

Chemical Analysis Report

SO-DIST-2016-04-26-02

Florida Department of Environmental Protection
Central Laboratory
2600 Blair Stone Road
Tallahassee, FL 32399-2400
DOH Accreditation E31780

Event Description: **Prairie Creek**
Request ID: **RQ-2016-04-04-35**
Customer: **SO-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FLDEP South District Office
2295 Victoria Ave. Suite 364
Fort Myers, FL 33901
Attn: Ben Paswater

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Certified by: Colin Wright, Environmental Administrator

Date Certified: 18-MAY-2016 09:18

A handwritten signature in black ink, appearing to read "Colin Wright", is written on a light-colored rectangular background.

Case Narrative

Unless otherwise noted, all samples included in this report were received in accordance with protocols referenced in Chapter 62-160, Florida Administrative Code (F.A.C.). Results published in this report pertain only to the samples as submitted to, and received by the laboratory. All times in this report are adjusted to the applicable Eastern Time Zone (EST or EDT).

Results for the following analytical groups are included in this report: Metals, Nutrients and Pesticides.

Scientific notation may be used in reporting very large or small values. Values reported using scientific notation will take the form of the following example: 1.3E+03, which is equivalent to 1.3×10^3 or 1300.

Unless otherwise noted, analytical values for soil and sediment samples are reported on a dry weight basis, and analytical values for waste and tissue samples are reported on a wet weight basis.

Results for TNI accredited tests met requirements established by The NELAC Institute. A double asterisk (**) is used to indicate an analyte/matrix/method for which the laboratory is not TNI accredited or where accreditation for that field of testing is not applicable.

Any significant anomalies or deviations from established protocols are documented in Non-Conformance Reports, which, where appropriate, are included within this analytical report. Additional comments related to specific analytical tests may be included as remarks following the analytical results for each sample. Such comments and remarks are for informational purposes only and are not intended to convey judgement about the usability of the reported data.

A quality control report on the performance of the test method for the submitted samples is included. Uncertainty associated with the analytical results contained in this report can be estimated from the reported quality assurance results and from published quality control acceptance limits for each analytical test. Matrix quality control results (matrix spike recoveries and matrix sample precision) pertain only to the matrix sample tested and do not necessarily reflect test method performance for other samples.

Typical matrix quality control (QC) measurements may include matrix spike recovery, matrix spike duplicate recovery, matrix spike precision and matrix sample precision. Not all matrix QC results may be available or reportable; where they are not an explanation is provided. Typical reasons for unavailable QC results include, but are not limited to, a) insufficient matrix sample to perform some or all QC measurements; b) analyte concentration in the sample replicated was too low for a meaningful measurement of precision and c) analyte concentration in the matrix sample spiked was too high (relative to the amount of analyte spiked) for a meaningful measurement of recovery. Where matrix QC results are unavailable, other method performance metrics (e.g., LCS recovery, LCS precision, surrogate recovery) may be used to assess performance of the method. Comments explaining any missing QC measurements are not intended to convey any adverse conclusions about the quality of the reported data.

Precision is reported as relative percent difference unless otherwise noted.

Quality Control codes as defined below may be used in this report to indicate results that are associated with one or more quality control elements which did not fall within established test method criteria. Such results may be qualified as estimates using a J qualifier as required by 62-160 F.A.C. Explanations are included in the report for any results that were reported as estimates for other reasons.

QC Codes used in this report may include:

- LCS – Recovery for the batch Laboratory Control Sample (LCS) was outside existing control limits;
- MS – Recovery for the batch matrix spike (MS) was outside existing control limits;
- CCV – Recovery for a continuing calibration verification (CCV) standard was outside existing control limits;
- SUR – Recovery of a surrogate (SUR) for associated analytes was outside existing control limits;
- RPD – The precision, measured as relative percent difference (RPD), of batch replicate measurements was outside existing control limits;
- RSD – The precision, measured as relative standard deviation (RSD), of batch replicate measurements was outside existing control limits;
- SMP – Sample - used precision derived from replicate analyses of a sample;

The following data qualifiers are used, where applicable, in this report as specified in 62-160 F.A.C.

- A - Value reported is the mean of two or more determinations.
- B - Results based on colony counts outside the acceptable range.
- I - The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
- J - Estimated value and/or the analysis did not meet established quality control criteria.
- K - Actual value is known to be less than value given.
- L - Actual value is known to be greater than value given.
- N - Presumptive evidence of presence of material.
- O - Sampled, but analysis lost or not performed.
- Q - Sample held beyond normal holding time.
- T - Value reported is less than the criterion of detection.
- U - Material was analyzed for but not detected. The reported value is the method detection limit for the sample analyzed.
- V - Analyte was detected in both sample and method blank.
- X - Too few individuals to calculate SCI value.
- Y - The laboratory analysis was from an unpreserved or improperly preserved sample. The data may not be accurate.
- Z - Colonies were too numerous to count (TNTC).

Quality control information from overflow laboratories may not be included in this report. Please refer to the associated report from the overflow laboratory for additional information.

Sample Location: PRAIRIE CR. @ SR 31

Collection Date/Time: 04/25/2016 09:15

Field ID: G3SD-25020435

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1792627	EPA 180.1 Rev. 2.0	Turbidity	5.1		NTU	P303005	
	EPA 300.0 Rev. 2.1	Chloride	68		mg Cl/L	P303320	
		Sulfate	96		mg SO4/L	P303323	
	SM 2120 B	Color (true)	78		PCU	P303012	
	SM 2320 B-97	Total Alkalinity	131		mg CaCO3/L	P303266	
	SM 2540 C-97	TDS	400		mg/L	P303444	
	SM 2540 D-97	TSS	5	I	mg/L	P303311	
	SM 4500 F-C-97	Fluoride	0.35		mg F/L	P303270	
1792628	EPA 350.1 Rev. 2.0	Ammonia-N	0.033		mg N/L	P303683	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.1	J	mg N/L	P303943	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.038		mg N/L	P303529	
	EPA 365.1 Rev. 2.0	Total-P	0.069		mg P/L	P303699	
	SM 5310 B-00	Organic Carbon	17		mg C/L	P304037	
1792629	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.033		mg P/L	P302984	
1792633	EPA 8321B	Glyphosate**	10	UJ	ug/L	P303155	MS, SUR
	USGS O-2060-01	2,4-D	0.0033	I	ug/L	P302924	MS
		Diuron	0.022		ug/L	P302924	
		2,4-DB	0.0020	U	ug/L	P302924	
		Fenuron	0.0080	U	ug/L	P302924	
		2,4,5-T	0.0020	U	ug/L	P302924	
		Acifluorfen	0.0020	U	ug/L	P302924	
		Imidacloprid	1.4		ug/L	P302924	MS
		Bentazon	0.035		ug/L	P302924	
		Linuron	0.0040	U	ug/L	P302924	
		Dichlorprop	0.0020	U	ug/L	P302924	
		Dinoseb	0.020	U	ug/L	P302924	
		MCPA	0.0040	U	ug/L	P302924	
		Acetaminophen**	0.0040	UJ	ug/L	P302924	LCS, RPD
		MCPD	0.0040	U	ug/L	P302924	
		Carbamazepine**	0.0053		ug/L	P302924	
		Silvex	0.0020	U	ug/L	P302924	MS
		Primidone**	0.0080	U	ug/L	P302924	
		Fluridone**	0.012		ug/L	P302924	
1792634	EPA 200.7 Rev. 4.4	Calcium	72.2		mg/L	P303173	
		Iron	630		ug/L	P303173	
		Magnesium	19.4		mg/L	P303173	
		Potassium	5.5		mg/L	P303173	
		Sodium	33.6		mg/L	P303173	
		Zinc	5.0	U	ug/L	P303173	
	EPA 200.8 Rev. 5.4	Arsenic	1.29		ug/L	P303173	
		Cadmium	0.020	U	ug/L	P303173	
		Chromium	0.59		ug/L	P303173	
		Copper	0.82		ug/L	P303173	

Field ID: G3SD-25020435

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1792634	EPA 200.8 Rev. 5.4	Lead	0.15	I	ug/L	P303173	
		Nickel	0.80		ug/L	P303173	
		Silver	0.0050	U	ug/L	P303173	
1792635	DEP SOP: GC-011-5 (based on EPA 608 and 617)	Aldrin	0.0019	U	ug/L	P302942	
		Alpha-BHC	0.0019	U	ug/L	P302942	
		Beta-BHC	0.0019	U	ug/L	P302942	
		Delta-BHC	0.0019	U	ug/L	P302942	
		Gamma-BHC	0.0019	U	ug/L	P302942	
		Carbophenothion	0.0058	UJ	ug/L	P302942	CCV
		Chlordane	0.019	U	ug/L	P302942	
		Chlorothalonil	0.0077	UJ	ug/L	P302942	CCV
		Cypermethrin	0.012	UJ	ug/L	P302942	CCV
		DDD-p,p'	0.0039	U	ug/L	P302942	
		DDE-p,p'	0.0039	U	ug/L	P302942	
		DDT-p,p'	0.0039	U	ug/L	P302942	MS, RPD
		Dicofol	0.023	U	ug/L	P302942	
		Dieldrin	0.0019	U	ug/L	P302942	
		Endosulfan I	0.0019	U	ug/L	P302942	MS, RPD
		Endosulfan II	0.0019	U	ug/L	P302942	
		Endosulfan Sulfate	0.0039	U	ug/L	P302942	
		Endrin	0.0039	U	ug/L	P302942	
		Endrin Aldehyde	0.0039	U	ug/L	P302942	
		Heptachlor	0.0019	U	ug/L	P302942	
		Heptachlor Epoxide	0.0019	U	ug/L	P302942	
		Methoxychlor	0.0097	U	ug/L	P302942	
		Mirex	0.0039	U	ug/L	P302942	
		Permethrin	0.0097	U	ug/L	P302942	
		Trifluralin	0.0077	U	ug/L	P302942	
1792636	EPA 8270D	Ametryn**	0.32	U	ng/L	P303196	
		Atrazine**	5.6		ng/L	P303196	
		Chlorpyrifos Ethyl**	0.097	U	ng/L	P303196	
		Chlorpyrifos Methyl**	0.097	U	ng/L	P303196	
		Disulfoton**	0.32	U	ng/L	P303196	
		Ethion**	0.15	U	ng/L	P303196	
		Ethoprop**	0.097	U	ng/L	P303196	
		Hexazinone**	87		ng/L	P303196	
		Malathion**	1.2	I	ng/L	P303196	
		Metribuzin**	0.30	I	ng/L	P303196	
		Mevinphos**	0.49	U	ng/L	P303196	
		Norflurazon**	290		ng/L	P303196	
		Phorate**	0.24	U	ng/L	P303196	
		Prometryn**	0.19	U	ng/L	P303196	
		Simazine**	18		ng/L	P303196	
		Atrazine Desethyl**	1.5	U	ng/L	P303196	

Field ID: G3SD-25020435

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1792636	EPA 8270D	Prometon**	0.88	U	ng/L	P303196	
		Fipronil**	0.24	U	ng/L	P303196	
		Molinate**	0.29	U	ng/L	P303196	MS
		Pendimethalin**	1.5	U	ng/L	P303196	
		Terbufos**	0.097	U	ng/L	P303196	
		EPTC**	1.2	U	ng/L	P303196	MS
		Terbuthylazine**	0.41	U	ng/L	P303196	
		Bromacil**	88		ng/L	P303196	
		Fipronil Sulfide**	0.15	U	ng/L	P303196	
		Fipronil Sulfone**	0.15	U	ng/L	P303196	
		Alachlor**	0.24	U	ng/L	P303196	
		Azinphos Methyl**	2.2	U	ng/L	P303196	
		Butylate**	0.39	U	ng/L	P303196	
		Demeton**	0.97	U	ng/L	P303196	
		Diazinon**	0.12	U	ng/L	P303196	
		Fenamiphos**	0.24	U	ng/L	P303196	
		Fonofos**	0.19	U	ng/L	P303196	
		Metalaxyl**	82		ng/L	P303196	MS
		Metolachlor**	1.8		ng/L	P303196	
		Acetochlor**	0.24	U	ng/L	P303196	
		Cyanazine**	0.49	UJ	ng/L	P303196	CCV, LCS
		Parathion Ethyl**	0.24	U	ng/L	P303196	
		Parathion Methyl**	0.24	U	ng/L	P303196	

Ref. Method and Comment:

SM 2540 D-97: The precision data is unavailable due to the low analyte concentration in the QC sample.

EPA 351.2 Rev. 2.0: Refer to the narrative for an explanation of QC Codes.

EPA 8321B: Refer to the narrative for an explanation of QC Codes.

USGS O-2060-01: Results confirmed in re-extraction. MS accuracy for bentazon could not be assessed due to high concentration of parameter in the spiked sample.

USGS O-2060-01: Results confirmed in re-extraction. Refer to the narrative for an explanation of QC Codes.

DEP SOP: GC-011-5 (based on EPA 608 and 617): Refer to the narrative for an explanation of QC Codes.

EPA 8270D: MS accuracy for Atrazine, Ametryn and Metribuzin not assessed due to high content of these parameters in the sample spiked. Refer to the narrative for an explanation of QC Codes.

Quality Assurance Report

Method Blank Results

Reference Method: DEP SOP: GC-011-5 (based on EPA 608 and 617)

Batch ID: P302942

Component	Result	Code	Units
Aldrin	0.0020	U	ug/L
Alpha-BHC	0.0020	U	ug/L
Beta-BHC	0.0020	U	ug/L
Carbophenothion	0.0060	U	ug/L
Chlordane	0.020	U	ug/L
Chlorothalonil	0.0080	U	ug/L
Cypermethrin	0.012	U	ug/L
DDD-p,p'	0.0040	U	ug/L
DDE-p,p'	0.0040	U	ug/L
DDT-p,p'	0.0040	U	ug/L

Quality Assurance Report Method Blank Results

Reference Method: DEP SOP: GC-011-5 (based on EPA 608 and 617)

Batch ID: P302942

Component	Result	Code	Units
Delta-BHC	0.0020	U	ug/L
Dicofol	0.024	U	ug/L
Dieldrin	0.0020	U	ug/L
Endosulfan I	0.0020	U	ug/L
Endosulfan II	0.0020	U	ug/L
Endosulfan Sulfate	0.0040	U	ug/L
Endrin	0.0040	U	ug/L
Endrin Aldehyde	0.0040	U	ug/L
Gamma-BHC	0.0020	U	ug/L
Heptachlor	0.0020	U	ug/L
Heptachlor Epoxide	0.0020	U	ug/L
Methoxychlor	0.010	U	ug/L
Mirex	0.0040	U	ug/L
Permethrin	0.010	U	ug/L
Trifluralin	0.0080	U	ug/L

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P303005

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P303173

Component	Result	Code	Units
Calcium	0.075	U	mg/L
Iron	30	U	ug/L
Magnesium	0.040	U	mg/L
Potassium	0.30	U	mg/L
Sodium	0.50	U	mg/L
Zinc	5.0	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P303173

Component	Result	Code	Units
Arsenic	0.050	U	ug/L
Cadmium	0.020	U	ug/L
Chromium	0.050	U	ug/L
Copper	0.10	U	ug/L
Lead	0.050	U	ug/L
Nickel	0.050	U	ug/L
Silver	0.0050	U	ug/L

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P303320

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P303323

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P303683

Component	Result	Code	Units
Ammonia-N	0.002	U	mg N/L

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P303943

Component	Result	Code	Units
Kjeldahl Nitrogen	0.080	U	mg N/L

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P303529

Component	Result	Code	Units
NO2NO3-N	0.004	U	mg N/L

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P303699

Component	Result	Code	Units
Total-P	0.002	U	mg P/L

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P302984

Component	Result	Code	Units
O-Phosphate-P	0.004	U	mg P/L

Reference Method: EPA 8270D
Batch ID: P303196

Component	Result	Code	Units
Acetochlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Ametryn	0.32	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Azinphos Methyl	2.2	U	ng/L
Bromacil	0.50	U	ng/L
Butylate	0.40	U	ng/L
Chlorpyrifos Ethyl	0.10	U	ng/L
Chlorpyrifos Methyl	0.10	U	ng/L
Cyanazine	0.50	U	ng/L
Demeton	1.0	U	ng/L
Diazinon	0.12	U	ng/L
Disulfoton	0.32	U	ng/L
EPTC	1.2	U	ng/L
Ethion	0.15	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270D
Batch ID: P303196

Component	Result	Code	Units
Ethoprop	0.10	U	ng/L
Fenamiphos	0.25	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fonofos	0.20	U	ng/L
Hexazinone	0.50	U	ng/L
Malathion	0.35	U	ng/L
Metalaxyl	0.20	U	ng/L
Metolachlor	0.25	U	ng/L
Metribuzin	0.20	U	ng/L
Mevinphos	0.50	U	ng/L
Molinate	0.30	U	ng/L
Norflurazon	0.50	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Methyl	0.25	U	ng/L
Pendimethalin	1.5	U	ng/L
Phorate	0.25	U	ng/L
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L
Simazine	0.50	U	ng/L
Terbufos	0.10	U	ng/L
Terbuthylazine	0.42	U	ng/L

Reference Method: EPA 8321B
Batch ID: P303155

Component	Result	Code	Units
Glyphosate	10	U	ug/L

Reference Method: SM 2120 B
Batch ID: P303012

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P303266

Component	Result	Code	Units
Total Alkalinity	0.65	U	mg CaCO3/L

Reference Method: SM 2540 C-97
Batch ID: P303444

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P303311

Component	Result	Code	Units
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Quality Assurance Report Method Blank Results

Reference Method: SM 2540 D-97
 Batch ID: P303311

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
 Batch ID: P303270

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
 Batch ID: P304037

Component	Result	Code	Units
Organic Carbon	0.50	U	mg C/L

Reference Method: USGS O-2060-01
 Batch ID: P302924

Component	Result	Code	Units
2,4,5-T	0.0020	U	ug/L
2,4-D	0.0020	U	ug/L
2,4-DB	0.0020	U	ug/L
Acetaminophen	0.0040	U	ug/L
Acifluorfen	0.0020	U	ug/L
Bentazon	0.0020	U	ug/L
Carbamazepine	4.0E-04	U	ug/L
Dichlorprop	0.0020	U	ug/L
Dinoseb	0.020	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.0080	U	ug/L
Fluridone	4.0E-04	U	ug/L
Imidacloprid	0.0040	U	ug/L
Linuron	0.0040	U	ug/L
MCPA	0.0040	U	ug/L
MCPP	0.0040	U	ug/L
Primidone	0.0080	U	ug/L
Silvex	0.0020	U	ug/L

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: DEP SOP: GC-011-5 (based on EPA 608 and 617)
 Batch ID: P302942

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	109	116	P/P	70 - 130
Alpha-BHC	86.8	100	P/P	70 - 130
Beta-BHC	99.8	115	P/P	70 - 130
DDD-p,p'	110	115	P/P	70 - 130
DDE-p,p'	105	110	P/P	70 - 130
DDT-p,p'	128	129	P/P	70 - 130
Delta-BHC	111	116	P/P	70 - 130

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: DEP SOP: GC-011-5 (based on EPA 608 and 617)

Batch ID: P302942

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Dieldrin	102	106	P/P	70 - 130
Endosulfan I	86.7	89.5	P/P	70 - 130
Endosulfan II	106	111	P/P	70 - 130
Endosulfan Sulfate	129	128	P/P	70 - 130
Endrin	125	129	P/P	81 - 147
Endrin Aldehyde	94.7	101	P/P	70 - 130
Gamma-BHC	94.5	104	P/P	70 - 130
Heptachlor	114	128	P/P	70 - 130
Heptachlor Epoxide	111	118	P/P	70 - 130
Methoxychlor	121	130	P/P	86 - 145

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P303173

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	109		P	85 - 115
Iron	105		P	85 - 115
Magnesium	112		P	85 - 115
Potassium	103		P	85 - 115
Sodium	108		P	85 - 115
Zinc	101		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P303173

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Arsenic	100		P	85 - 115
Cadmium	98.3		P	85 - 115
Chromium	100		P	85 - 115
Copper	99.6		P	85 - 115
Lead	100		P	85 - 115
Nickel	102		P	85 - 115
Silver	96.3		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P303320

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	98.9		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P303323

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	95.6		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P303683

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	99.1		P	90 - 110

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P303943

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	99.8		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P303529

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	104		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P303699

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	94.5		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P302984

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	103		P	90 - 110

Reference Method: EPA 8270D
Batch ID: P303196

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	101	89.8	P/P	84 - 119
Alachlor	101	91.1	P/P	84 - 121
Ametryn	108	104	P/P	66 - 127
Atrazine	104	93.5	P/P	72 - 119
Atrazine Desethyl	73.6	58.4	P/P	21 - 111
Azinphos Methyl	144	126	P/P	79 - 185
Bromacil	73.8	62.1	P/P	39 - 122
Butylate	57.9	55.8	P/P	36 - 94.0
Chlorpyrifos Ethyl	92.0	83.1	P/P	54 - 101
Chlorpyrifos Methyl	86.9	77.6	P/P	28 - 114
Cyanazine	214	183	F/P	58 - 201
Demeton	69.0	63.1	P/P	57 - 130
Diazinon	96.7	90.9	P/P	79 - 124
Disulfoton	95.0	78.9	P/P	45 - 140
EPTC	55.5	55.1	P/P	43 - 95.0
Ethion	95.8	87.7	P/P	65 - 125
Ethoprop	82.1	75.9	P/P	69 - 107
Fenamiphos	104	95.8	P/P	78 - 129
Fipronil	86.6	77.4	P/P	62 - 125
Fipronil Sulfide	75.6	69.2	P/P	65 - 119
Fipronil Sulfone	72.1	66.9	P/P	64 - 122
Fonofos	83.0	76.3	P/P	70 - 112
Hexazinone	105	90.1	P/P	44 - 147
Malathion	104	85.9	P/P	72 - 125
Metaxyl	93.0	85.1	P/P	83 - 113
Metolachlor	100	89.8	P/P	85 - 120
Metribuzin	109	91.7	P/P	68 - 129
Mevinphos	73.8	71.1	P/P	35 - 125

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270D

Batch ID: P303196

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Molinate	66.4	64.3	P/P	51 - 100
Norflurazon	90.3	84.4	P/P	66 - 127
Parathion Ethyl	94.5	89.2	P/P	86 - 108
Parathion Methyl	103	98.3	P/P	87 - 125
Pendimethalin	81.0	75.8	P/P	53 - 136
Phorate	83.3	80.4	P/P	52 - 113
Prometon	96.3	87.2	P/P	67 - 125
Prometryn	99.2	85.5	P/P	73 - 114
Simazine	101	94.3	P/P	66 - 123
Terbufos	87.8	78.0	P/P	58 - 116
Terbuthylazine	96.2	84.8	P/P	77 - 113

Reference Method: EPA 8321B

Batch ID: P303155

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Glyphosate	116		P	40 - 140

Reference Method: SM 2320 B-97

Batch ID: P303266

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	100		P	95 - 105

Reference Method: SM 4500 F-C-97

Batch ID: P303270

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.1		P	92 - 103

Reference Method: SM 5310 B-00

Batch ID: P304037

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	98.2		P	85 - 115

Reference Method: USGS O-2060-01

Batch ID: P302924

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4,5-T	102	89.6	P/P	40 - 140
2,4-D	107	108	P/P	40 - 140
2,4-DB	81.6	74.4	P/P	40 - 140
Acetaminophen	43.6	18.1	P/F	40 - 140
Acifluorfen	98.8	105	P/P	40 - 140
Bentazon	86.4	85.2	P/P	40 - 140
Carbamazepine	138	136	P/P	40 - 140
Dichlorprop	106	99.6	P/P	40 - 140
Dinoseb	102	102	P/P	40 - 140
Diuron	112	131	P/P	40 - 140
Fenuron	114	120	P/P	40 - 140
Fluridone	105	108	P/P	40 - 140

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: USGS O-2060-01
Batch ID: P302924

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Imidacloprid	129	125	P/P	40 - 160
Linuron	110	112	P/P	40 - 140
MCPA	98.0	95.2	P/P	40 - 140
MCPP	105	96.4	P/P	40 - 140
Primidone	120	117	P/P	40 - 140
Silvex	116	114	P/P	40 - 140

Quality Assurance Report Matrix Spike Accuracy

Reference Method: DEP SOP: GC-011-5 (based on EPA 608 and 617)
Batch ID: P302942

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1792377	Aldrin	94.8	120	P/P	70 - 130
1792377	Alpha-BHC	99.3	116	P/P	70 - 130
1792377	Beta-BHC	115	110	P/P	70 - 130
1792377	DDD-p,p'	97.4	118	P/P	70 - 130
1792377	DDE-p,p'	91.2	111	P/P	70 - 130
1792377	DDT-p,p'	99.3	184	P/F	70 - 130
1792377	Delta-BHC	96.5	112	P/P	70 - 130
1792377	Dieldrin	90.8	114	P/P	70 - 130
1792377	Endosulfan I	94.4	135	P/F	70 - 130
1792377	Endosulfan II	96.8	117	P/P	70 - 130
1792377	Endosulfan Sulfate	95.7	118	P/P	70 - 130
1792377	Endrin	106	135	P/P	81 - 147
1792377	Endrin Aldehyde	80.2	102	P/P	70 - 130
1792377	Gamma-BHC	93.1	112	P/P	70 - 130
1792377	Heptachlor	110	116	P/P	70 - 130
1792377	Heptachlor Epoxide	99.1	127	P/P	70 - 130
1792377	Methoxychlor	105	124	P/P	86 - 145
1792392	Aldrin	119		P	70 - 130
1792392	Alpha-BHC	112		P	70 - 130
1792392	Beta-BHC	123		P	70 - 130
1792392	DDD-p,p'	106		P	70 - 130
1792392	DDE-p,p'	102		P	70 - 130
1792392	DDT-p,p'	143		F	70 - 130
1792392	Delta-BHC	109		P	70 - 130
1792392	Dieldrin	99.0		P	70 - 130
1792392	Endosulfan I	113		P	70 - 130
1792392	Endosulfan II	108		P	70 - 130
1792392	Endosulfan Sulfate	105		P	70 - 130
1792392	Endrin	122		P	81 - 147
1792392	Endrin Aldehyde	97.2		P	70 - 130
1792392	Gamma-BHC	108		P	70 - 130
1792392	Heptachlor	119		P	70 - 130
1792392	Heptachlor Epoxide	113		P	70 - 130
1792392	Methoxychlor	110		P	86 - 145

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P303173

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1792559	Calcium	106	108	P/P	80 - 120
1792559	Iron	105	106	P/P	80 - 120
1792559	Magnesium	109	110	P/P	80 - 120
1792559	Potassium	101	101	P/P	80 - 120
1792559	Sodium	100	99.5	P/P	80 - 120
1792559	Zinc	101	101	P/P	80 - 120
1792863	Calcium	106		P	80 - 120
1792863	Iron	104		P	80 - 120
1792863	Magnesium	106		P	80 - 120
1792863	Potassium	98.7		P	80 - 120
1792863	Sodium	98.1		P	80 - 120
1792863	Zinc	101		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P303173

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1792559	Arsenic	96.4	99.0	P/P	80 - 120
1792559	Cadmium	98.5	97.8	P/P	80 - 120
1792559	Chromium	119	99.6	P/P	80 - 120
1792559	Copper	96.1	97.1	P/P	80 - 120
1792559	Lead	98.8	99.7	P/P	80 - 120
1792559	Nickel	98.2	99.0	P/P	80 - 120
1792559	Silver	95.5	96.1	P/P	80 - 120
1792863	Arsenic	102		P	80 - 120
1792863	Cadmium	101		P	80 - 120
1792863	Chromium	100		P	80 - 120
1792863	Copper	97.3		P	80 - 120
1792863	Lead	101		P	80 - 120
1792863	Nickel	99.3		P	80 - 120
1792863	Silver	94.7		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P303320

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1792546	Chloride	97.7		P	90 - 110
1792604	Chloride	97.8		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P303323

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1792546	Sulfate	94.2		P	90 - 110
1792604	Sulfate	94.1		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P303683

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1792651	Ammonia-N	98.4	99.4	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P303943

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1792628	Kjeldahl Nitrogen	89.7	102	F/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P303529

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1792549	NO2NO3-N	99.0	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P303699

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1792651	Total-P	98.3	98.7	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P302984

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1792664	O-Phosphate-P	100	101	P/P	90 - 110

Reference Method: EPA 8270D
Batch ID: P303196

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1792870	Acetochlor	90.9	96.5	P/P	84 - 119
1792870	Alachlor	89.5	99.8	P/P	84 - 121
1792870	Atrazine Desethyl	46.5	46.1	P/P	21 - 111
1792870	Azinphos Methyl	131	130	P/P	79 - 185
1792870	Bromacil	87.1	85.2	P/P	39 - 122
1792870	Butylate	42.1	36.8	P/P	36 - 94.0
1792870	Chlorpyrifos Ethyl	78.4	92.8	P/P	54 - 101
1792870	Chlorpyrifos Methyl	78.6	81.6	P/P	28 - 114
1792870	Cyanazine	163	172	P/P	58 - 201
1792870	Demeton	63.0	72.1	P/P	57 - 130
1792870	Diazinon	88.4	90.5	P/P	79 - 124
1792870	Disulfoton	83.7	79.5	P/P	45 - 140
1792870	EPTC	37.5	30.8	F/F	43 - 95.0
1792870	Ethion	100	104	P/P	65 - 125
1792870	Ethoprop	71.4	74.7	P/P	69 - 107
1792870	Fenamiphos	93.7	95.3	P/P	78 - 129
1792870	Fipronil	80.4	81.5	P/P	62 - 125
1792870	Fipronil Sulfide	73.0	73.1	P/P	65 - 119
1792870	Fipronil Sulfone	66.2	65.8	P/P	64 - 122
1792870	Fonofos	75.5	77.2	P/P	70 - 112
1792870	Hexazinone	98.4	101	P/P	44 - 147
1792870	Malathion	95.2	99.5	P/P	72 - 125
1792870	Metalaxyl	82.5	89.8	F/P	83 - 113
1792870	Metolachlor	90.4	98.1	P/P	85 - 120
1792870	Mevinphos	61.7	63.8	P/P	35 - 125
1792870	Molinate	47.1	43.9	F/F	51 - 100
1792870	Norflurazon	74.9	77.2	P/P	66 - 127
1792870	Parathion Ethyl	88.4	89.2	P/P	86 - 108

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270D
 Batch ID: P303196

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1792870	Parathion Methyl	104	99.9	P/P	87 - 125
1792870	Pendimethalin	80.2	81.4	P/P	53 - 136
1792870	Phorate	64.4	72.3	P/P	52 - 113
1792870	Prometon	101	91.6	P/P	67 - 125
1792870	Prometryn	90.5	95.9	P/P	73 - 114
1792870	Simazine	106	104	P/P	66 - 123
1792870	Terbufos	74.3	78.2	P/P	58 - 116
1792870	Terbutylazine	87.5	94.6	P/P	77 - 113

Reference Method: EPA 8321B
 Batch ID: P303155

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1792633	Glyphosate	33.0	35.4	F/F	40 - 140

Reference Method: SM 4500 F-C-97
 Batch ID: P303270

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1792546	Fluoride	97.0	97.0	P/P	91 - 105

Reference Method: SM 5310 B-00
 Batch ID: P304037

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1792519	Organic Carbon	94.8	93.2	P/P	85 - 115

Reference Method: USGS O-2060-01
 Batch ID: P302924

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1792860	2,4,5-T	106	107	P/P	40 - 140
1792860	2,4-D	154	154	F/F	40 - 140
1792860	2,4-DB	72.0	71.2	P/P	40 - 140
1792860	Acetaminophen	70.8	71.2	P/P	40 - 140
1792860	Acifluorfen	93.6	93.6	P/P	40 - 140
1792860	Carbamazepine	101	96.4	P/P	40 - 140
1792860	Dichlorprop	139	136	P/P	40 - 140
1792860	Dinoseb	101	105	P/P	40 - 140
1792860	Diuron	67.2	64.4	P/P	40 - 140
1792860	Fenuron	62.8	61.2	P/P	40 - 140
1792860	Fluridone	85.5	84.3	P/P	40 - 140
1792860	Imidacloprid	232	222	F/F	40 - 160
1792860	Linuron	86.8	81.2	P/P	40 - 140
1792860	MCPA	118	116	P/P	40 - 140
1792860	MCPP	122	124	P/P	40 - 140
1792860	Primidone	106	103	P/P	40 - 140
1792860	Silvex	139	146	P/F	40 - 140

Quality Assurance Report Precision

Quality Assurance Report Precision

Reference Method: DEP SOP: GC-011-5 (based on EPA 608 and 617)
Batch ID: P302942

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1792377	Aldrin	23.5	Spike	P	0 - 30
1792377	Alpha-BHC	15.1	Spike	P	0 - 30
1792377	Beta-BHC	4.59	Spike	P	0 - 30
1792377	DDD-p,p'	19.5	Spike	P	0 - 30
1792377	DDE-p,p'	19.1	Spike	P	0 - 30
1792377	DDT-p,p'	59.8	Spike	F	0 - 30
1792377	Delta-BHC	14.7	Spike	P	0 - 30
1792377	Dieldrin	19.0	Spike	P	0 - 30
1792377	Endosulfan I	35.3	Spike	F	0 - 30
1792377	Endosulfan II	19.1	Spike	P	0 - 30
1792377	Endosulfan Sulfate	20.7	Spike	P	0 - 30
1792377	Endrin	23.9	Spike	P	0 - 30
1792377	Endrin Aldehyde	23.5	Spike	P	0 - 30
1792377	Gamma-BHC	18.2	Spike	P	0 - 30
1792377	Heptachlor	4.75	Spike	P	0 - 30
1792377	Heptachlor Epoxide	24.5	Spike	P	0 - 30
1792377	Methoxychlor	16.6	Spike	P	0 - 30
LFB	Aldrin	6.08	LCS	P	0 - 30
LFB	Alpha-BHC	14.4	LCS	P	0 - 30
LFB	Beta-BHC	14.2	LCS	P	0 - 30
LFB	DDD-p,p'	3.71	LCS	P	0 - 30
LFB	DDE-p,p'	4.50	LCS	P	0 - 30
LFB	DDT-p,p'	0.693	LCS	P	0 - 30
LFB	Delta-BHC	3.97	LCS	P	0 - 30
LFB	Dieldrin	4.12	LCS	P	0 - 30
LFB	Endosulfan I	3.16	LCS	P	0 - 30
LFB	Endosulfan II	4.82	LCS	P	0 - 30
LFB	Endosulfan Sulfate	1.26	LCS	P	0 - 30
LFB	Endrin	3.23	LCS	P	0 - 30
LFB	Endrin Aldehyde	6.57	LCS	P	0 - 30
LFB	Gamma-BHC	9.11	LCS	P	0 - 30
LFB	Heptachlor	12.0	LCS	P	0 - 30
LFB	Heptachlor Epoxide	6.41	LCS	P	0 - 30
LFB	Methoxychlor	7.61	LCS	P	0 - 30

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P303005

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1792546	Turbidity	1.69	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P303173

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1792559	Calcium	1.01	Spike	P	0 - 20
1792559	Iron	0.466	Spike	P	0 - 20
1792559	Magnesium	0.997	Spike	P	0 - 20
1792559	Potassium	0.0699	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P303173

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1792559	Sodium	0.320	Spike	P	0 - 20
1792559	Zinc	0.194	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P303173

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1792559	Arsenic	2.62	Spike	P	0 - 20
1792559	Cadmium	0.737	Spike	P	0 - 20
1792559	Chromium	17.7	Spike	P	0 - 20
1792559	Copper	1.08	Spike	P	0 - 20
1792559	Lead	0.966	Spike	P	0 - 20
1792559	Nickel	0.824	Spike	P	0 - 20
1792559	Silver	0.613	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P303320

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1792546	Chloride	0.459	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P303323

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1792546	Sulfate	0.0185	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P303683

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1792651	Ammonia-N	0.890	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P303943

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1792628	Kjeldahl Nitrogen	6.47	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P303529

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1792549	NO2NO3-N	2.15	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P303699

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1792651	Total-P	0.429	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P302984

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1792664	O-Phosphate-P	1.17	Spike	P	0 - 20

Reference Method: EPA 8270D

Batch ID: P303196

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1792870	Acetochlor	5.94	Spike	P	0 - 30
1792870	Alachlor	10.9	Spike	P	0 - 30
1792870	Ametryn	3.37	Spike	P	0 - 30
1792870	Atrazine	8.90	Spike	P	0 - 30
1792870	Atrazine Desethyl	0.450	Spike	P	0 - 30
1792870	Azinphos Methyl	1.17	Spike	P	0 - 30
1792870	Bromacil	2.28	Spike	P	0 - 30
1792870	Butylate	13.3	Spike	P	0 - 30
1792870	Chlorpyrifos Ethyl	16.8	Spike	P	0 - 30
1792870	Chlorpyrifos Methyl	3.75	Spike	P	0 - 30
1792870	Cyanazine	5.75	Spike	P	0 - 30
1792870	Demeton	13.4	Spike	P	0 - 30
1792870	Diazinon	2.29	Spike	P	0 - 30
1792870	Disulfoton	5.15	Spike	P	0 - 30
1792870	EPTC	19.6	Spike	P	0 - 30
1792870	Ethion	3.40	Spike	P	0 - 30
1792870	Ethoprop	4.57	Spike	P	0 - 30
1792870	Fenamiphos	1.64	Spike	P	0 - 30
1792870	Fipronil	1.43	Spike	P	0 - 30
1792870	Fipronil Sulfide	0.0541	Spike	P	0 - 30
1792870	Fipronil Sulfone	0.664	Spike	P	0 - 30
1792870	Fonofos	2.24	Spike	P	0 - 30
1792870	Hexazinone	2.32	Spike	P	0 - 30
1792870	Malathion	4.51	Spike	P	0 - 30
1792870	Metalaxyl	8.22	Spike	P	0 - 30
1792870	Metolachlor	7.81	Spike	P	0 - 30
1792870	Metribuzin	5.95	Spike	P	0 - 30
1792870	Mevinphos	3.38	Spike	P	0 - 30
1792870	Molinate	6.95	Spike	P	0 - 30
1792870	Norflurazon	2.94	Spike	P	0 - 30
1792870	Parathion Ethyl	0.848	Spike	P	0 - 30
1792870	Parathion Methyl	4.45	Spike	P	0 - 30
1792870	Pendimethalin	1.56	Spike	P	0 - 30
1792870	Phorate	11.5	Spike	P	0 - 30
1792870	Prometon	9.59	Spike	P	0 - 30
1792870	Prometryn	5.32	Spike	P	0 - 30
1792870	Simazine	2.21	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270D
Batch ID: P303196

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1792870	Terbufos	5.14	Spike	P	0 - 30
1792870	Terbuthylazine	7.73	Spike	P	0 - 30
LFB	Acetochlor	12.0	LCS	P	0 - 30
LFB	Alachlor	10.6	LCS	P	0 - 30
LFB	Ametryn	3.40	LCS	P	0 - 30
LFB	Atrazine	10.8	LCS	P	0 - 30
LFB	Atrazine Desethyl	23.1	LCS	P	0 - 30
LFB	Azinphos Methyl	13.5	LCS	P	0 - 30
LFB	Bromacil	17.1	LCS	P	0 - 30
LFB	Butylate	3.76	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	10.2	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	11.3	LCS	P	0 - 30
LFB	Cyanazine	15.5	LCS	P	0 - 30
LFB	Demeton	8.95	LCS	P	0 - 30
LFB	Diazinon	6.14	LCS	P	0 - 30
LFB	Disulfoton	18.5	LCS	P	0 - 30
LFB	EPTC	0.745	LCS	P	0 - 30
LFB	Ethion	8.85	LCS	P	0 - 30
LFB	Ethoprop	7.78	LCS	P	0 - 30
LFB	Fenamiphos	8.16	LCS	P	0 - 30
LFB	Fipronil	11.1	LCS	P	0 - 30
LFB	Fipronil Sulfide	8.96	LCS	P	0 - 30
LFB	Fipronil Sulfone	7.52	LCS	P	0 - 30
LFB	Fonofos	8.34	LCS	P	0 - 30
LFB	Hexazinone	14.9	LCS	P	0 - 30
LFB	Malathion	19.0	LCS	P	0 - 30
LFB	Metalaxyl	8.93	LCS	P	0 - 30
LFB	Metolachlor	11.3	LCS	P	0 - 30
LFB	Metribuzin	17.3	LCS	P	0 - 30
LFB	Mevinphos	3.74	LCS	P	0 - 30
LFB	Molinate	3.12	LCS	P	0 - 30
LFB	Norflurazon	6.79	LCS	P	0 - 30
LFB	Parathion Ethyl	5.79	LCS	P	0 - 30
LFB	Parathion Methyl	4.88	LCS	P	0 - 30
LFB	Pendimethalin	6.60	LCS	P	0 - 30
LFB	Phorate	3.57	LCS	P	0 - 30
LFB	Prometon	9.89	LCS	P	0 - 30
LFB	Prometryn	14.8	LCS	P	0 - 30
LFB	Simazine	6.96	LCS	P	0 - 30
LFB	Terbufos	11.7	LCS	P	0 - 30
LFB	Terbuthylazine	12.6	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P303155

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1792633	Glyphosate	7.02	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: SM 2120 B
Batch ID: P303012

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1792547	Color (true)	1.93	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P303266

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1792546	Total Alkalinity	2.54	Sample	P	0 - 4.8

Reference Method: SM 2540 C-97
Batch ID: P303444

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1792604	TDS	4.93	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P303270

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1792546	Fluoride	0.0	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P304037

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1792519	Organic Carbon	1.45	Spike	P	0 - 20

Reference Method: USGS O-2060-01
Batch ID: P302924

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1792860	2,4,5-T	0.375	Spike	P	0 - 30
1792860	2,4-D	0.519	Spike	P	0 - 30
1792860	2,4-DB	1.12	Spike	P	0 - 30
1792860	Acetaminophen	0.563	Spike	P	0 - 30
1792860	Acifluorfen	0.0	Spike	P	0 - 30
1792860	Bentazon	7.69	Spike	P	0 - 30
1792860	Carbamazepine	4.46	Spike	P	0 - 30
1792860	Dichlorprop	2.04	Spike	P	0 - 30
1792860	Dinoseb	3.88	Spike	P	0 - 30
1792860	Diuron	4.26	Spike	P	0 - 30
1792860	Fenuron	2.58	Spike	P	0 - 30
1792860	Fluridone	1.40	Spike	P	0 - 30
1792860	Imidacloprid	4.59	Spike	P	0 - 30
1792860	Linuron	6.67	Spike	P	0 - 30
1792860	MCPA	1.71	Spike	P	0 - 30
1792860	MCP	1.95	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: USGS O-2060-01
Batch ID: P302924

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1792860	Primidone	3.05	Spike	P	0 - 30
1792860	Silvex	5.06	Spike	P	0 - 30
LFB	2,4,5-T	12.6	LCS	P	0 - 30
LFB	2,4-D	1.11	LCS	P	0 - 30
LFB	2,4-DB	9.23	LCS	P	0 - 30
LFB	Acetaminophen	82.6	LCS	F	0 - 30
LFB	Acifluorfen	6.27	LCS	P	0 - 30
LFB	Bentazon	1.40	LCS	P	0 - 30
LFB	Carbamazepine	1.75	LCS	P	0 - 30
LFB	Dichlorprop	5.85	LCS	P	0 - 30
LFB	Dinoseb	0.0	LCS	P	0 - 30
LFB	Diuron	16.1	LCS	P	0 - 30
LFB	Fenuron	5.48	LCS	P	0 - 30
LFB	Fluridone	3.01	LCS	P	0 - 30
LFB	Imidacloprid	2.83	LCS	P	0 - 30
LFB	Linuron	1.08	LCS	P	0 - 30
LFB	MCPA	2.90	LCS	P	0 - 30
LFB	MCPP	8.73	LCS	P	0 - 30
LFB	Primidone	2.03	LCS	P	0 - 30
LFB	Silvex	1.73	LCS	P	0 - 30

* Sample, spike and/or laboratory control sample precision (LCS) is reported.
Replicate spike precision may be reported when sample results are below quantifiable levels.

Quality Assurance Report Surrogates

Lab Sample ID: 1792633
Field Sample ID: G3SD-25020435

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Glyphosate 13C 15N	37.8	F	50 - 150
USGS O-2060-01	2,4-D-d3	112	P	40 - 150
USGS O-2060-01	Acetaminophen-d4	61.4	P	30 - 150
USGS O-2060-01	Carbamazepine-d10	119	P	40 - 160
USGS O-2060-01	Diuron-d6	69.8	P	40 - 150
USGS O-2060-01	Primidone-d5	94.6	P	40 - 150

Lab Sample ID: 1792635
Field Sample ID: G3SD-25020435

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
DEP SOP: GC-011-5 (based on EPA 608 and 617)	Decachlorobiphenyl	92.0	P	44 - 128

Lab Sample ID: 1792636
Field Sample ID: G3SD-25020435

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Malathion-d7	91.6	P	67 - 131
EPA 8270D	Simazine-d10	102	P	75 - 130

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A69106

Included Lab Sample IDs: 1792629

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.2	101	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A69112

Included Lab Sample IDs: 1792627

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	101	101	P/P	95 - 105

Reference Method: SM 2120 B

Run ID: A69115

Included Lab Sample IDs: 1792627

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	102	100	P/P	90 - 115

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A69144

Included Lab Sample IDs: 1792627

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	102	103	P/P	90 - 110
Sulfate	99.3	96.9	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A69170

Included Lab Sample IDs: 1792633

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Glyphosate	88.4	105	P/P	70 - 130

Reference Method: SM 2320 B-97

Run ID: A69186

Included Lab Sample IDs: 1792627

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	101	97.5	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A69186

Included Lab Sample IDs: 1792627

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	99.0	98.5	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A69210

Included Lab Sample IDs: 1792634

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	101	102	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A69210

Included Lab Sample IDs: 1792634

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Iron	99.6	100	P/P	90 - 110
Magnesium	101	102	P/P	90 - 110
Potassium	100	101	P/P	90 - 110
Sodium	100	101	P/P	90 - 110
Zinc	100	100	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A69214

Included Lab Sample IDs: 1792634

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Arsenic	99.6	99.3	P/P	90 - 110
Cadmium	97.8	97.9	P/P	90 - 110
Chromium	99.7	99.0	P/P	90 - 110
Copper	99.1	98.7	P/P	90 - 110
Lead	96.2	96.3	P/P	90 - 110
Nickel	99.5	99.4	P/P	90 - 110
Silver	95.7	96.7	P/P	90 - 110

Reference Method: USGS O-2060-01

Run ID: A69216

Included Lab Sample IDs: 1792633

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetaminophen	115	125	P/P	60 - 150
Carbamazepine	136	136	P/P	60 - 150
Diuron	93.6	104	P/P	60 - 150
Fenuron	114	116	P/P	60 - 150
Fluridone	94.0	93.6	P/P	60 - 150
Imidacloprid	132	135	P/P	60 - 150
Linuron	115	118	P/P	60 - 150
Primidone	125	111	P/P	60 - 150

Reference Method: USGS O-2060-01

Run ID: A69227

Included Lab Sample IDs: 1792633

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4,5-T	92.4	92.0	P/P	50 - 150
2,4-D	103	102	P/P	50 - 150
2,4-DB	88.4	88.8	P/P	50 - 150
Acifluorfen	109	111	P/P	50 - 150
Bentazon	85.4	85.2	P/P	50 - 150
Dichlorprop	95.8	98.4	P/P	50 - 150
Dinoseb	97.0	95.4	P/P	50 - 150
MCPA	97.2	104	P/P	50 - 150
MCPP	99.2	105	P/P	50 - 150
Silvex	110	114	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A69271

Included Lab Sample IDs: 1792628

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	102	102	P/P	90 - 110

Reference Method: DEP SOP: GC-011-5 (based on EPA 608 and 617)

Run ID: A69288

Included Lab Sample IDs: 1792635

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	94.7	89.9	P/P	85 - 115
Alpha-BHC	93.8	89.5	P/P	85 - 115
Beta-BHC	98.0	93.4	P/P	85 - 115
Carbophenothion	108	124*	P/F	90 - 110
Chlordane	101	106	P/P	85 - 115
Chlorothalonil	111*	118*	F/F	90 - 110
Cypermethrin	108	123*	P/F	85 - 115
DDD-p,p'	96.1	93.9	P/P	85 - 115
DDE-p,p'	95.5	91.4	P/P	85 - 115
DDT-p,p'	94.6	93.3	P/P	85 - 115
Delta-BHC	95.5	91.5	P/P	85 - 115
Dicofol	100	104	P/P	90 - 110
Dieldrin	95.9	90.9	P/P	85 - 115
Endosulfan I	95.4	91.0	P/P	85 - 115
Endosulfan II	95.8	90.9	P/P	85 - 115
Endosulfan Sulfate	95.2	93.4	P/P	85 - 115
Endrin	98.0	92.1	P/P	85 - 115
Endrin Aldehyde	95.4	91.2	P/P	85 - 115
Gamma-BHC	95.1	91.1	P/P	85 - 115
Heptachlor	96.1	97.9	P/P	85 - 115
Heptachlor Epoxide	95.6	91.2	P/P	85 - 115
Methoxychlor	97.2	98.1	P/P	90 - 110
Mirex	105	108	P/P	90 - 110
Permethrin	106	110	P/P	90 - 110
Trifluralin	106	107	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A69311

Included Lab Sample IDs: 1792628

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	101	99.8	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A69346

Included Lab Sample IDs: 1792628

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	100	101	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270D
Run ID: A69390
Included Lab Sample IDs: 1792636

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	98.2		P	80 - 120
Alachlor	98.3		P	80 - 120
Ametryn	95.3		P	80 - 120
Atrazine	95.9		P	80 - 120
Atrazine Desethyl	92.9		P	80 - 120
Azinphos Methyl	94.7		P	80 - 120
Bromacil	99.0		P	80 - 120
Butylate	102		P	80 - 120
Chlorpyrifos Ethyl	98.4		P	80 - 120
Chlorpyrifos Methyl	97.1		P	80 - 120
Cyanazine	120*		F	80 - 120
Demeton	96.3		P	80 - 120
Diazinon	93.4		P	80 - 120
Disulfoton	95.9		P	80 - 120
EPTC	100		P	80 - 120
Ethion	97.8		P	80 - 120
Ethoprop	98.4		P	80 - 120
Fenamiphos	101		P	80 - 120
Fipronil	91.2		P	80 - 120
Fipronil Sulfide	95.3		P	80 - 120
Fipronil Sulfone	95.1		P	80 - 120
Fonofos	94.1		P	80 - 120
Hexazinone	99.1		P	80 - 120
Malathion	94.7		P	80 - 120
Metalaxyl	95.5		P	80 - 120
Metolachlor	98.9		P	80 - 120
Metribuzin	92.9		P	80 - 120
Mevinphos	94.9		P	80 - 120
Molinate	98.9		P	80 - 120
Parathion Ethyl	98.1		P	80 - 120
Parathion Methyl	97.9		P	80 - 120
Pendimethalin	92.5		P	80 - 120
Phorate	97.8		P	80 - 120
Prometon	102		P	80 - 120
Prometryn	97.4		P	80 - 120
Simazine	95.0		P	80 - 120
Terbufos	97.5		P	80 - 120
Terbuthylazine	97.3		P	80 - 120

Reference Method: EPA 8270D
Run ID: A69397
Included Lab Sample IDs: 1792636

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Norflurazon	92.5		P	80 - 120

Reference Method: SM 5310 B-00
Run ID: A69421
Included Lab Sample IDs: 1792628

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
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Quality Assurance Report Calibration Verification

Reference Method: SM 5310 B-00
Run ID: A69421
Included Lab Sample IDs: 1792628

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	95.2	96.2	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A69428
Included Lab Sample IDs: 1792628

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	91.7	92.2	P/P	90 - 110

* Pass/Fail determinations are made for each bracketing calibration verification check.
Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.
Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery			Precision SMP	MS
						LCS		
DEP SOP: GC-011-5 (based on EPA 608 and 617)	Aldrin	109	116	119	94.8	120	6.08	23.5
	Alpha-BHC	86.8	100	112	99.3	116	14.4	15.1
	Beta-BHC	99.8	115	123	115	110	14.2	4.59
	DDD-p,p'	110	115	106	97.4	118	3.71	19.5
	DDE-p,p'	105	110	102	91.2	111	4.50	19.1
	DDT-p,p'	129	128	143	99.3	184	0.693	59.8
	Delta-BHC	111	116	109	96.5	112	3.97	14.7
	Dieldrin	106	102	99.0	90.8	114	4.12	19.0
	Endosulfan I	89.5	86.7	113	94.4	135	3.16	35.3
	Endosulfan II	111	106	108	96.8	117	4.82	19.1
	Endosulfan Sulfate	129	128	105	95.7	118	1.26	20.7
	Endrin	129	125	122	106	135	3.23	23.9
	Endrin Aldehyde	94.7	101	97.2	80.2	102	6.57	23.5
	Gamma-BHC	94.5	104	108	93.1	112	9.11	18.2
	Heptachlor	114	128	119	110	116	12.0	4.75
	Heptachlor Epoxide	111	118	113	99.1	127	6.41	24.5
	Methoxychlor	121	130	110	105	124	7.61	16.6
EPA 180.1 Rev. 2.0	Turbidity						1.69	
EPA 200.7 Rev. 4.4	Calcium	109		106	108	106		1.01
	Iron	105		105	106	104		0.466
	Magnesium	112		109	110	106		0.997
	Potassium	103		101	101	98.7		0.0699
	Sodium	108		100	99.5	98.1		0.320
EPA 200.8 Rev. 5.4	Zinc	101		101	101	101		0.194
	Arsenic	100		96.4	99.0	102		2.62
	Cadmium	98.3		98.5	97.8	101		0.737
	Chromium	100		119	99.6	100		17.7
	Copper	99.6		96.1	97.1	97.3		1.08
	Lead	100		98.8	99.7	101		0.966
	Nickel	102		98.2	99.0	99.3		0.824
	Silver	96.3		95.5	96.1	94.7		0.613

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision	MS
							SMP	
EPA 300.0 Rev. 2.1	Chloride	98.9		97.7	97.8		0.459	
	Sulfate	95.6		94.2	94.1		0.0185	
EPA 350.1 Rev. 2.0	Ammonia-N	99.1		98.4	99.4			0.890
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	99.8		89.7	102			6.47
EPA 353.2 Rev. 2.0	NO2NO3-N	104		99.0	102			2.15
EPA 365.1 Rev. 2.0	Total-P	94.5		98.3	98.7			0.429
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	103		100	101			1.17
EPA 8270D	Acetochlor	101	89.8	90.9	96.5	12.0		5.94
	Alachlor	101	91.1	89.5	99.8	10.6		10.9
	Ametryn	108	104			3.40		3.37
	Atrazine	104	93.5			10.8		8.90
	Atrazine Desethyl	73.6	58.4	46.5	46.1	23.1		0.450
	Azinphos Methyl	144	126	131	130	13.5		1.17
	Bromacil	73.8	62.1	87.1	85.2	17.1		2.28
	Butylate	57.9	55.8	42.1	36.8	3.76		13.3
	Chlorpyrifos Ethyl	92.0	83.1	78.4	92.8	10.2		16.8
	Chlorpyrifos Methyl	86.9	77.6	78.6	81.6	11.3		3.75
	Cyanazine	214	183	163	172	15.5		5.75
	Demeton	69.0	63.1	63.0	72.1	8.95		13.4
	Diazinon	96.7	90.9	88.4	90.5	6.14		2.29
	Disulfoton	95.0	78.9	83.7	79.5	18.5		5.15
	EPTC	55.5	55.1	37.5	30.8	0.745		19.6
	Ethion	95.8	87.7	100	104	8.85		3.40
	Ethoprop	82.1	75.9	71.4	74.7	7.78		4.57
	Fenamiphos	104	95.8	93.7	95.3	8.16		1.64
	Fipronil	86.6	77.4	80.4	81.5	11.1		1.43
	Fipronil Sulfide	75.6	69.2	73.0	73.1	8.96		0.0541
	Fipronil Sulfone	72.1	66.9	66.2	65.8	7.52		0.664
	Fonofos	83.0	76.3	75.5	77.2	8.34		2.24
	Hexazinone	105	90.1	98.4	101	14.9		2.32
	Malathion	104	85.9	95.2	99.5	19.0		4.51
	Metalaxyl	93.0	85.1	82.5	89.8	8.93		8.22
	Metolachlor	100	89.8	90.4	98.1	11.3		7.81
	Metribuzin	109	91.7			17.3		5.95
	Mevinphos	73.8	71.1	61.7	63.8	3.74		3.38
	Molinate	66.4	64.3	47.1	43.9	3.12		6.95
	Norflurazon	90.3	84.4	74.9	77.2	6.79		2.94
	Parathion Ethyl	94.5	89.2	88.4	89.2	5.79		0.848
	Parathion Methyl	103	98.3	104	99.9	4.88		4.45
	Pendimethalin	81.0	75.8	80.2	81.4	6.60		1.56
	Phorate	83.3	80.4	64.4	72.3	3.57		11.5
	Prometon	96.3	87.2	101	91.6	9.89		9.59
	Prometryn	99.2	85.5	90.5	95.9	14.8		5.32
	Simazine	101	94.3	106	104	6.96		2.21
	Terbufos	87.8	78.0	74.3	78.2	11.7		5.14
	Terbuthylazine	96.2	84.8	87.5	94.6	12.6		7.73
EPA 8321B	Glyphosate	116		33.0	35.4			7.02
SM 2120 B	Color (true)						1.93	
SM 2320 B-97	Total Alkalinity	100					2.54	
SM 2540 C-97	TDS						4.93	
SM 4500 F-C-97	Fluoride	98.1		97.0	97.0			0.0
SM 5310 B-00	Organic Carbon	98.2		94.8	93.2			1.45
USGS O-2060-01	2,4,5-T	102	89.6	107	106	12.6		0.375
	2,4-D	107	108	154	154	1.11		0.519

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						LCS	MS
USGS O-2060-01	2,4-DB	81.6	74.4	71.2	72.0	9.23	1.12
	Acetaminophen	43.6	18.1	70.8	71.2	82.6	0.563
	Acifluorfen	98.8	105	93.6	93.6	6.27	0.0
	Bentazon	86.4	85.2			1.40	7.69
	Carbamazepine	138	136	101	96.4	1.75	4.46
	Dichlorprop	106	99.6	136	139	5.85	2.04
	Dinoseb	102	102	105	101	0.0	3.88
	Diuron	112	131	67.2	64.4	16.1	4.26
	Fenuron	114	120	62.8	61.2	5.48	2.58
	Fluridone	108	105	85.5	84.3	3.01	1.40
	Imidacloprid	129	125	232	222	2.83	4.59
	Linuron	110	112	86.8	81.2	1.08	6.67
	MCPA	98.0	95.2	116	118	2.90	1.71
	MCPP	105	96.4	124	122	8.73	1.95
	Primidone	120	117	106	103	2.03	3.05
	Silvex	116	114	146	139	1.73	5.06

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
DEP SOP: GC-011-5 (based on EPA 608 and 617) / E31780	Organochlorine pesticides (low levels) in water matrices by GC/ECD.	1792635
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1792627
EPA 200.7 Rev. 4.4 / E31780	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	1792634
EPA 200.8 Rev. 5.4 / E31780	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	1792634
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1792627
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1792627
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1792628
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1792628
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1792628
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1792628
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1792629
EPA 8270D / E31780	Organonitrogen and phosphorus pesticides (ultra trace level) in water matrices by GC/MS/MS	1792636
EPA 8321B / E31780	Glyphosate in water matrices by HPLC/MS/MS	1792633
SM 2120 B / E31780	True Color measured at 450 nm	1792627
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	1792627
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1792627
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1792627
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1792627
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1792628
USGS O-2060-01 / E31780	Chlorinated (phenoxy acid) herbicides in water matrices by HPLC/MS/MS	1792633
USGS O-2060-01 / E31780	Urea herbicides and other chemicals in water matrices by HPLC/MS/MS	1792633

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
DEP SOP: GC-011-5 (based on EPA 608 and 617)	04/26/2016	04/27/2016	Fe-Val Siddell	05/03/2016	Vandana T. Nagar	1792635
EPA 180.1 Rev. 2.0	04/26/2016			04/26/2016 16:05	Blanca Fach	1792627
EPA 200.7 Rev. 4.4	04/26/2016	04/28/2016	Elliott D. Healy	05/02/2016	Joshua Ayres	1792634
EPA 200.8 Rev. 5.4	04/26/2016	04/28/2016	Elliott D. Healy	05/02/2016	Charles J. Peterson	1792634
EPA 300.0 Rev. 2.1	04/26/2016			04/30/2016	Elisa J Lutz	1792627
EPA 350.1 Rev. 2.0	04/26/2016			05/05/2016	Diana M. Turner	1792628
EPA 351.2 Rev. 2.0	04/26/2016	05/10/2016	Sofia Elnemr	05/11/2016	Christopher Armour	1792628
EPA 353.2 Rev. 2.0	04/26/2016			05/04/2016	Peter D. Kaus	1792628
EPA 365.1 Rev. 2.0	04/26/2016	05/06/2016	Vijayalakshmi Reddy	05/09/2016	Lipi Saha	1792628
EPA 365.1 Rev. 2.0 dissolved	04/26/2016			04/26/2016 15:33	Julia Storbeck	1792629
EPA 8270D	04/26/2016	04/29/2016	John Kaba	05/04/2016	Irina Carbone	1792636
	04/26/2016	04/29/2016	John Kaba	05/09/2016	Irina Carbone	1792636
EPA 8321B	04/26/2016	04/29/2016	Mohammad Ghaffari	04/29/2016	Mohammad Ghaffari	1792633
SM 2120 B	04/26/2016			04/26/2016 16:27	Chrisoulla Rakowski	1792627
SM 2320 B-97	04/26/2016			04/29/2016	Dale L. Simmons	1792627
SM 2540 C-97	04/26/2016			04/27/2016	Yijie Li	1792627
SM 2540 D-97	04/26/2016			04/27/2016	Yijie Li	1792627
SM 4500 F-C-97	04/26/2016			04/29/2016	Dale L. Simmons	1792627
SM 5310 B-00	04/26/2016			05/10/2016	Diana M. Turner	1792628
USGS O-2060-01	04/26/2016	04/28/2016	Hoor Shaik	04/30/2016	Juyoung Kim	1792633
	04/26/2016	04/28/2016	Hoor Shaik	05/01/2016	Juyoung Kim	1792633
	04/26/2016	04/28/2016	Hoor Shaik	05/03/2016	Juyoung Kim	1792633