCs	Bromodichloromethane	1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	VOCs	Bromoform	1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	VOCs	Bromomethane	1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	VOCs	Carbon Dioxide	110	ug/L	B J N	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	VOCs	Carbon Disulfide	2	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	VOCs	Carbon Tetrachloride	1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	VOCs	Chlorobenzene	1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	VOCs	Chlorodibromomethane	1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	VOCs	Chloroethane	1	ug/L	U*	UJ
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	VOCs	Chloroform	1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	VOCs	Chloromethane	1	ug/L	U*	UJ
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	VOCs	cis-1,2-Dichloroethene	1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	VOCs	cis-1,3-Dichloropropene	1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	VOCs	Dichloromethane	5	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	VOCs	Ethylbenzene	1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	VOCs	Methyl N-Butyl Ketone	10	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	VOCs	Styrene (Monomer)	1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	VOCs	Tetrachloroethene	1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	VOCs	Toluene	1	ug/L	U	

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	VOCs	trans-1,2-Dichloroethene	1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	VOCs	trans-1,3-Dichloropropene	1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	VOCs	Trichloroethene	1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	VOCs	Vinyl chloride	1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	VOCs	Xylenes, Total	2	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	1,2,4-Trichlorobenzene	9.7	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	1,2-Dichlorobenzene	9.7	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	1,3-Dichlorobenzene	9.7	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	1,4-Dichlorobenzene	9.7	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	9.7	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	2,4,5-Trichlorophenol	9.7	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	2,4,6-Trichlorophenol	9.7	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	2,4-Dichlorophenol	9.7	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	2,4-Dimethylphenol	9.7	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	2,4-Dinitrophenol	49	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	2,4-Dinitrotoluene	9.7	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	2,6-Dinitrotoluene	9.7	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	2-Chloronaphthalene	9.7	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	2-Chlorophenol	9.7	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	2-Methylnaphthalene	9.7	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	2-Methylphenol (o-Cresol)	9.7	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	2-Nitroaniline	49	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	2-Nitrophenol	9.7	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	3 & 4 Methylphenol	9.7	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	3,3'-Dichlorobenzidine	19	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	3-Nitroaniline	49	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	4,6-Dinitro-2-methylphenol	49	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	4-Bromophenyl Phenyl Ether	9.7	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	4-Chloro-3-methylphenol	9.7	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	4-Chlorophenyl Phenyl Ether	9.7	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	4-Nitrophenol	49	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	Acenaphthene	9.7	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	Acenaphthylene	9.7	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	Anthracene	9.7	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	Benzo(a)anthracene	9.7	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	Benzo(a)pyrene	9.7	ug/L	U	

Sauget Area 2
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Surface Water Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	Benzo(b)fluoranthene	9.7	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	Benzo(g,h,i)perylene	9.7	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	Benzo(k)fluoranthene	9.7	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	Benzyl Butyl Phthalate	9.7	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	bis(2-Chloroethoxy)methane	9.7	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	bis(2-Chloroethyl)ether	9.7	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	bis(2-Ethylhexyl)phthalate	9.7	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	Carbazole	9.7	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	Chrysene	9.7	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	Dibenzo(a,h)anthracene	9.7	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	Dibenzofuran	9.7	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	Diethyl Phthalate	9.7	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	Dimethyl Phthalate	9.7	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	Di-n-butylphthalate	9.7	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	Di-n-octylphthalate	9.7	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	Dinoseb	9.7	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	Fluoranthene	9.7	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	Fluorene	9.7	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	Hexachlorobenzene	9.7	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	Hexachlorobutadiene	9.7	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	Hexachlorocyclopentadiene	9.7	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	Hexachloroethane	9.7	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	Indeno(1,2,3-cd)pyrene	9.7	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	Isophorone	9.7	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	Naphthalene	9.7	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	Nitrobenzene	9.7	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	N-Nitroso-di-n-propylamine	9.7	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	N-Nitrosodiphenylamine	9.7	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	P-Chloroaniline	19	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	Phenanthrene	9.7	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	Phenol	9.7	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	P-Nitroaniline	49	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	SVOCs	Pyrene	9.7	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	Pesticides	4,4'-DDD	0.097	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	Pesticides	4,4'-DDE	0.097	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	Pesticides	4,4'-DDT	0.097	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	Pesticides	Aldrin	0.049	ug/L	U	

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	Pesticides	alpha-BHC	0.049	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	Pesticides	alpha-Chlordane	0.049	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	Pesticides	beta-BHC	0.049	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	Pesticides	delta-BHC	0.049	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	Pesticides	Dieldrin	0.097	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	Pesticides	Endosulfan I	0.049	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	Pesticides	Endosulfan II	0.097	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	Pesticides	Endosulfan Sulfate	0.097	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	Pesticides	Endrin	0.097	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	Pesticides	Endrin Aldehyde	0.097	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	Pesticides	Endrin Ketone	0.097	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	Pesticides	gamma-BHC (Lindane)	0.049	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	Pesticides	gamma-Chlordane	0.049	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	Pesticides	Heptachlor	0.049	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	Pesticides	Heptachlor Epoxide	0.049	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	Pesticides	Methoxychlor	0.49	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	Pesticides	Toxaphene	4.9	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	Herbicides	2,4,5-T	0.49	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	Herbicides	2,4,5-TP (Silvex)	0.49	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	Herbicides	2,4-D	0.49	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	Herbicides	2,4-DB	0.49	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	Herbicides	Dalapon	9.8	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	Herbicides	Dicamba	0.49	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	Herbicides	Dichlorprop	0.49	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	Herbicides	MCPA (2-Methyl-4-	120	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	Herbicides	MCPP	120	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	Herbicides	Pentachlorophenol	0.25	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	Metals	Aluminum (Dissolved)	0.2	mg/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	Metals	Antimony (Dissolved)	0.02	mg/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	Metals	Arsenic (Dissolved)	0.01	mg/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	Metals	Barium (Dissolved)	0.073	mg/L		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	Metals	Beryllium (Dissolved)	0.004	mg/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	Metals	Cadmium (Dissolved)	0.005	mg/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	Metals	Calcium (Dissolved)	63	mg/L		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	Metals	Chromium (Dissolved)	0.01	mg/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	Metals	Cobalt (Dissolved)	0.01	mg/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	Metals	Copper (Dissolved)	0.02	mg/L	U	

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	Metals	Iron (Dissolved)	0.05	mg/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	Metals	Lead (Dissolved)	0.005	mg/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	Metals	Magnesium (Dissolved)	24	mg/L		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	Metals	Manganese (Dissolved)	0.01	mg/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	Metals	Mercury (Dissolved)	0.0002	mg/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	Metals	Nickel (Dissolved)	0.04	mg/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	Metals	Potassium (Dissolved)	4.9	mg/L		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	Metals	Selenium (Dissolved)	0.01	mg/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	Metals	Silver (Dissolved)	0.01	mg/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	Metals	Sodium (Dissolved)	27	mg/L		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	Metals	Thallium (Dissolved)	0.025	mg/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	Metals	Vanadium (Dissolved)	0.003	mg/L	J	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-STATION 5	9/18/07	Metals	Zinc (Dissolved)	0.02	mg/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	VOCs	1,1,1-Trichloroethane	1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	VOCs	1,1,2,2-Tetrachloroethane	1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	VOCs	1,1,2-Trichloroethane	1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	VOCs	1,1-Dichloroethane	1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	VOCs	1,1-Dichloroethylene	1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	VOCs	1,2-Dichloroethane	1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	VOCs	1,2-Dichloroethene (total)	2	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	VOCs	1,2-Dichloropropane	1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	VOCs	2-Butanone (MEK)	10	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	VOCs	4-Methyl-2-pentanone (MIBK)	10	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	VOCs	Acetone	25	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	VOCs	Benzene	1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	VOCs	Bromodichloromethane	1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	VOCs	Bromoform	1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	VOCs	Bromomethane	1	ug/L	U *	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	VOCs	Carbon Dioxide	80	ug/L	J B N	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	VOCs	Carbon Disulfide	2	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	VOCs	Carbon Tetrachloride	1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	VOCs	Chlorobenzene	1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	VOCs	Chlorodibromomethane	1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	VOCs	Chloroethane	1	ug/L	U	UJ
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	VOCs	Chloroform	1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	VOCs	Chloromethane	1	ug/L	U	UJ
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	VOCs	cis-1,2-Dichloroethene	1	ug/L	U	

Sauget Area 2
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	VOCs	cis-1,3-Dichloropropene	1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	VOCs	Dichloromethane	5	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	VOCs	Ethylbenzene	1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	VOCs	Methyl N-Butyl Ketone	10	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	VOCs	Styrene (Monomer)	1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	VOCs	Tetrachloroethene	1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	VOCs	Toluene	1.6	ug/L		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	VOCs	trans-1,2-Dichloroethene	1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	VOCs	trans-1,3-Dichloropropene	1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	VOCs	Trichloroethene	1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	VOCs	Vinyl chloride	1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	VOCs	Xylenes, Total	2	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	1,2,4-Trichlorobenzene	9.6	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	1,2-Dichlorobenzene	9.6	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	1,3-Dichlorobenzene	9.6	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	1,4-Dichlorobenzene	9.6	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	9.6	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	2,4,5-Trichlorophenol	9.6	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	2,4,6-Trichlorophenol	9.6	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	2,4-Dichlorophenol	9.6	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	2,4-Dimethylphenol	9.6	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	2,4-Dinitrophenol	48	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	2,4-Dinitrotoluene	9.6	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	2,6-Dinitrotoluene	9.6	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	2-Chloronaphthalene	9.6	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	2-Chlorophenol	9.6	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	2-Methylnaphthalene	9.6	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	2-Methylphenol (o-Cresol)	9.6	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	2-Nitroaniline	48	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	2-Nitrophenol	9.6	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	3 & 4 Methylphenol	9.6	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	3,3'-Dichlorobenzidine	19	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	3-Nitroaniline	48	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	4,6-Dinitro-2-methylphenol	48	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	4-Bromophenyl Phenyl Ether	9.6	ug/L	U	

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	4-Chloro-3-methylphenol	9.6	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	4-Chlorophenyl Phenyl Ether	9.6	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	4-Nitrophenol	48	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	Acenaphthene	9.6	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	Acenaphthylene	9.6	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	Anthracene	9.6	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	Benzo(a)anthracene	9.6	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	Benzo(a)pyrene	9.6	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	Benzo(b)fluoranthene	9.6	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	Benzo(g,h,i)perylene	9.6	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	Benzo(k)fluoranthene	9.6	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	Benzyl Butyl Phthalate	9.6	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	bis(2-Chloroethoxy)methane	9.6	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	bis(2-Chloroethyl)ether	9.6	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	bis(2-Ethylhexyl)phthalate	9.6	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	Carbazole	9.6	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	Chrysene	9.6	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	Dibenzo(a,h)anthracene	9.6	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	Dibenzofuran	9.6	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	Diethyl Phthalate	9.6	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	Dimethyl Phthalate	9.6	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	Di-n-butylphthalate	9.6	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	Di-n-octylphthalate	9.6	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	Dinoseb	9.6	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	Fluoranthene	9.6	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	Fluorene	9.6	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	Hexachlorobenzene	9.6	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	Hexachlorobutadiene	9.6	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	Hexachlorocyclopentadiene	9.6	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	Hexachloroethane	9.6	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	Indeno(1,2,3-cd)pyrene	9.6	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	Isophorone	9.6	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	Naphthalene	9.6	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	Nitrobenzene	9.6	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	N-Nitroso-di-n-propylamine	9.6	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	N-Nitrosodiphenylamine	9.6	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	P-Chloroaniline	19	ug/L	U	

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	Phenanthrene	9.6	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	Phenol	9.6	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	P-Nitroaniline	48	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	SVOCs	Pyrene	9.6	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Pesticides	4,4'-DDD	0.1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Pesticides	4,4'-DDE	0.1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Pesticides	4,4'-DDT	0.1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Pesticides	Aldrin	0.05	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Pesticides	alpha-BHC	0.05	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Pesticides	alpha-Chlordane	0.05	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Pesticides	beta-BHC	0.05	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Pesticides	delta-BHC	0.05	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Pesticides	Dieldrin	0.1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Pesticides	Endosulfan I	0.05	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Pesticides	Endosulfan II	0.1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Pesticides	Endosulfan Sulfate	0.1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Pesticides	Endrin	0.1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Pesticides	Endrin Aldehyde	0.1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Pesticides	Endrin Ketone	0.1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Pesticides	gamma-BHC (Lindane)	0.05	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Pesticides	gamma-Chlordane	0.05	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Pesticides	Heptachlor	0.05	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Pesticides	Heptachlor Epoxide	0.05	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Pesticides	Methoxychlor	0.5	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Pesticides	Toxaphene	5	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Herbicides	2,4,5-T	0.49	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Herbicides	2,4,5-TP (Silvex)	0.49	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Herbicides	2,4-D	0.49	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Herbicides	2,4-DB	0.49	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Herbicides	Dalapon	9.8	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Herbicides	Dicamba	0.49	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Herbicides	Dichlorprop	0.49	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Herbicides	MCPA (2-Methyl-4-	120	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Herbicides	MCPP	120	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Herbicides	Pentachlorophenol	0.25	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Metals	Aluminum (Dissolved)	0.06	mg/L	J	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Metals	Antimony (Dissolved)	0.02	mg/L	U	

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Metals	Arsenic (Dissolved)	0.01	mg/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Metals	Barium (Dissolved)	0.07	mg/L		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Metals	Beryllium (Dissolved)	0.004	mg/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Metals	Cadmium (Dissolved)	0.005	mg/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Metals	Calcium (Dissolved)	62	mg/L		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Metals	Chromium (Dissolved)	0.01	mg/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Metals	Cobalt (Dissolved)	0.01	mg/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Metals	Copper (Dissolved)	0.02	mg/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Metals	Iron (Dissolved)	0.05	mg/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Metals	Lead (Dissolved)	0.005	mg/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Metals	Magnesium (Dissolved)	23	mg/L		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Metals	Manganese (Dissolved)	0.01	mg/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Metals	Mercury (Dissolved)	0.0002	mg/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Metals	Nickel (Dissolved)	0.04	mg/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Metals	Potassium (Dissolved)	4.9	mg/L		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Metals	Selenium (Dissolved)	0.01	mg/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Metals	Silver (Dissolved)	0.01	mg/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Metals	Sodium (Dissolved)	28	mg/L		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Metals	Thallium (Dissolved)	0.025	mg/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Metals	Vanadium (Dissolved)	0.0033	mg/L	J	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/17/07	Metals	Zinc (Dissolved)	0.02	mg/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	VOCs	1,1,1-Trichloroethane	1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	VOCs	1,1,2,2-Tetrachloroethane	1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	VOCs	1,1,2-Trichloroethane	1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	VOCs	1,1-Dichloroethane	1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	VOCs	1,1-Dichloroethylene	1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	VOCs	1,2-Dichloroethane	1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	VOCs	1,2-Dichloroethene (total)	2	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	VOCs	1,2-Dichloropropane	1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	VOCs	2-Butanone (MEK)	10	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	VOCs	4-Methyl-2-pentanone (MIBK)	10	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	VOCs	Acetone	25	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	VOCs	Benzene	1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	VOCs	Bromodichloromethane	1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	VOCs	Bromoform	1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	VOCs	Bromomethane	1	ug/L	U *	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	VOCs	Carbon Dioxide	79	ug/L	J B N	

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	VOCs	Carbon Disulfide	2	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	VOCs	Carbon Tetrachloride	1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	VOCs	Chlorobenzene	1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	VOCs	Chlorodibromomethane	1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	VOCs	Chloroethane	1	ug/L	U	UJ
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	VOCs	Chloroform	1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	VOCs	Chloromethane	1	ug/L	U	UJ
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	VOCs	cis-1,2-Dichloroethene	1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	VOCs	cis-1,3-Dichloropropene	1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	VOCs	Dichloromethane	5	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	VOCs	Ethylbenzene	1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	VOCs	Methyl N-Butyl Ketone	10	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	VOCs	Styrene (Monomer)	1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	VOCs	Tetrachloroethene	1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	VOCs	Toluene	0.88	ug/L	J	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	VOCs	trans-1,2-Dichloroethene	1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	VOCs	trans-1,3-Dichloropropene	1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	VOCs	Trichloroethene	1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	VOCs	Vinyl chloride	1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	VOCs	Xylenes, Total	2	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	1,2,4-Trichlorobenzene	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	1,2-Dichlorobenzene	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	1,3-Dichlorobenzene	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	1,4-Dichlorobenzene	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	2,4,5-Trichlorophenol	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	2,4,6-Trichlorophenol	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	2,4-Dichlorophenol	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	2,4-Dimethylphenol	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	2,4-Dinitrophenol	49	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	2,4-Dinitrotoluene	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	2,6-Dinitrotoluene	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	2-Chloronaphthalene	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	2-Chlorophenol	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	2-Methylnaphthalene	9.7	ug/L	U	

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	2-Methylphenol (o-Cresol)	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	2-Nitroaniline	49	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	2-Nitrophenol	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	3 & 4 Methylphenol	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	3,3'-Dichlorobenzidine	19	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	3-Nitroaniline	49	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	4,6-Dinitro-2-methylphenol	49	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	4-Bromophenyl Phenyl Ether	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	4-Chloro-3-methylphenol	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	4-Chlorophenyl Phenyl Ether	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	4-Nitrophenol	49	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	Acenaphthene	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	Acenaphthylene	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	Anthracene	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	Benzo(a)anthracene	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	Benzo(a)pyrene	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	Benzo(b)fluoranthene	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	Benzo(g,h,i)perylene	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	Benzo(k)fluoranthene	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	Benzyl Butyl Phthalate	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	bis(2-Chloroethoxy)methane	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	bis(2-Chloroethyl)ether	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	bis(2-Ethylhexyl)phthalate	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	Carbazole	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	Chrysene	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	Dibenzo(a,h)anthracene	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	Dibenzofuran	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	Diethyl Phthalate	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	Dimethyl Phthalate	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	Di-n-butylphthalate	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	Di-n-octylphthalate	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	Dinoseb	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	Fluoranthene	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	Fluorene	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	Hexachlorobenzene	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	Hexachlorobutadiene	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	Hexachlorocyclopentadiene	9.7	ug/L	U	

Sauget Area 2
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Surface Water Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	Hexachloroethane	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	Indeno(1,2,3-cd)pyrene	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	Isophorone	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	Naphthalene	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	Nitrobenzene	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	N-Nitroso-di-n-propylamine	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	N-Nitrosodiphenylamine	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	P-Chloroaniline	19	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	Phenanthrene	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	Phenol	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	P-Nitroaniline	49	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	SVOCs	Pyrene	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Pesticides	4,4'-DDD	0.097	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Pesticides	4,4'-DDE	0.097	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Pesticides	4,4'-DDT	0.097	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Pesticides	Aldrin	0.049	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Pesticides	alpha-BHC	0.049	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Pesticides	alpha-Chlordane	0.049	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Pesticides	beta-BHC	0.049	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Pesticides	delta-BHC	0.049	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Pesticides	Dieldrin	0.097	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Pesticides	Endosulfan I	0.049	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Pesticides	Endosulfan II	0.097	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Pesticides	Endosulfan Sulfate	0.097	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Pesticides	Endrin	0.097	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Pesticides	Endrin Aldehyde	0.097	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Pesticides	Endrin Ketone	0.097	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Pesticides	gamma-BHC (Lindane)	0.049	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Pesticides	gamma-Chlordane	0.049	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Pesticides	Heptachlor	0.049	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Pesticides	Heptachlor Epoxide	0.049	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Pesticides	Methoxychlor	0.49	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Pesticides	Toxaphene	4.9	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Herbicides	2,4,5-T	0.49	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Herbicides	2,4,5-TP (Silvex)	0.49	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Herbicides	2,4-D	0.49	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Herbicides	2,4-DB	0.49	ug/L	U	

Sauget Area 2
Groundwater Migration Control System
Surface Water Sample Results
September 2007

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Herbicides	Dalapon	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Herbicides	Dicamba	0.49	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Herbicides	Dichlorprop	0.49	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Herbicides	MCPA (2-Methyl-4-Chlorophenoxyacetic Acid)	120	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Herbicides	MCPP	120	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Herbicides	Pentachlorophenol	0.24	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Metals	Aluminum (Dissolved)	0.049	mg/L	J	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Metals	Antimony (Dissolved)	0.02	mg/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Metals	Arsenic (Dissolved)	0.0031	mg/L	J	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Metals	Barium (Dissolved)	0.072	mg/L		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Metals	Beryllium (Dissolved)	0.004	mg/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Metals	Cadmium (Dissolved)	0.005	mg/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Metals	Calcium (Dissolved)	62	mg/L		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Metals	Chromium (Dissolved)	0.01	mg/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Metals	Cobalt (Dissolved)	0.01	mg/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Metals	Copper (Dissolved)	0.02	mg/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Metals	Iron (Dissolved)	0.05	mg/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Metals	Lead (Dissolved)	0.005	mg/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Metals	Magnesium (Dissolved)	23	mg/L		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Metals	Manganese (Dissolved)	0.01	mg/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Metals	Mercury (Dissolved)	0.0002	mg/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Metals	Nickel (Dissolved)	0.04	mg/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Metals	Potassium (Dissolved)	4.9	mg/L		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Metals	Selenium (Dissolved)	0.01	mg/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Metals	Silver (Dissolved)	0.01	mg/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Metals	Sodium (Dissolved)	25	mg/L		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Metals	Thallium (Dissolved)	0.025	mg/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Metals	Vanadium (Dissolved)	0.0028	mg/L	J	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9 DUP	9/17/07	Metals	Zinc (Dissolved)	0.02	mg/L	U	

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
September 2007

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	VOCs	1,1,1-Trichloroethane	4.3	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	VOCs	1,1,2,2-Tetrachloroethane	4.3	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	VOCs	1,1,2-Trichloroethane	4.3	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	VOCs	1,1-Dichloroethane	4.3	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	VOCs	1,1-Dichloroethylene	4.3	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	VOCs	1,2-Dichloroethane	4.3	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	VOCs	1,2-Dichloropropane	4.3	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	VOCs	2-Butanone (MEK)	21	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	VOCs	4-Methyl-2-pentanone (MIBK)	21	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	VOCs	Acetone	43	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	VOCs	Benzene	4.3	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	VOCs	Bromodichloromethane	4.3	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	VOCs	Bromoform	4.3	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	VOCs	Bromomethane	4.3	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	VOCs	Carbon Dioxide	2300	ug/Kg	B J N	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	VOCs	Carbon Disulfide	0.55	ug/Kg	J	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	VOCs	Carbon Tetrachloride	4.3	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	VOCs	Chlorobenzene	12	ug/Kg		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	VOCs	Chlorodibromomethane	4.3	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	VOCs	Chloroethane	4.3	ug/Kg	U	UJ
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	VOCs	Chloroform	4.3	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	VOCs	Chloromethane	4.3	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	VOCs	cis-1,2-Dichloroethene	4.3	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	VOCs	cis-1,3-Dichloropropene	4.3	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	VOCs	Dichloromethane	4.3	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	VOCs	Ethylbenzene	4.3	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	VOCs	Methyl N-Butyl Ketone	21	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	VOCs	Styrene (Monomer)	4.3	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	VOCs	Tetrachloroethene	4.3	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	VOCs	Toluene	0.75	ug/Kg	J	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	VOCs	trans-1,2-Dichloroethene	4.3	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	VOCs	trans-1,3-Dichloropropene	4.3	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	VOCs	Trichloroethene	4.3	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	VOCs	Vinyl chloride	4.3	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	VOCs	Xylenes, Total	8.5	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	1,2,4-Trichlorobenzene	380	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	1,2-Dichlorobenzene	380	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	1,3-Dichlorobenzene	380	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	1,4-Dichlorobenzene	380	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	380	ug/Kg	U	

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
September 2007

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	2,4,5-Trichlorophenol	380	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	2,4,6-Trichlorophenol	380	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	2,4-Dichlorophenol	380	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	2,4-Dimethylphenol	380	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	2,4-Dinitrotoluene	380	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	2,6-Dinitrotoluene	380	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	2-Chloronaphthalene	380	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	2-Chlorophenol	380	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	2-Methylnaphthalene	380	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	2-Methylphenol (o-Cresol)	380	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	2-Nitroaniline	2000	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	2-Nitrophenol	380	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	3 & 4 Methylphenol	380	ug/Kg	U	UJ
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	3,3'-Dichlorobenzidine	760	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	3-Nitroaniline	2000	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	4,6-Dinitro-2-methylphenol	2000	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	4-Bromophenyl Phenyl Ether	380	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	4-Chloro-3-methylphenol	380	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	4-Chlorophenyl Phenyl Ether	380	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	4-Nitrophenol	2000	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	Acenaphthene	380	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	Acenaphthylene	380	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	Anthracene	380	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	Benzo(a)anthracene	380	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	Benzo(a)pyrene	380	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	Benzo(b)fluoranthene	380	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	Benzo(g,h,i)perylene	380	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	Benzo(k)fluoranthene	380	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	Benzyl Butyl Phthalate	380	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	bis(2-Chloroethoxy)methane	380	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	bis(2-Chloroethyl)ether	380	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	bis(2-Ethylhexyl)phthalate	380	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	Carbazole	380	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	Chrysene	380	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	Dibenzo(a,h)anthracene	380	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	Dibenzofuran	380	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	Diethyl Phthalate	380	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	Dimethyl Phthalate	380	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	Di-n-butylphthalate	380	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	Di-n-octylphthalate	380	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	Dinoseb	380	ug/Kg	U	

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
September 2007

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	Fluoranthene	380	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	Fluorene	380	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	Hexachlorobenzene	380	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	Hexachlorobutadiene	380	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	Hexachlorocyclopentadiene	380	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	Hexachloroethane	380	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	Indeno(1,2,3-cd)pyrene	380	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	Isophorone	380	ug/Kg	U	UJ
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	Naphthalene	380	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	Nitrobenzene	380	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	N-Nitroso-di-n-propylamine	380	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	N-Nitrosodiphenylamine	380	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	P-Chloroaniline	760	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	Phenanthrene	380	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	Phenol	380	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	P-Nitroaniline	2000	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	SVOCs	Pyrene	380	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Pesticides	4,4'-DDD	3.8	ug/Kg	U	UJ
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Pesticides	4,4'-DDE	3.8	ug/Kg	U	UJ
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Pesticides	4,4'-DDT	3.8	ug/Kg	U	UJ
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Pesticides	Aldrin	2	ug/Kg	U	UJ
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Pesticides	alpha-BHC	2	ug/Kg	U	UJ
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Pesticides	alpha-Chlordane	2	ug/Kg	U	UJ
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Pesticides	beta-BHC	2	ug/Kg	U	UJ
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Pesticides	delta-BHC	2	ug/Kg	U	UJ
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Pesticides	Dieldrin	3.8	ug/Kg	U	UJ
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Pesticides	Endosulfan I	2	ug/Kg	U	UJ
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Pesticides	Endosulfan II	3.8	ug/Kg	U	UJ
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Pesticides	Endosulfan Sulfate	3.8	ug/Kg	U	UJ
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Pesticides	Endrin	3.8	ug/Kg	U	UJ
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Pesticides	Endrin Aldehyde	3.8	ug/Kg	U	UJ
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Pesticides	Endrin Ketone	3.8	ug/Kg	U	UJ
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Pesticides	gamma-BHC (Lindane)	2	ug/Kg	U	UJ
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Pesticides	gamma-Chlordane	2	ug/Kg	U	UJ
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Pesticides	Heptachlor	2	ug/Kg	U	UJ
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Pesticides	Heptachlor Epoxide	2	ug/Kg	U	UJ
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Pesticides	Methoxychlor	20	ug/Kg	U	UJ
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Pesticides	Toxaphene	200	ug/Kg	U	UJ
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Herbicides	2,4,5-T	9.5	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Herbicides	2,4,5-TP (Silvex)	9.5	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Herbicides	2,4-D	9.5	ug/Kg	U	

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Herbicides	2,4-DB	9.5	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Herbicides	Dalapon	380	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Herbicides	Dicamba	9.5	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Herbicides	Dichlorprop	9.5	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Herbicides	MCPA (2-Methyl-4-	2300	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Herbicides	MCPP	2300	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Herbicides	Pentachlorophenol	9.5	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Metals	Aluminum	1400	mg/Kg		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Metals	Antimony	2.2	mg/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Metals	Arsenic	1.6	mg/Kg		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Metals	Barium	21	mg/Kg		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Metals	Beryllium	0.088	mg/Kg	J	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Metals	Cadmium	0.55	mg/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Metals	Calcium	2100	mg/Kg		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Metals	Chromium	3.8	mg/Kg		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Metals	Cobalt	3	mg/Kg		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Metals	Copper	2.4	mg/Kg		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Metals	Iron	4300	mg/Kg		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Metals	Lead	5.3	mg/Kg	B	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Metals	Magnesium	950	mg/Kg		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Metals	Manganese	72	mg/Kg		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Metals	Mercury	0.022	mg/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Metals	Nickel	7.2	mg/Kg		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Metals	Potassium	220	mg/Kg		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Metals	Selenium	2.8	mg/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Metals	Silver	0.073	mg/Kg	J B	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Metals	Sodium	120	mg/Kg		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Metals	Thallium	2.8	mg/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Metals	Vanadium	5.5	mg/Kg		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-STATION 3	9/18/07	Metals	Zinc	59	mg/Kg		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	VOCs	1,1,1-Trichloroethane	4.4	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	VOCs	1,1,2,2-Tetrachloroethane	4.4	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	VOCs	1,1,2-Trichloroethane	4.4	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	VOCs	1,1-Dichloroethane	4.4	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	VOCs	1,1-Dichloroethylene	4.4	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	VOCs	1,2-Dichloroethane	4.4	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	VOCs	1,2-Dichloropropane	4.4	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	VOCs	2-Butanone (MEK)	22	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	VOCs	4-Methyl-2-pentanone (MIBK)	22	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	VOCs	Acetone	44	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	VOCs	Benzene	4.4	ug/Kg	U	

Sauget Area 2
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Sediment Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	VOCs	Bromodichloromethane	4.4	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	VOCs	Bromoform	4.4	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	VOCs	Bromomethane	4.4	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	VOCs	Carbon Disulfide	4.4	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	VOCs	Carbon Tetrachloride	4.4	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	VOCs	Chlorobenzene	0.79	ug/Kg	J	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	VOCs	Chlorodibromomethane	4.4	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	VOCs	Chloroethane	4.4	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	VOCs	Chloroform	4.4	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	VOCs	Chloromethane	4.4	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	VOCs	cis-1,2-Dichloroethene	4.4	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	VOCs	cis-1,3-Dichloropropene	4.4	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	VOCs	Dichloromethane	4.4	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	VOCs	Ethylbenzene	4.4	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	VOCs	Methyl N-Butyl Ketone	22	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	VOCs	Styrene (Monomer)	4.4	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	VOCs	Tetrachloroethene	4.4	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	VOCs	Toluene	4.4	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	VOCs	trans-1,2-Dichloroethene	4.4	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	VOCs	trans-1,3-Dichloropropene	4.4	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	VOCs	Trichloroethene	4.4	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	VOCs	Vinyl chloride	4.4	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	VOCs	Xylenes, Total	8.8	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	1,2,4-Trichlorobenzene	380	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	1,2-Dichlorobenzene	380	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	1,3-Dichlorobenzene	380	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	1,4-Dichlorobenzene	380	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	380	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	2,4,5-Trichlorophenol	380	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	2,4,6-Trichlorophenol	380	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	2,4-Dichlorophenol	380	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	2,4-Dimethylphenol	380	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	2,4-Dinitrotoluene	380	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	2,6-Dinitrotoluene	380	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	2-Chloronaphthalene	380	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	2-Chlorophenol	380	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	2-Methylnaphthalene	380	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	2-Methylphenol (o-Cresol)	380	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	2-Nitroaniline	2000	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	2-Nitrophenol	380	ug/Kg	U	

Sauget Area 2
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	3 & 4 Methylphenol	380	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	3,3'-Dichlorobenzidine	770	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	3-Nitroaniline	2000	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	4,6-Dinitro-2-methylphenol	2000	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	4-Bromophenyl Phenyl Ether	380	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	4-Chloro-3-methylphenol	380	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	4-Chlorophenyl Phenyl Ether	380	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	4-Nitrophenol	2000	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	Acenaphthene	380	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	Acenaphthylene	380	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	Anthracene	380	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	Benzo(a)anthracene	380	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	Benzo(a)pyrene	380	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	Benzo(b)fluoranthene	380	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	Benzo(g,h,i)perylene	380	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	Benzo(k)fluoranthene	380	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	Benzyl Butyl Phthalate	380	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	bis(2-Chloroethoxy)methane	380	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	bis(2-Chloroethyl)ether	380	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	bis(2-Ethylhexyl)phthalate	380	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	Carbazole	380	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	Chrysene	380	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	Dibenzo(a,h)anthracene	380	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	Dibenzofuran	380	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	Diethyl Phthalate	380	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	Dimethyl Phthalate	380	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	Di-n-butylphthalate	380	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	Di-n-octylphthalate	380	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	Dinoseb	380	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	Fluoranthene	380	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	Fluorene	380	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	Hexachlorobenzene	380	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	Hexachlorobutadiene	380	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	Hexachlorocyclopentadiene	380	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	Hexachloroethane	380	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	Indeno(1,2,3-cd)pyrene	380	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	Isophorone	380	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	Naphthalene	380	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	Nitrobenzene	380	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	N-Nitroso-di-n-propylamine	380	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	N-Nitrosodiphenylamine	380	ug/Kg	U	

Sauget Area 2
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	P-Chloroaniline	770	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	Phenanthrene	380	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	Phenol	380	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	P-Nitroaniline	2000	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	SVOCs	Pyrene	380	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Pesticides	4,4'-DDD	3.9	ug/Kg	U	UJ
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Pesticides	4,4'-DDE	3.9	ug/Kg	U	UJ
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Pesticides	4,4'-DDT	3.9	ug/Kg	U	UJ
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Pesticides	Aldrin	2	ug/Kg	U	UJ
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Pesticides	alpha-BHC	2	ug/Kg	U	UJ
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Pesticides	alpha-Chlordane	2	ug/Kg	U	UJ
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Pesticides	beta-BHC	2	ug/Kg	U	UJ
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Pesticides	delta-BHC	2	ug/Kg	U	UJ
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Pesticides	Dieldrin	3.9	ug/Kg	U	UJ
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Pesticides	Endosulfan I	2	ug/Kg	U	UJ
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Pesticides	Endosulfan II	3.9	ug/Kg	U	UJ
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Pesticides	Endosulfan Sulfate	3.9	ug/Kg	U	UJ
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Pesticides	Endrin	3.9	ug/Kg	U	UJ
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Pesticides	Endrin Aldehyde	3.9	ug/Kg	U	UJ
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Pesticides	Endrin Ketone	3.9	ug/Kg	U	UJ
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Pesticides	gamma-BHC (Lindane)	2	ug/Kg	U	UJ
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Pesticides	gamma-Chlordane	2	ug/Kg	U	UJ
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Pesticides	Heptachlor	2	ug/Kg	U	UJ
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Pesticides	Heptachlor Epoxide	2	ug/Kg	U	UJ
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Pesticides	Methoxychlor	20	ug/Kg	U	UJ
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Pesticides	Toxaphene	200	ug/Kg	U	UJ
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Herbicides	2,4,5-T	9.7	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Herbicides	2,4,5-TP (Silvex)	9.7	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Herbicides	2,4-D	9.7	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Herbicides	2,4-DB	9.7	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Herbicides	Dalapon	390	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Herbicides	Dicamba	9.7	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Herbicides	Dichlorprop	9.7	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Herbicides	MCPA (2-Methyl-4-	2300	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Herbicides	MCPP	2300	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Herbicides	Pentachlorophenol	9.7	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Metals	Aluminum	710	mg/Kg		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Metals	Antimony	2.1	mg/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Metals	Arsenic	0.59	mg/Kg	J	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Metals	Barium	11	mg/Kg		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Metals	Beryllium	0.42	mg/Kg	U	

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Metals	Cadmium	0.53	mg/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Metals	Calcium	710	mg/Kg		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Metals	Chromium	1.8	mg/Kg		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Metals	Cobalt	1.3	mg/Kg		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Metals	Copper	0.53	mg/Kg	J	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Metals	Iron	2600	mg/Kg		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Metals	Lead	2.2	mg/Kg	B	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Metals	Magnesium	320	mg/Kg		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Metals	Manganese	46	mg/Kg		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Metals	Mercury	0.02	mg/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Metals	Nickel	2.9	mg/Kg	J	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Metals	Potassium	150	mg/Kg		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Metals	Selenium	2.6	mg/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Metals	Silver	1.1	mg/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Metals	Sodium	95	mg/Kg	J	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Metals	Thallium	0.5	mg/Kg	J	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Metals	Vanadium	5	mg/Kg		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-STATION 4	9/18/07	Metals	Zinc	5.9	mg/Kg		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	VOCs	1,1,1-Trichloroethane	4.3	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	VOCs	1,1,2,2-Tetrachloroethane	4.3	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	VOCs	1,1,2-Trichloroethane	4.3	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	VOCs	1,1-Dichloroethane	4.3	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	VOCs	1,1-Dichloroethylene	4.3	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	VOCs	1,2-Dichloroethane	4.3	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	VOCs	1,2-Dichloropropane	4.3	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	VOCs	2-Butanone (MEK)	21	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	VOCs	4-Methyl-2-pentanone (MIBK)	21	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	VOCs	Acetone	43	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	VOCs	Benzene	4.3	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	VOCs	Bromodichloromethane	4.3	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	VOCs	Bromoform	4.3	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	VOCs	Bromomethane	4.3	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	VOCs	Carbon Disulfide	4.3	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	VOCs	Carbon Tetrachloride	4.3	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	VOCs	Chlorobenzene	0.96	ug/Kg	J	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	VOCs	Chlorodibromomethane	4.3	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	VOCs	Chloroethane	4.3	ug/Kg	U	UJ
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	VOCs	Chloroform	4.3	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	VOCs	Chloromethane	4.3	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	VOCs	cis-1,2-Dichloroethene	4.3	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	VOCs	cis-1,3-Dichloropropene	4.3	ug/Kg	U	

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	VOCs	Dichloromethane	4.3	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	VOCs	Ethylbenzene	4.3	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	VOCs	Methyl N-Butyl Ketone	21	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	VOCs	Styrene (Monomer)	4.3	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	VOCs	Tetrachloroethene	1.4	ug/Kg	J	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	VOCs	Toluene	4.3	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	VOCs	trans-1,2-Dichloroethene	4.3	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	VOCs	trans-1,3-Dichloropropene	4.3	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	VOCs	Trichloroethene	4.3	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	VOCs	Vinyl chloride	4.3	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	VOCs	Xylenes, Total	8.5	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	1,2,4-Trichlorobenzene	350	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	1,2-Dichlorobenzene	350	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	1,3-Dichlorobenzene	350	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	1,4-Dichlorobenzene	350	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	350	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	2,4,5-Trichlorophenol	350	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	2,4,6-Trichlorophenol	350	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	2,4-Dichlorophenol	350	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	2,4-Dimethylphenol	350	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	2,4-Dinitrotoluene	350	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	2,6-Dinitrotoluene	350	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	2-Chloronaphthalene	350	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	2-Chlorophenol	350	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	2-Methylnaphthalene	350	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	2-Methylphenol (o-Cresol)	350	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	2-Nitroaniline	1800	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	2-Nitrophenol	350	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	3 & 4 Methylphenol	350	ug/Kg	U	UJ
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	3,3'-Dichlorobenzidine	690	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	3-Nitroaniline	1800	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	4,6-Dinitro-2-methylphenol	1800	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	4-Bromophenyl Phenyl Ether	350	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	4-Chloro-3-methylphenol	350	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	4-Chlorophenyl Phenyl Ether	350	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	4-Nitrophenol	1800	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	Acenaphthene	350	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	Acenaphthylene	350	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	Anthracene	350	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	Benzo(a)anthracene	350	ug/Kg	U	

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	Benzo(a)pyrene	350	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	Benzo(b)fluoranthene	350	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	Benzo(g,h,i)perylene	350	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	Benzo(k)fluoranthene	350	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	Benzyl Butyl Phthalate	350	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	bis(2-Chloroethoxy)methane	350	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	bis(2-Chloroethyl)ether	350	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	bis(2-Ethylhexyl)phthalate	350	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	Carbazole	350	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	Chrysene	350	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	Dibenzo(a,h)anthracene	350	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	Dibenzofuran	350	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	Diethyl Phthalate	350	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	Dimethyl Phthalate	350	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	Di-n-butylphthalate	350	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	Di-n-octylphthalate	350	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	Dinoseb	350	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	Fluoranthene	350	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	Fluorene	350	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	Hexachlorobenzene	350	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	Hexachlorobutadiene	350	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	Hexachlorocyclopentadiene	350	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	Hexachloroethane	350	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	Indeno(1,2,3-cd)pyrene	350	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	Isophorone	350	ug/Kg	U	UJ
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	Naphthalene	350	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	Nitrobenzene	350	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	N-Nitroso-di-n-propylamine	350	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	N-Nitrosodiphenylamine	350	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	P-Chloroaniline	690	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	Phenanthrene	350	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	Phenol	350	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	P-Nitroaniline	1800	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	SVOCs	Pyrene	350	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Pesticides	4,4'-DDD	3.5	ug/Kg	U	UJ
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Pesticides	4,4'-DDE	3.5	ug/Kg	U	UJ
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Pesticides	4,4'-DDT	3.5	ug/Kg	U	UJ
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Pesticides	Aldrin	1.8	ug/Kg	U	UJ
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Pesticides	alpha-BHC	1.8	ug/Kg	U	UJ
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Pesticides	alpha-Chlordane	1.8	ug/Kg	U	UJ
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Pesticides	beta-BHC	1.8	ug/Kg	U	UJ

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Pesticides	delta-BHC	1.8	ug/Kg	U	UJ
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Pesticides	Dieldrin	3.5	ug/Kg	U	UJ
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Pesticides	Endosulfan I	1.8	ug/Kg	U	UJ
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Pesticides	Endosulfan II	3.5	ug/Kg	U	UJ
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Pesticides	Endosulfan Sulfate	3.5	ug/Kg	U	UJ
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Pesticides	Endrin	3.5	ug/Kg	U	UJ
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Pesticides	Endrin Aldehyde	3.5	ug/Kg	U	UJ
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Pesticides	Endrin Ketone	3.5	ug/Kg	U	UJ
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Pesticides	gamma-BHC (Lindane)	1.8	ug/Kg	U	UJ
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Pesticides	gamma-Chlordane	1.8	ug/Kg	U	UJ
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Pesticides	Heptachlor	1.8	ug/Kg	U	UJ
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Pesticides	Heptachlor Epoxide	1.8	ug/Kg	U	UJ
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Pesticides	Methoxychlor	18	ug/Kg	U	UJ
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Pesticides	Toxaphene	180	ug/Kg	U	UJ
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Herbicides	2,4,5-T	8.7	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Herbicides	2,4,5-TP (Silvex)	8.7	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Herbicides	2,4-D	8.7	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Herbicides	2,4-DB	8.7	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Herbicides	Dalapon	350	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Herbicides	Dicamba	8.7	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Herbicides	Dichlorprop	8.7	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Herbicides	MCPA (2-Methyl-4-	2100	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Herbicides	MCPP	2100	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Herbicides	Pentachlorophenol	8.7	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Metals	Aluminum	1300	mg/Kg		J
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Metals	Antimony	1.9	mg/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Metals	Arsenic	3.2	mg/Kg		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Metals	Barium	24	mg/Kg		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Metals	Beryllium	0.11	mg/Kg	J	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Metals	Cadmium	0.12	mg/Kg	J	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Metals	Calcium	3200	mg/Kg		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Metals	Chromium	6.7	mg/Kg		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Metals	Cobalt	3.2	mg/Kg		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Metals	Copper	1.9	mg/Kg		J
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Metals	Iron	7700	mg/Kg		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Metals	Lead	140	mg/Kg	B	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Metals	Magnesium	1400	mg/Kg		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Metals	Manganese	88	mg/Kg		J
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Metals	Mercury	0.019	mg/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Metals	Nickel	9	mg/Kg		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Metals	Potassium	170	mg/Kg		

Sauget Area 2
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Metals	Selenium	2.4	mg/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Metals	Silver	0.94	mg/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Metals	Sodium	130	mg/Kg		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Metals	Thallium	2.4	mg/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Metals	Vanadium	12	mg/Kg		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-STATION 5	9/18/07	Metals	Zinc	68	mg/Kg		J
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	VOCs	1,1,1-Trichloroethane	4.1	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	VOCs	1,1,2,2-Tetrachloroethane	4.1	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	VOCs	1,1,2-Trichloroethane	4.1	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	VOCs	1,1-Dichloroethane	4.1	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	VOCs	1,1-Dichloroethylene	4.1	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	VOCs	1,2-Dichloroethane	4.1	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	VOCs	1,2-Dichloropropane	4.1	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	VOCs	2-Butanone (MEK)	20	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	VOCs	4-Methyl-2-pentanone (MIBK)	20	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	VOCs	Acetone	3.6	ug/Kg	J	U
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	VOCs	Benzene	4.1	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	VOCs	Bromodichloromethane	4.1	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	VOCs	Bromoform	4.1	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	VOCs	Bromomethane	4.1	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	VOCs	Carbon Dioxide	460	ug/Kg	B J N	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	VOCs	Carbon Disulfide	0.44	ug/Kg	J	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	VOCs	Carbon Tetrachloride	4.1	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	VOCs	Chlorobenzene	4.1	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	VOCs	Chlorodibromomethane	4.1	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	VOCs	Chloroethane	4.1	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	VOCs	Chloroform	4.1	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	VOCs	Chloromethane	4.1	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	VOCs	cis-1,2-Dichloroethene	4.1	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	VOCs	cis-1,3-Dichloropropene	4.1	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	VOCs	Dichloromethane	4.1	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	VOCs	Ethylbenzene	4.1	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	VOCs	Methyl N-Butyl Ketone	20	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	VOCs	Styrene (Monomer)	4.1	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	VOCs	Tetrachloroethene	4.1	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	VOCs	Toluene	4.1	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	VOCs	trans-1,2-Dichloroethene	4.1	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	VOCs	trans-1,3-Dichloropropene	4.1	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	VOCs	Trichloroethene	4.1	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	VOCs	Vinyl chloride	4.1	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	VOCs	Xylenes, Total	8.1	ug/Kg	U	

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	1,2,4-Trichlorobenzene	390	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	1,2-Dichlorobenzene	390	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	1,3-Dichlorobenzene	390	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	1,4-Dichlorobenzene	390	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-	390	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	2,4,5-Trichlorophenol	390	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	2,4,6-Trichlorophenol	390	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	2,4-Dichlorophenol	390	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	2,4-Dimethylphenol	390	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	2,4-Dinitrotoluene	390	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	2,6-Dinitrotoluene	390	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	2-Chloronaphthalene	390	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	2-Chlorophenol	390	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	2-Methylnaphthalene	390	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	2-Methylphenol (o-Cresol)	390	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	2-Nitroaniline	2000	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	2-Nitrophenol	390	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	3 & 4 Methylphenol	390	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	3,3'-Dichlorobenzidine	780	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	3-Nitroaniline	2000	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	4,6-Dinitro-2-methylphenol	2000	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	4-Bromophenyl Phenyl Ether	390	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	4-Chloro-3-methylphenol	390	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	4-Chlorophenyl Phenyl Ether	390	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	4-Nitrophenol	2000	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	Acenaphthene	390	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	Acenaphthylene	390	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	Anthracene	390	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	Benzo(a)anthracene	390	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	Benzo(a)pyrene	390	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	Benzo(b)fluoranthene	390	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	Benzo(g,h,i)perylene	390	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	Benzo(k)fluoranthene	390	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	Benzyl Butyl Phthalate	390	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	bis(2-Chloroethoxy)methane	390	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	bis(2-Chloroethyl)ether	390	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	bis(2-Ethylhexyl)phthalate	390	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	Carbazole	390	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	Chrysene	390	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	Dibenzo(a,h)anthracene	390	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	Dibenzofuran	390	ug/Kg	U	

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
September 2007

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	Diethyl Phthalate	390	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	Dimethyl Phthalate	390	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	Di-n-butylphthalate	390	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	Di-n-octylphthalate	390	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	Dinoseb	390	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	Fluoranthene	390	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	Fluorene	390	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	Hexachlorobenzene	390	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	Hexachlorobutadiene	390	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	Hexachlorocyclopentadiene	390	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	Hexachloroethane	390	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	Indeno(1,2,3-cd)pyrene	390	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	Isophorone	390	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	Naphthalene	390	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	Nitrobenzene	390	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	N-Nitroso-di-n-propylamine	390	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	N-Nitrosodiphenylamine	390	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	P-Chloroaniline	780	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	Phenanthrene	390	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	Phenol	390	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	P-Nitroaniline	2000	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	SVOCs	Pyrene	390	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Pesticides	4,4'-DDD	7.9	ug/Kg	U	UJ
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Pesticides	4,4'-DDE	7.9	ug/Kg	U	UJ
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Pesticides	4,4'-DDT	7.9	ug/Kg	U	UJ
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Pesticides	Aldrin	4.1	ug/Kg	U	UJ
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Pesticides	alpha-BHC	4.1	ug/Kg	U	UJ
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Pesticides	alpha-Chlordane	4.1	ug/Kg	U	UJ
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Pesticides	beta-BHC	4.1	ug/Kg	U	UJ
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Pesticides	delta-BHC	4.1	ug/Kg	U	UJ
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Pesticides	Dieldrin	7.9	ug/Kg	U	UJ
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Pesticides	Endosulfan I	4.1	ug/Kg	U	UJ
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Pesticides	Endosulfan II	7.9	ug/Kg	U	UJ
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Pesticides	Endosulfan Sulfate	7.9	ug/Kg	U	UJ
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Pesticides	Endrin	7.9	ug/Kg	U	UJ
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Pesticides	Endrin Aldehyde	7.9	ug/Kg	U	UJ
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Pesticides	Endrin Ketone	7.9	ug/Kg	U	UJ
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Pesticides	gamma-BHC (Lindane)	4.1	ug/Kg	U	UJ
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Pesticides	gamma-Chlordane	4.1	ug/Kg	U	UJ
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Pesticides	Heptachlor	4.1	ug/Kg	U	UJ
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Pesticides	Heptachlor Epoxide	4.1	ug/Kg	U	UJ

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Pesticides	Methoxychlor	41	ug/Kg	U	UJ
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Pesticides	Toxaphene	410	ug/Kg	U	UJ
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Herbicides	2,4,5-T	9.9	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Herbicides	2,4,5-TP (Silvex)	9.9	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Herbicides	2,4-D	9.9	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Herbicides	2,4-DB	9.9	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Herbicides	Dalapon	390	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Herbicides	Dicamba	9.9	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Herbicides	Dichlorprop	9.9	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Herbicides	MCPA (2-Methyl-4-	2400	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Herbicides	MCPP	2400	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Herbicides	Pentachlorophenol	9.9	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Metals	Aluminum	1000	mg/Kg		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Metals	Antimony	2.1	mg/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Metals	Arsenic	1.1	mg/Kg		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Metals	Barium	15	mg/Kg		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Metals	Beryllium	0.077	mg/Kg	J	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Metals	Cadmium	0.51	mg/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Metals	Calcium	1100	mg/Kg		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Metals	Chromium	4.9	mg/Kg		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Metals	Cobalt	2.2	mg/Kg		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Metals	Copper	0.67	mg/Kg	J	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Metals	Iron	3900	mg/Kg		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Metals	Lead	2.5	mg/Kg	B	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Metals	Magnesium	530	mg/Kg		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Metals	Manganese	59	mg/Kg		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Metals	Mercury	0.024	mg/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Metals	Nickel	5.5	mg/Kg		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Metals	Potassium	160	mg/Kg		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Metals	Selenium	2.6	mg/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Metals	Silver	1	mg/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Metals	Sodium	96	mg/Kg	J	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Metals	Thallium	2.6	mg/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Metals	Vanadium	5.5	mg/Kg		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/17/07	Metals	Zinc	8.3	mg/Kg		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	VOCs	1,1,1-Trichloroethane	4.5	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	VOCs	1,1,2,2-Tetrachloroethane	4.5	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	VOCs	1,1,2-Trichloroethane	4.5	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	VOCs	1,1-Dichloroethane	4.5	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	VOCs	1,1-Dichloroethylene	4.5	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	VOCs	1,2-Dichloroethane	4.5	ug/Kg	U	

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	VOCs	1,2-Dichloropropane	4.5	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	VOCs	2-Butanone (MEK)	23	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	VOCs	4-Methyl-2-pentanone (MIBK)	23	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	VOCs	Acetone	45	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	VOCs	Benzene	4.5	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	VOCs	Bromodichloromethane	4.5	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	VOCs	Bromoform	4.5	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	VOCs	Bromomethane	4.5	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	VOCs	Carbon Disulfide	4.5	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	VOCs	Carbon Tetrachloride	4.5	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	VOCs	Chlorobenzene	4.5	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	VOCs	Chlorodibromomethane	4.5	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	VOCs	Chloroethane	4.5	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	VOCs	Chloroform	4.5	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	VOCs	Chloromethane	4.5	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	VOCs	cis-1,2-Dichloroethene	4.5	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	VOCs	cis-1,3-Dichloropropene	4.5	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	VOCs	Dichloromethane	4.5	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	VOCs	Ethylbenzene	4.5	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	VOCs	Methyl N-Butyl Ketone	23	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	VOCs	Styrene (Monomer)	4.5	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	VOCs	Tetrachloroethene	4.5	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	VOCs	Toluene	4.5	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	VOCs	trans-1,2-Dichloroethene	4.5	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	VOCs	trans-1,3-Dichloropropene	4.5	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	VOCs	Trichloroethene	4.5	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	VOCs	Vinyl chloride	4.5	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	VOCs	Xylenes, Total	9	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	1,2,4-Trichlorobenzene	370	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	1,2-Dichlorobenzene	370	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	1,3-Dichlorobenzene	370	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	1,4-Dichlorobenzene	370	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chlorolsopropyl ether)	370	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	2,4,5-Trichlorophenol	370	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	2,4,6-Trichlorophenol	370	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	2,4-Dichlorophenol	370	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	2,4-Dimethylphenol	370	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	2,4-Dinitrotoluene	370	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	2,6-Dinitrotoluene	370	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	2-Chloronaphthalene	370	ug/Kg	U	

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
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Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	2-Chlorophenol	370	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	2-Methylnaphthalene	370	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	2-Methylphenol (o-Cresol)	370	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	2-Nitroaniline	1900	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	2-Nitrophenol	370	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	3 & 4 Methylphenol	370	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	3,3'-Dichlorobenzidine	730	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	3-Nitroaniline	1900	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	4,6-Dinitro-2-methylphenol	1900	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	4-Bromophenyl Phenyl Ether	370	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	4-Chloro-3-methylphenol	370	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	4-Chlorophenyl Phenyl Ether	370	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	4-Nitrophenol	1900	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	Acenaphthene	370	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	Acenaphthylene	370	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	Anthracene	370	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	Benzo(a)anthracene	370	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	Benzo(a)pyrene	370	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	Benzo(b)fluoranthene	370	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	Benzo(g,h,i)perylene	370	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	Benzo(k)fluoranthene	370	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	Benzyl Butyl Phthalate	370	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	bis(2-Chloroethoxy)methane	370	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	bis(2-Chloroethyl)ether	370	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	bis(2-Ethylhexyl)phthalate	370	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	Carbazole	370	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	Chrysene	370	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	Dibenzo(a,h)anthracene	370	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	Dibenzofuran	370	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	Diethyl Phthalate	370	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	Dimethyl Phthalate	370	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	Di-n-butylphthalate	370	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	Di-n-octylphthalate	370	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	Dinoseb	370	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	Fluoranthene	370	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	Fluorene	370	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	Hexachlorobenzene	370	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	Hexachlorobutadiene	370	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	Hexachlorocyclopentadiene	370	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	Hexachloroethane	370	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	Indeno(1,2,3-cd)pyrene	370	ug/Kg	U	

Sauget Area 2
Groundwater Migration Control System
Sediment Sample Results
September 2007

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	Isophorone	370	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	Naphthalene	370	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	Nitrobenzene	370	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	N-Nitroso-di-n-propylamine	370	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	N-Nitrosodiphenylamine	370	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	P-Chloroaniline	730	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	Phenanthrene	370	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	Phenol	370	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	P-Nitroaniline	1900	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	SVOCs	Pyrene	370	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Pesticides	4,4'-DDD	3.7	ug/Kg	U	UJ
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Pesticides	4,4'-DDE	3.7	ug/Kg	U	UJ
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Pesticides	4,4'-DDT	3.7	ug/Kg	U	UJ
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Pesticides	Aldrin	1.9	ug/Kg	U	UJ
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Pesticides	alpha-BHC	1.9	ug/Kg	U	UJ
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Pesticides	alpha-Chlordane	1.9	ug/Kg	U	UJ
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Pesticides	beta-BHC	1.9	ug/Kg	U	UJ
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Pesticides	delta-BHC	1.9	ug/Kg	U	UJ
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Pesticides	Dieldrin	3.7	ug/Kg	U	UJ
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Pesticides	Endosulfan I	1.9	ug/Kg	U	UJ
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Pesticides	Endosulfan II	3.7	ug/Kg	U	UJ
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Pesticides	Endosulfan Sulfate	3.7	ug/Kg	U	UJ
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Pesticides	Endrin	3.7	ug/Kg	U	UJ
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Pesticides	Endrin Aldehyde	3.7	ug/Kg	U	UJ
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Pesticides	Endrin Ketone	3.7	ug/Kg	U	UJ
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Pesticides	gamma-BHC (Lindane)	1.9	ug/Kg	U	UJ
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Pesticides	gamma-Chlordane	1.9	ug/Kg	U	UJ
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Pesticides	Heptachlor	1.9	ug/Kg	U	UJ
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Pesticides	Heptachlor Epoxide	1.9	ug/Kg	U	UJ
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Pesticides	Methoxychlor	19	ug/Kg	U	UJ
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Pesticides	Toxaphene	190	ug/Kg	U	UJ
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Herbicides	2,4,5-T	9.2	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Herbicides	2,4,5-TP (Silvex)	9.2	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Herbicides	2,4-D	9.2	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Herbicides	2,4-DB	9.2	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Herbicides	Dalapon	370	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Herbicides	Dicamba	9.2	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Herbicides	Dichlorprop	3.5	ug/Kg	J	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Herbicides	MCPA (2-Methyl-4-	2200	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Herbicides	MCPP	2200	ug/Kg	U	

Sauge. Area 2
Groundwater Migration Control System
Sediment Sample Results
September 2007

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Herbicides	Pentachlorophenol	9.2	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Metals	Aluminum	1200	mg/Kg		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Metals	Antimony	1.9	mg/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Metals	Arsenic	0.9	mg/Kg	J	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Metals	Barium	23	mg/Kg		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Metals	Beryllium	0.11	mg/Kg	J	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Metals	Cadmium	0.48	mg/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Metals	Calcium	2100	mg/Kg		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Metals	Chromium	3	mg/Kg		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Metals	Cobalt	1.9	mg/Kg		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Metals	Copper	0.69	mg/Kg	J	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Metals	Iron	3500	mg/Kg		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Metals	Lead	2.1	mg/Kg	B	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Metals	Magnesium	730	mg/Kg		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Metals	Manganese	64	mg/Kg		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Metals	Mercury	0.021	mg/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Metals	Nickel	4.8	mg/Kg		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Metals	Potassium	180	mg/Kg		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Metals	Selenium	2.4	mg/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Metals	Silver	0.97	mg/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Metals	Sodium	96	mg/Kg	J	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Metals	Thallium	2.4	mg/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Metals	Vanadium	4.1	mg/Kg		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9 DUP	9/17/07	Metals	Zinc	8	mg/Kg		

URS

Qualifier Definition Table

Sauget Area 2
Groundwater Migration Control System
STL Data Qualifier Definitions

Qualifier	Definition	Notes:
Organic Chemicals		
*	LCS, LCSD, MS, MSD, MD or Surrogate exceeds the control limits	
A	Tentatively identified compound (TIC) is a suspected aldol condensation product.	Only present in SA-O-1-SB-3 (SDG G5E070192) for 1,2,3,4,7,8-HxCDD.
B	Compound is found in the associated method blank.	
CON	Confirmation Analysis	
D	Concentrations identified from analysis of the sample at a secondary dilution.	
E	Compounds whose concentrations exceed the upper calibration range of the instrument for that analysis.	
J	Estimated value - result reported is less than the reporting limit but greater than the instrument detection limit.	
P	Greater than 25% (40% for CLP) difference for detected concentrations between the two GC columns.	
U	Compound analyzed for but not detected at a concentration above the reporting limit.	
Inorganic Chemicals		
B	Compound is found in the associated method blank.	
J	Estimated value - result reported is less than the reporting limit but greater than the instrument detection limit.	
S	Indicates that the Method of Standard Additions (MSA) determined the reported value.	
U	Compound analyzed for but not detected at a concentration above the reporting limit.	
JA	Compound tentatively identified, using theoretical ratios.	

Appendix L

INQUIP ASSOCIATES, INC.

SLURRY WALLS
SEEPAGE BARRIERS
FLEXIBLE LINERS
GROUTING

GEOTECHNICAL CONTRACTOR

October 1, 2003

URS Corporation
500 Monsanto Avenue
Sauget, IL 62206

RE: Solutia Inc. Area 2
Vertical Groundwater Control Barrier
Revised Contractor's Barrier Wall Construction & Quality Control Plan

Attention: Mr. Richard Ashley

Dear Mr. Ashley:

Enlosed are three copies of the Construction and Quality Control Plan for the above referenced site in accordance with the Project Specifications. This is a revised edition of the plan submitted on September 3, 2003.

If you have any questions or require further information, please do not hesitate to contact our office at 618-875-3180 or myself at 530-409-0613.

Yours very truly,
INQUIP ASSOCIATES, INC.

Mark Leitschuh,
Site CQC Manager

IAI-7603-14
cc: Namy

WESTERN REGION P.O. BOX 2182 • Santa Barbara, CA 93120 • (805) 687-2007 • FAX (805) 682-0396
EASTERN REGION P.O. Box 6277 • McLean, VA 22106 • (703) 442-0143 • FAX (703) 442-0188
CORPORATE WEBSITE: www.inquip.com

September 29, 2003

INQUIP ASSOCIATES, INC.
CONTRACTOR'S BARRIER WALL CONSTRUCTI0N & QUALITY CONTROL PLAN

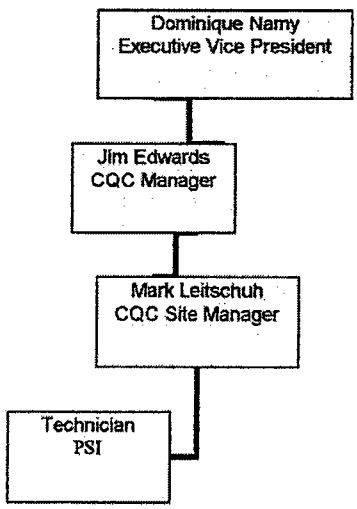
SOIL-BENTONITE SLURRY WALL
ST. LOUIS, MS

1. Quality Control

Quality Control Organization

Inquip Associates, Inc., is committed to conducting all phases of this project with a consistently high level of quality and reliability. Utilization of proven construction methods and attention to consistent and systematic quality control testing will allow Inquip to achieve these goals. The designated CQC Manager for the project is Jim Edwards and the CQC Site Manager is Mark Leitschuh. They will review all quality control data on a daily basis to ensure that the work is performed to the specified standards. The chart below shows the lines of authority for Inquip's Quality Control Organization. The resumes of the individuals named are attached.

INQUIP ASSOCIATES, INC.
QC ORGANIZATION CHART



Executive Vice President: Dominique Namy as Executive Vice President of Inquip has the overall responsibility for the quality of work produced by the company on all east coast projects. He has total authority to do whatever is necessary to ensure a high level of quality on every project. He routinely reviews testing reports and discusses them with the CQC Managers and the CQC Site Managers to ensure adherence to Inquip's CQC Program.

CQC Manager: Jim Edwards as CQC Manager for the project reports directly to the Executive Vice President on all matters regarding the quality of work on the project. He is responsible for the overall management of CQC Plan. Mr. Edwards has the authority to act on all CQC matters for Inquip Associates, Inc.

CQC Site Manager: Mark Leitschuh as CQC Site Manager reports to the CQC Manager on all matters regarding Quality Control on the project site. He is responsible for monitoring all activities on the site to ensure compliance with the contract CQC plan. His duties include performing inspections, overseeing testing, keeping records, and notifying the CQC Manager of any noncompliance with the contract requirements. He has direct access to the CQC Manager and the Executive Vice President who will ensure that the proper corrective action is taken.

Quality Control Technician: Provided by Precision Service Industries the quality control technician will be responsible for performing the contractor's quality control testing and monitoring. The technician will report directly to the CQC Site Manager and perform additional quality control duties as necessary.

Submittals

Submittals will be managed as specified in the project documents. For the slurry trench work we anticipate using Pangea Inc. for portions of the site preparation work. The only material to be incorporated into the work is the premium grade sodium montmorillonite bentonite for which manufacture certificates of compliance will be provided per truckload delivered to the site.

Control Procedures

Procedures for controlling activities related to inspection, testing, and noncompliance conditions are outlined below.

Inspection: Preparatory, initial, and follow-up inspections will be performed by the CQC Site Manager to verify compliance with the plans and specifications. These inspections include visually examining the material, equipment, workmanship, and test records for all aspects of the project. Results of these inspections will be noted on the daily quality control sheets.

Testing: Tests will be performed as specified in the project documents. All field tests will be performed by the CQC Site Manager or one of his staff fully qualified by experience to perform the test. A testing lab approved by the engineer will provide laboratory testing for gradations and hydraulic conductivity. Bentonite slurry testing and slump and density testing of the soil bentonite backfill will be performed on the site.

The CQC Site Manager will verify the following:

- That the testing procedures comply with contract requirements
- That the testing equipment is available and complies with testing standards
- That the testing instruments are properly calibrated
- That recording forms including all of the test documentation requirements have been prepared

Noncompliance: The CQC Site Manager will notify the CQC Manager of any noncompliance with the contract requirements. Inquip shall after receipt of such notice immediately take corrective action. The cause of the noncompliance will be determined and corrective action in the system will be made to preclude recurrence of noncompliance.

Reporting Procedures

Inquip Associates, Inc. uses a daily on-site reporting system that documents the quality control testing conducted and involves the clients engineer in all QC/QA observations. Inquip's daily Slurry Trench Quality Control form will be filled out each day by the CQC Site Manager and reviewed with the Engineer and the CQC Manager for compliance. These forms will be filled out in triplicate with one copy to the engineer, one to the CQC Manager, and one left on site at all times. A copy of the daily report is attached.

2. **List of Equipment:** (Submittal 2290, 1.4, A. 1,2,&3)
   Following is a listing of the equipment anticipated for the work:

   a. A Koehring Model 1266 (or equivalent) hydraulic backhoe with extended dipper stick capable of excavating in excess of 90 feet will be used for excavating the upper trench. A heavy duty "V" bottom rock bucket a minimum of 3 feet wide will be used to excavate through the upper clay and sand/gravel layers as shown on the project drawings.

   b. Two KS3000 hydraulic clamshells will be used to excavate the trench from where the backhoe stops to the top of bedrock.

   c. Caterpillar JD 850 dozer (or equivalent) will be used for mixing and blending of the backfill and also for placement into the trench when the mixing takes place adjacent to the trench.

   d. A small excavator will be used to load trucks with backfill for delivery from the remote backfill mix area.

   e. Contractor's slurry plant consisting of a venturi-type slurry mixer, sumps, pumps, piping, valves, fittings and hose/piping will be used for mixing and distribution of the slurry. Plant capacity is 400 to 500 gpm of continuous slurry output.

   f. Welding Machine for necessary repairs to equipment, etc.

   g. Caterpillar JD 644H (or equivalent) with a 3-$^{1}/_{4}$ cu. yd. loader bucket and forklift attachments will be used for unloading and setting up mixing plant, unloading bentonite

in jumbo bags from trucks, handling bentonite during the mixing operation, handling and moving of slurry and water lines, and for any other required on-site work.

h. A 4-inch 75 horse power mission pump will be used for pumping bentonite slurry to the trench from the hydration ponds and recirculation within the ponds.

3. **Methods of Construction:** Anticipated methods of construction for specific operations are as follows:

a. **Preparation of the Working Platform Erosion Control:** Erosion control devices will be installed in accordance with the Storm Water Pollution Prevention Plan (SWPPP). Pretrenching to a depth of twenty feet will be done ahead of the formal wall construction to expose any abandoned or unknown utilities or obstacles. Typically, the work pad will be leveled, or have a small longitudinal slope, so that we can maintain the specified slurry elevation in the open trench. It will be a minimum of 12 feet wide on the outside of the new slurry trench. Its width on the inside will vary depending upon the location. A graveled work pad for the KS 3000 clams to work from will be installed along the trench. This work will involve the following operations:

- Stripping, clearing and grubbing the existing vegetation.
- Leveling of the trench alignment using cut and fill operations.

b. **Staging Area:** The site office area, slurry mixing, and staging area slurry hydration ponds will be centrally located inside the work area. Upon approval by the owner, the exact location of the staging area will be determined in the field, prior to mobilization.

c. **Bentonite Slurry Preparation:** (Submittal 2290, 1.4, A.1) Federal Jel 90 sodium montmorillonite bentonite clay meeting the specifications will be used (see attached data sheets and certification letter). Submittals for the bentonite will contain the Technical Data Sheets showing physical and chemical properties and a Material Safety Data Sheets (MSDS). Certificates of compliance with the specifications will be provide by the manufacturer and submitted to the owner upon delivery of the materials. Bentonite for the trench stabilization slurry will be delivered by pneumatic unloading tractor-trailers. Bentonite for mixing dry into the backfill (if required) will be either powered or granular delivered in approximately 4,000 pounds jumbo bags or delivered by tractor-trailers. A hydrant adjacent to the work area will provide the water for preparation of the slurry. Four-inch HDPE pipe will be used for delivery of water to the mixing area from the hydrant and connected directly to the mixer. The mixing of bentonite and water will be performed in a venturi (high shear) mixer along with necessary pumps, hose and piping to result in slurry exceeding the specification slurry after recirculation and/or hydration in a storage pond. Higher than required viscosity slurry is necessary to compensate for any rain or other dilution that may occur in the hydration pond. Density

and marsh funnel tests will be used to control the production of the slurry. Viscosity adjustment of the slurry that exceeds the minimum specification requirement may be made as the slurry is pumped from the storage ponds by thinning with water at the pump suction or by recirculation and thinning. Control of thinning will be done by using the marsh funnel to measure viscosity.

d. **Bentonite Slurry for Trench Stabilization:** The bentonite slurry for stabilization of the slurry wall excavation shall be introduced into the trench at the time trenching is begun and shall be maintained within three feet of the top of the trench at all times during excavation and at least three feet above the groundwater level.

e. **Slurry Wall Excavation:** (Submittal 2290, 1.4, A.3) A Koehring 1266 hydraulic backhoe with extended dipper stick and a 36-inch (minimum) wide bucket will be used for slurry wall excavation to approximately 85 feet below the work pad. The KS 3000 clamshells will excavate from where the backhoe stopped to the top of bedrock. The trench stationing shall be offset from the centerline by 20 feet and staked at 50 foot intervals. The centerline shall be marked with small painted stakes or wire flags for the backhoe operator to line up on. The trench will be maintained full with bentonite slurry, pumped from the slurry pond. The excavation will proceed by making successive cuts approximately 30 feet long. The excavation process will provide for insurance of trench continuity. The depth of the trench will be recorded upon reaching the top of the bedrock. The Owner's Representative will verify the top of bedrock for every cut. The material excavated from the trench to be used in the backfill will be cast to the mixing area adjacent to the working platform or loaded into trucks for transport to the remote mixing area. Material not to be used as backfill will be transported to the disposal area on site. An earth berm will be constructed along the outer side of the trench as necessary to prevent runoff from carrying sediments and excavated material into the trench. When the desired depth of the bottom of the trench has been reached as determined by the Engineer, it shall be cleaned and sounded to the satisfaction of the Engineer. Soundings for the final bottom of the excavated trench shall be made from the working platform surface at 10 foot intervals performed to the satisfaction of the Engineer. Samples of the key strata material shall be obtained with the clamshell bucket. Where corners are required on the slurry wall alignment, overlaps on the trench bottom of 5 feet in each direction will be made. The corner shall be cleaned in each direction by re-excavation by the clamshell to assure that there is no loose or un-excavated material at or immediately adjacent to a corner on the slurry wall alignment.

f. **Soil-Bentonite Backfill:** (Submittal 2290, 1.4, A.4) The soil-bentonite backfill mixture shall consist of the soils from the trench excavation. Dry bentonite (if required) will be placed on the working platform in advance of the trench excavation as required to meet the specifications. Four thousand (4000) pound jumbo bags will be prepositioned along the working platform in the backfill mixing area according to calculations using the profile

as shown on the drawings. The dry bentonite and excavated soils shall be mixed with slurry either from the trench or from the hydration pond so that the final mixture will have the proper slump upon placement into the trench. It is anticipated that the final soil-bentonite mixture will have a slump of between 2 and 6 inches upon placement in the trench. The soil-bentonite backfill mixture will be mixed on the working platform alongside the trench or in the remote mixing area using a JD850 (or equivalent) dozer. The dozer will mix and knead the material until it results in a homogeneous mixture. Except for occasional soil lumps of up to 3 inches in size, the mixture will be homogeneous. Initial trench backfill at the beginning of each slurry wall shall be placed by constructing a lead in trench on a 1(h):1(v) slope at the beginning of trench excavation. Sounding of the trench bottom will be performed prior to the placement or progress of the toe of the backfill in the trench in accordance with paragraph e. above. The initial trench backfill will be pushed into the trench at the beginning of this slope by the dozer and allowed to slide down until sufficient backfill has been place to result in the natural angle of repose of the backfill under the slurry. Then the dozer will place additional backfill where the point of placement is adjacent to the backfill mixing area. This backfill will be placed into the trench on the face of the previously placed backfill as it daylights above the slurry. At the terminal end of the trench the bentonite slurry shall be removed using the backhoe bucket as the backfill comes into contact with the vertical face of the trench that joins the previously completed slurry wall. This process will insure that pockets of slurry are not trapped in the backfill as it rises from the bottom to the top of at the terminus of the trench. Some of this slurry will be used to mix backfill. Soil-bentonite backfill will be placed to the top of the trench at all locations. Mixing and placing of trench backfill will not be performed during cold weather when ice forms or is contained in the backfill mixture.

g. **Excessive Slurry Loss:** (Submittal 2290, 1.4, A.5 & 6): Sudden slurry loss usually occurs when a pipeline which intersects the trench alignment is damaged during excavation. When this occurs, a large volume of bentonite slurry is allowed to flow out of the trench. To help prevent this type of slurry loss, Inquip will review with the Construction Manager the available site drawings which show previously installed pipes, culverts, etc.. The general locations will be laid out in the field. We will then excavate a 2' wide to 20' deep pretrench along the slurry wall centerline. This trench will be excavated under bentonite slurry. We will attempt to locate the suspected pipe and slurry wall intersections. All abandoned pipes will be removed and their ends plugged. If an unknown pipe is ruptured during slurry trench excavation, resulting in sudden slurry loss, soil material excavated from the trench will be dumped or bulldozed at the location of the excavation equipment where the breach in the pipe occurred. The pump operator will pump slurry from the ponds to the trench and soil bentonite backfill will also be placed to raise the slurry level. Excavation of the slurry wall will cease in this area until the pipe is located, by potholing, on both sides of the slurry wall. When located the pipe will be plugged on either side of trench centerline and excavation will resume. Sudden slurry loss can also occur in porous

GENERAL TEST LOG
7603, Groundwater Mitigation Control System, Sauget Area 2

Section 2290, Soil-Bentonite Barrier Wall	Frequency	Specification
Water Sample	Water to be used in mixing operations, once prior to the start of mixing operations then once per month thereafter.	hardness <500ppm
Initial Slurry prior to placement in trench, viscosity, filtration, density, sand content & pH	2 times daily while mixing / 1 time daily when not mixing	Viscosity 40 - 65 seconds Density ≥ 63.5 pcf Filtration ≤ 20 cc. in 30 minutes Sand Content ≤ 2% pH 7 - 9
Trench slurry tested for viscosity, filtration, density, sand content & pH	1 time daily for top sample taken from within 100 ft of excavation toe, sampled 5 ft below the slurry surface. 2 times daily for bottom sample taken from within 100 ft of the excavation toe, sampled 5 ft above the trench bottom	Viscosity 40 - 100 seconds Density 64 – 80 pcf, bottom sample always 15 pcf < backfill Filtration ≤ 20 cc. in 30 minutes, filter cake ≤ ¾ inch Sand Content ≤ 20% pH 7 – 10.5
Slump of Backfill ASTM C-143	One/ 200cy or 2 per day min.	3" – 5", avg. of all tests ≤ 4 inches
Backfill Soil Gradation	One/ 800cy or 1 per day min.	3" – 100% 1" – 85% ½" – 75-100% #4 – 60-100% #10 – 50-100% #40 – 35-75% #200 – 20-40%
Backfill Bulk Wet Density	One/300cy or 2 per day min.	N/A
Backfill Water Content	One/300cy or 2 per day min.	N/A
Backfill Permeability Determinations	One/1,200cy or 1 per week minimum	1.0×10^{-7}
Sediment Thickness	At 20 ft construction stations after cleaning sediment immediately before backfill placement with flat weight within 50 to 60 feet from the backfill toe.	Pointed and flat weight measurement within 0.25 ft. or deeper from initial trench bottom. Thickness of sediment not to exceed 0.25 ft.
Backfill Sampling	Minimum of three locations with split spoon sampler daily, in presence of owner, before placing backfill to determine if backfill surface must be cleaned.	< 2 inches of sediment
Settlement Monitoring Plates	Placed 18" below backfill surface at 200 ft spacing along barrier wall within 24 hours of backfill completion within 50 ft of plate location.	Elevation recorded daily until owner indicates that cap installation may begin.
Backfill Slope	At 20 foot interval within 100 ft of the toe and at 60 feet intervals otherwise	Performed with flat weight

GENERAL TEST LOG
7603, Groundwater Mitigation Control System, Sauget Area 2

Backfill Samples	1 per week	Two 20lb. samples to owner for QA testing
Bentonite Certifications	As each new lot is delivered	API Specification 13A, Section 4 and 5

Section 2320, Construction Spoils Handling	**Frequency**	**Specification**
TCL/TAL Testing	For each new off site borrow source. One per every 5000 yd3	Compare to TACO Tier 1 criteria
Compacted Fill Testing Requirement: ASTM D2216 ASTM D4318 ASTM D1140 ASTM D698	 1 per 15,000 yd3 1 per 15,000 yd3 1 per 15,000 yd3 1 per 15,000 yd3	For 4" leveling layer or 12" stockpile cover soil: Silty to Clayey Sands SP, SP-SM, SC-SM Clayey Silts to Silty Clays CL Silty Sandy Clays CL Combinations of the above For Berms: Clayey Silts to Silty Clays CL Silty Sandy Clays CL Gravelly Clay CL Combinations of the above The plasticity index shall be 7 or greater
Post Constructed Quality Control Compacted Fill In –place density ASTM D2922 ASTM D3017 In-place density verification ASTM D2937 ASTM D2216	 1 per 2,000 yd3 placed and compacted 1 per 15,000 yd3 placed and compacted	 90% ± 4% of optimum 90% ±4% of optimum

INQUIP ASSOCIATES, INC.

SLURRY WALLS
SEEPAGE BARRIERS
FLEXIBLE LINERS
GROUTING

GEOTECHNICAL CONTRACTOR

January 14, 2004

URS Corporation
500 Monsanto Avenue
Sauget, IL 62206

RE: Solutia Inc. Area 2
Vertical Groundwater Control Barrier
Revised General Test Log

Attention: Mr. Richard Ashley

Dear Mr. Ashley:

Enlosed are three copies of the revised General Test Log based on the revised Hydraulic Barrier Plan. The general test log is an attachment to the Contractor's Barrier Wall Construction & Quality Control Plan.

If you have any questions or require further information, please do not hesitate to contact our office at 618-875-3180.

Yours very truly,
INQUIP ASSOCIATES, INC.

Mark Leitschuh,
Site CQC Manager

IAI-7603-65
cc: Namy

WESTERN REGION P.O. BOX 2182 • Santa Barbara, CA 93120 • (805) 687-2007 • FAX (805) 682-0396
EASTERN REGION P.O. Box 6277 • McLean, VA 22106 • (703) 442-0143 • FAX (703) 442-0188
CORPORATE WEBSITE: www.inquip.com

GENERAL TEST LOG
7603, Groundwater Mitigation Control System, Sauget Area 2

Section 2290, Soil-Bentonite Barrier Wall	**Frequency**	**Specification**
Water Sample	Water to be used in mixing operations, once prior to the start of mixing operations then once per month thereafter.	hardness <500ppm
Initial Slurry prior to placement in trench, viscosity, filtration, density, sand content & pH	2 times daily while mixing / 1 time daily when not mixing	Viscosity 40 - 65 seconds Density ≥ 63.5 pcf Filtration ≤ 20 cc. in 30 minutes Sand Content ≤ 2% pH 7 - 9
Trench slurry tested for viscosity, filtration, density, sand content & pH	1 time daily for top sample taken from within 100 ft of excavation toe, sampled 10 ft below the slurry surface. 2 times daily for bottom sample taken from within 100 ft of the excavation toe, sampled 10 ft above the trench bottom	Viscosity 40 - 100 seconds Density 75 – 85 pcf, bottom sample always 15 pcf < backfill 78 pcf Minimum Density Sta. 15+00 to Sta. 5+00 Filtration ≤ 20 cc. in 30 minutes, filter cake ≤ ¼ inch pH 7 – 10.5
Slump of Backfill ASTM C-143	One/ 300cy or 2 per day min.	3" – 6", avg. of all tests ≤ 4 inches
Backfill Soil Gradation	One/ 800cy or 1 per day min.	3" – 100% 1" – 85% ½" – 75-100% #4 – 60-100% #10 – 50-100% #40 – 35-75% #200 – 20-40% typical 50% maximum
Backfill Bulk Wet Density	One/300cy or 2 per day min.	N/A
Backfill Water Content	One/300cy or 2 per day min.	N/A
Backfill Permeability Determinations	One/1,200cy or 1 per week minimum	1.0×10^{-7}, 20% may be 5.0×10^{-7}, 5% may be 1.0×10^{-6}
Bottom Measurement and Sampling	The elevation of the trench bottom shall be determined daily, before excavating, at 20 ft spacing within 100 ft each side of the backfill toe and 100 ft spacing beyond, for full length of the slurry-supported trench.	Trench Weight or a closed empty clamshell cannot be advanced within 1 ft of the recorded final excavation depth, the bottom shall be cleaned of debris before placing backfill.
Bottom Measurement and Sampling	Minimum of two locations with split spoon or grab sampler daily, in presence of owner, before placing backfill to determine if backfill surface must be cleaned.	< 6 inches of sediment
Bottom Cleaning	Toe of the backfill slope shall be excavated every 100 ft of advance unless approved by the owner to remove accumulated soft materials pushed ahead of the backfill.	Cleaning may be performed by any combination of clamshell, airlifts, suction pumps, etc. Spoils may be used for preparation of Backfill.

GENERAL TEST LOG
7603, Groundwater Mitigation Control System, Sauget Area 2

Settlement Monitoring Plates	Placed 18" below backfill surface at 200 ft spacing along barrier wall within 24 hours of backfill completion within 50 ft of plate location.	Elevation recorded daily until owner indicates that cap installation may begin.
Backfill Samples	1 per week	Two 20lb. samples to owner for QA testing
Bentonite Certifications	As each new lot is delivered	API Specification 13A, Section 4 and 5

Section 2320, Construction Spoils Handling	**Frequency**	**Specification**
TCL/TAL Testing	For each new off site borrow source. One per every 5000 yd3	Compare to TACO Tier 1 criteria
Compacted Fill Testing Requirement: ASTM D2216 ASTM D4318 ASTM D1140 ASTM D698	 1 per 15,000 yd3 1 per 15,000 yd3 1 per 15,000 yd3 1 per 15,000 yd3	For 4" leveling layer or 12" stockpile cover soil: Silty to Clayey Sands SP, SP-SM, SC-SM Clayey Silts to Silty Clays CL Silty Sandy Clays CL Combinations of the above For Berms: Clayey Silts to Silty Clays CL Silty Sandy Clays CL Gravelly Clay CL Combinations of the above The plasticity index shall be 7 or greater
Post Constructed Quality Control Compacted Fill In –place density ASTM D2922 ASTM D3017 In-place density verification ASTM D2937 ASTM D2216	 1 per 2,000 yd3 placed and compacted 1 per 15,000 yd3 placed and compacted	 90% ± 4% of optimum 90% ±4% of optimum

BENTONITE SLURRY SUMMARY REPORT

Groundwater Mitigation Control System, Sauget Area 2

		Viscosity (seconds)	Density of Mud	Filtrate Loss	PH	Sand Content
	Fresh	Range 40 - 65	Greater than 63.5pcf	<20 cc.	7.0 - 9.0	0 - 2%
Date	In-Trench	Range 40 - 100	> than 75.0 pcf, < than 85.0pcf	<20 cc.	7.0 - 10.5	N/A
			78pcf minimum Sta. 15+00 to 5+00			
9/10/2003	Fresh	50	N/A	N/A	N/A	N/A
	Fresh	52	N/A	N/A	N/A	N/A
	Fresh	45	N/A	N/A	N/A	N/A
	Fresh	53	66	15	7	0.25
	Trench	56	72	N/A	7	8
	Trench	53	73	12.5	7	7
9/11/2003	Fresh	60	N/A	N/A	N/A	N/A
	Fresh	57	N/A	N/A	N/A	N/A
	26+70 Bot.	54	74	12	7	10
	26+70 Top.	54	74	12.5	7	10
	Fresh	52	65	19	7	0.25
	26+30 Bot.	42	71	15	7	6
9/12/2003	Fresh	57	66	17	8	0.25
	26+40 Top.	45	72	14	7	7
	26+40 Bot.	44	74	12	7.5	8
	Fresh	57	66	15.5	7.5	0.25
	26+00 Bot.	53	74	12.6	7.5	8
9/15/2003	Fresh	43	66	18.5	7	0
	26+00 Bot.	57	72	11.2	7	6
	26+00 Top.	56	73	12.1	7	9
	25+80 Bot.	56	74	12	7	9
	Fresh	53	66	18	7.5	0.25
9/16/2003	N/A	N/A	N/A	N/A	N/A	N/A
9/17/2003	26+00 Bot.	58	74	11	7	9
	26+00 Top.	56	76	11.8	7.5	8
	Fresh	41	66	16.3	7	0.25
	25+80 Bot.	54	74	11.1	7	10
	Fresh	38	66	19.1	7.5	0
9/18/2003	25+60 Top.	52	73	11.8	7	7
	25+60 Bot.	53	73	12.1	7	8
	Fresh	52	67	17.4	7	0
	25+00 Bot.	51	74	12.8	7	8
	Fresh	50	65	18.2	7	0.25
9/19/2003	Fresh	52	66	16.1	7	0
	26+00 Top.	56	75	11.9	7	10.5
	26+00 Bot.	56	70	12.8	7	8
	Fresh	53	66	14.9	7	0.25

BENTONITE SLURRY SUMMARY REPORT

Groundwater Mitigation Control System, Sauget Area 2

Date		Viscosity (seconds)	Density of Mud	Filtrate Loss	PH	Sand Content
	Fresh	Range 40 - 65	Greater than 63.5pcf	<20 cc.	7.0 - 9.0	0 - 2%
	In-Trench	Range 40 - 100	> than 75.0 pcf, < than 85.0pcf	<20 cc.	7.0 - 10.5	N/A
			78pcf minimum Sta. 15+00 to 5+00			
	25+70 Bot.	50	75	14.1	7	11
9/22/2003	Fresh	41	65	18	7	0.2
	Trench Top.	46	71	15	7	5
	Trench Bot.	56	76	15.5	7	12
	Fresh	43	66	17	7	0.2
	Trench Top.	50	71	15	7	6
	Trench Bot.	56	75	15	7	11
9/23/2003	Fresh	50	65	14	7	0.2
	26+90 Top.	49	72	10.5	7	6
	26+90 Bot.	52	74	11	7	15
	Fresh	48	66	15	7	0.2
	26+90 Top.	50	72	11	7	6
	26+90 Bot.	53	73	11	7	12
9/24/2003	Fresh	63	68	13	7	0.2
	27+00 Top.	50	71	11	7	5
	27+00 Bot.	49	74	10	7	10
	Fresh	40	64	13	7	0.2
	27+00 Top.	45	71	11	7	6
	27+00 Bot.	49	76	11	7	11
9/25/2003	Fresh	39	65	12	7	0.2
	Trench Top.	49	72.5	11	7	7
	Trench Bot.	53	74	11	7	11
	Fresh	53	66	13	7	0.2
	Trench Top.	65	74	10.5	7	11
	Trench Bot.	75	77	11	7	16
	Fresh	65	67	13	7	0.2
9/27/2003	Fresh	44	66	15	7	0.2
	Trench Top.	49	71	13	7	6
	Trench Bot.	56	73	12	7	11
	Fresh	46	66	14	7	0.2
	Trench Top.	52	70	12	7	5
	Trench Bot.	60	74	12	7	12
9/28/2003	Fresh	43	66	12	7	0.2
	Trench Top.	55	72	11	7	6
	Trench Bot.	61	75	10	7	12
	Fresh	44	66	12	7	0.2
	Trench Top.	56	71	11	7	6

BENTONITE SLURRY SUMMARY REPORT

Groundwater Mitigation Control System, Sauget Area 2

		Viscosity (seconds)	Density of Mud	Filtrate Loss	PH	Sand Content
	Fresh	Range 40 - 65	Greater than 63.5pcf	<20 cc.	7.0 - 9.0	0 - 2%
Date	In-Trench	Range 40 - 100	> than 75.0 pcf, < than 85.0pcf	<20 cc.	7.0 - 10.5	N/A
			78pcf minimum Sta. 15+00 to 5+00			
	Trench Bot.	60	75	10	7	12
9/29/2003	Fresh	45	66	13	7	0.2
	Trench Top.	55	70	11	7	5
	Trench Bot.	60	75	10	7	10
	Fresh	44	66	13	7	0.2
	Trench Top.	55	71	11	7	6
	Trench Bot.	58	74	11	7	14
9/30/2003	24+80 Top.	59	69	12.3	7.5	6
	24+80 Bot.	59	70	12	7	5
	Fresh	52	65	14	7	0.25
	Fresh	51	65	14.2	7	0
	26+80 Top.	57	69	13.8	7	4.5
	26+80 Bot.	55	68	12.9	7	5
10/1/2003	Fresh	55	69	12.1	7	0
	26+00 Top.	57	74	11.1	7	9
	26+00 Bot.	58	75	11.4	7	9.5
	Fresh	47	66	16.2	7	0.25
	26+70 Top.	74	77	10.8	7	14
	26+70 Bot.	60	74	13.4	7.5	12
10/2/2003	Fresh	44	65	12	7.5	0.25
	26+80 Top.	65	73	12	7	7
	26+80 Bot.	52	69	10	7.5	4
	Fresh	48	65	12	7.5	0.25
	25+60 Top.	62	72	9	7	11
	25+60 Bot.	66	73	10	7	11
10/3/2003	Fresh	53	65	10	7.5	0.25
	26+70 Top.	70	73	8	7	10
	26+70 Bot.	69	72	8	7	12
	26+00 Bot.	66	73	9.4	7	12
	25+70 Bot.	63	73	10.8	7.5	8.5
10/4/2003	25+80 Bot.	96	75	8.2	7	18
	Fresh	60	64.5	9.4	8	0.25
	25+80 Top.	68	71	9.8	7	9
	25+80 Bot.	60	69	11	7	8
10/6/2003	Fresh	45	64.5	12.2	7	0.25
	25+80 Top.	62	68.5	11.4	7	6
	25+80 Bot.	70	71	11.6	7	10

BENTONITE SLURRY SUMMARY REPORT

Groundwater Mitigation Control System, Sauget Area 2

		Viscosity (seconds)	Density of Mud	Filtrate Loss	PH	Sand Content
	Fresh	Range 40 - 65	Greater than 63.5pcf	<20 cc.	7.0 - 9.0	0 - 2%
Date	In-Trench	Range 40 - 100	> than 75.0 pcf, < than 85.0pcf	<20 cc.	7.0 - 10.5	N/A
			78pcf minimum Sta. 15+00 to 5+00			
	Fresh	44	64.5	15.2	8	0.25
	Fresh	53	65	10.4	8	0.25
	25+70 Bot.	96	75	9.4	7	16
10/7/2003	Fresh	41	65	11.6	7.5	0.25
	25+70 Top.	62	68	11	7	6
	25+70 Bot.	63	69	10.4	7	8
	Fresh	42	64	11.4	7	0.25
	25+70 Bot.	62	68	10.4	7	9
10/8/2003	Fresh	71	65	10.2	8	0.25
	25+20 Top.	55	69	10.2	7	9.5
	25+20 Bot.	60	70	10.6	7	10
	Fresh	46	65	13.6	7	0.25
	Fresh	44	64.5	12.6	7.5	0.25
	25+20 Bot.	61	69.5	12.2	7	6
10/9/2003	Fresh	44	64.5	12.2	8	0.25
	25+20 Top.	53	69	10	7	6.5
	25+20 Bot.	53	69	10.2	7	6.5
10/10/2003	Fresh	63	64.5	14	7.5	0.25
	25+40 Top.	57	70	11.2	7	7
	25+40 Bot.	50	66	10.8	7	6
	25+40 Bot.	74	74.5	10.4	7	7
10/13/2003	Fresh	42	64.5	11.4	8	0.25
	24+70 Top.	60	69	10.6	7	6
	24+70 Bot.	64	78	9.4	7	18.8
	Fresh	46	64	12.2	7.5	0.25
	Fresh	50	64.5	10.4	7.5	0.25
	24+70 Bot.	73	71	11.6	7	9
10/14/2003	Fresh	43	65	12.4	8	0.25
	24+70 Top.	72	70	10.4	7	7
	24+70 Bot.	86	72	10.6	7	11
	Fresh	53	65	14.2	7	0.25
	24+70 Bot.	78	71	10.4	7	9.5
10/15/2003	Fresh	41	65	13.8	7	0.25
	24+00 Top.	53	67	14	7.5	6
	24+00 Bot.	60	70	12	7.5	6
	24+00 Bot.	70	73	8.4	7	10
	Fresh	45	64.5	12.6	7	0.25

BENTONITE SLURRY SUMMARY REPORT

Groundwater Mitigation Control System, Sauget Area 2

		Viscosity (seconds)	Density of Mud	Filtrate Loss	PH	Sand Content
	Fresh	Range 40 - 65	Greater than 63.5pcf	<20 cc.	7.0 - 9.0	0 - 2%
Date	In-Trench	Range 40 - 100	> than 75.0 pcf, < than 85.0pcf	<20 cc.	7.0 - 10.5	N/A
			78pcf minimum Sta. 15+00 to 5+00			
10/16/2003	Fresh	58	65	14.4	7.5	0.25
	24+00 Top.	49	66.5	12.6	7	3
	24+00 Bot.	60	71	8.8	7	11
	Fresh	49	64.5	14	7.5	0.25
	24+00 Bot.	53	67	10.2	7	3.5
10/17/2003	Fresh	41	64	14	7.5	0.25
	24+00 Top.	69	72	9	7	10
	24+00 Bot.	68	72	9.4	7	9.5
	24+00 Bot.	80	72.5	9	7	9.5
10/20/2003	Fresh	42	65	14.8	7	0.25
	24+00 Top.	52	66.5	11.2	7	2.5
	24+00 Bot.	80	71.5	9.6	7	12
	Fresh	41	64	15.4	7	0.25
	24+00 Bot.	61	72.5	9.8	7	12
10/21/2003	Fresh	54	66	14	7.5	0.25
	24+40 Top.	58	72	8.4	7	10
	24+40 Bot.	113	76	8.4	7	17
	Fresh	62	65.5	12.2	8	0.25
	24+40 Bot.	66	75	8.2	7	14
10/22/2003	Fresh	74	65	11.2	8	0.25
	Trench Top.	67	72	9.8	7	9
	Trench Bot.	104	76.5	8.8	7	15
	Fresh	53	64.5	11.2	8	0.25
	Trench Bot.	97	72	10.2	7	10
	Fresh	54	65	11.2	7.5	0.25
10/23/2003	Fresh	65	65	12	8	0.25
	21+20 Top.	65	70	8.8	7	10
	21+20 Bot.	67	72	10.4	7.5	12.5
	Fresh	63	65.5	10.8	8	0.25
	21+20 Bot.	68	71	6.8	7	12
10/24/2003	Fresh	90	65	12.4	8	0.25
	Trench Top.	75	68	10.4	7	4.5
	Trench Bot.	79	69.5	10.8	7	7
	Fresh	65	64.5	10.6	7	0.25
	Trench Bot.	80	68	10.8	7	5
10/27/2003	Fresh	85	65.5	12.4	7	0.25
	22+80 Top.	115	69	8.4	7	5

BENTONITE SLURRY SUMMARY REPORT

Groundwater Mitigation Control System, Sauget Area 2

		Viscosity (seconds)	Density of Mud	Filtrate Loss	PH	Sand Content
	Fresh	Range 40 - 65	Greater than 63.5pcf	<20 cc.	7.0 - 9.0	0 - 2%
Date	In-Trench	Range 40 - 100	> than 75.0 pcf, < than 85.0pcf	<20 cc.	7.0 - 10.5	N/A
			78pcf minimum Sta. 15+00 to 5+00			
	22+80 Bot.	91	71	9.4	7	8
	Fresh	48	65	11.6	8	0.25
	22+80 Bot.	70	70.5	9.4	7	7
10/28/2003	Fresh	57	65	11.4	7.5	0.25
	22+40 Top.	85	68.5	8.2	7	5
	22+40 Bot.	102	68.5	9.4	7	6.5
	Fresh	55	65	12.2	7.5	0.25
	22+40 Bot.	90	72.5	8	7	10
10/29/2003	Fresh	80	65	9.4	7	0.25
	22+00 Top.	75	69.5	9	7	7.5
	22+00 Bot.	85	72	10	7	10
	Fresh	100	64.5	11	8	0.25
	22+00 Bot.	64	71.5	10.2	7.5	7.5
10/30/2003	Fresh	60	66	10.4	7	0.25
	22+00 Top.	75	69	9.6	7.5	5
	22+00 Bot.	76	69	10.2	7	6
	Fresh	60	64.5	9.8	7	0.25
	22+00 Bot.	86	71	9	7	7.5
10/31/2003	Fresh	63	64.5	10.6	8	0.25
	22+00 Top.	78	71	9.6	8	8
	22+00 Bot.	93	71	9.2	7	8
	Fresh	62	64	10.6	7.5	0.25
	22+00 Bot.	90	72	8.6	7	9
11/3/2003	Fresh	80	65	11.6	7	0.25%
	Trench Top.	80	70.5	9.2	7	11%
	Trench Bot.	115	77	9	7	15%
	Fresh	70	64.5	11.4	7	0.25%
	Trench Bot.	109	74.5	9.2	7	14%
11/4/2003	Fresh	43	64.5	12.6	7	0.25%
	21+60 Top.	72	69.5	10	7	7%
	21+60 Bot.	118	74	9.8	7	12%
	Fresh	52	64.5	12	7	0.25%
	21+60 Bot.	88	70.5	10.6	7	9%
11/5/2003	Fresh	44	64	12.4	8	0.25%
	21+80 Top.	91	69	8	7.5	7%
	21+80 Bot.	130	75	6.8	7	12%
	Fresh	52	64.5	11.6	7.5	0.25%

BENTONITE SLURRY SUMMARY REPORT

Groundwater Mitigation Control System, Sauget Area 2

Date		Viscosity (seconds)	Density of Mud	Filtrate Loss	PH	Sand Content
	Fresh	Range 40 - 65	Greater than 63.5pcf	<20 cc.	7.0 - 9.0	0 - 2%
	In-Trench	Range 40 - 100	> than 75.0 pcf, < than 85.0pcf	<20 cc.	7.0 - 10.5	N/A
			78pcf minimum Sta. 15+00 to 5+00			
	21+80 Bot.	118	75	7.2	7	11%
11/6/2003	Fresh	46	64	12.4	7	0.25%
	21+80 Top.	114	75	8.8	7	11%
	21+80 Bot.	140	76	8.2	7	13%
	Fresh	44	64.5	12.4	7	0.25%
	21+80 Bot.	106	74	7.6	7.5	12%
11/7/2003	Fresh	49	64	10.2	7	0.25%
	21+80 Top.	91	73	8.2	7	8%
	21+80 Bot.	110	73	8.2	7	11%
	Fresh	44	64.5	12	7	0.25%
	21+80 Bot.	95	70	10	7	10%
11/10/2003	Fresh	51	64.5	12	7	0.25%
	21+60 Top.	87	69.5	8.8	7	7.50%
	21+60 Bot.	95	70.5	8.4	8	7.50%
	Fresh	56	64.5	12.2	7	0.25%
	21+60 Bot.	120	72	7.4	7.5	10%
11/12/2003	Fresh	77	65	11	7	0.25%
	19+80 Top.	90	71	8	7	7%
	19+80 Bot.	115	73.5	10.2	8	11%
	Fresh	115	66	9	7	0.25%
	19+80 Bot.	125	72.5	10.2	7	10%
11/13/2003	Fresh	41	64	12	7	0.25%
	18+60 Top.	180	72.5	10	7	9.50%
	18+60 Bot.	192	74	10	7	13%
	Fresh	39	64	12.2	7	0.25%
	18+60 Bot.	121	74	10.4	7	13%
11/14/2003	Fresh	34	64	15.2	7	0.25%
	18+80 Top.	75	69.5	8.4	7	9%
	18+80 Bot.	101	72	11	7	12%
	Fresh	43	64	13.8	7	0.25%
	18+80 Bot.	100	72	9	7	11%
11/15/2003	Fresh	45	64.5	12.4	7	0.25%
	19+00 Top.	104	73	11.2	7	10%
	19+00 Bot.	98	73	10.8	7	13%
	Fresh	51	64.5	12	7	0.25%
	19+00 Bot.	100	73	9.8	7	12.50%
11/17/2003	Fresh	46	65	13.6	7	0.25%

BENTONITE SLURRY SUMMARY REPORT

Groundwater Mitigation Control System, Sauget Area 2

		Viscosity (seconds)	Density of Mud	Filtrate Loss	PH	Sand Content
	Fresh	Range 40 - 65	Greater than 63.5pcf	<20 cc.	7.0 - 9.0	0 - 2%
Date	In-Trench	Range 40 - 100	> than 75.0 pcf, < than 85.0pcf	<20 cc.	7.0 - 10.5	N/A
			78pcf minimum Sta. 15+00 to 5+00			
	18+60 Top.	74	69	10.6	7	8%
	18+60 Bot.	80	73.5	9	7	14%
	Fresh	54	65	13.4	7	0.25%
	18+60 Bot.	99	73	8.8	7	13%
11/19/2003	Fresh	42	64.5	12	7	0.25%
	18+50 Top.	66	68	10	7	5.50%
	18+50 Bot.	81	72	8	7	10%
	Fresh	41	64.5	12.2	7	0.25%
	18+50 Bot.	68	72	10	7	10%
11/20/2003	Fresh	41	64	12	7	0.25%
	18+40 Top.	57	67	10.4	7	5%
	18+40 Bot.	71	71.5	9.2	7	9%
	Fresh	41	65	11.4	7	0.25%
	18+40 Bot.	63	74.5	8.6	7	12%
11/21/2003	Fresh	50	64.5	13	7	0.25%
	18+80 Top.	65	71.5	9	7	9%
	18+80 Bot.	98	77.5	10	7	18%
	Fresh	43	65	12.2	7	0.25%
	18+80 Bot.	91	72	9	7	11%
11/24/2003	Fresh	42	65	9.6	7	0.25%
	18+80 Top.	61	66.5	6.8	7	3.50%
	18+80 Bot.	97	71	6.6	7	11.50%
	Fresh	58	64.5	11.2	7	0.25%
	18+80 Bot.	102	71.5	7.2	7	12%
11/25/2003	Fresh	41	64	11	7	0.25%
	18+50 Top.	86	71.5	8.6	7	8%
	18+50 Bot.	120	75.5	7	7	16%
	Fresh	43	64	11.4	7	0.25%
	18+50 Bot.	100	75	7.4	7	13.00%
11/26/2003	Fresh	47	65.5	12.8	7	0.25%
	18+20 Top.	71	71.5	7	7	10%
	18+20 Bot.	84	75.5	6.2	7	14%
	Fresh	49	65	12.4	7	0.25%
	18+20 Bot.	91	76	6.6	7	15%
11/28/2003	Fresh	60	65	8.2	7	0.25%
	18+00 Top.	83	71	7.6	7	8%
	18+00 Bot.	108	77.5	7.4	7	16%

BENTONITE SLURRY SUMMARY REPORT

Groundwater Mitigation Control System, Sauget Area 2

Date		Viscosity (seconds)	Density of Mud	Filtrate Loss	PH	Sand Content
	Fresh	Range 40 - 65	Greater than 63.5pcf	<20 cc.	7.0 - 9.0	0 - 2%
	In-Trench	Range 40 - 100	> than 75.0 pcf, < than 85.0pcf	<20 cc.	7.0 - 10.5	N/A
			78pcf minimum Sta. 15+00 to 5+00			
	Fresh	58	65	9.2	7	0.25%
	18+00 Bot.	81	74	7.2	7	14%
12/1/2003	Fresh	52	64	11.4	7	0.25%
	18+20 Top.	83	71	9.4	7	8%
	18+20 Bot.	115	76	8	7	14%
	Fresh	63	65	10.4	7	0.25%
	18+20 Bot.	140	79	8.2	7	18%
12/2/2003	Fresh	53	64.5	10.2	7	0.25%
	18+20 Top.	84	72	6.4	7	9%
	18+20 Bot.	124	76	6.4	7	14%
	17+50 Top.	87	74	6.8	7	10%
	17+50 Bot.	94	77	6.5	7	13%
	Fresh	52	65	7.2	7	0%
12/3/2003	18+60 Top.	96	71	8.8	7	6%
	18+60 Bot.	125	79	6.9	7.5	12%
	Fresh	53	65.5	10.8	7	0.25%
	18+40 Top.	120	78.5	6.6	7	16%
	18+40 Bot.	89	75	7.5	7	10%
12/4/2003	Fresh	70	65	11	8	0
	Trench Top.	60	70	11	7	N/A
	Trench Bot.	80	76	12	8	N/A
	Fresh	60	65	12	8	0
	Trench Top.	78	71	12	8	N/A
	Trench Bot.	122	75	11	8	N/A
12/5/2003	Fresh	58	65	10	7	0.25%
	18+00 Top.	63	69	8	7	6%
	18+00 Bot.	129	79	8.2	7	14%
	Fresh	55	64	10	7	0.25%
	18+00 Bot.	126	77	7.6	7	13%
12/8/2003	Fresh	40	64.5	13.2	7	0.25%
	18+00 Top.	63	69	8.8	7	6%
	18+00 Bot.	128	75.5	8.6	7	11%
	Fresh	42	64	13	7	0.25%
	18+00 Bot.	108	73.5	8.8	7	10%
12/9/2003	Fresh	40	64	12.2	7	0.25%
	18+00 Top.	49	67.5	9	7	5%
	18+00 Bot.	85	76.5	8.6	7	11%

BENTONITE SLURRY SUMMARY REPORT

Groundwater Mitigation Control System, Sauget Area 2

		Viscosity (seconds)	Density of Mud	Filtrate Loss	PH	Sand Content
	Fresh	Range 40 - 65	Greater than 63.5pcf	<20 cc.	7.0 - 9.0	0 - 2%
Date	In-Trench	Range 40 - 100	> than 75.0 pcf, < than 85.0pcf	<20 cc.	7.0 - 10.5	N/A
			78pcf minimum Sta. 15+00 to 5+00			
	Fresh	42	64.5	12.2	7	0.25%
	18+00 Bot.	90	78	8.2	7	12.50%
12/10/2003	Fresh	42	64.5	10	7	0.25%
	18+00 Top.	51	69	8.2	7	4%
	18+00 Bot.	142	77	8	7	10%
	Fresh	43	64	11.2	7	0.25%
	18+00 Bot.	125	77	8.4	7	12%
12/11/2003	Fresh	52	66	10.6	7	0.25%
	14+60 Top.	52	70	8.8	7	7%
	14+60 Bot.	58	73	8	7	12%
	Fresh	51	66	11	7	0.25%
	14+60 Bot.	56	74	8	7	13%
12/12/2003	Fresh	45	63	14	7	0.25%
	14+60 Top.	58	68	10.4	7	4.50%
	14+60 Bot.	55	69	9.2	7	6.20%
	Fresh	44	64	13.6	7	0.25%
	14+60 Bot.	53	71	9.6	7	8%
12/13/2003	Fresh	58	64.5	9.6	7	0.25%
	Fresh	62	64.5	10	7	0.25%
12/15/2003	Fresh	45	64.5	10	7	0.25%
	14+20 Top.	45	66.5	8.6	7	3.0%
	14+20 Bot.	49	73.5	8	7	8%
	Fresh	42	64	10.6	7	0.25%
	14+20 Bot.	52	73.5	8	7	9.00%
12/16/2003	Fresh	45	62.5	12.6	7	0.25%
	14+20 Top.	45	68	8.2	7	5%
	14+20 Bot.	52	68	7	7	6%
	Fresh	44	63.5	11.8	7	0.25%
	14+20 Bot.	60	70	8	7	6.50%
12/22/2003	Fresh	44	64	12	7	0.25%
	14+00 Top.	44	65	12	7	2%
	14+00 Bot.	48	66.5	11.6	7	3%
12/24/2003	14+00 Top.	42	66	15	7	2%
	14+00 Bot.	66	75	10.8	7	9%
12/29/2003	14+20 Top.	44	66.5	14.4	7	2.50%
	14+20 Bot.	64	74	10.8	7	9%
	14+20 Bot.	76	77	10.6	7	13%

BENTONITE SLURRY SUMMARY REPORT

Groundwater Mitigation Control System, Sauget Area 2

		Viscosity (seconds)	Density of Mud	Filtrate Loss	PH	Sand Content
	Fresh	Range 40 - 65	Greater than 63.5pcf	<20 cc.	7.0 - 9.0	0 - 2%
Date	In-Trench	Range 40 - 100	> than 75.0 pcf, < than 85.0pcf	<20 cc.	7.0 - 10.5	N/A
			78pcf minimum Sta. 15+00 to 5+00			
12/30/2003	Fresh	44	64.5	12.4	7	0.25%
	13+90 Top.	54	70	12	7	5%
	13+90 Bot.	102	77	9.6	7	13%
	Fresh	42	64	12.4	7	0.25%
	13+90 Bot.	64	75	10.2	7	9%
1/2/2004	Fresh	47	65.5	14.2	7	0.25%
	13+90 Top.	49	69	14.2	7	4.50%
	13+90 Bot.	82	78	10.8	7	13%
1/5/2004	13+80 Top.	54	69	10.2	7	4.50%
	13+80 Bot.	69	72.5	8.2	7	12%
1/7/2004	Fresh	58	66	10	7	0.25%
	14+00 Top.	50	70	10	7	6%
	14+00 Bot.	70	76	8.4	7	11%
	Fresh	56	65	10.2	7	0.25%
	14+00 Bot.	65	74	8.4	7	10%
1/8/2004	Fresh	68	65.5	10.4	7	0.25%
	13+80 Top.	46	69	12.2	7	4%
	13+80 Bot.	75	78	8.8	7	12%
	Fresh	64	65	10.6	7	0.25%
	13+80 Bot.	73	76	8.4	7	12%
1/9/2004	Fresh	66	65	12.4	7	0.25%
	13+60 Top.	60	72.5	9.4	7	7%
	13+60 Bot.	78	76	8	7	12%
	Fresh	69	65.5	12.4	7	0.25%
	13+60 Bot.	75	75	8.2	7	10%
	10+40	82	72	11.2	8	9%
	10+40 Bot.	94	77	10.2	8	14%
1/12/2004	Fresh	48	65	12	7	0.25%
	13+80 Top.	53	70	10.6	7	5%
	13+80 Bot.	58	71	11.8	7	6%
	Fresh	47	64	12	7	0.25%
	13+60 Bot.	78	73	11.6	7	9.50%
1/13/2004	Fresh	47	65	11.2	7	0.25%
	13+00 Top.	66	73	10	7	9%
	13+00 Bot.	75	75	11	7	10%
	Fresh	48	64.5	11.2	7	0.25%
	13+00 Bot.	83	77.5	10	7	12%

BENTONITE SLURRY SUMMARY REPORT

Groundwater Mitigation Control System, Sauget Area 2

		Viscosity (seconds)	Density of Mud	Filtrate Loss	PH	Sand Content
	Fresh	Range 40 - 65	Greater than 63.5pcf	<20 cc.	7.0 - 9.0	0 - 2%
Date	In-Trench	Range 40 - 100	> than 75.0 pcf, < than 85.0pcf	<20 cc.	7.0 - 10.5	N/A
			78pcf minimum Sta. 15+00 to 5+00			
1/14/2004	Fresh	52	64	10.4	7	0.25%
	13+40 Top.	68	72	8	7	6%
	13+40 Bot.	84	77	9.2	7	14%
	Fresh	61	65	11	7	0.25%
	13+40 Bot.	113	76	10	7	12%
	Corner Top.	92	79	10.4	8	14%
	Corner Bot.	90	79	10.2	8	16%
1/15/2004	Fresh	62	66	10.4	7	0.25%
	12+70 Top.	73	74	9.6	7	10%
	12+70 Bot.	83	77	9.6	7	12%
	Fresh	60	65	10.6	7	0.25%
	12+70 Bot.	78	76	9.4	7	11%
	Corner Top.	110	75	12	8	12%
	Corner Bot.	96	79	11.4	8	16%
1/16/2004	Fresh	71	66	10.2	7	0.25%
	12+80 Top.	74	74.5	9.8	7	10%
	12+80 Bot.	85	78	9.2	7	14%
	Fresh	64	64.5	11	7	0.25%
	Trench Bot.	74	74	10.2	7	10%
	Corner Top.	88	78	10.2	7	15%
	Corner Bot.	116	80	10.8	8	18%
1/17/2004	13+00 Top.	37	66	7	7	2.50%
	13+00 Bot.	84	79	8.2	7	14%
	13+00 Bot.	80	76	8.4	7	14%
1/20/2004	13+00 Top.	64	70.5	10.8	7	5%
	13+00 Bot.	87	79.5	9	7	14%
	13+00 Bot.	85	80	8.2	7	15%
	Corner Top.	138	77	11.8	8	15%
	Corner Bot.	94	77.5	10.6	7	16%
1/21/2004	12+80 Top.	72	70.5	9.4	7	6%
	12+80 Bot.	89	78.5	7.6	7	10%
	12+80 Bot.	77	78	9	7	13%
	Corner Top.	105	79	9.6	8	15%
	Corner Bot.	92	77.5	9.6	7	16%
1/22/2004	13+00 Top.	80	75	8.2	7	8%
	13+00 Bot.	101	81	8.4	7	14%
	13+00 Bot.	110	81	8.2	7	14%

BENTONITE SLURRY SUMMARY REPORT

Groundwater Mitigation Control System, Sauget Area 2

		Viscosity (seconds)	Density of Mud	Filtrate Loss	PH	Sand Content
	Fresh	Range 40 - 65	Greater than 63.5pcf	<20 cc.	7.0 - 9.0	0 - 2%
Date	In-Trench	Range 40 - 100	> than 75.0 pcf, < than 85.0pcf	<20 cc.	7.0 - 10.5	N/A
			78pcf minimum Sta. 15+00 to 5+00			
1/23/2004	12+60 Top.	89	78	8.4	7	12%
	12+60 Bot.	102	84	8.2	7	18%
	12+60 Bot.	98	80	8	7	14%
	Corner Top.	110	80	8	8	6%
	Corner Bot.	89	78	8	7	14%
2/4/2004	Fresh	44	65	13	6	0.25%
	Fresh	48	66	12.4	7	0.25%
2/5/2004	Fresh	42	65	12.6	7	0.25%
	Fresh	50	65	12.4	7	0.25%
2/13/2004	12+40 top	60	75	8	8	10%
	12+40 bot.	120	75	9	8	12%
	Fresh	44	65	14	8	0%
2/17/2004	12+50 top.	56	75	13	8	5%
	12+50 bot.	112	75	12	8	10%
2/20/2004	Fresh	40	65	15	7	1%
	12+50 top.	59	72	13	8	5%
	12+50 bot.	119	76	12	8	14%
2/24/2004	Fresh	44	64	14	7	<1%
	12+50 top.	64	71	14	8	5%
	12+50 bot.	124	75	13	8	13%
2/27/2004	Fresh	55	64	13	8	<1%
	12+50 top.	45	72	14	8	8%
	12+50 bot.	105	76	14	8	14%
3/2/2004	14+50 top.	60	69	16	8	6%
	14+50 bot.	117	74	15	8	13%
3/5/2004	14+40 top.	70	71	14	8	9%
	14+40 bot.	125	76	14	8	15%
3/8/2004	12+40 top	65	67	12.2	7	1.50%
	12+40 bot.	125	75	11	7	16%
3/10/2004	Fresh	40	65	15.6	7	0.25%
3/11/2004	Fresh	40	64.5	12.8	7	0.25%
	Fresh	41	65	14	7	0.25%
3/12/2004	Fresh	42	64	13	7	0.25%
	12+40 top.	58	69	11.8	7	3.50%
	12+40 bot.	130	77	12.4	7	14%
3/15/2004	Fresh	39	65	16.4	7	0.25%
	12+40 top.	55	70	14	7	5%

BENTONITE SLURRY SUMMARY REPORT

Groundwater Mitigation Control System, Sauget Area 2

		Viscosity (seconds)	Density of Mud	Filtrate Loss	PH	Sand Content
	Fresh	Range 40 - 65	Greater than 63.5pcf	<20 cc.	7.0 - 9.0	0 - 2%
Date	In-Trench	Range 40 - 100	> than 75.0 pcf, < than 85.0pcf	<20 cc.	7.0 - 10.5	N/A
			78pcf minimum Sta. 15+00 to 5+00			
	12+40 bot.	120	72	13.4	7	9.50%
3/16/2004	Fresh	39	64.5	17	7	0.25%
	12+40 top.	52	70	12	7	5%
	12+40 bot.	167	74	12	7	10%
3/22/2004	Fresh	41	65	16.4	7	0.25%
	Fresh	41	65	16	7	0.25%
	12+40 top	62	71	12.6	7	6%
	12+40 bot.	182	79	12	7	17%
	12+40 bot.	92	67	9.4	7	8%
3/23/2004	Fresh	42	64	14.2	7	0.25%
	12+40 top	55	69	12.4	7	5%
	12+40 bot.	145	79	11.8	7	18%
3/24/2004	Fresh	44	64	14	7	0.25%
3/26/2004	14+40 top.	102	65	12.8	7	8%
	14+40 bot.	143	65	12.2	7	12%
3/29/2004	13+00 Top.	68	74	11.6	7	12%
	13+00 Bot.	113	78	11	7	16%
	13+00 Bot.	96	77	11.6	7	16%
3/30/2004	13+00 Top.	110	75	11.6	7	12%
	13+00 Bot.	120	75	11.8	7	13%
	13+00 Bot.	98	73	12	7	12%
3/31/2004	13+00 Top.	93	74	11.4	7	12%
	13+00 Bot.	137	77	10	7	20%
	13+00 Bot.	132	77	10.2	7	16%
4/1/2004	Fresh	38	65	15.6	7	0.25%
	13+00 Top.	82	75	11.8	7	11%
	13+00 Bot.	116	78	12.2	7	16%
	13+00 Bot.	103	77	11.8	7	16%
4/2/2004	Fresh	40	65	14.2	7	0.25%
	12+40 Top.	89	75	11.2	7	12%
	12+40 bot.	152	77	12.2	7	16%
	12+40 bot.	133	76	11.8	7	16%
4/5/2004	Fresh	42	64.5	11.8	7	0.25%
	11+80 Top.	83	73	10.6	7	12%
	11+80 Bot.	173	80	12	7	20%
	11+80 Bot.	139	79	11.4	7	18%
4/6/2004	11+60 Top.	78	73	11.2	7	10%

BENTONITE SLURRY SUMMARY REPORT

Groundwater Mitigation Control System, Sauget Area 2

Date		Viscosity (seconds)	Density of Mud	Filtrate Loss	PH	Sand Content
	Fresh	Range 40 - 65	Greater than 63.5pcf	<20 cc.	7.0 - 9.0	0 - 2%
	In-Trench	Range 40 - 100	> than 75.0 pcf, < than 85.0pcf	<20 cc.	7.0 - 10.5	N/A
			78pcf minimum Sta. 15+00 to 5+00			
	11+60 Bot.	173	79	10.8	7	18%
	11+60 Bot.	144	79	N/a	7	20%
	Fresh	39	64	12	7	0.25%
4/7/2004	11+60 Top.	86	76	12	7	14%
	11+60 Bot.	167	78	11.4	7	18%
	Fresh	36	64	15.4	7	0.25%
	11+60 Bot.	140	78	12.4	7	20%
4/8/2004	Fresh	38	64.5	15.6	7	0.25%
	11+60 Top.	120	77	11.6	7	16%
	11+60 Bot.	183	78	12	7	20%
	Fresh	38	64.5	14.8	7	0.25%
	11+60 Bot.	190	78.5	12	7	20%
4/9/2004	Fresh	40	64.5	16	7	0.25%
	11+60 Top.	89	73	12.4	7	12%
	11+60 Bot.	146	77	12.6	7	18%
	11+60 Bot.	159	78	11.8	7	16%
4/12/2004	Fresh	38	64.5	16.4	7	0.25%
	11+60 Top.	112	77	11.6	7	16%
	11+60 Bot.	162	78	11.4	7	18%
	Fresh	39	64	16	7	0.25%
	11+60 Bot.	149	78	11.8	7	18%
4/13/2004	Fresh	40	64	16.6	7	0.25%
	11+60 Top.	90	72	13.4	7	10%
	11+60 Bot.	167	78	12.6	7	18%
	Fresh	46	64.5	15.2	7	0.25%
	11+60 Bot.	170	80	13	7	20%
4/14/2004	Fresh	38	64	16.4	7	0.25%
	11+60 Top.	97	73	12	7	10%
	11+60 Bot.	152	78	12	7	16%
	11+60 Bot.	109	77	12.2	7	N/A
4/15/2004	Fresh	41	64.5	15.2	7	0.25%
	11+60 Top.	89	76	12.4	7	16%
	11+60 Bot.	165	77	12.8	7	18%
	11+60 Bot.	156	78	13	7	18%
4/16/2004	Fresh	66	64.5	18.2	7	0.25%
	11+60 Top.	175	75	15	7	16%
	11+60 Bot.	187	78	15.4	7	15%

BENTONITE SLURRY SUMMARY REPORT

Groundwater Mitigation Control System, Sauget Area 2

		Viscosity (seconds)	Density of Mud	Filtrate Loss	PH	Sand Content
	Fresh	Range 40 - 65	Greater than 63.5pcf	<20 cc.	7.0 - 9.0	0 - 2%
Date	In-Trench	Range 40 - 100	> than 75.0 pcf, < than 85.0pcf	<20 cc.	7.0 - 10.5	N/A
			78pcf minimum Sta. 15+00 to 5+00			
	Fresh	81	64	18.4	7	0.25%
	11+60 Bot.	168	77	14.6	7	18%
4/19/2004	Fresh	40	64	18.8	7	0.25%
	10+20 Top.	73	72	13.4	7	10%
	10+20 Bot.	134	78	15.4	7	20%
	Fresh	40	64	18	7	0.25%
	10+20 Bot.	99	78	15.4	7	20%
4/20/2004	Fresh	36	64	19.4	7	0.25%
	10+20 Top.	58	72	15.4	7	10%
	10+20 Bot.	108	82	15	7	20%
	10+20 Top.	85	74	16.2	7	12%
4/21/2004	Fresh	39	64	18.8	7	0.25%
	10+20 Top.	110	73	15.2	7	10%
	10+20 Bot.	155	79	15	7	20%
	10+20 Bot.	159	78	15.2	7	20%
4/22/2004	Fresh	36	64	18.4	7	0.25%
	10+20 Top.	55	72	14.4	7	11%
	10+20 Bot.	144	84	15	7	20%
	Fresh	39	64	18.4	7	0.25%
	10+20 Bot.	121	78	15.4	7	18%
4/23/2004	21+00 Top.	68	76	12.6	7	16%
	21+00 Bot.	92	81.5	14	7	20%
	21+00 Bot.	96	81	14.8	7	20%
4/26/2004	Fresh	39	64	13.8	7	0.25%
	10+00 Top.	68	74	15	7	13%
	10+00 Bot.	99	83	16.2	7	20%+
	Fresh	47	65	12.8	7	0.25%
	10+00 Bot.	72	79	14.2	7	18%
4/27/2004	Fresh	45	62	13	7	0.25%
	10+00 Top.	108	69	18.8	7	15%
	10+00 Bot.	143	80	21.2	7	20%+
	Fresh	67	64	15.4	7	0.25%
	10+00 Bot.	148	73	13.2	7	18%
4/28/2004	Fresh	40	64	14	7	0.25%
	9+80 Top.	59	73	15	7	13%
	9+80 Bot.	159	83	15.8	7	20%+
	9+80 Bot.	73	76	15.2	7	16%

BENTONITE SLURRY SUMMARY REPORT

Groundwater Mitigation Control System, Sauget Area 2

		Viscosity (seconds)	Density of Mud	Filtrate Loss	PH	Sand Content
	Fresh	Range 40 - 65	Greater than 63.5pcf	<20 cc.	7.0 - 9.0	0 - 2%
Date	In-Trench	Range 40 - 100	> than 75.0 pcf, < than 85.0pcf	<20 cc.	7.0 - 10.5	N/A
			78pcf minimum Sta. 15+00 to 5+00			
4/29/2004	Fresh	48	64	13.2	7	0.25%
	10+00 Top.	58	73	13	7	12%
	10+00 Bot.	70	76	14	7	16%
	Fresh	47	64	13.4	7	0.25%
	10+00 Bot.	90	80	14.4	7	20%
4/30/2004	10+00 Top.	46	71	16	7	9%
	10+00 Bot.	72	77.5	13.4	7	18%
	10+00 Bot.	97	79	14.2	7	20%
5/3/2004	Fresh	38	64.5	14.2	7	0.25%
	10+00 Top.	47	71	13.2	7	7%
	10+00 Bot.	106	81.5	13.8	7	20%
	Fresh	42	64	14.6	7	0.25%
	10+00 Bot.	77	81.5	15	7	20%
5/4/2004	Fresh	41	64.5	15	7	0.25%
	9+80 Top.	47	68.5	15.2	7	6%
	9+80 Bot.	100	82	15.6	7	20%
	Fresh	41	64	14.6	7	0.25%
	9+80 Bot.	90	81	15.4	7	20%
5/5/2004	Fresh	42	64	15.8	7	0.25%
	9+10 Top.	50	74	14.6	7	12%
	9+10 Bot.	89	78.5	13.2	7	20%
	Fresh	40	64	18	7	0.25%
	9+10 Bot.	77	82	14.6	7	20%
5/6/2004	8+60 Top.	46	71	13.4	7	10%
	8+60 Bot	65	77	15.8	7	20%
	Fresh	41	64	14	7	0.25%
	8+60 Bot	71	71	15.4	7	20%
5/7/2004	Fresh	40	64	20.2	7	0.25%
	8+80 Top.	49	72	15.2	7	10%
	8+80 Bot.	60	76	15	7	20%
	8+80 Bot.	69	83	14.8	7	20%
5/10/2004	Fresh	48	65	15.4	7	0.25%
	8+80 Top.	40	65.5	17	7	4%
	8+80 Bot.	58	79	14.6	7	20%
	Fresh	62	65.5	16.2	7	0.25%
	8+80 Bot.	67	80	15.6	7	20%
5/11/2004	Fresh	40	64	16	7	0.25%

BENTONITE SLURRY SUMMARY REPORT

Groundwater Mitigation Control System, Sauget Area 2

		Viscosity (seconds)	Density of Mud	Filtrate Loss	PH	Sand Content
	Fresh	Range 40 - 65	Greater than 63.5pcf	<20 cc.	7.0 - 9.0	0 - 2%
Date	In-Trench	Range 40 - 100	> than 75.0 pcf, < than 85.0pcf	<20 cc.	7.0 - 10.5	N/A
			78pcf minimum Sta. 15+00 to 5+00			
	8+70 Top.	52	72.5	15	7	14%
	8+70 Bot.	73	80	15.2	7	20%
	Fresh	40	64	15.8	7	0.25%
	8+70 Bot.	65	80	14.8	7	20%
5/12/2004	Fresh	40	64	17	7	0.25%
	8+70 Top.	46	72	15	7	13%
	8+70 Bot.	64	77	13.6	7	20%
	Fresh	40	64	17.8	7	0.25%
	8+70 Bot.	64	78	13.4	7	20%
5/13/2004	Fresh	54	64.5	13.4	7	0.25%
	8+70 Top.	48	72	15	7	10%
	8+70 Bot.	55	77	15.4	7	20%
	8+70 Bot.	57	79	15.4	7	20%
5/17/2004	Fresh	43	64	16.4	7	0.25%
	8+60 Top.	48	72	14.6	7	12%
	8+60 Bot	62	76	15	7	18%
	Fresh	42	64	16	7	0.25%
	8+60 Bot	68	78	14.4	7	20%
5/18/2004	Fresh	40	64	17.2	7	0.25%
	8+50 Top.	46	70	15.4	7	6%
	8+50 Bot.	70	78	15.2	7	20%
	Fresh	41	64	16.8	7	0.25%
	8+50 Bot.	69	80.5	14.6	7	20%
5/20/2004	Fresh	45	65	16.4	7	0.25%
	8+60 Top.	50	72	17	7	12%
	8+60 Bot	64	74	18	7	16%
	Fresh	59	65	15	7	0.25%
	8+60 Bot	68	78	14.4	7	20%
5/21/2004	8+60 Top.	53	74	15.2	8	13%
	8+60 Bot	82	78	14.6	7	20%
	8+60 Bot	58	77	15	7	18%
5/24/2004	Fresh	44	64	13.2	7	0.25%
	7+60 Top.	51	73	14.8	7	12%
	7+60 Bot.	65	79	14.4	7	20%
After	Desander	68	71	N/A	7	9%
	7+60 Bot.	56	77	15.2	7	20%
5/25/2004	7+60 Top.	52	74	14.6	7	16%

BENTONITE SLURRY SUMMARY REPORT

Groundwater Mitigation Control System, Sauget Area 2

		Viscosity (seconds)	Density of Mud	Filtrate Loss	PH	Sand Content
	Fresh	Range 40 - 65	Greater than 63.5pcf	<20 cc.	7.0 - 9.0	0 - 2%
Date	In-Trench	Range 40 - 100	> than 75.0 pcf, < than 85.0pcf	<20 cc.	7.0 - 10.5	N/A
			78pcf minimum Sta. 15+00 to 5+00			
	7+60 Bot.	60	77	14.2	7	20%
	7+60 Bot.	59	76	14.6	7	20%
6/1/2004	7+00 Top.	50	70	15	7	6%
	7+00 Bot.	77	77	14.5	7	20%
	Fresh	40	64	14.5	7	0.25%
	7+00 Bot.	80	78	15.5	7	20%
	Fresh	40	64	14	7	0.25%
6/2/2004	7+00 Top.	38	66	16.5	7	5%
	7+00 Bot.	97	77	18.5	7	20%
	7+00 Bot.	72	82	16	7	20%
6/3/2004	Fresh	41	64.5	15	7	0.25%
	7+30 Top.	48	71	16	7	8%
	7+30 Bot.	68	77	14.5	7	20%
	7+30 Bot.	69	79	14.5	7	20%
6/4/2004	Fresh	40	64	15.5	7	0.25%
	7+30 Top.	42	69	16	7	8%
	7+30 Bot.	82	80	15	7	20%
	7+30 Bot.	79	78	15.5	7	20%
6/7/2004	Fresh	41	64.5	16	7	0.25%
	7+30 Top.	43	69	15	7	7%
	7+30 Bot.	64	76.5	15	7	20%
	7+30 Bot.	60	79	15.5	7	20%
6/8/2004	6+60 Top.	45	69	12.5	7	7%
	6+60 Bot.	56	75	13	7	20%
	6+60 Bot.	53	75	13.5	7	16%
6/9/2004	6+80 Top.	45	69	12.5	7	6%
	6+80 Bot.	52	75	13	7	16%
	6+80 Bot.	53	78	12.5	7	20%
6/10/2004	6+80 Top.	47	68	12.5	7	5%
	6+80 Bot.	57	74	12	7	16%
After	Desander	58	71	N/A	7	8%
	6+80 Bot.	53	72	14	7	14%
6/11/2004	6+80 Top.	48	69	13.5	7	7%
	6+80 Bot.	52	73	12.5	7	14%
	6+80 Bot.	64	80	13	7	20%
6/12/2004	6+80 Top.	49	68	12.5	7	5%
	6+80 Bot.	62	76	13.5	7	20%

BENTONITE SLURRY SUMMARY REPORT

Groundwater Mitigation Control System, Sauget Area 2

		Viscosity (seconds)	Density of Mud	Filtrate Loss	PH	Sand Content
	Fresh	Range 40 - 65	Greater than 63.5pcf	<20 cc.	7.0 - 9.0	0 - 2%
Date	In-Trench	Range 40 - 100	> than 75.0 pcf, < than 85.0pcf	<20 cc.	7.0 - 10.5	N/A
			78pcf minimum Sta. 15+00 to 5+00			
	Fresh	40	64	14	7	0.25%
6/14/2004	6+30 Top.	48	68	13	7	6%
	6+30 Bot.	57	75	12.5	7	14%
After	Desander	48	68	N/A	7	4%
	6+30 Bot.	51	74	13.5	7	14%
6/15/2004	6+30 Top.	46	69	12.5	7	7%
	6+30 Bot.	49	73	13	7	12%
After	Desander	45	69	N/A	7	6%
	6+30 Bot.	51	73	12.5	7	12%
6/16/2004	6+40 Top.	44	69	13.5	7	7%
	6+40 Bot.	49	71	12.5	7	14%
Before	Desander	47	71	N/A	7	14%
After	Desander	43	69	N/A	8	7%
	6+40 Bot.	53	72	13.5	7	16%
6/17/2004	6+40 Top.	45	68	14	7	6%
	6+40 Bot.	67	78	13	7	20%
	Fresh	41	64	15	7	0.25%
After	Desander	45	69	N/A	7	4%
	6+40 Bot.	69	79	14	7	16%
	Fresh	44	65	13	7	0.25%
6/18/2004	6+10 Top.	45	68	14	7	8%
	6+10 Bot.	58	73	13	7	14%
	6+10 Bot.	51	72	13.5	7	14%
After	Desander	49	68	N/A	7	6%
	Fresh	39	64	15	7	0.25%
6/21/2004	6+30 Top.	49	69	15	7	7%
	6+30 Bot.	52	71	13	7	14%
6/22/2004	6+30 Top.	46	69	14	7	7%
	6+30 Bot.	59	74	13.5	7	16%
6/23/2004	6+30 Top.	47	68.5	13	7	6%
	6+30 Bot.	53	72	13.5	7	12%
6/24/2004	6+30 Top.	48	69	13.5	7	8%
	6+30 Bot.	51	71	13	7	12%
	6+30 Bot.	52	72	14.5	7	12%
Before	Desander	62	71	N/A	7	14%
After	Desander	50	69	N/A	7	7%
6/25/2004	6+30 Top.	50	68	14	7	7%

BENTONITE SLURRY SUMMARY REPORT

Groundwater Mitigation Control System, Sauget Area 2

		Viscosity (seconds)	Density of Mud	Filtrate Loss	PH	Sand Content
	Fresh	Range 40 - 65	Greater than 63.5pcf	<20 cc.	7.0 - 9.0	0 - 2%
Date	In-Trench	Range 40 - 100	> than 75.0 pcf, < than 85.0pcf	<20 cc.	7.0 - 10.5	N/A
			78pcf minimum Sta. 15+00 to 5+00			
	6+30 Bot.	66	78	14	7	20%
	Fresh	42	65	14.5	7	0.25%
	6+30 Bot.	52	71	14	7	10%
	Fresh	42	64	16.5	7	0.25%
Before	Desander	53	73	N/A	7	16%
After	Desander	58	68	N/A	7	5%
6/28/2004	Fresh	38	64	17	7	0.25%
	5+70 Top.	49	69	13.5	7	10%
	5+70 Bot.	59	72.5	13	7	16%
	Fresh	40	64	16	7	0.25%
	5+70 Bot.	52	72.5	12.5	7	10%
Before	Desander	50	73	N/A	7	14%
After	Desander	58	68	N/A	7	6%
6/29/2004	Fresh	40	64	16	7	0.25%
	5+60 Top.	50	70	13	7	10%
	5+60 Bot.	59	72	13.5	7	14%
	Fresh	40	64	16.5	7	0.25%
	5+60 Bot.	60	72	14	7	14%
Before	Desander	47	71	N/A	7	14%
After	Desander	62	69	N/A	7	8%
6/30/2004	Fresh	40	64	16	7	0.25%
	5+30 Top.	52	70	14.5	7	7%
	5+30 Bot.	68	74	13	7	14%
	Fresh	41	64	16	7	0.25%
	5+30 Bot.	69	74	13.5	7	16%
Before	Desander	60	78	N/A	7	20%
After	Desander	46	68	N/A	7	7%
7/1/2004	Fresh	41	64	15	7	0.25%
	5+40 Top.	46	70	14	7	9%
	25+25 Top.	40	68	16	7	6%
	25+25 Bot.	40	69	15	7	7%
	Fresh	40	64	15.5	7	0.25%
	25+25 Bot.	42	71	N/A	7	7%
Before	Desander	62	74	N/A	7	14%
After	Desander	71	71	N/A	7	6%
7/6/2004	Fresh	41	62	15	7	0.25%
	25+25 Top.	45	68	16	7	6%

BENTONITE SLURRY SUMMARY REPORT

Groundwater Mitigation Control System, Sauget Area 2

Date		Viscosity (seconds)	Density of Mud	Filtrate Loss	PH	Sand Content
	Fresh	Range 40 - 65	Greater than 63.5pcf	<20 cc.	7.0 - 9.0	0 - 2%
	In-Trench	Range 40 - 100	> than 75.0 pcf, < than 85.0pcf	<20 cc.	7.0 - 10.5	N/A
			78pcf minimum Sta. 15+00 to 5+00			
	25+25 Bot.	46	70	14	7	7%
7/7/2004	Fresh	41	64	16.5	7	0.25%
	25+50 Top.	44	69	15.5	7	5%
	25+50 Bot.	50	72	15	7	10%
	5+40 Top.	46	69	15	7	6%
	25+50 Bot.	48	71	15.5	7	10%
7/8/2004	Fresh	40	64	17	6.5	0.25%
	26+00 Top.	45	70	15.5	7	7%
	26+00 Bot.	47	70	14.5	7	7%
	5+40 Top.	49	70	15	7	6%
	Fresh	40	65	15.5	7	0.25%
	26+00 Bot.	49	71	16	7	7%
7/9/2004	Fresh	42	65	15.5	7	0.25%
	26+00 Top.	41	71	14.5	7	7%
	26+00 Bot.	44	72	15.5	7	10%
	5+40 Top.	90	79	13.5	7	20%
	Fresh	40	64	15.5	7	0.25%
	26+00 Bot.	43	71	15.5	7	6%
7/10/2004	Fresh	40	64	16	7	0.25%
	26+00 Top.	41	69	16	7	7%
	26+00 Bot.	44	72	16	7	10%
	5+40 Top.	67	72	14.5	7	12%
	26+00 Bot.	42	71	16.5	7	0.25%
After	Desander	72	70	14.5	7	6%
7/12/2004	26+00 Top.	43	70	16.5	7	5%
	26+00 Bot.	48	73	16	7	10%
	5+40 Top.	61	75	15	7	16%
After	Desander	59	71	N/A	7	8%
7/13/2004	5+40 Top.	61	74	15.5	7	14%
	26+00 Top.	40	70	14.5	7	8%
	26+00 Bot.	44	72	15	7	10%
	26+00 Bot.	43	72	16	7	12%
Before	Desander	69	83	N/A	7	20%
After	Desander	46	72	N/A	7	10%
7/14/2004	5+40 Top.	65	76	15.5	7	18%
	26+00 Top.	42	71	16	7	6%
	26+00 Bot.	48	73	15	7	10%

BENTONITE SLURRY SUMMARY REPORT

Groundwater Mitigation Control System, Sauget Area 2

		Viscosity (seconds)	Density of Mud	Filtrate Loss	PH	Sand Content
	Fresh	Range 40 - 65	Greater than 63.5pcf	<20 cc.	7.0 - 9.0	0 - 2%
Date	In-Trench	Range 40 - 100	> than 75.0 pcf, < than 85.0pcf	<20 cc.	7.0 - 10.5	N/A
			78pcf minimum Sta. 15+00 to 5+00			
	26+00 Bot.	44	74	16	7	14%
Before	Desander	53	77	N/A	7	20%
After	Desander	43	71	N/A	7	12%
7/15/2004	5+40 Top.	76	75	14.5	7	14%
	26+00 Top.	44	72	16	7	8%
	26+00 Bot.	47	74	16.5	7	12%
	Fresh	40	64	16.5	7	0.25%
	Fresh	41	64	16.5	7	0.25%
Before	Desander	51	77	N/A	7	20%
After	Desander	45	72	N/A	7	12%
7/16/2004	Fresh	41	64	15	7	0.25%
	5+40 Top.	93	76	14	7	16%
	26+00 Top.	48	72	16	7	12%
	26+00 Bot.	58	75	15.5	7	14%
	Fresh	40	64	16	7	0.25%
	26+00 Bot.	49	74	16	7	10%
Before	Desander	89	79	N/A	7	20%
After	Desander	50	72	N/A	7	12%
7/19/2004	Fresh	38	64	18	7	0.25%
	5+40 Top.	89	74	15	7	14%
	26+00 Top.	50	73	16	7	9%
	26+00 Bot.	49	74	16	7	16%
	Fresh	40	64	17	7	0.25%
	26+00 Bot.	49	77	16	7	18%
Before	Desander	44	71	N/A	7	12%
After	Desander	40	69	N/A	7	6%
7/20/2004	5+40 Top.	89	76	14.5	7	14%
	26+00 Top.	49	71	14	7	9%
	26+00 Bot.	52	74	15.5	7	14%
	26+00 Bot.	51	74	16.5	7	14%
Before	Desander	45	74	N/A	7	12%
After	Desander	48	72	N/A	7	6%
7/21/2004	5+40 Top.	103	76	14.5	7	16%
	26+00 Top.	48	73	15.5	7	12%
	26+00 Bot.	57	76	16	7	16%
	26+00 Bot.	48	74	17	7	14%
Before	Desander	61	76	N/A	7	20%

BENTONITE SLURRY SUMMARY REPORT

Groundwater Mitigation Control System, Sauget Area 2

		Viscosity (seconds)	Density of Mud	Filtrate Loss	PH	Sand Content
	Fresh	Range 40 - 65	Greater than 63.5pcf	<20 cc.	7.0 - 9.0	0 - 2%
Date	In-Trench	Range 40 - 100	> than 75.0 pcf, < than 85.0pcf	<20 cc.	7.0 - 10.5	N/A
			78pcf minimum Sta. 15+00 to 5+00			
After	Desander	58	72	N/A	7	10%
7/22/2004	5+40 Top.	96	76	14	7	12%
	26+00 Top.	47	73	16	7	12%
	26+00 Bot.	52	75	15.5	7	12%
Before	Desander	71	75	N/A	7	16%
After	Desander	62	73	N/A	7	10%
7/23/2004	5+40 Top.	123	78	14.5	7	18%
	26+00 Top.	50	75	15.5	7	16%
	26+00 Bot.	53	75	16	7	18%
	26+00 Bot.	50	75	16.5	7	14%
Before	Desander	85	77	N/A	7	18%
After	Desander	76	75	N/A	7	10%
7/26/2004	5+40 Top.	120	79	13.5	7	20%
	27+00 Top.	45	72	14	7	14%
	27+00 Bot.	49	75	15.5	7	10%
	27+00 Bot.	50	73	15.5	7	12%
7/27/2004	5+40 Top.	95	76	14.5	8	10%
	27+00 Top.	48	73	14	7	13%
	27+00 Bot.	50	75	14.5	7	14%
	27+00 Bot.	55	75	15	7	18%
7/28/2004	5+40 Top.	240	81	14	7	20%
	27+00 Top.	42	71	16.5	7	12%
	27+00 Bot.	50	73	16	7	125
	27+00 Bot.	50	76	16.5	7	18%
	Fresh	43	64	15.4	7	0.25%
	Fresh	42	65	15	7	0.25%
	Fresh	43	64	15.4	7	0.25%
7/29/2004	5+40 Top.	600	84	14	7	20%
	27+00 Top.	49	72	16.5	7	14%
	27+00 Bot.	52	72	16	7	14%
	27+00 Bot.	51	73	16	7	16%
	Fresh	43	67	15	7	0.25%
8/2/2004	6+00 Top.	>100	88	14	7	20%
	27+00 Top.	49	72	17	7	12%
	27+00 Bot.	44	73	18	7	14%
	Fresh	45	66	16.5	7	0.25%
8/3/2004	6+00 Top.	>100	85	15.5	7	20%

BENTONITE SLURRY SUMMARY REPORT

Groundwater Mitigation Control System, Sauget Area 2

		Viscosity (seconds)	Density of Mud	Filtrate Loss	PH	Sand Content
	Fresh	Range 40 - 65	Greater than 63.5pcf	<20 cc.	7.0 - 9.0	0 - 2%
Date	In-Trench	Range 40 - 100	> than 75.0 pcf, < than 85.0pcf	<20 cc.	7.0 - 10.5	N/A
			78pcf minimum Sta. 15+00 to 5+00			
	27+00 Top.	48	73	17.5	7	14%
	27+00 Bot.	47	72	18.5	7	12%
	Fresh	40	64	15.5	7	0.25%
	27+00 Bot.	46	73	18	7	14%
	Fresh	43	64.5	16	7	0.25%
	Fresh	48	64	15	7	0.25%
8/4/2004	6+00 Top.	>100	85	15	7	20%+
	27+00 Top.	47	74	17	7	14%
	27+00 Bot.	48	73	18	7	14%
	Fresh	43	64	16.5	7	0.25%
	27+00 Bot.	60	75	17	7	16%
	Fresh	40	64	18	7	0.25%
	Fresh	48	65	15.4	7	0.25%
8/5/2004	Fresh	42	64	17.5	7	0.25%
	6+00 Top.	>100	84	16	7	20%+
	27+00 Top.	45	73	16.5	7	14%
	27+00 Bot.	47	75	17	7	14%
	Fresh	40	64	19	7	0.25%
	27+00 Bot.	50	77	17	7	20%
	Fresh	43	65	15	7	0.25%
8/6/2004	29+00 Top.	49	68	15.5	7	4%
	29+00 Bot.	43	71	17.5	7	8%
	29+00 Bot.	42	70	18.5	7	6%
	Fresh	78	64	17.5	7	0.25%
	Fresh	44	65	19	7	0.25%
8/9/2004	29+40 Top.	46	70	16	7	6%
	29+40 Bot	43	69	17	8	8%
	29+40 Bot	48	73	14	8	11%
	Fresh	53	65	14.5	7	0.25%
	Fresh	41	66	18	7	0.75%
8/10/2004	29+40 Top.	48	71	16	8	10%
	29+40 Bot	45	75	14	8	11%
	Fresh	41	65	19	7	0.25%
	29+40 Bot	51	71	15	7	14%
	Fresh	41	64	17.5	7	0.25%
8/11/2004	29+40 Top.	48	72	15	7	8%
	29+40 Bot	50	72	15.5	7	14%

BENTONITE SLURRY SUMMARY REPORT

Groundwater Mitigation Control System, Sauget Area 2

		Viscosity (seconds)	Density of Mud	Filtrate Loss	PH	Sand Content
	Fresh	Range 40 - 65	Greater than 63.5pcf	<20 cc.	7.0 - 9.0	0 - 2%
Date	In-Trench	Range 40 - 100	> than 75.0 pcf, < than 85.0pcf	<20 cc.	7.0 - 10.5	N/A
			78pcf minimum Sta. 15+00 to 5+00			
	Fresh	43	65	15	7	0.25%
	29+40 Bot	46	74	14.5	8	11%
8/12/2004	28+80 Top.	51	72	16.5	7	7%
	28+80 Bot.	54	75	15	8	11%
	Fresh	42	64	16	7	0.25%
	28+80 Bot.	54	74	15.5	7	14%
	Fresh	46	65	17	7	0.25%
8/13/2004	29+20 Top.	49	71	15.5	7	10%
	29+20 Bot.	54	74	16.5	7	14%
	29+20 Bot.	51	73	17.5	7	12%
	Fresh	41	65	16	7	0.25
8/16/2004	Fresh	40	64	17.5	7	0.25%
	29+20 Top.	43	66	17.5	7	2.50%
	29+20 Bot.	54	70	16	7	9%
	Fresh	40	64	19	7	0.25%
	29+20 Bot.	55	75	17	7	16%
Before	Desander	46	76	N/A	7	16%
After	Desander	43	71	N/A	7	6%
	Fresh	42	65	15	7	0.25%
8/17/2004	Fresh	47	65	14.5	7	0.25%
	29+20 Top.	51	71	15.5	7	10%
	29+20 Bot.	58	75	15.5	7	14%
	Fresh	48	65	14	7	0.25%
	Fresh	50	65	15.5	7	0.25%
	29+20 Bot.	66	76	17	7	18%
Before	Desander	58	78	N/A	7	20%
After	Desander	49	73	N/A	7	10%
	Fresh	38	63	25	7	0.25%
8/18/2004	Fresh	47	65	15	7	0.25%
	29+20 Top.	47	72	16	7	10%
	29+20 Bot.	64	78	16	7	18%
	29+20 Bot.	58	77	16	7	16%
	Fresh	40	64	18	7	0.25%
	29+20 Bot.	60	74	15.5	7	14%
8/19/2004	Fresh	44	65	17.5	7	0.25%
	30+50 Top.	54	71	15.5	7	10%
	30+50 Bot.	56	73	15.5	7	14%

BENTONITE SLURRY SUMMARY REPORT

Groundwater Mitigation Control System, Sauget Area 2

		Viscosity (seconds)	Density of Mud	Filtrate Loss	PH	Sand Content
	Fresh	Range 40 - 65	Greater than 63.5pcf	<20 cc.	7.0 - 9.0	0 - 2%
Date	In-Trench	Range 40 - 100	> than 75.0 pcf, < than 85.0pcf	<20 cc.	7.0 - 10.5	N/A
			78pcf minimum Sta. 15+00 to 5+00			
	Fresh	41	64	17.5	7	0.25%
	30+50 Bot.	53	74	17	7	14%
	30+50 Top.	47	71	16.5	7	10%
8/20/2004	29+50 Top.	50	73	16	7	10%
	29+50 Bot.	53	73	16	7	12%
	Fresh	46	65	13.5	7	0.25%
	29+50 Bot.	61	77	16	7	18%
8/23/2004	Fresh	47	65	13	7	0.25%
	29+50 Top.	50	70	13	7	6%
	29+50 Bot.	50	71	14	7	12%
	Fresh	38	64	16.5	7	0.25%
	29+50 Bot.	48	72	14	7	10%
8/24/2004	Fresh	42	64	14	7	0.25%
	29+50 Top.	51	70	15.5	7	10%
	29+50 Bot.	54	71	16.5	7	12%
8/25/2004	Fresh	59	65	12.5	7	0.25%
	29+50 Top.	49	71	13.5	7	9%
	29+50 Bot.	57	75	14	7	14%
	Fresh	44	64	13.5	7	0.25%
	29+50 Bot.	57	75	15	7	14%
8/26/2004	Fresh	40	64	15.5	7	0.25%
	30+50 Top.	47	70	14.5	7	8%
	30+50 Bot.	54	73	15.5	7	12%
	Fresh	45	64	15.5	7	0.25%
	30+50 Bot.	57	73	15	7	14%
8/27/2004	Fresh	40	64	19	7	0.25%
	30+50 Top.	45	71	14	7	8%
	30+50 Bot.	59	77	15.5	7	16%
	Fresh	40	64	18.5	7	0.25%
	30+50 Bot.	56	73	13	7	12%
8/30/2004	Fresh	41	65	15.5	7	0.25%
	30+50 Top.	36	67	17	7	2.50%
	30+50 Bot.	47	72	16	7	12%
	Fresh	43	67	15.5	7	0.25%
	30+50 Bot.	48	71	15	7	8%
8/31/2004	Fresh	42	64	16	7	0.25%
	31+50 Top.	44	70	15	7	8%

BENTONITE SLURRY SUMMARY REPORT

Groundwater Mitigation Control System, Sauget Area 2

		Viscosity (seconds)	Density of Mud	Filtrate Loss	PH	Sand Content
	Fresh	Range 40 - 65	Greater than 63.5pcf	<20 cc.	7.0 - 9.0	0 - 2%
Date	In-Trench	Range 40 - 100	> than 75.0 pcf, < than 85.0pcf	<20 cc.	7.0 - 10.5	N/A
			78pcf minimum Sta. 15+00 to 5+00			
	31+50 Bot.	55	77	14.5	7	18%
	Fresh	40	64	16.5	7	0.25%
	31+50 Bot.	57	77	14.5	7	18%
9/1/2004	Fresh	43	65	16	7	0.25%
	31+50 Top.	44	72	15	7	9%
	31+50 Bot.	45	72	15.5	7	10%
	Fresh	52	65	15.5	7	0.50%
	Fresh	41	64	16.5	7	0.25%
	31+50 Bot.	50	75	15	7	18%
9/2/2004	Fresh	46	64	15.5	7	0.25%
	32+30 Top.	55	71	14.5	7	10%
	32+30 Bot.	55	76	13.5	7	14%
	Fresh	44	64	16	7	0.25%
	32+30 Bot.	53	75	14	7	12%
9/3/2004	Fresh	50	64.5	15	7	0.25%
	32+30 Top.	61	71	13.5	7	7%
	32+30 Bot.	64	74	13.5	7	14%
	Fresh	44	64	15.5	7	0.25%
	32+30 Bot.	55	76	14	7	16%
9/7/2004	Fresh	42	65	15.5	7	0.25%
	32+30 Top.	58	74	14	7	14%
	32+30 Bot.	63	75	14.5	7	18%
	Fresh	44	65	16	7	0.25%
	32+30 Bot.	61	75	16.5	7	18%
	32+30 Top.	58	71	16.5	7	12%
9/8/2004	32+30 Top.	56	72	14.5	7	14%
	32+30 Bot.	63	78	15	7	20%
	32+30 Bot.	57	78	15	7	20%
	Fresh	43	66	15.5	7	0.25%
9/9/2004	Fresh	40	65	16.5	7	0.25%
	33+30 Top.	66	73.5	13.5	7	14%
	33+30 Bot.	65	78	13.5	7	18%
	33+30 Bot.	63	78	14.5	7	20%
9/10/2004	Fresh/Mix	45	67	12	7	1.50%
	33+40 Top.	58	74	14	7	14%
	33+40 Bot.	58	74	13.5	7	20%
	Fresh/Mix	48	68	13	7	1.50%

BENTONITE SLURRY SUMMARY REPORT

Groundwater Mitigation Control System, Sauget Area 2

		Viscosity (seconds)	Density of Mud	Filtrate Loss	PH	Sand Content
	Fresh	Range 40 - 65	Greater than 63.5pcf	<20 cc.	7.0 - 9.0	0 - 2%
Date	In-Trench	Range 40 - 100	> than 75.0 pcf, < than 85.0pcf	<20 cc.	7.0 - 10.5	N/A
			78pcf minimum Sta. 15+00 to 5+00			
	33+40 Bot.	60	77	14	7	20%
9/13/2004	33+40 Top.	51	71	13.5	7	12%
	33+40 Bot.	52	74	14	7	14%
	33+40 Bot.	59	76	13.5	7	20%
9/14/2004	33+40 Top.	51	73	14	7	10%
	33+40 Bot.	66	79	14	7	20%
	33+40 Bot.	61	77	14	7	18%
9/15/2004	34+60 Top.	59	77	14.5	7	16%
	34+60 Bot.	67	79	14	7	20%
	34+60 Bot.	61	78.5	14.5	7	20%
9/16/2004	34+60 Top.	51	73	14	7	14%
	34+60 Bot.	64	78	14	7	18%
	34+60 Bot.	66	79	14	7	20%
9/17/2004	34+60 Top.	49	76	14.5	7	16%
	34+60 Bot.	72	81	13	7	20%
	34+60 Bot.	58	81	14.5	7	20%
9/20/2004	34+60 Top.	63	78	14	7	20%
	34+60 Bot.	71	80	13	7	20%
	34+60 Bot.	71	80	13.5	7	20%
9/21/2004	34+60 Top.	64	76	15.5	7	16%
	34+60 Bot.	71	78	14	7	18%
	34+60 Bot.	72	80	14	7	20%
9/22/2004	34+60 Top.	67	77	15	7	18%
	34+60 Bot.	70	82	14	7	20%
	34+60 Bot.	71	81	14	7	20%
9/23/2004	34+60 Top.	66	76	17.5	7	16%
	34+60 Bot.	71	79	13.5	7	20%
	34+60 Bot.	81	80	13.5	7	20%
9/24/2004	34+60 Top.	59	76	17	7	16%
	34+60 Bot.	71	80	14.5	7	20%
	34+60 Bot.	67	80	14.5	7	20%
9/27/2004	34+60 Top.	72	77	17	7	18%
	34+60 Bot.	70	78	14.5	7	20%
	34+60 Bot.	70	80	14	7	20%
	Fresh/Mix	41	67	17	7	1%
9/28/2004	34+60 Top.	68	75	18	7	16%
	34+60 Bot.	79	80	16	7	20%

BENTONITE SLURRY SUMMARY REPORT

Groundwater Mitigation Control System, Sauget Area 2

		Viscosity (seconds)	Density of Mud	Filtrate Loss	PH	Sand Content
	Fresh	Range 40 - 65	Greater than 63.5pcf	<20 cc.	7.0 - 9.0	0 - 2%
Date	In-Trench	Range 40 - 100	> than 75.0 pcf, < than 85.0pcf	<20 cc.	7.0 - 10.5	N/A
			78pcf minimum Sta. 15+00 to 5+00			
	Fresh/Mix	40	64	21	7	0.50%
	34+60 Bot.	68	80	15	7	20%
	Fresh/Mix	40	64.5	21	7	0.50%
9/29/2004	Fresh/Mix	38	65	19.5	7	1%
	34+60 Top.	53	78	13	7	10%
	34+60 Bot.	77	82	15	7	20%
	Fresh/Mix	40	65	18	7	0.50%
	34+60 Bot.	67	80	15	7	20%
9/30/2004	Fresh/Mix	40	64	16.5	7	0.25%
	34+60 Top.	55	75	13.5	7	11%
	34+60 Bot.	76	78	14.5	7	20%
	Fresh/Mix	39	65	17.5	7	0.25%
	34+60 Bot.	65	78	15	7	19%
10/1/2004	Fresh/Mix	40	65	14	7	0.25%
	34+60 Top.	45	68	14	7	12%
	34+60 Bot.	77	75	15	7	20%
	Fresh/Mix	40	65	14	7	0.25%
	34+60 Bot.	66	80	16	7	20%
10/2/2004	Fresh/Mix	40	64	16	7	0.25%
	34+60 Top.	45	70	14.5	7	9%
	34+60 Bot.	75	79	13.5	7	20%
	34+60 Bot.	76	80	14	7	20%
10/4/2004	34+60 Top.	59	78	13.5	7	18%
	34+60 Bot.	67	81	13.5	7	20%
	34+60 Bot.	63	79	13.5	7	20%
10/5/2004	34+60 Top.	53	74	12.5	7	16%
	34+60 Bot.	67	78	13	7	20%
	34+60 Bot.	67	79	13	7	20%
10/6/2004	35+00 Top.	56	76	14	7	18%
	35+00 Bot.	86	83	14	7	20%
	35+00 Bot.	80	81.5	13.5	7	20%
	35+00 Bot.	74	80	15	7	20%
10/7/2004	35+00 Top.	92	79	17.5	7	20%
	35+00 Bot.	98	83	14.5	7	20%
	35+00 Bot.	82	82	14	7	20%
10/8/2004	35+00 Top.	67	78	16	7	18%
	35+00 Bot.	85	80	13.5	7	20%

BENTONITE SLURRY SUMMARY REPORT

Groundwater Mitigation Control System, Sauget Area 2

Date		Viscosity (seconds)	Density of Mud	Filtrate Loss	PH	Sand Content
	Fresh	Range 40 - 65	Greater than 63.5pcf	<20 cc.	7.0 - 9.0	0 - 2%
	In-Trench	Range 40 - 100	> than 75.0 pcf, < than 85.0pcf	<20 cc.	7.0 - 10.5	N/A
			78pcf minimum Sta. 15+00 to 5+00			
	35+00 Bot.	83	80	14	7	20%
10/9/2004	35+00 Top.	68	81	18	7	17%
	35+00 Bot.	96	86	16.5	7	20%
	35+00 Bot.	87	82	14.5	7	20%
10/11/2004	35+00 Top.	94	78	15	7	18%
	35+00 Bot.	88	81	14.5	7	20%
	35+00 Bot.	96	81	14.5	7	20%
10/12/2004	35+00 Top.	89	82	14	7	18%
	35+00 Bot.	99	79	14	7	20%
	35+00 Bot.	96	81	14	7	20%
10/13/2004	35+00 Top.	89	85	15	7	20%
10/14/2004	37+00 Top.	93	81	14	7	20%
10/15/2004	37+00 Top.	98	82.5	14.5	7	20%
10/16/2004	37+00 Top.	96	81	13.5	7	20%
10/19/2004	37+00 Top.	62	81	16.5	7	20%
10/20/2004	37+00 Top.	60	79.5	16	7	18%
10/21/2004	37+00 Top.	67	81	15.5	7	20%
10/22/2004	37+00 Top.	126	82	14	7	20%
10/25/2004	37+00 Top.	97	83	15	7	20%
10/26/2004	37+00 Top.	120	82	14	7	20%
10/27/2004	37+00 Top.	138	83.5	15.5	7	20%
10/28/2004	37+00 Top.	123	83	15	7	20%
10/29/2004	37+00 Top.	130	83	15.5	7	20%
11/1/2004	37+00 Top.	244	86	15.5	7	20%
11/3/2004	37+00 Top.	>100	84	14.5	7	20%
11/4/2004	37+00 Top.	>100	84	16.5	7	20%
11/5/2004	37+00 Top.	>100	87	16.5	7	20%
11/6/2004	37+00 Top.	>100	87	15.5	7	20%
11/8/2004	37+20 Top.	>100	88	15	7	20%

These test results fell outside of the specified QC test parameters.

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 11/8/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags: [ ]

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	Density of mud ≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
Top	> 100	88.0		15.0	7.0	20.0

	Superintendent	Plant Operator	Remarks
Date		11/8/04	SAMPLE GATHERED
Name		Zach Bullock	@ 37+20
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 11/6/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 60 seconds Range 40 to 100 seconds	Density of mud Greater than 66.4 PCF ≥ than 64.0 PCF	Density of mud ≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.6	Sand Content 0 - 2% 0 - 20%
5' Top	> 100	87		15.5	7.0	20.0

	Superintendent	Plant Operator	Remarks
Date		11/6/04	
Name		Larry Lockett	
Signature			

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 11/5/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags: [ ]

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	Density of mud ≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.6	Sand Content 0 - 2% 0 - 20%
5' top	>100	87.0		16.5	7.0	20.0

	Superintendent	Plant Operator	Remarks
Date		11/5/04	IN PLACE SAMPLE COLLECTED @ 37+00
Name		ZACH BULLOCK	
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 11/4/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 00 seconds Range 40 to 100 seconds	Density of mud Greater than 00.4 PCF ≥ than 04.0 PCF	≤ than 00 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.6	Sand Content 0 - 2% 0 - 20%
-5' top	7100	87.0		16.5	7.0	20.0

	Superintendent	Plant Operator	Remarks
Date			IN PLACE SAMPLES COLLECTED @ 37/400
Name			
Signature			

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 11/3/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 60 seconds Range 40 to 100 seconds	Density of mud Greater than 66.4 PCF ≥ than 64.0 PCF	≤ than 60 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
-5' top	100	84.0		14.5	7.0	20.0

Date	Superintendent	Plant Operator	Remarks
Name		11/3/04 Zach Bullock	In Place Sample Collected @ 39+00
Signature		[signature]	

Inqulp Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 11/1/04
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 66 seconds Range 40 to 100 seconds	Density of mud Greater than 66.4 PCF ≥ than 64.0 PCF	≤ than 60 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
-5'40p	244	86.0		15.5	7.0	20.0

	Superintendent	Plant Operator	Remarks
Date		11/01/04	In Place Sample Collected @ 37+00
Name		[illegible]	
Signature		[illegible]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 10/29/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
-5' Top	130	83.0		15.5		
					7.0	20.0

	Superintendent	Plant Operator	Remarks
Date		10/29/04	In Place Sample
Name		Zach Bullock	Collected @ 37+00
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 10/28/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 00 seconds Range 40 to 100 seconds	Density of mud Greater than 00.4 PCF ≥ than 04.0 PCF	Density of mud ≤ than 00 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
5' top	123	83.0		15.0	7.0	20.0

	Superintendent	Plant Operator	Remarks
Date		10/28/04	IN PLACE SAMPLES COLLECTED @ 37+00
Name		CACH BULLOCK	
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 10/27/04
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing; consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 00 seconds Range 40 to 100 seconds	Density of mud Greater than 00.4 PCF ≥ than 04.0 PCF	Density of mud ≤ than 00 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.6	Sand Content 0 - 2% 0 - 20%
-5' top	138	83.5		15.5	7.0	20.0

	Superintendent	Plant Operator	Remarks
Date		10/27/04	In Place Samples Collected @ 37400
Name		Zach Bullock	
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 10/26/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
-5' top	120	82.0		14.0	7.0	20.0

	Superintendent	Plant Operator	Remarks
Date		10/26/04	In Place Sample Collected @ 37+00.
Name		Earl Bullock	
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 00 seconds Range 40 to 100 seconds	Density of mud Greater than 00,4 PCF ≥ than 04.0 PCF	≤ than 00 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9,0 7.0 - 10,5	Sand Content 0 - 2% 0 - 20%
5/top	97	83.0		15.0	7.0	20.0

	Superintendent	Plant Operator	Remarks
Date		10/05/04	IN PLACE SAMPLE COLLECTED @ 37+00
Name		ZACH BULLOCK	
Signature			

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 10/22/04
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	Density of mud ≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
5' top	126	82.0		14.0	7.0	20.0

	Superintendent	Plant Operator	Remarks
Date		10/22/04	In Place Samples Collected @ 37+00.
Name		Zach Bullock	
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 60 seconds Range 40 to 100 seconds	Density of mud Greater than 66.4 PCF ≥ than 64.0 PCF	Density of mud ≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
5' Top	67	81.0		15.5	7.0	20.0

	Superintendent	Plant Operator	Remarks
Date		10/21/04	In Place Samples Collected @ 37+00.
Name		Zach Bullock	
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 66 seconds Range 40 to 100 seconds	Density of mud Greater than 66.4 PCF ≥ than 64.0 PCF	Density of mud ≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.6	Sand Content 0 - 2% 0 - 20%
57 top	60	79.5		16.0	7.0	18.0

Date	Superintendent	Plant Operator	Remarks
Name		10/30/04 ZACH BULLOCK	In Place Samples Collected @ 37+00
Signature			

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 10/19/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 60 seconds Range 40 to 100 seconds	Density of mud Greater than 60.4 PCF ≥ than 64.0 PCF	Density of mud Greater than 60.4 PCF ≤ than 60 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
-5' top	62	81.0		16.5	7.0	20.0

	Superintendent	Plant Operator	Remarks
Date		10/19/04	In Plant Samples
Name		Zach Bullock	Collected @ 3:00.
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags: [ ]

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
-5' top	96	81.0		13.5	7.0	20.0

	Superintendent	Plant Operator	Remarks
Date		10/16/04	STATION
Name		Zach Bluock	37+00
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 10/15/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 06 seconds Range 40 to 100 seconds	Density of mud Greater than 06.4 PCF ≥ than 04.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.6	Sand Content 0 - 2% 0 - 20%
-5' top	98	82.5		14.5	7.0	20.0

	Superintendent	Plant Operator	Remarks
Date		10/15/04	In Place Samples Collected @ 37+00
Name		Zach Burrow	
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags: [ ]

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	 ≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
-5' Top	93	81.0		14.0	7.0	20.0

	Superintendent	Plant Operator	Remarks
Date		10/14/04	W Place Sample Collected
Name		Zach Bullock	@ 37+00
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 60 seconds Range 40 to 100 seconds	Density of mud Greater than 66.4 PCF ≥ than 64.0 PCF	Density of mud ≤ than 60 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
-5' Top	80		66	15	7.0	20%

Date	Superintendent	Plant Operator	Remarks
Name		10/13/04 Zach Brooks	In Place Samples Collected @ 35-100
Signature			

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 10/12/04
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 60 seconds Range 40 to 100 seconds	Density of mud Greater than 66.4 PCF ≥ than 64.0 PCF	Density of mud ≤ than 60 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
5' Top	89	82.0		14.0	7.0	18.0
15' Bot	99	79.0		14.0	7.0	20.0
15' Bot	96	81.0		14.0	7.0	20.0

	Superintendent	Plant Operator	Remarks
Date		10/12/04	In Place Samples Collected @ 35+00.
Name		Zach Bullock	
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
-5' TOP	94	78.0		15.0	7.0	18.0
45' BOT	88	81.0		14.5	7.0	20.0
45' BOT.	96	81.0		14.5	7.0	20.0

	Superintendent	Plant Operator	Remarks
Date		10/11/04	IN PLACE SAMPLES COLLECTED
Name		ZACH BULLOCK	@ 35+00
Signature		[signature]	

Sat Oct. 9, 04

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 60 seconds Range 40 to 100 seconds	Density of mud Greater than 66,4 PCF ≥ than 64.0 PCF	≤ than 66 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
AM						
Top	68	81		18	7.0	17%
Bottom	96	86		16.5	7.0	20%
P.M.						
Top						
Bottom	87	82		14.5	7.0	20%

	Superintendent	Plant Operator	Remarks
Date		10/9/04	In Place Samples
Name		Aaron Lockett	Collected @ 35+00
Signature			

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
-5' Top	67	78		16.0	7.0	18.0
+5' Bot	85	80		13.5	7.0	20.0
+5' Bot	83	80		14.0	7.0	20.0

	Superintendent	Plant Operator	Remarks
Date		10/8/04	In Place Samples Collected
Name		Zach Bullock	@ 35+00.
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
-5' TOP	92	79.0		17.5	7.0	20.0
+5' BOT	98	83.0		14.5	7.0	20.0
+5' BOT	82	82.0		14.0	7.0	20.0

	Superintendent	Plant Operator	Remarks
Date		10/7/04	In Place Samples Collected
Name		Lach Bullock	C 35+00.
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags: [ ]

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	Density of mud ≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
-5 Top	56	76.0		14.0	7.0	18.0
+5' Bot	86	83.0		14.0	7.0	20.0
+5' Bot	80	81.5		13.5	7.0	20.0
+5' Bot	74	80.0		15.0	7.0	20.0

	Superintendent	Plant Operator	Remarks
Date		10/6/04	In place Samples Collected
Name		Zach Bullock	@ 35+00.
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 66 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 60 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
-5' top	53	74.0		12.5	7.0	16.0
+5' Bot	67	78.0		13.0	7.0	20.0
+5' Bot	67	79.0		13.0	7.0	20.0

	Superintendent	Plant Operator	Remarks
Date		10/5/04	In Place Samples Collected
Name		Zach Bullock	@ 34+60'.
Signature		Z A Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	Density of mud Greater than 65.4 PCF ≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
-5' top	59	78.0		13.5	7.0	18.0
+5' BOT	67	81.0		13.5	7.0	20.0
+5' BOT	63	79.0		13.5	7.0	20.0

	Superintendent	Plant Operator	Remarks
Date		10/4/04	In Place Samples Collected
Name		Zach Bullock	@ 34+60
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 00 seconds Range 40 to 100 seconds	Density of mud Greater than 00.4 PCF ≥ than 04.0 PCF	≤ than 00 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
FRESH	40	64.0		16.0	7.0	0.25
-5' top	45	70.0		14.5	7.0	9.0
+5' BOT	75	79.0		13.5	7.0	20.0
+5' BOT	76	80.0		14.0	7.0	20.0

Date / Name / Signature	Superintendent	Plant Operator	Remarks
		10/12/04 Zach Bunock	FRESH SLURRY ONLY PLACED FOR A SHORT PERIOD IN A.M. IN PLACE SAMPLES COLLECTED @ 34+60

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
A.M.						
FRESH	40	65		14	7.0	.25
-5' TOP	45	68		14	7.0	12
+5' BOT	77	75		15	7.0	20
P.M.						
FRESH	40	65		14	7.0	.25
+5' BOT	66	80		16	8.0	20

	Superintendent	Plant Operator	Remarks
Date		10/1/02	
Name		ZACH BULLOCK	IN PLACE SAMPLES COLLECTED @ 3' + 60'.
Signature			

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 06 seconds Range 40 to 100 seconds	Density of mud Greater than 06.4 PCF ≥ than 04.0 PCF	Density of mud ≤ than 00 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.6	Sand Content 0 - 2% 0 - 20%
FRESH	40	64.0		16.5	7.0	0.25
-5' TOP	55	75.0		13.5	7.0	11.0
+5' BOT.	76	78.0		14.5	7.0	20.0
FRESH	39	65.0		17.5	7.0	0.25
+5' BOT	65	78.0		15.0	7.0	19.0

	Superintendent	Plant Operator	Remarks
Date		9/30/04	In Place Samples Collected @ 34+60.
Name		Zach Bullock	
Signature			

7.29.04

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 66 seconds Range 40 to 100 seconds	Density of mud Greater than 66.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
A.M. FRESH	38	65		19.5	7.0	1%
-5' TOP	53	78		13	7.0	10%
+5' BOT	77	82		15	7.0	20%
P.M. FRESH	40	65		18	7.0	.5
+5' BOT	67	80		15	7.0	20%

Date Name Signature	Superintendent	Plant Operator	Remarks
		LARON LOCKOTT	IN PLACE SAMPLES COLLECTED @ 34+60

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
-5' Top	68	75.0		18.0	7.0	16.0
+5' Bot	79	80.0		16.0	7.0	20.0
Fresh Mix	~~80~~ 40	64.0		21.0	7.0	.5
+5' Bot	68	80.0		15.0	7.0	20%
Fresh Mix	40	64.5		21.0	7.0	0.5

	Superintendent	Plant Operator	Remarks
Date		9/28/04	In place Samples Collected @ 34+60.
Name		Zach Bullock	
Signature		[signature]	

Inqulp Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 06 seconds Range 40 to 100 seconds	Density of mud Greater than 06.4 PCF ≥ than 04.0 PCF	Density of mud ≤ than 00 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.6	Sand Content 0 - 2% 0 - 20%
-5' top	72	77.0		17.0	7.0	18.0
+5' Bot	70	78.0		14.5	7.0	20.0
+5' Bot	70	80.0		14.0	7.0	20.0
Fresh Mix	41	67.0		17.0	7.0	1.0

	Superintendent	Plant Operator	Remarks
Date		9/27/04	IN PLACE SAMPLES TAKEN @ 3+60.
Name		ZACH BULLOCK	
Signature		Zf R Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 06 seconds Range 40 to 100 seconds	Density of mud Greater than 06.4 PCF ≥ than 04.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.6	Sand Content 0 - 2% 0 - 20%
STOP	66	76.0		17.5	7.0	16.0
+5' Bot	71	79.0		13.5	7.0	20.0
+5' Bot	81	80.0		3.5	7.0	20.0

	Superintendent	Plant Operator	Remarks
Date		9/23/04	In Place Samples Collected
Name		Brent Bullock	@ 24+60
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	Density of mud ≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
-5' Top	59	76.0		17.0	7.0	16.0
+5' Bot	71	80.0		14.5	7.0	20.0
+5' Bot	67	80.0		14.5	7.0	20.0

	Superintendent	Plant Operator	Remarks
Date		9/24/04	In Place Samples Collected
Name		Zach Birloch	@ 34+60
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	Density of mud ≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
-5' Top	67	77.0		15.0	7.0	18.0
+5' Bot	70	82.0		14.0	7.0	20.0
+5' Bot	71	81.0		14.0	7.0	20.0

	Superintendent	Plant Operator	Remarks
Date		9/22/04	In place Samples Collected
Name		Zach Bullock	to 34+60
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n° ☐

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 60 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	Density of mud ≤ than 60 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
5' top	64	76.0		15.5	7.0	16.0
15' Bot	71	78.0		14.0	7.0	18.0
15' Bot	72	80.0		14.0	7.0	20.0

	Superintendent	Plant Operator	Remarks
Date		9/21/04	IN PLACE Samples Collected @ 34+60
Name		Zach Burrow	
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n° :

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 00 seconds Range 40 to 100 seconds	Density of mud Greater than 00.4 PCF ≥ than 04.0 PCF	≤ than 00 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
-5' Top	63	78.0		14.0	7.0	20.0
+5' Bot	71	80.0		13.0	7.0	20.0
+5' Bot	71	80.0		13.5	7.0	20.0

Date Name Signature	Superintendent	Plant Operator 9/20/04 ZACH BULLOCK Zach Bullock	Remarks IN PLACE SAMPLES COLLECTED @ 34+60.

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n° ☐

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	Density of mud ≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
-5' top	49	76.0		14.5	7.0	16.0
+5' Bot	72	81.0		13.0	7.0	20.0
+5' Bot	58	81.0		14.5	7.0	20.0

Date	Superintendent	Plant Operator	Remarks
Name		9/17/04 Zach Bullock	IN PLACE SAMPLES TAKEN @ 34 HRS
Signature			

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 66 seconds Range 40 to 100 seconds	Density of mud Greater than 66.4 PCF ≥ than 64.0 PCF	Density of mud ≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
5' top	51	73.0		14.0	7.0	14.0
15' Bot	64	78.0		14.0	7.0	18.0
15' Bot	66	79.0		14.0	7.0	20.0

	Superintendent	Plant Operator	Remarks
Date		9/16/04	
Name		Zach Bowlock	In Place Samples Collected @ 34+60
Signature		[illegible]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	Density of mud ≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
-5' top	59	77.0		14.5	7.0	16.0
15' BOT	67	79.0		14.0	7.0	20.0
15' BOT	61	78.5		14.5	7.0	20.0

	Superintendent	Plant Operator	Remarks
Date		9/15/04	In Place Samples Collected
Name		Zach Bullock	@ 34-60
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	Density of mud Greater than 65.4 PCF ≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
-5' top	51	73.0		14.0	7.0	10.0
+5' BOT	66	79.0		14.0	7.0	20.0
+5' BOT	61	77.0		14.0	7.0	18.0

	Superintendent	Plant Operator	Remarks
Date		9/14/04	In Place Samples Collected
Name		Zach Bulcock	@ 33+40
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	Density of mud ≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
-5' TOP	51	71.0		13.5	7.0	12.0
+5' BOT	52	74.0		14.0	7.0	14.0
+5' BOT	59	76.0		13.5	7.0	20.0

	Superintendent	Plant Operator	Remarks
Date		9/13/04	IN PLACE SAMPLES COLLECTED
Name		ZACH BULLOCK	@ L 33+40.
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	Density of mud ≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
FRESH	45	67.0		12.0	7.0	1.5
-5' top	58	74.0		14.0	7.0	14.0
+5' BOT	58	74.0		13.5	7.0	20.0
FRESH	48	68.0		13.0	7.0	1.5
+5' BOT	60	77.0		14.0	7.0	20.0

	Superintendent	Plant Operator	Remarks
Date		9/10/04	IN PLACE SAMPLES COLLECTED
Name		Zach Bullock	@ 33 + 40
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
FRESH	40	65.0		16.5	7.0	0.25
-5' TOP	66	73.5		13.5	7.0	14.0
+5' BOT	65	78.0		13.5	7.0	18.0
+5' BOT	63	78.0		14.5	7.0	20.0

	Superintendent	Plant Operator	Remarks
Date		9/19/04	In Place Samples Collected
Name		Zach Bullock	@ 33 + 30
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 9/8/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 66 seconds Range 40 to 100 seconds	Density of mud Greater than 66.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
FRESH	43	66		15.5	7.0	0.25

	Superintendent	Plant Operator	Remarks
Date		9/8/04	FRESH SAMPLE OFF FIRST TRUCK
Name		Brian R. Lowry	
Signature		Brian R. Lowry	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 9/8/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
5' TOP	56	72		14.5	7.0	14.0
15' BOT	63	78		15.0	7.0	20.0
15' BOT	57	78		15.0	7.0	20.0

	Superintendent	Plant Operator	Remarks
Date		9/8/04	
Name		Zach Bullock	In Place Samples Collected @ 32+30.
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	Density of mud ≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.6	Sand Content 0 - 2% 0 - 20%
FRESH	42	65		15.5	7.0	0.25
-5' TOP	58	74		14.0	7.0	14.0
+5' BOT	63	75		14.5	7.0	18.0
FRESH	44	65		16.0	7.0	0.25
+5' BOT	61	75		16.5	7.0	18.0
-5' TOP	58	71		16.5	7.0	12.0

	Superintendent	Plant Operator	Remarks
Date		9/7/04	IN PLACE SAMPLES COLLECTED
Name		ZACH BULLOCK	C 32+30
Signature		Zach Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 06 seconds Range 40 to 100 seconds	Density of mud Greater than 06.4 PCF ≥ than 04.0 PCF	Density of mud ≤ than 00 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.6	Sand Content 0 - 2% 0 - 20%
FRESH	50	64.5		15.0	7.0	0.25
-5' top	61	71.0		13.5	7.0	7.0
-5' BOT.	64	74.0		13.5	7.0	14.0
FRESH	44	64.0		15.5	7.0	0.25
+5' BOT	55	76.0		14.0	7.0	16.0

	Superintendent	Plant Operator	Remarks
Date		9/3/04	IN PLACE SAMPLES COLLECTED @ 32+30.
Name		ZACH BULLOCK	
Signature			

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n° ☐

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 66 seconds Range 40 to 100 seconds	Density of mud Greater than 66.4 PCF ≥ than 64.0 PCF	Density of mud ≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
FRESH	46	64.0		15.5	7.0	0.25
5' top	55	71.0		14.5	7.0	10.0
15' BOT	55	76.0		13.5	7.0	14.0
FRESH	44	64.0		16.0	7.0	0.25
15' BOT	53	75.0		14.0	7.0	12.0

	Superintendent	Plant Operator	Remarks
Date		9/2/04	IN PLACE SAMPLES COLLECTED @ 32+30.
Name		ZACH BULLOCK	
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n° ☐

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 00 seconds Range 40 to 100 seconds	Density of mud Greater than 00.4 PCF ≥ than 64.0 PCF	Density of mud ≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
FRESH	43	65.0		16.0	7.0	0.25
5' TOP	44	72.0		15.0	7.0	9.0
15' BOT	45	72.0		15.5	7.0	10.0
FRESH	52	65.0		15.5	7.0	0.5
FRESH	41	64.0		16.5	7.0	0.25
15' BOT	50	75.0		15.0	7.0	18.0

Date / Name / Signature	Superintendent	Plant Operator	Remarks
		9-1-04 Zach Burlock	In Place Samples Collected @ 31+50.

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	Density of mud ≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
FRESH	42	64.0		16.0	7.0	0.25
-5' TOP	44	70.0		15.0	7.0	8.0
+5' BOT	55	77.0		14.5	7.0	18.0
FRESH	40	64.0		16.5	7.0	0.25
+5' BOT	57	77.0		14.5	7.0	18.0

Date	Superintendent	Plant Operator	Remarks
Name			IN PLACE SAMPLES COLLECTED @ 31+50
Signature			

8-31-04

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags: [ ]

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	Density of mud ≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
FRESH	41	65.0		15.5	7.0	0.25
-5' TOP	36	67.0		17.0	7.0	2.5
+5' BOT	47	72.0		16.0	7.0	12.0
FRESH	43	67.0		15.5	7.0	0.25
+5' BOT	48	71.0		15.0	7.0	8.0

	Superintendent	Plant Operator	Remarks
Date		8/30/04	IN PLACE SAMPLES COLLECTED @ 30+50.
Name		ZACH BULLOCK	
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 60 seconds Range 40 to 100 seconds	Density of mud Greater than 66.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
FRESH	40	64		19.0	7.0	0.25
5' TOP	45	71		14.0	7.0	8.0
15' BOT	59	77		15.5	7.0	16.0
FRESH	40	64		18.5	7.0	0.25
15' BOT	56	73		13.0	7.0	12.0

	Superintendent	Plant Operator	Remarks
Date		8/27/04	
Name		ZACH BULLOCK	IN PLACE SAMPLES COLLECTED @ 30+50.
Signature			

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 66 seconds Range 40 to 100 seconds	Density of mud Greater than 66.4 PCF ≥ than 64.0 PCF	Density of mud ≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
FRESH	40	64		15.5	7.0	0.25
-5' TOP	47	70		14.5	7.0	8.0
+5' BOT	54	73		15.5	7.0	12.0
FRESH	45	64		15.5	7.0	0.25
+5' BOT	57	73		15.0	7.0	14.0

	Superintendent	Plant Operator	Remarks
Date		8/26/04	
Name		ZACH BULLOCK	IN PLACE SAMPLES COLLECTED @ 30+50
Signature		Z V Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 8/25/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 06 seconds Range 40 to 100 seconds	Density of mud Greater than 06.4 PCF		Filtrate loss	PH	Sand Content
		≥ than 04.0 PCF	≤ than 00 pcf	≤ 20 cc.	7.0 - 9.0	0 - 2%
				≤ 20 cc.	7.0 - 10.5	0 - 20%
FRESH	59	65		12.5	7.0	0.25
-5' TOP	49	71		13.5	7.0	0.0
+5' BOT	57	75		14.0	7.0	14.0
FRESH	44	64		13.5	7.0	0.25
+5' BOT	57	75		15.0	7.0	14.0

	Superintendent	Plant Operator	Remarks
Date			
Name			
Signature			INPLACE SAMPLES COLLECTED @ 29+50.

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 06 seconds Range 40 to 100 seconds	Density of mud Greater than 06.4 PCF ≥ than 04.0 PCF	Density of mud ≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.6	Sand Content 0 - 2% 0 - 20%
FRESH	42	64		14.0	7.0	0.25
-5' TOP	51	70		15.5	7.0	10.0
-15' BOT.	54	71		16.5	7.0	17.0

Date	Superintendent	Plant Operator	Remarks
Name		8/24/04 Zach Bullock	½ DAY DUE TO RAIN AND LIGHTNING.
Signature			Sample taken from Sta. 29+50

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	Density of mud ≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
FRESH	47	65		13.0	7.0	0.25
-5' TOP	50	70		13.0	7.0	6.0
+5' BOT	50	71		14.0	7.0	12.0
FRESH	38	64		16.5	7.0	0.25
+5' BOT	48	72		14.0	7.0	10.0

	Superintendent	Plant Operator	Remarks
Date		8/23/04	IN PLACE SAMPLES COLLECTED @ 29+50
Name		Zach Bullock	
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	Density of mud ≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
5' TOP	50	73		16.0	7.0	10.0
+5' BOT	53	73		16.0	7.0	12.0
FRESH	46	65		13.5	7.0	0.25
+5' BOT	61	77		16.0	7.0	18.0

	Superintendent	Plant Operator	Remarks
Date		8/20/04	IN PLACE SAMPLES COLLECTED @ 24 +50.
Name		ZACHA BULLOCK	
Signature		[signature]	< HALF DAY OF FRESH SLURRY PLACED.

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 8/19/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	Density of mud ≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
FRESH	44	65		17.5	7.0	0.25
-5' TOP	54	71		15.5	7.0	10.0
+5' BOT	56	73		15.5	7.0	14.0
FRESH	41	64		17.5	7.0	0.25
+5' BOT	53	74		17.0	7.0	14.0
-5' TOP	47	71		16.5	7.0	10.0

	Superintendent	Plant Operator	Remarks
Date		8/19/04	
Name		ZACH BULLOCK	IN PLACE SAMPLES COLLECTED @ 30+50.
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
FRESH	47	65		15.0	7.0	0.25
-5' TOP	47	72		16.0	7.0	10.0
+5' BOT	64	78		16.0	7.0	18.0
-						
+5' BOT	58	77		16.0	7.0	16.0
FRESH	40	64		18.0	7.0	0.25
+5' BOT	60	74		15.5	7.0	14.0

	Superintendent	Plant Operator	Remarks
Date		8/18/04	In Place Samples Collected @ 29 + 20.
Name		Zach Bullock	
Signature	/	[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
FRESH	38	63.0		25.0	7.0	0.25

	Superintendent	Plant Operator	Remarks
Date	08/18/04 8/17 PM		NIGHT SHIFT
Name	Brion R. Lowry Sr.		SLURRY Pond WAS LOW
Signature	Brion R. Lowry		DENSITY WAS WATERY

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n° ☐

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 06 seconds Range 40 to 100 seconds	Density of mud Greater than 06.4 PCF ≥ than 04.0 PCF	Density of mud ≤ than 00 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
FRESH -5' TOP	47	65		14.5	7.0	0.25
+5' BOT	51	71		15.5	7.0	10.0
	58	75		15.5	7.0	14.0
FRESH	48	65		14.0	7.0	0.25
FRESH +5' BOT	50	65		15.5	7.0	0.25
	66	76		17.0	7.0	18.0
DESANDER IN	58	78		—	7.0	20.0
OUT	49	73		—	7.0	10.0

	Superintendent	Plant Operator	Remarks
Date		8/17/04	IN PLACE SLURRY SAMPLES TAKEN AT STATION 29+20
Name		ZACH BULLOCK	
Signature			

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 8/16/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 66 seconds Range 40 to 100 seconds	Density of mud Greater than 66.4 PCF ≥ than 64.0 PCF	Density of mud ≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.6	Sand Content 0 - 2% 0 - 20%
FRESH	40	64.0		17.5	7.0	0.25
-5' top	43	66.0		17.5	6.0	2.5
+5' Bot	54	70.0		16.0	7.0	9.0
FRESH	40	64.0		19.0	7.0	0.25
+5' Bot	55	75.0		17.0	7.0	16.0
DESANDER	—	—	—	—		
IN	46	76.0		—	7.0	16.0
OUT	43	71.0		—	7.0	6.0

	Superintendent	Plant Operator	Remarks
Date		8/16/04	IN PLACE SAMPLES COLLECTED
Name		ZACH BULLOCK	@ 29+20.
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	Density of mud ≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
FRESH	42	65.0		15.0	7.0	0.25

	Superintendent	Plant Operator	Remarks
Date		8/16/04	
Name	Brian K. Lowery Sr		
Signature	Brian K. Lowery Sr		NITE SHIFT FRESH SAMPLE

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	Density of mud ≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
-5' TOP	49	71		15.5	7.0	10.0
+5' BOT	54	74		16.5	7.0	14.0
+5' BOT	51	73		17.5	7.0	12.0
FRESH	41	65		16.0	7.0	0.25

	Superintendent	Plant Operator	Remarks
Date		8/13/04	In Place Samples Collected @ 29+20.
Name		Zach Bullock	No Fresh Slurry Placed During Day.
Signature		Zach Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 8/12/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags: [ ]

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
+5' TOP	51	72		16.5	7.0	7.0
+5' BOT	54	75		15.0	8.0	11.0
FRESH	42	64		16.0	7.0	0.25
+5' BOT	54	74		15.5	7.0	14.0
FRESH	46	65		17.0	7.0	0.25

	Superintendent	Plant Operator	Remarks
Date			IN PLACE SAMPLES COLLECTED @ 28+80.
Name			
Signature			

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 8/11/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 66 seconds Range 40 to 100 seconds	Density of mud Greater than 66.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
-5' TOP	48	72.0		15.0	7.0	8.0
+5' BOT	50	72.0		15.5	7.0	14.0
FRESH	43	65.0		15.0	7.0	0.25
+5' BOT	46	74		14.5	8.0	11.0

	Superintendent	Plant Operator	Remarks
Date		8/11/04	IN PLACE SAMPLES COLLECTED
Name		ZACH BULLOCK	@ 29+40. NO FRESH SLURRY
Signature		Zach Bullock	PUMPED DURING DAY SHIFT

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 8/10/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 06 seconds Range 40 to 100 seconds	Density of mud Greater than 06.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.6	Sand Content 0 - 2% 0 - 20%
-5' TOP	48	71		16.0	8.0	10.0
+5' BOT	45	75		14.0	8.0	11.0
FRESH	41	65		19.0	7.0	0.25
+5' BOT	51	71		15.0	7.0	14.0
FRESH	41	64		17.5	7.0	0.25

	Superintendent	Plant Operator	Remarks
Date		8/10/04	IN PLACE SAMPLES COLLECTED @ 29+40.
Name		ZACH BULLOCK	
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 8/9/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	Density of mud ≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
-5' top 29+40 09:00	46 sec	70		16	7.0	6%
+5' Bot 29+40 - 09:00	43 sec	69		17	8.0	8%
+5' Bot 29+40	48 sec	73		14	8.0	11%
Fresh 11:00	53	65		14.5	7.0	.25%
Fresh 15:30	41	66		18	7.0	.75%

	Superintendent	Plant Operator	Remarks
Date		8/9/04	
Name		James Hardge	
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 8/6/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
-5' Top 29+00	49 sec	68		15.5	7.0	4%
+5' Bot 29+00	43	71		17.5	7.0	8.0%
+5' Bot 29+00	42	70		18.0	8.0	6.0%
Fresh 11:00	78 sec	64		17.5	7.0	.25%
Fresh 7:00	44 sec	65		19.0	7.0	.25%

	Superintendent	Plant Operator	Remarks
Date		8/6/04	
Name		ZACH BULLOCK	
Signature		Z. K. Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 8/5/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
FRESH	42	64.0		17.5	7.0	0.25
-5' top 6+00	>100+	84.0		16.0	7.0	20+
-5' top 27+00	45	73.0		16.5	7.0	14.0
+5' BOT 27+00	47	75.0		17.0	7.0	14.0
FRESH	40	64.0		19.0	7.0	0.25
+5' BOT 27+00	50	77.0		17.0	7.0	20.0

	Superintendent	Plant Operator	Remarks
Date		8/5/04	
Name		ZACH BULLOCK	
Signature			

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 08/05/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
P.M						
FRESH	43	65.0		15.0	7.0	0.25

	Superintendent	Plant Operator	Remarks
Date	08/05/04		
Name	Brian K. Lowry		11:00 pm Fresh Sample
Signature	Brian K. Lowry		

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 08/08/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
FRESH	48	65		15.4	7.0	0.25

	Superintendent	Plant Operator	Remarks
Date	08/04/04		1:00 AM NIGHT SHIFT
Name	BRION K. LOWRY		~~FRESH~~ SAMPLE
Signature	Brion K. Lowry		

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 8/4/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
-5' top 6+00	>100+	85.0		15.0	7.0	>20+
-5' top 27+00	47	74.0		17.0	7.0	14.0
-5' BOT 27+00	48	73.0		18.0	7.0	14.0
FRESH	43	64.0		16.5	7.0	0.25
-5' BOT 27+00	60	75.0		17.0	7.0	16.0
FRESH	40	64.0		18.0	7.0	0.25

	Superintendent	Plant Operator	Remarks
Date		8/4/04	
Name		ZACH BULLOCK	
Signature		Zach Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 08/08/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 06 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
FRESH	48	64		15.0	7.0	0.25

	Superintendent	Plant Operator	Remarks
Date	08/03/04		
Name	Brian K. Lowry		11:00 PM Test
Signature	Brian K. Lowry		

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 8/3/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 66 seconds Range 40 to 100 seconds	Density of mud Greater than 66.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
-5' Top 6+00	>100	85.0		15.5	7.0	20.0
-5' Top 27+00	48	73.0		17.5	7.0	14.0
+5' Bot 27+00	47	72.0		18.5	7.0	12.0
FRESH	40	64.0		15.5	7.0	0.25
+5' Bot 27+00	46	73.0		18.0	7.0	14.0
FRESH	43	64.5		16.0	7.0	0.25

18.5

	Superintendent	Plant Operator	Remarks
Date		8/3/04	
Name		ZACK BULLOCK	
Signature		Zack Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 8/2/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags: [ ]

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
5' top 6+00	>100	88.0		14.0	7.0	20.0
5' top 27+00	49	72.0		17.0	7.0	12.0
5' BOT 27+00	44	73.0		18.0	7.0	14.0
P.M. FRESH	45	66.0		16.5	7.0	0.25

	Superintendent	Plant Operator	Remarks
Date		8/2/04	• <½ DAY EXCAVATION ONLY DAY SHIFT
Name		ZACH BULLOCK / BRION LONDY	NO FRESH SLURRY PLACED DURING DAY SHIFT.
Signature	/	[signature]	• FRESH SLURRY SAMPLED @ NIGHT

FRESH SLURRY PLACED OFF/ON NIGHT SHIFT (½ NIGHT)
[signature]

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 7/29/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 06 seconds Range 40 to 100 seconds	Density of mud Greater than 66.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
-5' Top 5+40	600	84.0		14.0	7.0	20.0
-5' Top 27+00	49	72.0		16.5	7.0	14.0
+5' Bot 27+00	52	72.0		16.0	7.0	14.0
+5' Bot 27+00	51	73.0		16.0	7.0	16.0
Fresh	43	67.0		15.0	7.0	0.25
1						
2						
3						

	Superintendent	Plant Operator	Remarks
Date			
Name		Benny Lowry	
Signature			

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
~~5' top 5+40~~	240	81.0		14.0	7.0	20.0
~~-5' top 27+00~~	42	71.0		16.5	7.0	12.0
~~+5' top 27+00~~	50	73.0		16.0	7.0	12.0
~~+5' Bot 27+00~~	50	76.0		16.5	7.0	18.0
~~Fresh~~	43	64.0		15.4	7.0	0.25
~~Fresh~~	42	65.0		15.0	7.0	0.25
~~Fresh~~	43	64.0		15.4	7.0	0.25

	Superintendent	Plant Operator	Remarks
Date		7/28/04	
Name		Zach Bullock	
Signature		Zk Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 7/27/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 66 seconds Range 40 to 100 seconds	Density of mud Greater than 66.4 PCF ≥ than 64.0 PCF	Density of mud ≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.6	Sand Content 0 - 2% 0 - 20%
-5 top 5+40	95	76		14.5	8.0	10.0
-5 top 27+00	48	73		14.0	7.0	13.0
+5 Bot 27+00	50	75		14.5	7.0	14.0
+5 Bot 27+00	55	75		15.0	7.0	18.0

	Superintendent	Plant Operator	Remarks
Date		7/27/04	
Name			FRESH SLURRY WAS NOT PLACED DURING DAY SHIFT INQUIP DID PLACE FRESH SLURRY INTO NORTH TRENCH / NIGHT SHIFT.
Signature			

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
-5' Top 5+40	120	79		13.5	7.0	20.0
-5' Top 27+00	45	72		14.0	7.0	14.0
+5' Bot 27+00	49	75		15.5	7.0	10.0
+5' Bot 27+00	50	73		15.5	7.0	12.0
DESANDER						
IN						
OUT						

	Superintendent	Plant Operator	Remarks
Date		7/26/04	DESANDER UP AND DOWN.
Name		ZRB	NO FRESH SLURRY PUMPED.
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 7/23/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 66 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
-5' Top 5+40	123	78.0		14.5	7.0	18.0
5' Top 26+00	50	75.0		15.5	7.0	16.0
5' Bot 26+00	53	75.0		16.0	7.0	18.0
+5' Bot 26+00	50	75.0		16.5	7.0	14.0
DESANDER						
IN	85	77.0		—	7.0	18.0
OUT	76	75.0		—	7.0	10.0

	Superintendent	Plant Operator	Remarks
Date			NO FRESH SLURRY PLACED TODAY.
Name			
Signature			

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 66 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
5' TOP 5+40	96	76.0		14.0	7.0	12.0
5 TOP 26+00	47	73.0		16.0	7.0	12.0
5 BOT 26+00	52	75.0		15.5	7.0	12.0
~~5' BOT 20+00~~						
DESANDER						
IN	71	75.0		—	7.0	16.0
OUT	62	73.0		—	7.0	10.0

	Superintendent	Plant Operator	Remarks
Date		7/22/04	No FRESH SLURRY TODAY.
Name		Zach Bullock	NO EXCEVATION UNTIL 1500 hrs.
Signature			ON NORTH END.

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
5' Top 5+40	103	76		14.5	7.0	16.0
5' Top 26+00	48	73		15.5	7.0	12.0
5' Bot 20+00	57	76		16.0	7.0	16.0
5' Bot 26+00	48	74		17.0	7.0	14.0
Demanock						
IN	61	76		—	7.0	20.0
OUT	58	72		—	7.0	10.0

	Superintendent	Plant Operator	Remarks
Date		7/21/04	No Fresh Slurry
Name		Earl Bullock	
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 7/20/04
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
Stop 5+40	89					
Stop 26+00	49	76		14.5	7.0	14.0
+5 Bot 26+00	52	71		14.0	7.0	9.0
		74		15.5	7.0	14.0
+5 Bot 26+00	51					
		74		16.5	7.0	14.0
Desander						
IN	45					
OUT	48	74		—	7.0	12.0
		72		—	7.0	6.0

	Superintendent	Plant Operator	Remarks
Date		7/20/04	FRESH SLURRY PUMPED BRIEFLY IN A.M.
Name		ZAHH BULLOCK	NO SAMPLES TAKEN.
Signature		Zah Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
FRESH	38	64		18.0	7.0	0.25
-5' TOP 5+40	89	74		15.0	7.0	14.0
-5' TOP 26+00	50	73		16.0	7.0	9.0
+5' BOT 26+00	49	74		16.0	7.0	16.0
FRESH	40	64		17.0	7.0	0.25
+5' BOT 26+00	49	77		16.0	7.0	18.0
DESANDER						
IN	44	71		—	7.0	12.0
OUT	40	69		—	7.0	6.0

	Superintendent	Plant Operator	Remarks
Date		7/19/04	
Name		Zach Bullock	
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 7/16/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
FRESH	41	64.0		15.0	7.0	0.25
-5' TOP 5+40	93	76.0		14.0	7.0	16.0
-5' TOP 26+00	45	72.0		16.0	7.0	12.0
-5' BOT 26+00	58	75.0		15.5	7.0	14.0
FRESH	40	64.0		16.0	7.0	0.25
+5' BOT 26+00	49	74.0		16.0	7.0	10.0
DESANDER						
IN	89	79		—	7.0	20.0
OUT	50	72		—	7.0	12.0

	Superintendent	Plant Operator	Remarks
Date			
Name			
Signature			

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.6	Sand Content 0 - 2% 0 - 20%
-5' TOP 5+40	76	75		14.5	7.0	14.0
-5' TOP 26+00	44	72		16.0	7.0	8.0
15' BOT 26+00	47	74		16.5	7.0	12.0
FRESH	40	64		16.5	7.0	0.25
+5' BOT 26+00						
FRESH	41	64				
				16.5	7.0	0.25
DESANDER						
IN	51	77.0		—	7.0	20+
OUT	45	72.0		—	7.0	12.0

	Superintendent	Plant Operator	Remarks
Date		7/15/04	
Name		Eric A Burlock	
Signature			

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 7/14/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
5' Top 5+40	65	76.0		15.5	7.0	18.0
5' Top 26+00	42	71.0		16.0	7.0	6.0
15' Bot 21+00	48	73.0		15.0	7.0	10.0
15' Bot 26+00	44	74.0		~~16.0~~ 16.0	7.0	14.0
DESANDER						
IN	53	77.0		—	7.0	20+
OUT	43	71.0		—	7.0	12.0

	Superintendent	Plant Operator	Remarks
Date		7/14/04	NO FRESH SLURRY PUMPED
Name		ZACH BULLOCK	
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 7/13/04
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
5' top 5+40	61	74		15.5	7.0	14.0
5' top 26+00	40	70		14.5	7.0	8.0
5' BOT 26+00	44	72		15.0	7.0	10.0
15' BOT 26+00	43	72		16.0	7.0	12.0
DESANDER						
IN	69	83		—	7.0	30 +
OUT	46	72		—	7.0	10.0

	Superintendent	Plant Operator	Remarks
Date		7/13/04	
Name		Zach Bullock	No Fresh Slurry Dumped.
Signature		Zach Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 7/12/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
-5' top 26+00	43	70		16.5	7.0	5.0
5' BOT 26+00	48	73		16.0	7.0	10.0
-5' top 5+40	61	75		15.0	7.0	16.0
NO FRESH SLURRY PUMPED	41	69		17.0	7.0	4.0
DESANDER OUT	59	71		—	7.0	8.0

	Superintendent	Plant Operator	Remarks
Date		7/12/04	NO FRESH SLURRY PUMPED. ½ DAY EXCAVATION. ½ DAY BACKFILL.
Name		ZACH BULLOCK	
Signature		Zach Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 7/10/04
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
FRESH	40	64		16.0	7.0	0.25
STOP 26+00	41	69		16.0	7.0	7.0
+5 BOT 26+00	44	72		16.0	7.0	10.0
STOP 5+40	67	72		14.5	7.0	10.0
+5 BOT 26+00	42	71		16.5	7.0	0.25
DESANDER						
OUT	72	70		14.5	7.0	6.0

	Superintendent	Plant Operator	Remarks
Date		7/10/04	FRESH PLACED < ½ DAY.
Name		ZAM BULLOCK	< ½ DAY OF EXCAVATION.
Signature		ZM Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
FRESH	42	65		15.5	7.0	0.25
-5' TOP 26+00	41	71		14.5	7.0	7.0
+5' BOT 26+00	44	72		15.5	7.0	10.0
-5' TOP 5+40	90	79		13.5	7.0	20.0
FRESH	40	64		15.5	7.0	0.25
+5' BOT 26+00	43	71		15.5	7.0	6.0

	Superintendent	Plant Operator	Remarks
Date		7/9/04	FLUSH SLURRY TO NORTH END ONLY.
Name		[illegible]	1/2 DAY EXCAVATION AND
Signature		[illegible]	TRENCHING.

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 7/8/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	Density of mud ≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
FRESH	40	64.0		17.0	6.5	0.25
5' Top 26+00	43	70.0		15.5	7.0	7.0
15' Bot 26+00	47	70.0		14.5	7.0	7.0
5' Top 54+40	49	70.0		15.0	7.0	0.0
FRESH	40	65.0		15.5	7.0	0.25
15' Bot 26+00	49	71.0		16.0	7.0	7.0

	Superintendent	Plant Operator	Remarks
Date		7/8/04	Fresh Slurry Pumped To North End
Name		ZACH BULLOCK	
Signature		Z K Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 7/7/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
FRESH	41	64		16.5	7.0	0.25
5' TOP 25+50	44	69		15.5	7.0	5.0
+5' BOT 25+50	50	72		15.0	7.0	10.0
5' TOP 5+40	46	69		15.0	7.0	6
+5' BOT 25+50	48	71		15.5	7.0	10.0

	Superintendent	Plant Operator	Remarks
Date		7/7/04	FRESH SLURRY PUMPED TO NORTH BAD ONLY < HALF DAY
Name		ZACH BULLOCK	
Signature		Z R Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 07/06/04
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 66 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
Fresh	41	62.0 ?	LESS THAN WATER.	15.0	7.0	0.25
5+ TOP STA. 25+25	45	68.0		16.0	7.0	6.0
5+ BOT STA. 25+25	46	70.0		14.0	7.0	7.0

	Superintendent	Plant Operator	Remarks
Date		07/06/04	½ day digging Samples
Name		BRION K. LOWSY	
Signature		Brion K Lowsy	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 7/1/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
FRESH A.M.	41	64.0		15.0	7.0	0.25
-5' top 5+40	46	70.0		14.0	7.0	9.0
-5 top 25+25	40	68.0		16.0	7.0	6.0
+5 BOT 25+25	40	69.0		15.0	7.0	7.0
FRESH P.M.	40	64.0		15.5	7.0	0.25
+5' BOT 25+25	42	71.0			7.0	7.0
DESANDER						
IN	62	74.0		—	7.0	14.0
OUT	71	~~74.0~~ 71.0		—	7.0	6.0

	Superintendent	Plant Operator	Remarks
Date		7/1/04	
Name		Zach Barlock	
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 6/30/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
FRESH	40	64		16.0	7.0	0.25
-5' TOP	62	70		14.5	7.0	7.0
+5' BOT	68	74		13.0	7.0	14.0
FRESH	41	64		16.0	7.0	0.25
+5' BOT	69	74		13.5	7.0	16.0
DESANDER IN	60	78		—	7.0	20.0
OUT	46	68		—	7.0	7.0

	Superintendent	Plant Operator	Remarks
Date		6/30/04	
Name		ZACH BULLOCK	IN PLACE SAMPLES COLLECTED @ 5:30.
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 6/29/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
FRESH NORTH BARRIER WALL EX.	40	64		16.0	7.0	0.25
-5' TOP	50	70		13.0	7.0	10.0
+5' BOT	59	72		13.5	7.0	14.0
FRESH NORTH BARRIER WALL EX.	40	64		16.5	7.0	0.25
+5' BOT	60	72		14.0	7.0	14.0
DESANDER						
IN	47	71		—	7.0	14.0
OUT	62	69		—	7.0	8.0

	Superintendent	Plant Operator	Remarks
Date		6/29/04	IN PLACE SAMPLE COLLECTED @ 5+60.
Name		Zach Bullock	
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 6/28/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags: [ ]

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
NORTH FRESH NORTH TRENCH EXCAVATION	38	64.0		17.0	7.0	0.25
5' TOP	49	69.0		13.5	7.0	10.0
+5' BOT	59	72.5		13.0	7.0	16.0
FRESH NORTH TRENCH EXCAVATION	40	64.0		16.0	7.0	0.25
+5 BOT	52	72.5		12.5	7.0	10.0
DESANDER						
IN	50	73.0		—	7.0	14.0
OUT	58	68.0		—	7.0	6.0

	Superintendent	Plant Operator	Remarks
Date		6/28/04	IN PLACE SAMPLES COLLECTED @ 5+70
Name		ZACH BURLOCK	
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 6/25/04
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 66 seconds Range 40 to 100 seconds	Density of mud Greater than 66.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
-5' TOP	50	68		14.0	7.0	7.0
+5' BOT	66	78		14.0	7.0	20.0
FRESH	42	65		14.5	7.0	0.25
+5' BOT	58	71		14.0	7.0	10.0
FRESH	42	64		16.5	7.0	0.25
IN DESAND	53	73		—	7.0	16.0
OUT DESAND	58	68		—	7.0	5.0

	Superintendent	Plant Operator	Remarks
Date		6/25/04	IN PLACE SAMPLES COLLECTED @ 6+30
Name		ZACH BULLOCK	
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 6/24/04
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
5' TOP	48	69		13.5	7.0	8.0
15' BOT	51	71		13.0	7.0	12.0
15' BOT	52	72		14.5	7.0	12.0
IN DOSANDOX	62	71		—	7.0	14.0
OUT DOSANDOX	50	69		—	7.0	7.0

	Superintendent	Plant Operator	Remarks
Date		6/24/04	IN PLACE SAMPLES COLLECTED @ 6:30. NO FRESH SLURRY PRODUCED.
Name		Zach Burlack	
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 6/23/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
-5' TOP	47	68.5		13.0	7.0	6.0
+5' BOT	53	72.0		13.5	7.0	12.0

	Superintendent	Plant Operator	Remarks
Date		6/23/04	NO FRESH SLURRY PLACED TODAY.
Name		ZACH BALLOCK	NO EXCAVATION TODAY.
Signature		[signature]	SAMPLES TAKEN AT STATION.

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 6/22/04
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content
Fresh	Range 40 to 65 seconds	Greater than 65.4 PCF		≤ 20 cc.	7.0 - 9.0	0 - 2%
In Trench	Range 40 to 100 seconds	≥ than 64.0 PCF	≤ than 80 pcf	≤ 20 cc.	7.0 - 10.5	0 - 20%
5' TOP	46	69		14.0	7.0	7.0
15' BOT	59	74		13.5	7.0	16.0

	Superintendent	Plant Operator	Remarks
Date			NO FRESH SLURRY PLACED TODAY. LESS THAN HALF DAY OF EXCAVATION.
Name			
Signature			

STATION

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 6/21/04
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content
	Range 40 to 65 seconds	Greater than 65.4 PCF		≤ 20 cc.	7.0 - 9.0	0 - 2%
	Range 40 to 100 seconds	≥ than 64.0 PCF	≤ than 80 pcf	≤ 20 cc.	7.0 - 10.5	0 - 20%
-5' TOP	49	69		15.0	7.0	7.0
-15' BOT	52	71		13.0	7.0	1+.0

	Superintendent	Plant Operator	Remarks
Date			IN PLACE SAMPLES COLLECTED 6/21/04.
Name			NO FRESH SLURRY SAMPLES. NONE
Signature			PUMPED DURING PROD.

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 6/18/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
-5' TOP	45	68		14.0	7.0	2.0
45' BOT	58	73		13.0	7.0	14.0
15' BOT	51	72		13.5	7.0	14.0
POST DESANDER	49	68		—	7.0	6.0
FRESH	39	64		15.0	7.0	0.25

	Superintendent	Plant Operator	Remarks
Date		6/18/04	
Name		Zach Bullock	IN PLACE SAMPLES COLLECTED @ 6 + 10.
Signature		[signature]	FRESH SLURRY DUMPED ½ DAY

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 6/17/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
+5' TOP	45	68		14.0	7.0	6.0
+5' BOT	67	78		13.0	7.0	20.0
FRESH	41	64		15.0	7.0	0.25
POST DESAND	45	69		—	7.0	4.0
+5' BOT	69	79		14.0	7.0	16.0
FRESH	44	65		13.0	7.0	0.25

	Superintendent	Plant Operator	Remarks
Date		6/17/04	IN PLACE SAMPLES COLLECTED @ 6+40. SAMPLE PORT ON DESANDER CLOGGED NO PRE-SAMPLE
Name	BRIAN K. LOWRY SR	ROCH BURLOW	
Signature	Brian K. Lowry Sr	[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 6/16/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content
	Range 40 to 65 seconds	Greater than 65.4 PCF		≤ 20 cc.	7.0 - 9.0	0 - 2%
In Trench	Range 40 to 100 seconds	≥ than 64.0 PCF	≤ than 80 pcf	≤ 20 cc.	7.0 - 10.5	0 - 20%
-5' Top	44	69		13.5	7.0	7.0
+5' Bot	49	71		12.5	7.0	14.0
PRE DESAND	47	71		—	7.0	14.0
POST DESAND	43	69		—	8.0	7.0
+5' Bot	53	72		13.5	7.0	16.0

	Superintendent	Plant Operator	Remarks
Date		6/16/04	In place samples collected
Name		Zach Bullock	@ 6+40
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 6/15/04
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
-5' TOP	46	69		12.5	7.0	7.0
+5' BOT	49	73		13.0	7.0	12.0
POST DESAND	45	69		—	7.0	6.0
+5' BOT	51	73		12.5	7.0	12.0

	Superintendent	Plant Operator	Remarks
Date		6/15/04	IN PLACE SAMPLES COLLECTED @ 6+30
Name		ZACH BULLOCK	
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 6/14/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
-5' TOP	48	68		13.0	7.0	6.0
+5' BOT	57	75		12.5	7.0	14.0
DESAND	48	68		—	7.0	4.0
+5' BOT	51	74		13.5	7.0	14.0

	Superintendent	Plant Operator	Remarks
Date		6/14/04	IN PLACE SAMPLES COLLECTED @ 6:30.
Name		ZACH BULLOCH	FRESH SLURRY WAS NOT PLACED TODAY (RWS)
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 6/12/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content
	Range 40 to 65 seconds	Greater than 65.4 PCF		≤ 20 cc.	7.0 - 9.0	0 - 2%
In Trench	Range 40 to 100 seconds	≥ than 64.0 PCF	≤ than 80 pcf	≤ 20 cc.	7.0 - 10.5	0 - 20%
-5' TOP	49	68		12.5	7.0	5.0
+5' BOT	62	76		13.5	7.0	20.0
FRESH	40	64		14.0	7.0	0.25

	Superintendent	Plant Operator	Remarks
Date		6/12/04	INPLACE SAMPLES COLLECTED
Name		ZACH BULLOCK	@ 6+80
Signature		[signature]	1/2 DAY

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 6/11/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content
	Range 40 to 65 seconds	Greater than 65.4 PCF		≤ 20 cc.	7.0 - 9.0	0 - 2%
In Trench	Range 40 to 100 seconds	≥ than 64.0 PCF	≤ than 80 pcf	≤ 20 cc.	7.0 - 10.5	0 - 20%
-5' TOP	48	69		13.5	7.0	7.0
+5' BOT	52	73		12.5	7.0	14.0
BOT	64	80		13.0	7.0	20.0

	Superintendent	Plant Operator	Remarks
Date		6/11/04	In place samples collected
Name		Zach Bullock	@ 64+80.
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 6/10/04
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
-5' TOP	47	68		12.5	7.0	5.0
15' BOT	57	74		12.0	7.0	16.0
POST DESANDER	58	71		—	7.0	8.0
BOT	53	72		14.0	7.0	14.0

	Superintendent	Plant Operator	Remarks
Date		6/10/04	IN PLACE SAMPLES
Name		ZAM BULLOCK	COLLECTED @ 6:80
Signature		K Bullock	DID NOT PLACE FRESH SLURRY TODAY.

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 6/9/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 66 seconds Range 40 to 100 seconds	Density of mud Greater than 66.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
5' TOP	45	69		12.5	7.0	6.0
+5' BOT	52	75		13.0	7.0	16.0
+5' BOT	53	78		12.5	7.0	20.0
POST DESANDER						

	Superintendent	Plant Operator	Remarks
Date		6/9/04	IN PLACE SAMPLES COLLECTED @ 6+80.
Name		ZACH BULLOCK	NO FRESH SLURRY PLACED
Signature		Z K Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 6/8/04
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
-5' TOP	45	69.0		12.5	7.0	7.0
+5' BOT	56	75.0		13.0	7.0	20.0
+5 BOT	53	75.0		13.5	7.0	16.0

	Superintendent	Plant Operator	Remarks
Date		6/8/04	
Name		ZACH BULLOCK	IN PLACE SAMPLES COLLECTED @ 6+60.
Signature		[signature]	NO FRESH SLURRY PUMPED

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 6/7/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
FRESH	41	64.5		16.0	7.0	0.25
-5' TOP	43	69.0		15.0	7.0	7.0
+5' BOT	64	76.5		15.0	7.0	20.0
+5' BOT	60	79.0		15.5	7.0	20.0

	Superintendent	Plant Operator	Remarks
Date		6/7/04	
Name		Zach Bullock	7:30
Signature		[signature]	1/2 DAY FRESH SLURRY

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 6/4/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	Density of mud ≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
FRESH	40	64		15.5	7.0	0.25
5' top	42	69		16.0	7.0	8.0
+5' BOT	82	80		15.0	7.0	20.0
+5' BOT	79	78		15.5	7.0	20.0

	Superintendent	Plant Operator	Remarks
Date		6/4/04	IN PLACE SAMPLES COLLECTED @ 7+30
Name		Zach Bullock	FRESH SLURRY PUMPED 1/2 DAY
Signature		Zach Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 6/3/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content
Fresh	Range 40 to 65 seconds	Greater than 65.4 PCF		≤ 20 cc.	7.0 - 9.0	0 - 2%
In Trench	Range 40 to 100 seconds	≥ than 64.0 PCF	≤ than 80 pcf	≤ 20 cc.	7.0 - 10.5	0 - 20%
FRESH	41	64.5		15.0	7.0	0.25
-5' TOP	48	71.0		16.0	7.0	8.0
-5' BOT	68	77.0		14.5	7.0	20.0
+5' BOT	69	79.0		14.5	7.0	20.0

	Superintendent	Plant Operator	Remarks
Date		6/3/04	IN PLACE SAMPLES COLLECTED @ 7:30.
Name		ZACH BULLOCK	
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 6/2/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
-5' TOP	38	66		16.5	7.0	5.0
+5' BOT	97	77		18.5	7.0	20.0
+5' BOT	72	82		16.0	7.0	20.0

	Superintendent	Plant Operator	Remarks
Date		6/2/04	IN PLACE SAMPLES COLLECTED @ 7:00.
Name		ZACH BULLOCK	NO FRESH SLURRY PLACED.
Signature		Z. R. Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 6/1/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
-5' Top	50	70.0		15.0	7.0	6.0
+5' Bot	77	77.0		14.5	7.0	20.0
FRESH	40	64.0		14.5	7.0	0.25
+5' Bot	80	78.0		15.5	7.0	20.0
FRESH	40	64.0		14.0	7.0	0.25

	Superintendent	Plant Operator	Remarks
Date		6/1/04	IN PLACE SAMPLES TAKEN @ 7+00
Name		ZACH BULLOCK	
Signature		Zj R Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 5/25/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content
	Range 40 to 65 seconds	Greater than 65.4 PCF		≤ 20 cc.	7.0 - 9.0	0 - 2%
In Trench	Range 40 to 100 seconds	≥ than 64.0 PCF	≤ than 80 pcf	≤ 20 cc.	7.0 - 10.5	0 - 20%
-5' top	52	74		14.6	7.0	16.0
+5' BOT	60	77		14.2	7.0	20.0
+5' BOT	59	76		14.6	7.0	20.0

	Superintendent	Plant Operator	Remarks
Date		5/25/04	IN PLACE SAMPLES COLLECTED
Name		ZACH BULLOCK	@ 7+60
Signature	/	[signature]	NO FRESH-SLURRY PUMPED

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 5/24/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than ~~65.4~~ PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
FRESH	44	64.0		13.2	7.0	0.25
-5' TOP	51	73.0		14.8	7.0	12.0
+5' BOT	65	79.0		14.4	7.0	20.0
AFTER DESANDER	68	71.0		—	7.0	9.0
+5' BOT	56	77.0		15.2	7.0	20.0

	Superintendent	Plant Operator	Remarks
Date		5/24/04	IN PLACE SAMPLES COLLECTED @ 7+60
Name		ZACH BULLOCK	
Signature		Z. Bullock	FRESH SLURRY PLACED < HALF DAY.

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 5/21/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content
	Range 40 to 65 seconds	Greater than 65.4 PCF		≤ 20 cc.	7.0 - 9.0	0 - 2%
In Trench	Range 40 to 100 seconds	≥ than 64.0 PCF	≤ than 80 pcf	≤ 20 cc.	7.0 - 10.5	0 - 20%
-5' Top	53	74.0		15.2	8.0	13.0
+5' Bot	82	78.0		14.6	7.0	20.0
+5' Bot	58	77.0		15.0	7.0	18.0

	Superintendent	Plant Operator	Remarks
Date		5/21/04	IN PLACE SAMPLES COLLECTED
Name		Zach Bulloch	@ 8+40
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 5/20/04
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
Fresh	45	65.0		16.4	7.0	0.25
-5' Top	50	72.0		17.0	7.0	12.0
+5' Bot	64	74.0		18.0	7.0	16.0
Fresh	59	65.0		15.0	7.0	0.25
+5' Bot	68	78.0		14.4	7.0	20.0

	Superintendent	Plant Operator	Remarks
Date		5/20/04	In Place Samples Collected 8 + 68
Name		Brion R. Lowry Sr.	
Signature		Brion R. Lowry Sr.	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 5/18/04
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
Fresh	40	64.0		17.2	7.0	0.25
-5' top	46	70.0		15.4	7.0	6.0
+5' Bot	70	78.0		15.2	7.0	20.0
Fresh	41	64.0		16.8	7.0	0.25
+5' Bot	69	80.5		14.6	7.0	20.0

	Superintendent	Plant Operator	Remarks
Date		5/18/04	
Name		Zach Bullock	In place samples collected @ 8+50
Signature		Zach Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 5/17/04
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
FRESH	43	64.0		16.4	7.0	0.25
-5' TOP	48	72.0		14.6	7.0	12.0
+5' BOT	62	76.0		~~15.0~~ 15.0	7.0	18.0
FRESH	42	64.0		16.0	7.0	0.25
+5' BOT	68	78.0		14.4	7.0	20.0

	Superintendent	Plant Operator	Remarks
Date		5/17/04	In Place Samples Collected @ 8:60
Name		Zach Bullock	
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 5/13/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content
	Range 40 to 65 seconds	Greater than 65.4 PCF		≤ 20 cc.	7.0 - 9.0	0 - 2%
In Trench	Range 40 to 100 seconds	≥ than 64.0 PCF	≤ than 80 pcf	≤ 20 cc.	7.0 - 10.5	0 - 20%
FRESH	54	64.5		13.4	7.0	0.25
-5' TOP	48	72.0		15.0	7.0	10.0
+5' BOT	55	77.0		15.4	7.0	20.0
+5' BOT	57	79.0		15.4	7.0	20.0

	Superintendent	Plant Operator	Remarks
Date		5/13/04	IN PLACE SAMPLES COLLECTED
Name		ZACH BULLOCK	@ 8:70
Signature		[signature]	FRESH SLURRY PUMPED ½ DAY

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 5/12/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
FRESH	40	64.0		17.0	7.0	0.25
-5' TOP	46	72.0		15.0	7.0	13.0
+5' BOT	64	77.0		13.6	7.0	20.0
FRESH	40	64.0		17.8	7.0	0.25
+5' BOT	64	78.0		13.4	7.0	20.0

	Superintendent	Plant Operator	Remarks
Date		5/12/04	IN PLACE SAMPLES COLLECTED @ 8+70
Name		ZACH BULLOCK	
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 5/11/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags: [ ]

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
FRESH	40	64.0		16.0	7.0	0.25
-5' TOP	52	72.5		15.0	7.0	14.0
+5' BOT	78	80.0		15.2	7.0	20.0
FRESH	40	64.0		15.8	7.0	0.25
+5' BOT	65	80.0		14.8	7.0	20.0

	Superintendent	Plant Operator	Remarks
Date		5/11/04	In place Samples Collected
Name		Zach Bullock	@ 8+70
Signature		Zach Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 5/10/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	 ≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
FRESH	48	65.0		15.4	7.0	0.25
-5' TOP	40	65.5		17.0	7.0	4.0
+5' BOT	58	79.0		14.6	7.0	20.0
FRESH	62	65.5		16.2	7.0	0.25
+5' BOT	67	80.0		15.6	7.0	20.0

	Superintendent	Plant Operator	Remarks
Date		5/10/04	In Place Samples Collected
Name		Zach Bullock	@ 8+80
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 5/7/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
FRESH	40	64.0		20.2	7.0	0.25
-5' TOP	49	~~72.0~~		15.2	7.0	10.0
+5' BOT	60	76.0		15.0	7.0	20.0
+5' BOT	69	83.0		14.8	7.0	20.0

	Superintendent	Plant Operator	Remarks
Date		5/7/04	
Name		ZACH BULLOCK	INPLACE SAMPLES TAKEN @ 8:80
Signature			FRESH SLURRY PUMPED ½ DAY

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 5/6/04
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
-5' TOP	46	71.0		13.4	7.0	10.0
+5' BOT	65	77.0		15.8	7.0	20.0
FRESH	41	64.0		14.0	7.0	0.25
+5' BOT	71	71.0		15.4	7.0	20.0

	Superintendent	Plant Operator	Remarks
Date		5/6/04	IN PLACE SAMPLES COLLECTED
Name		ZACH BULLOCK	@ 8+60
Signature		Z P Bullock	SLURRY PUMPED ½ DAY

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 5/5/04
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
FRESH	42	64.0		15.8	7.0	0.25
-5 TOP	50	74.0		14.6	7.0	12.0
+5 BOT	89	78.5		13.2	7.0	20.0
FRESH	40	64.0		18.0	7.0	0.25
~~-5 BOT~~ +5 BOT	77	82.0		14.6	7.0	20.0

	Superintendent	Plant Operator	Remarks
Date		5/5/04	IN PLACE SAMPLES COLLECTED
Name		ZACH BULLOCK	@ 9+10
Signature			

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 5/4/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
FRESH	41	64.5		15.0	7.0	0.25
-5 TOP	47	68.5		15.2	7.0	6.0
+5 BOT	100	82.0		15.6	7.0	20.0
FRESH	41	64.0		14.6	7.0	0.25
+5 BOT	90	81.0		15.4	7.0	20.0

	Superintendent	Plant Operator	Remarks
Date		5/4/04	IN PLACE SAMPLES COLLECTED @ 9+80
Name		ZACK BURLOCK	
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 5/3/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
FRESH	38	64.5		14.2	7.0	0.25
-5' TOP	47	71.0		13.2	7.0	7.0
+5' BOT	106	81.5		13.8	7.0	20.0
FRESH	42	64.0		14.6	7.0	0.25
+5 BOT	77	81.5		15.0	7.0	20.0

	Superintendent	Plant Operator	Remarks
Date		5/3/04	
Name		ZACH BULLOCK	IN DUPLICATE SAMPLES COLLECTED @ 10:00
Signature		Zach Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 4/30/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
-5' Top	46	71.0		16.0	7.0	9.0
+5' Bot	72	77.5		13.4	7.0	18.0
+5' Bot	97	79.0		14.2	7.0	20.0

	Superintendent	Plant Operator	Remarks
Date		4/30/04	14 Pures Samples Taken @
Name		Zack Bullock	10+00
Signature		Zack Bullock	No Fresh Slurry Placed

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 4/29/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content
Fresh	Range 40 to 65 seconds	Greater than 65.4 PCF		≤ 20 cc.	7.0 - 9.0	0 - 2%
In Trench	Range 40 to 100 seconds	≥ than 64.0 PCF	≤ than 80 pcf	≤ 20 cc.	7.0 - 10.5	0 - 20%
FRESH	48	64		13.2	7.0	0.25
-5' TOP	58	73		13.0	7.0	12.0
+5' BOT	70	76		14.0	7.0	16.0
FRESH	47	64		13.4	7.0	0.25
+5' BOT	90	80		14.4	7.0	20.0

	Superintendent	Plant Operator	Remarks
Date		4/29/04	IN PLACE SAMPLES COLLECTED
Name		ZACH BULLOCK	@ 10+00
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 4/28/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags: [ ]

Fresh	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content
	Range 40 to 65 seconds	Greater than 65.4 PCF		≤ 20 cc.	7.0 - 9.0	0 - 2%
In Trench	Range 40 to 100 seconds	≥ than 64.0 PCF	≤ than 80 pcf	≤ 20 cc.	7.0 - 10.5	0 - 20%
FRESH	40	64		14.0	7.0	0.25
-5' TOP	59	73		15.0	7.0	13.0
+5' BOT	159	83		15.8	7.0	20+
+5' BOT	73	76		15.2	7.0	16.0

	Superintendent	Plant Operator	Remarks
Date		4/28/04	IN PLACE SAMPLES COLLECTED
Name		ZACH BULLOCK	@ 9+80
Signature	/	[signature]	FRESH SLURRY PUMPED
			1/2 DAY

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 4/27/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content
Fresh	Range 40 to 65 seconds	Greater than 65.4 PCF		≤ 20 cc.	7.0 - 9.0	0 - 2%
In Trench	Range 40 to 100 seconds	≥ than 64.0 PCF	≤ than 80 pcf	≤ 20 cc.	7.0 - 10.5	0 - 20%
Fresh	45	62		13.0	7.0	0.25
-5' TOP	108	69		18.8	7.0	15.0
+5 BOT	143	80		21.2	7.0	20+
Fresh	67	64		15.4	7.0	0.25
+5' BOT	148	73		13.2	7.0	18.0

	Superintendent	Plant Operator	Remarks
Date		4/27/04	in place samples Collected
Name		Brian R. Lowry Sr	10+00
Signature		Brian R. Lowry Sr	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 4/26/04
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content
Fresh	Range 40 to 05 seconds	Greater than 05.4 PCF		≤ 20 cc.	7.0 - 9.0	0 - 2%
In Trench	Range 40 to 100 seconds	≥ than 64.0 PCF	≤ than 80 pcf	≤ 20 cc.	7.0 - 10.5	0 - 20%
FRESH	39	64		13.8	7.0	0-25
-5 top	68	74		15.0	7.0	13.0
+5' BOT	99	83		16.2	7.0	20+
FRESH	47	65		12.8	7.0	0.25
+5' BOT	72	79		14.2	7.0	18.0

	Superintendent	Plant Operator	Remarks
Date		4/26/04	IN PLACE SAMPLES COLLECTED
Name		Zach Bullock	@ 10+00
Signature			

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 4/23/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds / Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	Density of mud ≤ than 80 pcf	Filtrate loss ≤ 20 cc. / ≤ 20 cc.	PH 7.0 - 9.0 / 7.0 - 10.5	Sand Content 0 - 2% / 0 - 20%
-5' TOP	68	76		12.6	7.0	16.0
+5' BOT	92	81.5		14.0	7.0	20.0
+5 BOT	96	81.0		14.8	7.0	20.0

	Superintendent	Plant Operator	Remarks
Date		4/23/04	No Fresh Slurry Pumped.
Name		Zach Bullock	In place samples collected
Signature		[signature]	@ 21+00

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 4/22/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
FRESH	36	64.0		18.4	7.0	0.25
-5' TOP	55	72.0		14.4	7.0	11.0
+5' BOT	144	84.0		15.0	7.0	20+
FRESH	39	64.0		18.4	7.0	0.25
+5' BOT	121	78.0		15.4	7.0	18.0

	Superintendent	Plant Operator	Remarks
Date		4/22/04	IN PLACE SAMPLES COLLECTED @ 10 + 20
Name		ZACH BULLOCK	
Signature		Zach Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 4/21/04
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
FRESH	39	64		18.8	7.0	6.25
-5' TOP	110	73		15.2	7.0	10.0
+5' BOT	155	79		15.0	7.0	20.0
+5' BOT	159	78		15.2	7.0	20.0

	Superintendent	Plant Operator	Remarks
Date		4/21/04	
Name		ZACH BULLOCK	IN PLACE SAMPLES COLLECTED 10 + 20.
Signature			FRESH SLURRY PUMPED TO 855

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 4/20/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content
Fresh	Range 40 to 65 seconds	Greater than 65.4 PCF		≤ 20 cc.	7.0 - 9.0	0 - 2%
In Trench	Range 40 to 100 seconds	≥ than 64.0 PCF	≤ than 80 pcf	≤ 20 cc.	7.0 - 10.5	0 - 20%
FRESH	36	64		19.4	7.0	0.25
-5 TOP	58	72		15.4	7.0	10.0
+5 BOT	108	82		15.0	7.0	20.0
+5 BOT	85	74		16.2	7.0	12.0

	Superintendent	Plant Operator	Remarks
Date		4/20/04	IN PLACE SAMPLE COLLECTED @ 10 + 20
Name		ZACH BULLOCK	
Signature		Z P Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 4/19/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
FRESH	40	64.0		18.8	7.0	0.25
-5 TOP	73	72.0		13.4	7.0	10.0
+5 BOT	134	78.0		15.4	7.0	20.0
FRESH	40	64.0		18.0	7.0	0.25
+5 BOT	99	78.0		15.4	7.0	20.0

	Superintendent	Plant Operator	Remarks
Date		4/19/04	~~FRESH~~ SAMPLES COLLECTED IN PLACE @ 10+20
Name		ZACH BULLOCK	
Signature		Zach Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 4/16/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content
Fresh	Range 40 to 65 seconds	Greater than 65.4 PCF		≤ 20 cc.	7.0 - 9.0	0 - 2%
In Trench	Range 40 to 100 seconds	≥ than 64.0 PCF	≤ than 80 pcf	≤ 20 cc.	7.0 - 10.5	0 - 20%
FRESH	66	64.5		18.2	7.0	0.25
-5' TOP	175	75		15.0	7.0	16.0
+5' BOT	187	78		15.4	7.0	15.0
FRESH	81	64		18.4	7.0	0.25
+5' BOT	168	77		14.6	7.0	18.0

	Superintendent	Plant Operator	Remarks
Date		4/16/04	INPLACE SAMPLES TAKEN @ 11+60.
Name		Brian K. Lowry	
Signature			

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 4/15/04
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
S Top	89	76		12.4	7.0	16.0
+5 BOT	165	77		12.8	7.0	18.0
FRESH	41	64.5		15.2	7.0	0.25
+5 BOT	156	78		13.0	7.0	18.0

	Superintendent	Plant Operator	Remarks
Date		4/15/04	IN PLACE SAMPLES TAKEN @
Name		ZACH BULLOCK	11+60. FRESH SLURRY ONLY
Signature			PUMPED TO SSS OFF AND ON (½ DAY)

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 4/14/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
FRESH	38	64		16.4	7.0	0.25
-5 TOP	97	73		12.0	7.0	10.0
+5 BOT	152	78		12.0	7.0	16.0
+5 BOT	105	77		12.2	7.0	

	Superintendent	Plant Operator	Remarks
Date		4/14/04	IN PLACE SAMPLES TAKEN @ 11+60. FRESH PUMPED SHORTLY TO 855. ½ DAY
Name		ZACH BULLOCK	
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 4/13/04
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content
Fresh	Range 40 to 65 seconds	Greater than 65.4 PCF		≤ 20 cc.	7.0 - 9.0	0 - 2%
In Trench	Range 40 to 100 seconds	≥ than 64.0 PCF	≤ than 80 pcf	≤ 20 cc.	7.0 - 10.5	0 - 20%
FRESH	40	64.0		16.6	7.0	0.25
-5' TOP	90	72.0		13.4	7.0	10.0
+5' BOT	167	78.0		12.6	7.0	18.0
FRESH	46	64.5		15.2	7.0	0.25
+5' BOT	170	80.0		13.0	7.0	20.0

	Superintendent	Plant Operator	Remarks
Date		4/13/04	IN PLACE SAMPLES TAKEN @
Name		ZACH BURLOCK	11+60.
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 4/12/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content
	Range 40 to 65 seconds	Greater than 65.4 PCF		≤ 20 cc.	7.0 - 9.0	0 - 2%
In Trench	Range 40 to 100 seconds	≥ than 64.0 PCF	≤ than 80 pcf	≤ 20 cc.	7.0 - 10.5	0 - 20%
FRESH	38	64.5		16.4	7.0	0.25
-5' TOP	112	77.0		11.6	7.0	16.0
+5' BOT	162	78.0		11.4	7.0	18.0
FRESH	39	64.0		16.0	7.0	0.25
+5' BOT	149	78.0		11.8	7.0	18.0

	Superintendent	Plant Operator	Remarks
Date		4/12/04	IN PLACE SAMPLES
Name		Zach Bullock	TAKEN FROM STA. 11+60
Signature		[signature]	

RWS
4/12/04

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 4/9/04
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
FRESH	40	64.5		16.0	7.0	0.25
-5' TOP	89	73.0		12.4	7.0	12.0
+5' BOT	146	77.0		12.6	7.0	18.0
+5' BOT	159	78.0		11.8	7.0	16.0

	Superintendent	Plant Operator	Remarks
Date		4/9/04	≤ HALF DAY OF SLURRY PLACEMENT
Name		ZACH BULLOCK	
Signature		Zach Bullock	

4/12/04.
R. SCHERRER SPOKE WITH ZACH CONCERNING LOCATION OF IN PLACE SLURRY SAMPLES. ZACH INDICATED THAT SAMPLES WERE TAKEN AT STA. 11+60 ON 4/8/04 & 4/9/04

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 4/8/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
FRESH	38	64.5		15.6	7.0	0.25
-5 TOP	120	77.0		11.6	7.0	16.0
+5 BOT	183	78.0		12.0	7.0	20.0
FRESH	38	64.5		14.8	7.0	0.25
+5 BOT	190	78.5		12.0	7.0	20.0

	Superintendent	Plant Operator	Remarks
Date		4/8/04	
Name		Zach Bullock	
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 4/7/04
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
-5 top	86	76.0		12.0	7.0	14.0
+5 BOT	167	78.0		11.4	7.0	18.0
FRESH	36	64.0		15.4	7.0	0.25
+5 BOT	140	78.0		12.4	7.0	20.0

	Superintendent	Plant Operator	Remarks
Date		4/7/04	HALF DAY FOR FRESH PUMPING
Name		ZACH BULLOCK	IN PLACE SAMPLES @
Signature		[signature]	11:60

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 4/06/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content
Fresh	Range 40 to 65 seconds	Greater than 65.4 PCF		≤ 20 cc.	7.0 - 9.0	0 - 2%
In Trench	Range 40 to 100 seconds	≥ than 64.0 PCF	≤ than 80 pcf	≤ 20 cc.	7.0 - 10.5	0 - 20%
-5 TOP	78	73		11.2	7.0	10.0
+5 BOT	173	79		10.8	7.0	18.0
+5 BOT	144	79			7.0	20.0
FRESH	39	64.0		12.0	7.0	0.25

	Superintendent	Plant Operator	Remarks
Date		4/6/04	½ DAY FRESH PUMPED
Name		ZACH BULLOCK	INPLACE SAMPLES TAKEN @
Signature		[signature]	11:60

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content
Fresh	Range 40 to 65 seconds	Greater than 65.4 PCF		≤ 20 cc.	7.0 - 9.0	0 - 2%
In Trench	Range 40 to 100 seconds	≥ than 64.0 PCF	≤ than 80 pcf	≤ 20 cc.	7.0 - 10.5	0 - 20%
FRESH	42	64.5		11.8	7.0	0.25
-5 TOP	83	73.0		10.6	7.0	12.0
+5 BOT	173	80.0		12.0	7.0	20.0
+5 BOT	139	79		11.4	7.0	18.0

	Superintendent	Plant Operator	Remarks
Date		4/5/04	1/2 DAY JUMPING FOR FRESH
Name		ZACH BURLOCK	IN PLACE SAMPLED @ 11:00
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 4/2/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh / In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
FRESH	40	65		14.2	7.0	0.25
-5 TOP	89	75		11.2	7.0	12.0
+5 BOT	152	77		12.2	7.0	16.0
+5 BOT	133	76		11.8	7.0	16.0

	Superintendent	Plant Operator	Remarks
Date		4/2/04	FRESH ONLY PUMPED ½ DAY
Name		ZACH BULLOCK	IN PLACE SAMPLED @ 12:40
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n° ☐

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content
Fresh	Range 40 to 65 seconds	Greater than 65.4 PCF		≤ 20 cc.	7.0 - 9.0	0 - 2%
In Trench	Range 40 to 100 seconds	≥ than 64.0 PCF	≤ than 80 pcf	≤ 20 cc.	7.0 - 10.5	0 - 20%
-5 Top	82	75		11.8	7.0	11.0
+5 Bot	116	78		12.2	7.0	16.0
-5 Bot	103	77		11.8	7.0	16.0
Fresh	38	65		15.6	7.0	0.25

	Superintendent	Plant Operator	Remarks
Date		4-1-04	SAMPLES TAKEN @ 13+00
Name		ZACH BULLOCK	½ DAY OF FRESH PUMPING.
Signature		Zf Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content
Fresh	*Range 40 to 65 seconds*	*Greater than 65.4 PCF*		≤ 20 cc.	7.0 - 9.0	0 - 2%
In Trench	*Range 40 to 100 seconds*	≥ than 64.0 PCF	≤ than 80 pcf	≤ 20 cc.	7.0 - 10.5	0 - 20%
5' Top	93	74		11.4	7.0	12.0
+5' Bot	137	77		10.0	7.0	20.0
+5 Bot	132	77		10.2	7.0	16.0

	Superintendent	Plant Operator	Remarks
Date		3/31/04	SAMPLES TAKEN @ 13:00
Name		ZACH BULLOCK	
Signature		Z R Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n° ☐

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content
Fresh	*Range 40 to 65 seconds*	*Greater than 65.4 PCF*		≤ 20 cc.	7.0 - 9.0	0 - 2%
In Trench	*Range 40 to 100 seconds*	≥ than 64.0 PCF	≤ than 80 pcf	≤ 20 cc.	7.0 - 10.5	0 - 20%
-5' Top	110	75		11.6	7.0	12
+5' Bot	120	75		11.8	7.0	13
+5' Bot	98	73		12.0	7.0	12

	Superintendent	Plant Operator	Remarks
Date		3/30/04	NO FRESH SLURRY MIXED
Name		Zach Bullock	OR PUMPED.
			IN PLANT SAMPLES @
Signature		[signature]	13:00

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 3/29/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content
Fresh	Range 40 to 65 seconds	Greater than 65.4 PCF		≤ 20 cc.	7.0 - 9.0	0 - 2%
In Trench	Range 40 to 100 seconds	≥ than 64.0 PCF	≤ than 80 pcf	≤ 20 cc.	7.0 - 10.5	0 - 20%
-5' Top 13+00	68	74		11.6	7.0	12.0
+5' Bot 13+00	~~123~~ 113	78		11.0	7.0	16.0
+5' Bot 13+00	96	77		11.6	7.0	16.0

	Superintendent	Plant Operator	Remarks
Date		3/29/04	
Name		ZACH BULLOCK	
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content
Fresh	Range 40 to 65 seconds	Greater than 65.4 PCF		≤ 20 cc.	7.0 - 9.0	0 - 2%
In Trench	Range 40 to 100 seconds	≥ than 64.0 PCF	≤ than 80 pcf	≤ 20 cc.	7.0 - 10.5	0 - 20%
-5' TOP @ 14+40	102	65		12.8	7.0	8.0
+5 BOT	143	65		12.2	7.0	12.0

	Superintendent	Plant Operator	Remarks
Date		3/26/02	< HALF DAY W/ NO FRESH SLURRY PLACEMENT.
Name		ZACH BULLOCK	
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 3-24-04
Shift n° ☐

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content
Fresh	*Range 40 to 65 seconds*	*Greater than 63.5 PCF*		≤ 20 cc.	*7.0 - 9.0*	*0 - 2%*
In Trench	*Range 40 to 100 seconds*	*≥ than 75.0 PCF **	*≤ than 85 PCF **	≤ 20 cc.	*7.0 - 10.5*	*N/A*
Fresh	44	64		14	7	0.25

*78 PCF (min) density at top of the trench required in the fly ash area approx. Sta. 15+00 to 5+00. The bulk density of slurry at bottom of trench shall always be 15 PCF lower than the bulk unit weight of Prepared Backfill.

	Superintendent	Plant Operator	Remarks
Date		3-24-04	4 Half Day
Name		Cuparvis	
Signature		[illegible]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 3/23/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh / In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
FRESH	42	64		14.2	7.0	0.25
-5' TOP (12+40)	55	69		12.4	7.0	5.0
+5' BOT (12+40)	145	79		11.8	7.0	18.0

	Superintendent	Plant Operator	Remarks
Date		3/23/04	< HALF DAY PLACEMENT
Name		Zach Bullock	
Signature		Z K Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n° ☐

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
FRESH	41	65		16.4	7.0	0.25
-5' TOP 12+40	62	71		12.6	7.0	6.0
+5' BOT 12+40	182	79		12.0	7.0	17.0
FRESH	41	65		14.0	7.0	0.25
+5' BOT 12+40	~~66~~ 92	67		9.4	7.0	8.0

	Superintendent	Plant Operator	Remarks
Date		3/22/04	
Name		ZACH BURLOCK	
Signature		[illegible]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%	
FRESH	39	64.5		17.0	7.0	0.25	1/4
-5' TOP 12+40	52	70.0		12.0	7.0	5.0	3/32
+5' BOT 12+40	167	74		12.0	7.0	10.0	1/8

	Superintendent	~~Plant Operator~~	Remarks
Date		3/16/04	SLURRY PLANT LESS THAN HALF DAY
Name		Jack Bullock	
Signature		Jack Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 3/15/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh / In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%	
Fresh	39	65		16.4	7.0	0.25	1/16
5' Top 12+40	55	70		14.0	7.0	5.0	3/32
5' Bot 12+40	120	72		13.4	7.0	9.5	1/8

	Superintendent	Plant Operator	Remarks
Date		3/15/04	Pumped Fresh ½ Day; NO MIXING
Name		Grant Bullock	
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 3/12/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content
Fresh	Range 40 to 65 seconds	Greater than 65.4 PCF		≤ 20 cc.	7.0 - 9.0	0 - 2%
In Trench	Range 40 to 100 seconds	≥ than 64.0 PCF	≤ than 80 pcf	≤ 20 cc.	7.0 - 10.5	0 - 20%
-5' TOP	58	69		11.8	7.0	3.5
15' BOT 12+40	130	77		12.4	7.0	14.0
FRESH 12+40	42	64		13.0	7.0	0.25

	Superintendent	Plant Operator	Remarks
Date		3/12/04	← HALF DAY SLURRY PLACEMENT
Name		ZACH BULLOCK	
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 3/11/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%	
FRESH	40	64.5		12.8	7.0	0.25	3/32
FRESH	41	65.0		14.0	~~7~~ 7.0	0.25	3/32

Date	Superintendent	Plant Operator	Remarks
Name		3/11/04 Zach Bullock	
Signature		Zach Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 3/10/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content
Fresh	*Range 40 to 65 seconds*	*Greater than 65.4 PCF*		≤ 20 cc.	*7.0 - 9.0*	*0 - 2%*
In Trench	*Range 40 to 100 seconds*	*≥ than 64.0 PCF*	*≤ than 80 pcf*	≤ 20 cc.	*7.0 - 10.5*	*0 - 20%*
FRESH	40	65		15.6	7.0	0.25

	Superintendent	Plant Operator	Remarks
Date		3/10/04	ONLY PUMPED FRESH SLURRY 1/2 DAY
Name		ZACH BULLOCK	
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 3/8/04
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content
Fresh	Range 40 to 65 seconds	Greater than 65.4 PCF		≤ 20 cc.	7.0 - 9.0	0 - 2%
In Trench	Range 40 to 100 seconds	≥ than 64.0 PCF	≤ than 80 pcf	≤ 20 cc.	7.0 - 10.5	0 - 20%
-5' TOP 12+40	65	67		12.2	7.0	1.5
+5' BOT 12+40	125	75		11.0	7.0	16.0

3/32

1/5

	Superintendent	Plant Operator	Remarks
Date		3/8/04	
Name		Zack Bullock	No Fresh Slurry Sampled.
Signature		Zack Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 3-5-04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content
	Range 40 to 65 seconds	*Greater than 65.4 PCF*		≤ 20 cc.	*7.0 - 9.0*	*0 - 2%*
	Range 40 to 100 seconds	*≥ than 64.0 PCF*	*≤ than 80 pcf*	≤ 20 cc.	*7.0 - 10.5*	*0 - 20%*
	STATION					
Top	14+40 70	71		14	8	9
Bottom	125	76		14	8	15

	Superintendent	Plant Operator	Remarks
Date	4-5-04		
Name	[illegible]		
Signature			

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date :
Shift n° ☐

3-2-04

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content
Fresh	Range 40 to 65 seconds	Greater than 65.4 PCF		≤ 20 cc.	7.0 - 9.0	0 - 2%
In Trench	Range 40 to 100 seconds	≥ than 64.0 PCF	≤ than 80 pcf	≤ 20 cc.	7.0 - 10.5	0 - 20%
Station 14+50						
TOP	60	69		16	8	6
Bottom	117	74		15	8	13

	Superintendent	Plant Operator	Remarks
Date			
Name			
Signature			

BENTONITE SLURRY REPORT

Sauget, Illinois - Groundwater Mitigation Control Barrier

		Viscosity (seconds)	Density of Mud		Filtrate Loss	PH	Sand Content	Comments
	Fresh	Range 40 - 65	Greater than 63.5pcf		<20 cc.	7.0 - 9.0	0 - 2%	
Date	In-Trench	Range 40 - 100	> than 75.0pcf	< than 85.0pcf	<20 cc.	7.0 - 10.5	N/A	
2/4/04	Fresh	44	65		13	6	0.25%	Full Day
	Fresh	48	66		12.4	7	0.25%	
2/5/04	Fresh	42	65		12.6	7	0.25%	Full Day
	Fresh	50	65		12.4	7	0.25%	
2/13/04	12+40 top	60	75		8	8	10%	Half Day
	12+40 bot.	120	75		9	8	12%	
	Fresh	44	65		14	8	0%	
2/17/04	12+50 top.	56	75		13	8	5%	
	12+50 bot.	112	75		12	8	10%	
2/20/04	Fresh	40	65		15	7	1%	Half Day
	12+50 top.	59	72		13	8	5%	
	12+50 bot.	119	76		12	8	14%	
2/24/04	Fresh	44	64		14	7	<1%	<Half Day
	12+50 top.	64	71		14	8	5%	
	12+50 bot.	124	75		13	8	13%	
2/27/04	Fresh	55	64		13	8	<1%	<Half Day
	12+50 top.	45	72		14	8	8%	
	12+50 bot.	105	76		14	8	14%	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 2/24/04
Shift n° 1

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content
Fresh	Range 40 to 65 seconds	Greater than 65.4 PCF		≤ 20 cc.	7.0 - 9.0	0 - 2%
In Trench	Range 40 to 100 seconds	≥ than 64.0 PCF	≤ than 80 pcf	≤ 20 cc.	7.0 - 10.5	0 - 20%
Fresh	44	64		14	7	<1%
Top	64	71		14	8	5
Bottom	124	75		13	8	13

	Superintendent	Plant Operator	Remarks
Date			PLACED SLURRY ∠ HALF DAY
Name	CW		
Signature			

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 2-12-04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content
	Range 40 to 65 seconds	Greater than 65.4 PCF		≤ 20 cc.	7.0 - 9.0	0 - 2%
	Range 40 to 100 seconds	≥ than 64.0 PCF	≤ than 80 pcf	≤ 20 cc.	7.0 - 10.5	0 - 20%
TOP 12+50	56	75 ~~72~~				
- Bottom 12+50	112	75 ~~112~~		13	8	5
				12	8	10

	Superintendent	Plant Operator	Remarks
Date			
Name	CW		IN PLACE SLURRY TESTING
			DURING TEMPORARY
Signature	)		SHUTDOWN.

3:25:30

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 2-13-04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content
	Range 40 to 65 seconds	Greater than 65.4 PCF		≤ 20 cc.	7.0 - 9.0	0 - 2%
In Trench	Range 40 to 100 seconds	≥ than 64.0 PCF	≤ than 80 pcf	≤ 20 cc.	7.0 - 10.5	0 - 20%
12+40 TOP	60	75		2:51:30 8	8	10 %
12+40 BOT	120	~~75~~ 75		9	8	12%
-						
FRESH	44	~~65~~ 65		14	8	0

	Superintendent	Plant Operator	Remarks
Date	2/13/04		SLURRY TESTING DURING
Name	CW		SHUT DOWN PERIOD
Signature	/		

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 2/5/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
FRESH	48	65		12.6	7.0	0.25
FRESH	50	65		12.4	7.0	0.25

	Superintendent	Plant Operator	Remarks
Date		LAB 2/5/04	MIXING SLURRY AND PERFORMING DEMOB
Name		ZACH BULLARD	
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 2/4/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
FRESH	44	65		26 13.0	6.0	0.25
FRESH	48	66		10 12.4	7.0	0.25

Date Name Signature	Superintendent	Plant Operator LAB 2/4/04 ZACH BULLOCK [signature]	Remarks ONLY MIXING AND PUMPING SLURRY.

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 1/23/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags: [ ]

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
-5' Top 12+60	89	78		8.4	7.0	12.0
+5' Bot 12+60	102	84		8.2	7.0	18.0
+5' Bot 12+60	98	80		8.0	7.0	14.0
Corner Samples						
Top	110	80		8.0	8.0	6.0
Bot	89	78		8.0	7.0	14.0

	Superintendent	Plant Operator	Remarks
Date		1/23/04	No Fresit Slurry Mixed or Pumped.
Name		Zach Bullock	
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 1/22/04
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
-5 TOP 13+00	80	75		8.2	7.0	8.0
+5 BOT 13+00	101	81		8.4	7.0	14.0
+5 BOT 13+00	110	81		8.2	7.0	14.0

	Superintendent	Plant Operator	Remarks
Date		1/22/04	
Name		ZACH BULLOCK	NO FRESH SLURRY MIXED OR PUMPED. PONDS FROZEN OVER.
Signature		Zach Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 1/21/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
-5' Top 12+80	72	70.5				
+5 Bot 12+80	89	78.5		9.4	7.0	6.0
				7.6	7.0	10.0
+5 Bot 12+80	77	78.0				
				9.0		
Core Box Samp					7.0	13.0
Top	105	79.0				
Bot	92	77.5		9.6	8.0	15.0
				9.6	7.0	16.0

	Superintendent	Plant Operator	Remarks
Date		1/21/04	
Name		ZACH BULLOCK	NO FRESH SLURRY PUMPED OR MIXED. NO TESTING REQ'D
Signature		Zach Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 1/20/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content
Fresh	*Range 40 to 65 seconds*	*Greater than 63.5 PCF*		≤ 20 cc.	*7.0 - 9.0*	*0 - 2%*
In Trench	*Range 40 to 100 seconds*	*≥ than 75.0 PCF **	*≤ than 85 PCF **	≤ 20 cc.	*7.0 - 10.5*	*N/A*
~~5' Top 13+00~~	104	~~70.5~~		10.8	7.0	5.0
~~+5' Bot 13+00~~	87	79.5		9.0	7.0	14.0
~~+5' Bot 13+00~~	85	80		8.2	7.0	15.0
Corner Samp.						
Top	138	~~138~~ 77		11.8	8.0	15.0
Bottom	94	77.5		10.6	7.0	16.0

*78 PCF (min) density at top of the trench required in the fly ash area approx. Sta. 15+00 to 5+00. The bulk density of slurry at bottom of trench shall always be 15 PCF lower than the bulk unit weight of Prepared Backfill.

	Superintendent	Plant Operator	Remarks
Date		1/20/04	No fresh slurry mixed or pumped.
Name		Zach Bullock	Ponds frozen over.
Signature		Z J R Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 1/19/04
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content
Fresh	*Range 40 to 65 seconds*	*Greater than 63.5 PCF*		≤ 20 cc.	*7.0 - 9.0*	*0 - 2%*
In Trench	*Range 40 to 100 seconds*	*≥ than 75.0 PCF **	*≤ than 85 PCF **	≤ 20 cc.	*7.0 - 10.5*	*N/A*
5' TOP 13+00	37	66		7.0	7.0	2.5
+5' BOT 13+02	84	79		8.2	7.0	14.0
~~5' TOP 13+00~~	80	76		8.4	7.0	14.0
+5' BOT						

RWS 1/20/04

*78 PCF (min) density at top of the trench required in the fly ash area approx. Sta. 15+00 to 5+00. The bulk density of slurry at bottom of trench shall always be 15 PCF lower than the bulk unit weight of Prepared Backfill.

	Superintendent	Plant Operator	Remarks
Date		1/19/04	FRESH SLURRY NOT MIXED OR PUMPED;
Name		ZACH BULLOCK	PONDS ARE FROZEN ; NOT SAMPLED
Signature		Z K Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 1/16/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content
Fresh	*Range 40 to 65 seconds*	*Greater than 63.5 PCF*		≤ 20 cc.	*7.0 - 9.0*	*0 - 2%*
In Trench	*Range 40 to 100 seconds*	*≥ than 75.0 PCF **	*≤ than 85 PCF **	≤ 20 cc.	*7.0 - 10.5*	*N/A*
FRESH	71	66		45 10.2	7.0	0.25
STOP 12+80	74	74.5		41 9.8	7.0	10.0
+5' BOT 12+80	85	78		09 9.2	7.0	14.0
FRESH	64	64.5		05 11.0	7.0	0.25
+5' BOT	74	74		13 10.2	7.0	19.0
CORNER SAMP						
TOP	88	78		18 10.2	7.0	15.0
BOTTOM	116	80		54 10.8	8.0	18.0

*78 PCF (min) density at top of the trench required in the fly ash area approx. Sta. 15+00 to 5+00. The bulk density of slurry at bottom of trench shall always be 15 PCF lower than the bulk unit weight of Prepared Backfill.

	Superintendent	Plant Operator	Remarks
Date		1/16/04	
Name		ZACH BULLOCK	
Signature		Z Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 1/15/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:	

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content	
Fresh	*Range 40 to 65 seconds*	*Greater than 63.5 PCF*		≤ 20 cc.	7.0 - 9.0	0 - 2%	
In Trench	*Range 40 to 100 seconds*	*≥ than 75.0 PCF **	*≤ than 85 PCF **	≤ 20 cc.	7.0 - 10.5	N/A	
FRESH	62	66		10.4	7.0	0.25	1/8
+5' TOP 12+70	73	74		9.6	7.0	10.0	1/8
+5' BOT 12+70	83	77		9.6	7.0	12.0	1/8
FRESH	60	65 OK		10.6	7.0	0.25	3/3
+5' BOT 12+70	78	76		9.4	7.0	11.0	1/8
CORNER SAMPLES							
TOP	110	75		12.0	7.0-8.0	12.0	1/8
BOTTOM	96	79		11.4	7.0-8.0	16.0	1/8

*78 PCF (min) density at top of the trench required in the fly ash area approx. Sta. 15+00 to 5+00. The bulk density of slurry at bottom of trench shall always be 15 PCF lower than the bulk unit weight of Prepared Backfill.

	Superintendent	Plant Operator	Remarks
Date		1/15/04	
Name		Zach Bunch	
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 11/14/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content	
Fresh	*Range 40 to 65 seconds*	*Greater than 63.5 PCF*		≤ 20 cc.	*7.0 - 9.0*	*0 - 2%*	
In Trench	*Range 40 to 100 seconds*	*≥ than 75.0 PCF **	*≤ than 85 PCF **	≤ 20 cc.	*7.0 - 10.5*	*N/A*	
FRESH	52	64		10.4	7.0	0.25	3/32
+5' TOP 13+40	68	72		8.0	7.0	6.0	1/8
+5' BOT 13+40	84	77		9.2	7.0	14.0	1/8
FRESH	61	65		11.0	7.0	0.25	3/32
+5' BOT 13+40	113	76		10.0	7.0	12.0	1/8
CORNER							
TOP	92	79		10.4	7.0-8.0	14.0	1/8
BOTTOM	90	79		10.2	7.0-8.0	16.0	1/8

*78 PCF (min) density at top of the trench required in the fly ash area approx. Sta. 15+00 to 5+00. The bulk density of slurry at bottom of trench shall always be 15 PCF lower than the bulk unit weight of Prepared Backfill.

	Superintendent	Plant Operator	Remarks
Date		11/14/04	
Name		ZACH BULLOCK	
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 1/13/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh / In Trench	Viscosity in seconds: Range 40 to 65 seconds / Range 40 to 100 seconds	Density of mud: Greater than 63.5 PCF: ≥ than 75.0 PCF *	Density of mud: ≤ than 85 PCF *	Filtrate loss: ≤ 20 cc. / ≤ 20 cc.	PH: 7.0 - 9.0 / 7.0 - 10.5	Sand Content: 0 - 2% / N/A
FRESH	47	65				
+5' TOP 13+00	66	73		11.2	7.0	0.25
+5' BOT 13+00	75	75		10.0	7.0	9.0
				11.0	7.0	10.0
FRESH	48					
+5' BOT 8+00	83	64.5 OK		11.2	7.0	0.25
		77.5		10.0	7.0	12.0

*78 PCF (min) density at top of the trench required in the fly ash area approx. Sta. 15+00 to 5+00. The bulk density of slurry at bottom of trench shall always be 15 PCF lower than the bulk unit weight of Prepared Backfill.

	Superintendent	Plant Operator	Remarks
Date		1/13/04	
Name		ZACH BULLOCK	
Signature		ZJR Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 1/12/04
Shift n° ☐

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content
Fresh	*Range 40 to 65 seconds*	*Greater than 63.5 PCF*		≤ 20 cc.	*7.0 - 9.0*	*0 - 2%*
In Trench	*Range 40 to 100 seconds*	*≥ than 75.0 PCF **	*≤ than 85 PCF **	≤ 20 cc.	*7.0 - 10.5*	*N/A*
~~Fresh~~	48	65		12.0	7	0.25
TOP	53	70		10.6	7	5.0
~~Bot~~ 80	58	71		11.8	7	6.0
Fresh	47	64		12.0	7	0.25
~~Bot 13+00~~	78	73		11.6	7	9.5

3/36
1/8
1/8

*78 PCF (min) density at top of the trench required in the fly ash area approx. Sta. 15+00 to 5+00. The bulk density of slurry at bottom of trench shall always be 15 PCF lower than the bulk unit weight of Prepared Backfill.

	Superintendent	Plant Operator	Remarks
Date		1/12/04	
Name		ZACH BULLOCK	
Signature		ZJ R Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 1/9/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content	
Fresh	Range 40 to 65 seconds	Greater than 63.5 PCF		≤ 20 cc.	7.0 - 9.0	0 - 2%	
In Trench	Range 40 to 100 seconds	≥ than 75.0 PCF *	≤ than 85 PCF *	≤ 20 cc.	7.0 - 10.5	N/A	
Fresh	66	65.0		10.4	7.0	0.25	3/31
+5' Top 13+60	60	72.5		9.4	7.0	7.0	3/31
+5' Bot 13+60	78	76.0		8.0	7.0	12.0	4/8
Fresh	69	65.5		10.4	7.0	0.25	3/32
+5' Bot 13+60	75	75.0		8.2	7.0	10.0	4/8
Corner Samples							
Mid 10+40	82	72.0		11.2 ~~10.2~~	8.0	9.0	1/8
Bot 10+40	94	77.0		10.2	8.0	14.0	1/8

*78 PCF (min) density at top of the trench required in the fly ash area approx. Sta. 15+00 to 5+00. The bulk density of slurry at bottom of trench shall always be 15 PCF lower than the bulk unit weight of Prepared Backfill.

	Superintendent	~~Plant Operator~~	Remarks
Date		1/9/04	
Name		ZACH BULLOCK	
Signature		Z J R Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 1/8/04
Shift n° ☐

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content	
Fresh	*Range 40 to 65 seconds*	*Greater than 63.5 PCF*		≤ 20 cc.	*7.0 - 9.0*	*0 - 2%*	
In Trench	*Range 40 to 100 seconds*	*≥ than 75.0 PCF **	*≤ than 85 PCF **	≤ 20 cc.	*7.0 - 10.5*	*N/A*	
Fresh	68	65.5		10.4	7.0	0.25	3/30
-5' Top 13+80	46	69		12.2	7.0	4.0	1/8
+5' Bot 13+80	75	78		8.8	7.0	12.0	1/8
Fresh	64	65.0		10.6	7.0	0.25	3/30
+5' Bot 13+80	73	76		8.4	7.0	12.0	1/8

*78 PCF (min) density at top of the trench required in the fly ash area approx. Sta. 15+00 to 5+00. The bulk density of slurry at bottom of trench shall always be 15 PCF lower than the bulk unit weight of Prepared Backfill.

	Superintendent	Plant Operator	Remarks
Date		1/8/04	
Name		Zach Bullock	
Signature		ZR Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 1/7/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content	
Fresh	*Range 40 to 65 seconds*	*Greater than 63.5 PCF*		≤ 20 cc.	*7.0 - 9.0*	*0 - 2%*	
In Trench	*Range 40 to 100 seconds*	*≥ than 75.0 PCF **	*≤ than 85 PCF **	≤ 20 cc.	*7.0 - 10.5*	*N/A*	
FRESH	58	66		10.0	7.0	0.25	1/8
5' TOP 14+00	50	70		10.0	7.0	6.0	1/8
5' BOT 14+00	70	76		8.4	7.0	11.0	1/8
FRESH	56	65		10.2	7.0	0.25	3/32
5' BOT 14+00	65	74		8.4	7.0	10.0	1/8

*78 PCF (min) density at top of the trench required in the fly ash area approx. Sta. 15+00 to 5+00. The bulk density of slurry at bottom of trench shall always be 15 PCF lower than the bulk unit weight of Prepared Backfill.

	Superintendent	Plant Operator	Remarks
Date		1/7/04	
Name		ZACH BULLOCK	
Signature		ZJR Bullock	

FRESH SLURRY WAS ONLY PLACED FOR 1/2 DAY

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 1/5/04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content	
Fresh	*Range 40 to 65 seconds*	*Greater than 63.5 PCF*		≤ 20 cc.	*7.0 - 9.0*	*0 - 2%*	
In Trench	*Range 40 to 100 seconds*	*≥ than 75.0 PCF **	*≤ than 85 PCF **	≤ 20 cc.	*7.0 - 10.5*	*N/A*	
FROSA							
-5' TOP 13+80	54	69		10.2	7.0	4.5	3/3
-5' BOT 13+80	69	72.5		8.2	7.0	12.0	3/3

*78 PCF (min) density at top of the trench required in the fly ash area approx. Sta. 15+00 to 5+00. The bulk density of slurry at bottom of trench shall always be 15 PCF lower than the bulk unit weight of Prepared Backfill.

	Superintendent	~~Plant Operator~~	Remarks NO MIXING
Date		1/5/04	PUMPING, OR TRENCHING
Name		ZACH BULLOCK	OR EXCAVATING
Signature		[signature]	

CHECKING IN PLACE SLURRY.

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 1-2-04
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content	
Fresh	*Range 40 to 65 seconds*	*Greater than 63.5 PCF*		≤ 20 cc.	*7.0 - 9.0*	*0 - 2%*	
In Trench	*Range 40 to 100 seconds*	*≥ than 75.0 PCF **	*≤ than 85 PCF **	≤ 20 cc.	*7.0 - 10.5*	*N/A*	
FRESH	47	65.5		14.2	7.0	0.25	3/32
-5' TOP 13+90	49	69		14.2	7.0	4.5	1/8
+5' BOT 13+90	82	78		10.8	7.0	13.0	1/8

*78 PCF (min) density at top of the trench required in the fly ash area approx. Sta. 15+00 to 5+00. The bulk density of slurry at bottom of trench shall always be 15 PCF lower than the bulk unit weight of Prepared Backfill.

	Superintendent	~~Plant Operator~~	Remarks
Date		1-2-04	
Name		ZACH BULLOCK	
Signature		[signature]	

TOP OFF TRENCH
NO EXCAVATING
TO DAY.

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 12/30/03
Shift n° ☐

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:	

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content
Fresh	*Range 40 to 65 seconds*	*Greater than 63.5 PCF*		≤ 20 cc.	*7.0 - 9.0*	*0 - 2%*
In Trench	*Range 40 to 100 seconds*	*≥ than 75.0 PCF **	*≤ than 85 PCF **	≤ 20 cc.	*7.0 - 10.5*	*N/A*
FRESH	44	67.5		12.4	7.0	0.25
+5 Top 13+90	54	70.0		12.0	7.0	5.0
+5 Bot 13+90	102	77.0		9.6	7.0	13.0
FRESH	42	64.0		12.4	7.0	0.25
+5 Bot 13+90	64	75.0		10.2	7.0	9.0

*78 PCF (min) density at top of the trench required in the fly ash area approx. Sta. 15+00 to 5+00. The bulk density of slurry at bottom of trench shall always be 15 PCF lower than the bulk unit weight of Prepared Backfill.

	Superintendent	~~Plant Operator~~	Remarks
Date		12/30/03	
Name		Zach Burlock	
Signature		[illegible]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 12/29/03
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content	
Fresh	*Range 40 to 65 seconds*	*Greater than 63.5 PCF*		≤ 20 cc.	7.0 - 9.0	0 - 2%	
In Trench	*Range 40 to 100 seconds*	*≥ than 75.0 PCF **	*≤ than 85 PCF **	≤ 20 cc.	7.0 - 10.5	N/A	
-5' Top 14+20	44	66.5		14.4	7.0	2.5	3/3
+5' Bot 14+20	64	74.0		10.8	7.0	9.0	3/3
+5 Bot 14+20	76	77.0		10.6	7.0	13.0	1/8

*78 PCF (min) density at top of the trench required in the fly ash area approx. Sta. 15+00 to 5+00. The bulk density of slurry at bottom of trench shall always be 15 PCF lower than the bulk unit weight of Prepared Backfill.

	Superintendent	Plant Operator	Remarks
Date		12/29/03	NO BENTONITE BEING MIXED
Name		ZACH BULLOCK	NO TRENCHING PERFORMED
Signature		ZR Bullock	

CHECKING IN PLACE SLURRY DURING SHUTDOWN, RWS

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 12/24/03
Shift n° ☐

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content
Fresh	*Range 40 to 65 seconds*	*Greater than 63.5 PCF*		≤ 20 cc.	*7.0 - 9.0*	*0 - 2%*
In Trench	*Range 40 to 100 seconds*	*≥ than 75.0 PCF **	*≤ than 85 PCF **	≤ 20 cc.	*7.0 - 10.5*	*N/A*
-5 top 14+00	42	66		15.0	7.0	2.0
+5 BOT 14+00	66	75.0		10.8	7.0	9.0

*78 PCF (min) density at top of the trench required in the fly ash area approx. Sta. 15+00 to 5+00. The bulk density of slurry at bottom of trench shall always be 15 PCF lower than the bulk unit weight of Prepared Backfill.

	Superintendent	Plant Operator	Remarks
Date		12/24/03	No Work; Just QC
Name		~~Zach Bullock~~	Evaluation on in place
Signature		Zach Bullock	slurry.

CHECKING IN PLACE TRENCH SLURRY DURING SHUT DOWN. ~~NOT INCLUDED IN TRACKING~~ INCLUDED IN TRACKING

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 12/22/03
Shift n° ☐

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content	
Fresh	Range 40 to 65 seconds	Greater than 63.5 PCF		≤ 20 cc.	7.0 - 9.0	0 - 2%	
In Trench	Range 40 to 100 seconds	≥ than 75.0 PCF *	≤ than 85 PCF *	≤ 20 cc.	7.0 - 10.5	N/A	
FRESH	44	64.0		12.0	7.0	0.25%	3/32
+5 TOP 14+00	44	65.0		12.0	7.0	2.0%	3/32
+5 BOT 14+00	48	66.5		11.6	7.0	3.0%	3/32

*78 PCF (min) density at top of the trench required in the fly ash area approx. Sta. 15+00 to 5+00. The bulk density of slurry at bottom of trench shall always be 15 PCF lower than the bulk unit weight of Prepared Backfill.

	Superintendent	Plant Operator	Remarks
Date		12/22/03	
Name		Zach Bullock	
Signature		Z K Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 12/16/03
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content
Fresh	*Range 40 to 65 seconds*	*Greater than 63.5 PCF*		≤ 20 cc.	*7.0 - 9.0*	*0 - 2%*
In Trench	*Range 40 to 100 seconds*	*≥ than 75.0 PCF **	*≤ than 85 PCF **	≤ 20 cc.	*7.0 - 10.5*	*N/A*
FRESH	45	62.5		12.6	7.0	0.25
STOP 14+20	45	68.0		8.2	7.0	5.0
+5 BOT 14+20	52	68.0		7.0	7.0	6.0
FRESH	44	63.5		11.8	7.0	0.25
+5 BOT 14+20	60	70.0		8.0	7.0	6.5
+5 BOT @ 17+00	150					
+5 BOT @ 14+00	67	SEPERATE TESTING FOR INFORMATION.				

*78 PCF (min) density at top of the trench required in the fly ash area approx. Sta. 15+00 to 5+00. The bulk density of slurry at bottom of trench shall always be 15 PCF lower than the bulk unit weight of Prepared Backfill.

	Superintendent	Plant Operator	Remarks
Date		12/16/03	
Name		ZACH BULLOCK	
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 12/15/03
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content	
Fresh	*Range 40 to 65 seconds*	*Greater than 63.5 PCF*		≤ 20 cc.	*7.0 - 9.0*	*0 - 2%*	
In Trench	*Range 40 to 100 seconds*	*≥ than 75.0 PCF **	*≤ than 85 PCF **	≤ 20 cc.	*7.0 - 10.5*	*N/A*	
FRESH	45	64.5		10.0	7.0	0.25	3/3
-5 top 14+20	45	66.5		8.6	7.0	3.0	1/8
+5 BOT 14+20	49	73.5		8.0	7.0	8.0	1/8
FRESH	42	64.0		10.6	7.0	0.25	3/3
+5 BOT 14+20	52	73.5		8.0	7.0	9.0	1/8

*78 PCF (min) density at top of the trench required in the fly ash area approx. Sta. 15+00 to 5+00. The bulk density of slurry at bottom of trench shall always be 15 PCF lower than the bulk unit weight of Prepared Backfill.

	Superintendent	~~Plant Operator~~	Remarks
Date		12/15/03	
Name		ZACH BULLOCK	
Signature		ZR Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 12/13/03
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content	
Fresh	*Range 40 to 65 seconds*	*Greater than 63.5 PCF*		≤ 20 cc.	*7.0 - 9.0*	*0 - 2%*	
In Trench	*Range 40 to 100 seconds*	*≥ than 75.0 PCF **	*≤ than 85 PCF **	≤ 20 cc.	*7.0 - 10.5*	*N/A*	
Fresh AM	58	64.5		9.6	7.0	0.25	1/8
Fresh PM	62	64.5		10.0	7.0	0.25	3/32

*78 PCF (min) density at top of the trench required in the fly ash area approx. Sta. 15+00 to 5+00. The bulk density of slurry at bottom of trench shall always be 15 PCF lower than the bulk unit weight of Prepared Backfill.

	Superintendent	~~Plant Operator~~	Remarks
Date		12/13/03	
Name		ZACH BULLOCK	
Signature		Z/R Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 12/12/03
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content
Fresh	*Range 40 to 65 seconds*	*Greater than 63.5 PCF*		≤ 20 cc.	*7.0 - 9.0*	*0 - 2%*
In Trench	*Range 40 to 100 seconds*	*≥ than 75.0 PCF **	*≤ than 85 PCF **	≤ 20 cc.	*7.0 - 10.5*	*N/A*
FRESH	45	63		14.0	7.0	0.25
STOP 14+60	58	68		10.4	7.0	4.5
+5 BOT 14+60	55	69		9.2	7.0	6.2
FRESH	44	64		13.6	7.0	0.25
+5 BOT 14+60	53	71		9.6	7.0	8.0

*78 PCF (min) density at top of the trench required in the fly ash area approx. Sta. 15+00 to 5+00. The bulk density of slurry at bottom of trench shall always be 15 PCF lower than the bulk unit weight of Prepared Backfill.

	Superintendent	Plant Operator	Remarks
Date		WAS 12/12/03	BRION LOWRY TRAINING
Name		ZACH BULLOCK	
Signature		Z J BULLOCK	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 12/11/03
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content	
Fresh	*Range 40 to 65 seconds*	*Greater than 63.5 PCF*		≤ 20 cc.	*7.0 - 9.0*	*0 - 2%*	
In Trench	*Range 40 to 100 seconds*	*≥ than 75.0 PCF **	*≤ than 85 PCF **	≤ 20 cc.	*7.0 - 10.5*	*N/A*	
FRESH	52	66		10.6	7.0	0.25	3/32
STOP 14+60	52	70		8.8	7.0	7.0	3/32
15 BOT 14+60	58	73		8.0	7.0	12.0	1/8
FRESH	51	66		11.0	7.0	0.25	3/32
15 BOT 14+60	56	74		8.0	7.0	13.0	1/8

*78 PCF (min) density at top of the trench required in the fly ash area approx. Sta. 15+00 to 5+00. The bulk density of slurry at bottom of trench shall always be 15 PCF lower than the bulk unit weight of Prepared Backfill.

	Superintendent	Plant Operator	Remarks
Date		12/11/03	
Name		ZACH BULLOCK	
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 12/10/03
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content
Fresh	Range 40 to 65 seconds	Greater than 63.5 PCF		≤ 20 cc.	7.0 - 9.0	0 - 2%
In Trench	Range 40 to 100 seconds	≥ than 75.0 PCF *	≤ than 85 PCF *	≤ 20 cc.	7.0 - 10.5	N/A
Fresh	42	64.5		10.0	7.0	0.25
+5 Top 18+00	51	69.0		8.2	7.0	4.0
+5 Bot 18+00	142	77.0		8.0	7.0	10
Fresh	43	64.0		11.2	7.0	0.25
+5 Bot 18+00	125	77		8.4	7.0	12.0

*78 PCF (min) density at top of the trench required in the fly ash area approx. Sta. 15+00 to 5+00. The bulk density of slurry at bottom of trench shall always be 15 PCF lower than the bulk unit weight of Prepared Backfill.

	Superintendent	Plant Operator	Remarks
Date		LAB 12/10/03	
Name		Trent Bullock / Brion Lowery	
Signature		T.R. Bullock / Brion R. Lowery	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 12/9/03
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than ~~65.4 PCF~~ 63.5 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc.	PH 7.0 - 9.0	Sand Content 0 - 2%
FRESH	40	64.0		≤ 20 cc.	7.0 - 10.5	0 - 20%
-5 TOP 18+00	49	67.5		12.2	7.0	0.25
+5 BOT 18+00	85	76.5		9.0	7.0	5.0
FRESH	42			8.6	7.0	11.0
+5 BOT 18+00	90	64.5 OK				
		78.0		12.2	7.0	0.25
				8.2	7.0	12.5

	Superintendent	Plant Operator	Remarks
Date		LAB 12/9/03	
Name		ZACH BULLOCK	
Signature		Z R Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 12/8/03
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content	
Fresh	*Range 40 to 65 seconds*	*Greater than 63.5 PCF*		≤ 20 cc.	*7.0 - 9.0*	*0 - 2%*	
In Trench	*Range 40 to 100 seconds*	*≥ than 75.0 PCF **	*≤ than 85 PCF **	≤ 20 cc.	*7.0 - 10.5*	*N/A*	
FRESH	40	64.5		18 13.2	7.0	0.25	3/30
Stop 18+00	63	69		53 8.8	7.0	6.0	1/8
+5 BOT 18+00	128	75.5		39 8.6	7.0	11.0	1/8
FRESH	42	64		21 13.0	7.0	0.25	3/30
+5 BOT 18+00	108	73.5		25 8.8	7.0	10.0	1/8

*78 PCF (min) density at top of the trench required in the fly ash area approx. Sta. 15+00 to 5+00. The bulk density of slurry at bottom of trench shall always be 15 PCF lower than the bulk unit weight of Prepared Backfill.

	Superintendent	~~Plant Operator~~ LAB	Remarks
Date		12/8/03	
Name		ZACH BULLOCK	
Signature		Z R Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 12/5/03
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content
Fresh	*Range 40 to 65 seconds*	*Greater than 63.5 PCF*		≤ 20 cc.	7.0 - 9.0	0 - 2%
In Trench	*Range 40 to 100 seconds*	*≥ than 75.0 PCF **	*≤ than 85 PCF **	≤ 20 cc.	7.0 - 10.5	N/A
Fresh	58	65		52 10.0	7.0	0.25
-5 top 18+00	63	69		30 8.0	7.0	6.0
+5 bot 18+00	129	79		66 8.2	7.0	14.0
Fresh	55	64		11 10.0	7.0	0.25
+5 bot 18+00	126	77		5 7.6	7.0	13.0

*78 PCF (min) density at top of the trench required in the fly ash area approx. Sta. 15+00 to 5+00. The bulk density of slurry at bottom of trench shall always be 15 PCF lower than the bulk unit weight of Prepared Backfill.

	Superintendent	~~Plant Operator~~	Remarks
Date		12/5/03	
Name		ZACH BULLOCK	
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N°:
Date: 12-4-03
Shift n° 1

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags: 220

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 63.5 PCF ≥ than 75.0 PCF *	≤ than 85 PCF *	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% N/A
Fresh A.M.	70	65		11	8	0
-10' Top	60	70	76	11	7	
-10' Bottom	80		76	12	8	
Fresh P.M.	60	65		12	8	0
-10' Top	78		71	12	8	
-10' Bot	122		75	11	8	

*78 PCF (min) density at top of the trench required in the fly ash area approx. Sta. 15+00 to 5+00. The bulk density of slurry at bottom of trench shall always be 15 PCF lower than the bulk unit weight of Prepared Backfill.

	Superintendent	Plant Operator	Remarks
Date			
Name			
Signature			

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 12-3-03
Shift n° D

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
+5' Top 5 to 18+60	96	71		8.8	7.0	6%
-5' Bot 5 to 18+60	125	79		6.9	7.5	12%
Fresh	53	65.5		10.8	7.0	0.25%
-5 Bot 18+40	120	78.5		6.6	7.0	16.0
-5 Top 18+40	84	75		7.5	7.0	10.0

	Superintendent	Plant Operator	Remarks
Date	12-3-03	12-3-03	
Name	C. F.	R. S.	
Signature			

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 12/2/03
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags: [ ]

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content
Fresh	Range 40 to 65 seconds	Greater than 65.4 PCF		≤ 20 cc.	7.0 - 9.0	0 - 2%
In Trench	Range 40 to 100 seconds	≥ than 64.0 PCF	≤ than 80 pcf	≤ 20 cc.	7.0 - 10.5	0 - 20%
Fresh	53	64.5		10.2	7.0	0.25
-5 Top 18+20	84	72		6.4	7.0	9.0
-5 Bot 18+20	124	76		6.4	7.0	14.0
-						
-5 Top 17+50	87	74		6.8	7.0	10.0
+5 Bot 17+50	94	77		6.5	7.0	13.0
Fresh	52	65.0		7.2	7.0	0.0

Date	Superintendent	Plant Operator	Remarks
Name			
Signature			

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 12/1/03
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%	
FRESH	58	64.0		11.4	7.0	0.25	3/32
-5 TOP 18+20	83	71.0		9.4	7.0	8.0	1/8
-15 BOT 18+20	115	76.0		8.0	7.0	14.0	1/8
-							
FRESH	63	65		10.4	7.0	0.25	3/32
-15 BOT 18+20	140	79		8.2	7.0	18.0	

	Superintendent	Plant Operator	Remarks
Date		LAB 12/1/03	
Name		ZACH BULLOCK	
Signature		ZJR Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 11/25/03
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%	
FRESH	60	65		8.2	7.0	0.25	1/8
-5 TOP 18+00	83	71		7.6	7.0	8.0	1/8
+5 BOT 18+00	108	77.5		7.4	7.0	16.0	1/8
- FRESH	58	65		9.2	7.0	0.25	1/8
+5 BOT 18+00	81	74		7.2	7.0	14.0	1/8

	Superintendent	Plant Operator	Remarks
Date		AB 11/25/03	
Name		Zach Bullock	
Signature		Zach Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 11/26/03
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
FRESH	47					
-STOP 18+20	71	65.5		45 12.8	7.0	0.25
+5 BOT 18+20	84	71.5		09 7.0	7.0	10.0
		75.5		05 6.2	7.0	14.0
FRESH	49					
+5' BOT 18+20	91	65.0		11 12.4	7.0	0.25
		76.0		41 6.6	7.0	15.0

1/8

	Superintendent	~~Plant Operator~~ LAB	Remarks
Date		11/26/03	
Name		ZACH BULLOCK	
Signature			

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 11/25/03
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
FRESH	41	64		50 11.0	7.0	0.25
-5 top 18+50	86	71.5		21 8.6	7.0	8.0
+5 BOT 18+50	120	75.5		" 7.0	7.0	16.0
-						
FRESH	43	64		" 11.4	7.0	0.25
+5' BOT 18+50	100	75		5" 7.4	7.0	18.0

Date	Superintendent	~~Plant Operator~~	Remarks
Name		11/25/03 ZACH BULLOCK	
Signature			

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 11/24/03
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%	
FRESH	42	65		13 9.6	7.0	0.25	1/8
-5 TOP 18+80	61	66.5		21 6.8	7.0	3.5	3/32
+5 BOT 18+80	97	71.0		09 6.6	7.0	11.5	1/8
-							
FRESH	58	64.5		34 11.2	7.0	0.25	3/32
+5 BOT 18+80	102	71.5		15 7.2	7.0	12.0	1/8

	Superintendent	LAB ~~Plant Operator~~	Remarks
Date		11/24/03	
Name		ZACH BULLOCK	
Signature		Zf R Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 11/21/03
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh / In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
Fresh	50	64.5		13.0	7.0	0.25
+5 top 18+80	65	71.5		9.0	7.0	9.0
+5 BOT 18+80	98	77.5		10.0	7.0	18.0
Fresh	43				~~7.0~~	~~0.25~~
+5 BOT 18+80	91	65		12.2	7.0	0.25
		~~72~~		9.0	7.0	11.0

3/32
1/8
1/8

	Superintendent	~~Plant Operator~~ LAB	Remarks
Date		11/21/03	
Name		ZACH BULLOCK	
Signature		Z J R Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 11/20/03
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%	
FRESH	41	64		12.0	7.0	0.25	3/32
-STOP 18+40	57	67	10.4	~~5.0~~	7.0	5.0	1/8
+5 BOT 18+40	71	71.5		9.2	7.0	9.0	1/8
-							
FRESH	41	65		11.4	7.0	0.25	3/32
+5 BOT 18+40	63	74.5		8.6	7.0	12.0	1/8

	Superintendent	~~Plant Operator~~ LAB	Remarks
Date		11/20/03	
Name		ZACH BULLOCK	
Signature		Z R Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 11/19/03
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content	
Fresh	Range 40 to 65 seconds	Greater than 65.4 PCF		≤ 20 cc.	7.0 - 9.0	0 - 2%	
In Trench	Range 40 to 100 seconds	≥ than 64.0 PCF	≤ than 80 pcf	≤ 20 cc.	7.0 - 10.5	0 - 20%	
Fresh	42	64.5		44 12.0	7.0	0.25	3/32
Stop 18+50	66	68		14 10.0	7.0	5.5	3/32
Stop 18+50	81	72		28 8.0	7.0	10.0	1/8
-							
Fresh	41	64.5		10 12.2	7.0	0.25	3/32
Stop 18+50	68	72		35 10.0	7.0	10.0	1/8

	Superintendent	Plant Operator	Remarks
Date		11/19/03	
Name		Zach Bunce	
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 11/17/03
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content	
Fresh	Range 40 to 65 seconds	Greater than 65.4 PCF		≤ 20 cc.	7.0 - 9.0	0 - 2%	
In Trench	Range 40 to 100 seconds	≥ than 64.0 PCF	≤ than 80 pcf	≤ 20 cc.	7.0 - 10.5	0 - 20%	
FRESH	46	65		13.6	7.0	0.25	3/32
5' TOP 18+60	74	69		10.6	7.0	8.0	1/8
15' BOT 18+60	80	73.5		9.0	7.0	14.0	1/8
-							
FRESH	54	65		13.4	7.0	0.25	3/32
15' BOT 18+60	99	73.0		8.8	7.0	13.0	1/8

	Superintendent	~~Plant Operator~~	Remarks
Date		11/17/03	
Name		ZACH BULLOCK	
Signature		ZJ Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 11/15/03
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
FRESH	45	64.5		33 12.4	7.0	0.25
-5 TOP 19+00	104	73		24 11.2	7.0	10.0
+5 BOT 19+00	98	73		12 10.8	7.0	13.0
FRESH	51	64.5		15 12.0	7.0	0.25
+5 BOT 19+00	100	73		58 9.8	7.0	12.5

	Superintendent	~~Plant~~ Operator	Remarks
Date		11/15/03	
Name		ZACH BULLOCK	
Signature		Zach Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 11/14/03
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh / In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%	
FRESH	34	64.0		15.2	7.0	0.25	3/32
-5 TOP 18+80	75	69.5		#5 8.4	7.0	9.0	1/8
+5 BOT 18+80	101	72		#3 11.0	7.0	12	1/8
-							
FRESH	43	64.0		13.8	7.0	0.25	3/32
+5' BOT 18+80	100	72		9.0	7.0	11.0	1/8

	Superintendent	LAB Plant Operator	Remarks
Date		11/14/03	
Name		ZACH BULLOCK	
Signature		Zy R Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 11/13/03
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%	
Fresh	41	64.0		12.0	7.0	0.25	3/32
-5 Top 18+60	180	72.5		10.0	7.0	9.5	1/8
+5 Bot 18+60	192	74.0		10.0	7.0	13.0	1/8
-							
Fresh	39	64		12.2	7.0	0.25	3/32
+5 Bot 18+60	121	74		10.4	7.0	13.0	1/8

	Superintendent	LAB Plant Operator	Remarks
Date		11/13/03	
Name		Zack Bullock	
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 11/12/03
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh / In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%	
~~Fresh~~	77	65		10 11.0	7.0	0.25	3/32
5' Top 19+80	90	71		28 8.0	7.0	7.0	1/8
+5' Bot 19+80	115	73.5		14 10.2	8.0	11.0	1/8
-							
Fresh	115	66		45 9.0	7.0	0.25	1/8
+5' Bot 19+80	125	72.5		20 10.2	7.0	10.0	1/8

	Superintendent	~~Plant Operator~~ LAB	Remarks
Date		11/12/03	
Name		ZACH BULLOCK	
Signature		Zf R Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 11/10/03
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%	
FRESH	51	64.5		12.0	7.0	0.25	3/32
-5' TOP 21+60	87	69.5		#6 8.8	7.0	7.5	3/32
+5' BOT 21+60	95	70.5		" 8.4	8.0	7.5	1/8
FRESH	56	64.5		12.2	7.0	0.25	1/8
+5 BOT 21+60	120	72		7.4	7.5	10.0	1/8

	Superintendent	~~Plant Operator~~	Remarks
Date		11/10/03	
Name		ZACH BULLOCK	
Signature		Zach R Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 11/7/03
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content	
Fresh	Range 40 to 65 seconds	Greater than 65.4 PCF		≤ 20 cc.	7.0 - 9.0	0 - 2%	
In Trench	Range 40 to 100 seconds	≥ than 64.0 PCF	≤ than 80 pcf	≤ 20 cc.	7.0 - 10.5	0 - 20%	
FRESH	49	64		22 10.2	7.0	0.25	3/32
-5' Top 21+80	91	73		41 8.2	7.0	8.0	1/8
+5' Bot 21+80	110	73		7 8.2	7.0	11.0	1/8
-							
FRESH	44	64.5		49 12.0	7.0	0.25	1/8
+5 Bot 21+80	95	70.0		06 10.0	7.0	10.0	1/8

	Superintendent	LAB ~~Plant Operator~~	Remarks
Date		11/7/03	
Name		ZACH BULLOCK	
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N°: 11/6/03
Date :
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content	
Fresh	Range 40 to 65 seconds	Greater than 65.4 PCF		≤ 20 cc.	7.0 - 9.0	0 - 2%	
In Trench	Range 40 to 100 seconds	≥ than 64.0 PCF	≤ than 80 pcf	≤ 20 cc.	7.0 - 10.5	0 - 20%	
FRESH	46	64.0		40 12.4	7.0	0.25	1/8
5 TOP 21+80	114	75		35 8.8	7.0	11.0	1/8
15 BOT 21+80	140	76		08 8.2	7.0	13.0	1/8
FRESH	44	64.5		10 12.4	7.0	0.25	1/8
15 BOT 21+80	106	74		7.6	7.5	12.0	1/8

	Superintendent	LAB ~~Plant Operator~~	Remarks
Date		11/6/03	
Name		ZACH BULLOCK	
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 11/5/03
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds / Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF: ≥ than 64.0 PCF	Density of mud: ≤ than 80 pcf	Filtrate loss ≤ 20 cc. / ≤ 20 cc.	PH 7.0 - 9.0 / 7.0 - 10.5	Sand Content 0 - 2% / 0 - 20%	
FRESH	44	64		24 12.4	8.0	0.25	3/32
+5 TOP 21+80	91	69		35 8.0	7.5	7.0	1/8
+5 BOT 21+80	130	75		53 6.8	7.0	12.0	1/8
-							
FRESH	52	64.5		11.6	7.5	0.25	3/32
+5 BOT 21+80	118	75		7.2	7.0	11.0	1/8

	Superintendent	LAB ~~Plant Operator~~	Remarks
Date		11/5/03	
Name		ZACH BULLOCK	
Signature		Z J Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 11/4/03
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh / In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%	
FRESH	43	64.5		45 12.6	7.0	0.25	3/32
-5 TOP 21+60	72	69.5		30 10.0	7.0	7.0	1/8
+5 BOT 21+60	118	74.0		15 9.8	7.0	12.0	1/8
-							
FRESH							
+5 BOT 21+60	88	70.5		14 10.6	7.0	9.0	1/8
	52	64.5		00 12.0	7.0	0.25	

	Superintendent	LAB ~~Plant Operator~~	Remarks
Date		11/4/03	
Name		ZACH BULLOCK	
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 11/3/03
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content	
Fresh	Range 40 to 65 seconds	Greater than 65.4 PCF		≤ 20 cc.	7.0 - 9.0	0 - 2%	
In Trench	Range 40 to 100 seconds	≥ than 64.0 PCF	≤ than 80 pcf	≤ 20 cc.	7.0 - 10.5	0 - 20%	
FRESH	80	65		03 11.6	7.0	0.25	
+5 TOP	80	70.5		40 9.2	7.0	11.0	1/8
+5 BOT	115	77.0		14 9.0	7.0	15.0	1/8
–							
FRESH	70	64.5		39 11.4	7.0	0.25	
+5 BOT	109	74.5		00 9.2	7.0	14.0	1/8
BACKFILL	STARTED						
25+30							
~~SHREDDED GRASS~~	—	101.5	—	—	—	—	
26+60		107.0					
~~FLOWING GRASS~~							

	Superintendent	~~LAB~~ Plant Operator	Remarks
Date		11/03/03	
Name		ZACH BULLOCK	
Signature		ZJR Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 10/31/03
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content	
Fresh	Range 40 to 65 seconds	Greater than 65.4 PCF		≤ 20 cc.	7.0 - 9.0	0 - 2%	
In Trench	Range 40 to 100 seconds	≥ than 64.0 PCF	≤ than 80 pcf	≤ 20 cc.	7.0 - 10.5	0 - 20%	
FRESH	63	64.5		10.6	8.0	0.25	1/8
-5 top 22+00	78	71.0		9.6	8.0	8.0	1/8
+5 BOT 22+00	93	71.0		9.2	7.0	8.0	1/8
-							
FRESH	62	64.0		10.6	7.5	0.25	1/8
+5 BOT 22+00	90	72.0		57 8.6	7.0	9.0	1/8

	Superintendent	~~Plant Operator~~	Remarks
Date		LAB 10/31/03	
Name		ZACH BULLOCK	
Signature		Z J R Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 10/30/03
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh / In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%	
FRESH	60	66		10.4	7.0	0.25	3/32
+5 TOP 22+00	75	69		9.6	7.5	5.0	1/8
+5 BOT 22+00	76	69		10.2	7.0	6.0	1/8
–							
FRESH	60	67.5		9.8	7.0	0.25	3/32
+5 BOT	86	71		9.0	7.0	7.5	

	Superintendent	LAB Plant Operator	Remarks
Date		10/30/03	
Name		ZACH BULLOCK	
Signature		Zf R Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 10/29/03
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds / Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF		Filtrate loss ≤ 20 cc. / ≤ 20 cc.	PH 7.0 - 9.0 / 7.0 - 10.5	Sand Content 0 - 2% / 0 - 20%	
		≥ than 64.0 PCF	≤ than 80 pcf				
FRESH	80	65.0		33 9.4	7.0	0.25	
STOP 22+00	75	69.5		17 9.0	7.0	7.5	
+5 BOT 22+00	85	72.0		56 10.0	7.0	10.0	
-							
FRESH	100	64.5		09 11.0	8.0	0.25	
FRESH + 10% RAIN	59	64.5		53 12.2	8.0	0.25	
FRESH + 10% HYDRANT	67	64.5		36 12.2	8.0	0.25	
+5 BOT 22+00	64	71.5		37 10.2	7.5	7.5	

1/8
3/32
1/8
1/8
3/32
3/32

	Superintendent	LAB Plant Operator	Remarks
Date		10/29/03	
Name		ZACH BULLOCK	
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 10/28/03
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh / In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%	
FRESH	57	65		11.4	7.5	0.25	3/32
+5TOP 22+40	85	68.5		8.2	7.0	5.0	1/8
+5BOT 22+40	102	68.5		9.4	7.0	6.5	1/8
–							
FRESH	55	65		12.2	7.5	0.25	3/32
+5BOT	90	72.5		8.0	7.0	10.0	1/8

	Superintendent	Plant Operator	Remarks
Date		LAB 10/28/03	HEAVY RAINS ELIM. DUST. ½ DAY
Name		ZACH BULLOCK	CHARGED TO BACKFILL (200 pm)
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 10-27-03
Shift n° ☐

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh / In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%	
~~Fresh~~	85	65.5		02 12.4	7.0	0.25	1/8
Stop ~~22~~+80	113	69		47 8.4	7.0	5.0	1/8
+5 BOT ~~22~~+80	91	71		26 9.4	7.0	8.0	1/8
-							
Fresh	48	65		15 11.6	8.0	0.25	3/32
+5 BOT 22+80	70	70.5		55 9.4	7.0	7.0	1/8

	Superintendent	Plant Operator	Remarks
Date		LAB 10/27/03	
Name		Zach Bullock	
Signature		Zach Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 10/24/03
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh / In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%	
FRESH	90	65		12.4	8.0	0.25	3/3
-5 TOP	75	68		10.4	7.0	4.5	1/8
+5 BOT	79	69.5		10.8	7.0	7.0	1/8
-							
FRESH	65	64.5		10.6	7.0	0.25	1/8
+5 BOT	70	68		10.8	7.0	5.0	1/8

	Superintendent	Plant Operator	Remarks
Date		LAB 10/24/03	
Name		ZACH BULLOCK	
Signature		[signature]	

PLACED BACK FILL 1/2 DAY.

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 10/23/03
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content	
	Range 40 to 65 seconds	Greater than 65.4 PCF		≤ 20 cc.	7.0 - 9.0	0 - 2%	
	Range 40 to 100 seconds	≥ than 64.0 PCF	≤ than 80 pcf	≤ 20 cc.	7.0 - 10.5	0 - 20%	
FRESH	65	65		12.0	8.0	0.25	1/8
+5 TOP 21+20	65	70		8.8	7.0	10.0	1/8
+5 BOT 21+20	67	72		10.4	7.5	12.5	1/8
-							
FRESH	63	65.5		10.8	8.0	0.25	1/8
+5 BOT	68	71		6.8	7.0	12.0	1/8

	Superintendent	Plant Operator	Remarks
Date		10/23/03	
Name		ZACH BULLOCK	
Signature			

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 10/22/03
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh / In Trench	Viscosity in seconds: Range 40 to 65 seconds / Range 40 to 100 seconds	Density of mud: Greater than 65.4 PCF / ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss: ≤ 20 cc. / ≤ 20 cc.	PH: 7.0 - 9.0 / 7.0 - 10.5	Sand Content: 0 - 2% / 0 - 20%	
~~FRESH~~	74	65		11.2	8.0	0.25	
-5 TOP	67	72		9.8	7.0	9.0	
+5 BOT	104	76.5		8.8	7.0	15.0	
FRESH	53	64.5		11.2	8.0	0.25	
+5 BOT	97	72.0		10.2	7.0	10.0	
FRESH	54	65.0		11.2	7.5	0.25	
BATCH	LOCATION	SLUMP (IN)	UNIT WT (PCF)	MC (%)			
1	27 + 40	3½	121.0	24.5			
8	27+40	3¼	119.0	23.6			

	Superintendent	~~Plant Operator~~	Remarks
Date		WAB 10/22/03	
Name		ZACH BULLOCK	
Signature		Zac Bullock	

* BACKFILL FULL DAY

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 10/21/03
Shift n° ☐

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh / In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%	
FRESH	54	66		4 14.0	7.5	0.25	3/32
Stop 24+40	58	72		18 8.4	7.0	10.0	1/8
+5 BOT 24+40	113	76		54 8.0	7.0	17.0	1/8
FRESH	62						
+5 BOT 24+40	66	65.5 / 75		24 12.2	8.0	0.25	3/32
				44 8.2	7.0	14.0	1/8
TIME	SLUMP (INCHES)	UNIT WT (PCF)	MC (%)	BATCH #			
A.M.	3½"	122 PCF	23%	1			
P.M	4"	121 PCF	23%	6			

	Superintendent	~~Plant Operator~~	Remarks
Date		10/21/03 WAB	
Name		ZACH BULLOCK	
Signature		Zach Bullock	

* BACKFILL FULL DAY

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 10-20-03
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content	
Fresh	Range 40 to 65 seconds	Greater than 65.4 PCF		≤ 20 cc.	7.0 - 9.0	0 - 2%	
In Trench	Range 40 to 100 seconds	≥ than 64.0 PCF	≤ than 80 pcf	≤ 20 cc.	7.0 - 10.5	0 - 20%	
FRESH	42	65		32 14.8	7.0	0.25	3/32
-5 TOP 24+00	52	66.5		36 11.2	7.0	2.5	1/8
+5 BOT 24+00	80	71.5		03 9.6	7.0	12.0	1/8
-							
FRESH	41	64		21 15.4	7.0	0.25	3/32
+5 BOT 24+00	61	72.5		58 9.8	7.0	12.0	1/8
SLUMP	4"						
UNIT WT	12.70×10=127.0 pcf						
MC %	18%						

	Superintendent	Plant Operator	Remarks
Date		LAB 10-20-03	
Name		ZACH BULLOCK	ONLY ½ DAY OF BACKFILL PRODUCTION
Signature		Z J R Bullock	

* PLACED FILL ½ DAY IN AFTER NOON

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 10-17-03
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%	
FRESH	41	64		37 14.0	7.5	0.25%	
+5 TOP 24+00	69	72		28 9.0	7.0	10.0%	
+5 BOT 24+00	68	72		06 9.4	7.0	9.5%	
-							
FRESH							
+5 BOT 24+00	80	72.5		18 9.0	7.0	9.5%	

11:00
4:00

Date	Superintendent	~~Plant Operator~~	Remarks
Name		ZAB 10-17-03 ZACH BULLOCK	BROKE IN TRENCH IN P.M. NO FRESH CLAM SLURRY PUMPED AFTERWARD.
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 10-16-03
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh / In Trench	Viscosity in seconds: Range 40 to 65 seconds / Range 40 to 100 seconds	Density of mud: Greater than 65.4 PCF / ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss: ≤ 20 cc. / ≤ 20 cc.	PH: 7.0 - 9.0 / 7.0 - 10.5	Sand Content: 0 - 2% / 0 - 20%	
FRESH	58	65.0		14.4	7.5	0.25	1/8
-5 TOP 24+00	49	66.5		37 12.6	7.0	3%	7/32
+5 BOT 24+00	60	71.0		17 8.8	7.0	11%	3/32
-							
FRESH	49	64.5		02 14.0	7.5	0.25	1/8
+5 BOT 24+00	53	67		24 10.2	7.0	3.5%	

	Superintendent	Plant Operator	Remarks
Date		LAB 10-16-03	
Name		ZACH BULLOCK	
Signature		Z P Bullock	

12:00

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 10-15-03
Shift n° ☐

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content	
Fresh	Range 40 to 65 seconds	Greater than 65.4 PCF		≤ 20 cc.	7.0 - 9.0	0 - 2%	
In Trench	Range 40 to 100 seconds	≥ than 64.0 PCF	≤ than 80 pcf	≤ 20 cc.	7.0 - 10.5	0 - 20%	
12:30 FRESH	41	65		03 13.8	7.0	0.25%	3/32
-5' TOP 24+00	53	67		14.0	7.5	6.0%	1/8
+5' BOT 24+00	60	70		12.0	7.5	6.0%	1/8
-							
4:00 ~~FRESH~~	~~70~~ 3RB	~~73~~ 3RB					
+5 BOT	70	73				~~3RB 0.25%~~	~~1/8~~
FRESH	45	64.5		8.4	7.0	10.0%	1/8
				12.6	7.0	0.25%	1/8

	Superintendent	~~Plant Operator~~	Remarks
Date		LAB 10-15-03	
Name		ZACH BULLOCK	
Signature		Zach Bullock	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° : 10-14-03
Date :
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%	
9:30	FRESH	43						
	-5 TOP 24+70	72	65		50 12.4	8.0	0.25 %	3/32
	+5 BOT 24+70	86	70		73 10.4	7.0	7.0 %	1/8
			72		74 10.6	7.0	11.0 %	1/8
1630	FRESH	53						
	+5 BOT 24+70	78	65		14.2	7.0	0.25 %	1/8
			71		10.4	7.0	9.5 %	1/8

Date Name Signature	Superintendent	LAB ~~Plant Operator~~ 10-14-03 Zach Burrow	Remarks

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 10-13-03
Shift n° ☐

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Fresh	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content	
		Range 40 to 65 seconds	Greater than 65.4 PCF		≤ 20 cc.	7.0 - 9.0	0 - 2%	
	In Trench	Range 40 to 100 seconds	≥ than 64.0 PCF	≤ than 80 pcf	≤ 20 cc.	7.0 - 10.5	0 - 20%	
10:30	FRESH	42	64.5		56 11.4	8.0	0.25%	3/32
	-5TOP 24+70	60	69.0		31 10.6	7.0	6.0%	1/8
	+5BOT 24+70	64	78.0		07 9.4	7.0	18.0%	1/8
1:15	FRESH	~~34~~ 46	64.0		20 12.2	7.5	0.25%	3/32
4:30	FRESH	50	64.5		35 10.4	7.5	0.25%	1/8
	+5BOT 24+70	73	71.0		46 11.6	7.0	9.0%	

	Superintendent	Plant Operator	Remarks
Date		LAB 10-13-03	
Name		ZACH BULLOCK	
Signature		[signature]	

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 10-10-03
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content	
Fresh	Range 40 to 65 seconds	Greater than 65.4 PCF		≤ 20 cc.	7.0 - 9.0	0 - 2%	
In Trench	Range 40 to 100 seconds	≥ than 64.0 PCF	≤ than 80 pcf	≤ 20 cc.	7.0 - 10.5	0 - 20%	
Fresh	63	64.5		14.0	7.5	0.25%	1/8
11:00 -5 TOP 25+40	57	70		11.2	7.0	7.0%	1/8
+5 BOT 25+40	50	66		10.8	7.0	6.0%	1/8
3:45 +5 BOT 25+40	74	74.5		10.4	7.0	7.0%	1/8

* PUMP 1/2 HALF FRESH —

	Superintendent	Plant Operator	Remarks
Date			LAB
Name			10-10-03 Zach Bullock
Signature			Zach Bullock

* ONLY PUMPED FRESH SLURRY FOR 1/2 DAY.

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 10-9-03
Shift n°

1/2 DAY.

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh / In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%	
FRESH	44	64.5		30 12.2	8.0	0.25%	1/8
-5' TOP 25+20	53	69.0		34 10.0	7.0	6.5%	1/8
-5' BOT 25+20	53	69.0		19 10.2	7.0	6.5%	1/8

* NOTE: WORKED HALF DUE RAIN

	Superintendent	Plant Operator	Remarks
Date			10-9-03 LAB
Name			ZACH BULLOCK
Signature			

* ONLY WORKED 1/2 DAY DUE TO RAIN

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 10-8-03
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%	
10:00	FRESH	71	65.0		35 10.2	8.0	0.25 %	1/8
	-5 TOP 25+20	55	69.0		14 10.2	7.0	9.5 %	1/8
	+5 BOT 25+20	60	70.0		42 10.6	7.0	10.0 %	1/8
1:15	-							
	FRESH	46	65.0		20 13.6	7.0	0.25 %	3/32
4:15	FRESH	44	64.5		20 12.6	7.5	0.25 %	1/8
	+5 BOT 25+20	61	69.5		54 12.2	7.0	6.0 %	1/8

	Superintendent	Plant Operator	Remarks
Date			10-8-03 LAB
Name			ZACH BULLOCK
Signature			

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 10-7-03
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh / In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%	
FRESH	41	65		11.6	7.5	0.25 %	1/8
-5 TOP 25+70	62	68		11.0	7.0	6.0 %	1/8
+5 BOT 25+70	63	69		10.4	7.0	8.0 %	1/8
-							
FRESH	42	64		11.4	7.0	0.25 %	1/10
-5 BOT 25+70	62	68		10.4	7.0	9.0 %	1/8

	Superintendent	Plant Operator	Remarks
Date			LAB
Name			10-7-03
			ZACH BULLOCK
Signature			

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 10-6-03
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh / In Trench	Viscosity in seconds: Range 40 to 65 seconds / Range 40 to 100 seconds	Density of mud: Greater than 65.4 PCF / ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss: ≤ 20 cc. / ≤ 20 cc.	PH: 7.0 - 9.0 / 7.0 - 10.5	Sand Content: 0 - 2% / 0 - 20%	
30 FRESH	45	64.5		09 12.2	7.0	0.25	X/6
-5 TOP 25+80	62	68.5		41 11.4	7.0	6.0%	1/10
+5 BOT 25+80	70	71.0		15 11.6	7.0	10.0%	X/8
FRESH	44	64.5		35 15.2	8.0	0.25%	X/6
FRESH	53	65.0		40 10.4	8.0	0.25%	1/16
+5 BOT 25+70	96	75.0		36 9.4	~~7.0~~	16%	

	Superintendent	Plant Operator	Remarks
Date			LAB
Name			10-6-03
			ZACH BULLOCK
Signature			Zf Bullock

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 10-6-03
Shift n° ☐

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
7:30	45 sec.	11:15	40 sec.			
7:45	45 sec	11:30	43 sec.			
8:00	43 sec.	11:45	47 sec.			
8:15	45 sec	12:40	41 sec.			
8:30	45 sec.	1:45	52 sec.			
9:30	43 sec.	2:30	55 sec.			
9:45	43 sec.	3:45	47 sec.			
10:00	43 sec.	4:00	50 sec.			
10:15	42 sec.	4:23	52 sec.			
10:30	41 sec.	4:45	55 sec.			
10:45	41 sec.	5:30	43 sec.			
11:00	40 sec.		Sec.			

	Superintendent	Plant Operator	Remarks
Date		10/6/03	
Name		ROB SMITH	
Signature			

B-TRUCK start 7:25
Finish 2:30
28 ton

ON - 7:30
OFF - 8:35
ON - 9:25
OFF - 11:45
ON - 12:35
OFF - 2:40
ON 3:45
OFF - 5:40

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 10-4-03
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content
Fresh	Range 40 to 65 seconds	Greater than 65.4 PCF		≤ 20 cc.	7.0 - 9.0	0 - 2%
In Trench	Range 40 to 100 seconds	≥ than 64.0 PCF	≤ than 80 pcf	≤ 20 cc.	7.0 - 10.5	0 - 20%
+5' Bottom 25+80	96	75		8.2	7.0	18%
	-					
- Fresh	60	64.5		9.4	8.0	0.25%
-5' Top @ 25+80	68	71.0		9.8	7.0	9.0%
-5' Bot @ 25+80	60	69		11.0	7.0	8.0%

	Superintendent	Plant Operator	Remarks
Date			LAB
Name			10-4-03
			ZACH BULLOCK
Signature			

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 10-3-03
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content	
Fresh	Range 40 to 65 seconds	Greater than 65.4 PCF		≤ 20 cc.	7.0 - 9.0	0 - 2%	
In Trench	Range 40 to 100 seconds	≥ than 64.0 PCF	≤ than 80 pcf	≤ 20 cc.	7.0 - 10.5	0 - 20%	
5:30 FRESH	53	65		51 10.0	7.5	.25	1/16"
-5 STOP 26+70	70	73		13 8.0	7.0	10.0%	1/10"
+5 BOT 26+70	69	72		51 8.0	7.0	12.0%	1/10"
-							
:00 +5 BOT 26+00	66	73		32 9.4	7.0	12.0%	1/8"
+5 BOT 25+70	63	73		15 10.8	7.5	8.5%	1/10"

	Superintendent	Plant Operator	Remarks
Date			10-3-03
Name			ZACH BULLOCK
Signature			

LAD

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 10-2-03
Shift n° ☐

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%	Filtrate Cake
Fresh	44	65		19 12.0	7.5	0.25%	1/10"
0:30 5 to 26+80 -5' Top	65	73		05 12.0	7.0	7.%	1/16
5 to 26+80 +5' Bottom	52	69		47 10.0	7.5	7%	1/10
FRESH	48	65		24 12.0	7.5	.25%	1/10
30 25+60 -5' Top	62	72		35 9.0	7.0	11.0%	1/8
25+60+5' Bottom	66	73		10 10.0	7.0	11.0%	1/10

Date	Superintendent	Plant Operator	Remarks
Name			
Signature			

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 10-1-03
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh / In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
Fresh 10:15	55	69.0		1:35 12.1	7.0	0.0
				2:15		
9:30 Trench Top 24+00	57	74.0		2:5 11.1	7.0	9.0
Trench Bot. 24+00	58	75.0		20 11.4	7.0	9.5
Fresh	47	66		35 16.2	7.0	0.25%
Trench Top Sta. 26+70	74	77		19.5 10.8	7.0	14%
Trench Bott. Sta. 26+70	60	74		19 13.4	7.5	12%

	Superintendent	Plant Operator	Remarks
Date			
Name			
Signature			

Newark
Inv. # 03

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 9-30-03
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds		Density of mud		Filtrate loss	PH	Sand Content
Fresh	Range 40 to 65 seconds		Greater than 65.4 PCF		≤ 20 cc.	7.0 - 9.0	0 - 2%
In Trench	Range 40 to 100 seconds		≥ than 64.0 PCF	≤ than 80 pcf	≤ 20 cc.	7.0 - 10.5	0 - 20%
10:30 Trench -5'	5 to 24+80	59	69		12:44 12.3	7.5	6%
10:30 Trench +5' bottom	"	59	70		1:24 12.0	7.0	5.2%
10:30 Fresh #1		52	65		2:18 14	7.0	0.255%
Fresh 5:04		51	65		14.2	7.0	0.0
Top 26+80		57	69		5:09 13.8	7.0	4.5
Bottom 26+80		55	68		12.9	7.0	5.0

	Superintendent	Plant Operator	Remarks
Date			
Name			
Signature			

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 9/29/03
Shift n° ☐

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
10:00 Fresh	45	66		13	7	0.2%
Trench -10	55	70		11	7	5%
Trench - Bot	60	75		10	7	10%
4:30 Fresh	44	66		13	7	0.2%
Trench-10	55	71		11	7	6%
Trench Bot	58	74		11	7	14%

	Superintendent	Plant Operator	Remarks
Date			
Name			
Signature			

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 9/28/03
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content
Fresh	Range 40 to 65 seconds	Greater than 65.4 PCF		≤ 20 cc.	7.0 - 9.0	0 - 2%
In Trench	Range 40 to 100 seconds	≥ than 64.0 PCF	≤ than 80 pcf	≤ 20 cc.	7.0 - 10.5	0 - 20%
Fresh	43	66		12	7	0.2%
Trench-10	55	72		11	7	6%
Trench-Bot	61	75		10	7	12%
Fresh	44	66		12	7	0.2%
Trench-10	56	71		11	7	6%
Trench-Bot	60	75		10	7	12%

	Superintendent	Plant Operator	Remarks
Date			
Name			
Signature			

Fw4

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 9/22/03
Shift n°

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content
Fresh	Range 40 to 65 seconds	Greater than 65.4 PCF		≤ 20 cc.	7.0 - 9.0	0 - 2%
In Trench	Range 40 to 100 seconds	≥ than 64.0 PCF	≤ than 80 pcf	≤ 20 cc.	7.0 - 10.5	0 - 20%
Fresh	44	66		15	7	0.2%
Trench -10	49	71		13	7	6%
Trench - Bot	56	73		12	7	11%
Fresh	46	66		14	7	0.2%
Trench - 10	52	70		12	7	5%
Trench - Bot	60	74		12	7	12%

	Superintendent	Plant Operator	Remarks
Date			
Name			
Signature			

RWS

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 9/25/03
Shift n° ☐

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content
Fresh	Range 40 to 65 seconds	Greater than 65.4 PCF		≤ 20 cc.	7.0 - 9.0	0 - 2%
In Trench	Range 40 to 100 seconds	≥ than 64.0 PCF	≤ than 80 pcf	≤ 20 cc.	7.0 - 10.5	0 - 20%
10:00 Fresh	39 sec	65 pcf		12ml	7	0.2%
Trench 10	49 sec	72.5 pcf		11ml	7	7%
Trench Bot	53 sec	74 pcf		11ml	7	11%
2:00 Fresh	53	66 pcf		13ml	7	0.2%
Trench 10	65	74 pcf		10.5ml	7	11%
Trench Bot	75	77 pcf		11ml	7	16%
4:00 Fresh	65	67 pcf		13ml	7	0.2%

	Superintendent	Plant Operator	Remarks
Date	9/25/03		
Name	Greg Dolan		
Signature	Greg Dolan		

Russ

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 9-25-03
Shift n° [ ]

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh / In Trench	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content
	Range 40 to 65 seconds	Greater than 65.4 PCF		≤ 20 cc.	7.0 - 9.0	0 - 2%
	Range 40 to 100 seconds	≥ than 64.0 PCF	≤ than 80 pcf	≤ 20 cc.	7.0 - 10.5	0 - 20%
9:15	55 sec.					
9:30	54 sec					
10:50	45 sec.					
3:10	51 sec.					
4:45	52 sec.					
5:00	53 sec					
5:15	52 sec					

	Superintendent	Plant Operator	Remarks
Date		9/25/03	
Name		Bob Smith	
Signature		[signature]	

ON - 9:08
OFF - 9:33
ON - 10:45
OFF - 11:00
ON - 3:08
OFF - 3:20
ON - 4:40
OFF - 5:15

Rob

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 9/24/03
Shift n° 1

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds		Density of mud		Filtrate loss	PH	Sand Content
Fresh	*Range 40 to 65 seconds*		*Greater than 65.4 PCF*		≤ 20 cc.	*7.0 - 9.0*	*0 - 2%*
In Trench	*Range 40 to 100 seconds*		*≥ than 64.0 PCF*	*≤ than 80 pcf*	≤ 20 cc.	*7.0 - 10.5*	*0 - 20%*
Fresh	63 seconds		68 lbcf		13	7	0.2%
Trench Top	50	Sta 27+00	71 lbcf		11	7	5%
Trench Bot	49	Sta 27+00	74 lbCF		10	7	10%
Fresh	40		64 lbcf		13	7	0.2%
Trench Top	45	Sta 27+00	71 lbcf		11	7	6%
Trench Bot	49	Sta 27+00	76 lbcf		11	7	11%

	Superintendent	Plant Operator	Remarks
Date	9/24/03		
Name			
Signature	[signature]		

Rws

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 9/23/03
Shift n° 1

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content
Fresh	Range 40 to 65 seconds	Greater than 65.4 PCF		≤ 20 cc.	7.0 - 9.0	0 - 2%
In Trench	Range 40 to 100 seconds	≥ than 64.0 PCF	≤ than 80 pcf	≤ 20 cc.	7.0 - 10.5	0 - 20%
11:00am Fresh	50 sec	65 pcf	1.5mm	14cc	7	0.2%
-10' Trench	26+90 49sec	72 pcf	2mm	10.5 cc	7	6.0%
Bott Trench	26+90 52sec	74 pcf	~3mm	11.0cc	7	15.0%
4:00pm Fresh	48 sec	66 pcf	1.5mm	15cc	7	0.2%
-10' Trench	50 sec	72 pcf	2mm	11cc	7	6.0%
Bottom Trench	53 sec	73 pcf	3mm	11cc	7	12.0%

	Superintendent	Plant Operator	Remarks
Date	9/23/03		
Name	Greg Dolan		
Signature	[signature]		

RWS

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 9/22/03
Shift n° 1

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content
Fresh	Range 40 to 65 seconds	Greater than 65.4 PCF		≤ 20 cc.	7.0 - 9.0	0 - 2%
In Trench	Range 40 to 100 seconds	≥ than 64.0 PCF	≤ than 80 pcf	≤ 20 cc.	7.0 - 10.5	0 - 20%
10:00 Fresh	41 seconds	65 PCF		18cc	7	0.2%
Trench	-10' 46 Seconds	71 PCF		15cc	7	5%
Trench	Bottom 56 Seconds	76 PCF		15.5cc	7	12%
3:00 Fresh	43 Seconds	66 PCF		17cc	7	0.2%
Trench	-10' 50 Seconds	71 PCF		15.cc	7	6%
Trench	Bottom 56 Seconds	75 PCF		15cc	7	11%

	Superintendent	Plant Operator	Remarks
Date			
Name			
Signature			

RWS

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 9-19-03
Shift n° D

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:	

Fresh	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content
	Range 40 to 65 seconds	*Greater than 65.4 PCF*		≤ 20 cc.	*7.0 - 9.0*	*0 - 2%*
In Trench	*Range 40 to 100 seconds*	*≥ than 64.0 PCF*	*≤ than 80 pcf*	≤ 20 cc.	*7.0 - 10.5*	*0 - 20%*
Fresh	52	66		56 16.1	7.0	0.0
Top 9:00am Sta 2+00	56	75		11.9	7.0	10.5%
Bottom " "	56	70	~~[illegible]~~	08 12.8	7.0	8.0%
Fresh 1:30	53	66		57 14.9	7.0	0.255
Sta 25+70 1:30 bottom	50	75		08 14.1	7.0	11%

	Superintendent	Plant Operator	Remarks
Date			
Name			
Signature			

Rw S

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 9-18-03
Shift n° D

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Fresh / In Trench	Viscosity in seconds: Range 40 to 65 seconds / Range 40 to 100 seconds	Density of mud: Greater than 65.4 PCF / ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss: ≤ 20 cc. / ≤ 20 cc.	PH: 7.0 - 9.0 / 7.0 - 10.5	Sand Content: 0 - 2% / 0 - 20%
Trench Top	5 to. 25+60	10:00 a.m. 52	73		11.8	7.0	7.0
Bottom	" "	53	73		12.1	7.0	8.0
	Fresh 1:30 pm	52	67		17.4	7.0	0.0
Trench	Bott. 5 to. 25+00	51	74		12.8	7.0	8.0
	Fresh 3:00 p.m.	50	65		18.2	7.0	0.25 %

	Superintendent	Plant Operator	Remarks
Date	9-18-03		
Name	C.W. Farris	Robert Smith	
Signature			

R.C.

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 9-17-03
Shift n° D

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
10:30 Bottom Sta. 26+00	58	74.0		1:09 11.0	7.0	9.0
Top " "	56	76.0		11.8	7.5	8.0
Fresh	41	66		16.3	7.0	0.25%
3:30 pm Sta. 25+80 bottom	54	74		6:27 11.1	7.0	0.0
Fresh	38	66		19.1	7.5	0.0%

	Superintendent	Plant Operator	Remarks
Date	9-17-03		
Name	G.W. Ferris	Robert Smith	
Signature			

RWS

NO TESTING OBSERVED FOR
9/16/03

- UNION ISSUES THIS DAY. KOEHRING EXCAVATED 1/2 DAY. AND NO TESTS WERE TAKEN.

RWS

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 9-15-03
Shift n° D

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

Fresh In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
10:00 Fresh	43	66		18.5	7.0	0.0%
Trench 26+00 Bottom	57	72		1:05 11.2	7.0	6%
" " -10' TOP	56	73		1:37 12.1	7.0	9%
TRENCH BOT. -10' 25+80	56	74		12.0	7.0	9%
Fresh 4'15	53	66		18.0	7.5	0.25%

	Superintendent	Plant Operator	Remarks
Date	9-15-03		
Name	C.W. Ferris	Robert Smith	
Signature			

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 9-12-03
Shift n° D

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

		Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content
	Fresh	Range 40 to 65 seconds	Greater than 65.4 PCF		≤ 20 cc.	7.0 - 9.0	0 - 2%
	In Trench	Range 40 to 100 seconds	≥ than 64.0 PCF	≤ than 80 pcf	≤ 20 cc.	7.0 - 10.5	0 - 20%
Fresh	1:00 a.m.	57	66		17.0	8.0	0.25%
Trench	Sta. 26+40@	~10' Top 45	72		14.0	7.0	7%
	Sta. 26+40 @	10' above bottom 44	74		12.0	7.5	8%
Fresh	4:00 p.m.	57	66		15.5	7.5	0.25%
Trench	Sta. 26+00	Bot 53	74		12.6	7.5	8%

	Superintendent	Plant Operator	Remarks
Date	9-12-03		
Name	C.W. Farris	Robert Smith	
Signature			

RWS

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° :
Date : 9-11-03
Shift n° 0

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Fresh / In Trench	Viscosity in seconds Range 40 to 65 seconds Range 40 to 100 seconds	Density of mud Greater than 65.4 PCF ≥ than 64.0 PCF	≤ than 80 pcf	Filtrate loss ≤ 20 cc. ≤ 20 cc.	PH 7.0 - 9.0 7.0 - 10.5	Sand Content 0 - 2% 0 - 20%
Fresh	8:00	60					
Fresh	10:15	57					
Trench	Sta. 26+70 bottom 11:00 a.m.	54	74		12	7.0	10%
Trench	Sta. 26+70 Top " "	54	74		12.5	7.0	10%
Fresh	~~St~~ 3:15 p.m.	52	65		19.0	7.0	<0.25%
Trench	Sta. 26+30 bottom	42	71		15.0	7.0	6%
	4:15 p.m.						

	Superintendent	Plant Operator	Remarks
Date	9-11-03		
Name	C.W. Ferris	B. Johnson / R. Smith	
Signature			

R. L

Inquip Associates, Inc.

BENTONITE PLANT REPORT

N° : 1
Date : 9-10-03
Shift n° D

SAUGET, GROUNDWATER MITIGATION CONTROL BARRIER

Bentonite Mud mixing: consumption of bags:

	Viscosity in seconds	Density of mud		Filtrate loss	PH	Sand Content
Fresh	Range 40 to 65 seconds	Greater than 65.4 PCF		≤ 20 cc.	7.0 - 9.0	0 - 2%
In Trench	Range 40 to 100 seconds	≥ than 64.0 PCF	≤ than 80 pcf	≤ 20 cc.	7.0 - 10.5	0 - 20%
Fresh 11:20a.m.	50					
Fresh 11:35	52					
Fresh 1:15p.m.	45					
Trench 1:57p.m.	56	72.0		~~15.0~~	7.0	8.0%
Fresh 3:30p.m.	53	66.0		15.0	7.0	0.25%
Trench 4:41p.m.	53	73.0		12.5	7.0	7.0%

Both Top/Bot
Top/Bot *

	Superintendent	Plant Operator	Remarks
Date	~~C.F.~~ 9-10-03		
Name	C.W. Farris	Robert Smith	
Signature			

* TRENCH WAS SHALLOW AT THIS TIME. TESTS WERE TAKEN AS A COMBINATION TOP AND BOTTOM.

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