Laboratory Reports

August 21, 2012

Chris McNellis
City of Tucson - Transportation Department
PO Box 27210
Tucson, AZ 85726-7210

TEL (520) 837-6583
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Work Order No.: 12G0694
Order Name: Storm Water Once per Season

RE: Storm Water Once per Season

Dear Chris McNellis,

Turner Laboratories, Inc. received 2 sample(s) on 07/21/2012 for the analyses presented in the following report.

All results are intended to be considered in their entirety, and Turner Laboratories, Inc. is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Samples will be disposed of 30 days after issue of our report unless special arrangements are made.

The pages that follow may contain sensitive, privileged or confidential information intended solely for the addressee named above. If you receive this message and are not the agent or employee of the addressee, this communication has been sent in error. Please do not disseminate or copy any of the attached and notify the sender immediately by telephone. Please also return the attached sheet(s) to the sender by mail.

Please call if you have any questions.

Respectfully submitted,

Turner Laboratories, Inc.
ADHS License AZ0066

Terri L. Garcia

Terri Garcia
Technical Director

Turner Laboratories, Inc.

Date: 08/21/2012

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12G0694
Date Received: 07/21/2012

Order: Storm Water Once per Season

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date/Time
12G0694-01	Composite	Storm Water	07/20/2012 1748
12G0694-02	Grab	Storm Water	07/20/2012 1748

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12G0694
Date Received: 07/21/2012

Case Narrative

D5	Minimum Reporting Limit (MRL) is adjusted due to sample dilution; analyte was non-detect in the sample.
E4	Concentration estimated. Analyte was detected below laboratory Minimum Reporting Limit (MRL).
E8	Analyte reported to MDL per project specification. Target analyte was not detected in the sample.
H2	Initial analysis was performed within holding time. Reanalysis for the required dilution was past holding time.
H5	This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time.

All soil, sludge, and solid matrix determinations are reported on a wet weight basis unless otherwise noted.

ND	Not Detected at or above the PQL
PQL	Practical Quantitation Limit
DF	Dilution Factor

Turner Laboratories, Inc.

Date: 08/21/2012

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12G0694
Lab Sample ID: 12G0694-01

Client Sample ID: Composite
Collection Date/Time: 07/20/2012 1748
Matrix: Storm Water
Order Name: Storm Water Once per Season

Analyses	Result	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Hardness-Calculation								
Hardness, Calcium/Magnesium (As CaCO3)	48			mg/L	1	07/23/2012 1410	07/24/2012 1535	RAD
Nitrate + Nitrite Sum-Calculation								
Nitrate and Nitrite Sum	1.3	0.10		mg/L	1	07/21/2012 1400	07/21/2012 1957	EW
ICP Total Metals-E200.7								
Arsenic	6.7	40	E4	ug/L	1	07/23/2012 1410	07/24/2012 1535	RAD
Barium	92	50		ug/L	1	07/23/2012 1410	07/24/2012 1535	RAD
Beryllium	ND	2.0		ug/L	1	07/23/2012 1410	07/30/2012 1207	RAD
Cadmium	0.29	2.0	E4	ug/L	1	07/23/2012 1410	07/24/2012 1535	RAD
Calcium	19000	4000		ug/L	1	07/23/2012 1410	07/24/2012 1535	RAD
Chromium	5.1	30	E4	ug/L	1	07/23/2012 1410	07/24/2012 1535	RAD
Copper	50	20		ug/L	1	07/23/2012 1410	07/24/2012 1535	RAD
Magnesium	ND	3000	E4	ug/L	1	07/23/2012 1410	07/24/2012 1535	RAD
Nickel	9.6	50	E4	ug/L	1	07/23/2012 1410	07/24/2012 1535	RAD
Silver	0.87	10	E4	ug/L	1	07/23/2012 1410	07/24/2012 1535	RAD
Zinc	140	40		ug/L	1	07/23/2012 1410	07/24/2012 1535	RAD
ICP/MS Total Metals-E200.8								
Antimony	1.9	2.0	D5, E4	ug/L	4	08/03/2012 0955	08/15/2012 1535	RAD
Lead	8.6	2.0		ug/L	4	08/03/2012 0955	08/15/2012 1535	RAD
Selenium	0.68	25	D5	ug/L	10	08/03/2012 0955	08/16/2012 1306	RAD
Thallium	0.048	2.0	D5, E4	ug/L	4	08/03/2012 0955	08/15/2012 1535	RAD
CVAA Total Mercury-E245.1								
Mercury	ND	1.0	E8	ug/L	1	07/26/2012 1420	07/27/2012 1057	RAD
Anions by Ion Chromatography-E300								
Nitrogen, Nitrate (As N)	1.3	1.0		mg/L	1	07/21/2012 1400	07/21/2012 1957	EW
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	07/21/2012 1400	07/21/2012 1957	EW
Orthophosphate as P-H8048								
Orthophosphate (as P)	0.22	0.10		mg/L	1	07/21/2012 1500	07/21/2012 1514	EW
Total Phosphorous as P-H8190								
Total Phosphorus (as P)	0.38	0.10		mg/L	1	08/16/2012 1440	08/16/2012 1755	AC

Turner Laboratories, Inc.

Date: 08/21/2012

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12G0694
Lab Sample ID: 12G0694-01

Client Sample ID: Composite
Collection Date/Time: 07/20/2012 1748
Matrix: Storm Water
Order Name: Storm Water Once per Season

Analyses	Result	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Chemical Oxygen Demand-Hach 8000								
Chemical Oxygen Demand	250	20		mg/L	1	08/01/2012 1100	08/01/2012 1652	EW
Total Kjeldahl Nitrogen-PAI-DK01								
Nitrogen, Total Kjeldahl	4.9	0.50		mg/L	1	08/13/2012 1530	08/15/2012 1630	EW
Total Dissolved Solids (Residue, Filterable)-SM2540 C								
Total Dissolved Solids (Residue, Filterable)	180	20		mg/L	1	07/24/2012 1110	07/25/2012 1705	AC
Total Suspended Solids (Residue, Non-Filterable)-SM2540 D								
Total Suspended Solids	110	10		mg/L	1	07/24/2012 1002	07/25/2012 1050	AC
Ammonia as N-SM4500-NH3 B,C								
Nitrogen, Ammonia (As N)	1.8	0.50		mg/L	1	08/07/2012 1100	08/07/2012 1750	EW
BOD, 5 day-SM5210 B								
Biochemical Oxygen Demand	74	2.0	H2	mg/L	1	07/26/2012 1630	07/31/2012 1630	AC

Turner Laboratories, Inc.

Date: 08/21/2012

Client:	City of Tucson - Transportation Department	**Client Sample ID:**	Grab
Project:	Storm Water Once per Season	**Collection Date/Time:**	07/20/2012 1748
Work Order:	12G0694	**Matrix:**	Storm Water
Lab Sample ID:	12G0694-02	**Order Name:**	Storm Water Once per Season

Analyses	Result	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
N-Hexane Extractable Material (SGT-HEM)-E 1664A								
Total Petroleum Hydrocarbons	ND	5.00		mg/L	1	08/02/2012 0800	08/02/2012 1545	AC
N-Hexane Extractable Material (HEM)-E1664A								
Oil & Grease	ND	5.00		mg/L	1	08/06/2012 0800	08/06/2012 1645	AC
Cyanide-SM4500-CN BE								
Cyanide	ND	0.10	E8	mg/L	1	08/01/2012 1400	08/02/2012 1300	EW
pH-SM4500-H+ B								
pH (pH Units)	7.0	0.0	H5	-	1	07/21/2012 1445	07/21/2012 1455	EW
Temperature (°C)	24		H5	-	1	07/21/2012 1445	07/21/2012 1455	EW

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12G0694
Date Received: 07/21/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1207263 - E200.7										
Blank (1207263-BLK1)				Prepared: 07/23/2012 Analyzed: 07/24/2012						
Arsenic	ND	40	ug/L							
Barium	ND	50	ug/L							
Beryllium	ND	2.0	ug/L							
Cadmium	0.32	2.0	ug/L							
Calcium	ND	4000	ug/L							
Chromium	ND	30	ug/L							
Copper	ND	20	ug/L							
Magnesium	ND	3000	ug/L							
Nickel	1.2	50	ug/L							
Silver	0.54	10	ug/L							
Zinc	ND	40	ug/L							
LCS (1207263-BS1)				Prepared: 07/23/2012 Analyzed: 07/24/2012						
Arsenic	1980	40	ug/L	2000		99	85-115			
Barium	2000	50	ug/L	2000		100	85-115			
Beryllium	47	2.0	ug/L	50.00		95	85-115			
Cadmium	50	2.0	ug/L	50.00		100	85-115			
Calcium	10000	4000	ug/L	10000		105	85-115			
Chromium	200	30	ug/L	200.0		101	85-115			
Copper	250	20	ug/L	250.0		100	85-115			
Magnesium	10000	3000	ug/L	10000		102	85-115			
Nickel	490	50	ug/L	500.0		98	85-115			
Silver	48	10	ug/L	50.00		97	85-115			
Zinc	500	40	ug/L	500.0		99	85-115			
LCS Dup (1207263-BSD1)				Prepared: 07/23/2012 Analyzed: 07/24/2012						
Arsenic	1960	40	ug/L	2000		98	85-115	1	20	
Barium	2000	50	ug/L	2000		99	85-115	0.7	20	
Beryllium	47	2.0	ug/L	50.00		95	85-115	0.2	20	
Cadmium	50	2.0	ug/L	50.00		99	85-115	0.8	20	
Calcium	11000	4000	ug/L	10000		105	85-115	0.3	20	
Chromium	200	30	ug/L	200.0		100	85-115	1	20	
Copper	250	20	ug/L	250.0		99	85-115	0.8	20	
Magnesium	10000	3000	ug/L	10000		101	85-115	0.9	20	
Nickel	490	50	ug/L	500.0		98	85-115	0.6	20	
Silver	48	10	ug/L	50.00		95	85-115	1	20	
Zinc	490	40	ug/L	500.0		98	85-115	0.9	20	
Matrix Spike (1207263-MS1)		**Source: 12G0406-01**		Prepared: 07/23/2012 Analyzed: 07/24/2012						
Arsenic	1980	40	ug/L	2000	10.9	98	70-130			
Barium	2000	50	ug/L	2000	46	95	70-130			
Cadmium	47	2.0	ug/L	50.00	ND	95	70-130			
Calcium	38000	4000	ug/L	10000	29000	92	70-130			
Chromium	190	30	ug/L	200.0	0.76	97	70-130			
Copper	270	20	ug/L	250.0	12	101	70-130			
Magnesium	14000	3000	ug/L	10000	4500	99	70-130			
Nickel	480	50	ug/L	500.0	1.4	96	70-130			
Silver	45	10	ug/L	50.00	0.61	89	70-130			
Zinc	600	40	ug/L	500.0	120	95	70-130			

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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1207263 - E200.7										
Matrix Spike (1207263-MS2)		**Source: 12G0675-01**		Prepared: 07/23/2012 Analyzed: 07/24/2012						
Arsenic	2760	400	ug/L	2000	356	120	70-130			
Barium	280	500	ug/L	2000	100	9	70-130			
Cadmium	52	20	ug/L	50.00	4.5	95	70-130			
Calcium	320000	40000	ug/L	10000	300000	192	70-130			
Chromium	420	300	ug/L	200.0	210	106	70-130			
Copper	1900	200	ug/L	250.0	1600	110	70-130			
Magnesium	2500000	30000	ug/L	10000	2600000	NR	70-130			
Nickel	4800	500	ug/L	500.0	440	865	70-130			
Silver	ND	100	ug/L	50.00	ND		70-130			
Zinc	3000	400	ug/L	500.0	2500	110	70-130			
Batch 1207296 - E245.1										
Blank (1207296-BLK1)				Prepared: 07/26/2012 Analyzed: 07/27/2012						
Mercury	ND	1.0	ug/L							
LCS (1207296-BS1)				Prepared: 07/26/2012 Analyzed: 07/27/2012						
Mercury	5.2	1.0	ug/L	5.000		104	85-115			
LCS Dup (1207296-BSD1)				Prepared: 07/26/2012 Analyzed: 07/27/2012						
Mercury	5.1	1.0	ug/L	5.000		102	85-115	1	20	
Matrix Spike (1207296-MS1)		**Source: 12G0564-04**		Prepared: 07/26/2012 Analyzed: 07/27/2012						
Mercury	5.1	1.0	ug/L	5.000	0.48	92	85-115			
Matrix Spike (1207296-MS2)		**Source: 12G0531-01**		Prepared: 07/26/2012 Analyzed: 07/27/2012						
Mercury	5.2	1.0	ug/L	5.000	ND	105	85-115			
Matrix Spike Dup (1207296-MSD1)		**Source: 12G0564-04**		Prepared: 07/26/2012 Analyzed: 07/27/2012						
Mercury	4.8	1.0	ug/L	5.000	0.48	87	85-115	5	10	
Matrix Spike Dup (1207296-MSD2)		**Source: 12G0531-01**		Prepared: 07/26/2012 Analyzed: 07/27/2012						
Mercury	5.3	1.0	ug/L	5.000	ND	105	85-115	0.3	10	
Batch 1208027 - E200.8										
Blank (1208027-BLK1)				Prepared: 08/03/2012 Analyzed: 08/14/2012						
Antimony	0.0080	0.50	ug/L							
Lead	0.022	0.50	ug/L							
Selenium	0.20	2.5	ug/L							
Thallium	0.015	0.50	ug/L							
LCS (1208027-BS1)				Prepared: 08/03/2012 Analyzed: 08/14/2012						
Antimony	49	0.50	ug/L	50.00		98	85-115			
Lead	51	0.50	ug/L	50.00		101	85-115			
Selenium	230	2.5	ug/L	250.0		93	85-115			
Thallium	51	0.50	ug/L	50.00		101	85-115			

Client: City of Tucson - Transportation Department
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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1208027 - E200.8										
LCS Dup (1208027-BSD1)				Prepared: 08/03/2012 Analyzed: 08/14/2012						
Antimony	50	0.50	ug/L	50.00		100	85-115	2	20	
Lead	51	0.50	ug/L	50.00		102	85-115	1	20	
Selenium	230	2.5	ug/L	250.0		92	85-115	0.8	20	
Thallium	51	0.50	ug/L	50.00		102	85-115	0.6	20	
Matrix Spike (1208027-MS1)		**Source: 12G0728-01**		Prepared: 08/03/2012 Analyzed: 08/14/2012						
Antimony	44	0.50	ug/L	50.00	0.27	87	70-130			
Lead	49	0.50	ug/L	50.00	3.0	91	70-130			
Selenium	210	2.5	ug/L	250.0	1.7	83	70-130			
Thallium	45	0.50	ug/L	50.00	ND	89	70-130			
Matrix Spike (1208027-MS2)		**Source: 12G0826-01**		Prepared: 08/03/2012 Analyzed: 08/14/2012						
Antimony	49	0.50	ug/L	50.00	5.9	87	70-130			
Lead	47	0.50	ug/L	50.00	1.8	90	70-130			
Selenium	230	2.5	ug/L	250.0	0.45	93	70-130			
Thallium	43	0.50	ug/L	50.00	0.042	87	70-130			

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12G0694
Date Received: 07/21/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1207137 - Hach 8000										
Blank (1207137-BLK1)				Prepared & Analyzed: 08/01/2012						
Chemical Oxygen Demand	ND	20	mg/L							
LCS (1207137-BS1)				Prepared & Analyzed: 08/01/2012						
Chemical Oxygen Demand	510	20	mg/L	500.0		103	70-130			
LCS Dup (1207137-BSD1)				Prepared & Analyzed: 08/01/2012						
Chemical Oxygen Demand	500	20	mg/L	500.0		100	70-130	2	20	
Matrix Spike (1207137-MS1)		**Source: 12G0372-01**		Prepared & Analyzed: 08/01/2012						
Chemical Oxygen Demand	570	20	mg/L	500.0	52	104	70-130			
Matrix Spike Dup (1207137-MSD1)		**Source: 12G0372-01**		Prepared & Analyzed: 08/01/2012						
Chemical Oxygen Demand	580	20	mg/L	500.0	52	105	70-130	1	20	
Batch 1207265 - SM2540 D										
Duplicate (1207265-DUP1)		**Source: 12G0701-01**		Prepared: 07/24/2012 Analyzed: 07/25/2012						
Total Suspended Solids	1900	10	mg/L		1900			0.4	5	
Duplicate (1207265-DUP2)		**Source: 12G0374-01**		Prepared: 07/24/2012 Analyzed: 07/25/2012						
Total Suspended Solids	7.0	10	mg/L		5.0			33	5	
Batch 1207267 - SM2540 C										
Duplicate (1207267-DUP1)		**Source: 12G0701-01**		Prepared: 07/24/2012 Analyzed: 07/25/2012						
Total Dissolved Solids (Residue, Filterable)	120	20	mg/L		110			4	5	
Batch 1207274 - SM4500-H+ B										
Duplicate (1207274-DUP1)		**Source: 12G0693-02**		Prepared & Analyzed: 07/21/2012						
pH (pH Units)	7.0	0.0	-		7.0			1	200	
Temperature (°C)	24		-		25			2	200	
Batch 1207276 - H8048										
Blank (1207276-BLK1)				Prepared & Analyzed: 07/21/2012						
Orthophosphate (as P)	ND	0.10	mg/L							
LCS (1207276-BS1)				Prepared & Analyzed: 07/21/2012						
Orthophosphate (as P)	0.51	0.10	mg/L	0.5000		102	90-110			
LCS Dup (1207276-BSD1)				Prepared & Analyzed: 07/21/2012						
Orthophosphate (as P)	0.51	0.10	mg/L	0.5000		102	90-110	0	10	
Matrix Spike (1207276-MS1)		**Source: 12G0693-01**		Prepared & Analyzed: 07/21/2012						
Orthophosphate (as P)	0.67	0.10	mg/L	0.5000	0.13	108	70-130			
Matrix Spike Dup (1207276-MSD1)		**Source: 12G0693-01**		Prepared & Analyzed: 07/21/2012						
Orthophosphate (as P)	0.65	0.10	mg/L	0.5000	0.13	104	70-130	3	15	
Batch 1207295 - PAI-DK01										
Blank (1207295-BLK1)				Prepared: 08/13/2012 Analyzed: 08/15/2012						
Nitrogen, Total Kjeldahl	ND	0.50	mg/L							

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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1207295 - PAI-DK01										
LCS (1207295-BS1)				Prepared: 08/13/2012 Analyzed: 08/15/2012						
Nitrogen, Total Kjeldahl	5.0	0.50	mg/L	5.000		100	80-120			
LCS Dup (1207295-BSD1)				Prepared: 08/13/2012 Analyzed: 08/15/2012						
Nitrogen, Total Kjeldahl	4.9	0.50	mg/L	5.000		99	80-120	0.9	20	
Matrix Spike (1207295-MS1)		**Source: 12G0374-01**		Prepared: 08/13/2012 Analyzed: 08/15/2012						
Nitrogen, Total Kjeldahl	36	2.5	mg/L	25.00	13	89	80-120			
Matrix Spike (1207295-MS2)		**Source: 12G0564-05**		Prepared: 08/13/2012 Analyzed: 08/15/2012						
Nitrogen, Total Kjeldahl	100	10	mg/L	100.0	6.7	97	80-120			
Matrix Spike Dup (1207295-MSD1)		**Source: 12G0374-01**		Prepared: 08/13/2012 Analyzed: 08/15/2012						
Nitrogen, Total Kjeldahl	36	2.5	mg/L	25.00	13	91	80-120	0.9	20	
Matrix Spike Dup (1207295-MSD2)		**Source: 12G0564-05**		Prepared: 08/13/2012 Analyzed: 08/15/2012						
Nitrogen, Total Kjeldahl	100	10	mg/L	100.0	6.7	97	80-120	0.4	20	
Batch 1207299 - SM4500-CN BE										
Blank (1207299-BLK1)				Prepared: 08/01/2012 Analyzed: 08/02/2012						
Cyanide	ND	0.10	mg/L							
LCS (1207299-BS1)				Prepared: 08/01/2012 Analyzed: 08/02/2012						
Cyanide	1.9	0.10	mg/L	2.000		96	90-110			
LCS Dup (1207299-BSD1)				Prepared: 08/01/2012 Analyzed: 08/02/2012						
Cyanide	1.9	0.10	mg/L	2.000		97	90-110	1	20	
Matrix Spike (1207299-MS1)		**Source: 12G0773-02**		Prepared: 08/01/2012 Analyzed: 08/02/2012						
Cyanide	2.0	0.10	mg/L	2.000	ND	100	70-130			
Matrix Spike Dup (1207299-MSD1)		**Source: 12G0773-02**		Prepared: 08/01/2012 Analyzed: 08/02/2012						
Cyanide	1.9	0.10	mg/L	2.000	ND	93	70-130	7	20	
Batch 1207329 - SM5210 B										
Blank (1207329-BLK1)				Prepared: 07/26/2012 Analyzed: 07/31/2012						
Biochemical Oxygen Demand	ND	2.0	mg/L							
LCS (1207329-BS1)				Prepared: 07/26/2012 Analyzed: 07/31/2012						
Biochemical Oxygen Demand	200		mg/L	198.0		104	85-115			
Batch 1208049 - E 1664A										
Blank (1208049-BLK1)				Prepared & Analyzed: 08/02/2012						
Total Petroleum Hydrocarbons	ND	5.00	mg/L							
LCS (1208049-BS1)				Prepared & Analyzed: 08/02/2012						
Total Petroleum Hydrocarbons	17.0	5.00	mg/L	20.00		85	64-132			
LCS Dup (1208049-BSD1)				Prepared & Analyzed: 08/02/2012						
Total Petroleum Hydrocarbons	17.3	5.00	mg/L	20.00		86	64-132	2	34	

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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1208049 - E 1664A										
Matrix Spike (1208049-MS1)		**Source: 12G0354-02**		Prepared & Analyzed: 08/02/2012						
Total Petroleum Hydrocarbons	19.9	5.00	mg/L	20.00	ND	100	64-132			
Batch 1208054 - SM4500-NH3 B,C										
Blank (1208054-BLK1)				Prepared & Analyzed: 08/07/2012						
Nitrogen, Ammonia (As N)	ND	0.50	mg/L							
LCS (1208054-BS1)				Prepared & Analyzed: 08/07/2012						
Nitrogen, Ammonia (As N)	5.5	0.50	mg/L	5.000		109	90-110			
LCS Dup (1208054-BSD1)				Prepared & Analyzed: 08/07/2012						
Nitrogen, Ammonia (As N)	5.4	0.50	mg/L	5.000		108	90-110	0.9	10	
Matrix Spike (1208054-MS1)		**Source: 12G0531-01**		Prepared & Analyzed: 08/07/2012						
Nitrogen, Ammonia (As N)	5.6	0.50	mg/L	5.000	0.38	105	70-130			
Matrix Spike Dup (1208054-MSD1)		**Source: 12G0531-01**		Prepared & Analyzed: 08/07/2012						
Nitrogen, Ammonia (As N)	5.6	0.50	mg/L	5.000	0.38	104	70-130	1	20	
Batch 1208070 - E1664A										
Blank (1208070-BLK1)				Prepared & Analyzed: 08/06/2012						
Oil & Grease	ND	5.00	mg/L							
LCS (1208070-BS1)				Prepared & Analyzed: 08/06/2012						
Oil & Grease	36.4	5.00	mg/L	40.00		91	78-114			
LCS Dup (1208070-BSD1)				Prepared & Analyzed: 08/06/2012						
Oil & Grease	36.2	5.00	mg/L	40.00		90	78-114	0.6	18	
Matrix Spike (1208070-MS1)		**Source: 12G0806-02**		Prepared & Analyzed: 08/06/2012						
Oil & Grease	59.1	5.00	mg/L	40.00	19.9	98	78-114			
Batch 1208205 - H8190										
Blank (1208205-BLK1)				Prepared & Analyzed: 08/16/2012						
Total Phosphorus (as P)	ND	0.10	mg/L							
LCS (1208205-BS1)				Prepared & Analyzed: 08/16/2012						
Total Phosphorus (as P)	0.48	0.10	mg/L	0.5000		96	90-110			
LCS Dup (1208205-BSD1)				Prepared & Analyzed: 08/16/2012						
Total Phosphorus (as P)	0.51	0.10	mg/L	0.5000		102	90-110	6	10	
Matrix Spike (1208205-MS1)		**Source: 12G0693-01**		Prepared & Analyzed: 08/16/2012						
Total Phosphorus (as P)	0.78	0.10	mg/L	0.5000	0.25	106	70-130			
Matrix Spike Dup (1208205-MSD1)		**Source: 12G0693-01**		Prepared & Analyzed: 08/16/2012						
Total Phosphorus (as P)	0.80	0.10	mg/L	0.5000	0.25	110	70-130	3	15	

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12G0694
Date Received: 07/21/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1207227 - E300										
Blank (1207227-BLK1)				Prepared & Analyzed: 07/21/2012						
Nitrogen, Nitrate (As N)	ND	1.0	mg/L							
Nitrogen, Nitrite (As N)	ND	0.10	mg/L							
LCS (1207227-BS1)				Prepared & Analyzed: 07/21/2012						
Nitrogen, Nitrate (As N)	4.7	1.0	mg/L	5.000		95	90-110			
Nitrogen, Nitrite (As N)	2.4	0.10	mg/L	2.500		95	90-110			
LCS Dup (1207227-BSD1)				Prepared & Analyzed: 07/21/2012						
Nitrogen, Nitrate (As N)	4.7	1.0	mg/L	5.000		95	90-110	0.2	10	
Nitrogen, Nitrite (As N)	2.4	0.10	mg/L	2.500		94	90-110	1	10	
Matrix Spike (1207227-MS1)	**Source: 12G0694-01**			Prepared & Analyzed: 07/21/2012						
Nitrogen, Nitrate (As N)	5.1		mg/L	5.000	0.25	97	80-120			
Nitrogen, Nitrite (As N)	2.4		mg/L	2.500	0.012	98	80-120			
Matrix Spike Dup (1207227-MSD1)	**Source: 12G0694-01**			Prepared & Analyzed: 07/21/2012						
Nitrogen, Nitrate (As N)	5.1		mg/L	5.000	0.25	97	80-120	0.02	10	
Nitrogen, Nitrite (As N)	2.4		mg/L	2.500	0.012	96	80-120	1	10	

TURNER LABORATORIES INC.
2445 N. Coyote Drive, Suite 104
Tucson, Arizona 85745
(520) 882-5880
Fax: (520) 882-9788
www.turnerlabs.com

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

TURNER WORK ORDER # 12609 1094 DATE _____ PAGE _____ OF _____

PROJECT NAME Storm Water # 120720SF
CONTACT NAME Chris McNellis
COMPANY NAME City of Tucson - Transportation Dept
ADDRESS P.O. Box 27210
CITY Tucson STATE AZ ZIP CODE 85726
PHONE (520) 837-6583 FAX (520) 791-4373
SAMPLER'S SIGNATURE Eric Ross

CIRCLE ANALYSIS REQUESTED AND/OR CHECK THE APPROPRIATE BOX

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX*	NUMBER OF CONTAINERS	Total Metals *	Chemical Oxygen Demand	Hardness Ca & Mg	BOD	TDS	TSS	Orthophosphate - Hach	Nitrate + Nitrite	Total Phosphorus	TKN	NH3	TPH 1664	O & G	pH	CN	MPN				
Comp	7-20-12	5:48PM		Storm Water	20	X	X	X	X	X	X	X	X	X	X	X									
Grab	7-20-12	5:48PM		Storm Water	58												X	X	X	X	X				
					58 7-21-12																7-21-12				

1. RELINQUISHED BY:	2. RECEIVED BY:	TURNAROUND REQUIREMENTS:	REPORT REQUIREMENTS:	INVOICE INFORMATION:	SAMPLE RECEIPT:
Eric Ross Signature ERIC ROSS Printed Name City of Tucson Trans. Dept Firm 7-21-2012 10:24 AM Date/Time	Signature Printed Name Firm Date/Time	____ Standard (approx.10 days)* ____ Next day ____ 2 Day ____ 5 Day* ____ Email Preliminary Results To: * Working Days	____ I. Routine Report ____ II. Report (includes DUP,MS,MSD, as required, may be charged as samples) ____ III. Date Validation Report (includes All Raw Data) Add 10% to invoice	Account ____ Y ____ N P.O. # ____ Bill to: ____	Total Containers 25 Temperature D ☑ Wet Ice ☐ Blue Ice

3. RELINQUISHED BY:	4. RECEIVED BY:	*LEGEND
Signature Printed Name Firm Date/Time	Signature Printed Name TURNER LABORATORIES, INC. Firm 7/21/12 1024 Date/Time	DW = DRINKING WATER GW = GROUNDWATER SD = SOLID SG = SLUDGE SL = SOIL ST = STORMWATER WW = WASTEWATER

SPECIAL INSTRUCTIONS/COMMENTS:

Compliance Analysis:	☐ Yes	☐ No	Custody Seals	☐	Preservation Confirmation	☒
ADEQ Forms:	☐ Yes	☐ No	Container Intact	☒	Appropriate Head Space	NA ☐
Mail ADEQ Forms:	☐ Yes	☐ No	COC/Labels Agree	☑	Received Within Hold Time	☑

*Ni, Hg, Ag, Cr, Cd, Be, Ba, As, Cu, Sb, Zn, Se, Pb, Tl, Ca, Mg
Composite poured at lab per C.O.T. Specifications

July 24, 2012

Beverley Hester
City of Tucson - Transportation Department
PO Box 27210
Tucson, AZ 85726-7210

TEL 520-837-4935
FAX (520) 791-4373

Work Order No.: 12G0691
Order Name: 120720SF Wilson

RE: Storm Water Once per Season

Dear Beverley Hester,

Turner Laboratories, Inc. received 1 sample(s) on 07/20/2012 for the analyses presented in the following report.

All results are intended to be considered in their entirety, and Turner Laboratories, Inc. is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Samples will be disposed of 30 days after issue of our report unless special arrangements are made.

The pages that follow may contain sensitive, privileged or confidential information intended solely for the addressee named above. If you receive this message and are not the agent or employee of the addressee, this communication has been sent in error. Please do not disseminate or copy any of the attached and notify the sender immediately by telephone. Please also return the attached sheet(s) to the sender by mail.

Please call if you have any questions.

Respectfully submitted,

Turner Laboratories, Inc.
ADHS License AZ0066

Dawn Weyer
Project Manager

Turner Laboratories, Inc.

Date: 07/24/2012

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12G0691
Date Received: 07/20/2012

Order: 120720SF Wilson

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date/Time
12G0691-01	Grab	Storm Water	07/20/2012 1748

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12G0691
Date Received: 07/20/2012

Case Narrative

E Value is above quantitation range.

All soil, sludge, and solid matrix determinations are reported on a wet weight basis unless otherwise noted.

ND Not Detected at or above the PQL

PQL Practical Quantitation Limit

DF Dilution Factor

Turner Laboratories, Inc.

Date: 07/24/2012

Client:	City of Tucson - Transportation Department	**Client Sample ID:**	Grab
Project:	Storm Water Once per Season	**Collection Date/Time:**	07/20/2012 1748
Work Order:	12G0691	**Matrix:**	Storm Water
Lab Sample ID:	12G0691-01	**Order Name:**	120720SF Wilson

Analyses	Result	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Total Coliform & E. Coli, MPN-SM9223B								
E.Coli	2000	1.0		MPN/100mL	1	07/20/2012 1955	07/21/2012 2025	AC
Total Coliform	2400	1.0	E	MPN/100mL	1	07/20/2012 1955	07/21/2012 2025	AC

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CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

TURNER WORK ORDER # 1260691 DATE _____ PAGE _____ OF _____

PROJECT NAME Storm Water # 120720SF
WILSON
CONTACT NAME Chris McNellis
COMPANY NAME City of Tucson - Transportation Dept
ADDRESS P.O. Box 27210
CITY Tucson STATE AZ ZIP CODE 85726
PHONE (520) 837-6583 FAX (520) 791-4373
SAMPLER'S SIGNATURE Eric Ross

CIRCLE ANALYSIS REQUESTED AND/OR CHECK THE APPROPRIATE BOX

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX*	NUMBER OF CONTAINERS	MPN
Grab	7-20-12	5:48PM		Storm Water	1	X
1260691	7-20-12		01			

1. RELINQUISHED BY: Eric Ross
Signature: ERIC ROSS
Printed Name: City of Tucson Trans. Dept
Firm: 7-20-12 7:23PM
Date/Time

2. RECEIVED BY: BEV HOSTEN
Signature: BEV HOSTEN
Printed Name: COT
Firm: 7/20/12 7:23PM
Date/Time

TURNAROUND REQUIREMENTS:
____ Standard (approx.10 days)*
____ Next day ____ 2 Day ____ 5 Day*
____ Email Preliminary Results To:
* Working Days

REPORT REQUIREMENTS:
____ I. Routine Report
____ II. Report (includes DUP,MS,MSD, as required, may be charged as samples)
____ III. Data Validation Report (Includes All Raw Data)
Add 10% to invoice

INVOICE INFORMATION:
Account ____ Y ____ N
P.O. # _____
Bill to: _____

SAMPLE RECEIPT:
Total Containers 1
Temperature 14.0
☒ Wet Ice ☐ Blue Ice

3. RELINQUISHED BY: BEV HOSTEN
Signature
Printed Name: COT
Firm: 7/20/12 7:38pm
Date/Time

4. RECEIVED BY: Andrew Calcaterra
Signature
Printed Name: TURNER LABORATORIES, INC.
Firm
Date/Time: 7-20-12 / 1939

*LEGEND
DW = DRINKING WATER
GW = GROUNDWATER
SD = SOLID
SG = SLUDGE
SL = SOIL
ST = STORMWATER
WW = WASTEWATER

SPECIAL INSTRUCTIONS/COMMENTS:

Compliance Analysis:	☐ Yes	☐ No	Custody Seals	☐	Preservation Confirmation	☒
ADEQ Forms:	☐ Yes	☐ No	Container Intact	☒	Appropriate Head Space	☒
Mail ADEQ Forms:	☐ Yes	☐ No	COC/Labels Agree	☒	Received Within Hold Time	☒

*Ni, Hg, Ag, Cr, Cd, Be, Ba, As, Cu, Sb, Zn, Se, Pb, Tl, Ca, Mg
Composite poured at lab per C.O.T. Specifications

August 16, 2012

Chris McNellis
City of Tucson - Transportation Department
PO Box 27210
Tucson, AZ 85726-7210

TEL (520) 837-6583
FAX (520) 791-4238

Work Order No.: 12G0531
Order Name: 120715MEF

RE: Storm Water Once per Season

Dear Chris McNellis,

Turner Laboratories, Inc. received 2 sample(s) on 07/16/2012 for the analyses presented in the following report.

All results are intended to be considered in their entirety, and Turner Laboratories, Inc. is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Samples will be disposed of 30 days after issue of our report unless special arrangements are made.

The pages that follow may contain sensitive, privileged or confidential information intended solely for the addressee named above. If you receive this message and are not the agent or employee of the addressee, this communication has been sent in error. Please do not disseminate or copy any of the attached and notify the sender immediately by telephone. Please also return the attached sheet(s) to the sender by mail.

Please call if you have any questions.

Respectfully submitted,

Turner Laboratories, Inc.
ADHS License AZ0066

Terri L. Garcia

Terri Garcia
Technical Director

Turner Laboratories, Inc.

Date: 08/16/2012

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12G0531
Date Received: 07/16/2012

Order: 120715MEF

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date/Time
12G0531-01	Composite	Storm Water	07/15/2012 1721
12G0531-02	Grab	Storm Water	07/15/2012 1728

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12G0531
Date Received: 07/16/2012

Case Narrative

E4	Concentration estimated. Analyte was detected below laboratory Minimum Reporting Limit (MRL).
E8	Analyte reported to MDL per project specification. Target analyte was not detected in the sample.
H5	This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time.
K5	The dilution water D.O depletion was >0.2 mg/L.

All soil, sludge, and solid matrix determinations are reported on a wet weight basis unless otherwise noted.

ND	Not Detected at or above the PQL
PQL	Practical Quantitation Limit
DF	Dilution Factor

Turner Laboratories, Inc.

Date: 08/16/2012

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12G0531
Lab Sample ID: 12G0531-01

Client Sample ID: Composite
Collection Date/Time: 07/15/2012 1721
Matrix: Storm Water
Order Name: 120715MEF

Analyses	Result	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Hardness-Calculation								
Hardness, Calcium/Magnesium (As CaCO3)	27			mg/L	1	07/18/2012 1440	07/19/2012 1900	RAD
Nitrate + Nitrite Sum-Calculation								
Nitrate and Nitrite Sum	ND	0.10		mg/L	1	07/17/2012 1240	07/17/2012 1336	EW
ICP Total Metals-E200.7								
Arsenic	ND	40	E8	ug/L	1	07/18/2012 1440	07/19/2012 1901	RAD
Barium	49	50	E4	ug/L	1	07/18/2012 1440	07/19/2012 1901	RAD
Beryllium	ND	2.0	E8	ug/L	1	07/18/2012 1440	07/19/2012 1901	RAD
Cadmium	0.40	2.0	E4	ug/L	1	07/18/2012 1440	07/19/2012 1901	RAD
Calcium	11000	4000		ug/L	1	07/18/2012 1440	07/19/2012 1900	RAD
Chromium	1.8	30	E4	ug/L	1	07/18/2012 1440	07/19/2012 1901	RAD
Copper	19	20	E4	ug/L	1	07/18/2012 1440	07/19/2012 1901	RAD
Magnesium	ND	3000	E4	ug/L	1	07/18/2012 1440	07/19/2012 1900	RAD
Nickel	3.0	50	E4	ug/L	1	07/18/2012 1440	07/19/2012 1901	RAD
Silver	0.99	10	E4	ug/L	1	07/18/2012 1440	07/19/2012 1901	RAD
Zinc	78	40		ug/L	1	07/18/2012 1440	07/19/2012 1901	RAD
ICP/MS Total Metals-E200.8								
Antimony	0.34	0.50	E4	ug/L	1	08/03/2012 0955	08/14/2012 1200	RAD
Lead	2.7	0.50		ug/L	1	08/03/2012 0955	08/14/2012 1200	RAD
Selenium	0.26	2.5	E4	ug/L	1	08/03/2012 0955	08/14/2012 1200	RAD
Thallium	0.022	0.50	E4	ug/L	1	08/03/2012 0955	08/14/2012 1200	RAD
CVAA Total Mercury-E245.1								
Mercury	ND	1.0	E8	ug/L	1	07/26/2012 1420	07/27/2012 1018	RAD
Anions by Ion Chromatography-E300								
Nitrogen, Nitrate (As N)	ND	1.0		mg/L	1	07/16/2012 1500	07/16/2012 1826	EW
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	07/17/2012 1240	07/17/2012 1336	EW
Orthophosphate as P-H8048								
Orthophosphate (as P)	0.19	0.10		mg/L	1	07/16/2012 1545	07/16/2012 1625	EW
Total Phosphorous as P-H8190								
Total Phosphorus (as P)	0.36	0.10		mg/L	1	07/20/2012 0830	07/20/2012 1545	EW
Chemical Oxygen Demand-Hach 8000								
Chemical Oxygen Demand	89	20		mg/L	1	07/24/2012 1150	07/24/2012 1725	EW

Turner Laboratories, Inc.

Date: 08/16/2012

Client:	City of Tucson - Transportation Department	**Client Sample ID:**	Composite
Project:	Storm Water Once per Season	**Collection Date/Time:**	07/15/2012 1721
Work Order:	12G0531	**Matrix:**	Storm Water
Lab Sample ID:	12G0531-01	**Order Name:**	120715MEF

Analyses	Result	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Total Kjeldahl Nitrogen-PAI-DK01								
Nitrogen, Total Kjeldahl	2.2	0.50		mg/L	1	08/08/2012 1600	08/10/2012 1620	EW
Total Dissolved Solids (Residue, Filterable)-SM2540 C								
Total Dissolved Solids (Residue, Filterable)	79	20		mg/L	1	07/20/2012 1525	07/23/2012 1155	AC
Total Suspended Solids (Residue, Non-Filterable)-SM2540 D								
Total Suspended Solids	70	10		mg/L	1	07/17/2012 1018	07/18/2012 1300	AC
Ammonia as N-SM4500-NH3 B,C								
Nitrogen, Ammonia (As N)	ND	0.50		mg/L	1	08/07/2012 1100	08/07/2012 1750	EW
BOD, 5 day-SM5210 B								
Biochemical Oxygen Demand	16	2.0	K5	mg/L	1	07/17/2012 1535	07/22/2012 1535	AC

Turner Laboratories, Inc.

Date: 08/16/2012

Client:	City of Tucson - Transportation Department	**Client Sample ID:**	Grab
Project:	Storm Water Once per Season	**Collection Date/Time:**	07/15/2012 1728
Work Order:	12G0531	**Matrix:**	Storm Water
Lab Sample ID:	12G0531-02	**Order Name:**	120715MEF

Analyses	Result	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
N-Hexane Extractable Material (SGT-HEM)-E 1664A								
Total Petroleum Hydrocarbons	ND	5.00		mg/L	1	08/02/2012 0800	08/02/2012 1545	AC
N-Hexane Extractable Material (HEM)-E1664A								
Oil & Grease	ND	5.00		mg/L	1	07/27/2012 0800	07/27/2012 1505	AC
Cyanide-SM4500-CN BE								
Cyanide	ND	0.10	E8	mg/L	1	07/24/2012 1500	07/25/2012 1725	EW
pH-SM4500-H+ B								
pH (pH Units)	7.3	0.0	H5	-	1	07/16/2012 1230	07/16/2012 1311	AC
Temperature (°C)	19		H5	-	1	07/16/2012 1230	07/16/2012 1311	AC

Turner Laboratories, Inc.

Date: 08/16/2012

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12G0531
Date Received: 07/16/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1207206 - E200.7										
Blank (1207206-BLK1)				Prepared: 07/18/2012 Analyzed: 07/19/2012						
Arsenic	ND	40	ug/L							
Barium	0.40	50	ug/L							
Beryllium	ND	2.0	ug/L							
Cadmium	0.30	2.0	ug/L							
Calcium	ND	4000	ug/L							
Chromium	ND	30	ug/L							
Copper	1.3	20	ug/L							
Magnesium	ND	3000	ug/L							
Nickel	ND	50	ug/L							
Silver	0.73	10	ug/L							
Zinc	2.1	40	ug/L							
LCS (1207206-BS1)				Prepared: 07/18/2012 Analyzed: 07/19/2012						
Arsenic	1940	40	ug/L	2000		97	85-115			
Barium	2000	50	ug/L	2000		99	85-115			
Beryllium	48	2.0	ug/L	50.00		96	85-115			
Cadmium	48	2.0	ug/L	50.00		96	85-115			
Calcium	10000	4000	ug/L	10000		103	85-115			
Chromium	200	30	ug/L	200.0		102	85-115			
Copper	250	20	ug/L	250.0		100	85-115			
Magnesium	10000	3000	ug/L	10000		103	85-115			
Nickel	480	50	ug/L	500.0		97	85-115			
Silver	48	10	ug/L	50.00		97	85-115			
Zinc	490	40	ug/L	500.0		98	85-115			
LCS Dup (1207206-BSD1)				Prepared: 07/18/2012 Analyzed: 07/19/2012						
Arsenic	1950	40	ug/L	2000		98	85-115	0.6	20	
Barium	2000	50	ug/L	2000		99	85-115	0.08	20	
Beryllium	48	2.0	ug/L	50.00		96	85-115	0.1	20	
Cadmium	48	2.0	ug/L	50.00		96	85-115	0.4	20	
Calcium	10000	4000	ug/L	10000		104	85-115	0.9	20	
Chromium	200	30	ug/L	200.0		102	85-115	0.6	20	
Copper	250	20	ug/L	250.0		100	85-115	0.2	20	
Magnesium	10000	3000	ug/L	10000		104	85-115	0.9	20	
Nickel	490	50	ug/L	500.0		97	85-115	0.4	20	
Silver	48	10	ug/L	50.00		97	85-115	0.1	20	
Zinc	490	40	ug/L	500.0		98	85-115	0.08	20	

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12G0531
Date Received: 07/16/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1207206 - E200.7										
Matrix Spike (1207206-MS1)		**Source: 12G0115-01**		Prepared: 07/18/2012 Analyzed: 07/19/2012						
Arsenic	2020	40	ug/L	2000	17.3	100	70-130			
Barium	1900	50	ug/L	2000	140	88	70-130			
Beryllium	45	2.0	ug/L	50.00	ND	90	70-130			
Cadmium	42	2.0	ug/L	50.00	ND	83	70-130			
Calcium	190000	4000	ug/L	10000	190000	NR	70-130			
Chromium	190	30	ug/L	200.0	2.0	94	70-130			
Copper	610	20	ug/L	250.0	370	96	70-130			
Magnesium	45000	3000	ug/L	10000	37000	82	70-130			
Nickel	490	50	ug/L	500.0	9.9	95	70-130			
Silver	43	10	ug/L	50.00	ND	86	70-130			
Zinc	650	40	ug/L	500.0	180	94	70-130			
Matrix Spike (1207206-MS2)		**Source: 12G0564-03**		Prepared: 07/18/2012 Analyzed: 07/19/2012						
Arsenic	1890	40	ug/L	2000	37.0	93	70-130			
Barium	2700	50	ug/L	2000	850	95	70-130			
Beryllium	49	2.0	ug/L	50.00	2.3	94	70-130			
Cadmium	47	2.0	ug/L	50.00	1.7	90	70-130			
Calcium	140000	4000	ug/L	10000	130000	69	70-130			
Chromium	210	30	ug/L	200.0	20	96	70-130			
Copper	460	20	ug/L	250.0	200	105	70-130			
Magnesium	32000	3000	ug/L	10000	21000	106	70-130			
Nickel	510	50	ug/L	500.0	29	97	70-130			
Silver	48	10	ug/L	50.00	ND	96	70-130			
Zinc	1000	40	ug/L	500.0	550	94	70-130			
Batch 1207296 - E245.1										
Blank (1207296-BLK1)				Prepared: 07/26/2012 Analyzed: 07/27/2012						
Mercury	ND	1.0	ug/L							
LCS (1207296-BS1)				Prepared: 07/26/2012 Analyzed: 07/27/2012						
Mercury	5.2	1.0	ug/L	5.000		104	85-115			
LCS Dup (1207296-BSD1)				Prepared: 07/26/2012 Analyzed: 07/27/2012						
Mercury	5.1	1.0	ug/L	5.000		102	85-115	1	20	
Matrix Spike (1207296-MS1)		**Source: 12G0564-04**		Prepared: 07/26/2012 Analyzed: 07/27/2012						
Mercury	5.1	1.0	ug/L	5.000	0.48	92	85-115			
Matrix Spike (1207296-MS2)		**Source: 12G0531-01**		Prepared: 07/26/2012 Analyzed: 07/27/2012						
Mercury	5.2	1.0	ug/L	5.000	ND	105	85-115			
Matrix Spike Dup (1207296-MSD1)		**Source: 12G0564-04**		Prepared: 07/26/2012 Analyzed: 07/27/2012						
Mercury	4.8	1.0	ug/L	5.000	0.48	87	85-115	5	10	
Matrix Spike Dup (1207296-MSD2)		**Source: 12G0531-01**		Prepared: 07/26/2012 Analyzed: 07/27/2012						
Mercury	5.3	1.0	ug/L	5.000	ND	105	85-115	0.3	10	
Batch 1208027 - E200.8										

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12G0531
Date Received: 07/16/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1208027 - E200.8										
Blank (1208027-BLK1)				Prepared: 08/03/2012 Analyzed: 08/14/2012						
Antimony	0.0080	0.50	ug/L							
Lead	0.022	0.50	ug/L							
Selenium	0.20	2.5	ug/L							
Thallium	0.015	0.50	ug/L							
LCS (1208027-BS1)				Prepared: 08/03/2012 Analyzed: 08/14/2012						
Antimony	49	0.50	ug/L	50.00		98	85-115			
Lead	51	0.50	ug/L	50.00		101	85-115			
Selenium	230	2.5	ug/L	250.0		93	85-115			
Thallium	51	0.50	ug/L	50.00		101	85-115			
LCS Dup (1208027-BSD1)				Prepared: 08/03/2012 Analyzed: 08/14/2012						
Antimony	50	0.50	ug/L	50.00		100	85-115	2	20	
Lead	51	0.50	ug/L	50.00		102	85-115	1	20	
Selenium	230	2.5	ug/L	250.0		92	85-115	0.8	20	
Thallium	51	0.50	ug/L	50.00		102	85-115	0.6	20	
Matrix Spike (1208027-MS1)	**Source: 12G0728-01**			Prepared: 08/03/2012 Analyzed: 08/14/2012						
Antimony	44	0.50	ug/L	50.00	0.27	87	70-130			
Lead	49	0.50	ug/L	50.00	3.0	91	70-130			
Selenium	210	2.5	ug/L	250.0	1.7	83	70-130			
Thallium	45	0.50	ug/L	50.00	ND	89	70-130			
Matrix Spike (1208027-MS2)	**Source: 12G0826-01**			Prepared: 08/03/2012 Analyzed: 08/14/2012						
Antimony	49	0.50	ug/L	50.00	5.9	87	70-130			
Lead	47	0.50	ug/L	50.00	1.8	90	70-130			
Selenium	230	2.5	ug/L	250.0	0.45	93	70-130			
Thallium	43	0.50	ug/L	50.00	0.042	87	70-130			

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12G0531
Date Received: 07/16/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1207166 - SM4500-H+ B										
Duplicate (1207166-DUP1)		**Source: 12G0521-02**		Prepared & Analyzed: 07/16/2012						
pH (pH Units)	7.3	0.0	-		7.3			0.3	200	
Temperature (°C)	17		-		18			3	200	
Duplicate (1207166-DUP2)		**Source: 12G0543-05**		Prepared & Analyzed: 07/24/2012						
pH (pH Units)	6.5	0.0	-		6.5			0.2	200	
Temperature (°C)	19		-		19			2	200	
Duplicate (1207166-DUP3)		**Source: 12G0564-05**		Prepared & Analyzed: 07/24/2012						
pH (pH Units)	7.8	0.0	-		7.8			0.1	200	
Temperature (°C)	20		-		20			0.5	200	
Batch 1207172 - SM2540 D										
Duplicate (1207172-DUP1)		**Source: 12G0118-01**		Prepared: 07/17/2012 Analyzed: 07/18/2012						
Total Suspended Solids	160	10	mg/L		160			1	5	
Duplicate (1207172-DUP2)		**Source: 12G0115-01**		Prepared: 07/17/2012 Analyzed: 07/18/2012						
Total Suspended Solids	170	10	mg/L		170			2	5	
Batch 1207181 - H8048										
Blank (1207181-BLK1)				Prepared & Analyzed: 07/16/2012						
Orthophosphate (as P)	ND	0.10	mg/L							
LCS (1207181-BS1)				Prepared & Analyzed: 07/16/2012						
Orthophosphate (as P)	0.51	0.10	mg/L	0.5000		102	90-110			
LCS Dup (1207181-BSD1)				Prepared & Analyzed: 07/16/2012						
Orthophosphate (as P)	0.51	0.10	mg/L	0.5000		102	90-110	0	10	
Matrix Spike (1207181-MS1)		**Source: 12G0530-01**		Prepared & Analyzed: 07/16/2012						
Orthophosphate (as P)	0.63	0.10	mg/L	0.5000	0.12	102	85-115			
Matrix Spike Dup (1207181-MSD1)		**Source: 12G0530-01**		Prepared & Analyzed: 07/16/2012						
Orthophosphate (as P)	0.64	0.10	mg/L	0.5000	0.12	104	85-115	2	15	
Batch 1207211 - H8190										
Blank (1207211-BLK1)				Prepared & Analyzed: 07/20/2012						
Total Phosphorus (as P)	ND	0.10	mg/L							
LCS (1207211-BS1)				Prepared & Analyzed: 07/20/2012						
Total Phosphorus (as P)	0.53	0.10	mg/L	0.5000		106	90-110			
LCS Dup (1207211-BSD1)				Prepared & Analyzed: 07/20/2012						
Total Phosphorus (as P)	0.53	0.10	mg/L	0.5000		106	90-110	0	10	
Matrix Spike (1207211-MS1)		**Source: 12G0115-02**		Prepared & Analyzed: 07/20/2012						
Total Phosphorus (as P)	6.9	1.0	mg/L	5.000	2.0	98	70-130			
Matrix Spike Dup (1207211-MSD1)		**Source: 12G0115-02**		Prepared & Analyzed: 07/20/2012						
Total Phosphorus (as P)	6.9	1.0	mg/L	5.000	2.0	98	70-130	0	15	
Batch 1207228 - SM2540 C										

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12G0531
Date Received: 07/16/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1207228 - SM2540 C										
Duplicate (1207228-DUP1)		**Source: 12G0374-01**		Prepared: 07/20/2012 Analyzed: 07/23/2012						
Total Dissolved Solids (Residue, Filterable)	1100	20	mg/L		1100			0.5	5	
Batch 1207241 - SM4500-CN BE										
Blank (1207241-BLK1)				Prepared: 07/24/2012 Analyzed: 07/25/2012						
Cyanide	ND	0.10	mg/L							
LCS (1207241-BS1)				Prepared: 07/24/2012 Analyzed: 07/25/2012						
Cyanide	1.8	0.10	mg/L	2.000		90	90-110			
LCS Dup (1207241-BSD1)				Prepared: 07/24/2012 Analyzed: 07/25/2012						
Cyanide	1.8	0.10	mg/L	2.000		90	90-110	0	20	
Matrix Spike (1207241-MS1)		**Source: 12G0521-01**		Prepared: 07/24/2012 Analyzed: 07/25/2012						
Cyanide	1.8	0.10	mg/L	2.000	0.020	91	70-130			
Matrix Spike Dup (1207241-MSD1)		**Source: 12G0521-01**		Prepared: 07/24/2012 Analyzed: 07/25/2012						
Cyanide	1.8	0.10	mg/L	2.000	0.020	90	70-130	0.4	20	
Batch 1207244 - Hach 8000										
Blank (1207244-BLK1)				Prepared & Analyzed: 07/24/2012						
Chemical Oxygen Demand	ND	20	mg/L							
LCS (1207244-BS1)				Prepared & Analyzed: 07/24/2012						
Chemical Oxygen Demand	500	20	mg/L	500.0		100	70-130			
LCS Dup (1207244-BSD1)				Prepared & Analyzed: 07/24/2012						
Chemical Oxygen Demand	500	20	mg/L	500.0		101	70-130	0.6	20	
Matrix Spike (1207244-MS1)		**Source: 12G0374-01**		Prepared & Analyzed: 07/24/2012						
Chemical Oxygen Demand	530	20	mg/L	500.0	28	101	70-130			
Matrix Spike Dup (1207244-MSD1)		**Source: 12G0374-01**		Prepared & Analyzed: 07/24/2012						
Chemical Oxygen Demand	550	20	mg/L	500.0	28	104	70-130	3	20	
Batch 1207275 - SM5210 B										
Blank (1207275-BLK1)				Prepared: 07/17/2012 Analyzed: 07/22/2012						
Biochemical Oxygen Demand	ND	2.0	mg/L							
LCS (1207275-BS1)				Prepared: 07/17/2012 Analyzed: 07/22/2012						
Biochemical Oxygen Demand	210		mg/L	198.0		108	85-115			
Batch 1207330 - E1664A										
Blank (1207330-BLK1)				Prepared & Analyzed: 07/27/2012						
Oil & Grease	ND	5.00	mg/L							
LCS (1207330-BS1)				Prepared & Analyzed: 07/27/2012						
Oil & Grease	37.0	5.00	mg/L	40.00		92	78-114			
LCS Dup (1207330-BSD1)				Prepared & Analyzed: 07/27/2012						
Oil & Grease	35.7	5.00	mg/L	40.00		89	78-114	4	18	

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12G0531
Date Received: 07/16/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1207330 - E1664A										
Matrix Spike (1207330-MS1)		**Source: 12G0620-02**		Prepared & Analyzed: 07/27/2012						
Oil & Grease	54.1	5.00	mg/L	40.00	14.1	100	78-114			
Batch 1208049 - E 1664A										
Blank (1208049-BLK1)				Prepared & Analyzed: 08/02/2012						
Total Petroleum Hydrocarbons	ND	5.00	mg/L							
LCS (1208049-BS1)				Prepared & Analyzed: 08/02/2012						
Total Petroleum Hydrocarbons	17.0	5.00	mg/L	20.00		85	64-132			
LCS Dup (1208049-BSD1)				Prepared & Analyzed: 08/02/2012						
Total Petroleum Hydrocarbons	17.3	5.00	mg/L	20.00		86	64-132	2	34	
Matrix Spike (1208049-MS1)		**Source: 12G0354-02**		Prepared & Analyzed: 08/02/2012						
Total Petroleum Hydrocarbons	19.9	5.00	mg/L	20.00	ND	100	64-132			
Batch 1208054 - SM4500-NH3 B,C										
Blank (1208054-BLK1)				Prepared & Analyzed: 08/07/2012						
Nitrogen, Ammonia (As N)	ND	0.50	mg/L							
LCS (1208054-BS1)				Prepared & Analyzed: 08/07/2012						
Nitrogen, Ammonia (As N)	5.5	0.50	mg/L	5.000		109	90-110			
LCS Dup (1208054-BSD1)				Prepared & Analyzed: 08/07/2012						
Nitrogen, Ammonia (As N)	5.4	0.50	mg/L	5.000		108	90-110	0.9	10	
Matrix Spike (1208054-MS1)		**Source: 12G0531-01**		Prepared & Analyzed: 08/07/2012						
Nitrogen, Ammonia (As N)	5.6	0.50	mg/L	5.000	0.38	105	70-130			
Matrix Spike Dup (1208054-MSD1)		**Source: 12G0531-01**		Prepared & Analyzed: 08/07/2012						
Nitrogen, Ammonia (As N)	5.6	0.50	mg/L	5.000	0.38	104	70-130	1	20	
Batch 1208096 - PAI-DK01										
Blank (1208096-BLK1)				Prepared: 08/08/2012 Analyzed: 08/10/2012						
Nitrogen, Total Kjeldahl	ND	0.50	mg/L							
LCS (1208096-BS1)				Prepared: 08/08/2012 Analyzed: 08/10/2012						
Nitrogen, Total Kjeldahl	4.8	0.50	mg/L	5.000		97	80-120			
LCS Dup (1208096-BSD1)				Prepared: 08/08/2012 Analyzed: 08/10/2012						
Nitrogen, Total Kjeldahl	4.6	0.50	mg/L	5.000		92	80-120	5	20	
Matrix Spike (1208096-MS1)		**Source: 12G0521-02**		Prepared: 08/08/2012 Analyzed: 08/10/2012						
Nitrogen, Total Kjeldahl	9.5	0.50	mg/L	5.000	4.2	107	80-120			
Matrix Spike (1208096-MS2)		**Source: 12G0564-01**		Prepared: 08/08/2012 Analyzed: 08/10/2012						
Nitrogen, Total Kjeldahl	150	10	mg/L	100.0	51	102	80-120			
Matrix Spike Dup (1208096-MSD1)		**Source: 12G0521-02**		Prepared: 08/08/2012 Analyzed: 08/10/2012						
Nitrogen, Total Kjeldahl	10	0.50	mg/L	5.000	4.2	116	80-120	5	20	

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12G0531
Date Received: 07/16/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1208096 - PAI-DK01										
Matrix Spike Dup (1208096-MSD2)		**Source: 12G0564-01**		Prepared: 08/08/2012 Analyzed: 08/10/2012						
Nitrogen, Total Kjeldahl	150	10	mg/L	100.0	51	103	80-120	0.9	20	

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12G0531
Date Received: 07/16/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1207157 - E300										
Blank (1207157-BLK1)				Prepared & Analyzed: 07/16/2012						
Nitrogen, Nitrate (As N)	ND	1.0	mg/L							
LCS (1207157-BS1)				Prepared & Analyzed: 07/16/2012						
Nitrogen, Nitrate (As N)	4.7	1.0	mg/L	5.000		94	90-110			
LCS Dup (1207157-BSD1)				Prepared & Analyzed: 07/16/2012						
Nitrogen, Nitrate (As N)	4.7	1.0	mg/L	5.000		94	90-110	0.4	10	
Matrix Spike (1207157-MS2)		**Source: 12G0562-01**		Prepared: 07/16/2012 Analyzed: 07/24/2012						
Nitrogen, Nitrate (As N)	20	2.0	mg/L	10.00	9.2	107	80-120			
Matrix Spike Dup (1207157-MSD2)		**Source: 12G0562-01**		Prepared: 07/16/2012 Analyzed: 07/24/2012						
Nitrogen, Nitrate (As N)	20	2.0	mg/L	10.00	9.2	108	80-120	0.6	10	
Batch 1207169 - E300										
Blank (1207169-BLK1)				Prepared & Analyzed: 07/17/2012						
Nitrogen, Nitrite (As N)	ND	0.10	mg/L							
LCS (1207169-BS1)				Prepared & Analyzed: 07/17/2012						
Nitrogen, Nitrite (As N)	2.4	0.10	mg/L	2.500		98	90-110			
LCS Dup (1207169-BSD1)				Prepared & Analyzed: 07/17/2012						
Nitrogen, Nitrite (As N)	2.5	0.10	mg/L	2.500		98	90-110	0.8	10	
Matrix Spike (1207169-MS1)		**Source: 12G0564-03**		Prepared & Analyzed: 07/17/2012						
Nitrogen, Nitrite (As N)	2.5	0.10	mg/L	2.500	0.086	96	80-120			
Matrix Spike (1207169-MS3)		**Source: 12G0575-05**		Prepared & Analyzed: 07/17/2012						
Nitrogen, Nitrite (As N)	2.3	0.10	mg/L	2.500	ND	91	80-120			
Matrix Spike Dup (1207169-MSD3)		**Source: 12G0575-05**		Prepared & Analyzed: 07/17/2012						
Nitrogen, Nitrite (As N)	2.3	0.10	mg/L	2.500	ND	93	80-120	2	10	

TURNER LABORATORIES INC.
2445 N. Coyote Drive, Suite 104
Tucson, Arizona 85745
(520) 882-5880
Fax: (520) 882-9788
www.turnerlabs.com

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

TURNER WORK ORDER # 126-0531 DATE _____ PAGE ____ OF ____

PROJECT NAME Storm Water # 120715 MEF
CONTACT NAME Chris McNellis
COMPANY NAME City of Tucson - Transportation Dept
ADDRESS P.O. Box 27210
CITY Tucson STATE AZ ZIP CODE 85726
PHONE (520) 837-6583 FAX (520) 791-4373
SAMPLER'S SIGNATURE C McNellis

CIRCLE ANALYSIS REQUESTED AND/OR CHECK THE APPROPRIATE BOX

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX*	NUMBER OF CONTAINERS	Total Metals *	Chemical Oxygen Demand	Hardness Ca & Mg	BOD	TDS	TSS	Orthophosphate - Hach	Nitrate + Nitrite	Total Phosphorus	TKN	NH3	TPH 1664	O & G	pH	CN	~~MDAL~~				
Comp	7/15	5:21 pm		Storm Water	20	X	X	X	X	X	X	X	X	X	X	X									
Grab	5:28 pm	7/15		Storm Water	~~8~~ 3												X	X	X	X	~~MDAL~~				

1. RELINQUISHED BY: C McNellis
Signature C McNellis
Printed Name
City of Tucson Trans. Dept
Firm
7/16/12 10:20 AM
Date/Time

2. RECEIVED BY:
Signature
Printed Name
Firm
Date/Time

TURNAROUND REQUIREMENTS:
____ Standard (approx.10 days)*
____ Next day ____ 2 Day ____ 5 Day*
____ Email Preliminary Results To:
* Working Days

REPORT REQUIREMENTS:
____ I. Routine Report
____ II. Report (includes DUP,MS,MSD, as required, may be charged as samples)
____ III. Date Validation Report (Includes All Raw Data)
Add 10% to invoice

INVOICE INFORMATION:
Account ____ Y ____ N
P.O. # _____
Bill to: _____

SAMPLE RECEIPT:
Total Containers 25
Temperature 0.9
☑ Wet Ice ☐ Blue Ice

3. RELINQUISHED BY:
Signature
Printed Name
Time

4. RECEIVED BY:
Signature Steve Linn
Printed Name
TURNER LABORATORIES, INC.
Firm
7-16-12 1020
Date/Time

*LEGEND
DW = DRINKING WATER
GW = GROUNDWATER
SD = SOLID
SG = SLUDGE
SL = SOIL
ST = STORMWATER
WW = WASTEWATER

SPECIAL INSTRUCTIONS/COMMENTS:

Compliance Analysis:	☐ Yes	☐ No	Custody Seals	☐	Preservation Confirmation	☑
ADEQ Forms:	☐ Yes	☐ No	Container Intact	☑	Appropriate Head Space	☐
Mail ADEQ Forms:	☐ Yes	☐ No	COC/Labels Agree	☑	Received Within Hold Time	☑

*Ni, Hg, Ag, Cr, Cd, Be, Ba, As, Cu, Sb, Zn, Se, Pb, Tl, Ca, Mg
Composite poured at lab per C.O.T. Specifications

July 20, 2012

Chris McNellis
City of Tucson - Transportation Department
PO Box 27210
Tucson, AZ 85726-7210

TEL (520) 837-6583
FAX (520) 791-4238

Work Order No.: 12G0523
Order Name: 120715 MF

RE: Storm Water Once per Season

Dear Chris McNellis,

Turner Laboratories, Inc. received 1 sample(s) on 07/15/2012 for the analyses presented in the following report.

All results are intended to be considered in their entirety, and Turner Laboratories, Inc. is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Samples will be disposed of 30 days after issue of our report unless special arrangements are made.

The pages that follow may contain sensitive, privileged or confidential information intended solely for the addressee named above. If you receive this message and are not the agent or employee of the addressee, this communication has been sent in error. Please do not disseminate or copy any of the attached and notify the sender immediately by telephone. Please also return the attached sheet(s) to the sender by mail.

Please call if you have any questions.

Respectfully submitted,

Turner Laboratories, Inc.
ADHS License AZ0066

Dawn Weyer
Project Manager

Turner Laboratories, Inc.

Date: 07/20/2012

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12G0523
Date Received: 07/15/2012

Order: 120715 MF

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date/Time
12G0523-01	Grab	Storm Water	07/15/2012 1728

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12G0523
Date Received: 07/15/2012

Case Narrative

E Value is above quantitation range.

All soil, sludge, and solid matrix determinations are reported on a wet weight basis unless otherwise noted.

ND Not Detected at or above the PQL

PQL Practical Quantitation Limit

DF Dilution Factor

Turner Laboratories, Inc.

Date: 07/20/2012

Client:	City of Tucson - Transportation Department	**Client Sample ID:**	Grab
Project:	Storm Water Once per Season	**Collection Date/Time:**	07/15/2012 1728
Work Order:	12G0523	**Matrix:**	Storm Water
Lab Sample ID:	12G0523-01	**Order Name:**	120715 MF

Analyses	Result	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Total Coliform & E. Coli, MPN-SM9223B								
E.Coli	2400	1.0		MPN/100mL	1	07/15/2012 2145	07/16/2012 2150	AC
Total Coliform	2400	1.0	E	MPN/100mL	1	07/15/2012 2145	07/16/2012 2150	AC

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CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

TURNER WORK ORDER # 1260523-01 DATE 7-15-12 PAGE 1 OF 1

PROJECT NAME Storm Water # 120715 MLF

CONTACT NAME Chris McNellis

COMPANY NAME City of Tucson - Transportation Dept

ADDRESS P.O. Box 27210

CITY Tucson STATE AZ ZIP CODE 85726

PHONE (520) 837-6583 FAX (520) 791-4373

SAMPLER'S SIGNATURE C McNellis

CIRCLE ANALYSIS REQUESTED AND/OR CHECK THE APPROPRIATE BOX

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX*	NUMBER OF CONTAINERS	MPN
Grab	7/15	5:26pm		Storm Water	1	X

1. RELINQUISHED BY: C McNellis
Signature: C McNellis
Printed Name: City of Tucson Trans. Dept
Firm: 7/15 8:57pm
Date/Time

2. RECEIVED BY: Eric Ross
Signature: ERIC ROSS
Printed Name: COT TRANSPORTATION
Firm: 7-15-12 8:57P.M.
Date/Time

TURNAROUND REQUIREMENTS:
____ Standard (approx. 10 days)*
____ Next day ____ 2 Day ____ 5 Day*
____ Email Preliminary Results To:
* Working Days

REPORT REQUIREMENTS:
____ I. Routine Report
____ II. Report (includes DUP,MS,MSD, as required, may be charged as samples)
____ III. Data Validation Report (includes All Raw Data)
Add 10% to invoice

INVOICE INFORMATION:
Account ____ Y ____ N
P.O. # ____
Bill to: ____

SAMPLE RECEIPT:
Total Containers 1
Temperature 6.8
☒ Wet Ice ☐ Blue Ice

3. RELINQUISHED BY: Eric Ross
Signature: ERIC ROSS
Printed Name: COT TRANSPORTATION
Firm: 7-15-12 9:26PM
Date/Time

4. RECEIVED BY: E Weidenschilling
Signature: Erika Weidenschilling
Printed Name: TURNER LABORATORIES, INC.
Firm: 7-15-12/2126
Date/Time

*LEGEND
DW = DRINKING WATER
GW = GROUNDWATER
SD = SOLID
SG = SLUDGE
SL = SOIL
ST = STORMWATER
WW = WASTEWATER

SPECIAL INSTRUCTIONS/COMMENTS:

Compliance Analysis: ☐ Yes ☐ No	Custody Seals ☒	Preservation Confirmation ☒
ADEQ Forms: ☐ Yes ☐ No	Container Intact ☒	Appropriate Head Space ☒
Mail ADEQ Forms: ☐ Yes ☐ No	COC/Labels Agree ☒	Received Within Hold Time ☒

*Ni, Hg, Ag, Cr, Cd, Be, Ba, As, Cu, Sb, Zn, Se, Pb, Tl, Ca, Mg

Composite poured at lab per C.O.T. Specifications

August 17, 2012

Chris McNellis
City of Tucson - Transportation Department
PO Box 27210
Tucson, AZ 85726-7210

TEL (520) 837-6583
FAX (520) 791-4238

Work Order No.: 12G0693
Order Name: 120720 CO

RE: Storm Water Once per Season

Dear Chris McNellis,

Turner Laboratories, Inc. received 2 sample(s) on 07/21/2012 for the analyses presented in the following report.

All results are intended to be considered in their entirety, and Turner Laboratories, Inc. is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Samples will be disposed of 30 days after issue of our report unless special arrangements are made.

The pages that follow may contain sensitive, privileged or confidential information intended solely for the addressee named above. If you receive this message and are not the agent or employee of the addressee, this communication has been sent in error. Please do not disseminate or copy any of the attached and notify the sender immediately by telephone. Please also return the attached sheet(s) to the sender by mail.

Please call if you have any questions.

Respectfully submitted,

Turner Laboratories, Inc.
ADHS License AZ0066

Terri L. Garcia

Terri Garcia
Technical Director

Turner Laboratories, Inc.

Date: 08/17/2012

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12G0693
Date Received: 07/21/2012

Order: 120720 CO

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date/Time
12G0693-01	Composite	Storm Water	07/20/2012 1740
12G0693-02	Grab	Storm Water	07/20/2012 1735

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12G0693
Date Received: 07/21/2012

Case Narrative

E4	Concentration estimated. Analyte was detected below laboratory Minimum Reporting Limit (MRL).
E8	Analyte reported to MDL per project specification. Target analyte was not detected in the sample.
H2	Initial analysis was performed within holding time. Reanalysis for the required dilution was past holding time.
H5	This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time.
M7	Matrix spike recovery was low. Data reported per ADEQ policy 0154.000.

All soil, sludge, and solid matrix determinations are reported on a wet weight basis unless otherwise noted.

ND	Not Detected at or above the PQL
PQL	Practical Quantitation Limit
DF	Dilution Factor

Turner Laboratories, Inc.

Date: 08/17/2012

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12G0693
Lab Sample ID: 12G0693-01

Client Sample ID: Composite
Collection Date/Time: 07/20/2012 1740
Matrix: Storm Water
Order Name: 120720 CO

Analyses	Result	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Hardness-Calculation								
Hardness, Calcium/Magnesium (As CaCO3)	28			mg/L	1	07/23/2012 1410	07/24/2012 1531	RAD
Nitrate + Nitrite Sum-Calculation								
Nitrate and Nitrite Sum	ND	0.10		mg/L	1	07/21/2012 1400	07/21/2012 1920	EW
ICP Total Metals-E200.7								
Arsenic	ND	40	E8	ug/L	1	07/23/2012 1410	07/24/2012 1531	RAD
Barium	50	50		ug/L	1	07/23/2012 1410	07/24/2012 1531	RAD
Beryllium	ND	2.0		ug/L	1	07/23/2012 1410	07/30/2012 1203	RAD
Cadmium	0.44	2.0	E4	ug/L	1	07/23/2012 1410	07/24/2012 1531	RAD
Calcium	11000	4000		ug/L	1	07/23/2012 1410	07/24/2012 1531	RAD
Chromium	3.6	30	E4	ug/L	1	07/23/2012 1410	07/24/2012 1531	RAD
Copper	34	20		ug/L	1	07/23/2012 1410	07/24/2012 1531	RAD
Magnesium	ND	3000	E4	ug/L	1	07/23/2012 1410	07/24/2012 1531	RAD
Nickel	4.8	50	E4	ug/L	1	07/23/2012 1410	07/24/2012 1531	RAD
Silver	0.95	10	E4	ug/L	1	07/23/2012 1410	07/24/2012 1531	RAD
Zinc	150	40		ug/L	1	07/23/2012 1410	07/24/2012 1531	RAD
ICP/MS Total Metals-E200.8								
Antimony	3.5	0.50		ug/L	1	08/03/2012 0955	08/14/2012 1205	RAD
Lead	7.9	0.50		ug/L	1	08/03/2012 0955	08/14/2012 1205	RAD
Selenium	ND	2.5	E8	ug/L	1	08/03/2012 0955	08/14/2012 1205	RAD
Thallium	0.018	0.50	E4	ug/L	1	08/03/2012 0955	08/14/2012 1205	RAD
CVAA Total Mercury-E245.1								
Mercury	ND	1.0	E8	ug/L	1	07/26/2012 1420	07/27/2012 1055	RAD
Anions by Ion Chromatography-E300								
Nitrogen, Nitrate (As N)	ND	1.0		mg/L	1	07/21/2012 1400	07/21/2012 1920	EW
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	07/21/2012 1400	07/21/2012 1920	EW
Orthophosphate as P-H8048								
Orthophosphate (as P)	0.13	0.10		mg/L	1	07/21/2012 1500	07/21/2012 1514	EW
Total Phosphorous as P-H8190								
Total Phosphorus (as P)	0.25	0.10		mg/L	1	08/16/2012 1440	08/16/2012 1755	AC
Chemical Oxygen Demand-Hach 8000								
Chemical Oxygen Demand	110	20		mg/L	1	08/01/2012 1100	08/01/2012 1652	EW

Turner Laboratories, Inc.

Date: 08/17/2012

Client:	City of Tucson - Transportation Department	**Client Sample ID:**	Composite
Project:	Storm Water Once per Season	**Collection Date/Time:**	07/20/2012 1740
Work Order:	12G0693	**Matrix:**	Storm Water
Lab Sample ID:	12G0693-01	**Order Name:**	120720 CO

Analyses	Result	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Total Kjeldahl Nitrogen-PAI-DK01								
Nitrogen, Total Kjeldahl	2.3	0.50		mg/L	1	08/13/2012 1530	08/15/2012 1630	EW
Total Dissolved Solids (Residue, Filterable)-SM2540 C								
Total Dissolved Solids (Residue, Filterable)	92	20		mg/L	1	07/24/2012 1110	07/25/2012 1705	AC
Total Suspended Solids (Residue, Non-Filterable)-SM2540 D								
Total Suspended Solids	57	10		mg/L	1	07/24/2012 1002	07/25/2012 1050	AC
Ammonia as N-SM4500-NH3 B,C								
Nitrogen, Ammonia (As N)	1.3	0.50		mg/L	1	08/07/2012 1100	08/07/2012 1750	EW
BOD, 5 day-SM5210 B								
Biochemical Oxygen Demand	100	2.0	H2	mg/L	1	07/26/2012 1630	07/31/2012 1630	AC

Turner Laboratories, Inc.

Date: 08/17/2012

Client:	City of Tucson - Transportation Department	**Client Sample ID:**	Grab
Project:	Storm Water Once per Season	**Collection Date/Time:**	07/20/2012 1735
Work Order:	12G0693	**Matrix:**	Storm Water
Lab Sample ID:	12G0693-02	**Order Name:**	120720 CO

Analyses	Result	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
N-Hexane Extractable Material (SGT-HEM)-E 1664A								
Total Petroleum Hydrocarbons	ND	5.00		mg/L	1	08/02/2012 0800	08/02/2012 1545	AC
N-Hexane Extractable Material (HEM)-E1664A								
Oil & Grease	ND	5.00		mg/L	1	07/27/2012 0800	07/27/2012 1705	AC
Cyanide-SM4500-CN BE								
Cyanide	ND	0.10		mg/L	1	07/27/2012 0914	07/27/2012 1640	EW
pH-SM4500-H+ B								
pH (pH Units)	7.0	0.0	H5	-	1	07/21/2012 1445	07/21/2012 1452	EW
Temperature (°C)	25		H5	-	1	07/21/2012 1445	07/21/2012 1452	EW

Turner Laboratories, Inc.

Date: 08/17/2012

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12G0693
Date Received: 07/21/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1207263 - E200.7										
Blank (1207263-BLK1)				Prepared: 07/23/2012 Analyzed: 07/24/2012						
Arsenic	ND	40	ug/L							
Barium	ND	50	ug/L							
Beryllium	ND	2.0	ug/L							
Cadmium	0.32	2.0	ug/L							
Calcium	ND	4000	ug/L							
Chromium	ND	30	ug/L							
Copper	ND	20	ug/L							
Magnesium	ND	3000	ug/L							
Nickel	1.2	50	ug/L							
Silver	0.54	10	ug/L							
Zinc	ND	40	ug/L							
LCS (1207263-BS1)				Prepared: 07/23/2012 Analyzed: 07/24/2012						
Arsenic	1980	40	ug/L	2000		99	85-115			
Barium	2000	50	ug/L	2000		100	85-115			
Beryllium	47	2.0	ug/L	50.00		95	85-115			
Cadmium	50	2.0	ug/L	50.00		100	85-115			
Calcium	10000	4000	ug/L	10000		105	85-115			
Chromium	200	30	ug/L	200.0		101	85-115			
Copper	250	20	ug/L	250.0		100	85-115			
Magnesium	10000	3000	ug/L	10000		102	85-115			
Nickel	490	50	ug/L	500.0		98	85-115			
Silver	48	10	ug/L	50.00		97	85-115			
Zinc	500	40	ug/L	500.0		99	85-115			
LCS Dup (1207263-BSD1)				Prepared: 07/23/2012 Analyzed: 07/24/2012						
Arsenic	1960	40	ug/L	2000		98	85-115	1	20	
Barium	2000	50	ug/L	2000		99	85-115	0.7	20	
Beryllium	47	2.0	ug/L	50.00		95	85-115	0.2	20	
Cadmium	50	2.0	ug/L	50.00		99	85-115	0.8	20	
Calcium	11000	4000	ug/L	10000		105	85-115	0.3	20	
Chromium	200	30	ug/L	200.0		100	85-115	1	20	
Copper	250	20	ug/L	250.0		99	85-115	0.8	20	
Magnesium	10000	3000	ug/L	10000		101	85-115	0.9	20	
Nickel	490	50	ug/L	500.0		98	85-115	0.6	20	
Silver	48	10	ug/L	50.00		95	85-115	1	20	
Zinc	490	40	ug/L	500.0		98	85-115	0.9	20	
Matrix Spike (1207263-MS1)		**Source: 12G0406-01**		Prepared: 07/23/2012 Analyzed: 07/24/2012						
Arsenic	1980	40	ug/L	2000	10.9	98	70-130			
Barium	2000	50	ug/L	2000	46	95	70-130			
Cadmium	47	2.0	ug/L	50.00	ND	95	70-130			
Calcium	38000	4000	ug/L	10000	29000	92	70-130			
Chromium	190	30	ug/L	200.0	0.76	97	70-130			
Copper	270	20	ug/L	250.0	12	101	70-130			
Magnesium	14000	3000	ug/L	10000	4500	99	70-130			
Nickel	480	50	ug/L	500.0	1.4	96	70-130			
Silver	45	10	ug/L	50.00	0.61	89	70-130			
Zinc	600	40	ug/L	500.0	120	95	70-130			

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12G0693
Date Received: 07/21/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1207263 - E200.7										
Matrix Spike (1207263-MS2)		**Source: 12G0675-01**		Prepared: 07/23/2012 Analyzed: 07/24/2012						
Arsenic	2760	400	ug/L	2000	356	120	70-130			
Barium	280	500	ug/L	2000	100	9	70-130			
Cadmium	52	20	ug/L	50.00	4.5	95	70-130			
Calcium	320000	40000	ug/L	10000	300000	192	70-130			
Chromium	420	300	ug/L	200.0	210	106	70-130			
Copper	1900	200	ug/L	250.0	1600	110	70-130			
Magnesium	2500000	30000	ug/L	10000	2600000	NR	70-130			
Nickel	4800	500	ug/L	500.0	440	865	70-130			
Silver	ND	100	ug/L	50.00	ND		70-130			
Zinc	3000	400	ug/L	500.0	2500	110	70-130			
Batch 1207296 - E245.1										
Blank (1207296-BLK1)				Prepared: 07/26/2012 Analyzed: 07/27/2012						
Mercury	ND	1.0	ug/L							
LCS (1207296-BS1)				Prepared: 07/26/2012 Analyzed: 07/27/2012						
Mercury	5.2	1.0	ug/L	5.000		104	85-115			
LCS Dup (1207296-BSD1)				Prepared: 07/26/2012 Analyzed: 07/27/2012						
Mercury	5.1	1.0	ug/L	5.000		102	85-115	1	20	
Matrix Spike (1207296-MS1)		**Source: 12G0564-04**		Prepared: 07/26/2012 Analyzed: 07/27/2012						
Mercury	5.1	1.0	ug/L	5.000	0.48	92	85-115			
Matrix Spike (1207296-MS2)		**Source: 12G0531-01**		Prepared: 07/26/2012 Analyzed: 07/27/2012						
Mercury	5.2	1.0	ug/L	5.000	ND	105	85-115			
Matrix Spike Dup (1207296-MSD1)		**Source: 12G0564-04**		Prepared: 07/26/2012 Analyzed: 07/27/2012						
Mercury	4.8	1.0	ug/L	5.000	0.48	87	85-115	5	10	
Matrix Spike Dup (1207296-MSD2)		**Source: 12G0531-01**		Prepared: 07/26/2012 Analyzed: 07/27/2012						
Mercury	5.3	1.0	ug/L	5.000	ND	105	85-115	0.3	10	
Batch 1208027 - E200.8										
Blank (1208027-BLK1)				Prepared: 08/03/2012 Analyzed: 08/14/2012						
Antimony	0.0080	0.50	ug/L							
Lead	0.022	0.50	ug/L							
Selenium	0.20	2.5	ug/L							
Thallium	0.015	0.50	ug/L							
LCS (1208027-BS1)				Prepared: 08/03/2012 Analyzed: 08/14/2012						
Antimony	49	0.50	ug/L	50.00		98	85-115			
Lead	51	0.50	ug/L	50.00		101	85-115			
Selenium	230	2.5	ug/L	250.0		93	85-115			
Thallium	51	0.50	ug/L	50.00		101	85-115			

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12G0693
Date Received: 07/21/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1208027 - E200.8										
LCS Dup (1208027-BSD1)				Prepared: 08/03/2012 Analyzed: 08/14/2012						
Antimony	50	0.50	ug/L	50.00		100	85-115	2	20	
Lead	51	0.50	ug/L	50.00		102	85-115	1	20	
Selenium	230	2.5	ug/L	250.0		92	85-115	0.8	20	
Thallium	51	0.50	ug/L	50.00		102	85-115	0.6	20	
Matrix Spike (1208027-MS1)		**Source: 12G0728-01**		Prepared: 08/03/2012 Analyzed: 08/14/2012						
Antimony	44	0.50	ug/L	50.00	0.27	87	70-130			
Lead	49	0.50	ug/L	50.00	3.0	91	70-130			
Selenium	210	2.5	ug/L	250.0	1.7	83	70-130			
Thallium	45	0.50	ug/L	50.00	ND	89	70-130			
Matrix Spike (1208027-MS2)		**Source: 12G0826-01**		Prepared: 08/03/2012 Analyzed: 08/14/2012						
Antimony	49	0.50	ug/L	50.00	5.9	87	70-130			
Lead	47	0.50	ug/L	50.00	1.8	90	70-130			
Selenium	230	2.5	ug/L	250.0	0.45	93	70-130			
Thallium	43	0.50	ug/L	50.00	0.042	87	70-130			

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12G0693
Date Received: 07/21/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1207137 - Hach 8000										
Blank (1207137-BLK1)				Prepared & Analyzed: 08/01/2012						
Chemical Oxygen Demand	ND	20	mg/L							
LCS (1207137-BS1)				Prepared & Analyzed: 08/01/2012						
Chemical Oxygen Demand	510	20	mg/L	500.0		103	70-130			
LCS Dup (1207137-BSD1)				Prepared & Analyzed: 08/01/2012						
Chemical Oxygen Demand	500	20	mg/L	500.0		100	70-130	2	20	
Matrix Spike (1207137-MS1)		**Source: 12G0372-01**		Prepared & Analyzed: 08/01/2012						
Chemical Oxygen Demand	570	20	mg/L	500.0	52	104	70-130			
Matrix Spike Dup (1207137-MSD1)		**Source: 12G0372-01**		Prepared & Analyzed: 08/01/2012						
Chemical Oxygen Demand	580	20	mg/L	500.0	52	105	70-130	1	20	
Batch 1207265 - SM2540 D										
Duplicate (1207265-DUP1)		**Source: 12G0701-01**		Prepared: 07/24/2012 Analyzed: 07/25/2012						
Total Suspended Solids	1900	10	mg/L		1900			0.4	5	
Duplicate (1207265-DUP2)		**Source: 12G0374-01**		Prepared: 07/24/2012 Analyzed: 07/25/2012						
Total Suspended Solids	7.0	10	mg/L		5.0			33	5	
Batch 1207267 - SM2540 C										
Duplicate (1207267-DUP1)		**Source: 12G0701-01**		Prepared: 07/24/2012 Analyzed: 07/25/2012						
Total Dissolved Solids (Residue, Filterable)	120	20	mg/L		110			4	5	
Batch 1207274 - SM4500-H+ B										
Duplicate (1207274-DUP1)		**Source: 12G0693-02**		Prepared & Analyzed: 07/21/2012						
pH (pH Units)	7.0	0.0	-		7.0			1	200	
Temperature (°C)	24		-		25			2	200	
Batch 1207276 - H8048										
Blank (1207276-BLK1)				Prepared & Analyzed: 07/21/2012						
Orthophosphate (as P)	ND	0.10	mg/L							
LCS (1207276-BS1)				Prepared & Analyzed: 07/21/2012						
Orthophosphate (as P)	0.51	0.10	mg/L	0.5000		102	90-110			
LCS Dup (1207276-BSD1)				Prepared & Analyzed: 07/21/2012						
Orthophosphate (as P)	0.51	0.10	mg/L	0.5000		102	90-110	0	10	
Matrix Spike (1207276-MS1)		**Source: 12G0693-01**		Prepared & Analyzed: 07/21/2012						
Orthophosphate (as P)	0.67	0.10	mg/L	0.5000	0.13	108	70-130			
Matrix Spike Dup (1207276-MSD1)		**Source: 12G0693-01**		Prepared & Analyzed: 07/21/2012						
Orthophosphate (as P)	0.65	0.10	mg/L	0.5000	0.13	104	70-130	3	15	
Batch 1207295 - PAI-DK01										
Blank (1207295-BLK1)				Prepared: 08/13/2012 Analyzed: 08/15/2012						
Nitrogen, Total Kjeldahl	ND	0.50	mg/L							

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12G0693
Date Received: 07/21/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1207295 - PAI-DK01										
LCS (1207295-BS1)				Prepared: 08/13/2012 Analyzed: 08/15/2012						
Nitrogen, Total Kjeldahl	5.0	0.50	mg/L	5.000		100	80-120			
LCS Dup (1207295-BSD1)				Prepared: 08/13/2012 Analyzed: 08/15/2012						
Nitrogen, Total Kjeldahl	4.9	0.50	mg/L	5.000		99	80-120	0.9	20	
Matrix Spike (1207295-MS1)		**Source: 12G0374-01**		Prepared: 08/13/2012 Analyzed: 08/15/2012						
Nitrogen, Total Kjeldahl	36	2.5	mg/L	25.00	13	89	80-120			
Matrix Spike (1207295-MS2)		**Source: 12G0564-05**		Prepared: 08/13/2012 Analyzed: 08/15/2012						
Nitrogen, Total Kjeldahl	100	10	mg/L	100.0	6.7	97	80-120			
Matrix Spike Dup (1207295-MSD1)		**Source: 12G0374-01**		Prepared: 08/13/2012 Analyzed: 08/15/2012						
Nitrogen, Total Kjeldahl	36	2.5	mg/L	25.00	13	91	80-120	0.9	20	
Matrix Spike Dup (1207295-MSD2)		**Source: 12G0564-05**		Prepared: 08/13/2012 Analyzed: 08/15/2012						
Nitrogen, Total Kjeldahl	100	10	mg/L	100.0	6.7	97	80-120	0.4	20	
Batch 1207298 - SM4500-CN BE										
Blank (1207298-BLK1)				Prepared & Analyzed: 07/27/2012						
Cyanide	ND	0.10	mg/L							
LCS (1207298-BS1)				Prepared & Analyzed: 07/27/2012						
Cyanide	2.1	0.10	mg/L	2.000		106	90-110			
LCS Dup (1207298-BSD1)				Prepared & Analyzed: 07/27/2012						
Cyanide	2.1	0.10	mg/L	2.000		107	90-110	0.7	20	
Matrix Spike (1207298-MS1)		**Source: 12G0374-01**		Prepared & Analyzed: 07/27/2012						
Cyanide	0.92	0.10	mg/L	2.000	ND	46	70-130			M7
Matrix Spike Dup (1207298-MSD1)		**Source: 12G0374-01**		Prepared & Analyzed: 07/27/2012						
Cyanide	0.82	0.10	mg/L	2.000	ND	41	70-130	10	20	M7
Batch 1207329 - SM5210 B										
Blank (1207329-BLK1)				Prepared: 07/26/2012 Analyzed: 07/31/2012						
Biochemical Oxygen Demand	ND	2.0	mg/L							
LCS (1207329-BS1)				Prepared: 07/26/2012 Analyzed: 07/31/2012						
Biochemical Oxygen Demand	200		mg/L	198.0		104	85-115			
Batch 1207330 - E1664A										
Blank (1207330-BLK1)				Prepared & Analyzed: 07/27/2012						
Oil & Grease	ND	5.00	mg/L							
LCS (1207330-BS1)				Prepared & Analyzed: 07/27/2012						
Oil & Grease	37.0	5.00	mg/L	40.00		92	78-114			
LCS Dup (1207330-BSD1)				Prepared & Analyzed: 07/27/2012						
Oil & Grease	35.7	5.00	mg/L	40.00		89	78-114	4	18	

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12G0693
Date Received: 07/21/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1207330 - E1664A										
Matrix Spike (1207330-MS1)		**Source: 12G0620-02**		Prepared & Analyzed: 07/27/2012						
Oil & Grease	54.1	5.00	mg/L	40.00	14.1	100	78-114			
Batch 1208049 - E 1664A										
Blank (1208049-BLK1)				Prepared & Analyzed: 08/02/2012						
Total Petroleum Hydrocarbons	ND	5.00	mg/L							
LCS (1208049-BS1)				Prepared & Analyzed: 08/02/2012						
Total Petroleum Hydrocarbons	17.0	5.00	mg/L	20.00		85	64-132			
LCS Dup (1208049-BSD1)				Prepared & Analyzed: 08/02/2012						
Total Petroleum Hydrocarbons	17.3	5.00	mg/L	20.00		86	64-132	2	34	
Matrix Spike (1208049-MS1)		**Source: 12G0354-02**		Prepared & Analyzed: 08/02/2012						
Total Petroleum Hydrocarbons	19.9	5.00	mg/L	20.00	ND	100	64-132			
Batch 1208054 - SM4500-NH3 B,C										
Blank (1208054-BLK1)				Prepared & Analyzed: 08/07/2012						
Nitrogen, Ammonia (As N)	ND	0.50	mg/L							
LCS (1208054-BS1)				Prepared & Analyzed: 08/07/2012						
Nitrogen, Ammonia (As N)	5.5	0.50	mg/L	5.000		109	90-110			
LCS Dup (1208054-BSD1)				Prepared & Analyzed: 08/07/2012						
Nitrogen, Ammonia (As N)	5.4	0.50	mg/L	5.000		108	90-110	0.9	10	
Matrix Spike (1208054-MS1)		**Source: 12G0531-01**		Prepared & Analyzed: 08/07/2012						
Nitrogen, Ammonia (As N)	5.6	0.50	mg/L	5.000	0.38	105	70-130			
Matrix Spike Dup (1208054-MSD1)		**Source: 12G0531-01**		Prepared & Analyzed: 08/07/2012						
Nitrogen, Ammonia (As N)	5.6	0.50	mg/L	5.000	0.38	104	70-130	1	20	
Batch 1208205 - H8190										
Blank (1208205-BLK1)				Prepared & Analyzed: 08/16/2012						
Total Phosphorus (as P)	ND	0.10	mg/L							
LCS (1208205-BS1)				Prepared & Analyzed: 08/16/2012						
Total Phosphorus (as P)	0.48	0.10	mg/L	0.5000		96	90-110			
LCS Dup (1208205-BSD1)				Prepared & Analyzed: 08/16/2012						
Total Phosphorus (as P)	0.51	0.10	mg/L	0.5000		102	90-110	6	10	
Matrix Spike (1208205-MS1)		**Source: 12G0693-01**		Prepared & Analyzed: 08/16/2012						
Total Phosphorus (as P)	0.78	0.10	mg/L	0.5000	0.25	106	70-130			
Matrix Spike Dup (1208205-MSD1)		**Source: 12G0693-01**		Prepared & Analyzed: 08/16/2012						
Total Phosphorus (as P)	0.80	0.10	mg/L	0.5000	0.25	110	70-130	3	15	

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12G0693
Date Received: 07/21/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1207227 - E300										
Blank (1207227-BLK1)				Prepared & Analyzed: 07/21/2012						
Nitrogen, Nitrate (As N)	ND	1.0	mg/L							
Nitrogen, Nitrite (As N)	ND	0.10	mg/L							
LCS (1207227-BS1)				Prepared & Analyzed: 07/21/2012						
Nitrogen, Nitrate (As N)	4.7	1.0	mg/L	5.000		95	90-110			
Nitrogen, Nitrite (As N)	2.4	0.10	mg/L	2.500		95	90-110			
LCS Dup (1207227-BSD1)				Prepared & Analyzed: 07/21/2012						
Nitrogen, Nitrate (As N)	4.7	1.0	mg/L	5.000		95	90-110	0.2	10	
Nitrogen, Nitrite (As N)	2.4	0.10	mg/L	2.500		94	90-110	1	10	
Matrix Spike (1207227-MS1)	**Source: 12G0694-01**			Prepared & Analyzed: 07/21/2012						
Nitrogen, Nitrate (As N)	5.1		mg/L	5.000	0.25	97	80-120			
Nitrogen, Nitrite (As N)	2.4		mg/L	2.500	0.012	98	80-120			
Matrix Spike Dup (1207227-MSD1)	**Source: 12G0694-01**			Prepared & Analyzed: 07/21/2012						
Nitrogen, Nitrate (As N)	5.1		mg/L	5.000	0.25	97	80-120	0.02	10	
Nitrogen, Nitrite (As N)	2.4		mg/L	2.500	0.012	96	80-120	1	10	

TURNER LABORATORIES INC.
2445 N. Coyote Drive, Suite 104
Tucson, Arizona 85745
(520) 882-5880
Fax: (520) 882-9788
www.turnerlabs.com

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

TURNER WORK ORDER # 1260093 DATE _____ PAGE _____ OF _____

PROJECT NAME Storm Water # 120720 CO
CONTACT NAME Chris McNellis
COMPANY NAME City of Tucson - Transportation Dept
ADDRESS P.O. Box 27210
CITY Tucson STATE AZ ZIP CODE 85726
PHONE (520) 837-6583 FAX (520) 791-4373
SAMPLER'S SIGNATURE C McNellis

CIRCLE ANALYSIS REQUESTED AND/OR CHECK THE APPROPRIATE BOX

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX*	NUMBER OF CONTAINERS	Total Metals *	Chemical Oxygen Demand	Hardness Ca & Mg	BOD	TDS	TSS	Orthophosphate - Hach	Nitrate + Nitrite	Total Phosphorus	TKN	NH3	TPH 1664	O & G	pH	CN	MPN				
Comp	7/20	5:40pm		Storm Water	12	X	X	X	X	X	X	X	X	X	X	X									
Grab	7/20	5:35pm		Storm Water	5												X	X	X	X	X				

1. RELINQUISHED BY: C McNellis
Signature C McNellis
Printed Name
City of Tucson Trans. Dept
Firm 7/21/12 10:22am
Date/Time

2. RECEIVED BY:
Signature
Printed Name
Firm
Date/Time

TURNAROUND REQUIREMENTS:
____ Standard (approx.10 days)*
____ Next day ____ 2 Day ____ 5 Day*
____ Email Preliminary Results To:
* Working Days

REPORT REQUIREMENTS:
____ I. Routine Report
____ II. Report (includes DUP,MS,MSD, as required, may be charged as samples)
____ III. Date Validation Report (Includes All Raw Data)
Add 10% to invoice

INVOICE INFORMATION:
Account ____ Y ____ N
P.O. # _____
Bill to: _____

SAMPLE RECEIPT:
Total Containers 17
Temperature 14
☒ Wet Ice ☐ Blue Ice

3. RELINQUISHED BY:
Signature
Printed Name
Time

4. RECEIVED BY:
Signature
Printed Name
TURNER LABORATORIES, INC.
Firm 7/21/2012 1022
Date/Time

*LEGEND
DW = DRINKING WATER
GW = GROUNDWATER
SD = SOLID
SG = SLUDGE
SL = SOIL
ST = STORMWATER
WW = WASTEWATER

SPECIAL INSTRUCTIONS/COMMENTS:

Compliance Analysis:	☐ Yes	☐ No	Custody Seals	☐	Preservation Confirmation	☒
ADEQ Forms:	☐ Yes	☐ No	Container Intact	☒	Appropriate Head Space	N/A ☐
Mail ADEQ Forms:	☐ Yes	☐ No	COC/Labels Agree	☑	Received Within Hold Time	☒

*Ni, Hg, Ag, Cr, Cd, Be, Ba, As, Cu, Sb, Zn, Se, Pb, Tl, Ca, Mg
Composite poured at lab per C.O.T. Specifications

July 24, 2012

Beverley Hester
City of Tucson - Transportation Department
PO Box 27210
Tucson, AZ 85726-7210

TEL 520-837-4935
FAX (520) 791-4373

Work Order No.: 12G0692
Order Name: 1207020 CO Randolf

RE: Storm Water Once per Season

Dear Beverley Hester,

Turner Laboratories, Inc. received 1 sample(s) on 07/20/2012 for the analyses presented in the following report.

All results are intended to be considered in their entirety, and Turner Laboratories, Inc. is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Samples will be disposed of 30 days after issue of our report unless special arrangements are made.

The pages that follow may contain sensitive, privileged or confidential information intended solely for the addressee named above. If you receive this message and are not the agent or employee of the addressee, this communication has been sent in error. Please do not disseminate or copy any of the attached and notify the sender immediately by telephone. Please also return the attached sheet(s) to the sender by mail.

Please call if you have any questions.

Respectfully submitted,

Turner Laboratories, Inc.
ADHS License AZ0066

Dawn Weyer
Project Manager

Turner Laboratories, Inc.

Date: 07/24/2012

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12G0692
Date Received: 07/20/2012

Order: 1207020 CO Randolf

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date/Time
12G0692-01	Grab	Storm Water	07/20/2012 1735

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12G0692
Date Received: 07/20/2012

Case Narrative

E Value is above quantitation range.

All soil, sludge, and solid matrix determinations are reported on a wet weight basis unless otherwise noted.

ND Not Detected at or above the PQL

PQL Practical Quantitation Limit

DF Dilution Factor

Turner Laboratories, Inc.

Date: 07/24/2012

Client:	City of Tucson - Transportation Department	**Client Sample ID:**	Grab
Project:	Storm Water Once per Season	**Collection Date/Time:**	07/20/2012 1735
Work Order:	12G0692	**Matrix:**	Storm Water
Lab Sample ID:	12G0692-01	**Order Name:**	1207020 CO Randolf

Analyses	Result	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Total Coliform & E. Coli, MPN-SM9223B								
E.Coli	370	1.0		MPN/100mL	1	07/20/2012 1955	07/21/2012 2025	AC
Total Coliform	2400	1.0	E	MPN/100mL	1	07/20/2012 1955	07/21/2012 2025	AC

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CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

TURNER WORK ORDER # 1260692 DATE _____ PAGE ____ OF ____

PROJECT NAME Storm Water # 120720 CO RANDOLF

CONTACT NAME Chris McNellis

COMPANY NAME City of Tucson - Transportation Dept

ADDRESS P.O. Box 27210

CITY Tucson STATE AZ ZIP CODE 85726

PHONE (520) 837-6583 FAX (520) 791-4373

SAMPLER'S SIGNATURE C McNellis

CIRCLE ANALYSIS REQUESTED AND/OR CHECK THE APPROPRIATE BOX

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX*	NUMBER OF CONTAINERS	MPN
Grab	7/20	5:35pm		Storm Water	1	X
1260692	7-20		01			

1. RELINQUISHED BY: C McNellis
Signature: C McNellis
Printed Name: City of Tucson Trans. Dept
Firm: 7/20 6:54pm
Date/Time

2. RECEIVED BY: Bev Hester
Signature: Bev Hester
Printed Name: COT
Firm: 7/20/12 6:54PM
Date/Time

TURNAROUND REQUIREMENTS:
____ Standard (approx 10 days)*
____ Next day ____ 2 Day ____ 5 Day*
____ Email Preliminary Results To:
* Working Days

REPORT REQUIREMENTS:
____ I. Routine Report
____ II. Report (includes DUP,MS,MSD, as required, may be charged as samples)
____ III. Data Validation Report (includes All Raw Data)
Add 10% to invoice

INVOICE INFORMATION:
Account ____ Y ____ N
P.O. # ____
Bill to: ____

SAMPLE RECEIPT:
Total Containers 1
Temperature 6.5°F
☒ Wet Ice ☐ Blue Ice

3. RELINQUISHED BY: Bev Hester
Signature: Bev Hester
Printed Name: COT
Firm: 7/20/12 7:33PM
Date/Time

4. RECEIVED BY: Andrew Calcutera
Signature: Andrew Calcutera
Printed Name: TURNER LABORATORIES, INC.
Firm
Date/Time: 7-20-12 / 1939

*LEGEND
DW = DRINKING WATER
GW = GROUNDWATER
SD = SOLID
SG = SLUDGE
SL = SOIL
ST = STORMWATER
WW = WASTEWATER

SPECIAL INSTRUCTIONS/COMMENTS:

Compliance Analysis:	☐ Yes	☐ No	Custody Seals	☐	Preservation Confirmation	☒
ADEQ Forms:	☐ Yes	☐ No	Container Intact	☒	Appropriate Head Space	☒
Mail ADEQ Forms:	☐ Yes	☐ No	COC/Labels Agree	☒	Received Within Hold Time	☒

*Ni, Hg, Ag, Cr, Cd, Be, Ba, As, Cu, Sb, Zn, Se, Pb, Tl, Ca, Mg

Composite poured at lab per C.O.T. Specifications

August 16, 2012

Chris McNellis
City of Tucson - Transportation Department
PO Box 27210
Tucson, AZ 85726-7210

TEL (520) 837-6583
FAX (520) 791-4238

Work Order No.: 12G0530
Order Name: 120715 IN

RE: Storm Water Once per Season

Dear Chris McNellis,

Turner Laboratories, Inc. received 2 sample(s) on 07/16/2012 for the analyses presented in the following report.

All results are intended to be considered in their entirety, and Turner Laboratories, Inc. is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Samples will be disposed of 30 days after issue of our report unless special arrangements are made.

The pages that follow may contain sensitive, privileged or confidential information intended solely for the addressee named above. If you receive this message and are not the agent or employee of the addressee, this communication has been sent in error. Please do not disseminate or copy any of the attached and notify the sender immediately by telephone. Please also return the attached sheet(s) to the sender by mail.

Please call if you have any questions.

Respectfully submitted,

Turner Laboratories, Inc.
ADHS License AZ0066

Terri L. Garcia

Terri Garcia
Technical Director

Turner Laboratories, Inc.

Date: 08/16/2012

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12G0530
Date Received: 07/16/2012

Order: 120715 IN

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date/Time
12G0530-01	Composite	Storm Water	07/15/2012 1725
12G0530-02	Grab	Storm Water	07/15/2012 1725

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12G0530
Date Received: 07/16/2012

Case Narrative

E4	Concentration estimated. Analyte was detected below laboratory Minimum Reporting Limit (MRL).
E8	Analyte reported to MDL per project specification. Target analyte was not detected in the sample.
H5	This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time.
K5	The dilution water D.O depletion was >0.2 mg/L.

All soil, sludge, and solid matrix determinations are reported on a wet weight basis unless otherwise noted.

ND	Not Detected at or above the PQL
PQL	Practical Quantitation Limit
DF	Dilution Factor

Turner Laboratories, Inc.

Date: 08/16/2012

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12G0530
Lab Sample ID: 12G0530-01

Client Sample ID: Composite
Collection Date/Time: 07/15/2012 1725
Matrix: Storm Water
Order Name: 120715 IN

Analyses	Result	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Hardness-Calculation								
Hardness, Calcium/Magnesium (As CaCO3)	76			mg/L	1	07/18/2012 1440	07/19/2012 1823	RAD
Nitrate + Nitrite Sum-Calculation								
Nitrate and Nitrite Sum	ND	0.10		mg/L	1	07/17/2012 1240	07/17/2012 1317	EW
ICP Total Metals-E200.7								
Arsenic	6.1	40	E4	ug/L	1	07/18/2012 1440	07/19/2012 1824	RAD
Barium	100	50		ug/L	1	07/18/2012 1440	07/19/2012 1823	RAD
Beryllium	ND	2.0	E8	ug/L	1	07/18/2012 1440	07/19/2012 1823	RAD
Cadmium	0.50	2.0	E4	ug/L	1	07/18/2012 1440	07/19/2012 1824	RAD
Calcium	25000	4000		ug/L	1	07/18/2012 1440	07/19/2012 1823	RAD
Chromium	5.5	30	E4	ug/L	1	07/18/2012 1440	07/19/2012 1824	RAD
Copper	67	20		ug/L	1	07/18/2012 1440	07/19/2012 1823	RAD
Magnesium	3400	3000		ug/L	1	07/18/2012 1440	07/19/2012 1823	RAD
Nickel	6.0	50	E4	ug/L	1	07/18/2012 1440	07/19/2012 1824	RAD
Silver	0.85	10	E4	ug/L	1	07/18/2012 1440	07/19/2012 1824	RAD
Zinc	220	40		ug/L	1	07/18/2012 1440	07/19/2012 1823	RAD
ICP/MS Total Metals-E200.8								
Antimony	1.2	0.50		ug/L	1	08/03/2012 0955	08/14/2012 1154	RAD
Lead	19	0.50		ug/L	1	08/03/2012 0955	08/14/2012 1154	RAD
Selenium	0.32	2.5	E4	ug/L	1	08/03/2012 0955	08/14/2012 1154	RAD
Thallium	0.063	0.50	E4	ug/L	1	08/03/2012 0955	08/14/2012 1154	RAD
CVAA Total Mercury-E245.1								
Mercury	ND	1.0	E8	ug/L	1	07/26/2012 1420	07/27/2012 1033	RAD
Anions by Ion Chromatography-E300								
Nitrogen, Nitrate (As N)	ND	1.0		mg/L	1	07/16/2012 1500	07/16/2012 1807	EW
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	07/17/2012 1240	07/17/2012 1317	EW
Orthophosphate as P-H8048								
Orthophosphate (as P)	0.12	0.10		mg/L	1	07/16/2012 1545	07/16/2012 1625	EW
Total Phosphorous as P-H8190								
Total Phosphorus (as P)	0.39	0.10		mg/L	1	07/20/2012 0830	07/20/2012 1545	EW
Chemical Oxygen Demand-Hach 8000								
Chemical Oxygen Demand	140	20		mg/L	1	07/24/2012 1150	07/24/2012 1725	EW

Turner Laboratories, Inc.

Date: 08/16/2012

Client:	City of Tucson - Transportation Department	**Client Sample ID:**	Composite
Project:	Storm Water Once per Season	**Collection Date/Time:**	07/15/2012 1725
Work Order:	12G0530	**Matrix:**	Storm Water
Lab Sample ID:	12G0530-01	**Order Name:**	120715 IN

Analyses	Result	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Total Kjeldahl Nitrogen-PAI-DK01								
Nitrogen, Total Kjeldahl	1.7	0.50		mg/L	1	08/08/2012 1600	08/10/2012 1620	EW
Total Dissolved Solids (Residue, Filterable)-SM2540 C								
Total Dissolved Solids (Residue, Filterable)	44	20		mg/L	1	07/20/2012 1525	07/23/2012 1155	AC
Total Suspended Solids (Residue, Non-Filterable)-SM2540 D								
Total Suspended Solids	200	10		mg/L	1	07/17/2012 1018	07/18/2012 1300	AC
Ammonia as N-SM4500-NH3 B,C								
Nitrogen, Ammonia (As N)	0.74	0.50		mg/L	1	07/27/2012 1200	07/27/2012 1700	EW
BOD, 5 day-SM5210 B								
Biochemical Oxygen Demand	14	2.0	K5	mg/L	1	07/17/2012 1535	07/22/2012 1535	AC

Turner Laboratories, Inc.

Date: 08/16/2012

Client:	City of Tucson - Transportation Department	**Client Sample ID:**	Grab
Project:	Storm Water Once per Season	**Collection Date/Time:**	07/15/2012 1725
Work Order:	12G0530	**Matrix:**	Storm Water
Lab Sample ID:	12G0530-02	**Order Name:**	120715 IN

Analyses	Result	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
N-Hexane Extractable Material (SGT-HEM)-E 1664A								
Total Petroleum Hydrocarbons	ND	5.00		mg/L	1	08/02/2012 0800	08/02/2012 1545	AC
N-Hexane Extractable Material (HEM)-E1664A								
Oil & Grease	11.5	5.00		mg/L	1	07/22/2012 1020	07/22/2012 1545	AC
Cyanide-SM4500-CN BE								
Cyanide	ND	0.10	E8	mg/L	1	07/24/2012 1500	07/25/2012 1725	EW
pH-SM4500-H+ B								
pH (pH Units)	7.9	0.0	H5	-	1	07/16/2012 1230	07/16/2012 1314	AC
Temperature (°C)	19		H5	-	1	07/16/2012 1230	07/16/2012 1314	AC

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12G0530
Date Received: 07/16/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1207206 - E200.7										
Blank (1207206-BLK1)				Prepared: 07/18/2012 Analyzed: 07/19/2012						
Arsenic	ND	40	ug/L							
Barium	0.40	50	ug/L							
Beryllium	ND	2.0	ug/L							
Cadmium	0.30	2.0	ug/L							
Calcium	ND	4000	ug/L							
Chromium	ND	30	ug/L							
Copper	1.3	20	ug/L							
Magnesium	ND	3000	ug/L							
Nickel	ND	50	ug/L							
Silver	0.73	10	ug/L							
Zinc	2.1	40	ug/L							
LCS (1207206-BS1)				Prepared: 07/18/2012 Analyzed: 07/19/2012						
Arsenic	1940	40	ug/L	2000		97	85-115			
Barium	2000	50	ug/L	2000		99	85-115			
Beryllium	48	2.0	ug/L	50.00		96	85-115			
Cadmium	48	2.0	ug/L	50.00		96	85-115			
Calcium	10000	4000	ug/L	10000		103	85-115			
Chromium	200	30	ug/L	200.0		102	85-115			
Copper	250	20	ug/L	250.0		100	85-115			
Magnesium	10000	3000	ug/L	10000		103	85-115			
Nickel	480	50	ug/L	500.0		97	85-115			
Silver	48	10	ug/L	50.00		97	85-115			
Zinc	490	40	ug/L	500.0		98	85-115			
LCS Dup (1207206-BSD1)				Prepared: 07/18/2012 Analyzed: 07/19/2012						
Arsenic	1950	40	ug/L	2000		98	85-115	0.6	20	
Barium	2000	50	ug/L	2000		99	85-115	0.08	20	
Beryllium	48	2.0	ug/L	50.00		96	85-115	0.1	20	
Cadmium	48	2.0	ug/L	50.00		96	85-115	0.4	20	
Calcium	10000	4000	ug/L	10000		104	85-115	0.9	20	
Chromium	200	30	ug/L	200.0		102	85-115	0.6	20	
Copper	250	20	ug/L	250.0		100	85-115	0.2	20	
Magnesium	10000	3000	ug/L	10000		104	85-115	0.9	20	
Nickel	490	50	ug/L	500.0		97	85-115	0.4	20	
Silver	48	10	ug/L	50.00		97	85-115	0.1	20	
Zinc	490	40	ug/L	500.0		98	85-115	0.08	20	

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12G0530
Date Received: 07/16/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1207206 - E200.7										
Matrix Spike (1207206-MS1)		**Source: 12G0115-01**		Prepared: 07/18/2012 Analyzed: 07/19/2012						
Arsenic	2020	40	ug/L	2000	17.3	100	70-130			
Barium	1900	50	ug/L	2000	140	88	70-130			
Beryllium	45	2.0	ug/L	50.00	ND	90	70-130			
Cadmium	42	2.0	ug/L	50.00	ND	83	70-130			
Calcium	190000	4000	ug/L	10000	190000	NR	70-130			
Chromium	190	30	ug/L	200.0	2.0	94	70-130			
Copper	610	20	ug/L	250.0	370	96	70-130			
Magnesium	45000	3000	ug/L	10000	37000	82	70-130			
Nickel	490	50	ug/L	500.0	9.9	95	70-130			
Silver	43	10	ug/L	50.00	ND	86	70-130			
Zinc	650	40	ug/L	500.0	180	94	70-130			
Matrix Spike (1207206-MS2)		**Source: 12G0564-03**		Prepared: 07/18/2012 Analyzed: 07/19/2012						
Arsenic	1890	40	ug/L	2000	37.0	93	70-130			
Barium	2700	50	ug/L	2000	850	95	70-130			
Beryllium	49	2.0	ug/L	50.00	2.3	94	70-130			
Cadmium	47	2.0	ug/L	50.00	1.7	90	70-130			
Calcium	140000	4000	ug/L	10000	130000	69	70-130			
Chromium	210	30	ug/L	200.0	20	96	70-130			
Copper	460	20	ug/L	250.0	200	105	70-130			
Magnesium	32000	3000	ug/L	10000	21000	106	70-130			
Nickel	510	50	ug/L	500.0	29	97	70-130			
Silver	48	10	ug/L	50.00	ND	96	70-130			
Zinc	1000	40	ug/L	500.0	550	94	70-130			
Batch 1207296 - E245.1										
Blank (1207296-BLK1)				Prepared: 07/26/2012 Analyzed: 07/27/2012						
Mercury	ND	1.0	ug/L							
LCS (1207296-BS1)				Prepared: 07/26/2012 Analyzed: 07/27/2012						
Mercury	5.2	1.0	ug/L	5.000		104	85-115			
LCS Dup (1207296-BSD1)				Prepared: 07/26/2012 Analyzed: 07/27/2012						
Mercury	5.1	1.0	ug/L	5.000		102	85-115	1	20	
Matrix Spike (1207296-MS1)		**Source: 12G0564-04**		Prepared: 07/26/2012 Analyzed: 07/27/2012						
Mercury	5.1	1.0	ug/L	5.000	0.48	92	85-115			
Matrix Spike (1207296-MS2)		**Source: 12G0531-01**		Prepared: 07/26/2012 Analyzed: 07/27/2012						
Mercury	5.2	1.0	ug/L	5.000	ND	105	85-115			
Matrix Spike Dup (1207296-MSD1)		**Source: 12G0564-04**		Prepared: 07/26/2012 Analyzed: 07/27/2012						
Mercury	4.8	1.0	ug/L	5.000	0.48	87	85-115	5	10	
Matrix Spike Dup (1207296-MSD2)		**Source: 12G0531-01**		Prepared: 07/26/2012 Analyzed: 07/27/2012						
Mercury	5.3	1.0	ug/L	5.000	ND	105	85-115	0.3	10	
Batch 1208027 - E200.8										

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12G0530
Date Received: 07/16/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1208027 - E200.8										
Blank (1208027-BLK1)				Prepared: 08/03/2012 Analyzed: 08/14/2012						
Antimony	0.0080	0.50	ug/L							
Lead	0.022	0.50	ug/L							
Selenium	0.20	2.5	ug/L							
Thallium	0.015	0.50	ug/L							
LCS (1208027-BS1)				Prepared: 08/03/2012 Analyzed: 08/14/2012						
Antimony	49	0.50	ug/L	50.00		98	85-115			
Lead	51	0.50	ug/L	50.00		101	85-115			
Selenium	230	2.5	ug/L	250.0		93	85-115			
Thallium	51	0.50	ug/L	50.00		101	85-115			
LCS Dup (1208027-BSD1)				Prepared: 08/03/2012 Analyzed: 08/14/2012						
Antimony	50	0.50	ug/L	50.00		100	85-115	2	20	
Lead	51	0.50	ug/L	50.00		102	85-115	1	20	
Selenium	230	2.5	ug/L	250.0		92	85-115	0.8	20	
Thallium	51	0.50	ug/L	50.00		102	85-115	0.6	20	
Matrix Spike (1208027-MS1)	**Source: 12G0728-01**			Prepared: 08/03/2012 Analyzed: 08/14/2012						
Antimony	44	0.50	ug/L	50.00	0.27	87	70-130			
Lead	49	0.50	ug/L	50.00	3.0	91	70-130			
Selenium	210	2.5	ug/L	250.0	1.7	83	70-130			
Thallium	45	0.50	ug/L	50.00	ND	89	70-130			
Matrix Spike (1208027-MS2)	**Source: 12G0826-01**			Prepared: 08/03/2012 Analyzed: 08/14/2012						
Antimony	49	0.50	ug/L	50.00	5.9	87	70-130			
Lead	47	0.50	ug/L	50.00	1.8	90	70-130			
Selenium	230	2.5	ug/L	250.0	0.45	93	70-130			
Thallium	43	0.50	ug/L	50.00	0.042	87	70-130			

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12G0530
Date Received: 07/16/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1207166 - SM4500-H+ B										
Duplicate (1207166-DUP1)		**Source: 12G0521-02**		Prepared & Analyzed: 07/16/2012						
pH (pH Units)	7.3	0.0	-		7.3			0.3	200	
Temperature (°C)	17		-		18			3	200	
Duplicate (1207166-DUP2)		**Source: 12G0543-05**		Prepared & Analyzed: 07/24/2012						
pH (pH Units)	6.5	0.0	-		6.5			0.2	200	
Temperature (°C)	19		-		19			2	200	
Duplicate (1207166-DUP3)		**Source: 12G0564-05**		Prepared & Analyzed: 07/24/2012						
pH (pH Units)	7.8	0.0	-		7.8			0.1	200	
Temperature (°C)	20		-		20			0.5	200	
Batch 1207172 - SM2540 D										
Duplicate (1207172-DUP1)		**Source: 12G0118-01**		Prepared: 07/17/2012 Analyzed: 07/18/2012						
Total Suspended Solids	160	10	mg/L		160			1	5	
Duplicate (1207172-DUP2)		**Source: 12G0115-01**		Prepared: 07/17/2012 Analyzed: 07/18/2012						
Total Suspended Solids	170	10	mg/L		170			2	5	
Batch 1207181 - H8048										
Blank (1207181-BLK1)				Prepared & Analyzed: 07/16/2012						
Orthophosphate (as P)	ND	0.10	mg/L							
LCS (1207181-BS1)				Prepared & Analyzed: 07/16/2012						
Orthophosphate (as P)	0.51	0.10	mg/L	0.5000		102	90-110			
LCS Dup (1207181-BSD1)				Prepared & Analyzed: 07/16/2012						
Orthophosphate (as P)	0.51	0.10	mg/L	0.5000		102	90-110	0	10	
Matrix Spike (1207181-MS1)		**Source: 12G0530-01**		Prepared & Analyzed: 07/16/2012						
Orthophosphate (as P)	0.63	0.10	mg/L	0.5000	0.12	102	85-115			
Matrix Spike Dup (1207181-MSD1)		**Source: 12G0530-01**		Prepared & Analyzed: 07/16/2012						
Orthophosphate (as P)	0.64	0.10	mg/L	0.5000	0.12	104	85-115	2	15	
Batch 1207211 - H8190										
Blank (1207211-BLK1)				Prepared & Analyzed: 07/20/2012						
Total Phosphorus (as P)	ND	0.10	mg/L							
LCS (1207211-BS1)				Prepared & Analyzed: 07/20/2012						
Total Phosphorus (as P)	0.53	0.10	mg/L	0.5000		106	90-110			
LCS Dup (1207211-BSD1)				Prepared & Analyzed: 07/20/2012						
Total Phosphorus (as P)	0.53	0.10	mg/L	0.5000		106	90-110	0	10	
Matrix Spike (1207211-MS1)		**Source: 12G0115-02**		Prepared & Analyzed: 07/20/2012						
Total Phosphorus (as P)	6.9	1.0	mg/L	5.000	2.0	98	70-130			
Matrix Spike Dup (1207211-MSD1)		**Source: 12G0115-02**		Prepared & Analyzed: 07/20/2012						
Total Phosphorus (as P)	6.9	1.0	mg/L	5.000	2.0	98	70-130	0	15	
Batch 1207228 - SM2540 C										

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12G0530
Date Received: 07/16/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1207228 - SM2540 C										
Duplicate (1207228-DUP1)		**Source: 12G0374-01**		Prepared: 07/20/2012 Analyzed: 07/23/2012						
Total Dissolved Solids (Residue, Filterable)	1100	20	mg/L		1100			0.5	5	
Batch 1207241 - SM4500-CN BE										
Blank (1207241-BLK1)				Prepared: 07/24/2012 Analyzed: 07/25/2012						
Cyanide	ND	0.10	mg/L							
LCS (1207241-BS1)				Prepared: 07/24/2012 Analyzed: 07/25/2012						
Cyanide	1.8	0.10	mg/L	2.000		90	90-110			
LCS Dup (1207241-BSD1)				Prepared: 07/24/2012 Analyzed: 07/25/2012						
Cyanide	1.8	0.10	mg/L	2.000		90	90-110	0	20	
Matrix Spike (1207241-MS1)		**Source: 12G0521-01**		Prepared: 07/24/2012 Analyzed: 07/25/2012						
Cyanide	1.8	0.10	mg/L	2.000	0.020	91	70-130			
Matrix Spike Dup (1207241-MSD1)		**Source: 12G0521-01**		Prepared: 07/24/2012 Analyzed: 07/25/2012						
Cyanide	1.8	0.10	mg/L	2.000	0.020	90	70-130	0.4	20	
Batch 1207244 - Hach 8000										
Blank (1207244-BLK1)				Prepared & Analyzed: 07/24/2012						
Chemical Oxygen Demand	ND	20	mg/L							
LCS (1207244-BS1)				Prepared & Analyzed: 07/24/2012						
Chemical Oxygen Demand	500	20	mg/L	500.0		100	70-130			
LCS Dup (1207244-BSD1)				Prepared & Analyzed: 07/24/2012						
Chemical Oxygen Demand	500	20	mg/L	500.0		101	70-130	0.6	20	
Matrix Spike (1207244-MS1)		**Source: 12G0374-01**		Prepared & Analyzed: 07/24/2012						
Chemical Oxygen Demand	530	20	mg/L	500.0	28	101	70-130			
Matrix Spike Dup (1207244-MSD1)		**Source: 12G0374-01**		Prepared & Analyzed: 07/24/2012						
Chemical Oxygen Demand	550	20	mg/L	500.0	28	104	70-130	3	20	
Batch 1207264 - E1664A										
Blank (1207264-BLK1)				Prepared & Analyzed: 07/22/2012						
Oil & Grease	ND	5.00	mg/L							
LCS (1207264-BS1)				Prepared & Analyzed: 07/22/2012						
Oil & Grease	40.3	5.00	mg/L	40.00		101	78-114			
LCS Dup (1207264-BSD1)				Prepared & Analyzed: 07/22/2012						
Oil & Grease	38.8	5.00	mg/L	40.00		97	78-114	4	18	
Matrix Spike (1207264-MS1)		**Source: 12G0360-02**		Prepared & Analyzed: 07/22/2012						
Oil & Grease	59.6	5.00	mg/L	40.00	20.4	98	78-114			
Batch 1207275 - SM5210 B										
Blank (1207275-BLK1)				Prepared: 07/17/2012 Analyzed: 07/22/2012						
Biochemical Oxygen Demand	ND	2.0	mg/L							

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12G0530
Date Received: 07/16/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1207275 - SM5210 B										
LCS (1207275-BS1)				Prepared: 07/17/2012 Analyzed: 07/22/2012						
Biochemical Oxygen Demand	210		mg/L	198.0		108	85-115			
Batch 1207300 - SM4500-NH3 B,C										
Blank (1207300-BLK1)				Prepared & Analyzed: 07/27/2012						
Nitrogen, Ammonia (As N)	ND	0.50	mg/L							
LCS (1207300-BS1)				Prepared & Analyzed: 07/27/2012						
Nitrogen, Ammonia (As N)	5.2	0.50	mg/L	5.000		103	90-110			
LCS Dup (1207300-BSD1)				Prepared & Analyzed: 07/27/2012						
Nitrogen, Ammonia (As N)	5.3	0.50	mg/L	5.000		106	90-110	3	10	
Matrix Spike (1207300-MS1)		**Source: 12G0115-02**		Prepared & Analyzed: 07/27/2012						
Nitrogen, Ammonia (As N)	37	2.5	mg/L	25.00	9.7	109	70-130			
Matrix Spike (1207300-MS2)		**Source: 12G0374-01**		Prepared & Analyzed: 07/27/2012						
Nitrogen, Ammonia (As N)	36	2.5	mg/L	25.00	11	100	70-130			
Matrix Spike Dup (1207300-MSD1)		**Source: 12G0115-02**		Prepared & Analyzed: 07/27/2012						
Nitrogen, Ammonia (As N)	36	2.5	mg/L	25.00	9.7	106	70-130	2	20	
Matrix Spike Dup (1207300-MSD2)		**Source: 12G0374-01**		Prepared & Analyzed: 07/27/2012						
Nitrogen, Ammonia (As N)	38	2.5	mg/L	25.00	11	107	70-130	5	20	
Batch 1208049 - E 1664A										
Blank (1208049-BLK1)				Prepared & Analyzed: 08/02/2012						
Total Petroleum Hydrocarbons	ND	5.00	mg/L							
LCS (1208049-BS1)				Prepared & Analyzed: 08/02/2012						
Total Petroleum Hydrocarbons	17.0	5.00	mg/L	20.00		85	64-132			
LCS Dup (1208049-BSD1)				Prepared & Analyzed: 08/02/2012						
Total Petroleum Hydrocarbons	17.3	5.00	mg/L	20.00		86	64-132	2	34	
Matrix Spike (1208049-MS1)		**Source: 12G0354-02**		Prepared & Analyzed: 08/02/2012						
Total Petroleum Hydrocarbons	19.9	5.00	mg/L	20.00	ND	100	64-132			
Batch 1208096 - PAI-DK01										
Blank (1208096-BLK1)				Prepared: 08/08/2012 Analyzed: 08/10/2012						
Nitrogen, Total Kjeldahl	ND	0.50	mg/L							
LCS (1208096-BS1)				Prepared: 08/08/2012 Analyzed: 08/10/2012						
Nitrogen, Total Kjeldahl	4.8	0.50	mg/L	5.000		97	80-120			
LCS Dup (1208096-BSD1)				Prepared: 08/08/2012 Analyzed: 08/10/2012						
Nitrogen, Total Kjeldahl	4.6	0.50	mg/L	5.000		92	80-120	5	20	
Matrix Spike (1208096-MS1)		**Source: 12G0521-02**		Prepared: 08/08/2012 Analyzed: 08/10/2012						
Nitrogen, Total Kjeldahl	9.5	0.50	mg/L	5.000	4.2	107	80-120			

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12G0530
Date Received: 07/16/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1208096 - PAI-DK01										
Matrix Spike (1208096-MS2)		**Source: 12G0564-01**		Prepared: 08/08/2012 Analyzed: 08/10/2012						
Nitrogen, Total Kjeldahl	150	10	mg/L	100.0	51	102	80-120			
Matrix Spike Dup (1208096-MSD1)		**Source: 12G0521-02**		Prepared: 08/08/2012 Analyzed: 08/10/2012						
Nitrogen, Total Kjeldahl	10	0.50	mg/L	5.000	4.2	116	80-120	5	20	
Matrix Spike Dup (1208096-MSD2)		**Source: 12G0564-01**		Prepared: 08/08/2012 Analyzed: 08/10/2012						
Nitrogen, Total Kjeldahl	150	10	mg/L	100.0	51	103	80-120	0.9	20	

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12G0530
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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1207157 - E300										
Blank (1207157-BLK1)				Prepared & Analyzed: 07/16/2012						
Nitrogen, Nitrate (As N)	ND	1.0	mg/L							
LCS (1207157-BS1)				Prepared & Analyzed: 07/16/2012						
Nitrogen, Nitrate (As N)	4.7	1.0	mg/L	5.000		94	90-110			
LCS Dup (1207157-BSD1)				Prepared & Analyzed: 07/16/2012						
Nitrogen, Nitrate (As N)	4.7	1.0	mg/L	5.000		94	90-110	0.4	10	
Matrix Spike (1207157-MS2)		**Source: 12G0562-01**		Prepared: 07/16/2012 Analyzed: 07/24/2012						
Nitrogen, Nitrate (As N)	20	2.0	mg/L	10.00	9.2	107	80-120			
Matrix Spike Dup (1207157-MSD2)		**Source: 12G0562-01**		Prepared: 07/16/2012 Analyzed: 07/24/2012						
Nitrogen, Nitrate (As N)	20	2.0	mg/L	10.00	9.2	108	80-120	0.6	10	
Batch 1207169 - E300										
Blank (1207169-BLK1)				Prepared & Analyzed: 07/17/2012						
Nitrogen, Nitrite (As N)	ND	0.10	mg/L							
LCS (1207169-BS1)				Prepared & Analyzed: 07/17/2012						
Nitrogen, Nitrite (As N)	2.4	0.10	mg/L	2.500		98	90-110			
LCS Dup (1207169-BSD1)				Prepared & Analyzed: 07/17/2012						
Nitrogen, Nitrite (As N)	2.5	0.10	mg/L	2.500		98	90-110	0.8	10	
Matrix Spike (1207169-MS1)		**Source: 12G0564-03**		Prepared & Analyzed: 07/17/2012						
Nitrogen, Nitrite (As N)	2.5	0.10	mg/L	2.500	0.086	96	80-120			
Matrix Spike (1207169-MS3)		**Source: 12G0575-05**		Prepared & Analyzed: 07/17/2012						
Nitrogen, Nitrite (As N)	2.3	0.10	mg/L	2.500	ND	91	80-120			
Matrix Spike Dup (1207169-MSD3)		**Source: 12G0575-05**		Prepared & Analyzed: 07/17/2012						
Nitrogen, Nitrite (As N)	2.3	0.10	mg/L	2.500	ND	93	80-120	2	10	

TURNER LABORATORIES INC.
2445 N. Coyote Drive, Suite 104
Tucson, Arizona 85745
(520) 882-5880
Fax: (520) 882-9788
www.turnerlabs.com

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

TURNER WORK ORDER # 1260530 DATE _____ PAGE _____ OF _____

PROJECT NAME Storm Water # 120715IN
CONTACT NAME Chris McNellis
COMPANY NAME City of Tucson - Transportation Dept
ADDRESS P.O. Box 27210
CITY Tucson STATE AZ ZIP CODE 85726
PHONE (520) 837-6583 FAX (520) 791-4373
SAMPLER'S SIGNATURE Eric Ross

CIRCLE ANALYSIS REQUESTED AND/OR CHECK THE APPROPRIATE BOX

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX*	NUMBER OF CONTAINERS	Total Metals *	Chemical Oxygen Demand	Hardness Ca & Mg	BOD	TDS	TSS	Orthophosphate - Hach	Nitrate + Nitrite	Total Phosphorus	TKN	NH3	TPH 1664	O & G	pH	CN	MPN				
Comp	7-15-12	5:25PM		Storm Water	20	X	X	X	X	X	X	X	X	X	X	X									
Grab	7-15-12	5:25PM		Storm Water	5												X	X	X	X					
					ER																ER				
					7-16-12																7-16-12				

1. RELINQUISHED BY: Eric Ross
Signature
ERIC ROSS
Printed Name
City of Tucson Trans. Dept
Firm
7-16-2012 10:20AM
Date/Time

2. RECEIVED BY:
Signature
Printed Name
Firm
Date/Time

TURNAROUND REQUIREMENTS:
____ Standard (approx.10 days)*
____ Next day ____ 2 Day ____ 5 Day*
____ Email Preliminary Results To:
* Working Days

REPORT REQUIREMENTS:
____ I. Routine Report
____ II. Report (includes DUP,MS,MSD, as required, may be charged as samples)
____ III. Date Validation Report (Includes All Raw Data)
Add 10% to invoice

INVOICE INFORMATION:
Account ____ Y ____ N
P.O. # _____
Bill to: _____

SAMPLE RECEIPT:
Total Containers 25
Temperature 1.5
☑ Wet Ice ☐ Blue Ice

3. RELINQUISHED BY:
Signature
Printed Name
Time

4. RECEIVED BY:
Signature
Printed Name
TURNER LABORATORIES, INC.
Firm
7-16-12 1020
Date/Time

*LEGEND
DW = DRINKING WATER
GW = GROUNDWATER
SD = SOLID
SG = SLUDGE
SL = SOIL
ST = STORMWATER
WW = WASTEWATER

SPECIAL INSTRUCTIONS/COMMENTS:

Compliance Analysis:	☐ Yes	☐ No	Custody Seals	☐	Preservation Confirmation	☑
ADEQ Forms:	☐ Yes	☐ No	Container Intact	☑	Appropriate Head Space	☐
Mail ADEQ Forms:	☐ Yes	☐ No	COC/Labels Agree	☑	Received Within Hold Time	☑

*Ni, Hg, Ag, Cr, Cd, Be, Ba, As, Cu, Sb, Zn, Se, Pb, Tl, Ca, Mg
Composite poured at lab per C.O.T. Specifications

July 20, 2012

Chris McNellis
City of Tucson - Transportation Department
PO Box 27210
Tucson, AZ 85726-7210

TEL (520) 837-6583
FAX (520) 791-4238

Work Order No.: 12G0522
Order Name: 120715 IN

RE: Storm Water Once per Season

Dear Chris McNellis,

Turner Laboratories, Inc. received 1 sample(s) on 07/15/2012 for the analyses presented in the following report.

All results are intended to be considered in their entirety, and Turner Laboratories, Inc. is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Samples will be disposed of 30 days after issue of our report unless special arrangements are made.

The pages that follow may contain sensitive, privileged or confidential information intended solely for the addressee named above. If you receive this message and are not the agent or employee of the addressee, this communication has been sent in error. Please do not disseminate or copy any of the attached and notify the sender immediately by telephone. Please also return the attached sheet(s) to the sender by mail.

Please call if you have any questions.

Respectfully submitted,

Turner Laboratories, Inc.
ADHS License AZ0066

Dawn Weyer
Project Manager

Turner Laboratories, Inc.

Date: 07/20/2012

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12G0522
Date Received: 07/15/2012

Order: 120715 IN

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date/Time
12G0522-01	Grab	Storm Water	07/15/2012 1725

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12G0522
Date Received: 07/15/2012

Case Narrative

E Value is above quantitation range.

All soil, sludge, and solid matrix determinations are reported on a wet weight basis unless otherwise noted.

ND Not Detected at or above the PQL

PQL Practical Quantitation Limit

DF Dilution Factor

Turner Laboratories, Inc.

Date: 07/20/2012

Client:	City of Tucson - Transportation Department	**Client Sample ID:**	Grab
Project:	Storm Water Once per Season	**Collection Date/Time:**	07/15/2012 1725
Work Order:	12G0522	**Matrix:**	Storm Water
Lab Sample ID:	12G0522-01	**Order Name:**	120715 IN

Analyses	Result	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Total Coliform & E. Coli, MPN-SM9223B								
E.Coli	2400	1.0	E	MPN/100mL	1	07/15/2012 2145	07/16/2012 2150	AC
Total Coliform	2400	1.0	E	MPN/100mL	1	07/15/2012 2145	07/16/2012 2150	AC

TURNER LABORATORIES INC.
2445 N. Coyote Drive, Suite 104
Tucson, Arizona 85745
(520) 882-5880
Fax: (520) 882-9788
www.turnerlabs.com

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

TURNER WORK ORDER # 1260522-01 DATE 7-15-12 PAGE 1 OF 1

PROJECT NAME Storm Water # 120715 IN

CONTACT NAME Chris McNellis

COMPANY NAME City of Tucson - Transportation Dept

ADDRESS P.O. Box 27210

CITY Tucson STATE AZ ZIP CODE 85726

PHONE (520) 837-6583 FAX (520) 791-4373

SAMPLER'S SIGNATURE Ella Ross

CIRCLE ANALYSIS REQUESTED AND/OR CHECK THE APPROPRIATE BOX

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX*	NUMBER OF CONTAINERS	MPN
Grab	7-15	5:20 PM		Storm Water	1	X

1. RELINQUISHED BY: Ella Ross
Signature
E.R.C. ROSS
Printed Name
City of Tucson Trans. Dept
Firm
7-15-12 9:25 PM
Date/Time

2. RECEIVED BY:
Signature
Printed Name
Firm
Date/Time

TURNAROUND REQUIREMENTS:
Standard (approx 10 days)*
Next day 2 Day 5 Day*
Email Preliminary Results To:
* Working Days

REPORT REQUIREMENTS:
I. Routine Report
II. Report (includes DUP,MS,MSD, as required, may be charged as samples)
III. Data Validation Report (includes All Raw Data)
Add 10% to invoice

INVOICE INFORMATION:
Account Y N
P.O. #
Bill to:

SAMPLE RECEIPT:
Total Containers 1
Temperature 7.3
☒ Wet Ice ☐ Blue Ice

3. RELINQUISHED BY:
Signature
Printed Name
Firm
Date/Time

4. RECEIVED BY: E. Williams
Signature
Erika Weidenschilling
Printed Name
TURNER LABORATORIES, INC.
Firm
7-15-12 / 2125
Date/Time

*LEGEND
DW = DRINKING WATER
GW = GROUNDWATER
SD = SOLID
SG = SLUDGE
SL = SOIL
ST = STORMWATER
WW = WASTEWATER

SPECIAL INSTRUCTIONS/COMMENTS:

Compliance Analysis: ☐ Yes ☐ No	Custody Seals ☒	Preservation Confirmation ☒
ADEQ Forms: ☐ Yes ☐ No	Container Intact ☒	Appropriate Head Space ☒
Mail ADEQ Forms: ☐ Yes ☐ No	COC/Labels Agree ☒	Received Within Hold Time ☒

*Ni, Hg, Ag, Cr, Cd, Be, Ba, As, Cu, Sb, Zn, Se, Pb, Tl, Ca, Mg

Composite poured at lab per C.O.T. Specifications

August 07, 2012

Chris McNellis
City of Tucson - Transportation Department
PO Box 27210
Tucson, AZ 85726-7210

TEL (520) 837-6583
FAX (520) 791-4238

Work Order No.: 12G0354
Order Name: 120710MU

RE: Storm Water Once per Season

Dear Chris McNellis,

Turner Laboratories, Inc. received 2 sample(s) on 07/11/2012 for the analyses presented in the following report.

All results are intended to be considered in their entirety, and Turner Laboratories, Inc. is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Samples will be disposed of 30 days after issue of our report unless special arrangements are made.

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Please call if you have any questions.

Respectfully submitted,

Turner Laboratories, Inc.
ADHS License AZ0066

Terri L. Garcia

Terri Garcia
Technical Director

Turner Laboratories, Inc.

Date: 08/07/2012

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12G0354
Date Received: 07/11/2012

Order: 120710MU

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date/Time
12G0354-01	Composite	Storm Water	07/10/2012 1800
12G0354-02	Grab	Storm Water	07/10/2012 1800

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12G0354
Date Received: 07/11/2012

Case Narrative

E4	Concentration estimated. Analyte was detected below laboratory Minimum Reporting Limit (MRL).
E8	Analyte reported to MDL per project specification. Target analyte was not detected in the sample.
H5	This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time.
K8	Glucose/glutamic acid BOD/CBOD was above method acceptance levels.

All soil, sludge, and solid matrix determinations are reported on a wet weight basis unless otherwise noted.

ND	Not Detected at or above the PQL
PQL	Practical Quantitation Limit
DF	Dilution Factor

Turner Laboratories, Inc.

Date: 08/07/2012

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12G0354
Lab Sample ID: 12G0354-01

Client Sample ID: Composite
Collection Date/Time: 07/10/2012 1800
Matrix: Storm Water
Order Name: 120710MU

Analyses	Result	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Hardness-Calculation								
Hardness, Calcium/Magnesium (As CaCO3)	92			mg/L	1	07/18/2012 1400	07/19/2012 1529	RAD
Nitrate + Nitrite Sum-Calculation								
Nitrate and Nitrite Sum	1.1	0.10		mg/L	1	07/12/2012 0900	07/12/2012 1622	EW
ICP Total Metals-E200.7								
Arsenic	7.3	40	E4	ug/L	1	07/18/2012 1400	07/19/2012 1530	RAD
Barium	180	50		ug/L	1	07/18/2012 1400	07/19/2012 1529	RAD
Beryllium	ND	2.0	E8	ug/L	1	07/18/2012 1400	07/19/2012 1529	RAD
Cadmium	ND	2.0	E8	ug/L	1	07/18/2012 1400	07/19/2012 1530	RAD
Calcium	27000	4000		ug/L	1	07/18/2012 1400	07/19/2012 1529	RAD
Chromium	12	30	E4	ug/L	1	07/18/2012 1400	07/19/2012 1530	RAD
Copper	97	20		ug/L	1	07/18/2012 1400	07/19/2012 1529	RAD
Magnesium	5900	3000		ug/L	1	07/18/2012 1400	07/19/2012 1529	RAD
Nickel	13	50	E4	ug/L	1	07/18/2012 1400	07/19/2012 1530	RAD
Silver	ND	10	E8	ug/L	1	07/18/2012 1400	07/19/2012 1530	RAD
Zinc	420	40		ug/L	1	07/18/2012 1400	07/19/2012 1529	RAD
ICP/MS Total Metals-E200.8								
Antimony	2.2	0.50		ug/L	1	07/25/2012 1145	07/30/2012 1651	RAD
Lead	40	0.50		ug/L	1	07/25/2012 1145	07/30/2012 1651	RAD
Selenium	0.36	2.5	E4	ug/L	1	07/25/2012 1145	07/30/2012 1651	RAD
Thallium	0.040	0.50	E4	ug/L	1	07/25/2012 1145	07/30/2012 1651	RAD
CVAA Total Mercury-E245.1								
Mercury	ND	1.0	E8	ug/L	1	07/20/2012 1450	07/22/2012 1400	RAD
Anions by Ion Chromatography-E300								
Nitrogen, Nitrate (As N)	1.1	1.0		mg/L	1	07/12/2012 0900	07/12/2012 1622	EW
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	07/12/2012 0900	07/12/2012 1622	EW
Orthophosphate as P-H8048								
Orthophosphate (as P)	0.16	0.10		mg/L	1	07/12/2012 1345	07/12/2012 1445	EW
Total Phosphorous as P-H8190								
Total Phosphorus (as P)	0.90	0.50		mg/L	5	07/20/2012 0830	07/20/2012 1545	EW
Chemical Oxygen Demand-Hach 8000								
Chemical Oxygen Demand	260	20		mg/L	1	07/17/2012 0830	07/17/2012 1510	EW

Turner Laboratories, Inc.

Date: 08/07/2012

Client:	City of Tucson - Transportation Department	**Client Sample ID:**	Composite
Project:	Storm Water Once per Season	**Collection Date/Time:**	07/10/2012 1800
Work Order:	12G0354	**Matrix:**	Storm Water
Lab Sample ID:	12G0354-01	**Order Name:**	120710MU

Analyses	Result	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Total Kjeldahl Nitrogen-PAI-DK01								
Nitrogen, Total Kjeldahl	19	5.0		mg/L	10	08/01/2012 1500	08/03/2012 1655	EW
Total Dissolved Solids (Residue, Filterable)-SM2540 C								
Total Dissolved Solids (Residue, Filterable)	120	20		mg/L	1	07/13/2012 1229	07/17/2012 1230	AC
Total Suspended Solids (Residue, Non-Filterable)-SM2540 D								
Total Suspended Solids	500	10		mg/L	1	07/11/2012 1320	07/12/2012 1335	AC
Ammonia as N-SM4500-NH3 B,C								
Nitrogen, Ammonia (As N)	1.1	0.50		mg/L	1	07/27/2012 1200	07/27/2012 1700	EW
BOD, 5 day-SM5210 B								
Biochemical Oxygen Demand	27	2.0	K8	mg/L	1	07/12/2012 1100	07/17/2012 1100	EW

Turner Laboratories, Inc.

Date: 08/07/2012

Client:	City of Tucson - Transportation Department	**Client Sample ID:**	Grab
Project:	Storm Water Once per Season	**Collection Date/Time:**	07/10/2012 1800
Work Order:	12G0354	**Matrix:**	Storm Water
Lab Sample ID:	12G0354-02	**Order Name:**	120710MU

Analyses	Result	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
N-Hexane Extractable Material (SGT-HEM)-E 1664A								
Total Petroleum Hydrocarbons	ND	5.00		mg/L	1	08/02/2012 0800	08/02/2012 1545	AC
N-Hexane Extractable Material (HEM)-E1664A								
Oil & Grease	13.0	5.00		mg/L	1	07/13/2012 1053	07/13/2012 1137	AC
Cyanide-SM4500-CN BE								
Cyanide	ND	0.10		mg/L	1	07/18/2012 1350	07/19/2012 1300	EW
pH-SM4500-H+ B								
pH (pH Units)	7.2	0.0	H5	-	1	07/11/2012 1252	07/11/2012 1314	AC
Temperature (°C)	21		H5	-	1	07/11/2012 1252	07/11/2012 1314	AC

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12G0354
Date Received: 07/11/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1207204 - E200.7										
Blank (1207204-BLK1)				Prepared: 07/18/2012 Analyzed: 07/19/2012						
Arsenic	ND	40	ug/L							
Barium	0.30	50	ug/L							
Beryllium	ND	2.0	ug/L							
Cadmium	0.35	2.0	ug/L							
Calcium	ND	4000	ug/L							
Chromium	ND	30	ug/L							
Copper	ND	20	ug/L							
Magnesium	ND	3000	ug/L							
Nickel	ND	50	ug/L							
Silver	0.58	10	ug/L							
Zinc	1.8	40	ug/L							
LCS (1207204-BS1)				Prepared: 07/18/2012 Analyzed: 07/19/2012						
Arsenic	2020	40	ug/L	2000		101	85-115			
Barium	2000	50	ug/L	2000		101	85-115			
Beryllium	49	2.0	ug/L	50.00		98	85-115			
Cadmium	51	2.0	ug/L	50.00		102	85-115			
Calcium	11000	4000	ug/L	10000		106	85-115			
Chromium	200	30	ug/L	200.0		99	85-115			
Copper	250	20	ug/L	250.0		102	85-115			
Magnesium	10000	3000	ug/L	10000		103	85-115			
Nickel	480	50	ug/L	500.0		97	85-115			
Silver	47	10	ug/L	50.00		94	85-115			
Zinc	500	40	ug/L	500.0		100	85-115			
LCS Dup (1207204-BSD1)				Prepared: 07/18/2012 Analyzed: 07/19/2012						
Arsenic	2000	40	ug/L	2000		100	85-115	0.9	20	
Barium	2000	50	ug/L	2000		102	85-115	1	20	
Beryllium	49	2.0	ug/L	50.00		99	85-115	1	20	
Cadmium	50	2.0	ug/L	50.00		100	85-115	1	20	
Calcium	10000	4000	ug/L	10000		105	85-115	1	20	
Chromium	200	30	ug/L	200.0		100	85-115	0.7	20	
Copper	260	20	ug/L	250.0		103	85-115	2	20	
Magnesium	10000	3000	ug/L	10000		102	85-115	0.4	20	
Nickel	490	50	ug/L	500.0		98	85-115	1	20	
Silver	47	10	ug/L	50.00		95	85-115	0.8	20	
Zinc	500	40	ug/L	500.0		101	85-115	0.8	20	

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12G0354
Date Received: 07/11/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1207204 - E200.7										
Matrix Spike (1207204-MS1)		**Source: 12G0108-01**		Prepared: 07/18/2012 Analyzed: 07/19/2012						
Arsenic	2070	40	ug/L	2000	11.5	103	70-130			
Barium	2000	50	ug/L	2000	1.7	100	70-130			
Beryllium	49	2.0	ug/L	50.00	ND	98	70-130			
Cadmium	50	2.0	ug/L	50.00	ND	99	70-130			
Calcium	12000	4000	ug/L	10000	1800	106	70-130			
Chromium	200	30	ug/L	200.0	0.64	98	70-130			
Copper	290	20	ug/L	250.0	13	109	70-130			
Magnesium	11000	3000	ug/L	10000	840	103	70-130			
Nickel	480	50	ug/L	500.0	1.0	97	70-130			
Silver	46	10	ug/L	50.00	0.62	91	70-130			
Zinc	530	40	ug/L	500.0	7.1	104	70-130			
Matrix Spike (1207204-MS2)		**Source: 12G0462-01**		Prepared: 07/18/2012 Analyzed: 07/19/2012						
Arsenic	2100	40	ug/L	2000	9.47	105	70-130			
Barium	2600	50	ug/L	2000	1000	79	70-130			
Beryllium	49	2.0	ug/L	50.00	ND	97	70-130			
Cadmium	48	2.0	ug/L	50.00	ND	96	70-130			
Calcium	59000	4000	ug/L	10000	49000	101	70-130			
Chromium	200	30	ug/L	200.0	1.2	97	70-130			
Copper	740	20	ug/L	250.0	520	87	70-130			
Magnesium	20000	3000	ug/L	10000	9500	103	70-130			
Nickel	500	50	ug/L	500.0	13	98	70-130			
Silver	48	10	ug/L	50.00	4.5	87	70-130			
Zinc	520	40	ug/L	500.0	13	102	70-130			
Batch 1207219 - E245.1										
Blank (1207219-BLK1)				Prepared: 07/20/2012 Analyzed: 07/22/2012						
Mercury	ND	1.0	ug/L							
LCS (1207219-BS1)				Prepared: 07/20/2012 Analyzed: 07/22/2012						
Mercury	5.3	1.0	ug/L	5.000		106	85-115			
LCS Dup (1207219-BSD1)				Prepared: 07/20/2012 Analyzed: 07/22/2012						
Mercury	5.2	1.0	ug/L	5.000		105	85-115	0.7	20	
Matrix Spike (1207219-MS1)		**Source: 12G0223-01**		Prepared: 07/20/2012 Analyzed: 07/22/2012						
Mercury	5.0	1.0	ug/L	5.000	ND	101	85-115			
Matrix Spike (1207219-MS2)		**Source: 12G0374-01**		Prepared: 07/20/2012 Analyzed: 07/22/2012						
Mercury	5.1	1.0	ug/L	5.000	ND	102	85-115			
Matrix Spike Dup (1207219-MSD1)		**Source: 12G0223-01**		Prepared: 07/20/2012 Analyzed: 07/22/2012						
Mercury	5.1	1.0	ug/L	5.000	ND	102	85-115	1	10	
Matrix Spike Dup (1207219-MSD2)		**Source: 12G0374-01**		Prepared: 07/20/2012 Analyzed: 07/22/2012						
Mercury	5.1	1.0	ug/L	5.000	ND	103	85-115	0.9	10	
Batch 1207278 - E200.8										

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12G0354
Date Received: 07/11/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1207278 - E200.8										
Blank (1207278-BLK1)				Prepared: 07/25/2012 Analyzed: 07/30/2012						
Antimony	ND	0.50	ug/L							
Lead	ND	0.50	ug/L							
Selenium	ND	2.5	ug/L							
Thallium	ND	0.50	ug/L							
LCS (1207278-BS1)				Prepared: 07/25/2012 Analyzed: 07/30/2012						
Antimony	50	0.50	ug/L	50.00		99	85-115			
Lead	51	0.50	ug/L	50.00		102	85-115			
Selenium	260	2.5	ug/L	250.0		104	85-115			
Thallium	50	0.50	ug/L	50.00		101	85-115			
LCS Dup (1207278-BSD1)				Prepared: 07/25/2012 Analyzed: 07/30/2012						
Antimony	49	0.50	ug/L	50.00		99	85-115	0.4	20	
Lead	51	0.50	ug/L	50.00		101	85-115	0.9	20	
Selenium	260	2.5	ug/L	250.0		104	85-115	0.02	20	
Thallium	50	0.50	ug/L	50.00		99	85-115	2	20	
Matrix Spike (1207278-MS1)	**Source: 12G0374-01**			Prepared: 07/25/2012 Analyzed: 07/31/2012						
Antimony	51	0.50	ug/L	50.00	0.41	101	70-130			
Lead	51	0.50	ug/L	50.00	0.28	100	70-130			
Selenium	260	2.5	ug/L	250.0	2.3	103	70-130			
Thallium	49	0.50	ug/L	50.00	ND	98	70-130			
Matrix Spike (1207278-MS2)	**Source: 12G0564-05**			Prepared: 07/25/2012 Analyzed: 07/31/2012						
Antimony	3.0	2.0	ug/L	50.00	0.29	5	70-130			
Lead	550	2.0	ug/L	50.00	510	84	70-130			
Selenium	120	10	ug/L	250.0	ND	49	70-130			
Thallium	42	2.0	ug/L	50.00	0.73	83	70-130			

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12G0354
Date Received: 07/11/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1207099 - SM2540 D										
Duplicate (1207099-DUP1)		**Source: 12G0103-01**		Prepared: 07/11/2012 Analyzed: 07/12/2012						
Total Suspended Solids	100	10	mg/L		110			2	5	
Duplicate (1207099-DUP2)		**Source: 12G0344-02**		Prepared: 07/11/2012 Analyzed: 07/12/2012						
Total Suspended Solids	2100	10	mg/L		2000			1	5	
Duplicate (1207099-DUP3)		**Source: 12G0248-02**		Prepared: 07/11/2012 Analyzed: 07/12/2012						
Total Suspended Solids	82	10	mg/L		84			2	5	
Batch 1207106 - SM4500-H+ B										
Duplicate (1207106-DUP1)		**Source: 12G0354-02**		Prepared & Analyzed: 07/11/2012						
pH (pH Units)	7.3	0.0	-		7.2			0.1	200	
Temperature (°C)	20		-		21			2	200	
Batch 1207131 - H8048										
Blank (1207131-BLK1)				Prepared & Analyzed: 07/12/2012						
Orthophosphate (as P)	ND	0.10	mg/L							
LCS (1207131-BS1)				Prepared & Analyzed: 07/12/2012						
Orthophosphate (as P)	0.51	0.10	mg/L	0.5000		102	90-110			
LCS Dup (1207131-BSD1)				Prepared & Analyzed: 07/12/2012						
Orthophosphate (as P)	0.54	0.10	mg/L	0.5000		108	90-110	6	10	
Matrix Spike (1207131-MS1)		**Source: 12G0354-01**		Prepared & Analyzed: 07/12/2012						
Orthophosphate (as P)	0.66	0.10	mg/L	0.5000	0.16	100	85-115			
Matrix Spike Dup (1207131-MSD1)		**Source: 12G0354-01**		Prepared & Analyzed: 07/12/2012						
Orthophosphate (as P)	0.67	0.10	mg/L	0.5000	0.16	102	85-115	2	15	
Batch 1207158 - SM2540 C										
Duplicate (1207158-DUP1)		**Source: 12G0386-01**		Prepared: 07/13/2012 Analyzed: 07/17/2012						
Total Dissolved Solids (Residue, Filterable)	150	20	mg/L		150			2	5	
Duplicate (1207158-DUP2)		**Source: 12G0354-01**		Prepared: 07/13/2012 Analyzed: 07/17/2012						
Total Dissolved Solids (Residue, Filterable)	120	20	mg/L		120			3	5	
Batch 1207162 - E1664A										
Blank (1207162-BLK1)				Prepared & Analyzed: 07/13/2012						
Oil & Grease	ND	5.00	mg/L							
LCS (1207162-BS1)				Prepared & Analyzed: 07/13/2012						
Oil & Grease	35.8	5.00	mg/L	40.00		90	78-114			
LCS Dup (1207162-BSD1)				Prepared & Analyzed: 07/13/2012						
Oil & Grease	36.8	5.00	mg/L	40.00		92	78-114	3	18	
Matrix Spike (1207162-MS1)		**Source: 12G0103-02**		Prepared & Analyzed: 07/13/2012						
Oil & Grease	44.3	5.00	mg/L	40.00	7.90	91	78-114			

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12G0354
Date Received: 07/11/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1207170 - SM5210 B										
Blank (1207170-BLK1)				Prepared: 07/12/2012 Analyzed: 07/17/2012						
Biochemical Oxygen Demand	ND	2.0	mg/L							
LCS (1207170-BS1)				Prepared: 07/12/2012 Analyzed: 07/17/2012						
Biochemical Oxygen Demand	350		mg/L	198.0		176	85-115			
Batch 1207185 - Hach 8000										
Blank (1207185-BLK1)				Prepared & Analyzed: 07/17/2012						
Chemical Oxygen Demand	ND	20	mg/L							
LCS (1207185-BS1)				Prepared & Analyzed: 07/17/2012						
Chemical Oxygen Demand	500	20	mg/L	500.0		101	70-130			
LCS Dup (1207185-BSD1)				Prepared & Analyzed: 07/17/2012						
Chemical Oxygen Demand	500	20	mg/L	500.0		100	70-130	1	20	
Matrix Spike (1207185-MS1)		**Source: 12G0142-01**		Prepared & Analyzed: 07/17/2012						
Chemical Oxygen Demand	550	20	mg/L	500.0	75	95	70-130			
Matrix Spike Dup (1207185-MSD1)		**Source: 12G0142-01**		Prepared & Analyzed: 07/17/2012						
Chemical Oxygen Demand	560	20	mg/L	500.0	75	98	70-130	3	20	
Batch 1207187 - SM4500-CN BE										
Blank (1207187-BLK1)				Prepared: 07/18/2012 Analyzed: 07/19/2012						
Cyanide	ND	0.10	mg/L							
LCS (1207187-BS1)				Prepared: 07/18/2012 Analyzed: 07/19/2012						
Cyanide	2.1	0.10	mg/L				90-110			
LCS Dup (1207187-BSD1)				Prepared: 07/18/2012 Analyzed: 07/19/2012						
Cyanide	2.0	0.10	mg/L				90-110	3	20	
Matrix Spike (1207187-MS1)		**Source: 12G0310-01**		Prepared: 07/18/2012 Analyzed: 07/19/2012						
Cyanide	1.9	0.10	mg/L		ND		70-130			
Matrix Spike Dup (1207187-MSD1)		**Source: 12G0310-01**		Prepared: 07/18/2012 Analyzed: 07/19/2012						
Cyanide	1.9	0.10	mg/L		ND		70-130	0	20	
Batch 1207211 - H8190										
Blank (1207211-BLK1)				Prepared & Analyzed: 07/20/2012						
Total Phosphorus (as P)	ND	0.10	mg/L							
LCS (1207211-BS1)				Prepared & Analyzed: 07/20/2012						
Total Phosphorus (as P)	0.53	0.10	mg/L	0.5000		106	90-110			
LCS Dup (1207211-BSD1)				Prepared & Analyzed: 07/20/2012						
Total Phosphorus (as P)	0.53	0.10	mg/L	0.5000		106	90-110	0	10	
Matrix Spike (1207211-MS1)		**Source: 12G0115-02**		Prepared & Analyzed: 07/20/2012						
Total Phosphorus (as P)	6.9	1.0	mg/L	5.000	2.0	98	70-130			

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12G0354
Date Received: 07/11/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1207211 - H8190										
Matrix Spike Dup (1207211-MSD1)		**Source: 12G0115-02**		Prepared & Analyzed: 07/20/2012						
Total Phosphorus (as P)	6.9	1.0	mg/L	5.000	2.0	98	70-130	0	15	
Batch 1207294 - PAI-DK01										
Blank (1207294-BLK1)				Prepared: 08/01/2012 Analyzed: 08/03/2012						
Nitrogen, Total Kjeldahl	ND	0.50	mg/L							
LCS (1207294-BS1)				Prepared: 08/01/2012 Analyzed: 08/03/2012						
Nitrogen, Total Kjeldahl	4.4	0.50	mg/L	5.000		88	80-120			
LCS Dup (1207294-BSD1)				Prepared: 08/01/2012 Analyzed: 08/03/2012						
Nitrogen, Total Kjeldahl	4.4	0.50	mg/L	5.000		88	80-120	0.5	20	
Matrix Spike (1207294-MS1)		**Source: 12G0328-01**		Prepared: 08/01/2012 Analyzed: 08/03/2012						
Nitrogen, Total Kjeldahl	4.6	0.50	mg/L	5.000	0.16	88	80-120			
Matrix Spike (1207294-MS2)		**Source: 12G0521-01**		Prepared: 08/01/2012 Analyzed: 08/03/2012						
Nitrogen, Total Kjeldahl	4.2	0.50	mg/L	5.000	ND	83	80-120			
Matrix Spike Dup (1207294-MSD1)		**Source: 12G0328-01**		Prepared: 08/01/2012 Analyzed: 08/03/2012						
Nitrogen, Total Kjeldahl	4.6	0.50	mg/L	5.000	0.16	88	80-120	0.5	20	
Matrix Spike Dup (1207294-MSD2)		**Source: 12G0521-01**		Prepared: 08/01/2012 Analyzed: 08/03/2012						
Nitrogen, Total Kjeldahl	4.1	0.50	mg/L	5.000	ND	82	80-120	2	20	
Batch 1207300 - SM4500-NH3 B,C										
Blank (1207300-BLK1)				Prepared & Analyzed: 07/27/2012						
Nitrogen, Ammonia (As N)	ND	0.50	mg/L							
LCS (1207300-BS1)				Prepared & Analyzed: 07/27/2012						
Nitrogen, Ammonia (As N)	5.2	0.50	mg/L	5.000		103	90-110			
LCS Dup (1207300-BSD1)				Prepared & Analyzed: 07/27/2012						
Nitrogen, Ammonia (As N)	5.3	0.50	mg/L	5.000		106	90-110	3	10	
Matrix Spike (1207300-MS1)		**Source: 12G0115-02**		Prepared & Analyzed: 07/27/2012						
Nitrogen, Ammonia (As N)	37	2.5	mg/L	25.00	9.7	109	70-130			
Matrix Spike (1207300-MS2)		**Source: 12G0374-01**		Prepared & Analyzed: 07/27/2012						
Nitrogen, Ammonia (As N)	36	2.5	mg/L	25.00	11	100	70-130			
Matrix Spike Dup (1207300-MSD1)		**Source: 12G0115-02**		Prepared & Analyzed: 07/27/2012						
Nitrogen, Ammonia (As N)	36	2.5	mg/L	25.00	9.7	106	70-130	2	20	
Matrix Spike Dup (1207300-MSD2)		**Source: 12G0374-01**		Prepared & Analyzed: 07/27/2012						
Nitrogen, Ammonia (As N)	38	2.5	mg/L	25.00	11	107	70-130	5	20	
Batch 1208049 - E 1664A										
Blank (1208049-BLK1)				Prepared & Analyzed: 08/02/2012						
Total Petroleum Hydrocarbons	ND	5.00	mg/L							

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12G0354
Date Received: 07/11/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1208049 - E 1664A										
LCS (1208049-BS1)				Prepared & Analyzed: 08/02/2012						
Total Petroleum Hydrocarbons	17.0	5.00	mg/L	20.00		85	64-132			
LCS Dup (1208049-BSD1)				Prepared & Analyzed: 08/02/2012						
Total Petroleum Hydrocarbons	17.3	5.00	mg/L	20.00		86	64-132	2	34	
Matrix Spike (1208049-MS1)		**Source: 12G0354-02**		Prepared & Analyzed: 08/02/2012						
Total Petroleum Hydrocarbons	19.9	5.00	mg/L	20.00	ND	100	64-132			

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12G0354
Date Received: 07/11/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1207105 - E300										
Blank (1207105-BLK1)				Prepared & Analyzed: 07/12/2012						
Nitrogen, Nitrate (As N)	ND	1.0	mg/L							
Nitrogen, Nitrite (As N)	ND	0.10	mg/L							
LCS (1207105-BS1)				Prepared & Analyzed: 07/12/2012						
Nitrogen, Nitrate (As N)	4.8	1.0	mg/L	5.000		97	90-110			
Nitrogen, Nitrite (As N)	2.5	0.10	mg/L	2.500		101	90-110			
LCS Dup (1207105-BSD1)				Prepared & Analyzed: 07/12/2012						
Nitrogen, Nitrate (As N)	4.8	1.0	mg/L	5.000		97	90-110	0.4	10	
Nitrogen, Nitrite (As N)	2.5	0.10	mg/L	2.500		101	90-110	0.5	10	
Matrix Spike (1207105-MS1)		**Source: 12G0388-01**		Prepared: 07/12/2012 Analyzed: 07/13/2012						
Nitrogen, Nitrate (As N)	5.6	1.0	mg/L	5.000	0.89	93	80-120			
Matrix Spike (1207105-MS2)		**Source: 12G0418-01**		Prepared: 07/12/2012 Analyzed: 07/13/2012						
Nitrogen, Nitrate (As N)	6.7	1.0	mg/L	5.000	1.9	96	80-120			
Nitrogen, Nitrite (As N)	2.2	0.10	mg/L	2.500	ND	87	80-120			
Matrix Spike Dup (1207105-MSD1)		**Source: 12G0388-01**		Prepared: 07/12/2012 Analyzed: 07/13/2012						
Nitrogen, Nitrate (As N)	5.6	1.0	mg/L	5.000	0.89	94	80-120	0.8	10	
Matrix Spike Dup (1207105-MSD2)		**Source: 12G0418-01**		Prepared: 07/12/2012 Analyzed: 07/13/2012						
Nitrogen, Nitrate (As N)	6.7	1.0	mg/L	5.000	1.9	97	80-120	0.6	10	
Nitrogen, Nitrite (As N)	2.2	0.10	mg/L	2.500	ND	89	80-120	1	10	

TURNER LABORATORIES INC.
2445 N. Coyote Drive, Suite 104
Tucson, Arizona 85745
(520) 882-5880
Fax: (520) 882-9788
www.turnerlabs.com

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

TURNER WORK ORDER # 1260354 DATE _____ PAGE _____ OF _____

PROJECT NAME Storm Water #120710MU
CONTACT NAME Chris McNellis
COMPANY NAME City of Tucson - Transportation Dept
ADDRESS P.O. Box 27210
CITY Tucson STATE AZ ZIP CODE 85726
PHONE (520) 837-6583 FAX (520) 791-4373
SAMPLER'S SIGNATURE Eric Ross

CIRCLE ANALYSIS REQUESTED AND/OR CHECK THE APPROPRIATE BOX

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX*	NUMBER OF CONTAINERS	Total Metals *	Chemical Oxygen Demand	Hardness Ca & Mg	BOD	TDS	TSS	Orthophosphate - Hach	Nitrate + Nitrite	Total Phosphorus	TKN	NH3	TPH 1664	O & G	pH	CN	~~MPN~~ EB 7-11-12				
Comp	7-10-12	6:00PM	ST	Storm Water	20	X	X	X	X	X	X	X	X	X	X	X									
Grab	7-10-12	10:00PM	ST	Storm Water	5	EB 7-11-12											X	X	X	X					

1. RELINQUISHED BY: Eric Ross
Signature
ERIC ROSS
Printed Name
City of Tucson Trans. Dept
Firm
7-11-12 10:34
Date/Time

2. RECEIVED BY:
Signature
Printed Name
Firm
Date/Time

TURNAROUND REQUIREMENTS:
____ Standard (approx.10 days)*
____ Next day ____ 2 Day ____ 5 Day*
____ Email Preliminary Results To:
* Working Days

REPORT REQUIREMENTS:
____ I. Routine Report
____ II. Report (includes DUP,MS,MSD, as required, may be charged as samples)
____ III. Date Validation Report (Includes All Raw Data)
Add 10% to invoice

INVOICE INFORMATION:
Account ____ Y ____ N
P.O. # _____
Bill to: _____

SAMPLE RECEIPT:
Total Containers 25
Temperature 0.1
☑ Wet Ice ☐ Blue Ice

3. RELINQUISHED BY:
Signature
Printed Name
Date/Time

4. RECEIVED BY:
Signature Stephen Lodh
Printed Name
TURNER LABORATORIES, INC.
Firm
7-11-12 1034
Date/Time

*LEGEND
DW = DRINKING WATER
GW = GROUNDWATER
SD = SOLID
SG = SLUDGE
SL = SOIL
ST = STORMWATER
WW = WASTEWATER

SPECIAL INSTRUCTIONS/COMMENTS:

Compliance Analysis:	☐ Yes	☐ No	Custody Seals	☐	Preservation Confirmation	☑
ADEQ Forms:	☐ Yes	☐ No	Container Intact	☑	Appropriate Head Space	☐
Mail ADEQ Forms:	☐ Yes	☐ No	COC/Labels Agree	☑	Received Within Hold Time	☑

*Ni, Hg, Ag, Cr, Cd, Be, Ba, As, Cu, Sb, Zn, Se, Pb, Tl, Ca, Mg
Composite poured at lab per C.O.T. Specifications

July 20, 2012

Chris McNellis
City of Tucson - Transportation Department
PO Box 27210
Tucson, AZ 85726-7210

TEL (520) 837-6583
FAX (520) 791-4238

Work Order No.: 12G0343
Order Name: 120710MN

RE: Storm Water Once per Season

Dear Chris McNellis,

Turner Laboratories, Inc. received 1 sample(s) on 07/10/2012 for the analyses presented in the following report.

All results are intended to be considered in their entirety, and Turner Laboratories, Inc. is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Samples will be disposed of 30 days after issue of our report unless special arrangements are made.

The pages that follow may contain sensitive, privileged or confidential information intended solely for the addressee named above. If you receive this message and are not the agent or employee of the addressee, this communication has been sent in error. Please do not disseminate or copy any of the attached and notify the sender immediately by telephone. Please also return the attached sheet(s) to the sender by mail.

Please call if you have any questions.

Respectfully submitted,

Turner Laboratories, Inc.
ADHS License AZ0066

Dawn Weyer
Project Manager

Turner Laboratories, Inc.

Date: 07/20/2012

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12G0343
Date Received: 07/10/2012

Order: 120710MN

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date/Time
12G0343-01	Grab	Storm Water	07/10/2012 1800

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12G0343
Date Received: 07/10/2012

Case Narrative

E Value is above quantitation range.

All soil, sludge, and solid matrix determinations are reported on a wet weight basis unless otherwise noted.

ND Not Detected at or above the PQL

PQL Practical Quantitation Limit

DF Dilution Factor

Turner Laboratories, Inc.

Date: 07/20/2012

Client:	City of Tucson - Transportation Department	**Client Sample ID:**	Grab
Project:	Storm Water Once per Season	**Collection Date/Time:**	07/10/2012 1800
Work Order:	12G0343	**Matrix:**	Storm Water
Lab Sample ID:	12G0343-01	**Order Name:**	120710MN

Analyses	Result	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Total Coliform & E. Coli, MPN-SM9223B								
E.Coli	2400	1.0	E	MPN/100mL	1	07/10/2012 1902	07/11/2012 1911	AC
Total Coliform	2400	1.0	E	MPN/100mL	1	07/10/2012 1902	07/11/2012 1911	AC

TURNER LABORATORIES INC
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CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

TURNER WORK ORDER # 12G0343 DATE _____ PAGE ____ OF ____

PROJECT NAME Storm Water # 120710 MM

CONTACT NAME Chris McNellis

COMPANY NAME City of Tucson - Transportation Dept

ADDRESS P.O. Box 27210

CITY Tucson STATE AZ ZIP CODE 85726

PHONE (520) 837-6583 FAX (520) 791-4373

SAMPLER'S SIGNATURE C McNellis

CIRCLE ANALYSIS REQUESTED AND/OR CHECK THE APPROPRIATE BOX

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX*	NUMBER OF CONTAINERS	MPN
Grab	7/10	6:40pm		Storm Water	1	X

1. RELINQUISHED BY: C McNellis
Signature
C McNellis
Printed Name
City of Tucson Trans. Dept
Firm
7/10 6:41
Date/Time

2. RECEIVED BY: HESTER
Signature
Printed Name
Firm COT
Date/Time 7/10/12 6:41

TURNAROUND REQUIREMENTS:
____ Standard (approx.10 days)*
____ Next day ____ 2 Day ____ 5 Day*
____ Email Preliminary Results To:
* Working Days

REPORT REQUIREMENTS:
____ I. Routine Report
____ II. Report (includes DUP,MS,MSD, as required, may be charged as samples)
____ III. Data Validation Report (Includes All Raw Data)
Add 10% to invoice

INVOICE INFORMATION:
Account ____ Y ____ N
P.O. # _____
Bill to: _____

SAMPLE RECEIPT:
Total Containers 1
Temperature 4.9°C
☒ Wet Ice ☐ Blue Ice

3. RELINQUISHED BY:
Signature
Printed Name BEV HESTER COT
Firm
7/10/12 6:59PM
Date/Time

4. RECEIVED BY:
Signature
Andrew Calcaterra
Printed Name
TURNER LABORATORIES, INC.
Firm 7-10-12/1859
Date/Time

*LEGEND
DW = DRINKING WATER
GW = GROUNDWATER
SD = SOLID
SG = SLUDGE
SL = SOIL
ST = STORMWATER
WW = WASTEWATER

SPECIAL INSTRUCTIONS/COMMENTS:

Compliance Analysis:	☐ Yes ☐ No	Custody Seals	☐	Preservation Confirmation	☑
ADEQ Forms:	☐ Yes ☐ No	Container Intact	☑	Appropriate Head Space	☑
Mail ADEQ Forms:	☐ Yes ☐ No	COC/Labels Agree	☑	Received Within Hold Time	☑

*Ni, Hg, Ag, Cr, Cd, Be, Ba, As, Cu, Sb, Zn, Se, Pb, Tl, Ca, Mg

Composite poured at lab per C.O.T. Specifications

March 19, 2013

Beverley Hester
City of Tucson - Transportation Department
PO Box 27210
Tucson, AZ 85726-7210

TEL 520-837-4935
FAX (520) 791-4373

Work Order No.: 12L0563
Order Name: Storm Water Annual

RE: Storm Water Biannual

Dear Beverley Hester,

Turner Laboratories, Inc. received 2 sample(s) on 12/19/2012 for the analyses presented in the following report.

The attached report has been revised. Please refer to the Case Narrative page for an explanation of the changes. We apologize for any inconvenience this may have caused you.

All results are intended to be considered in their entirety, and Turner Laboratories, Inc. is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Samples will be disposed of 30 days after issue of our report unless special arrangements are made.

The pages that follow may contain sensitive, privileged or confidential information intended solely for the addressee named above. If you receive this message and are not the agent or employee of the addressee, this communication has been sent in error. Please do not disseminate or copy any of the attached and notify the sender immediately by telephone. Please also return the attached sheet(s) to the sender by mail.

Please call if you have any questions.

Respectfully submitted,
Turner Laboratories, Inc.
ADHS License AZ0066

Terri L. Garcia

Terri Garcia
Technical Director

Turner Laboratories, Inc.

Date: 03/19/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 12L0563
Date Received: 12/19/2012

Order: Storm Water Annual

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date/Time
12L0563-01	Composite	Storm Water	12/19/2012 0320
12L0563-02	Grab	Storm Water	12/19/2012 0320

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 12L0563
Date Received: 12/19/2012

Case Narrative

EPA 8270C: There was insufficient sample volume available to perform the method-required Matrix Spike Duplicate. A Matrix Spike was analyzed.

EPA 624: The sample was run within holding time, but the data file was corrupted. There were no target analytes detected in the sample. It was re-analyzed outside of holding time and there were no target analytes detected in the sample.

EPA 8082: There was insufficient sample volume available to perform the method-required Matrix Spike and Matrix Spike Duplicate. Laboratory Control Sample and Laboratory control Sample Duplicate were analyzed.

EPA 8081: There was insufficient sample volume available to perform the method-required Matrix Spike Duplicate. A Matrix Spike was analyzed.

The cyanide analysis was performed by Accutest Laboratory in Houston, TX.

This report was originally generated on 1/28/2013. It is being revised on 2/17/2013 to include 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene by EPA 624; Technical Chlordane as a pattern-compared compound in addition to the alpha and gamma Chlordane reported by EPA 8081; and nitrate-nitrite sum, which were not on the original report. It is being re-revised on 2/20/2013 to include Ag by ICP/MS which was reported as Ag by ICP on the original report. It is being re-revised on 3/19/2013 to include phosphorus by ICP to replace the phosphorus by H8190 that was run past holding time and to correct the benzoic acid detection by EPA 8270C to non-detect due to a transcription error in the calibration standard concentration.

E4 Concentration estimated. Analyte was detected below laboratory Minimum Reporting Limit (MRL) but above MDL.

E8 Analyte reported to MDL per project specification. Target analyte was not detected in the sample.

M1 Matrix spike recovery was high; the associated LCS/LCSD was acceptable.

M2 Matrix spike recovery was low; the associated LCS/LCSD was acceptable.

M3 The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS/LCSD recovery was acceptable.

S11 Surrogate recovery was high. Data reported per ADEQ policy 0154.000.

T2 Cited ADHS Licensed method does not contain this analyte as part of the method compound list.

T4 Tentatively identified compound. Concentration is estimated and based on the closest internal standard.

V1 CCV recovery was above method acceptance limits. This target analyte was not detected in the sample.

All soil, sludge, and solid matrix determinations are reported on a wet weight basis unless otherwise noted.

ND Not Detected at or above the PQL

PQL Practical Quantitation Limit

DF Dilution Factor

Turner Laboratories, Inc.

Date: 03/19/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 12L0563
Lab Sample ID: 12L0563-01

Client Sample ID: Composite
Collection Date/Time: 12/19/2012 0320
Matrix: Storm Water
Order Name: Storm Water Annual

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Hardness-Calculation									
Hardness, Calcium/Magnesium (As CaCO3)	53				mg/L	1	12/20/2012 1115	12/21/2012 1939	RAD
Nitrate + Nitrite Sum-Calculation									
Nitrate and Nitrite Sum	ND		0.10		mg/L	1	12/19/2012 1500	12/19/2012 1640	EW
ICP Total Metals-E200.7									
Arsenic	ND		40		ug/L	1	12/20/2012 1115	12/21/2012 1939	RAD
Barium	66		50		ug/L	1	12/20/2012 1115	12/21/2012 1939	RAD
Beryllium	ND		2.0		ug/L	1	12/20/2012 1115	12/21/2012 1939	RAD
Cadmium	ND		2.0		ug/L	1	12/20/2012 1115	12/21/2012 1939	RAD
Calcium	16000		4000		ug/L	1	12/20/2012 1115	12/21/2012 1939	RAD
Chromium	ND		30		ug/L	1	12/20/2012 1115	12/21/2012 1939	RAD
Copper	33		20		ug/L	1	12/20/2012 1115	12/21/2012 1939	RAD
Magnesium	3100		3000		ug/L	1	12/20/2012 1115	12/21/2012 1939	RAD
Nickel	ND		50		ug/L	1	12/20/2012 1115	12/21/2012 1939	RAD
Phosphorus	ND		0.50		mg/L	1	03/14/2013 0840	03/15/2013 0957	RAD
Zinc	100		40		ug/L	1	12/20/2012 1115	12/21/2012 1939	RAD
ICP/MS Total Metals-E200.8									
Antimony	0.82		0.50		ug/L	1	01/11/2013 1325	01/22/2013 1810	RAD
Lead	14		0.50		ug/L	1	01/11/2013 1325	01/23/2013 1135	RAD
Selenium	0.35	0.072	2.5	E4	ug/L	1	01/11/2013 1325	01/22/2013 1810	RAD
Silver	0.067	0.0054	0.50	E4	ug/L	1	01/11/2013 1325	01/22/2013 1810	RAD
Thallium	ND	0.0063	0.50	E8	ug/L	1	01/11/2013 1325	01/23/2013 1135	RAD
CVAA Total Mercury-E245.1									
Mercury	0.090		1.0		ug/L	1	12/20/2012 1250	12/21/2012 1038	RAD
Anions by Ion Chromatography-E300									
Nitrogen, Nitrate (As N)	ND		1.0		mg/L	1	12/19/2012 1500	12/19/2012 1640	EW
Nitrogen, Nitrite (As N)	ND		0.10		mg/L	1	12/19/2012 1500	12/19/2012 1640	EW
Phosphorus, Dissolved Orthophosphate (As P)	ND		0.50		mg/L	1	12/19/2012 1500	12/19/2012 1640	EW
Chemical Oxygen Demand-Hach 8000									

Turner Laboratories, Inc.

Date: 03/19/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 12L0563
Lab Sample ID: 12L0563-01

Client Sample ID: Composite
Collection Date/Time: 12/19/2012 0320
Matrix: Storm Water
Order Name: Storm Water Annual

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Chemical Oxygen Demand	110		20		mg/L	1	01/03/2013 0850	01/03/2013 1650	EW
Total Kjeldahl Nitrogen-PAI-DK01									
Nitrogen, Total Kjeldahl	1.9		0.50		mg/L	1	12/26/2012 0900	12/27/2012 1555	EW
Total Dissolved Solids (Residue, Filterable)-SM2540 C									
Total Dissolved Solids (Residue, Filterable)	110		20		mg/L	1	12/19/2012 1210	12/20/2012 1655	AC
Total Suspended Solids (Residue, Non-Filterable)-SM2540 D									
Total Suspended Solids	120		10		mg/L	1	12/19/2012 1533	12/20/2012 1350	AC
Ammonia as N-SM4500-NH3 B,C									
Nitrogen, Ammonia (As N)	ND		0.50		mg/L	1	01/04/2013 1330	01/04/2013 1700	EW
BOD, 5 day-SM5210 B									
Biochemical Oxygen Demand	110		2.0		mg/L	1	12/20/2012 0920	12/25/2012 0920	AC
Organochlorine Pesticides-SW8081A									
4,4´-DDD	ND		0.098		ug/L	1	12/19/2012 1200	12/28/2012 1726	MD
4,4´-DDE	ND		0.098		ug/L	1	12/19/2012 1200	12/28/2012 1726	MD
4,4´-DDT	ND		0.098		ug/L	1	12/19/2012 1200	12/28/2012 1726	MD
Aldrin	ND		0.098		ug/L	1	12/19/2012 1200	12/28/2012 1726	MD
alpha-BHC	ND		0.098		ug/L	1	12/19/2012 1200	12/28/2012 1726	MD
alpha-Chlordane	ND		0.098		ug/L	1	12/19/2012 1200	01/16/2013 1615	MD
beta-BHC	ND		0.098		ug/L	1	12/19/2012 1200	12/28/2012 1726	MD
Chlordane	ND		0.0	T2	ug/L	1	12/19/2012 1200	12/28/2012 1726	MD
delta-BHC	ND		0.098		ug/L	1	12/19/2012 1200	12/28/2012 1726	MD
Dieldrin	ND		0.098		ug/L	1	12/19/2012 1200	12/28/2012 1726	MD
Endosulfan I	ND		0.098		ug/L	1	12/19/2012 1200	12/28/2012 1726	MD
Endosulfan II	ND		0.098		ug/L	1	12/19/2012 1200	12/28/2012 1726	MD
Endosulfan sulfate	ND		0.098		ug/L	1	12/19/2012 1200	12/28/2012 1726	MD
Endrin	ND		0.098		ug/L	1	12/19/2012 1200	12/28/2012 1726	MD
Endrin aldehyde	ND		0.098		ug/L	1	12/19/2012 1200	12/28/2012 1726	MD
Endrin ketone	ND		0.098		ug/L	1	12/19/2012 1200	12/28/2012 1726	MD
gamma-BHC	ND		0.098		ug/L	1	12/19/2012 1200	12/28/2012 1726	MD

Turner Laboratories, Inc.

Date: 03/19/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 12L0563
Lab Sample ID: 12L0563-01

Client Sample ID: Composite
Collection Date/Time: 12/19/2012 0320
Matrix: Storm Water
Order Name: Storm Water Annual

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
gamma-Chlordane	ND		0.098		ug/L	1	12/19/2012 1200	01/16/2013 1615	MD
Heptachlor	ND		0.098		ug/L	1	12/19/2012 1200	12/28/2012 1726	MD
Heptachlor epoxide	ND		0.098		ug/L	1	12/19/2012 1200	12/28/2012 1726	MD
Methoxychlor	ND		0.098		ug/L	1	12/19/2012 1200	12/28/2012 1726	MD
Toxaphene	ND		0.98		ug/L	1	12/19/2012 1200	12/28/2012 1726	MD
Surr: Decachlorobiphenyl	*80*	*51.1-138.5*			*%REC*	*1*	*12/19/2012 1200*	*12/28/2012 1726*	*MD*
Surr: Tetrachloro-m-xylene	*81*	*39.1-120*			*%REC*	*1*	*12/19/2012 1200*	*12/28/2012 1726*	*MD*
PCBs-SW8082									
Aroclor 1016	ND		0.97		ug/L	1	12/20/2012 0838	12/29/2012 0208	MD
Aroclor 1221	ND		0.97		ug/L	1	12/20/2012 0838	12/29/2012 0208	MD
Aroclor 1232	ND		0.97		ug/L	1	12/20/2012 0838	12/29/2012 0208	MD
Aroclor 1242	ND		0.97		ug/L	1	12/20/2012 0838	12/29/2012 0208	MD
Aroclor 1248	ND		0.97		ug/L	1	12/20/2012 0838	12/29/2012 0208	MD
Aroclor 1254	ND		0.97		ug/L	1	12/20/2012 0838	12/29/2012 0208	MD
Aroclor 1260	ND		0.97		ug/L	1	12/20/2012 0838	12/29/2012 0208	MD
Surr: Decachlorobiphenyl	*86*	*52.7-155.1*			*%REC*	*1*	*12/20/2012 0838*	*12/29/2012 208*	*MD*
Semivolatile Organic Compounds-SW8270C									
1,2,4-Trichlorobenzene	ND		9.8		ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
1,2-Dichlorobenzene	ND		9.8		ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
1,2-Diphenylhydrazine	ND		9.8		ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
1,3-Dichlorobenzene	ND		9.8		ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
1,4-Dichlorobenzene	ND		9.8		ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
2,4,5-Trichlorophenol	ND		9.8		ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
2,4,6-Trichlorophenol	ND		9.8	V1	ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
2,4-Dichlorophenol	ND		9.8		ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
2,4-Dimethylphenol	ND		9.8	V1	ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
2,4-Dinitrophenol	ND		49		ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
2,4-Dinitrotoluene	ND		9.8		ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
2,6-Dinitrotoluene	ND		9.8		ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
2-Chloronaphthalene	ND		9.8		ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
2-Chlorophenol	ND		9.8		ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
2-Methylnaphthalene	ND		4.9		ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
2-Methylphenol	ND		9.8		ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
2-Nitroaniline	ND		20		ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
2-Nitrophenol	ND		9.8	V1	ug/L	1	12/21/2012 0828	01/02/2013 1815	MD

Turner Laboratories, Inc.

Date: 03/19/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 12L0563
Lab Sample ID: 12L0563-01

Client Sample ID: Composite
Collection Date/Time: 12/19/2012 0320
Matrix: Storm Water
Order Name: Storm Water Annual

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
3,3´-Dichlorobenzidine	ND	0.99	20	E8	ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
3,4-Methylphenol	ND		9.8		ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
3-Nitroaniline	ND		20	V1	ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
4,6-Dinitro-2-methylphenol	ND		20		ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
4-Bromophenyl phenyl ether	ND		9.8		ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
4-Chloro-3-methylphenol	ND		9.8		ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
4-Chloroaniline	ND		20		ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
4-Chlorophenyl phenyl ether	ND		9.8		ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
4-Nitroaniline	ND		20		ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
4-Nitrophenol	ND		49		ug/L	1	12/21/2012 0828	01/04/2013 1535	MD
Acenaphthene	ND		4.9		ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
Acenaphthylene	ND		4.9		ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
Aniline	ND		20		ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
Anthracene	ND		4.9		ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
Benzo[a]anthracene	ND	0.60	4.9	E8	ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
Benzo[a]pyrene	ND	0.74	4.9	E8	ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
Benzo[b,k]fluoranthene	ND	1.6	9.8	E8	ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
Benzo[g,h,i]perylene	ND		4.9		ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
Benzoic acid	ND		49		ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
Benzyl alcohol	ND		4.9		ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
Bis(2-chloroethoxy)methane	ND		9.8		ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
Bis(2-chloroethyl)ether	ND		9.8		ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
Bis(2-chloroisopropyl)ether	ND		9.8		ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
Bis(2-ethylhexyl)phthalate	ND		9.8		ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
Butyl benzyl phthalate	ND		9.8		ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
Chrysene	ND		4.9		ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
Dibenz[a,h]anthracene	ND	0.93	4.9	E8	ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
Dibenzofuran	ND		4.9		ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
Diethyl phthalate	ND		9.8		ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
Dimethyl phthalate	ND		9.8		ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
Di-n-butyl phthalate	ND		9.8		ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
Di-n-octyl phthalate	ND		9.8		ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
Fluoranthene	ND		4.9		ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
Fluorene	ND		4.9		ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
Hexachlorobenzene	ND		9.8		ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
Hexachlorobutadiene	ND		9.8		ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
Hexachlorocyclopentadiene	ND		9.8		ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
Hexachloroethane	ND		9.8		ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
Indeno[1,2,3-cd]pyrene	ND	0.80	4.9	E8	ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
Isophorone	ND		9.8		ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
Naphthalene	ND		4.9		ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
Nitrobenzene	ND		9.8		ug/L	1	12/21/2012 0828	01/02/2013 1815	MD

Turner Laboratories, Inc.

Date: 03/19/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 12L0563
Lab Sample ID: 12L0563-01

Client Sample ID: Composite
Collection Date/Time: 12/19/2012 0320
Matrix: Storm Water
Order Name: Storm Water Annual

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
N-Nitrosodimethylamine	ND	1.6	9.8	E8	ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
N-Nitrosodiphenylamine	ND		9.8		ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
N-Nitrosodipropylamine	ND		9.8		ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
Pentachlorophenol	ND		29		ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
Phenanthrene	ND		4.9		ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
Phenol	ND		9.8		ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
Pyrene	ND		4.9		ug/L	1	12/21/2012 0828	01/02/2013 1815	MD
Surr: 2,4,6-Tribromophenol	*102*	*48.18-103.2*			*%REC*	*1*	*12/21/2012 0828*	*01/02/2013 1815*	*MD*
Surr: 2-Fluorobiphenyl	*64*	*44.86-97.28*			*%REC*	*1*	*12/21/2012 0828*	*01/02/2013 1815*	*MD*
Surr: 2-Fluorophenol	*52*	*17.76-99.38*			*%REC*	*1*	*12/21/2012 0828*	*01/02/2013 1815*	*MD*
Surr: 4-Terphenyl-d14	*97*	*38.67-92.68*	*S11*		*%REC*	*1*	*12/21/2012 0828*	*01/02/2013 1815*	*MD*
Surr: Nitrobenzene-d5	*58*	*23.73-103.2*			*%REC*	*1*	*12/21/2012 0828*	*01/02/2013 1815*	*MD*
Surr: Phenol-d6	*60*	*17.76-99.38*			*%REC*	*1*	*12/21/2012 0828*	*01/02/2013 1815*	*MD*

Turner Laboratories, Inc.

Date: 03/19/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 12L0563
Lab Sample ID: 12L0563-02

Client Sample ID: Grab
Collection Date/Time: 12/19/2012 0320
Matrix: Storm Water
Order Name: Storm Water Annual

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
N-Hexane Extractable Material (SGT-HEM)-E 1664A									
Total Petroleum Hydrocarbons	ND		5.00		mg/L	1	01/04/2013 0910	01/04/2013 1455	AC
N-Hexane Extractable Material (HEM)-E1664A									
Oil & Grease	ND		5.00		mg/L	1	12/28/2012 0800	12/28/2012 1650	AC
Additional Compounds by GCMS-E624									
2-Chloroethylvinylether	ND		10		ug/L	1	12/19/2012 0800	01/03/2013 2352	KP
Acrolein	ND		10		ug/L	1	12/19/2012 0800	01/03/2013 2352	KP
Acrylonitrile	ND		10		ug/L	1	12/19/2012 0800	01/03/2013 2352	KP
Surr: 1,2-Dichloroethane-d4	*113*	*70-130*			*%REC*	*1*	*12/19/2012 0800*	*01/03/2013 2352*	*KP*
Surr: 4-Bromofluorobenzene	*99*	*70-130*			*%REC*	*1*	*12/19/2012 0800*	*01/03/2013 2352*	*KP*
Surr: Fluorobenzene	*108*	*70-130*			*%REC*	*1*	*12/19/2012 0800*	*01/03/2013 2352*	*KP*
Volatile Organic Compounds by GCMS-EPA 624									
1,1,1-Trichloroethane	ND		2.0		ug/L	1	12/19/2012 0800	01/04/2013 0026	KP
1,1,2,2-Tetrachloroethane	ND		2.0		ug/L	1	12/19/2012 0800	01/04/2013 0026	KP
1,1,2-Trichloroethane	ND		2.0		ug/L	1	12/19/2012 0800	01/04/2013 0026	KP
1,1-Dichloroethane	ND		2.0		ug/L	1	12/19/2012 0800	01/04/2013 0026	KP
1,1-Dichloroethene	ND		2.0		ug/L	1	12/19/2012 0800	01/04/2013 0026	KP
1,2,4-Trimethylbenzene	ND		2.0	T4	ug/L	1	12/19/2012 0800	01/04/2013 0026	KP
1,2-Dichlorobenzene	ND		2.0		ug/L	1	12/19/2012 0800	01/04/2013 0026	KP
1,2-Dichloroethane	ND		2.0		ug/L	1	12/19/2012 0800	01/04/2013 0026	KP
1,2-Dichloropropane	ND		2.0		ug/L	1	12/19/2012 0800	01/04/2013 0026	KP
1,3,5-Trimethylbenzene	ND		2.0	T4	ug/L	1	12/19/2012 0800	01/04/2013 0026	KP
1,3-Dichlorobenzene	ND		2.0		ug/L	1	12/19/2012 0800	01/04/2013 0026	KP
1,4-Dichlorobenzene	ND		2.0		ug/L	1	12/19/2012 0800	01/04/2013 0026	KP
2-Chloroethylvinylether	ND		10		ug/L	1	12/19/2012 0800	01/04/2013 0026	KP
Acetone	ND		10		ug/L	1	12/19/2012 0800	01/04/2013 0026	KP
Acrolein	ND		10		ug/L	1	12/19/2012 0800	01/04/2013 0026	KP
Acrylonitrile	ND		10		ug/L	1	12/19/2012 0800	01/04/2013 0026	KP
Benzene	ND		2.0		ug/L	1	12/19/2012 0800	01/04/2013 0026	KP
Bromodichloromethane	ND		2.0		ug/L	1	12/19/2012 0800	01/04/2013 0026	KP
Bromoform	ND		2.0		ug/L	1	12/19/2012 0800	01/04/2013 0026	KP
Bromomethane	ND		2.0		ug/L	1	12/19/2012 0800	01/04/2013 0026	KP
Carbon tetrachloride	ND		2.0		ug/L	1	12/19/2012 0800	01/04/2013 0026	KP
Chlorobenzene	ND		2.0		ug/L	1	12/19/2012 0800	01/04/2013 0026	KP

Turner Laboratories, Inc.

Date: 03/19/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 12L0563
Lab Sample ID: 12L0563-02

Client Sample ID: Grab
Collection Date/Time: 12/19/2012 0320
Matrix: Storm Water
Order Name: Storm Water Annual

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Chloroethane	ND		5.0		ug/L	1	12/19/2012 0800	01/04/2013 0026	KP
Chloroform	ND		2.0		ug/L	1	12/19/2012 0800	01/04/2013 0026	KP
Chloromethane	ND		5.0		ug/L	1	12/19/2012 0800	01/04/2013 0026	KP
cis-1,3-Dichloropropene	ND		2.0		ug/L	1	12/19/2012 0800	01/04/2013 0026	KP
Dibromochloromethane	ND		2.0		ug/L	1	12/19/2012 0800	01/04/2013 0026	KP
Dichlorodifluoromethane	ND		5.0		ug/L	1	12/19/2012 0800	01/04/2013 0026	KP
Ethylbenzene	ND		2.0		ug/L	1	12/19/2012 0800	01/04/2013 0026	KP
Methyl Isobutyl Ketone (MIBK)	ND		10		ug/L	1	12/19/2012 0800	01/04/2013 0026	KP
Methylene chloride	ND		10		ug/L	1	12/19/2012 0800	01/04/2013 0026	KP
Tetrachloroethene	ND		2.0		ug/L	1	12/19/2012 0800	01/04/2013 0026	KP
Tetrahydrofuran	ND		10		ug/L	1	12/19/2012 0800	01/04/2013 0026	KP
Toluene	ND		2.0		ug/L	1	12/19/2012 0800	01/04/2013 0026	KP
trans-1,2-Dichloroethene	ND		2.0		ug/L	1	12/19/2012 0800	01/04/2013 0026	KP
trans-1,3-Dichloropropene	ND		2.0		ug/L	1	12/19/2012 0800	01/04/2013 0026	KP
Trichloroethene	ND		2.0		ug/L	1	12/19/2012 0800	01/04/2013 0026	KP
Trichlorofluoromethane	ND		5.0		ug/L	1	12/19/2012 0800	01/04/2013 0026	KP
Vinyl chloride	ND		2.0		ug/L	1	12/19/2012 0800	01/04/2013 0026	KP
Xylenes, Total	ND		6.0		ug/L	1	12/19/2012 0800	01/04/2013 0026	KP
Surr: 1,2-Dichloroethane-d4	*101*	*70-130*			*%REC*	*1*	*12/19/2012 0800*	*12/19/2012 1123*	*KP*
Surr: 1,2-Dichloroethane-d4	*110*	*70-130*			*%REC*	*1*	*12/19/2012 0800*	*01/04/2013 026*	*KP*
Surr: 4-Bromofluorobenzene	*104*	*70-130*			*%REC*	*1*	*12/19/2012 0800*	*12/19/2012 1123*	*KP*
Surr: 4-Bromofluorobenzene	*100*	*70-130*			*%REC*	*1*	*12/19/2012 0800*	*01/04/2013 026*	*KP*
Surr: Fluorobenzene	*104*	*70-130*			*%REC*	*1*	*12/19/2012 0800*	*01/04/2013 026*	*KP*
Surr: Fluorobenzene	*104*	*70-130*			*%REC*	*1*	*12/19/2012 0800*	*12/19/2012 1123*	*KP*

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1212223 - E 245.1										
Blank (1212223-BLK1)				Prepared: 12/20/2012 Analyzed: 12/21/2012						
Mercury	ND	1.0	ug/L							
LCS (1212223-BS1)				Prepared: 12/20/2012 Analyzed: 12/21/2012						
Mercury	5.1	1.0	ug/L	5.000		103	85-115			
LCS Dup (1212223-BSD1)				Prepared: 12/20/2012 Analyzed: 12/21/2012						
Mercury	5.2	1.0	ug/L	5.000		103	85-115	0.7	20	
Matrix Spike (1212223-MS1)		**Source: 12L0468-01**		Prepared: 12/20/2012 Analyzed: 12/21/2012						
Mercury	5.0	1.0	ug/L	5.000	ND	101	85-115			
Matrix Spike (1212223-MS2)		**Source: 12L0563-01**		Prepared: 12/20/2012 Analyzed: 12/21/2012						
Mercury	4.8	1.0	ug/L	5.000	0.090	95	85-115			
Matrix Spike Dup (1212223-MSD1)		**Source: 12L0468-01**		Prepared: 12/20/2012 Analyzed: 12/21/2012						
Mercury	5.0	1.0	ug/L	5.000	ND	100	85-115	0.9	10	
Matrix Spike Dup (1212223-MSD2)		**Source: 12L0563-01**		Prepared: 12/20/2012 Analyzed: 12/21/2012						
Mercury	5.0	1.0	ug/L	5.000	0.090	97	85-115	2	10	
Batch 1212232 - E 200.2 ICP										
Blank (1212232-BLK1)				Prepared: 12/20/2012 Analyzed: 12/21/2012						
Arsenic	ND	40	ug/L							
Barium	ND	50	ug/L							
Beryllium	ND	2.0	ug/L							
Cadmium	ND	2.0	ug/L							
Calcium	ND	4000	ug/L							
Chromium	ND	30	ug/L							
Copper	ND	20	ug/L							
Magnesium	ND	3000	ug/L							
Nickel	ND	50	ug/L							
Zinc	ND	40	ug/L							
LCS (1212232-BS1)				Prepared: 12/20/2012 Analyzed: 12/21/2012						
Arsenic	1850	40	ug/L	2000		93	85-115			
Barium	2000	50	ug/L	2000		98	85-115			
Beryllium	49	2.0	ug/L	50.00		98	85-115			
Cadmium	49	2.0	ug/L	50.00		98	85-115			
Calcium	9600	4000	ug/L	10000		96	85-115			
Chromium	200	30	ug/L	200.0		99	85-115			
Copper	250	20	ug/L	250.0		99	85-115			
Magnesium	9600	3000	ug/L	10000		96	85-115			
Nickel	480	50	ug/L	500.0		96	85-115			
Zinc	490	40	ug/L	500.0		97	85-115			

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1212232 - E 200.2 ICP										
LCS Dup (1212232-BSD1)				Prepared: 12/20/2012 Analyzed: 12/21/2012						
Arsenic	1890	40	ug/L	2000		94	85-115	2	20	
Barium	2000	50	ug/L	2000		100	85-115	1	20	
Beryllium	49	2.0	ug/L	50.00		99	85-115	1	20	
Cadmium	50	2.0	ug/L	50.00		99	85-115	1	20	
Calcium	9700	4000	ug/L	10000		97	85-115	2	20	
Chromium	200	30	ug/L	200.0		100	85-115	1	20	
Copper	250	20	ug/L	250.0		99	85-115	0.06	20	
Magnesium	9800	3000	ug/L	10000		98	85-115	1	20	
Nickel	490	50	ug/L	500.0		97	85-115	1	20	
Zinc	490	40	ug/L	500.0		99	85-115	1	20	
Matrix Spike (1212232-MS1)		**Source: 12L0236-01**		Prepared: 12/20/2012 Analyzed: 12/21/2012						
Arsenic	1960	40	ug/L	2000	20.9	97	70-130			
Barium	1800	50	ug/L	2000	68	89	70-130			
Beryllium	48	2.0	ug/L	50.00	ND	96	70-130			
Cadmium	46	2.0	ug/L	50.00	ND	93	70-130			
Calcium	100000	4000	ug/L	10000	95000	62	70-130			M3
Chromium	200	30	ug/L	200.0	0.42	98	70-130			
Copper	300	20	ug/L	250.0	25	110	70-130			
Magnesium	29000	3000	ug/L	10000	20000	93	70-130			
Nickel	490	50	ug/L	500.0	9.4	97	70-130			
Zinc	540	40	ug/L	500.0	30	102	70-130			
Matrix Spike (1212232-MS2)		**Source: 12L0532-01**		Prepared: 12/20/2012 Analyzed: 12/21/2012						
Arsenic	1940	40	ug/L	2000	17.4	96	70-130			
Barium	1800	50	ug/L	2000	31	91	70-130			
Beryllium	46	2.0	ug/L	50.00	ND	93	70-130			
Cadmium	67	2.0	ug/L	50.00	23	88	70-130			
Calcium	38000	4000	ug/L	10000	30000	78	70-130			
Chromium	250	30	ug/L	200.0	70	90	70-130			
Copper	290	20	ug/L	250.0	24	107	70-130			
Magnesium	16000	3000	ug/L	10000	6500	92	70-130			
Nickel	510	50	ug/L	500.0	31	95	70-130			
Zinc	520	40	ug/L	500.0	3.7	102	70-130			
Batch 1301185 - E 200.8 ICP/MS										
Blank (1301185-BLK1)				Prepared: 01/11/2013 Analyzed: 01/22/2013						
Antimony	ND	0.50	ug/L							
Lead	ND	0.50	ug/L							
Selenium	ND	2.5	ug/L							
Silver	ND	0.50	ug/L							
Thallium	ND	0.50	ug/L							

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1301185 - E 200.8 ICP/MS										
LCS (1301185-BS1)				Prepared: 01/11/2013 Analyzed: 01/22/2013						
Antimony	52	0.50	ug/L	50.00		103	85-115			
Lead	46	0.50	ug/L	50.00		93	85-115			
Selenium	250	2.5	ug/L	250.0		100	85-115			
Silver	49	0.50	ug/L	50.00		98	85-115			
Thallium	47	0.50	ug/L	50.00		93	85-115			
LCS Dup (1301185-BSD1)				Prepared: 01/11/2013 Analyzed: 01/22/2013						
Antimony	51	0.50	ug/L	50.00		103	85-115	0.6	20	
Lead	46	0.50	ug/L	50.00		93	85-115	0.1	20	
Selenium	250	2.5	ug/L	250.0		99	85-115	0.4	20	
Silver	49	0.50	ug/L	50.00		98	85-115	0.5	20	
Thallium	46	0.50	ug/L	50.00		93	85-115	0.6	20	
Matrix Spike (1301185-MS1)	**Source: 13A0309-01**			Prepared: 01/11/2013 Analyzed: 01/22/2013						
Antimony	43	0.50	ug/L	50.00	0.27	85	70-130			
Lead	49	0.50	ug/L	50.00	0.59	96	70-130			
Selenium	220	2.5	ug/L	250.0	3.3	85	70-130			
Silver	36	0.50	ug/L	50.00	0.022	71	70-130			
Thallium	46	0.50	ug/L	50.00	ND	93	70-130			
Matrix Spike (1301185-MS2)	**Source: 13A0119-02**			Prepared: 01/11/2013 Analyzed: 01/22/2013						
Antimony	45	0.50	ug/L	50.00	0.39	89	70-130			
Lead	47	0.50	ug/L	50.00	0.48	93	70-130			
Selenium	220	2.5	ug/L	250.0	5.2	88	70-130			
Silver	36	0.50	ug/L	50.00	0.028	72	70-130			
Thallium	46	0.50	ug/L	50.00	ND	92	70-130			
Batch 1303138 - E 200.2 ICP										
Blank (1303138-BLK1)				Prepared: 03/14/2013 Analyzed: 03/15/2013						
Phosphorus	ND	0.50	mg/L							
LCS (1303138-BS1)				Prepared: 03/14/2013 Analyzed: 03/15/2013						
Phosphorus	5.1	0.50	mg/L	5.000		103	85-115			
LCS Dup (1303138-BSD1)				Prepared: 03/14/2013 Analyzed: 03/15/2013						
Phosphorus	5.1	0.50	mg/L	5.000		102	85-115	1	20	
Matrix Spike (1303138-MS1)	**Source: 13C0133-02**			Prepared: 03/14/2013 Analyzed: 03/15/2013						
Phosphorus	14	0.50	mg/L	5.000	8.7	102	70-130			
Matrix Spike (1303138-MS2)	**Source: 13C0383-01**			Prepared: 03/14/2013 Analyzed: 03/15/2013						
Phosphorus	5.1	0.50	mg/L	5.000	0.12	99	70-130			

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1212199 - GEN CHEM										
Duplicate (1212199-DUP1)		**Source: 12L0215-01**		Prepared: 12/19/2012 Analyzed: 12/20/2012						
Total Suspended Solids	34	10	mg/L		35			3	5	
Duplicate (1212199-DUP2)		**Source: 12L0514-02**		Prepared: 12/19/2012 Analyzed: 12/20/2012						
Total Suspended Solids	4300	10	mg/L		4300			0.5	5	
Batch 1212203 - GEN CHEM										
Duplicate (1212203-DUP1)		**Source: 12L0514-03**		Prepared: 12/19/2012 Analyzed: 12/20/2012						
Total Dissolved Solids (Residue, Filterable)	160	20	mg/L		160			1	5	
Batch 1212237 - GEN CHEM										
Blank (1212237-BLK1)				Prepared: 12/26/2012 Analyzed: 12/27/2012						
Nitrogen, Total Kjeldahl	ND	0.50	mg/L							
LCS (1212237-BS1)				Prepared: 12/26/2012 Analyzed: 12/27/2012						
Nitrogen, Total Kjeldahl	5.2	0.50	mg/L	5.000		105	80-120			
LCS Dup (1212237-BSD1)				Prepared: 12/26/2012 Analyzed: 12/27/2012						
Nitrogen, Total Kjeldahl	4.9	0.50	mg/L	5.000		98	80-120	7	20	
Matrix Spike (1212237-MS1)		**Source: 12L0443-01**		Prepared: 12/26/2012 Analyzed: 12/27/2012						
Nitrogen, Total Kjeldahl	4.8	0.50	mg/L	5.000	0.14	93	80-120			
Matrix Spike (1212237-MS2)		**Source: 12L0553-01**		Prepared: 12/26/2012 Analyzed: 12/27/2012						
Nitrogen, Total Kjeldahl	4.8	0.50	mg/L	5.000	0.052	94	80-120			
Matrix Spike Dup (1212237-MSD1)		**Source: 12L0443-01**		Prepared: 12/26/2012 Analyzed: 12/27/2012						
Nitrogen, Total Kjeldahl	4.8	0.50	mg/L	5.000	0.14	93	80-120	0.4	20	
Matrix Spike Dup (1212237-MSD2)		**Source: 12L0553-01**		Prepared: 12/26/2012 Analyzed: 12/27/2012						
Nitrogen, Total Kjeldahl	4.9	0.50	mg/L	5.000	0.052	96	80-120	2	20	
Batch 1212251 - GEN CHEM										
Blank (1212251-BLK1)				Prepared: 12/20/2012 Analyzed: 12/25/2012						
Biochemical Oxygen Demand	ND	2.0	mg/L							
LCS (1212251-BS1)				Prepared: 12/20/2012 Analyzed: 12/25/2012						
Biochemical Oxygen Demand	190		mg/L	198.0		94	85-115			
Batch 1301004 - GEN CHEM										
Blank (1301004-BLK1)				Prepared & Analyzed: 12/28/2012						
Oil & Grease	ND	5.00	mg/L							
LCS (1301004-BS1)				Prepared & Analyzed: 12/28/2012						
Oil & Grease	36.9	5.00	mg/L	40.00		92	78-114			
LCS Dup (1301004-BSD1)				Prepared & Analyzed: 12/28/2012						
Oil & Grease	36.6	5.00	mg/L	40.00		92	78-114	0.8	18	

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1301004 - GEN CHEM										
Matrix Spike (1301004-MS1)		**Source: 12L0226-02**		Prepared & Analyzed: 12/28/2012						
Oil & Grease	37.6	5.00	mg/L	40.00	1.00	92	78-114			
Batch 1301041 - SPECTRO PREP										
Blank (1301041-BLK1)				Prepared & Analyzed: 01/03/2013						
Chemical Oxygen Demand	ND	20	mg/L							
LCS (1301041-BS1)				Prepared & Analyzed: 01/03/2013						
Chemical Oxygen Demand	520	20	mg/L	500.0		104	70-130			
LCS Dup (1301041-BSD1)				Prepared & Analyzed: 01/03/2013						
Chemical Oxygen Demand	500	20	mg/L	500.0		100	70-130	4	20	
Matrix Spike (1301041-MS1)		**Source: 12L0206-01**		Prepared & Analyzed: 01/03/2013						
Chemical Oxygen Demand	870	20	mg/L	500.0	400	94	70-130			
Matrix Spike Dup (1301041-MSD1)		**Source: 12L0206-01**		Prepared & Analyzed: 01/03/2013						
Chemical Oxygen Demand	860	20	mg/L	500.0	400	94	70-130	0.3	20	
Batch 1301049 - GEN CHEM										
Blank (1301049-BLK1)				Prepared & Analyzed: 01/04/2013						
Nitrogen, Ammonia (As N)	ND	0.50	mg/L							
LCS (1301049-BS1)				Prepared & Analyzed: 01/04/2013						
Nitrogen, Ammonia (As N)	5.2	0.50	mg/L	5.000		104	90-110			
LCS Dup (1301049-BSD1)				Prepared & Analyzed: 01/04/2013						
Nitrogen, Ammonia (As N)	5.2	0.50	mg/L	5.000		103	90-110	0.6	10	
Matrix Spike (1301049-MS1)		**Source: 12L0670-02**		Prepared & Analyzed: 01/04/2013						
Nitrogen, Ammonia (As N)	4.7	0.50	mg/L	5.000	0.34	87	70-130			
Matrix Spike Dup (1301049-MSD1)		**Source: 12L0670-02**		Prepared & Analyzed: 01/04/2013						
Nitrogen, Ammonia (As N)	5.2	0.50	mg/L	5.000	0.34	97	70-130	10	20	
Batch 1301091 - GEN CHEM										
Blank (1301091-BLK1)				Prepared & Analyzed: 01/04/2013						
Total Petroleum Hydrocarbons	ND	5.00	mg/L							
LCS (1301091-BS1)				Prepared & Analyzed: 01/04/2013						
Total Petroleum Hydrocarbons	16.2	5.00	mg/L	20.00		81	64-132			
LCS Dup (1301091-BSD1)				Prepared & Analyzed: 01/04/2013						
Total Petroleum Hydrocarbons	17.0	5.00	mg/L	20.00		85	64-132	5	34	
Matrix Spike (1301091-MS1)		**Source: 12L0563-02**		Prepared & Analyzed: 01/04/2013						
Total Petroleum Hydrocarbons	15.8	5.00	mg/L	20.00	ND	79	64-132			
Batch 1301340 - SPECTRO PREP										
Blank (1301340-BLK1)				Prepared & Analyzed: 01/28/2013						
Total Phosphorus (as P)	ND	0.10	mg/L							

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1301340 - SPECTRO PREP										
LCS (1301340-BS1)				Prepared & Analyzed: 01/28/2013						
Total Phosphorus (as P)	0.52	0.10	mg/L	0.5000		104	90-110			
LCS Dup (1301340-BSD1)				Prepared & Analyzed: 01/28/2013						
Total Phosphorus (as P)	0.50	0.10	mg/L	0.5000		100	90-110	4	10	
Matrix Spike (1301340-MS1)		**Source: 13A0718-01**		Prepared & Analyzed: 01/28/2013						
Total Phosphorus (as P)	2.8	0.50	mg/L	2.500	0.35	96	85-115			
Matrix Spike Dup (1301340-MSD1)		**Source: 13A0718-01**		Prepared & Analyzed: 01/28/2013						
Total Phosphorus (as P)	2.7	0.50	mg/L	2.500	0.35	92	85-115	4	15	

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1212201 - SW 846 3520C										
Blank (1212201-BLK1)				Prepared: 12/19/2012 Analyzed: 12/28/2012						
4,4´-DDD	ND	0.10	ug/L							
4,4´-DDE	ND	0.10	ug/L							
4,4´-DDT	ND	0.10	ug/L							
Aldrin	ND	0.10	ug/L							
alpha-BHC	ND	0.10	ug/L							
alpha-Chlordane	ND	0.10	ug/L							
beta-BHC	ND	0.10	ug/L							
delta-BHC	ND	0.10	ug/L							
Dieldrin	ND	0.10	ug/L							
Endosulfan I	ND	0.10	ug/L							
Endosulfan II	ND	0.10	ug/L							
Endosulfan sulfate	ND	0.10	ug/L							
Endrin	ND	0.10	ug/L							
Endrin aldehyde	ND	0.10	ug/L							
Endrin ketone	ND	0.10	ug/L							
gamma-BHC	ND	0.10	ug/L							
gamma-Chlordane	ND	0.10	ug/L							
Heptachlor	ND	0.10	ug/L							
Heptachlor epoxide	ND	0.10	ug/L							
Methoxychlor	ND	0.10	ug/L							
Toxaphene	ND	1.0	ug/L							
Surrogate: Decachlorobiphenyl	*0.920*		*ug/L*	*1.000*		*92*	*51.1-138.5*			
Surrogate: Tetrachloro-m-xylene	*0.824*		*ug/L*	*1.000*		*82*	*39.1-120*			
LCS (1212201-BS1)				Prepared: 12/19/2012 Analyzed: 12/28/2012						
4,4´-DDT	0.96	0.10	ug/L	1.000		96	57-116.5			
Aldrin	0.43	0.10	ug/L	0.5000		85	48.4-113.2			
Dieldrin	0.84	0.10	ug/L	1.000		84	53.2-117.5			
Endrin	0.91	0.10	ug/L	1.000		91	49.2-123.7			
gamma-BHC	0.47	0.10	ug/L	0.5000		93	58.9-127.4			
Heptachlor	0.42	0.10	ug/L	0.5000		84	48.1-120			
Surrogate: Decachlorobiphenyl	*0.957*		*ug/L*	*1.000*		*96*	*51.6-128.7*			
Surrogate: Tetrachloro-m-xylene	*0.823*		*ug/L*	*1.000*		*82*	*37.1-110.6*			
LCS Dup (1212201-BSD1)				Prepared: 12/19/2012 Analyzed: 12/28/2012						
4,4´-DDT	0.95	0.10	ug/L	1.000		95	57-116.5	1	30	
Aldrin	0.43	0.10	ug/L	0.5000		85	48.4-113.2	0.3	30	
Dieldrin	0.84	0.10	ug/L	1.000		84	53.2-117.5	0.4	30	
Endrin	0.85	0.10	ug/L	1.000		85	49.2-123.7	6	30	
gamma-BHC	0.45	0.10	ug/L	0.5000		91	58.9-127.4	3	30	
Heptachlor	0.42	0.10	ug/L	0.5000		83	48.1-120	1	30	
Surrogate: Decachlorobiphenyl	*0.972*		*ug/L*	*1.000*		*97*	*51.6-128.7*			
Surrogate: Tetrachloro-m-xylene	*0.814*		*ug/L*	*1.000*		*81*	*37.1-110.6*			

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1212201 - SW 846 3520C										
Matrix Spike (1212201-MS1)		**Source: 12L0563-01**		Prepared: 12/19/2012 Analyzed: 12/28/2012						
4,4´-DDT	0.38	0.10	ug/L	0.9980	ND	38	16.5-164.5			
Aldrin	0.18	0.10	ug/L	0.4990	ND	35	20.7-143.6			
Dieldrin	0.53	0.10	ug/L	0.9980	ND	53	53.5-127.4			M2
Endrin	0.52	0.10	ug/L	0.9980	ND	53	52.9-133.2			M2
gamma-BHC	0.40	0.10	ug/L	0.4990	ND	80	51.9-134.6			
Heptachlor	0.23	0.10	ug/L	0.4990	ND	46	32.7-141.3			
Surrogate: Decachlorobiphenyl	*0.824*		*ug/L*	*0.9980*		*83*	*51.1-138.5*			
Surrogate: Tetrachloro-m-xylene	*0.742*		*ug/L*	*0.9980*		*74*	*39.1-120*			
Batch 1212202 - SW 846 3520C										
Blank (1212202-BLK1)				Prepared: 12/20/2012 Analyzed: 12/29/2012						
Aroclor 1016	ND	1.0	ug/L							
Aroclor 1221	ND	1.0	ug/L							
Aroclor 1232	ND	1.0	ug/L							
Aroclor 1242	ND	1.0	ug/L							
Aroclor 1248	ND	1.0	ug/L							
Aroclor 1254	ND	1.0	ug/L							
Aroclor 1260	ND	1.0	ug/L							
Surrogate: Decachlorobiphenyl	*1.94*		*ug/L*	*2.000*		*97*	*52.7-155.1*			
LCS (1212202-BS1)				Prepared: 12/20/2012 Analyzed: 12/29/2012						
Aroclor 1016	9.6	1.0	ug/L	10.00		96	65.2-120.7			
Aroclor 1254	ND	1.0	ug/L				70-130			
Aroclor 1260	9.8	1.0	ug/L	10.00		98	65.3-133.7			
Surrogate: Decachlorobiphenyl	*2.03*		*ug/L*	*2.000*		*101*	*52.7-155.1*			
LCS Dup (1212202-BSD1)				Prepared: 12/20/2012 Analyzed: 12/29/2012						
Aroclor 1016	9.2	1.0	ug/L	10.00		92	65.2-120.7	4	30	
Aroclor 1254	ND	1.0	ug/L				70-130		30	
Aroclor 1260	9.6	1.0	ug/L	10.00		96	65.3-133.7	2	30	
Surrogate: Decachlorobiphenyl	*1.99*		*ug/L*	*2.000*		*99*	*52.7-155.1*			
Batch 1212226 - SW 846 3535										

Turner Laboratories, Inc.

Date: 03/19/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 12L0563
Date Received: 12/19/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1212226 - SW 846 3535										
Blank (1212226-BLK1)				Prepared: 12/21/2012 Analyzed: 01/02/2013						
1,2,4-Trichlorobenzene	ND	10	ug/L							
1,2-Dichlorobenzene	ND	10	ug/L							
1,2-Diphenylhydrazine	ND	10	ug/L							
1,3-Dichlorobenzene	ND	10	ug/L							
1,4-Dichlorobenzene	ND	10	ug/L							
2,4,5-Trichlorophenol	ND	10	ug/L							
2,4,6-Trichlorophenol	ND	10	ug/L							
2,4-Dichlorophenol	ND	10	ug/L							
2,4-Dimethylphenol	ND	10	ug/L							
2,4-Dinitrophenol	ND	50	ug/L							
2,4-Dinitrotoluene	ND	10	ug/L							
2,6-Dinitrotoluene	ND	10	ug/L							
2-Chloronaphthalene	ND	10	ug/L							
2-Chlorophenol	ND	10	ug/L							
2-Methylnaphthalene	ND	5.0	ug/L							
2-Methylphenol	ND	10	ug/L							
2-Nitroaniline	ND	20	ug/L							
2-Nitrophenol	ND	10	ug/L							
3,3´-Dichlorobenzidine	ND	20	ug/L							
3,4-Methylphenol	ND	10	ug/L							
3-Nitroaniline	ND	20	ug/L							
4,6-Dinitro-2-methylphenol	ND	20	ug/L							
4-Bromophenyl phenyl ether	ND	10	ug/L							
4-Chloro-3-methylphenol	ND	10	ug/L							
4-Chloroaniline	ND	20	ug/L							
4-Chlorophenyl phenyl ether	ND	10	ug/L							
4-Nitroaniline	ND	20	ug/L							
4-Nitrophenol	ND	50	ug/L							
Acenaphthene	ND	5.0	ug/L							
Acenaphthylene	ND	5.0	ug/L							
Aniline	ND	20	ug/L							
Anthracene	ND	5.0	ug/L							
Benzo[a]anthracene	ND	5.0	ug/L							
Benzo[a]pyrene	ND	5.0	ug/L							
Benzo[b,k]fluoranthene	ND	10	ug/L							
Benzo[g,h,i]perylene	ND	5.0	ug/L							
Benzoic acid	ND	50	ug/L							
Benzyl alcohol	ND	5.0	ug/L							
Bis(2-chloroethoxy)methane	ND	10	ug/L							
Bis(2-chloroethyl)ether	ND	10	ug/L							
Bis(2-chloroisopropyl)ether	ND	10	ug/L							
Bis(2-ethylhexyl)phthalate	ND	10	ug/L							
Butyl benzyl phthalate	ND	10	ug/L							
Chrysene	ND	5.0	ug/L							
Dibenz[a,h]anthracene	ND	5.0	ug/L							
Dibenzofuran	ND	5.0	ug/L							
Diethyl phthalate	ND	10	ug/L							

Turner Laboratories, Inc.

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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1212226 - SW 846 3535										
Blank (1212226-BLK1)				Prepared: 12/21/2012 Analyzed: 01/02/2013						
Dimethyl phthalate	ND	10	ug/L							
Di-n-butyl phthalate	ND	10	ug/L							
Di-n-octyl phthalate	ND	10	ug/L							
Fluoranthene	ND	5.0	ug/L							
Fluorene	ND	5.0	ug/L							
Hexachlorobenzene	ND	10	ug/L							
Hexachlorobutadiene	ND	10	ug/L							
Hexachlorocyclopentadiene	ND	10	ug/L							
Hexachloroethane	ND	10	ug/L							
Indeno[1,2,3-cd]pyrene	ND	5.0	ug/L							
Isophorone	ND	10	ug/L							
Naphthalene	ND	5.0	ug/L							
Nitrobenzene	ND	10	ug/L							
N-Nitrosodimethylamine	ND	10	ug/L							
N-Nitrosodiphenylamine	ND	10	ug/L							
N-Nitrosodipropylamine	ND	10	ug/L							
Pentachlorophenol	ND	30	ug/L							
Phenanthrene	ND	5.0	ug/L							
Phenol	ND	10	ug/L							
Pyrene	ND	5.0	ug/L							
Surrogate: 2,4,6-Tribromophenol	*80.2*		*ug/L*	*100.0*		*80*	*48.18-103.25*			
Surrogate: 2-Fluorobiphenyl	*67.0*		*ug/L*	*100.0*		*67*	*44.86-97.28*			
Surrogate: 2-Fluorophenol	*38.2*		*ug/L*	*100.0*		*38*	*17.76-99.38*			
Surrogate: 4-Terphenyl-d14	*79.5*		*ug/L*	*100.0*		*79*	*38.67-92.68*			
Surrogate: Nitrobenzene-d5	*53.5*		*ug/L*	*100.0*		*53*	*23.73-103.28*			
Surrogate: Phenol-d6	*34.8*		*ug/L*	*100.0*		*35*	*17.76-99.38*			
LCS (1212226-BS1)				Prepared: 12/21/2012 Analyzed: 01/02/2013						
1,2,4-Trichlorobenzene	34	10	ug/L	50.00		69	44.61-96.97			
1,4-Dichlorobenzene	26	10	ug/L	50.00		52	34.76-84.41			
2,4-Dinitrotoluene	33	10	ug/L	50.00		66	53.41-93.7			
2-Chlorophenol	72	10	ug/L	100.0		72	24.48-90.36			
4-Chloro-3-methylphenol	78	10	ug/L	100.0		78	35.71-98.42			
4-Nitrophenol	69	50	ug/L	100.0		69	29.09-97.75			
Acenaphthene	33	5.0	ug/L	50.00		65	45.55-93.72			
N-Nitrosodipropylamine	37	10	ug/L	50.00		73	36.51-113.8			
Pentachlorophenol	84	30	ug/L	100.0		84	56.81-93.77			
Phenol	31	10	ug/L	100.0		31	25.83-92.79			
Pyrene	35	5.0	ug/L	50.00		71	46.41-100.1			
Surrogate: 2,4,6-Tribromophenol	*99.8*		*ug/L*	*100.0*		*100*	*50.03-106.09*			
Surrogate: 2-Fluorobiphenyl	*72.2*		*ug/L*	*100.0*		*72*	*48.56-92.49*			
Surrogate: 2-Fluorophenol	*42.3*		*ug/L*	*100.0*		*42*	*17.64-75.67*			
Surrogate: 4-Terphenyl-d14	*74.8*		*ug/L*	*100.0*		*75*	*46-86.35*			
Surrogate: Nitrobenzene-d5	*62.3*		*ug/L*	*100.0*		*62*	*39.5-94.5*			
Surrogate: Phenol-d6	*37.9*		*ug/L*	*100.0*		*38*	*32.72-92.61*			

Turner Laboratories, Inc.

Date: 03/19/2013

Client: City of Tucson - Transportation Department
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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1212226 - SW 846 3535										
LCS Dup (1212226-BSD1)				Prepared: 12/21/2012 Analyzed: 01/02/2013						
1,2,4-Trichlorobenzene	29	10	ug/L	50.00		58	44.61-96.97	17	30	
1,4-Dichlorobenzene	22	10	ug/L	50.00		43	34.76-84.41	19	30	
2,4-Dinitrotoluene	30	10	ug/L	50.00		60	53.41-93.7	10	30	
2-Chlorophenol	61	10	ug/L	100.0		61	24.48-90.36	16	30	
4-Chloro-3-methylphenol	69	10	ug/L	100.0		69	35.71-98.42	12	30	
4-Nitrophenol	66	50	ug/L	100.0		66	29.09-97.75	5	30	
Acenaphthene	29	5.0	ug/L	50.00		58	45.55-93.72	12	30	
N-Nitrosodipropylamine	32	10	ug/L	50.00		64	36.51-113.8	14	30	
Pentachlorophenol	67	30	ug/L	100.0		67	56.81-93.77	23	30	
Phenol	29	10	ug/L	100.0		29	25.83-92.79	9	30	
Pyrene	32	5.0	ug/L	50.00		64	46.41-100.1	10	30	
Surrogate: 2,4,6-Tribromophenol	*85.3*		*ug/L*	*100.0*		*85*	*50.03-106.09*			
Surrogate: 2-Fluorobiphenyl	*66.4*		*ug/L*	*100.0*		*66*	*48.56-92.49*			
Surrogate: 2-Fluorophenol	*36.7*		*ug/L*	*100.0*		*37*	*17.64-75.67*			
Surrogate: 4-Terphenyl-d14	*69.5*		*ug/L*	*100.0*		*70*	*46-86.35*			
Surrogate: Nitrobenzene-d5	*53.2*		*ug/L*	*100.0*		*53*	*39.5-94.5*			
Surrogate: Phenol-d6	*33.9*		*ug/L*	*100.0*		*34*	*32.72-92.61*			
Matrix Spike (1212226-MS1)		**Source: 12L0563-01**		Prepared: 12/21/2012 Analyzed: 01/02/2013						
1,2,4-Trichlorobenzene	34	9.9	ug/L	49.46	ND	68	26.12-109.76			
1,4-Dichlorobenzene	27	9.9	ug/L	49.46	ND	55	23.67-90			
2,4-Dinitrotoluene	38	9.9	ug/L	49.46	ND	76	42.38-99.06			
2-Chlorophenol	72	9.9	ug/L	98.91	ND	73	13.58-96.61			
4-Chloro-3-methylphenol	80	9.9	ug/L	98.91	ND	81	34.59-92.25			
4-Nitrophenol	89	49	ug/L	98.91	ND	90	20.75-109.23			
Acenaphthene	38	4.9	ug/L	49.46	ND	77	24.45-105.5			
N-Nitrosodipropylamine	45	9.9	ug/L	49.46	ND	92	14.35-130.03			
Pentachlorophenol	97	30	ug/L	98.91	ND	98	43.33-101.64			
Phenol	43	9.9	ug/L	98.91	ND	44	22.94-95			
Pyrene	36	4.9	ug/L	49.46	ND	73	25.28-106.05			
Surrogate: 2,4,6-Tribromophenol	*114*		*ug/L*	*98.91*		*115*	*48.18-103.25*			*S11*
Surrogate: 2-Fluorobiphenyl	*80.5*		*ug/L*	*98.91*		*81*	*44.86-97.28*			
Surrogate: 2-Fluorophenol	*50.5*		*ug/L*	*98.91*		*51*	*17.76-99.38*			
Surrogate: 4-Terphenyl-d14	*109*		*ug/L*	*98.91*		*110*	*38.67-92.68*			*S11*
Surrogate: Nitrobenzene-d5	*72.2*		*ug/L*	*98.91*		*73*	*23.73-103.28*			
Surrogate: Phenol-d6	*55.1*		*ug/L*	*98.91*		*56*	*17.76-99.38*			

Turner Laboratories, Inc.

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Client: City of Tucson - Transportation Department
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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1212188 - VOA_GCMS										
Blank (1212188-BLK1)				Prepared & Analyzed: 12/18/2012						
1,1,1-Trichloroethane	ND	2.0	ug/L							
1,1,2,2-Tetrachloroethane	ND	2.0	ug/L							
1,1,2-Trichloroethane	ND	2.0	ug/L							
1,1-Dichloroethane	ND	2.0	ug/L							
1,1-Dichloroethene	ND	2.0	ug/L							
1,2-Dichlorobenzene	ND	2.0	ug/L							
1,2-Dichloroethane	ND	2.0	ug/L							
1,2-Dichloropropane	ND	2.0	ug/L							
1,3-Dichlorobenzene	ND	2.0	ug/L							
1,4-Dichlorobenzene	ND	2.0	ug/L							
2-Chloroethylvinylether	ND	10	ug/L							
2-Chloroethylvinylether	ND	10	ug/L							
Acetone	ND	10	ug/L							
Acrolein	ND	10	ug/L							
Acrolein	ND	10	ug/L							
Acrylonitrile	ND	10	ug/L							
Acrylonitrile	ND	10	ug/L							
Benzene	ND	2.0	ug/L							
Bromodichloromethane	ND	2.0	ug/L							
Bromoform	ND	2.0	ug/L							
Bromomethane	ND	2.0	ug/L							
Carbon tetrachloride	ND	2.0	ug/L							
Chlorobenzene	ND	2.0	ug/L							
Chloroethane	ND	5.0	ug/L							
Chloroform	ND	2.0	ug/L							
Chloromethane	ND	5.0	ug/L							
cis-1,3-Dichloropropene	ND	2.0	ug/L							
Dibromochloromethane	ND	2.0	ug/L							
Dichlorodifluoromethane	ND	5.0	ug/L							
Ethylbenzene	ND	2.0	ug/L							
Methyl Isobutyl Ketone (MIBK)	ND	10	ug/L							
Methylene chloride	ND	10	ug/L							
Tetrachloroethene	ND	2.0	ug/L							
Tetrahydrofuran	ND	10	ug/L							
Toluene	ND	2.0	ug/L							
trans-1,2-Dichloroethene	ND	2.0	ug/L							
trans-1,3-Dichloropropene	ND	2.0	ug/L							
Trichloroethene	ND	2.0	ug/L							
Trichlorofluoromethane	ND	5.0	ug/L							
Vinyl chloride	ND	2.0	ug/L							
Xylenes, Total	ND	6.0	ug/L							
Surrogate: 1,2-Dichloroethane-d4	*29.1*		*ug/L*	*28.00*		*104*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*29.1*		*ug/L*	*28.00*		*104*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*27.7*		*ug/L*	*28.00*		*99*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*27.7*		*ug/L*	*28.00*		*99*	*70-130*			
Surrogate: Fluorobenzene	*28.5*		*ug/L*	*28.00*		*102*	*70-130*			
Surrogate: Fluorobenzene	*28.5*		*ug/L*	*28.00*		*102*	*70-130*			

Turner Laboratories, Inc.

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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1212188 - VOA_GCMS										
LCS (1212188-BS1)				Prepared & Analyzed: 12/18/2012						
1,1,1-Trichloroethane	21		ug/L	20.00		105	52-162			
1,1,2,2-Tetrachloroethane	19		ug/L	20.00		96	46-157			
1,1,2-Trichloroethane	19		ug/L	20.00		96	52-150			
1,1-Dichloroethane	22		ug/L	20.00		110	59-155			
1,1-Dichloroethene	20		ug/L	20.00		101	2-234			
1,2-Dichlorobenzene	20		ug/L	20.00		100	18-190			
1,2-Dichloroethane	20		ug/L	20.00		100	49-155			
1,2-Dichloropropane	20		ug/L	20.00		101	2-210			
1,3-Dichlorobenzene	20		ug/L	20.00		99	59-156			
1,4-Dichlorobenzene	20		ug/L	20.00		99	18-190			
2-Chloroethylvinylether	19	10	ug/L				10-305			
2-Chloroethylvinylether	ND	10	ug/L				10-305			
Acetone	95		ug/L	100.0		95	70-130			
Acrolein	92		ug/L	100.0		92	88-118			
Acrolein	92		ug/L	100.0		92	88-118			
Acrylonitrile	100		ug/L	100.0		104	71-135			
Acrylonitrile	100		ug/L	100.0		104	71-135			
Benzene	20		ug/L	20.00		99	37-151			
Bromodichloromethane	21		ug/L	20.00		105	35-155			
Bromoform	19		ug/L	20.00		95	45-169			
Bromomethane	20		ug/L	20.00		98	2-242			
Carbon tetrachloride	21		ug/L	20.00		105	70-140			
Chlorobenzene	19		ug/L	20.00		94	37-160			
Chloroethane	21		ug/L	20.00		105	14-230			
Chloroform	20		ug/L	20.00		99	51-138			
Chloromethane	20		ug/L	20.00		102	5-273			
cis-1,3-Dichloropropene	21		ug/L	20.00		104	2-227			
Dibromochloromethane	21		ug/L	20.00		105	53-149			
Dichlorodifluoromethane	19		ug/L	20.00		97	5-273			
Ethylbenzene	20		ug/L	20.00		98	37-162			
Isopropyl Alcohol	1000		ug/L	1000		100	70-130			
Methyl Isobutyl Ketone (MIBK)	97		ug/L	100.0		97	70-130			
Methylene chloride	20		ug/L	20.00		99	10-221			
Tetrachloroethene	22		ug/L	20.00		111	64-148			
Tetrahydrofuran	97		ug/L	100.0		97	70-130			
Toluene	19		ug/L	20.00		95	47-150			
trans-1,2-Dichloroethene	21		ug/L	20.00		104	54-156			
trans-1,3-Dichloropropene	21		ug/L	20.00		103	17-183			
Trichloroethene	20		ug/L	20.00		101	71-157			
Trichlorofluoromethane	21		ug/L	20.00		103	17-181			
Vinyl chloride	21		ug/L	20.00		107	2-251			
Xylenes, Total	59		ug/L	60.00		98	37-162			
Surrogate: 1,2-Dichloroethane-d4	*28.4*		*ug/L*	*28.00*		*101*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*28.4*		*ug/L*	*28.00*		*101*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*27.2*		*ug/L*	*28.00*		*97*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*27.2*		*ug/L*	*28.00*		*97*	*70-130*			
Surrogate: Fluorobenzene	*27.8*		*ug/L*	*28.00*		*99*	*70-130*			

Turner Laboratories, Inc.

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Client: City of Tucson - Transportation Department
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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1212188 - VOA_GCMS										
LCS (1212188-BS1)				Prepared & Analyzed: 12/18/2012						
Surrogate: Fluorobenzene	*27.8*		*ug/L*	*28.00*		*99*	*70-130*			

Turner Laboratories, Inc.

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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1212188 - VOA_GCMS										
LCS Dup (1212188-BSD1)				Prepared & Analyzed: 12/18/2012						
1,1,1-Trichloroethane	22		ug/L	20.00		109	52-162	4	30	
1,1,2,2-Tetrachloroethane	19		ug/L	20.00		97	46-157	1	30	
1,1,2-Trichloroethane	18		ug/L	20.00		92	52-150	5	30	
1,1-Dichloroethane	20		ug/L	20.00		99	59-155	10	30	
1,1-Dichloroethene	21		ug/L	20.00		106	2-234	4	30	
1,2-Dichlorobenzene	21		ug/L	20.00		103	18-190	3	30	
1,2-Dichloroethane	20		ug/L	20.00		102	49-155	1	30	
1,2-Dichloropropane	21		ug/L	20.00		105	2-210	3	30	
1,3-Dichlorobenzene	21		ug/L	20.00		103	59-156	4	30	
1,4-Dichlorobenzene	20		ug/L	20.00		100	18-190	0.3	30	
2-Chloroethylvinylether	19	10	ug/L				10-305	2	30	
2-Chloroethylvinylether	ND	10	ug/L				10-305		30	
Acetone	95		ug/L	100.0		95	70-130	0.3	30	
Acrolein	100		ug/L	100.0		103	88-118	12	30	
Acrolein	100		ug/L	100.0		103	88-118	12	30	
Acrylonitrile	100		ug/L	100.0		104	71-135	0.2	30	
Acrylonitrile	100		ug/L	100.0		104	71-135	0.2	30	
Benzene	20		ug/L	20.00		101	37-151	2	30	
Bromodichloromethane	22		ug/L	20.00		112	35-155	7	30	
Bromoform	21		ug/L	20.00		104	45-169	9	30	
Bromomethane	21		ug/L	20.00		106	2-242	8	30	
Carbon tetrachloride	23		ug/L	20.00		114	70-140	8	30	
Chlorobenzene	19		ug/L	20.00		95	37-160	1	30	
Chloroethane	22		ug/L	20.00		108	14-230	3	30	
Chloroform	21		ug/L	20.00		106	51-138	8	30	
Chloromethane	20		ug/L	20.00		99	5-273	3	30	
cis-1,3-Dichloropropene	20		ug/L	20.00		98	2-227	5	30	
Dibromochloromethane	21		ug/L	20.00		107	53-149	2	30	
Dichlorodifluoromethane	20		ug/L	20.00		100	5-273	3	30	
Ethylbenzene	20		ug/L	20.00		101	37-162	3	30	
Isopropyl Alcohol	1000		ug/L	1000		102	70-130	2	200	
Methyl Isobutyl Ketone (MIBK)	98		ug/L	100.0		98	70-130	1	30	
Methylene chloride	21		ug/L	20.00		103	10-221	4	30	
Tetrachloroethene	22		ug/L	20.00		110	64-148	1	30	
Tetrahydrofuran	94		ug/L	100.0		94	70-130	4	30	
Toluene	19		ug/L	20.00		97	47-150	2	30	
trans-1,2-Dichloroethene	22		ug/L	20.00		109	54-156	5	30	
trans-1,3-Dichloropropene	21		ug/L	20.00		103	17-183	0.1	30	
Trichloroethene	21		ug/L	20.00		105	71-157	4	30	
Trichlorofluoromethane	21		ug/L	20.00		107	17-181	3	30	
Vinyl chloride	22		ug/L	20.00		112	2-251	5	30	
Xylenes, Total	59		ug/L	60.00		98	37-162	0.2	30	
Surrogate: 1,2-Dichloroethane-d4	*28.7*		*ug/L*	*28.00*		*102*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*28.7*		*ug/L*	*28.00*		*102*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*27.9*		*ug/L*	*28.00*		*100*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*27.9*		*ug/L*	*28.00*		*100*	*70-130*			
Surrogate: Fluorobenzene	*28.0*		*ug/L*	*28.00*		*100*	*70-130*			

Turner Laboratories, Inc.

Date: 03/19/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 12L0563
Date Received: 12/19/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1212188 - VOA_GCMS										
LCS Dup (1212188-BSD1)				Prepared & Analyzed: 12/18/2012						
Surrogate: Fluorobenzene	*28.0*		*ug/L*	*28.00*		*100*	*70-130*			

Turner Laboratories, Inc.

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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1212188 - VOA_GCMS										
Matrix Spike (1212188-MS1)		**Source: 12L0007-04**		Prepared & Analyzed: 12/19/2012						
1,1,1-Trichloroethane	23		ug/L	20.00	ND	116	52-162			
1,1,2,2-Tetrachloroethane	20		ug/L	20.00	ND	102	46-157			
1,1,2-Trichloroethane	18		ug/L	20.00	ND	90	52-150			
1,1-Dichloroethane	19		ug/L	20.00	ND	97	59-155			
1,1-Dichloroethene	21		ug/L	20.00	ND	104	2-234			
1,2-Dichlorobenzene	21		ug/L	20.00	ND	107	18-190			
1,2-Dichloroethane	21		ug/L	20.00	ND	104	49-155			
1,2-Dichloropropane	21		ug/L	20.00	0.0	107	2-210			
1,3-Dichlorobenzene	22		ug/L	20.00	ND	108	59-156			
1,4-Dichlorobenzene	22		ug/L	20.00	ND	111	18-190			
2-Chloroethylvinylether	500	250	ug/L		ND		10-305			
2-Chloroethylvinylether	ND	50	ug/L		ND		10-305			
Acetone	100		ug/L	100.0	ND	102	70-130			
Acrolein	61		ug/L	100.0	ND	61	88-118			M2
Acrolein	85		ug/L	100.0	0.0	85	88-118			
Acrylonitrile	79		ug/L	100.0	ND	79	71-135			
Acrylonitrile	91		ug/L	100.0	ND	91	71-135			
Benzene	21		ug/L	20.00	ND	105	37-151			
Bromodichloromethane	23		ug/L	20.00	ND	115	35-155			
Bromoform	24		ug/L	20.00	ND	122	45-169			
Bromomethane	23		ug/L	20.00	ND	113	2-242			
Carbon tetrachloride	25		ug/L	20.00	ND	126	70-140			
Chlorobenzene	19		ug/L	20.00	ND	93	37-160			
Chloroethane	22		ug/L	20.00	ND	108	14-230			
Chloroform	22		ug/L	20.00	ND	109	51-138			
Chloromethane	21		ug/L	20.00	ND	105	5-273			
cis-1,3-Dichloropropene	20		ug/L	20.00	ND	102	2-221			
Dibromochloromethane	22		ug/L	20.00	ND	111	53-149			
Dichlorodifluoromethane	20		ug/L	20.00	ND	98	5-273			
Ethylbenzene	20		ug/L	20.00	ND	98	37-162			
Isopropyl Alcohol	790		ug/L	1000	ND	79	70-130			
Methyl Isobutyl Ketone (MIBK)	95		ug/L	100.0	0.0	95	70-130			
Methylene chloride	20		ug/L	20.00	ND	102	10-221			
Tetrachloroethene	21		ug/L	20.00	ND	103	64-148			
Tetrahydrofuran	98		ug/L	100.0	ND	98	70-130			
Toluene	19		ug/L	20.00	0.45	93	47-150			
trans-1,2-Dichloroethene	21		ug/L	20.00	ND	103	54-156			
trans-1,3-Dichloropropene	20		ug/L	20.00	ND	99	17-183			
Trichloroethene	21		ug/L	20.00	ND	105	71-157			
Trichlorofluoromethane	20		ug/L	20.00	0.010	100	17-181			
Vinyl chloride	21		ug/L	20.00	ND	104	2-251			
Xylenes, Total	58		ug/L	60.00	ND	96	37-162			
Surrogate: 1,2-Dichloroethane-d4	*27.7*		*ug/L*	*28.00*		*99*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*28.7*		*ug/L*	*28.00*		*103*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*29.2*		*ug/L*	*28.00*		*104*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*28.3*		*ug/L*	*28.00*		*101*	*70-130*			
Surrogate: Fluorobenzene	*29.2*		*ug/L*	*28.00*		*104*	*70-130*			

Turner Laboratories, Inc.

Date: 03/19/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 12L0563
Date Received: 12/19/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1212188 - VOA_GCMS										
Matrix Spike (1212188-MS1)		**Source: 12L0007-04**		Prepared & Analyzed: 12/19/2012						
Surrogate: Fluorobenzene	*28.4*		*ug/L*	*28.00*		*101*	*70-130*			
Matrix Spike (1212188-MS2)		**Source: 12L0007-04**		Prepared & Analyzed: 12/18/2012						
1,1,1-Trichloroethane	15		ug/L	20.00	ND	73	52-162			
1,1,2,2-Tetrachloroethane	19		ug/L	20.00	ND	96	46-157			
1,1,2-Trichloroethane	19		ug/L	20.00	ND	93	52-150			
1,1-Dichloroethane	16		ug/L	20.00	ND	79	59-155			
1,1-Dichloroethene	14		ug/L	20.00	ND	71	2-234			
1,2-Dichlorobenzene	18		ug/L	20.00	ND	88	18-190			
1,2-Dichloroethane	19		ug/L	20.00	ND	96	49-155			
1,2-Dichloropropane	18		ug/L	20.00	0.0	89	2-210			
1,3-Dichlorobenzene	17		ug/L	20.00	ND	87	59-156			
1,4-Dichlorobenzene	17		ug/L	20.00	ND	86	18-190			
2-Chloroethylvinylether	ND	250	ug/L		ND		10-305			
Acetone	95		ug/L	100.0	ND	95	70-130			
Acrolein	0.0		ug/L	100.0	0.0		88-118			
Acrylonitrile	0.0		ug/L	100.0	ND		71-135			
Benzene	16		ug/L	20.00	ND	78	37-151			
Bromodichloromethane	19		ug/L	20.00	ND	96	35-155			
Bromoform	20		ug/L	20.00	ND	98	45-169			
Bromomethane	17		ug/L	20.00	ND	87	2-242			
Carbon tetrachloride	14		ug/L	20.00	ND	70	70-140			
Chlorobenzene	15		ug/L	20.00	ND	77	37-160			
Chloroethane	15		ug/L	20.00	ND	75	14-230			
Chloroform	17		ug/L	20.00	ND	85	51-138			
Chloromethane	15		ug/L	20.00	ND	73	5-273			
cis-1,3-Dichloropropene	17		ug/L	20.00	ND	84	2-221			
Dibromochloromethane	20		ug/L	20.00	ND	100	53-149			
Dichlorodifluoromethane	13		ug/L	20.00	ND	65	5-273			
Ethylbenzene	15		ug/L	20.00	ND	75	37-162			
Isopropyl Alcohol	940		ug/L	1000	ND	94	70-130			
Methyl Isobutyl Ketone (MIBK)	100		ug/L	100.0	0.0	103	70-130			
Methylene chloride	18		ug/L	20.00	ND	90	10-221			
Tetrachloroethene	16		ug/L	20.00	ND	82	64-148			
Tetrahydrofuran	100		ug/L	100.0	ND	103	70-130			
Toluene	16		ug/L	20.00	0.45	77	47-150			
trans-1,2-Dichloroethene	16		ug/L	20.00	ND	80	54-156			
trans-1,3-Dichloropropene	18		ug/L	20.00	ND	88	17-183			
Trichloroethene	15		ug/L	20.00	ND	76	71-157			
Trichlorofluoromethane	13		ug/L	20.00	0.010	66	17-181			
Vinyl chloride	15		ug/L	20.00	ND	77	2-251			
Xylenes, Total	46		ug/L	60.00	ND	77	37-162			
Surrogate: 1,2-Dichloroethane-d4	*29.0*		*ug/L*	*28.00*		*104*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*26.6*		*ug/L*	*28.00*		*95*	*70-130*			
Surrogate: Fluorobenzene	*27.8*		*ug/L*	*28.00*		*99*	*70-130*			

Turner Laboratories, Inc.

Date: 03/19/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 12L0563
Date Received: 12/19/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1212188 - VOA_GCMS										
Matrix Spike (1212188-MS3)		**Source: 12L0007-02**		Prepared & Analyzed: 12/18/2012						
1,1,1-Trichloroethane	14		ug/L	20.00	ND	69	52-162			
1,1,2,2-Tetrachloroethane	20		ug/L	20.00	ND	98	46-157			
1,1,2-Trichloroethane	19		ug/L	20.00	ND	94	52-150			
1,1-Dichloroethane	16		ug/L	20.00	ND	78	59-155			
1,1-Dichloroethene	14		ug/L	20.00	ND	68	2-234			
1,2-Dichlorobenzene	18		ug/L	20.00	ND	92	18-190			
1,2-Dichloroethane	18		ug/L	20.00	ND	91	49-155			
1,2-Dichloropropane	17		ug/L	20.00	0.0	85	2-210			
1,3-Dichlorobenzene	17		ug/L	20.00	ND	85	59-156			
1,4-Dichlorobenzene	17		ug/L	20.00	ND	87	18-190			
2-Chloroethylvinylether	ND	250	ug/L		ND		10-305			
Acetone	150		ug/L	100.0	58	89	70-130			
Acrolein	0.0		ug/L	100.0	0.0		88-118			
Acrylonitrile	0.0		ug/L	100.0	ND		71-135			
Benzene	15		ug/L	20.00	ND	74	37-151			
Bromodichloromethane	19		ug/L	20.00	ND	94	35-155			
Bromoform	22		ug/L	20.00	ND	108	45-169			
Bromomethane	17		ug/L	20.00	ND	86	2-242			
Carbon tetrachloride	13		ug/L	20.00	ND	65	70-140			M2
Chlorobenzene	16		ug/L	20.00	ND	78	37-160			
Chloroethane	14		ug/L	20.00	ND	69	14-230			
Chloroform	16		ug/L	20.00	ND	82	51-138			
Chloromethane	13		ug/L	20.00	ND	67	5-273			
cis-1,3-Dichloropropene	17		ug/L	20.00	ND	84	2-221			
Dibromochloromethane	20		ug/L	20.00	ND	101	53-149			
Dichlorodifluoromethane	12		ug/L	20.00	ND	59	5-273			
Ethylbenzene	15		ug/L	20.00	ND	74	37-162			
Isopropyl Alcohol	980		ug/L	1000	30	95	70-130			
Methyl Isobutyl Ketone (MIBK)	110		ug/L	100.0	0.0	107	70-130			
Methylene chloride	17		ug/L	20.00	ND	83	10-221			
Tetrachloroethene	15		ug/L	20.00	ND	74	64-148			
Tetrahydrofuran	110		ug/L	100.0	8.8	106	70-130			
Toluene	17		ug/L	20.00	1.9	77	47-150			
trans-1,2-Dichloroethene	14		ug/L	20.00	ND	71	54-156			
trans-1,3-Dichloropropene	17		ug/L	20.00	ND	87	17-183			
Trichloroethene	14		ug/L	20.00	ND	68	71-157			M2
Trichlorofluoromethane	13		ug/L	20.00	0.0	63	17-181			
Vinyl chloride	14		ug/L	20.00	ND	69	2-251			
Xylenes, Total	46		ug/L	60.00	ND	76	37-162			
Surrogate: 1,2-Dichloroethane-d4	*27.6*		*ug/L*	*28.00*		*99*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*28.2*		*ug/L*	*28.00*		*101*	*70-130*			
Surrogate: Fluorobenzene	*27.5*		*ug/L*	*28.00*		*98*	*70-130*			

Turner Laboratories, Inc.

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Work Order: 12L0563
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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1212188 - VOA_GCMS										
Matrix Spike (1212188-MS4)		**Source: 12L0563-02**		Prepared: 12/18/2012 Analyzed: 12/19/2012						
1,1,1-Trichloroethane	23		ug/L	20.00	ND	116	52-162			
1,1,2,2-Tetrachloroethane	20		ug/L	20.00	ND	102	46-157			
1,1,2-Trichloroethane	18		ug/L	20.00	ND	90	52-150			
1,1-Dichloroethane	19		ug/L	20.00	ND	97	59-155			
1,1-Dichloroethene	21		ug/L	20.00	ND	104	2-234			
1,2-Dichlorobenzene	21		ug/L	20.00	ND	107	18-190			
1,2-Dichloroethane	21		ug/L	20.00	ND	104	49-155			
1,2-Dichloropropane	21		ug/L	20.00	0.0	107	2-210			
1,3-Dichlorobenzene	22		ug/L	20.00	ND	108	59-156			
1,4-Dichlorobenzene	22		ug/L	20.00	ND	111	18-190			
2-Chloroethylvinylether	19	10	ug/L		ND		10-305			
2-Chloroethylvinylether	19	10	ug/L		ND		10-305			
Acetone	100		ug/L	100.0	ND	102	70-130			
Acrolein	85		ug/L	100.0	ND	85	88-118			
Acrolein	85		ug/L	100.0	0.0	85	88-118			M2
Acrylonitrile	91		ug/L	100.0	ND	91	71-135			
Acrylonitrile	91		ug/L	100.0	ND	91	71-135			
Benzene	21		ug/L	20.00	ND	105	37-151			
Bromodichloromethane	23		ug/L	20.00	ND	115	35-155			
Bromoform	24		ug/L	20.00	ND	122	45-169			
Bromomethane	23		ug/L	20.00	ND	113	2-242			
Carbon tetrachloride	25		ug/L	20.00	ND	126	70-140			
Chlorobenzene	19		ug/L	20.00	ND	93	37-160			
Chloroethane	22		ug/L	20.00	ND	108	14-230			
Chloroform	22		ug/L	20.00	ND	109	51-138			
Chloromethane	21		ug/L	20.00	ND	105	5-273			
cis-1,3-Dichloropropene	20		ug/L	20.00	ND	102	2-221			
Dibromochloromethane	22		ug/L	20.00	ND	111	53-149			
Dichlorodifluoromethane	20		ug/L	20.00	ND	98	5-273			
Ethylbenzene	20		ug/L	20.00	ND	98	37-162			
Isopropyl Alcohol	790		ug/L	1000	ND	79	70-130			
Methyl Isobutyl Ketone (MIBK)	95		ug/L	100.0	0.0	95	70-130			
Methylene chloride	20		ug/L	20.00	ND	102	10-221			
Tetrachloroethene	21		ug/L	20.00	ND	103	64-148			
Tetrahydrofuran	98		ug/L	100.0	ND	98	70-130			
Toluene	19		ug/L	20.00	ND	95	47-150			
trans-1,2-Dichloroethene	21		ug/L	20.00	ND	103	54-156			
trans-1,3-Dichloropropene	20		ug/L	20.00	ND	99	17-183			
Trichloroethene	21		ug/L	20.00	ND	105	71-157			
Trichlorofluoromethane	20		ug/L	20.00	0.0	100	17-181			
Vinyl chloride	21		ug/L	20.00	ND	104	2-251			
Xylenes, Total	58		ug/L	60.00	ND	96	37-162			
Surrogate: 1,2-Dichloroethane-d4	*28.7*		*ug/L*	*28.00*		*103*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*28.7*		*ug/L*	*28.00*		*103*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*28.3*		*ug/L*	*28.00*		*101*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*28.3*		*ug/L*	*28.00*		*101*	*70-130*			
Surrogate: Fluorobenzene	*28.4*		*ug/L*	*28.00*		*101*	*70-130*			

Turner Laboratories, Inc.

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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1212188 - VOA_GCMS										
Matrix Spike (1212188-MS4)		**Source: 12L0563-02**		Prepared: 12/18/2012 Analyzed: 12/19/2012						
Surrogate: Fluorobenzene	*28.4*		*ug/L*	*28.00*		*101*	*70-130*			
Batch 1301046 - VOA_GCMS										

Turner Laboratories, Inc.

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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1301046 - VOA_GCMS										
Blank (1301046-BLK1)				Prepared & Analyzed: 01/03/2013						
1,1,1-Trichloroethane	ND	2.0	ug/L							
1,1,2,2-Tetrachloroethane	ND	2.0	ug/L							
1,1,2-Trichloroethane	ND	2.0	ug/L							
1,1-Dichloroethane	ND	2.0	ug/L							
1,1-Dichloroethene	ND	2.0	ug/L							
1,2-Dichlorobenzene	ND	2.0	ug/L							
1,2-Dichloroethane	ND	2.0	ug/L							
1,2-Dichloropropane	ND	2.0	ug/L							
1,3-Dichlorobenzene	ND	2.0	ug/L							
1,4-Dichlorobenzene	ND	2.0	ug/L							
2-Chloroethylvinylether	ND	10	ug/L							
2-Chloroethylvinylether	ND	10	ug/L							
Acetone	ND	10	ug/L							
Acrolein	ND	10	ug/L							
Acrolein	ND	10	ug/L							
Acrylonitrile	ND	10	ug/L							
Acrylonitrile	ND	10	ug/L							
Benzene	ND	2.0	ug/L							
Bromodichloromethane	ND	2.0	ug/L							
Bromoform	ND	2.0	ug/L							
Bromomethane	ND	2.0	ug/L							
Carbon tetrachloride	ND	2.0	ug/L							
Chlorobenzene	ND	2.0	ug/L							
Chloroethane	ND	5.0	ug/L							
Chloroform	ND	2.0	ug/L							
Chloromethane	ND	5.0	ug/L							
cis-1,3-Dichloropropene	ND	2.0	ug/L							
Dibromochloromethane	ND	2.0	ug/L							
Dichlorodifluoromethane	ND	5.0	ug/L							
Ethylbenzene	ND	2.0	ug/L							
Methyl Isobutyl Ketone (MIBK)	ND	10	ug/L							
Methylene chloride	ND	10	ug/L							
Tetrachloroethene	ND	2.0	ug/L							
Tetrahydrofuran	ND	10	ug/L							
Toluene	ND	2.0	ug/L							
trans-1,2-Dichloroethene	ND	2.0	ug/L							
trans-1,3-Dichloropropene	ND	2.0	ug/L							
Trichloroethene	ND	2.0	ug/L							
Trichlorofluoromethane	ND	5.0	ug/L							
Vinyl chloride	ND	2.0	ug/L							
Xylenes, Total	ND	6.0	ug/L							
Surrogate: 1,2-Dichloroethane-d4	*30.1*		*ug/L*	*28.00*		*107*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*30.1*		*ug/L*	*28.00*		*107*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*28.6*		*ug/L*	*28.00*		*102*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*28.6*		*ug/L*	*28.00*		*102*	*70-130*			
Surrogate: Fluorobenzene	*29.0*		*ug/L*	*28.00*		*104*	*70-130*			
Surrogate: Fluorobenzene	*29.0*		*ug/L*	*28.00*		*104*	*70-130*			

Turner Laboratories, Inc.

Date: 03/19/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 12L0563
Date Received: 12/19/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1301046 - VOA_GCMS										
LCS (1301046-BS1)				Prepared & Analyzed: 01/03/2013						
1,1,1-Trichloroethane	20		ug/L	20.00		98	52-162			
1,1,2,2-Tetrachloroethane	20		ug/L	20.00		102	46-157			
1,1,2-Trichloroethane	19		ug/L	20.00		95	52-150			
1,1-Dichloroethane	21		ug/L	20.00		106	59-155			
1,1-Dichloroethene	21		ug/L	20.00		107	2-234			
1,2-Dichlorobenzene	20		ug/L	20.00		99	18-190			
1,2-Dichloroethane	21		ug/L	20.00		103	49-155			
1,2-Dichloropropane	20		ug/L	20.00		100	2-210			
1,3-Dichlorobenzene	19		ug/L	20.00		96	59-156			
1,4-Dichlorobenzene	20		ug/L	20.00		101	18-190			
2-Chloroethylvinylether	18	10	ug/L				10-305			
2-Chloroethylvinylether	18	10	ug/L				10-305			
Acetone	100		ug/L	100.0		104	70-130			
Acrolein	110		ug/L	100.0		105	88-118			
Acrolein	110		ug/L	100.0		105	88-118			
Acrylonitrile	110		ug/L	100.0		106	71-135			
Acrylonitrile	110		ug/L	100.0		106	71-135			
Benzene	20		ug/L	20.00		102	37-151			
Bromodichloromethane	20		ug/L	20.00		100	35-155			
Bromoform	19		ug/L	20.00		95	45-169			
Bromomethane	20		ug/L	20.00		101	2-242			
Carbon tetrachloride	19		ug/L	20.00		95	70-140			
Chlorobenzene	19		ug/L	20.00		97	37-160			
Chloroethane	22		ug/L	20.00		111	14-230			
Chloroform	21		ug/L	20.00		105	51-138			
Chloromethane	21		ug/L	20.00		103	5-273			
cis-1,3-Dichloropropene	19		ug/L	20.00		94	2-227			
Dibromochloromethane	19		ug/L	20.00		95	53-149			
Dichlorodifluoromethane	20		ug/L	20.00		102	5-273			
Ethylbenzene	20		ug/L	20.00		98	37-162			
Isopropyl Alcohol	1100		ug/L	1000		109	70-130			
Methyl Isobutyl Ketone (MIBK)	100		ug/L	100.0		100	70-130			
Methylene chloride	21		ug/L	20.00		103	10-221			
Tetrachloroethene	20		ug/L	20.00		98	64-148			
Tetrahydrofuran	100		ug/L	100.0		100	70-130			
Toluene	19		ug/L	20.00		97	47-150			
trans-1,2-Dichloroethene	21		ug/L	20.00		104	54-156			
trans-1,3-Dichloropropene	19		ug/L	20.00		95	17-183			
Trichloroethene	20		ug/L	20.00		101	71-157			
Trichlorofluoromethane	21		ug/L	20.00		105	17-181			
Vinyl chloride	21		ug/L	20.00		103	2-251			
Xylenes, Total	59		ug/L	60.00		98	37-162			
Surrogate: 1,2-Dichloroethane-d4	*28.7*		*ug/L*	*28.00*		*103*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*28.7*		*ug/L*	*28.00*		*103*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*28.0*		*ug/L*	*28.00*		*100*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*28.0*		*ug/L*	*28.00*		*100*	*70-130*			
Surrogate: Fluorobenzene	*28.5*		*ug/L*	*28.00*		*102*	*70-130*			

Turner Laboratories, Inc.

Date: 03/19/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 12L0563
Date Received: 12/19/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1301046 - VOA_GCMS										
LCS (1301046-BS1)				Prepared & Analyzed: 01/03/2013						
Surrogate: Fluorobenzene	*28.5*		*ug/L*	*28.00*		*102*	*70-130*			

Turner Laboratories, Inc.

Date: 03/19/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 12L0563
Date Received: 12/19/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1301046 - VOA_GCMS										
LCS Dup (1301046-BSD1)				Prepared & Analyzed: 01/03/2013						
1,1,1-Trichloroethane	19		ug/L	20.00		96	52-162	2	30	
1,1,2,2-Tetrachloroethane	19		ug/L	20.00		97	46-157	5	30	
1,1,2-Trichloroethane	20		ug/L	20.00		99	52-150	5	30	
1,1-Dichloroethane	21		ug/L	20.00		105	59-155	1	30	
1,1-Dichloroethene	21		ug/L	20.00		107	2-234	0.05	30	
1,2-Dichlorobenzene	19		ug/L	20.00		95	18-190	5	30	
1,2-Dichloroethane	21		ug/L	20.00		106	49-155	3	30	
1,2-Dichloropropane	20		ug/L	20.00		101	2-210	0.9	30	
1,3-Dichlorobenzene	19		ug/L	20.00		95	59-156	0.5	30	
1,4-Dichlorobenzene	19		ug/L	20.00		94	18-190	8	30	
2-Chloroethylvinylether	19	10	ug/L				10-305	5	30	
2-Chloroethylvinylether	19	10	ug/L				10-305	5	30	
Acetone	110		ug/L	100.0		106	70-130	2	30	
Acrolein	100		ug/L	100.0		104	88-118	0.8	30	
Acrolein	100		ug/L	100.0		104	88-118	0.8	30	
Acrylonitrile	110		ug/L	100.0		106	71-135	0.06	30	
Acrylonitrile	110		ug/L	100.0		106	71-135	0.06	30	
Benzene	20		ug/L	20.00		100	37-151	2	30	
Bromodichloromethane	20		ug/L	20.00		99	35-155	0.7	30	
Bromoform	18		ug/L	20.00		88	45-169	8	30	
Bromomethane	19		ug/L	20.00		96	2-242	5	30	
Carbon tetrachloride	19		ug/L	20.00		96	70-140	2	30	
Chlorobenzene	19		ug/L	20.00		96	37-160	1	30	
Chloroethane	22		ug/L	20.00		108	14-230	3	30	
Chloroform	21		ug/L	20.00		103	51-138	2	30	
Chloromethane	21		ug/L	20.00		104	5-273	2	30	
cis-1,3-Dichloropropene	19		ug/L	20.00		96	2-227	2	30	
Dibromochloromethane	19		ug/L	20.00		96	53-149	0.7	30	
Dichlorodifluoromethane	21		ug/L	20.00		106	5-273	4	30	
Ethylbenzene	19		ug/L	20.00		97	37-162	0.9	30	
Isopropyl Alcohol	1100		ug/L	1000		110	70-130	0.6	200	
Methyl Isobutyl Ketone (MIBK)	100		ug/L	100.0		103	70-130	3	30	
Methylene chloride	21		ug/L	20.00		104	10-221	0.8	30	
Tetrachloroethene	19		ug/L	20.00		96	64-148	1	30	
Tetrahydrofuran	94		ug/L	100.0		94	70-130	6	30	
Toluene	19		ug/L	20.00		97	47-150	0.05	30	
trans-1,2-Dichloroethene	21		ug/L	20.00		105	54-156	2	30	
trans-1,3-Dichloropropene	18		ug/L	20.00		92	17-183	3	30	
Trichloroethene	20		ug/L	20.00		101	71-157	0.4	30	
Trichlorofluoromethane	21		ug/L	20.00		106	17-181	0.6	30	
Vinyl chloride	21		ug/L	20.00		106	2-251	3	30	
Xylenes, Total	59		ug/L	60.00		98	37-162	0.2	30	
Surrogate: 1,2-Dichloroethane-d4	*29.9*		*ug/L*	*28.00*		*107*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*29.9*		*ug/L*	*28.00*		*107*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*28.0*		*ug/L*	*28.00*		*100*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*28.0*		*ug/L*	*28.00*		*100*	*70-130*			
Surrogate: Fluorobenzene	*28.9*		*ug/L*	*28.00*		*103*	*70-130*			

Turner Laboratories, Inc.

Date: 03/19/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 12L0563
Date Received: 12/19/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1301046 - VOA_GCMS										
LCS Dup (1301046-BSD1)				Prepared & Analyzed: 01/03/2013						
Surrogate: Fluorobenzene	*28.9*		*ug/L*	*28.00*		*103*	*70-130*			
Matrix Spike (1301046-MS1)		**Source: 13A0131-01**		Prepared: 01/03/2013 Analyzed: 01/04/2013						
1,1,1-Trichloroethane	16		ug/L	20.00	ND	79	52-162			
1,1,2,2-Tetrachloroethane	21		ug/L	20.00	ND	105	46-157			
1,1,2-Trichloroethane	21		ug/L	20.00	ND	106	52-150			
1,1-Dichloroethane	21		ug/L	20.00	ND	103	59-155			
1,1-Dichloroethene	18		ug/L	20.00	ND	91	2-234			
1,2-Dichlorobenzene	18		ug/L	20.00	ND	89	18-190			
1,2-Dichloroethane	22		ug/L	20.00	ND	108	49-155			
1,2-Dichloropropane	19		ug/L	20.00	0.0	97	2-210			
1,3-Dichlorobenzene	17		ug/L	20.00	ND	86	59-156			
1,4-Dichlorobenzene	17		ug/L	20.00	ND	86	18-190			
2-Chloroethylvinylether	23	10	ug/L		ND		10-305			
Acetone	130		ug/L	100.0	ND	127	70-130			
Acrolein	100		ug/L	100.0	0.0	103	88-118			
Acrylonitrile	120		ug/L	100.0	ND	116	71-135			
Benzene	18		ug/L	20.00	ND	90	37-151			
Bromodichloromethane	20		ug/L	20.00	ND	99	35-155			
Bromoform	21		ug/L	20.00	ND	104	45-169			
Bromomethane	20		ug/L	20.00	ND	98	2-242			
Carbon tetrachloride	15		ug/L	20.00	ND	75	70-140			
Chlorobenzene	19		ug/L	20.00	ND	95	37-160			
Chloroethane	19		ug/L	20.00	ND	94	14-230			
Chloroform	20		ug/L	20.00	ND	98	51-138			
Chloromethane	19		ug/L	20.00	ND	96	5-273			
cis-1,3-Dichloropropene	19		ug/L	20.00	ND	97	2-221			
Dibromochloromethane	21		ug/L	20.00	ND	106	53-149			
Dichlorodifluoromethane	16		ug/L	20.00	ND	82	5-273			
Ethylbenzene	18		ug/L	20.00	ND	90	37-162			
Isopropyl Alcohol	840		ug/L	1000	ND	84	70-130			
Methyl Isobutyl Ketone (MIBK)	130		ug/L	100.0	0.0	134	70-130			M1
Methylene chloride	20		ug/L	20.00	ND	99	10-221			
Tetrachloroethene	17		ug/L	20.00	ND	87	64-148			
Tetrahydrofuran	100		ug/L	100.0	ND	104	70-130			
Toluene	18		ug/L	20.00	ND	90	47-150			
trans-1,2-Dichloroethene	19		ug/L	20.00	ND	95	54-156			
trans-1,3-Dichloropropene	19		ug/L	20.00	2.1	86	17-183			
Trichloroethene	17		ug/L	20.00	ND	87	71-157			
Trichlorofluoromethane	17		ug/L	20.00	0.0	85	17-181			
Vinyl chloride	17		ug/L	20.00	ND	87	2-251			
Xylenes, Total	57		ug/L	60.00	ND	95	37-162			
Surrogate: 1,2-Dichloroethane-d4	*29.9*		*ug/L*	*28.00*		*107*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*25.9*		*ug/L*	*28.00*		*93*	*70-130*			
Surrogate: Fluorobenzene	*29.5*		*ug/L*	*28.00*		*105*	*70-130*			

Turner Laboratories, Inc.

Date: 03/19/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 12L0563
Date Received: 12/19/2012

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1212192 - IC PREP										
Blank (1212192-BLK1)				Prepared & Analyzed: 12/19/2012						
Nitrogen, Nitrate (As N)	ND	1.0	mg/L							
Nitrogen, Nitrite (As N)	ND	0.10	mg/L							
Phosphorus, Dissolved Orthophosphate (As P)	ND	0.50	mg/L							
LCS (1212192-BS1)				Prepared & Analyzed: 12/19/2012						
Nitrogen, Nitrate (As N)	4.8	1.0	mg/L	5.000		97	90-110			
Nitrogen, Nitrite (As N)	2.5	0.10	mg/L	2.500		101	90-110			
Phosphorus, Dissolved Orthophosphate (As P)	2.3	0.50	mg/L	2.500		94	90-110			
LCS Dup (1212192-BSD1)				Prepared & Analyzed: 12/19/2012						
Nitrogen, Nitrate (As N)	4.9	1.0	mg/L	5.000		97	90-110	0.3	10	
Nitrogen, Nitrite (As N)	2.5	0.10	mg/L	2.500		101	90-110	0.08	10	
Phosphorus, Dissolved Orthophosphate (As P)	2.3	0.50	mg/L	2.500		94	90-110	0.4	10	
Matrix Spike (1212192-MS2)		**Source: 12L0572-01**		Prepared: 12/19/2012 Analyzed: 12/27/2012						
Nitrogen, Nitrate (As N)	16	2.0	mg/L	10.00	6.4	99	80-120			
Nitrogen, Nitrite (As N)	4.6	0.20	mg/L	5.000	ND	91	80-120			
Phosphorus, Dissolved Orthophosphate (As P)	5.3	1.0	mg/L	5.000	ND	106	80-120			
Matrix Spike Dup (1212192-MSD2)		**Source: 12L0572-01**		Prepared: 12/19/2012 Analyzed: 12/27/2012						
Nitrogen, Nitrate (As N)	16	2.0	mg/L	10.00	6.4	100	80-120	0.7	10	
Nitrogen, Nitrite (As N)	4.6	0.20	mg/L	5.000	ND	93	80-120	2	10	
Phosphorus, Dissolved Orthophosphate (As P)	5.4	1.0	mg/L	5.000	ND	108	80-120	2	10	

TURNER LABORATORIES, INC.
2445 N. Coyote Drive, Suite 104
Tucson, Arizona 85745
(520) 882-5880
Fax: (520) 882-9788
www.turnerlabs.com

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

TURNER WORK ORDER # 12L0563 DATE _____ PAGE _____ OF _____

PROJECT NAME: Stormwater Samples Site # 1, 2, 3, 4, 5 (circle)
CONTACT NAME Chris McNellis, Eric Ross, Bev Hester
COMPANY NAME City of Tucson - Transportation Dept
ADDRESS P.O. Box 27210 CITY Tucson STATE AZ 85726-7210
PHONE: 837-6583 (Chris), 837-6582 (Eric), 8374935 (Bev)
FAX (520) 791-4373
SAMPLER'S SIGNATURE C McNellis

CIRCLE ANALYSIS REQUESTED AND/OR CHECK THE APPROPRIATE BOX

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX*	NUMBER OF CONTAINERS	Total Metals *	Chemical Oxygen Demand (COD)	Hardness Ca & Mg	Biological Oxygen Demand (BOD)	Total Dissolved Solids (TDS)	Total Suspended Solids (TSS)	Orthophosphate by Ion Chromatography	Nitrate + Nitrite	Total Phosphorus	TKN	NH3	TPH 1664	O & G	Volitile Organic Compounds by 624	CN	8270 added per COT Staff request 12/19/12	8081	8082		
					27																				
Composite	12/19	3:20 pm		Storm Water	~~14~~ 9	X	X	X	X	X	X	X	X	X	X	X					X	X	X		
Grab	12/19	3:20 Am		Storm Water	9												X	X	X	X					
				~~SW~~	~~13~~ 18																				

1. RELINQUISHED BY: C McNellis
Signature C McNellis
Printed Name
City of Tucson Trans. Dept
Firm
12/19 8:13 Am
Date/Time

2. RECEIVED BY:
Signature
Printed Name
Firm
Date/Time

TURNAROUND REQUIREMENTS:
____ Standard (approx.10 days)*
____ Next day ____ 2 Day ____ 5 Day*
____ Email Preliminary Results To:
* Working Days

REPORT REQUIREMENTS:
____ I. Routine Report
____ II. Report (includes DUP,MS,MSD, as required, may be charged as samples)
____ III. Date Validation Report (Includes All Raw Data)
Add 10% to invoice

INVOICE INFORMATION:
Account ____ Y ____ N
P.O. # _____
Bill to: _____

SAMPLE RECEIPT:
Total Containers ~~27~~ 36
Temperature 0.8
☑ Wet Ice ☐ Blue Ice

3. RELINQUISHED BY:
Signature
Printed Name
Firm
Date/Time

4. RECEIVED BY: Lucas Santacruz
Signature
Printed Name Lucas Santacruz
Firm TURNER LABORATORIES, INC.
Date/Time 12-19-12 0813

*LEGEND
DW = DRINKING WATER
GW = GROUNDWATER
SD = SOLID
SG = SLUDGE
SL = SOIL
ST = STORMWATER
WW = WASTEWATER

SPECIAL INSTRUCTIONS/COMMENTS:

Compliance Analysis:	☐ Yes ☐ No	Custody Seals	☐	Preservation Confirmation	☑
ADEQ Forms:	☐ Yes ☐ No	Container Intact	☑	Appropriate Head Space	☑
Mail ADEQ Forms:	☐ Yes ☐ No	COC/Labels Agree	☑	Received Within Hold Time	☑

*Ni, Hg, Ag, Cr, Cd, Be, Ba, As, Cu, Sb, Zn, Se, Pb, Tl

Composite poured at lab per C.O.T. Specifications

Gulf Coast
ACCUTEST
LABORATORIES

01/07/13

Technical Report for

Turner Laboratories, Inc.

Cyanide

12L0563

Accutest Job Number: TC22309

Sampling Date: 12/19/12

Report to:

2445 N.Coyote Drive
Suite#104
Tucson, AZ 85745
tgarcia@turnerlab.com

ATTN: Terri Garcia

Total number of pages in report: 14

Accredited in accordance with nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Richard Rodriguez
Laboratory Director

Client Service contact: Electa Brown 713-271-4700

Certifications: TX (T104704220-12-8) AR (11-028-0) AZ (AZ0769) FL (E87628) KS (E-10366) LA (85695/04004) OK (211-035)

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Test results relate only to samples analyzed.

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Sample Summary

Turner Laboratories, Inc.

Job No: TC22309

Cyanide
Project No: 12L0563

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
TC22309-1	12/19/12	03:20		12/27/12	AQ	Water	12L0563-02 NON-POTABLE WA

Summary of Hits

Job Number: TC22309
Account: Turner Laboratories, Inc.
Project: Cyanide
Collected: 12/19/12

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
TC22309-1	**12L0563-02 NON-POTABLE WA**					

No hits reported in this sample.

Gulf Coast
ACCUTEST
LABORATORIES

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	12L0563-02 NON-POTABLE WA		
Lab Sample ID:	TC22309-1	**Date Sampled:**	12/19/12
Matrix:	AQ - Water	**Date Received:**	12/27/12
		Percent Solids:	n/a
Project:	Cyanide		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	<0.0050	0.0050	mg/l	1	12/29/12 10:48	CV	EPA 335.4/SW 9012

RL = Reporting Limit

Gulf Coast ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

SUBCONTRACT ORDER

Turner Laboratories, Inc.

12L0563

TC22309

SENDING LABORATORY:

Turner Laboratories, Inc.
2445 N. Coyote Drive, Ste #104
Tucson, AZ 85745
Phone: 520.882.5880
Fax: 520.882.9788
Project Manager: Terri Garcia

RECEIVING LABORATORY:

Accutest
10165 Harwin Dr. Ste. 150
Houston, TX 77036
Phone: (713) 327-1470
Fax:

Analysis	Expires	Comments
Sample ID: 12L0563-02 Non-Potable Wa Sampled:12/19/2012 03:20		
Cyanide	01/02/2013 03:20	
Containers Supplied:		

Relinquished By: [signature] Date: 12/20/12 14 Received By: Date:

Released By: [signature] Date: Received By: [signature] Date: 12-27-12 9:

Page 1 of 1

4.1 4

TC22309: Chain of Custody

Page 1 of 3

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: TC22309 **Client:** TURNER LABORATORIES **Project:**

Date / Time Received: 12/27/2012 **Delivery Method:** **Airbill #'s:** 794395324187

No. Coolers: 1 **Therm ID:** IR6; **Temp Adjustment Factor:** 0.2;

Cooler Temps (Initial/Adjusted): #1: (1.8/2);

Cooler Security

	Y	or N		Y	or N
1. Custody Seals Present:	☑	☐	3. COC Present:	☑	☐
2. Custody Seals Intact:	☑	☐	4. Smpl Dates/Time OK	☑	☐

Cooler Temperature

	Y	or N
1. Temp criteria achieved:	☑	☐
2. Cooler temp verification:		
3. Cooler media:	Ice (Bag)	

Quality Control Preservation

	Y	or N	N/A	WTB	STB
1. Trip Blank present / cooler:	☐	☐	☑	☐	☐
2. Trip Blank listed on COC:	☐	☐	☑		
3. Samples preserved properly:	☑	☐			
4. VOCs headspace free:	☐	☐	☑		

Sample Integrity - Documentation

	Y	or N
1. Sample labels present on bottles:	☑	☐
2. Container labeling complete:	☑	☐
3. Sample container label / COC agree:	☑	☐

Sample Integrity - Condition

	Y	or N
1. Sample recvd within HT:	☑	☐
2. All containers accounted for:	☑	☐
3. Condition of sample:	Intact	

Sample Integrity - Instructions

	Y	or N	N/A
1. Analysis requested is clear:	☑	☐	
2. Bottles received for unspecified tests	☐	☑	
3. Sufficient volume recvd for analysis:	☑	☐	
4. Compositing instructions clear:	☐	☐	☑
5. Filtering instructions clear:	☐	☐	☑

Comments

Accutest Laboratories
V:713.271.4700

10165 Harwin Drive
F: 713.271.4770

Houston, TX 77036
www/accutest.com

TC22309: Chain of Custody
Page 2 of 3

Sample Receipt Log

Job #: TC22309 **Date / Time Received:** 12/27/2012 9:00:00 AM **Initials:** BG

Client: TURNER LABORATORIES

Cooler #	Sample ID:	Vol	Bot #	Location	Pres	pH	Therm ID	Initial Temp	Therm CF	Corrected Temp
1	TC22309-1	500ml	1	1X	NaOH	pH > 12	IR6	1.8	0.2	2

TC22309: Chain of Custody
Page 3 of 3

Gulf Coast
ACCUTEST
LABORATORIES

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: TC22309
Account: TURNEAZT - Turner Laboratories, Inc.
Project: Cyanide

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Cyanide	GP22077/GN47303	0.0050	0.0	mg/l	0.1	0.0999	99.9	91-108%

Associated Samples:
Batch GP22077: TC22309-1
(*) Outside of QC limits

5.1

5

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: TC22309
Account: TURNEAZT - Turner Laboratories, Inc.
Project: Cyanide

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Cyanide	GP22077/GN47303	TC22301-2	mg/l	0.0074	0.0073	1.4	0-20%

Associated Samples:
Batch GP22077: TC22309-1
(*) Outside of QC limits

5.2

5

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: TC22309
Account: TURNEAZT - Turner Laboratories, Inc.
Project: Cyanide

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Cyanide	GP22077/GN47303	TC22301-2	mg/l	0.0074	0.2	0.21	101.3	90-110%

Associated Samples:
Batch GP22077: TC22309-1
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

December 28, 2012

Chris McNellis
City of Tucson - Transportation Department
PO Box 27210
Tucson, AZ 85726-7210

TEL (520) 837-6583
FAX (520) 791-4238

Work Order No.: 12L0562
Order Name: Storm Water Once per Season

RE: Storm Water Once per Season

Dear Chris McNellis,

Turner Laboratories, Inc. received 1 sample(s) on 12/19/2012 for the analyses presented in the following report.

All results are intended to be considered in their entirety, and Turner Laboratories, Inc. is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Samples will be disposed of 30 days after issue of our report unless special arrangements are made.

The pages that follow may contain sensitive, privileged or confidential information intended solely for the addressee named above. If you receive this message and are not the agent or employee of the addressee, this communication has been sent in error. Please do not disseminate or copy any of the attached and notify the sender immediately by telephone. Please also return the attached sheet(s) to the sender by mail.

Please call if you have any questions.

Respectfully submitted,

Turner Laboratories, Inc.
ADHS License AZ0066

Dawn Weyer
Project Manager

Turner Laboratories, Inc.

Date: 12/28/2012

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12L0562
Date Received: 12/19/2012

Order: Storm Water Once per Season

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date/Time
12L0562-01	Grab	Surface Water	12/19/2012 0400

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 12L0562
Date Received: 12/19/2012

Case Narrative

E Value is above quantitation range.

All soil, sludge, and solid matrix determinations are reported on a wet weight basis unless otherwise noted.

ND Not Detected at or above the PQL

PQL Practical Quantitation Limit

DF Dilution Factor

Turner Laboratories, Inc.

Date: 12/28/2012

Client:	City of Tucson - Transportation Department	**Client Sample ID:**	Grab
Project:	Storm Water Once per Season	**Collection Date/Time:**	12/19/2012 0400
Work Order:	12L0562	**Matrix:**	Surface Water
Lab Sample ID:	12L0562-01	**Order Name:**	Storm Water Once per Season

Analyses	Result	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Total Coliform & E. Coli, MPN-SM9223B								
E.Coli	2400	1.0		MPN/100mL	1	12/19/2012 0830	12/20/2012 0840	AC
Total Coliform	2400	1.0	E	MPN/100mL	1	12/19/2012 0830	12/20/2012 0840	AC

TURNER LABORATORIES INC.
2445 N. Coyote Drive, Suite 104
Tucson, Arizona 85745
(520) 882-5880
Fax: (520) 882-9788
www.turnerlabs.com

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

TURNER WORK ORDER # 12L0562 DATE _____ PAGE _____ OF _____

PROJECT NAME: Stormwater Samples Site # 1/2, 3, 4, 5 (circle)
CONTACT NAME Chris McNellis Bev Hester
COMPANY NAME City of Tucson - Transportation Dept
ADDRESS P.O. Box 27210
CITY Tucson STATE AZ ZIP CODE 85726
PHONE (520) 837-6583 FAX (520) 791-4373
SAMPLER'S SIGNATURE C McNellis

CIRCLE ANALYSIS REQUESTED AND/OR CHECK THE APPROPRIATE BOX

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX*	NUMBER OF CONTAINERS	MPN
Grab	12/19	4:00AM		Storm Water	1	X

1. RELINQUISHER BY: C McNellis
Signature: C McNellis
Printed Name: C McNellis
Firm: City of Tucson Trans. Dept
Date/Time: 12/19/12 8:05 AM

2. RECEIVED BY:
Signature
Printed Name
Firm
Date/Time

TURNAROUND REQUIREMENTS:
____ Standard (approx.10 days)*
____ Next day ____ 2 Day ____ 5 Day*
____ Email Preliminary Results To:
* Working Days

REPORT REQUIREMENTS:
____ I. Routine Report
____ II. Report (includes DUP,MS,MSD, as required, may be charged as samples)
____ III. Date Validation Report (Includes All Raw Data)
Add 10% to invoice

INVOICE INFORMATION:
Account ____ Y ____ N
P.O. # _____
Bill to: _____

SAMPLE RECEIPT:
Total Containers 1
Temperature 0.8
☑ Wet Ice ☐ Blue Ice

3. RELINQUISHED BY:
Signature
Printed Name
Time

4. RECEIVED BY: Angela Santacruz
Signature
Printed Name: Angela Santacruz
Firm: TURNER LABORATORIES, INC.
Date/Time: 12-19-12 0805

*LEGEND
DW = DRINKING WATER
GW = GROUNDWATER
SD = SOLID
SG = SLUDGE
SL = SOIL
ST = STORMWATER
WW = WASTEWATER

SPECIAL INSTRUCTIONS/COMMENTS:

Compliance Analysis: ☐ Yes ☐ No	Custody Seals ☐	Preservation Confirmation ☑
ADEQ Forms: ☐ Yes ☐ No	Container Intact ☑	Appropriate Head Space ☑
Mail ADEQ Forms: ☐ Yes ☐ No	COC/Labels Agree ☐	Received Within Hold Time ☑

*Ni, Hg, Ag, Cr, Cd, Be, Ba, As, Cu, Sb, Zn, Se, Pb, Tl, Ca, Mg
Composite poured at lab per C.O.T. Specifications

February 26, 2013

Beverley Hester
City of Tucson - Transportation Department
PO Box 27210
Tucson, AZ 85726-7210

TEL 520-837-4935
FAX (520) 791-4373

Work Order No.: 13A0718
Order Name: Storm Water Annual

RE: Storm Water Biannual

Dear Beverley Hester,

Turner Laboratories, Inc. received 2 sample(s) on 01/26/2013 for the analyses presented in the following report.

All results are intended to be considered in their entirety, and Turner Laboratories, Inc. is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Samples will be disposed of 30 days after issue of our report unless special arrangements are made.

The pages that follow may contain sensitive, privileged or confidential information intended solely for the addressee named above. If you receive this message and are not the agent or employee of the addressee, this communication has been sent in error. Please do not disseminate or copy any of the attached and notify the sender immediately by telephone. Please also return the attached sheet(s) to the sender by mail.

Please call if you have any questions.

Respectfully submitted,

Turner Laboratories, Inc.
ADHS License AZ0066

Terri L. Garcia

Terri Garcia
Technical Director

Turner Laboratories, Inc.

Date: 02/26/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13A0718
Date Received: 01/26/2013

Order: Storm Water Annual

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date/Time
13A0718-01	Composite	Storm Water	01/26/2013 1043
13A0718-02	Grab	Storm Water	01/26/2013 1043

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13A0718
Date Received: 01/26/2013

Case Narrative

EPA 8270C: Insufficient sample volume was available to perform the method-recommend Matrix Spike and Matrix Spike Duplicate.

EPA 8082: Insufficient sample volume was available to perform the method-recommend Matrix Spike and Matrix Spike Duplicate.

EPA 8081: Insufficient sample volume was available to perform the method-recommend Matrix Spike and Matrix Spike Duplicate.

C4	Confirmatory analysis was past holding time
E8	Analyte reported to MDL per project specification. Target analyte was not detected in the sample.
M2	Matrix spike recovery was low; the associated LCS/LCSD was acceptable.
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS/LCSD recovery was acceptable.
S4	Surrogate recovery was above laboratory and method acceptance limits. No target analytes were detected in the sample.
T2	Cited ADHS Licensed method does not contain this analyte as part of the method compound list.
V1	CCV recovery was above method acceptance limits. This target analyte was not detected in the sample.

All soil, sludge, and solid matrix determinations are reported on a wet weight basis unless otherwise noted.

ND	Not Detected at or above the PQL
PQL	Practical Quantitation Limit
DF	Dilution Factor

Turner Laboratories, Inc.

Date: 02/26/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13A0718
Lab Sample ID: 13A0718-01

Client Sample ID: Composite
Collection Date/Time: 01/26/2013 1043
Matrix: Storm Water
Order Name: Storm Water Annual

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Hardness-Calculation									
Hardness, Calcium/Magnesium (As CaCO3)	16				mg/L	1	01/28/2013 1110	01/29/2013 1857	RAD
Nitrate + Nitrite Sum-Calculation									
Nitrate and Nitrite Sum	ND		0.10		mg/L	1	01/27/2013 1400	01/27/2013 1759	AC
ICP Total Metals-E200.7									
Arsenic	ND		40		ug/L	1	01/28/2013 1110	01/31/2013 1149	RAD
Barium	ND		50		ug/L	1	01/28/2013 1110	01/29/2013 1858	RAD
Beryllium	ND		2.0		ug/L	1	01/28/2013 1110	01/29/2013 1858	RAD
Cadmium	ND		2.0		ug/L	1	01/28/2013 1110	01/29/2013 1858	RAD
Calcium	6300		4000		ug/L	1	01/28/2013 1110	01/29/2013 1857	RAD
Chromium	ND		30		ug/L	1	01/28/2013 1110	01/29/2013 1858	RAD
Copper	ND		20		ug/L	1	01/28/2013 1110	01/29/2013 1858	RAD
Magnesium	ND		3000		ug/L	1	01/28/2013 1110	01/29/2013 1857	RAD
Nickel	ND		50		ug/L	1	01/28/2013 1110	01/29/2013 1858	RAD
Zinc	ND		40		ug/L	1	01/28/2013 1110	01/29/2013 1858	RAD
ICP/MS Total Metals-E200.8									
Antimony	0.25		0.50		ug/L	1	01/28/2013 1330	01/31/2013 1444	RAD
Lead	1.4		0.50		ug/L	1	01/28/2013 1330	01/31/2013 1444	RAD
Selenium	ND		2.5		ug/L	1	01/28/2013 1330	01/29/2013 1705	RAD
Silver	0.014		0.50		ug/L	1	01/28/2013 1330	01/31/2013 1444	RAD
Thallium	ND		0.50		ug/L	1	01/28/2013 1330	01/29/2013 1705	RAD
CVAA Total Mercury-E245.1									
Mercury	ND		1.0		ug/L	1	02/04/2013 0910	02/04/2013 1609	RAD
Anions by Ion Chromatography-E300									
Nitrogen, Nitrate (As N)	ND		1.0		mg/L	1	01/27/2013 1400	01/27/2013 1759	AC
Nitrogen, Nitrite (As N)	ND		0.10		mg/L	1	01/27/2013 1400	01/27/2013 1759	AC
Phosphorus, Dissolved Orthophosphate (As P)	ND		0.50	C4	mg/L	1	01/28/2013 1200	01/28/2013 1813	EW
Total Phosphorous as P-H8190									
Total Phosphorus (as P)	0.35		0.10		mg/L	1	01/28/2013 1100	01/28/2013 1545	AC

Turner Laboratories, Inc.

Date: 02/26/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13A0718
Lab Sample ID: 13A0718-01

Client Sample ID: Composite
Collection Date/Time: 01/26/2013 1043
Matrix: Storm Water
Order Name: Storm Water Annual

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Chemical Oxygen Demand-Hach 8000									
Chemical Oxygen Demand	64		20		mg/L	1	02/05/2013 1000	02/05/2013 1640	EW
Total Kjeldahl Nitrogen-PAI-DK01									
Nitrogen, Total Kjeldahl	1.2		0.50		mg/L	1	01/28/2013 1510	01/29/2013 1630	EW
Total Dissolved Solids (Residue, Filterable)-SM2540 C									
Total Dissolved Solids (Residue, Filterable)	43		20		mg/L	1	01/29/2013 1005	01/30/2013 1630	AC
Total Suspended Solids (Residue, Non-Filterable)-SM2540 D									
Total Suspended Solids	24		10		mg/L	1	01/30/2013 0807	01/31/2013 1120	AC
Ammonia as N-SM4500-NH3 B,C									
Nitrogen, Ammonia (As N)	0.56		0.50		mg/L	1	02/13/2013 1330	02/13/2013 1625	EW
BOD, 5 day-SM5210 B									
Biochemical Oxygen Demand	20		2.0		mg/L	1	01/26/2013 1605	01/31/2013 1605	AC
Organochlorine Pesticides-SW8081A									
4,4´-DDD	ND		0.099		ug/L	1	01/28/2013 1356	02/04/2013 1906	MD
4,4´-DDE	ND		0.099		ug/L	1	01/28/2013 1356	02/04/2013 1906	MD
4,4´-DDT	ND		0.099		ug/L	1	01/28/2013 1356	02/04/2013 1906	MD
Aldrin	ND		0.099		ug/L	1	01/28/2013 1356	02/04/2013 1906	MD
alpha-BHC	ND		0.099		ug/L	1	01/28/2013 1356	02/04/2013 1906	MD
alpha-Chlordane	ND		0.099		ug/L	1	01/28/2013 1356	02/04/2013 2332	MD
beta-BHC	ND		0.099		ug/L	1	01/28/2013 1356	02/04/2013 1906	MD
delta-BHC	ND		0.099		ug/L	1	01/28/2013 1356	02/04/2013 1906	MD
Dieldrin	ND		0.099		ug/L	1	01/28/2013 1356	02/04/2013 1906	MD
Endosulfan I	ND		0.099		ug/L	1	01/28/2013 1356	02/04/2013 1906	MD
Endosulfan II	ND		0.099		ug/L	1	01/28/2013 1356	02/04/2013 1906	MD
Endosulfan sulfate	ND		0.099		ug/L	1	01/28/2013 1356	02/04/2013 1906	MD
Endrin	ND		0.099		ug/L	1	01/28/2013 1356	02/04/2013 1906	MD
Endrin aldehyde	ND		0.099		ug/L	1	01/28/2013 1356	02/04/2013 1906	MD

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13A0718
Lab Sample ID: 13A0718-01

Client Sample ID: Composite
Collection Date/Time: 01/26/2013 1043
Matrix: Storm Water
Order Name: Storm Water Annual

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Endrin ketone	ND		0.099		ug/L	1	01/28/2013 1356	02/04/2013 1906	MD
gamma-BHC	ND		0.099		ug/L	1	01/28/2013 1356	02/04/2013 1906	MD
gamma-Chlordane	ND		0.099		ug/L	1	01/28/2013 1356	02/04/2013 2332	MD
Heptachlor	ND		0.099		ug/L	1	01/28/2013 1356	02/04/2013 1906	MD
Heptachlor epoxide	ND		0.099		ug/L	1	01/28/2013 1356	02/04/2013 1906	MD
Methoxychlor	ND		0.099		ug/L	1	01/28/2013 1356	02/04/2013 1906	MD
Toxaphene	ND		0.99		ug/L	1	01/28/2013 1356	02/04/2013 1906	MD
Surr: Decachlorobiphenyl	*82*	*51.1-138.5*			*%REC*	*1*	*01/28/2013 1356*	*02/04/2013 1906*	*MD*
Surr: Tetrachloro-m-xylene	*67*	*39.1-120*			*%REC*	*1*	*01/28/2013 1356*	*02/04/2013 1906*	*MD*
PCBs-SW8082									
Aroclor 1016	ND		1.0		ug/L	1	01/28/2013 1355	02/02/2013 0034	MD
Aroclor 1221	ND		1.0		ug/L	1	01/28/2013 1355	02/02/2013 0034	MD
Aroclor 1232	ND		1.0		ug/L	1	01/28/2013 1355	02/02/2013 0034	MD
Aroclor 1242	ND		1.0		ug/L	1	01/28/2013 1355	02/02/2013 0034	MD
Aroclor 1248	ND		1.0		ug/L	1	01/28/2013 1355	02/02/2013 0034	MD
Aroclor 1254	ND		1.0		ug/L	1	01/28/2013 1355	02/02/2013 0034	MD
Aroclor 1260	ND		1.0		ug/L	1	01/28/2013 1355	02/02/2013 0034	MD
Surr: Decachlorobiphenyl	*76*	*52.7-155.1*			*%REC*	*1*	*01/28/2013 1355*	*02/02/2013 034*	*MD*
Semivolatile Organic Compounds-SW8270C									
1,2,4-Trichlorobenzene	ND		9.9		ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
1,2-Dichlorobenzene	ND		9.9		ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
1,2-Diphenylhydrazine	ND		9.9		ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
1,3-Dichlorobenzene	ND		9.9		ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
1,4-Dichlorobenzene	ND		9.9		ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
2,4,5-Trichlorophenol	ND		9.9		ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
2,4,6-Trichlorophenol	ND		9.9	V1	ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
2,4-Dichlorophenol	ND		9.9		ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
2,4-Dimethylphenol	ND		9.9		ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
2,4-Dinitrophenol	ND		50		ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
2,4-Dinitrotoluene	ND		9.9		ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
2,6-Dinitrotoluene	ND		9.9		ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
2-Chloronaphthalene	ND		9.9		ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
2-Chlorophenol	ND		9.9		ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
2-Methylnaphthalene	ND		5.0		ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
2-Methylphenol	ND		9.9		ug/L	1	01/31/2013 0838	02/06/2013 1738	MD

Turner Laboratories, Inc.

Date: 02/26/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13A0718
Lab Sample ID: 13A0718-01

Client Sample ID: Composite
Collection Date/Time: 01/26/2013 1043
Matrix: Storm Water
Order Name: Storm Water Annual

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
2-Nitroaniline	ND		20		ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
2-Nitrophenol	ND		9.9		ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
3,3´-Dichlorobenzidine	ND	1.0	20	E8	ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
3,4-Methylphenol	ND		9.9		ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
3-Nitroaniline	ND		20	V1	ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
4,6-Dinitro-2-methylphenol	ND		20		ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
4-Bromophenyl phenyl ether	ND		9.9		ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
4-Chloro-3-methylphenol	ND		9.9		ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
4-Chloroaniline	ND		20		ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
4-Chlorophenyl phenyl ether	ND		9.9		ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
4-Methylphenol	ND		9.9		ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
4-Nitroaniline	ND		20		ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
4-Nitrophenol	ND		50		ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
Acenaphthene	ND		5.0		ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
Acenaphthylene	ND		5.0		ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
Aniline	ND		20		ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
Anthracene	ND		5.0		ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
Benzo[a]anthracene	ND		5.0	V1	ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
Benzo[a]pyrene	ND	0.75	5.0	E8	ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
Benzo[b,k]fluoranthene	ND	1.6	9.9	E8	ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
Benzo[g,h,i]perylene	ND		5.0		ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
Benzoic acid	ND		50		ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
Benzyl alcohol	ND		5.0		ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
Bis(2-chloroethoxy)methane	ND		9.9		ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
Bis(2-chloroethyl)ether	ND		9.9		ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
Bis(2-chloroisopropyl)ether	ND		9.9		ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
Bis(2-ethylhexyl)phthalate	ND		9.9		ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
Butyl benzyl phthalate	ND		9.9		ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
Chrysene	ND		5.0		ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
Dibenz[a,h]anthracene	ND	0.94	5.0	E8	ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
Dibenzofuran	ND		5.0		ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
Diethyl phthalate	ND		9.9		ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
Dimethyl phthalate	ND		9.9		ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
Di-n-butyl phthalate	ND		9.9		ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
Di-n-octyl phthalate	ND		9.9		ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
Fluoranthene	ND		5.0		ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
Fluorene	ND		5.0		ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
Hexachlorobenzene	ND		9.9		ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
Hexachlorobutadiene	ND		9.9		ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
Hexachlorocyclopentadiene	ND		9.9		ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
Hexachloroethane	ND		9.9		ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
Indeno[1,2,3-cd]pyrene	ND	0.81	5.0	E8	ug/L	1	01/31/2013 0838	02/06/2013 1738	MD

Turner Laboratories, Inc.

Date: 02/26/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13A0718
Lab Sample ID: 13A0718-01

Client Sample ID: Composite
Collection Date/Time: 01/26/2013 1043
Matrix: Storm Water
Order Name: Storm Water Annual

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Isophorone	ND		9.9		ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
Naphthalene	ND		5.0	V1	ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
Nitrobenzene	ND		9.9		ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
N-Nitrosodimethylamine	ND	1.6	9.9	E8	ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
N-Nitrosodiphenylamine	ND		9.9		ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
N-Nitrosodipropylamine	ND		9.9		ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
Pentachlorophenol	ND		30		ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
Phenanthrene	ND		5.0		ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
Phenol	ND		9.9		ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
Pyrene	ND		5.0		ug/L	1	01/31/2013 0838	02/06/2013 1738	MD
Surr: 2,4,6-Tribromophenol	*88*	*48.18-103.2*			*%REC*	*1*	*01/31/2013 0838*	*02/06/2013 1738*	*MD*
Surr: 2-Fluorobiphenyl	*78*	*44.86-97.28*			*%REC*	*1*	*01/31/2013 0838*	*02/06/2013 1738*	*MD*
Surr: 2-Fluorophenol	*46*	*17.76-99.38*			*%REC*	*1*	*01/31/2013 0838*	*02/06/2013 1738*	*MD*
Surr: 4-Terphenyl-d14	*92*	*38.67-92.68*			*%REC*	*1*	*01/31/2013 0838*	*02/06/2013 1738*	*MD*
Surr: Nitrobenzene-d5	*63*	*23.73-103.2*			*%REC*	*1*	*01/31/2013 0838*	*02/06/2013 1738*	*MD*
Surr: Phenol-d6	*48*	*17.76-99.38*			*%REC*	*1*	*01/31/2013 0838*	*02/06/2013 1738*	*MD*

Turner Laboratories, Inc.

Date: 02/26/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13A0718
Lab Sample ID: 13A0718-02

Client Sample ID: Grab
Collection Date/Time: 01/26/2013 1043
Matrix: Storm Water
Order Name: Storm Water Annual

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
N-Hexane Extractable Material (SGT-HEM)-E 1664A									
Total Petroleum Hydrocarbons	ND		5.00		mg/L	1	02/04/2013 1000	02/04/2013 1445	AC
N-Hexane Extractable Material (HEM)-E1664A									
Oil & Grease	ND		5.00		mg/L	1	02/01/2013 0800	02/01/2013 1620	AC
Additional Compounds by GCMS-E624									
2-Chloroethylvinylether	ND		10		ug/L	1	02/05/2013 1726	02/05/2013 2239	KP
Acrolein	ND		10		ug/L	1	02/05/2013 1726	02/05/2013 2239	KP
Acrylonitrile	ND		10		ug/L	1	02/05/2013 1726	02/05/2013 2239	KP
Surr: 1,2-Dichloroethane-d4	*104*	*70-130*			*%REC*	*1*	*02/05/2013 1726*	*02/05/2013 2239*	*KP*
Surr: 4-Bromofluorobenzene	*106*	*70-130*			*%REC*	*1*	*02/05/2013 1726*	*02/05/2013 2239*	*KP*
Surr: Fluorobenzene	*102*	*70-130*			*%REC*	*1*	*02/05/2013 1726*	*02/05/2013 2239*	*KP*
Volatile Organic Compounds by GCMS-EPA 624									
1,1,1-Trichloroethane	ND		2.0		ug/L	1	02/05/2013 1726	02/05/2013 2206	KP
1,1,2,2-Tetrachloroethane	ND		2.0		ug/L	1	02/05/2013 1726	02/05/2013 2206	KP
1,1,2-Trichloroethane	ND		2.0		ug/L	1	02/05/2013 1726	02/05/2013 2206	KP
1,1-Dichloroethane	ND		2.0		ug/L	1	02/05/2013 1726	02/05/2013 2206	KP
1,1-Dichloroethene	ND		2.0		ug/L	1	02/05/2013 1726	02/05/2013 2206	KP
1,2,4-Trimethylbenzene	ND		2.0		ug/L	1	02/05/2013 1726	02/05/2013 2206	KP
1,2-Dichlorobenzene	ND		2.0		ug/L	1	02/05/2013 1726	02/05/2013 2206	KP
1,2-Dichloroethane	ND		2.0		ug/L	1	02/05/2013 1726	02/05/2013 2206	KP
1,2-Dichloropropane	ND		2.0		ug/L	1	02/05/2013 1726	02/05/2013 2206	KP
1,3,5-Trimethylbenzene	ND		2.0		ug/L	1	02/05/2013 1726	02/05/2013 2206	KP
1,3-Dichlorobenzene	ND		2.0		ug/L	1	02/05/2013 1726	02/05/2013 2206	KP
1,4-Dichlorobenzene	ND		2.0		ug/L	1	02/05/2013 1726	02/05/2013 2206	KP
Acetone	22		10	T2	ug/L	1	02/05/2013 1726	02/05/2013 2206	KP
Benzene	ND		2.0		ug/L	1	02/05/2013 1726	02/05/2013 2206	KP
Bromodichloromethane	ND		2.0		ug/L	1	02/05/2013 1726	02/05/2013 2206	KP
Bromoform	ND		2.0		ug/L	1	02/05/2013 1726	02/05/2013 2206	KP
Bromomethane	ND		2.0		ug/L	1	02/05/2013 1726	02/05/2013 2206	KP
Carbon tetrachloride	ND		2.0		ug/L	1	02/05/2013 1726	02/05/2013 2206	KP
Chlorobenzene	ND		2.0		ug/L	1	02/05/2013 1726	02/05/2013 2206	KP
Chloroethane	ND		5.0		ug/L	1	02/05/2013 1726	02/05/2013 2206	KP
Chloroform	ND		2.0		ug/L	1	02/05/2013 1726	02/05/2013 2206	KP
Chloromethane	ND		5.0		ug/L	1	02/05/2013 1726	02/05/2013 2206	KP

Turner Laboratories, Inc.

Date: 02/26/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13A0718
Lab Sample ID: 13A0718-02

Client Sample ID: Grab
Collection Date/Time: 01/26/2013 1043
Matrix: Storm Water
Order Name: Storm Water Annual

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
cis-1,3-Dichloropropene	ND		2.0		ug/L	1	02/05/2013 1726	02/05/2013 2206	KP
Dibromochloromethane	ND		2.0		ug/L	1	02/05/2013 1726	02/05/2013 2206	KP
Dichlorodifluoromethane	ND		5.0	T2	ug/L	1	02/05/2013 1726	02/05/2013 2206	KP
Ethylbenzene	ND		2.0		ug/L	1	02/05/2013 1726	02/05/2013 2206	KP
Methyl Isobutyl Ketone (MIBK)	ND		10	T2	ug/L	1	02/05/2013 1726	02/05/2013 2206	KP
Methylene chloride	ND		10		ug/L	1	02/05/2013 1726	02/05/2013 2206	KP
Tetrachloroethene	ND		2.0		ug/L	1	02/05/2013 1726	02/05/2013 2206	KP
Tetrahydrofuran	17		10	T2	ug/L	1	02/05/2013 1726	02/05/2013 2206	KP
Toluene	ND		2.0		ug/L	1	02/05/2013 1726	02/05/2013 2206	KP
trans-1,2-Dichloroethene	ND		2.0		ug/L	1	02/05/2013 1726	02/05/2013 2206	KP
trans-1,3-Dichloropropene	ND		2.0		ug/L	1	02/05/2013 1726	02/05/2013 2206	KP
Trichloroethene	ND		2.0		ug/L	1	02/05/2013 1726	02/05/2013 2206	KP
Trichlorofluoromethane	ND		5.0		ug/L	1	02/05/2013 1726	02/05/2013 2206	KP
Vinyl chloride	ND		2.0		ug/L	1	02/05/2013 1726	02/05/2013 2206	KP
Xylenes, Total	ND		6.0	T2	ug/L	1	02/05/2013 1726	02/05/2013 2206	KP
Surr: 1,2-Dichloroethane-d4	*104*	*70-130*			*%REC*	*1*	*02/05/2013 1726*	*02/05/2013 2206*	*KP*
Surr: 4-Bromofluorobenzene	*103*	*70-130*			*%REC*	*1*	*02/05/2013 1726*	*02/05/2013 2206*	*KP*
Surr: Fluorobenzene	*102*	*70-130*			*%REC*	*1*	*02/05/2013 1726*	*02/05/2013 2206*	*KP*

Cyanide-SM4500-CN BE

Cyanide	ND		100		ug/L	1	01/29/2013 0900	01/30/2013 1705	EW

Turner Laboratories, Inc.

Date: 02/26/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13A0718
Date Received: 01/26/2013

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1301336 - E 200.2 ICP										
Blank (1301336-BLK1)				Prepared: 01/28/2013 Analyzed: 01/29/2013						
Arsenic	ND	40	ug/L							
Barium	ND	50	ug/L							
Beryllium	ND	2.0	ug/L							
Cadmium	ND	2.0	ug/L							
Calcium	ND	4000	ug/L							
Chromium	ND	30	ug/L							
Copper	ND	20	ug/L							
Magnesium	ND	3000	ug/L							
Nickel	ND	50	ug/L							
Zinc	ND	40	ug/L							
LCS (1301336-BS1)				Prepared: 01/28/2013 Analyzed: 01/29/2013						
Arsenic	1710	40	ug/L	2000		85	85-115			
Barium	1800	50	ug/L	2000		91	85-115			
Beryllium	46	2.0	ug/L	50.00		91	85-115			
Cadmium	44	2.0	ug/L	50.00		87	85-115			
Calcium	9000	4000	ug/L	10000		90	85-115			
Chromium	180	30	ug/L	200.0		91	85-115			
Copper	230	20	ug/L	250.0		92	85-115			
Magnesium	9100	3000	ug/L	10000		91	85-115			
Nickel	450	50	ug/L	500.0		90	85-115			
Zinc	450	40	ug/L	500.0		90	85-115			
LCS Dup (1301336-BSD1)				Prepared: 01/28/2013 Analyzed: 01/29/2013						
Arsenic	1730	40	ug/L	2000		86	85-115	1	20	
Barium	1800	50	ug/L	2000		92	85-115	1	20	
Beryllium	46	2.0	ug/L	50.00		92	85-115	0.8	20	
Cadmium	45	2.0	ug/L	50.00		89	85-115	2	20	
Calcium	9100	4000	ug/L	10000		91	85-115	1	20	
Chromium	180	30	ug/L	200.0		91	85-115	0.8	20	
Copper	230	20	ug/L	250.0		93	85-115	2	20	
Magnesium	9200	3000	ug/L	10000		92	85-115	1	20	
Nickel	450	50	ug/L	500.0		90	85-115	0.7	20	
Zinc	460	40	ug/L	500.0		91	85-115	1	20	
Matrix Spike (1301336-MS1)	**Source: 13A0571-01**			Prepared: 01/28/2013 Analyzed: 01/29/2013						
Arsenic	1780	40	ug/L	2000	22.9	88	70-130			
Barium	1800	50	ug/L	2000	78	84	70-130			
Beryllium	45	2.0	ug/L	50.00	ND	91	70-130			
Cadmium	42	2.0	ug/L	50.00	ND	85	70-130			
Calcium	120000	4000	ug/L	10000	120000	28	70-130			M3
Chromium	180	30	ug/L	200.0	1.1	91	70-130			
Copper	300	20	ug/L	250.0	32	109	70-130			
Magnesium	34000	3000	ug/L	10000	25000	94	70-130			
Nickel	520	50	ug/L	500.0	31	98	70-130			
Zinc	670	40	ug/L	500.0	230	89	70-130			

Turner Laboratories, Inc.

Date: 02/26/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13A0718
Date Received: 01/26/2013

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1301336 - E 200.2 ICP										
Matrix Spike (1301336-MS2)		**Source: 13A0715-01**		Prepared: 01/28/2013 Analyzed: 01/29/2013						
Arsenic	1820	40	ug/L	2000	23.2	90	70-130			
Barium	300	50	ug/L	2000	0.64	15	70-130			M2
Beryllium	42	2.0	ug/L	50.00	ND	84	70-130			
Cadmium	62	2.0	ug/L	50.00	21	82	70-130			
Calcium	33000	4000	ug/L	10000	24000	82	70-130			
Chromium	190	30	ug/L	200.0	2.6	91	70-130			
Copper	310	20	ug/L	250.0	8.5	119	70-130			
Magnesium	11000	3000	ug/L	10000	1700	92	70-130			
Nickel	550	50	ug/L	500.0	19	107	70-130			
Zinc	490	40	ug/L	500.0	ND	98	70-130			
Batch 1301337 - E 200.8 ICP/MS										
Blank (1301337-BLK1)				Prepared: 01/28/2013 Analyzed: 01/29/2013						
Antimony	0.011	0.50	ug/L							
Lead	ND	0.50	ug/L							
Selenium	ND	2.5	ug/L							
Silver	0.020	0.50	ug/L							
Thallium	0.031	0.50	ug/L							
LCS (1301337-BS1)				Prepared: 01/28/2013 Analyzed: 01/29/2013						
Antimony	46	0.50	ug/L	50.00		92	85-115			
Lead	47	0.50	ug/L	50.00		94	85-115			
Selenium	240	2.5	ug/L	250.0		94	85-115			
Silver	48	0.50	ug/L	50.00		96	85-115			
Thallium	48	0.50	ug/L	50.00		96	85-115			
LCS Dup (1301337-BSD1)				Prepared: 01/28/2013 Analyzed: 01/29/2013						
Antimony	47	0.50	ug/L	50.00		94	85-115	1	20	
Lead	46	0.50	ug/L	50.00		92	85-115	3	20	
Selenium	240	2.5	ug/L	250.0		95	85-115	0.8	20	
Silver	48	0.50	ug/L	50.00		96	85-115	0.6	20	
Thallium	46	0.50	ug/L	50.00		91	85-115	5	20	
Matrix Spike (1301337-MS1)		**Source: 13A0709-01**		Prepared: 01/28/2013 Analyzed: 01/31/2013						
Antimony	52	0.50	ug/L	50.00	0.99	102	70-130			
Lead	66	0.50	ug/L	50.00	12	110	70-130			
Selenium	210	2.5	ug/L	250.0	0.36	85	70-130			
Silver	49	0.50	ug/L	50.00	0.013	98	70-130			
Thallium	47	0.50	ug/L	50.00	ND	94	70-130			
Batch 1302035 - E 245.1										
Blank (1302035-BLK1)				Prepared & Analyzed: 02/04/2013						
Mercury	ND	1.0	ug/L							
LCS (1302035-BS1)				Prepared & Analyzed: 02/04/2013						
Mercury	4.7	1.0	ug/L	5.000		93	85-115			

Turner Laboratories, Inc.

Date: 02/26/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13A0718
Date Received: 01/26/2013

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302035 - E 245.1										
LCS Dup (1302035-BSD1)				Prepared & Analyzed: 02/04/2013						
Mercury	4.8	1.0	ug/L	5.000		95	85-115	2	20	
Matrix Spike (1302035-MS1)		**Source: 13A0792-01**		Prepared: 02/04/2013 Analyzed: 02/08/2013						
Mercury	5.0	1.0	ug/L	5.000	ND	100	85-115			
Matrix Spike (1302035-MS2)		**Source: 13A0728-02**		Prepared & Analyzed: 02/04/2013						
Mercury	4.8	1.0	ug/L	5.000	ND	97	85-115			
Matrix Spike Dup (1302035-MSD1)		**Source: 13A0792-01**		Prepared: 02/04/2013 Analyzed: 02/08/2013						
Mercury	5.2	1.0	ug/L	5.000	ND	103	85-115	3	10	
Matrix Spike Dup (1302035-MSD2)		**Source: 13A0728-02**		Prepared & Analyzed: 02/04/2013						
Mercury	4.7	1.0	ug/L	5.000	ND	94	85-115	3	10	

Turner Laboratories, Inc.

Date: 02/26/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13A0718
Date Received: 01/26/2013

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1301316 - SPECTRO PREP										
Blank (1301316-BLK1)				Prepared: 01/29/2013 Analyzed: 01/30/2013						
Cyanide	ND	100	ug/L							
LCS (1301316-BS1)				Prepared: 01/29/2013 Analyzed: 01/30/2013						
Cyanide	1900	100	ug/L	2000		96	90-110			
LCS Dup (1301316-BSD1)				Prepared: 01/29/2013 Analyzed: 01/30/2013						
Cyanide	2000	100	ug/L	2000		102	90-110	6	20	
Matrix Spike (1301316-MS1)		**Source: 13A0714-01**		Prepared: 01/29/2013 Analyzed: 01/30/2013						
Cyanide	1800	100	ug/L	2000	ND	88	70-130			
Matrix Spike Dup (1301316-MSD1)		**Source: 13A0714-01**		Prepared: 01/29/2013 Analyzed: 01/30/2013						
Cyanide	1800	100	ug/L	2000	ND	88	70-130	0	20	
Batch 1301335 - GEN CHEM										
Blank (1301335-BLK1)				Prepared: 01/28/2013 Analyzed: 01/29/2013						
Nitrogen, Total Kjeldahl	ND	0.50	mg/L							
LCS (1301335-BS1)				Prepared: 01/28/2013 Analyzed: 01/29/2013						
Nitrogen, Total Kjeldahl	5.0	0.50	mg/L	5.000		100	80-120			
LCS Dup (1301335-BSD1)				Prepared: 01/28/2013 Analyzed: 01/29/2013						
Nitrogen, Total Kjeldahl	5.0	0.50	mg/L	5.000		100	80-120	0.4	20	
Matrix Spike (1301335-MS3)		**Source: 13A0574-01**		Prepared: 02/06/2013 Analyzed: 02/08/2013						
Nitrogen, Total Kjeldahl	82	5.0	mg/L	50.00	32	100	80-120			
Matrix Spike (1301335-MS4)		**Source: 13A0681-11RE1**		Prepared: 02/06/2013 Analyzed: 02/08/2013						
Nitrogen, Total Kjeldahl	4.7	0.50	mg/L	5.000	ND	94	80-120			
Matrix Spike Dup (1301335-MSD3)		**Source: 13A0574-01**		Prepared: 02/06/2013 Analyzed: 02/08/2013						
Nitrogen, Total Kjeldahl	80	5.0	mg/L	50.00	32	97	80-120	2	20	
Matrix Spike Dup (1301335-MSD4)		**Source: 13A0681-11RE1**		Prepared: 02/06/2013 Analyzed: 02/08/2013						
Nitrogen, Total Kjeldahl	4.7	0.50	mg/L	5.000	ND	95	80-120	1	20	
Batch 1301340 - SPECTRO PREP										
Blank (1301340-BLK1)				Prepared & Analyzed: 01/28/2013						
Total Phosphorus (as P)	ND	0.10	mg/L							
LCS (1301340-BS1)				Prepared & Analyzed: 01/28/2013						
Total Phosphorus (as P)	0.52	0.10	mg/L	0.5000		104	90-110			
LCS Dup (1301340-BSD1)				Prepared & Analyzed: 01/28/2013						
Total Phosphorus (as P)	0.50	0.10	mg/L	0.5000		100	90-110	4	10	
Matrix Spike (1301340-MS1)		**Source: 13A0718-01**		Prepared & Analyzed: 01/28/2013						
Total Phosphorus (as P)	2.8	0.50	mg/L	2.500	0.35	96	85-115			
Matrix Spike Dup (1301340-MSD1)		**Source: 13A0718-01**		Prepared & Analyzed: 01/28/2013						
Total Phosphorus (as P)	2.7	0.50	mg/L	2.500	0.35	92	85-115	4	15	

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1301355 - GEN CHEM										
Duplicate (1301355-DUP1)		**Source: 13A0716-02**		Prepared: 01/29/2013 Analyzed: 01/31/2013						
Total Dissolved Solids (Residue, Filterable)	780	20	mg/L		780			0.6	5	
Batch 1301357 - GEN CHEM										
Duplicate (1301357-DUP1)		**Source: 13A0709-01**		Prepared: 01/30/2013 Analyzed: 01/31/2013						
Total Suspended Solids	160	10	mg/L		160			2	5	
Duplicate (1301357-DUP2)		**Source: 13A0718-01**		Prepared: 01/30/2013 Analyzed: 01/31/2013						
Total Suspended Solids	24	10	mg/L		24			0	5	
Batch 1302009 - GEN CHEM										
Blank (1302009-BLK1)				Prepared & Analyzed: 02/01/2013						
Oil & Grease	ND	5.00	mg/L							
LCS (1302009-BS1)				Prepared & Analyzed: 02/01/2013						
Oil & Grease	34.0	5.00	mg/L	40.00		85	78-114			
LCS Dup (1302009-BSD1)				Prepared & Analyzed: 02/01/2013						
Oil & Grease	35.2	5.00	mg/L	40.00		88	78-114	3	18	
Matrix Spike (1302009-MS1)		**Source: 13A0666-02**		Prepared & Analyzed: 02/01/2013						
Oil & Grease	36.9	5.00	mg/L	40.00	2.40	86	78-114			
Batch 1302013 - GEN CHEM										
Blank (1302013-BLK1)				Prepared: 01/26/2013 Analyzed: 01/31/2013						
Biochemical Oxygen Demand	ND	2.0	mg/L							
LCS (1302013-BS1)				Prepared: 01/26/2013 Analyzed: 01/31/2013						
Biochemical Oxygen Demand	180		mg/L	198.0		90	85-115			
Batch 1302038 - GEN CHEM										
Blank (1302038-BLK1)				Prepared & Analyzed: 02/04/2013						
Total Petroleum Hydrocarbons	ND	5.00	mg/L							
LCS (1302038-BS1)				Prepared & Analyzed: 02/04/2013						
Total Petroleum Hydrocarbons	17.9	5.00	mg/L	20.00		90	64-132			
LCS Dup (1302038-BSD1)				Prepared & Analyzed: 02/04/2013						
Total Petroleum Hydrocarbons	17.0	5.00	mg/L	20.00		85	64-132	5	34	
Matrix Spike (1302038-MS1)		**Source: 13A0646-01**		Prepared & Analyzed: 02/04/2013						
Total Petroleum Hydrocarbons	15.1	5.00	mg/L	20.00	ND	76	64-132			
Batch 1302054 - SPECTRO PREP										
Blank (1302054-BLK1)				Prepared & Analyzed: 02/05/2013						
Chemical Oxygen Demand	ND	20	mg/L							
LCS (1302054-BS1)				Prepared & Analyzed: 02/05/2013						
Chemical Oxygen Demand	510	20	mg/L	500.0		103	70-130			

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302054 - SPECTRO PREP										
LCS Dup (1302054-BSD1)				Prepared & Analyzed: 02/05/2013						
Chemical Oxygen Demand	510	20	mg/L	500.0		101	70-130	2	20	
Matrix Spike (1302054-MS1)		**Source: 13A0718-01**		Prepared & Analyzed: 02/05/2013						
Chemical Oxygen Demand	570	20	mg/L	500.0	64	100	70-130			
Matrix Spike Dup (1302054-MSD1)		**Source: 13A0718-01**		Prepared & Analyzed: 02/05/2013						
Chemical Oxygen Demand	570	20	mg/L	500.0	64	102	70-130	1	20	
Batch 1302161 - GEN CHEM										
Blank (1302161-BLK1)				Prepared & Analyzed: 02/13/2013						
Nitrogen, Ammonia (As N)	ND	0.50	mg/L							
LCS (1302161-BS1)				Prepared & Analyzed: 02/13/2013						
Nitrogen, Ammonia (As N)	5.2	0.50	mg/L	5.000		103	90-110			
LCS Dup (1302161-BSD1)				Prepared & Analyzed: 02/13/2013						
Nitrogen, Ammonia (As N)	5.3	0.50	mg/L	5.000		107	90-110	3	10	
Matrix Spike (1302161-MS1)		**Source: 13B0305-05**		Prepared & Analyzed: 02/13/2013						
Nitrogen, Ammonia (As N)	4.9	0.50	mg/L	5.000	0.16	94	70-130			
Matrix Spike Dup (1302161-MSD1)		**Source: 13B0305-05**		Prepared & Analyzed: 02/13/2013						
Nitrogen, Ammonia (As N)	4.9	0.50	mg/L	5.000	0.16	94	70-130	0	20	

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1301328 - SW 846 3520C										
Blank (1301328-BLK1)				Prepared: 01/28/2013 Analyzed: 02/04/2013						
4,4´-DDD	ND	0.10	ug/L							
4,4´-DDE	ND	0.10	ug/L							
4,4´-DDT	ND	0.10	ug/L							
Aldrin	ND	0.10	ug/L							
alpha-BHC	ND	0.10	ug/L							
alpha-Chlordane	ND	0.10	ug/L							
beta-BHC	ND	0.10	ug/L							
delta-BHC	ND	0.10	ug/L							
Dieldrin	ND	0.10	ug/L							
Endosulfan I	ND	0.10	ug/L							
Endosulfan II	ND	0.10	ug/L							
Endosulfan sulfate	ND	0.10	ug/L							
Endrin	ND	0.10	ug/L							
Endrin aldehyde	ND	0.10	ug/L							
Endrin ketone	ND	0.10	ug/L							
gamma-BHC	ND	0.10	ug/L							
gamma-Chlordane	ND	0.10	ug/L							
Heptachlor	ND	0.10	ug/L							
Heptachlor epoxide	ND	0.10	ug/L							
Methoxychlor	ND	0.10	ug/L							
Toxaphene	ND	1.0	ug/L							
Surrogate: Decachlorobiphenyl	*0.893*		*ug/L*	*1.000*		*89*	*51.1-138.5*			
Surrogate: Tetrachloro-m-xylene	*0.637*		*ug/L*	*1.000*		*64*	*39.1-120*			
LCS (1301328-BS1)				Prepared: 01/28/2013 Analyzed: 02/04/2013						
4,4´-DDT	0.95	0.10	ug/L	1.000		95	57-116.5			
Aldrin	0.43	0.10	ug/L	0.5000		86	48.4-113.2			
Dieldrin	0.81	0.10	ug/L	1.000		81	53.2-117.5			
Endrin	0.89	0.10	ug/L	1.000		89	49.2-123.7			
gamma-BHC	0.44	0.10	ug/L	0.5000		88	58.9-127.4			
Heptachlor	0.42	0.10	ug/L	0.5000		84	48.1-120			
Surrogate: Decachlorobiphenyl	*0.939*		*ug/L*	*1.000*		*94*	*51.6-128.7*			
Surrogate: Tetrachloro-m-xylene	*0.825*		*ug/L*	*1.000*		*83*	*37.1-110.6*			
LCS Dup (1301328-BSD1)				Prepared: 01/28/2013 Analyzed: 02/04/2013						
4,4´-DDT	0.92	0.10	ug/L	1.000		92	57-116.5	3	30	
Aldrin	0.41	0.10	ug/L	0.5000		83	48.4-113.2	3	30	
Dieldrin	0.80	0.10	ug/L	1.000		80	53.2-117.5	2	30	
Endrin	0.84	0.10	ug/L	1.000		84	49.2-123.7	5	30	
gamma-BHC	0.43	0.10	ug/L	0.5000		86	58.9-127.4	3	30	
Heptachlor	0.41	0.10	ug/L	0.5000		81	48.1-120	3	30	
Surrogate: Decachlorobiphenyl	*0.929*		*ug/L*	*1.000*		*93*	*51.6-128.7*			
Surrogate: Tetrachloro-m-xylene	*0.745*		*ug/L*	*1.000*		*74*	*37.1-110.6*			
Batch 1301329 - SW 846 3520C										

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1301329 - SW 846 3520C										
Blank (1301329-BLK1)				Prepared: 01/28/2013 Analyzed: 02/01/2013						
Aroclor 1016	ND	1.0	ug/L							
Aroclor 1221	ND	1.0	ug/L							
Aroclor 1232	ND	1.0	ug/L							
Aroclor 1242	ND	1.0	ug/L							
Aroclor 1248	ND	1.0	ug/L							
Aroclor 1254	ND	1.0	ug/L							
Aroclor 1260	ND	1.0	ug/L							
Surrogate: Decachlorobiphenyl	*1.88*		*ug/L*	*2.000*		*94*	*52.7-155.1*			
LCS (1301329-BS1)				Prepared: 01/28/2013 Analyzed: 02/01/2013						
Aroclor 1016	8.3	1.0	ug/L	10.00		83	65.2-120.7			
Aroclor 1254	ND	1.0	ug/L				70-130			
Aroclor 1260	8.9	1.0	ug/L	10.00		89	65.3-133.7			
Surrogate: Decachlorobiphenyl	*1.87*		*ug/L*	*2.000*		*93*	*52.7-155.1*			
LCS Dup (1301329-BSD1)				Prepared: 01/28/2013 Analyzed: 02/01/2013						
Aroclor 1016	7.9	1.0	ug/L	10.00		79	65.2-120.7	5	30	
Aroclor 1254	ND	1.0	ug/L				70-130		30	
Aroclor 1260	8.7	1.0	ug/L	10.00		87	65.3-133.7	2	30	
Surrogate: Decachlorobiphenyl	*1.84*		*ug/L*	*2.000*		*92*	*52.7-155.1*			
Batch 1301369 - SW 846 3535										

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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1301369 - SW 846 3535										
Blank (1301369-BLK1)				Prepared: 01/31/2013 Analyzed: 02/06/2013						
1,2,4-Trichlorobenzene	ND	10	ug/L							
1,2-Dichlorobenzene	ND	10	ug/L							
1,2-Diphenylhydrazine	ND	10	ug/L							
1,3-Dichlorobenzene	ND	10	ug/L							
1,4-Dichlorobenzene	ND	10	ug/L							
2,4,5-Trichlorophenol	ND	10	ug/L							
2,4,6-Trichlorophenol	ND	10	ug/L							
2,4-Dichlorophenol	ND	10	ug/L							
2,4-Dimethylphenol	ND	10	ug/L							
2,4-Dinitrophenol	ND	50	ug/L							
2,4-Dinitrotoluene	ND	10	ug/L							
2,6-Dinitrotoluene	ND	10	ug/L							
2-Chloronaphthalene	ND	10	ug/L							
2-Chlorophenol	ND	10	ug/L							
2-Methylnaphthalene	ND	5.0	ug/L							
2-Methylphenol	ND	10	ug/L							
2-Nitroaniline	ND	20	ug/L							
2-Nitrophenol	ND	10	ug/L							
3,3´-Dichlorobenzidine	ND	20	ug/L							
3,4-Methylphenol	ND	10	ug/L							
3-Nitroaniline	ND	20	ug/L							
4,6-Dinitro-2-methylphenol	ND	20	ug/L							
4-Bromophenyl phenyl ether	ND	10	ug/L							
4-Chloro-3-methylphenol	ND	10	ug/L							
4-Chloroaniline	ND	20	ug/L							
4-Chlorophenyl phenyl ether	ND	10	ug/L							
4-Methylphenol	ND	10	ug/L							
4-Nitroaniline	ND	20	ug/L							
4-Nitrophenol	ND	50	ug/L							
Acenaphthene	ND	5.0	ug/L							
Acenaphthylene	ND	5.0	ug/L							
Aniline	ND	20	ug/L							
Anthracene	ND	5.0	ug/L							
Benzo[a]anthracene	ND	5.0	ug/L							
Benzo[a]pyrene	ND	5.0	ug/L							
Benzo[b,k]fluoranthene	ND	10	ug/L							
Benzo[g,h,i]perylene	ND	5.0	ug/L							
Benzoic acid	ND	50	ug/L							
Benzyl alcohol	ND	5.0	ug/L							
Bis(2-chloroethoxy)methane	ND	10	ug/L							
Bis(2-chloroethyl)ether	ND	10	ug/L							
Bis(2-chloroisopropyl)ether	ND	10	ug/L							
Bis(2-ethylhexyl)phthalate	ND	10	ug/L							
Butyl benzyl phthalate	ND	10	ug/L							
Chrysene	ND	5.0	ug/L							
Dibenz[a,h]anthracene	ND	5.0	ug/L							
Dibenzofuran	ND	5.0	ug/L							

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1301369 - SW 846 3535										
Blank (1301369-BLK1)				Prepared: 01/31/2013 Analyzed: 02/06/2013						
Diethyl phthalate	ND	10	ug/L							
Dimethyl phthalate	ND	10	ug/L							
Di-n-butyl phthalate	ND	10	ug/L							
Di-n-octyl phthalate	ND	10	ug/L							
Fluoranthene	ND	5.0	ug/L							
Fluorene	ND	5.0	ug/L							
Hexachlorobenzene	ND	10	ug/L							
Hexachlorobutadiene	ND	10	ug/L							
Hexachlorocyclopentadiene	ND	10	ug/L							
Hexachloroethane	ND	10	ug/L							
Indeno[1,2,3-cd]pyrene	ND	5.0	ug/L							
Isophorone	ND	10	ug/L							
Naphthalene	ND	5.0	ug/L							
Nitrobenzene	ND	10	ug/L							
N-Nitrosodimethylamine	ND	10	ug/L							
N-Nitrosodiphenylamine	ND	10	ug/L							
N-Nitrosodipropylamine	ND	10	ug/L							
Pentachlorophenol	ND	30	ug/L							
Phenanthrene	ND	5.0	ug/L							
Phenol	ND	10	ug/L							
Pyrene	ND	5.0	ug/L							
Surrogate: 2,4,6-Tribromophenol	*79.7*		*ug/L*	*100.0*		*80*	*48.18-103.25*			
Surrogate: 2-Fluorobiphenyl	*75.4*		*ug/L*	*100.0*		*75*	*44.86-97.28*			
Surrogate: 2-Fluorophenol	*37.8*		*ug/L*	*100.0*		*38*	*17.76-99.38*			
Surrogate: 4-Terphenyl-d14	*82.1*		*ug/L*	*100.0*		*82*	*38.67-92.68*			*S4*
Surrogate: Nitrobenzene-d5	*54.3*		*ug/L*	*100.0*		*54*	*23.73-103.28*			
Surrogate: Phenol-d6	*36.9*		*ug/L*	*100.0*		*37*	*17.76-99.38*			
LCS (1301369-BS1)				Prepared: 01/31/2013 Analyzed: 02/06/2013						
1,2,4-Trichlorobenzene	31	10	ug/L	50.00		63	34.82-69.59			
1,4-Dichlorobenzene	21	10	ug/L	50.00		43	28.32-61.4			
2,4-Dinitrotoluene	31	10	ug/L	50.00		61	39.9-79.18			
2-Chlorophenol	58	10	ug/L	100.0		58	25.24-74.48			
4-Chloro-3-methylphenol	60	10	ug/L	100.0		60	40.3-77.78			
4-Nitrophenol	64	50	ug/L	100.0		64	19.31-103.56			
Acenaphthene	31	5.0	ug/L	50.00		63	41.54-75.46			
N-Nitrosodipropylamine	32	10	ug/L	50.00		65	40.18-80.63			
Pentachlorophenol	55	30	ug/L	100.0		55	40.22-81.99			
Phenol	32	10	ug/L	100.0		32	40.06-85.43			
Pyrene	32	5.0	ug/L	50.00		65	46.41-100.1			
Surrogate: 2,4,6-Tribromophenol	*66.2*		*ug/L*	*100.0*		*66*	*47.48-81.05*			
Surrogate: 2-Fluorobiphenyl	*75.5*		*ug/L*	*100.0*		*76*	*38.2-73.43*			
Surrogate: 2-Fluorophenol	*43.5*		*ug/L*	*100.0*		*44*	*0-78.37*			
Surrogate: 4-Terphenyl-d14	*70.2*		*ug/L*	*100.0*		*70*	*39.29-86.74*			
Surrogate: Nitrobenzene-d5	*62.0*		*ug/L*	*100.0*		*62*	*34.79-78.71*			
Surrogate: Phenol-d6	*42.4*		*ug/L*	*100.0*		*42*	*1.69-37.11*			

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1301369 - SW 846 3535										
LCS Dup (1301369-BSD1)				Prepared: 01/31/2013 Analyzed: 02/06/2013						
1,2,4-Trichlorobenzene	32	10	ug/L	50.00		65	34.82-69.59	4	30	
1,4-Dichlorobenzene	24	10	ug/L	50.00		49	28.32-61.4	13	30	
2,4-Dinitrotoluene	30	10	ug/L	50.00		60	39.9-79.18	2	30	
2-Chlorophenol	62	10	ug/L	100.0		62	25.24-74.48	7	30	
4-Chloro-3-methylphenol	62	10	ug/L	100.0		62	40.3-77.78	3	30	
4-Nitrophenol	65	50	ug/L	100.0		65	19.31-103.56	1	30	
Acenaphthene	33	5.0	ug/L	50.00		66	41.54-75.46	4	30	
N-Nitrosodipropylamine	36	10	ug/L	50.00		71	40.18-80.63	9	30	
Pentachlorophenol	61	30	ug/L	100.0		61	40.22-81.99	9	30	
Phenol	32	10	ug/L	100.0		32	40.06-85.43	0.5	30	
Pyrene	34	5.0	ug/L	50.00		67	46.41-100.1	4	30	
Surrogate: 2,4,6-Tribromophenol	*74.5*		*ug/L*	*100.0*		*74*	*47.48-81.05*			
Surrogate: 2-Fluorobiphenyl	*79.7*		*ug/L*	*100.0*		*80*	*38.2-73.43*			*S4*
Surrogate: 2-Fluorophenol	*45.7*		*ug/L*	*100.0*		*46*	*0-78.37*			
Surrogate: 4-Terphenyl-d14	*75.6*		*ug/L*	*100.0*		*76*	*39.29-86.74*			
Surrogate: Nitrobenzene-d5	*68.7*		*ug/L*	*100.0*		*69*	*34.79-78.71*			
Surrogate: Phenol-d6	*42.5*		*ug/L*	*100.0*		*42*	*1.69-37.11*			

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302061 - VOA_GCMS										
Blank (1302061-BLK1)				Prepared & Analyzed: 02/05/2013						
1,1,1-Trichloroethane	ND	2.0	ug/L							
1,1,2,2-Tetrachloroethane	ND	2.0	ug/L							
1,1,2-Trichloroethane	ND	2.0	ug/L							
1,1-Dichloroethane	ND	2.0	ug/L							
1,1-Dichloroethene	ND	2.0	ug/L							
1,2-Dichlorobenzene	ND	2.0	ug/L							
1,2-Dichloroethane	ND	2.0	ug/L							
1,2-Dichloropropane	ND	2.0	ug/L							
1,3-Dichlorobenzene	ND	2.0	ug/L							
1,4-Dichlorobenzene	ND	2.0	ug/L							
2-Chloroethylvinylether	ND	10	ug/L							
2-Chloroethylvinylether	ND	10	ug/L							
Acetone	ND	10	ug/L							
Acrolein	ND	10	ug/L							
Acrolein	ND	10	ug/L							
Acrylonitrile	ND	10	ug/L							
Acrylonitrile	ND	10	ug/L							
Benzene	ND	2.0	ug/L							
Bromodichloromethane	ND	2.0	ug/L							
Bromoform	ND	2.0	ug/L							
Bromomethane	ND	2.0	ug/L							
Carbon tetrachloride	ND	2.0	ug/L							
Chlorobenzene	ND	2.0	ug/L							
Chloroethane	ND	5.0	ug/L							
Chloroform	ND	2.0	ug/L							
Chloromethane	ND	5.0	ug/L							
cis-1,3-Dichloropropene	ND	2.0	ug/L							
Dibromochloromethane	ND	2.0	ug/L							
Dichlorodifluoromethane	ND	5.0	ug/L							
Ethylbenzene	ND	2.0	ug/L							
Methyl Isobutyl Ketone (MIBK)	ND	10	ug/L							
Methylene chloride	ND	10	ug/L							
Tetrachloroethene	ND	2.0	ug/L							
Tetrahydrofuran	ND	10	ug/L							
Toluene	ND	2.0	ug/L							
trans-1,2-Dichloroethene	ND	2.0	ug/L							
trans-1,3-Dichloropropene	ND	2.0	ug/L							
Trichloroethene	ND	2.0	ug/L							
Trichlorofluoromethane	ND	5.0	ug/L							
Vinyl chloride	ND	2.0	ug/L							
Xylenes, Total	ND	6.0	ug/L							
Surrogate: 1,2-Dichloroethane-d4	*28.5*		*ug/L*	*28.00*		*102*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*28.5*		*ug/L*	*28.00*		*102*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*29.9*		*ug/L*	*28.00*		*107*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*29.9*		*ug/L*	*28.00*		*107*	*70-130*			
Surrogate: Fluorobenzene	*28.8*		*ug/L*	*28.00*		*103*	*70-130*			
Surrogate: Fluorobenzene	*28.8*		*ug/L*	*28.00*		*103*	*70-130*			

Turner Laboratories, Inc.

Date: 02/26/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13A0718
Date Received: 01/26/2013

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302061 - VOA_GCMS										
LCS (1302061-BS1)				Prepared & Analyzed: 02/05/2013						
1,1,1-Trichloroethane	21		ug/L	20.00		107	52-162			
1,1,2,2-Tetrachloroethane	21		ug/L	20.00		104	46-157			
1,1,2-Trichloroethane	20		ug/L	20.00		99	52-150			
1,1-Dichloroethane	20		ug/L	20.00		99	59-155			
1,1-Dichloroethene	21		ug/L	20.00		105	2-234			
1,2,4-Trimethylbenzene	23		ug/L	20.00		113	0-200			
1,2-Dichlorobenzene	22		ug/L	20.00		112	18-190			
1,2-Dichloroethane	21		ug/L	20.00		103	49-155			
1,2-Dichloropropane	21		ug/L	20.00		107	2-210			
1,3,5-Trimethylbenzene	22		ug/L	20.00		112	0-200			
1,3-Dichlorobenzene	22		ug/L	20.00		108	59-156			
1,4-Dichlorobenzene	22		ug/L	20.00		110	18-190			
2-Chloroethylvinylether	20		ug/L	20.00		101	10-305			
2-Chloroethylvinylether	20		ug/L	20.00		101	10-305			
Acetone	91		ug/L	100.0		91	70-130			
Acrolein	95		ug/L	100.0		95	88-118			
Acrolein	95		ug/L	100.0		95	88-118			
Acrylonitrile	100		ug/L	100.0		100	71-135			
Acrylonitrile	100		ug/L	100.0		100	71-135			
Benzene	21		ug/L	20.00		106	37-151			
Bromodichloromethane	21		ug/L	20.00		103	35-155			
Bromoform	22		ug/L	20.00		110	45-169			
Bromomethane	22		ug/L	20.00		110	2-242			
Carbon tetrachloride	21		ug/L	20.00		104	70-140			
Chlorobenzene	20		ug/L	20.00		102	37-160			
Chloroethane	21		ug/L	20.00		105	14-230			
Chloroform	20		ug/L	20.00		101	51-138			
Chloromethane	20		ug/L	20.00		101	5-273			
cis-1,3-Dichloropropene	20		ug/L	20.00		102	2-227			
Dibromochloromethane	20		ug/L	20.00		100	53-149			
Dichlorodifluoromethane	20		ug/L	20.00		99	5-273			
Ethylbenzene	21		ug/L	20.00		104	37-162			
Isopropyl Alcohol	1100		ug/L	1000		106	70-130			
Methyl Isobutyl Ketone (MIBK)	100		ug/L	100.0		101	70-130			
Methylene chloride	20		ug/L	20.00		98	10-221			
Tetrachloroethene	21		ug/L	20.00		106	64-148			
Tetrahydrofuran	110		ug/L	100.0		110	70-130			
Toluene	21		ug/L	20.00		105	47-150			
trans-1,2-Dichloroethene	20		ug/L	20.00		102	54-156			
trans-1,3-Dichloropropene	19		ug/L	20.00		97	17-183			
Trichloroethene	21		ug/L	20.00		106	71-157			
Trichlorofluoromethane	22		ug/L	20.00		111	17-181			
Vinyl chloride	23		ug/L	20.00		115	2-251			
Xylenes, Total	62		ug/L	60.00		103	37-162			
Surrogate: 1,2-Dichloroethane-d4	*29.1*		*ug/L*	*28.00*		*104*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*29.1*		*ug/L*	*28.00*		*104*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*29.3*		*ug/L*	*28.00*		*105*	*70-130*			

Turner Laboratories, Inc.

Date: 02/26/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13A0718
Date Received: 01/26/2013

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302061 - VOA_GCMS										
LCS (1302061-BS1)				Prepared & Analyzed: 02/05/2013						
Surrogate: 4-Bromofluorobenzene	*29.3*		*ug/L*	*28.00*		*105*	*70-130*			
Surrogate: Fluorobenzene	*29.3*		*ug/L*	*28.00*		*105*	*70-130*			
Surrogate: Fluorobenzene	*29.3*		*ug/L*	*28.00*		*105*	*70-130*			

Turner Laboratories, Inc.

Date: 02/26/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13A0718
Date Received: 01/26/2013

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302061 - VOA_GCMS										
LCS Dup (1302061-BSD1)				Prepared & Analyzed: 02/05/2013						
1,1,1-Trichloroethane	21		ug/L	20.00		103	52-162	3	30	
1,1,2,2-Tetrachloroethane	19		ug/L	20.00		95	46-157	9	30	
1,1,2-Trichloroethane	20		ug/L	20.00		99	52-150	0.1	30	
1,1-Dichloroethane	20		ug/L	20.00		100	59-155	1	30	
1,1-Dichloroethene	21		ug/L	20.00		103	2-234	2	30	
1,2,4-Trimethylbenzene	21		ug/L	20.00		107	0-200	5	200	
1,2-Dichlorobenzene	22		ug/L	20.00		108	18-190	4	30	
1,2-Dichloroethane	20		ug/L	20.00		101	49-155	2	30	
1,2-Dichloropropane	21		ug/L	20.00		104	2-210	3	30	
1,3,5-Trimethylbenzene	21		ug/L	20.00		104	0-200	7	200	
1,3-Dichlorobenzene	20		ug/L	20.00		102	59-156	5	30	
1,4-Dichlorobenzene	21		ug/L	20.00		103	18-190	6	30	
2-Chloroethylvinylether	20		ug/L	20.00		98	10-305	3	30	
2-Chloroethylvinylether	20		ug/L	20.00		98	10-305	3	30	
Acetone	92		ug/L	100.0		92	70-130	1	30	
Acrolein	94		ug/L	100.0		94	88-118	2	30	
Acrolein	94		ug/L	100.0		94	88-118	2	30	
Acrylonitrile	92		ug/L	100.0		92	71-135	8	30	
Acrylonitrile	92		ug/L	100.0		92	71-135	8	30	
Benzene	21		ug/L	20.00		105	37-151	0.6	30	
Bromodichloromethane	20		ug/L	20.00		101	35-155	2	30	
Bromoform	20		ug/L	20.00		100	45-169	9	30	
Bromomethane	21		ug/L	20.00		107	2-242	2	30	
Carbon tetrachloride	21		ug/L	20.00		104	70-140	0.2	30	
Chlorobenzene	21		ug/L	20.00		103	37-160	0.4	30	
Chloroethane	22		ug/L	20.00		109	14-230	4	30	
Chloroform	21		ug/L	20.00		104	51-138	2	30	
Chloromethane	20		ug/L	20.00		99	5-273	2	30	
cis-1,3-Dichloropropene	20		ug/L	20.00		99	2-227	3	30	
Dibromochloromethane	20		ug/L	20.00		99	53-149	1	30	
Dichlorodifluoromethane	21		ug/L	20.00		105	5-273	5	30	
Ethylbenzene	21		ug/L	20.00		105	37-162	1	30	
Isopropyl Alcohol	1100		ug/L	1000		108	70-130	2	200	
Methyl Isobutyl Ketone (MIBK)	100		ug/L	100.0		102	70-130	0.6	30	
Methylene chloride	20		ug/L	20.00		99	10-221	0.7	30	
Tetrachloroethene	22		ug/L	20.00		109	64-148	3	30	
Tetrahydrofuran	97		ug/L	100.0		97	70-130	13	30	
Toluene	21		ug/L	20.00		104	47-150	1	30	
trans-1,2-Dichloroethene	21		ug/L	20.00		103	54-156	1	30	
trans-1,3-Dichloropropene	19		ug/L	20.00		97	17-183	0.05	30	
Trichloroethene	21		ug/L	20.00		107	71-157	2	30	
Trichlorofluoromethane	22		ug/L	20.00		109	17-181	2	30	
Vinyl chloride	23		ug/L	20.00		113	2-251	1	30	
Xylenes, Total	61		ug/L	60.00		102	37-162	0.7	30	
Surrogate: 1,2-Dichloroethane-d4	*28.9*		*ug/L*	*28.00*		*103*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*28.9*		*ug/L*	*28.00*		*103*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*28.7*		*ug/L*	*28.00*		*103*	*70-130*			

Turner Laboratories, Inc.

Date: 02/26/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13A0718
Date Received: 01/26/2013

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302061 - VOA_GCMS										
LCS Dup (1302061-BSD1)				Prepared & Analyzed: 02/05/2013						
Surrogate: 4-Bromofluorobenzene	*28.7*		*ug/L*	*28.00*		*103*	*70-130*			
Surrogate: Fluorobenzene	*29.4*		*ug/L*	*28.00*		*105*	*70-130*			
Surrogate: Fluorobenzene	*29.4*		*ug/L*	*28.00*		*105*	*70-130*			
Matrix Spike (1302061-MS1)		**Source: 13A0718-02**		Prepared: 02/05/2013 Analyzed: 02/06/2013						
2-Chloroethylvinylether	22		ug/L	20.00	ND	110	10-305			
Acrolein	87		ug/L	100.0	ND	87	88-118			M2
Acrylonitrile	97		ug/L	100.0	ND	97	71-135			
Surrogate: 1,2-Dichloroethane-d4	*28.8*		*ug/L*	*28.00*		*103*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*28.6*		*ug/L*	*28.00*		*102*	*70-130*			
Surrogate: Fluorobenzene	*29.3*		*ug/L*	*28.00*		*105*	*70-130*			

Turner Laboratories, Inc.

Date: 02/26/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13A0718
Date Received: 01/26/2013

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302061 - VOA_GCMS										
Matrix Spike (1302061-MS2)		**Source: 13A0718-02**		Prepared: 02/05/2013 Analyzed: 02/06/2013						
1,1,1-Trichloroethane	23		ug/L	20.00	ND	113	52-162			
1,1,2,2-Tetrachloroethane	21		ug/L	20.00	ND	106	46-157			
1,1,2-Trichloroethane	20		ug/L	20.00	ND	102	52-150			
1,1-Dichloroethane	21		ug/L	20.00	ND	106	59-155			
1,1-Dichloroethene	22		ug/L	20.00	ND	110	2-234			
1,2,4-Trimethylbenzene	24		ug/L	20.00	0.0	118	0-200			
1,2-Dichlorobenzene	23		ug/L	20.00	ND	114	18-190			
1,2-Dichloroethane	21		ug/L	20.00	ND	104	49-155			
1,2-Dichloropropane	23		ug/L	20.00	0.0	113	2-210			
1,3,5-Trimethylbenzene	23		ug/L	20.00	0.0	116	0-200			
1,3-Dichlorobenzene	22		ug/L	20.00	ND	111	59-156			
1,4-Dichlorobenzene	23		ug/L	20.00	ND	113	18-190			
Acetone	100		ug/L	100.0	22	81	70-130			
Benzene	22		ug/L	20.00	ND	110	37-151			
Bromodichloromethane	22		ug/L	20.00	ND	109	35-155			
Bromoform	24		ug/L	20.00	ND	118	45-169			
Bromomethane	21		ug/L	20.00	ND	107	2-242			
Carbon tetrachloride	23		ug/L	20.00	ND	113	70-140			
Chlorobenzene	22		ug/L	20.00	ND	110	37-160			
Chloroethane	21		ug/L	20.00	ND	104	14-230			
Chloroform	22		ug/L	20.00	ND	108	51-138			
Chloromethane	21		ug/L	20.00	ND	106	5-273			
cis-1,3-Dichloropropene	23		ug/L	20.00	ND	113	2-221			
Dibromochloromethane	22		ug/L	20.00	ND	109	53-149			
Dichlorodifluoromethane	18		ug/L	20.00	ND	89	5-273			
Ethylbenzene	22		ug/L	20.00	ND	111	37-162			
Isopropyl Alcohol	940		ug/L	1000	ND	94	70-130			
Methyl Isobutyl Ketone (MIBK)	100		ug/L	100.0	0.0	101	70-130			
Methylene chloride	20		ug/L	20.00	ND	101	10-221			
Tetrachloroethene	23		ug/L	20.00	ND	116	64-148			
Tetrahydrofuran	98		ug/L	100.0	17	81	70-130			
Toluene	22		ug/L	20.00	ND	111	47-150			
trans-1,2-Dichloroethene	22		ug/L	20.00	ND	110	54-156			
trans-1,3-Dichloropropene	22		ug/L	20.00	0.61	109	17-183			
Trichloroethene	22		ug/L	20.00	ND	109	71-157			
Trichlorofluoromethane	22		ug/L	20.00	0.0	109	17-181			
Vinyl chloride	21		ug/L	20.00	ND	107	2-251			
Xylenes, Total	67		ug/L	60.00	0.010	111	37-162			
Surrogate: 1,2-Dichloroethane-d4	*27.4*		*ug/L*	*28.00*		*98*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*29.2*		*ug/L*	*28.00*		*104*	*70-130*			
Surrogate: Fluorobenzene	*28.2*		*ug/L*	*28.00*		*101*	*70-130*			

Turner Laboratories, Inc.

Date: 02/26/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13A0718
Date Received: 01/26/2013

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1301307 - IC PREP										
Blank (1301307-BLK1)				Prepared & Analyzed: 01/27/2013						
Nitrogen, Nitrate (As N)	ND	1.0	mg/L							
Nitrogen, Nitrite (As N)	ND	0.10	mg/L							
LCS (1301307-BS1)				Prepared & Analyzed: 01/27/2013						
Nitrogen, Nitrate (As N)	4.9	1.0	mg/L	5.000		97	90-110			
Nitrogen, Nitrite (As N)	2.4	0.10	mg/L	2.500		97	90-110			
LCS Dup (1301307-BSD1)				Prepared & Analyzed: 01/27/2013						
Nitrogen, Nitrate (As N)	4.8	1.0	mg/L	5.000		96	90-110	0.7	10	
Nitrogen, Nitrite (As N)	2.4	0.10	mg/L	2.500		97	90-110	0.2	10	
Matrix Spike (1301307-MS1)		**Source: 13A0709-01**		Prepared & Analyzed: 01/27/2013						
Nitrogen, Nitrate (As N)	5.2	1.0	mg/L	5.000	0.59	92	80-120			
Nitrogen, Nitrite (As N)	2.4	0.10	mg/L	2.500	0.071	92	80-120			
Matrix Spike Dup (1301307-MSD1)		**Source: 13A0709-01**		Prepared & Analyzed: 01/27/2013						
Nitrogen, Nitrate (As N)	5.3	1.0	mg/L	5.000	0.59	93	80-120	0.9	10	
Nitrogen, Nitrite (As N)	2.4	0.10	mg/L	2.500	0.071	93	80-120	0.6	10	
Batch 1301318 - IC PREP										
Blank (1301318-BLK1)				Prepared & Analyzed: 01/28/2013						
Phosphorus, Dissolved Orthophosphate (As P)	ND	0.50	mg/L							
LCS (1301318-BS1)				Prepared & Analyzed: 01/28/2013						
Phosphorus, Dissolved Orthophosphate (As P)	2.5	0.50	mg/L	2.500		102	90-110			
LCS Dup (1301318-BSD1)				Prepared & Analyzed: 01/28/2013						
Phosphorus, Dissolved Orthophosphate (As P)	2.5	0.50	mg/L	2.500		100	90-110	2	10	
Matrix Spike (1301318-MS1)		**Source: 13A0733-01**		Prepared & Analyzed: 01/28/2013						
Phosphorus, Dissolved Orthophosphate (As P)	2.7	0.50	mg/L	2.500	ND	109	80-120			
Matrix Spike (1301318-MS2)		**Source: 13A0733-02**		Prepared & Analyzed: 01/28/2013						
Phosphorus, Dissolved Orthophosphate (As P)	3.0	0.50	mg/L	2.500	ND	118	80-120			
Matrix Spike Dup (1301318-MSD1)		**Source: 13A0733-01**		Prepared & Analyzed: 01/28/2013						
Phosphorus, Dissolved Orthophosphate (As P)	2.9	0.50	mg/L	2.500	ND	114	80-120	5	10	
Matrix Spike Dup (1301318-MSD2)		**Source: 13A0733-02**		Prepared & Analyzed: 01/28/2013						
Phosphorus, Dissolved Orthophosphate (As P)	2.9	0.50	mg/L	2.500	ND	116	80-120	2	10	

TURNER LABORATORIES INC.
2445 N. Coyote Drive, Suite 104
Tucson, Arizona 85745
(520) 882-5880
Fax: (520) 882-9788
www.turnerlabs.com

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

TURNER WORK ORDER # 13A0718 DATE 1-26-13 PAGE _____ OF _____

PROJECT NAME: Stormwater Samples Site # 1, 2, 3, 4, 5 (circle)
CONTACT NAME: Bev Hester
COMPANY NAME: City of Tucson
ADDRESS: PO Box 27210, Tucson AZ 85726-7210
PHONE: 837-4935
FAX: 791-4343
SAMPLER'S SIGNATURE: C McNellis

CIRCLE ANALYSIS REQUESTED AND/OR CHECK THE APPROPRIATE BOX

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX*	NUMBER OF CONTAINERS	Hardness	Total Dissolved Solids (TDS)	Total Suspended Solids (TSS)	Biological Oxygen Demand (BOD)	Chemical Oxygen Demand (COD)	Cyanide	Metals*	Nitrate + Nitrite Sum	Nitrogen, Ammonia as N	Nitrogen, Total Kjeldahl	Phosphorus as P, Total	Orthophosphate by Ion Chromatography	Total Petroleum Hydrocarbons (TPH)	Oil & Grease	Volatile Organic Compounds by 624	Semivolatile Organic Acid Extractables by 8270	Semivolatile Organic Base Neutrals by 8270	PCBs by 8082	Organochlorine Pesticides by SW 8081
Composite	1/26/13	10:43am		ST	16	X	X	X	X	X		X	X	X	X	X	X							X
Grab/Discrete	1/26/13	10:43am		ST	9						X							X	X	X			X	
sVOC's-composite	1/26/13	10:43am		ST	~~23~~ 11																X	X		

1. RELINQUISHED BY: C McNellis
Signature: C McNellis
Printed Name: CoT Stormwater
Firm: 1/26/13 2:01pm
Date/Time

2. RECEIVED BY:
Signature
Printed Name
Firm
Date/Time

TURNAROUND REQUIREMENTS:
X Standard (approx.10 days)*
___Next day ___2 Day ___5 Day*
X Email Preliminary Results To: Bev.Hester@tucsonaz.gov
* Working Days

REPORT REQUIREMENTS:
___ I. Routine Report
___ II. Report (includes DUP,MS,MSD, as required, may be charged as samples)
___ III. Date Validation Report (Includes All Raw Data)
Add 10% to invoice

INVOICE INFORMATION:
Account ___ Y ___ N
P.O. # ___
Bill to: ___

SAMPLE RECEIPT:
Total Containers 36
Temperature 1.3
☑ Wet Ice ☐ Blue Ice

3. RELINQUISHED BY:
Signature
Printed Name
Firm
Date/Time

4. RECEIVED BY:
Signature
Printed Name: Andrew Calcaterra
Firm: TURNER LABORATORIES, INC.
Date/Time: 1-26-13 /1401

*LEGEND
DW = DRINKING WATER
GW = GROUNDWATER
SD = SOLID
SG = SLUDGE
SL = SOIL
ST = STORMWATER
WW = WASTEWATER

SPECIAL INSTRUCTIONS/COMMENTS:

Compliance Analysis: ☐ Yes ☐ No	Custody Seals ☐	Preservation Confirmation ☑
ADEQ Forms: ☐ Yes ☐ No	Container Intact ☑	Appropriate Head Space ☑
Mail ADEQ Forms: ☐ Yes ☐ No	COC/Labels Agree ☑	Received Within Hold Time ☑

Metals; Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Hg, Ni, Se, Ag, Tl, Zn
Cyanide, Metals, VOCs, sVOCs, PCBs, Pesticides; report in ug/L

City of Tucson's
Sampling Aliquot Form

13A0718-01

Site #: 2 Greenlee Mult-Family Date of Sample: 01/26/13

Sample ID: 130126 # 2 Sampler(s): Chris /Eric

Maximum Sample Size: 2,000 mL Aliquot Begin Time: 10:43:00 AM
default (2000)

Elapsed Time after 1st Sample	Depth		Site 4 Only Width	Time		Flowrate for Site 2	
Minutes	*Inches*		*Feet*	*Seconds*		*cfs*	
0	2.00	1				1.97	0.00
20	2.50	2				3.06	0.00
40	2.25	3				2.49	0.00
60	2.00	4				1.97	0.00
80	1.00	5				0.29	0.00
100	0.75	6				0.21	0.00
120	0.50	7				0.14	0.00
140	0.25	8				0.07	0.00
						0.00	0.00
						0.00	0.00
				Average Flowrate: (CFS):		1.02	0.00

Time Aliquot Collected	Aliquot #	Aliquot Volumes Calculated Using Maximum Aliquot	Aliquot Volumes for Laboratory mL
10:43 AM	1	1,287	730
11:03 AM	2	2,000	1,135
11:23 AM	3	1,630	925
11:43 AM	4	1,287	730
12:03 PM	5	187	106
12:23 PM	6	140	80
12:43 PM	7	94	53
1:03 PM	8	47	27
		6,671	3,786

January 28, 2013

Beverley Hester
City of Tucson - Transportation Department
PO Box 27210
Tucson, AZ 85726-7210

TEL 520-837-4935
FAX (520) 791-4373

Work Order No.: 13A0719
Order Name: Storm Water Annual
MPN

RE: Storm Water Biannual

Dear Beverley Hester,

Turner Laboratories, Inc. received 1 sample(s) on 01/26/2013 for the analyses presented in the following report.

All results are intended to be considered in their entirety, and Turner Laboratories, Inc. is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Samples will be disposed of 30 days after issue of our report unless special arrangements are made.

The pages that follow may contain sensitive, privileged or confidential information intended solely for the addressee named above. If you receive this message and are not the agent or employee of the addressee, this communication has been sent in error. Please do not disseminate or copy any of the attached and notify the sender immediately by telephone. Please also return the attached sheet(s) to the sender by mail.

Please call if you have any questions.

Respectfully submitted,

Turner Laboratories, Inc.
ADHS License AZ0066

Dawn Weyer
Project Manager

Turner Laboratories, Inc.

Date: 01/28/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13A0719
Date Received: 01/26/2013

Order: Storm Water Annual MPN

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date/Time
13A0719-01	Grab	Storm Water	01/26/2013 1043

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13A0719
Date Received: 01/26/2013

Case Narrative

E Value is above quantitation range.

All soil, sludge, and solid matrix determinations are reported on a wet weight basis unless otherwise noted.

ND Not Detected at or above the PQL

PQL Practical Quantitation Limit

DF Dilution Factor

Turner Laboratories, Inc.

Date: 01/28/2013

Client:	City of Tucson - Transportation Department	**Client Sample ID:**	Grab
Project:	Storm Water Biannual	**Collection Date/Time:**	01/26/2013 1043
Work Order:	13A0719	**Matrix:**	Storm Water
Lab Sample ID:	13A0719-01	**Order Name:**	Storm Water Annual MPN

Analyses	Result	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Total Coliform & E. Coli, MPN-SM9223B								
E.Coli	770	1.0		MPN/100mL	1	01/26/2013 1420	01/27/2013 1425	AC
Total Coliform	2400	1.0	E	MPN/100mL	1	01/26/2013 1420	01/27/2013 1425	AC

TURNER LABORATORIES INC.
2445 N. Coyote Drive, Suite 104
Tucson, Arizona 85745
(520) 882-5880
Fax: (520) 882-9788
www.turnerlabs.com

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

TURNER WORK ORDER # 1301719- DATE 1-26-13 PAGE ____ OF ____

PROJECT NAME: Stormwater Samples Site # 1, 2, 3, 4, 5 (circle)

CONTACT NAME ~~Chris McNellis~~ Bev Hester

COMPANY NAME City of Tucson - Transportation Dept

ADDRESS P.O. Box 27210

CITY Tucson STATE AZ ZIP CODE 85726

PHONE (520) 837-6583 FAX (520) 791-4373

SAMPLER'S SIGNATURE C McNellis

CIRCLE ANALYSIS REQUESTED AND/OR CHECK THE APPROPRIATE BOX

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX*	NUMBER OF CONTAINERS	MPN
Grab	1/26/13	10:43am		Storm Water	1	X

1. RELINQUISHED BY: C McNellis
Signature: C McNellis
Printed Name: City of Tucson Trans. Dept
Firm:
Date/Time: 1/26/13 2:01pm

2. RECEIVED BY:
Signature:
Printed Name:
Firm:
Date/Time:

TURNAROUND REQUIREMENTS:
____ Standard (approx.10 days)*
____ Next day ____ 2 Day ____ 5 Day*
____ Email Preliminary Results To:
* Working Days

REPORT REQUIREMENTS:
____ I. Routine Report
____ II. Report (includes DUP,MS,MSD, as required, may be charged as samples)
____ III. Date Validation Report (Includes All Raw Data)
Add 10% to invoice

INVOICE INFORMATION:
Account ____ Y ____ N
P.O. #
Bill to:

SAMPLE RECEIPT:
Total Containers 1
Temperature 1.3
☑ Wet Ice ☐ Blue Ice

3. RELINQUISHED BY:
Signature:
Printed Name:
Firm:
Date/Time:

4. RECEIVED BY:
Signature: Andrew Calcaterra
Printed Name: TURNER LABORATORIES, INC.
Firm:
Date/Time: 1-26-13 / 1401

*LEGEND
DW = DRINKING WATER
GW = GROUNDWATER
SD = SOLID
SG = SLUDGE
SL = SOIL
ST = STORMWATER
WW = WASTEWATER

SPECIAL INSTRUCTIONS/COMMENTS:

Compliance Analysis:	☐ Yes ☐ No	Custody Seals	☐	Preservation Confirmation	☑
ADEQ Forms:	☐ Yes ☐ No	Container Intact	☑	Appropriate Head Space	☑
Mail ADEQ Forms:	☐ Yes ☐ No	COC/Labels Agree	☑	Received Within Hold Time	☑

*Ni, Hg, Ag, Cr, Cd, Be, Ba, As, Cu, Sb, Zn, Se, Pb, Tl, Ca, Mg

Composite poured at lab per C.O.T. Specifications

March 21, 2013

Beverley Hester
City of Tucson - Transportation Department
PO Box 27210
Tucson, AZ 85726-7210

TEL 520-837-4935
FAX (520) 791-4373

Work Order No.: 13B0610
Order Name: Site #3

RE: Storm Water Biannual

Dear Beverley Hester,

Turner Laboratories, Inc. received 2 sample(s) on 02/21/2013 for the analyses presented in the following report.

The attached report has been revised. Please refer to the Case Narrative page for an explanation of the changes. We apologize for any inconvenience this may have caused you.

All results are intended to be considered in their entirety, and Turner Laboratories, Inc. is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Samples will be disposed of 30 days after issue of our report unless special arrangements are made.

The pages that follow may contain sensitive, privileged or confidential information intended solely for the addressee named above. If you receive this message and are not the agent or employee of the addressee, this communication has been sent in error. Please do not disseminate or copy any of the attached and notify the sender immediately by telephone. Please also return the attached sheet(s) to the sender by mail.

Please call if you have any questions.

Respectfully submitted,
Turner Laboratories, Inc.
ADHS License AZ0066

Terri L. Garcia

Terri Garcia
Technical Director

Turner Laboratories, Inc.

Date: 03/21/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13B0610
Date Received: 02/21/2013

Order: Site #3

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date/Time
13B0610-01	Composite	Storm Water	02/20/2013 1220
13B0610-02	Grab	Storm Water	02/20/2013 1220

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13B0610
Date Received: 02/21/2013

Case Narrative

EPA 624: Recovery of Acrolein was below acceptance limits in the Matrix Spike.

EPA 8270C: There was insufficient sample volume available to perform the method-required Matrix Spike Duplicate. A Matrix Spike was analyzed. (ADHS qualifier Q9). The PQLs are elevated. The sample required a dilution due to matrix interferences. (ADHS qualifier D5).

EPA 8081: Technical Chlordane is reported as a pattern-compared compound in addition to the alpha and gamma Chlordane reported by EPA 8081.

This report was originally generated on 3/20/2013. It is being revised on 3/21/2013 to include pentachlorophenol reporting to the MDL, which was not on the original report.

C4	Confirmatory analysis was past holding time
D5	Minimum Reporting Limit (MRL) is adjusted due to sample dilution; analyte was non-detect in the sample.
E4	Concentration estimated. Analyte was detected below laboratory Minimum Reporting Limit (MRL) but above MDL.
E8	Analyte reported to MDL per project specification. Target analyte was not detected in the sample.
H5	This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time.
L1	The associated LCS/LCSD recovery was above laboratory acceptance limits.
M1	Matrix spike recovery was high; the associated LCS/LCSD was acceptable.
M2	Matrix spike recovery was low; the associated LCS/LCSD was acceptable.
M7	Matrix spike recovery was low. Data reported per ADEQ policy 0154.000. Matrix interference was confirmed.
S4	Surrogate recovery was above laboratory and method acceptance limits. No target analytes were detected in the sample.
T2	Cited ADHS Licensed method does not contain this analyte as part of the method compound list.
V1	CCV recovery was above method acceptance limits. This target analyte was not detected in the sample.

All soil, sludge, and solid matrix determinations are reported on a wet weight basis unless otherwise noted.

ND	Not Detected at or above the PQL
PQL	Practical Quantitation Limit
DF	Dilution Factor

Turner Laboratories, Inc.

Date: 03/21/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13B0610
Lab Sample ID: 13B0610-01

Client Sample ID: Composite
Collection Date/Time: 02/20/2013 1220
Matrix: Storm Water
Order Name: Site #3

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Hardness-Calculation									
Hardness, Calcium/Magnesium (As CaCO3)	25				mg/L	1	02/25/2013 1015	02/26/2013 1138	RAD
Nitrate + Nitrite Sum-Calculation									
Nitrate and Nitrite Sum	ND		0.10		mg/L	1	02/21/2013 1200	02/21/2013 1732	EW
ICP Total Metals-E200.7									
Arsenic	ND		40		ug/L	1	02/25/2013 1015	02/26/2013 1139	RAD
Barium	57		50		ug/L	1	02/25/2013 1015	02/26/2013 1139	RAD
Beryllium	ND		2.0		ug/L	1	02/25/2013 1015	02/26/2013 1139	RAD
Cadmium	ND		2.0		ug/L	1	02/25/2013 1015	02/26/2013 1139	RAD
Calcium	9800		4000		ug/L	1	02/25/2013 1015	02/26/2013 1138	RAD
Chromium	ND		30		ug/L	1	02/25/2013 1015	02/26/2013 1139	RAD
Copper	44		20		ug/L	1	02/25/2013 1015	02/26/2013 1139	RAD
Magnesium	ND		3000		ug/L	1	02/25/2013 1015	02/26/2013 1138	RAD
Nickel	ND		50		ug/L	1	02/25/2013 1015	02/26/2013 1139	RAD
Zinc	190		40		ug/L	1	02/25/2013 1015	02/26/2013 1139	RAD
ICP/MS Total Metals-E200.8									
Antimony	2.0		0.50		ug/L	1	02/28/2013 0935	03/01/2013 1150	RAD
Lead	12		0.50		ug/L	1	02/28/2013 0935	03/01/2013 1150	RAD
Selenium	1.7		13	D5	ug/L	5	02/28/2013 0935	03/05/2013 1032	RAD
Silver	0.10	0.0054	0.50	E4	ug/L	1	02/28/2013 0935	03/01/2013 1150	RAD
Thallium	0.018		0.50		ug/L	1	02/28/2013 0935	03/01/2013 1150	RAD
CVAA Total Mercury-E245.1									
Mercury	ND	0.032	1.0	E8	ug/L	1	03/01/2013 0930	03/01/2013 1531	RAD
Anions by Ion Chromatography-E300									
Nitrogen, Nitrate (As N)	ND		1.0		mg/L	1	02/21/2013 1200	02/21/2013 1732	EW
Nitrogen, Nitrite (As N)	ND		0.10		mg/L	1	02/21/2013 1200	02/21/2013 1732	EW
Phosphorus, Dissolved Orthophosphate (As P)	ND		0.50	C4	mg/L	1	02/22/2013 1300	02/22/2013 1418	EW
Total Phosphorous as P-H8190									
Total Phosphorus (as P)	0.16		0.10		mg/L	1	03/04/2013 1315	03/04/2013 1650	AC

Turner Laboratories, Inc.

Date: 03/21/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13B0610
Lab Sample ID: 13B0610-01

Client Sample ID: Composite
Collection Date/Time: 02/20/2013 1220
Matrix: Storm Water
Order Name: Site #3

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Chemical Oxygen Demand-Hach 8000									
Chemical Oxygen Demand	130		20		mg/L	1	02/28/2013 1000	02/28/2013 1700	EW
Total Kjeldahl Nitrogen-PAI-DK01									
Nitrogen, Total Kjeldahl	1.3		0.50		mg/L	1	02/28/2013 0900	03/04/2013 1545	EW
Total Dissolved Solids (Residue, Filterable)-SM2540 C									
Total Dissolved Solids (Residue, Filterable)	63		20		mg/L	1	02/22/2013 1430	02/26/2013 1510	AC
Total Suspended Solids (Residue, Non-Filterable)-SM2540 D									
Total Suspended Solids	59		10		mg/L	1	02/22/2013 1334	02/25/2013 1720	AC
Ammonia as N-SM4500-NH3 B,C									
Nitrogen, Ammonia (As N)	0.63		0.50		mg/L	1	02/28/2013 0915	02/28/2013 1545	EW
BOD, 5 day-SM5210 B									
Biochemical Oxygen Demand	15		2.0		mg/L	1	02/21/2013 1645	02/26/2013 1645	AC
Organochlorine Pesticides-SW8081A									
4,4´-DDD	ND		0.10		ug/L	1	02/27/2013 0815	03/04/2013 1717	MD
4,4´-DDE	ND		0.10		ug/L	1	02/27/2013 0815	03/04/2013 1717	MD
4,4´-DDT	ND		0.10		ug/L	1	02/27/2013 0815	03/04/2013 1717	MD
Aldrin	ND		0.10		ug/L	1	02/27/2013 0815	03/04/2013 1717	MD
alpha-BHC	ND		0.10		ug/L	1	02/27/2013 0815	03/04/2013 1717	MD
alpha-Chlordane	ND		0.10		ug/L	1	02/27/2013 0815	03/04/2013 2141	MD
beta-BHC	ND		0.10		ug/L	1	02/27/2013 0815	03/04/2013 1717	MD
Chlordane	0.0			T2	ug/L	1	02/27/2013 0815	03/04/2013 1717	MD
delta-BHC	ND		0.10		ug/L	1	02/27/2013 0815	03/04/2013 1717	MD
Dieldrin	ND		0.10		ug/L	1	02/27/2013 0815	03/04/2013 1717	MD
Endosulfan I	ND		0.10		ug/L	1	02/27/2013 0815	03/04/2013 1717	MD
Endosulfan II	ND		0.10		ug/L	1	02/27/2013 0815	03/04/2013 1717	MD
Endosulfan sulfate	ND		0.10		ug/L	1	02/27/2013 0815	03/04/2013 1717	MD
Endrin	ND		0.10		ug/L	1	02/27/2013 0815	03/04/2013 1717	MD

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13B0610
Lab Sample ID: 13B0610-01
Client Sample ID: Composite
Collection Date/Time: 02/20/2013 1220
Matrix: Storm Water
Order Name: Site #3

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Endrin aldehyde	ND		0.10		ug/L	1	02/27/2013 0815	03/04/2013 1717	MD
Endrin ketone	ND		0.10		ug/L	1	02/27/2013 0815	03/04/2013 1717	MD
gamma-BHC	ND		0.10		ug/L	1	02/27/2013 0815	03/04/2013 1717	MD
gamma-Chlordane	ND		0.10		ug/L	1	02/27/2013 0815	03/04/2013 2141	MD
Heptachlor	ND		0.10		ug/L	1	02/27/2013 0815	03/04/2013 1717	MD
Heptachlor epoxide	ND		0.10		ug/L	1	02/27/2013 0815	03/04/2013 1717	MD
Methoxychlor	ND		0.10		ug/L	1	02/27/2013 0815	03/04/2013 1717	MD
Toxaphene	ND		1.0		ug/L	1	02/27/2013 0815	03/04/2013 1717	MD
Surr: Decachlorobiphenyl	*69*	*51.1-138.5*			*%REC*	*1*	*02/27/2013 0815*	*03/04/2013 1717*	*MD*
Surr: Tetrachloro-m-xylene	*93*	*39.1-120*			*%REC*	*1*	*02/27/2013 0815*	*03/04/2013 1717*	*MD*
PCBs-SW8082									
Aroclor 1016	ND		0.98		ug/L	1	02/21/2013 1514	02/25/2013 2328	MD
Aroclor 1221	ND		0.98		ug/L	1	02/21/2013 1514	02/25/2013 2328	MD
Aroclor 1232	ND		0.98		ug/L	1	02/21/2013 1514	02/25/2013 2328	MD
Aroclor 1242	ND		0.98		ug/L	1	02/21/2013 1514	02/25/2013 2328	MD
Aroclor 1248	ND		0.98		ug/L	1	02/21/2013 1514	02/25/2013 2328	MD
Aroclor 1254	ND		0.98		ug/L	1	02/21/2013 1514	02/25/2013 2328	MD
Aroclor 1260	ND		0.98		ug/L	1	02/21/2013 1514	02/25/2013 2328	MD
Surr: Decachlorobiphenyl	*97*	*52.7-155.1*			*%REC*	*1*	*02/21/2013 1514*	*02/25/2013 2328*	*MD*
Semivolatile Organic Compounds-SW8270C									
1,2,4-Trichlorobenzene	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
1,2-Dichlorobenzene	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
1,2-Diphenylhydrazine	ND	5.1	20	E8	ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
1,3-Dichlorobenzene	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
1,4-Dichlorobenzene	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
2,4,5-Trichlorophenol	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
2,4,6-Trichlorophenol	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
2,4-Dichlorophenol	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
2,4-Dimethylphenol	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
2,4-Dinitrophenol	ND		100		ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
2,4-Dinitrotoluene	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
2,6-Dinitrotoluene	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
2-Chloronaphthalene	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
2-Chlorophenol	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
2-Methylnaphthalene	ND		10		ug/L	2	02/26/2013 0814	03/14/2013 0506	MD

Turner Laboratories, Inc.

Date: 03/21/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13B0610
Lab Sample ID: 13B0610-01

Client Sample ID: Composite
Collection Date/Time: 02/20/2013 1220
Matrix: Storm Water
Order Name: Site #3

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
2-Methylphenol	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
2-Nitroaniline	ND		41		ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
2-Nitrophenol	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
3,3´-Dichlorobenzidine	ND	2.0	41	E8	ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
3,4-Methylphenol	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
3-Nitroaniline	ND		41	V1	ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
4,6-Dinitro-2-methylphenol	ND		41		ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
4-Bromophenyl phenyl ether	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
4-Chloro-3-methylphenol	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
4-Chloroaniline	ND		41		ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
4-Chlorophenyl phenyl ether	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
4-Methylphenol	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
4-Nitroaniline	ND		41		ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
4-Nitrophenol	ND		100		ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
Acenaphthene	ND		10		ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
Acenaphthylene	ND		10		ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
Aniline	ND		41		ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
Anthracene	ND		10		ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
Benzo[a]anthracene	ND	1.2	10	E8	ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
Benzo[a]pyrene	ND	1.5	10	E8	ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
Benzo[b,k]fluoranthene	ND	3.3	20	E8	ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
Benzo[g,h,i]perylene	ND		10		ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
Benzoic acid	ND		100		ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
Benzyl alcohol	ND		10		ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
Bis(2-chloroethoxy)methane	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
Bis(2-chloroethyl)ether	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
Bis(2-chloroisopropyl)ether	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
Bis(2-ethylhexyl)phthalate	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
Butyl benzyl phthalate	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
Chrysene	ND		10		ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
Dibenz[a,h]anthracene	ND	1.9	10	E8	ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
Dibenzofuran	ND		10		ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
Diethyl phthalate	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
Dimethyl phthalate	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
Di-n-butyl phthalate	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
Di-n-octyl phthalate	ND		20		ug/L	2	02/26/2013 0814	03/18/2013 2335	MD
Fluoranthene	ND		10		ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
Fluorene	ND		10		ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
Hexachlorobenzene	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
Hexachlorobutadiene	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
Hexachlorocyclopentadiene	ND		20	V1	ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
Hexachloroethane	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0506	MD

Turner Laboratories, Inc.

Date: 03/21/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13B0610
Lab Sample ID: 13B0610-01

Client Sample ID: Composite
Collection Date/Time: 02/20/2013 1220
Matrix: Storm Water
Order Name: Site #3

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Indeno[1,2,3-cd]pyrene	ND	1.7	10	E8	ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
Isophorone	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
Naphthalene	ND		10		ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
Nitrobenzene	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
N-Nitrosodimethylamine	ND	3.3	20	E8	ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
N-Nitrosodiphenylamine	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
N-Nitrosodipropylamine	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
Pentachlorophenol	ND	3.0	61	E8	ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
Phenanthrene	ND		10		ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
Phenol	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
Pyrene	ND		10		ug/L	2	02/26/2013 0814	03/14/2013 0506	MD
Surr: 2,4,6-Tribromophenol	*83*	*61.48-125.9*			*%REC*	*2*	*02/26/2013 0814*	*03/14/2013 506*	*MD*
Surr: 2-Fluorobiphenyl	*85*	*41.02-91.53*			*%REC*	*2*	*02/26/2013 0814*	*03/14/2013 506*	*MD*
Surr: 2-Fluorophenol	*50*	*38.35-57.43*			*%REC*	*2*	*02/26/2013 0814*	*03/14/2013 506*	*MD*
Surr: 4-Terphenyl-d14	*71*	*14.66-124.1*			*%REC*	*2*	*02/26/2013 0814*	*03/14/2013 506*	*MD*
Surr: Nitrobenzene-d5	*64*	*49.49-85.19*			*%REC*	*2*	*02/26/2013 0814*	*03/14/2013 506*	*MD*
Surr: Phenol-d6	*65*	*28.68-69.45*			*%REC*	*2*	*02/26/2013 0814*	*03/14/2013 506*	*MD*

Turner Laboratories, Inc.

Date: 03/21/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13B0610
Lab Sample ID: 13B0610-02

Client Sample ID: Grab
Collection Date/Time: 02/20/2013 1220
Matrix: Storm Water
Order Name: Site #3

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
N-Hexane Extractable Material (SGT-HEM)-E 1664A									
Total Petroleum Hydrocarbons	ND		5.00		mg/L	1	03/06/2013 1045	03/06/2013 1620	AC
N-Hexane Extractable Material (HEM)-E1664A									
Oil & Grease	5.90		5.00		mg/L	1	02/25/2013 0845	02/25/2013 1715	AC
Volatile Organic Compounds by GCMS-EPA 624									
1,1,1-Trichloroethane	ND		2.0	T2	ug/L	1	02/20/2013 1643	02/21/2013 1543	KP
1,1,2,2-Tetrachloroethane	ND		2.0		ug/L	1	02/20/2013 1643	02/21/2013 1543	KP
1,1,2-Trichloroethane	ND		2.0		ug/L	1	02/20/2013 1643	02/21/2013 1543	KP
1,1-Dichloroethane	ND		2.0		ug/L	1	02/20/2013 1643	02/21/2013 1543	KP
1,1-Dichloroethene	ND		2.0		ug/L	1	02/20/2013 1643	02/21/2013 1543	KP
1,2,4-Trimethylbenzene	ND		2.0	T2	ug/L	1	02/20/2013 1643	02/21/2013 1543	KP
1,2-Dichlorobenzene	ND		2.0		ug/L	1	02/20/2013 1643	02/21/2013 1543	KP
1,2-Dichloroethane	ND		2.0		ug/L	1	02/20/2013 1643	02/21/2013 1543	KP
1,2-Dichloropropane	ND		2.0		ug/L	1	02/20/2013 1643	02/21/2013 1543	KP
1,3,5-Trimethylbenzene	ND		2.0	T2	ug/L	1	02/20/2013 1643	02/21/2013 1543	KP
1,3-Dichlorobenzene	ND		2.0		ug/L	1	02/20/2013 1643	02/21/2013 1543	KP
1,4-Dichlorobenzene	ND		2.0		ug/L	1	02/20/2013 1643	02/21/2013 1543	KP
2-Chloroethylvinylether	ND		10		ug/L	1	02/20/2013 1643	02/21/2013 1543	KP
Acetone	11		10	T2	ug/L	1	02/20/2013 1643	02/21/2013 1543	KP
Acrolein	ND		10		ug/L	1	02/20/2013 1643	02/21/2013 1543	KP
Acrylonitrile	ND		10		ug/L	1	02/20/2013 1643	02/21/2013 1543	KP
Benzene	ND		2.0		ug/L	1	02/20/2013 1643	02/21/2013 1543	KP
Bromodichloromethane	ND		2.0		ug/L	1	02/20/2013 1643	02/21/2013 1543	KP
Bromoform	ND		2.0		ug/L	1	02/20/2013 1643	02/21/2013 1543	KP
Bromomethane	ND		2.0		ug/L	1	02/20/2013 1643	02/21/2013 1543	KP
Carbon tetrachloride	ND		2.0		ug/L	1	02/20/2013 1643	02/21/2013 1543	KP
Chlorobenzene	ND		2.0		ug/L	1	02/20/2013 1643	02/21/2013 1543	KP
Chloroethane	ND		5.0		ug/L	1	02/20/2013 1643	02/21/2013 1543	KP
Chloroform	ND		2.0		ug/L	1	02/20/2013 1643	02/21/2013 1543	KP
Chloromethane	ND		5.0		ug/L	1	02/20/2013 1643	02/21/2013 1543	KP
cis-1,3-Dichloropropene	ND		2.0		ug/L	1	02/20/2013 1643	02/21/2013 1543	KP
Dibromochloromethane	ND		2.0		ug/L	1	02/20/2013 1643	02/21/2013 1543	KP
Dichlorodifluoromethane	ND		5.0	T2	ug/L	1	02/20/2013 1643	02/21/2013 1543	KP
Ethylbenzene	ND		2.0		ug/L	1	02/20/2013 1643	02/21/2013 1543	KP
Methyl Isobutyl Ketone (MIBK)	ND		10	T2	ug/L	1	02/20/2013 1643	02/21/2013 1543	KP
Methylene chloride	ND		10		ug/L	1	02/20/2013 1643	02/21/2013 1543	KP
Tetrachloroethene	ND		2.0		ug/L	1	02/20/2013 1643	02/21/2013 1543	KP

Turner Laboratories, Inc.

Date: 03/21/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13B0610
Lab Sample ID: 13B0610-02

Client Sample ID: Grab
Collection Date/Time: 02/20/2013 1220
Matrix: Storm Water
Order Name: Site #3

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Tetrahydrofuran	ND		10	T2	ug/L	1	02/20/2013 1643	02/21/2013 1543	KP
Toluene	ND		2.0		ug/L	1	02/20/2013 1643	02/21/2013 1543	KP
trans-1,2-Dichloroethene	ND		2.0		ug/L	1	02/20/2013 1643	02/21/2013 1543	KP
trans-1,3-Dichloropropene	ND		2.0		ug/L	1	02/20/2013 1643	02/21/2013 1543	KP
Trichloroethene	ND		2.0		ug/L	1	02/20/2013 1643	02/21/2013 1543	KP
Trichlorofluoromethane	ND		5.0		ug/L	1	02/20/2013 1643	02/21/2013 1543	KP
Vinyl chloride	ND		2.0		ug/L	1	02/20/2013 1643	02/21/2013 1543	KP
Xylenes, Total	ND		6.0	T2	ug/L	1	02/20/2013 1643	02/21/2013 1543	KP
Surr: 1,2-Dichloroethane-d4	*108*	*70-130*			*%REC*	*1*	*02/20/2013 1643*	*02/21/2013 1543*	*KP*
Surr: 4-Bromofluorobenzene	*87*	*70-130*			*%REC*	*1*	*02/20/2013 1643*	*02/21/2013 1543*	*KP*
Surr: Fluorobenzene	*100*	*70-130*			*%REC*	*1*	*02/20/2013 1643*	*02/21/2013 1543*	*KP*
Cyanide-SM4500-CN BE									
Cyanide	ND		100		ug/L	1	02/25/2013 0900	02/26/2013 1715	EW
pH-SM4500-H+ B									
pH (pH Units)	7.0		0.0	H5	-	1	02/21/2013 1000	02/21/2013 1005	AC
Temperature (°C)	19			H5	-	1	02/21/2013 1000	02/21/2013 1005	AC

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13B0610
Date Received: 02/21/2013

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302295 - E 200.2 ICP										
Blank (1302295-BLK1)				Prepared: 02/25/2013 Analyzed: 02/26/2013						
Arsenic	ND	40	ug/L							
Barium	ND	50	ug/L							
Beryllium	ND	2.0	ug/L							
Cadmium	ND	2.0	ug/L							
Calcium	ND	4000	ug/L							
Chromium	ND	30	ug/L							
Copper	ND	20	ug/L							
Magnesium	ND	3000	ug/L							
Nickel	ND	50	ug/L							
Zinc	ND	40	ug/L							
LCS (1302295-BS1)				Prepared: 02/25/2013 Analyzed: 02/26/2013						
Arsenic	1910	40	ug/L	2000		95	85-115			
Barium	1900	50	ug/L	2000		97	85-115			
Beryllium	48	2.0	ug/L	50.00		96	85-115			
Cadmium	49	2.0	ug/L	50.00		98	85-115			
Calcium	10000	4000	ug/L	10000		100	85-115			
Chromium	200	30	ug/L	200.0		99	85-115			
Copper	240	20	ug/L	250.0		97	85-115			
Magnesium	10000	3000	ug/L	10000		101	85-115			
Nickel	490	50	ug/L	500.0		97	85-115			
Zinc	490	40	ug/L	500.0		98	85-115			
LCS Dup (1302295-BSD1)				Prepared: 02/25/2013 Analyzed: 02/26/2013						
Arsenic	1950	40	ug/L	2000		98	85-115	2	20	
Barium	2000	50	ug/L	2000		99	85-115	2	20	
Beryllium	49	2.0	ug/L	50.00		98	85-115	2	20	
Cadmium	50	2.0	ug/L	50.00		100	85-115	2	20	
Calcium	10000	4000	ug/L	10000		102	85-115	2	20	
Chromium	200	30	ug/L	200.0		101	85-115	2	20	
Copper	250	20	ug/L	250.0		100	85-115	2	20	
Magnesium	10000	3000	ug/L	10000		103	85-115	2	20	
Nickel	500	50	ug/L	500.0		99	85-115	2	20	
Zinc	500	40	ug/L	500.0		100	85-115	2	20	
Matrix Spike (1302295-MS1)	**Source: 13B0420-01**			Prepared: 02/25/2013 Analyzed: 02/26/2013						
Arsenic	1920	40	ug/L	2000	7.26	96	70-130			
Barium	1900	50	ug/L	2000	42	92	70-130			
Beryllium	47	2.0	ug/L	50.00	ND	95	70-130			
Cadmium	46	2.0	ug/L	50.00	0.85	91	70-130			
Calcium	33000	4000	ug/L	10000	25000	81	70-130			
Chromium	190	30	ug/L	200.0	0.91	92	70-130			
Copper	260	20	ug/L	250.0	3.0	102	70-130			
Magnesium	12000	3000	ug/L	10000	2900	94	70-130			
Nickel	480	50	ug/L	500.0	5.6	95	70-130			
Zinc	490	40	ug/L	500.0	14	95	70-130			

Turner Laboratories, Inc.

Date: 03/21/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13B0610
Date Received: 02/21/2013

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302295 - E 200.2 ICP										
Matrix Spike (1302295-MS2)		**Source: 13B0598-01**		Prepared: 02/25/2013 Analyzed: 02/26/2013						
Arsenic	2100	40	ug/L	2000	21.6	104	70-130			
Barium	520	50	ug/L	2000	1.8	26	70-130			M2
Beryllium	43	2.0	ug/L	50.00	0.40	85	70-130			
Cadmium	53	2.0	ug/L	50.00	9.2	87	70-130			
Calcium	40000	4000	ug/L	10000	32000	87	70-130			
Chromium	180	30	ug/L	200.0	0.96	91	70-130			
Copper	270	20	ug/L	250.0	5.0	105	70-130			
Magnesium	11000	3000	ug/L	10000	1700	95	70-130			
Nickel	530	50	ug/L	500.0	30	100	70-130			
Zinc	520	40	ug/L	500.0	1.5	103	70-130			
Batch 1302340 - E 200.8 ICP/MS										
Blank (1302340-BLK1)				Prepared & Analyzed: 02/28/2013						
Antimony	0.0060	0.50	ug/L							
Lead	ND	0.50	ug/L							
Selenium	ND	2.5	ug/L							
Silver	ND	0.50	ug/L							
Thallium	ND	0.50	ug/L							
LCS (1302340-BS1)				Prepared & Analyzed: 02/28/2013						
Antimony	50	0.50	ug/L	50.00		99	85-115			
Lead	48	0.50	ug/L	50.00		95	85-115			
Selenium	260	2.5	ug/L	250.0		103	85-115			
Silver	48	0.50	ug/L	50.00		96	85-115			
Thallium	47	0.50	ug/L	50.00		95	85-115			
LCS Dup (1302340-BSD1)				Prepared & Analyzed: 02/28/2013						
Antimony	50	0.50	ug/L	50.00		99	85-115	0.4	20	
Lead	48	0.50	ug/L	50.00		97	85-115	2	20	
Selenium	260	2.5	ug/L	250.0		104	85-115	0.9	20	
Silver	48	0.50	ug/L	50.00		96	85-115	0.4	20	
Thallium	48	0.50	ug/L	50.00		96	85-115	0.6	20	
Matrix Spike (1302340-MS1)		**Source: 13B0633-02**		Prepared: 02/28/2013 Analyzed: 03/01/2013						
Antimony	46	0.50	ug/L	50.00	0.14	92	70-130			
Lead	51	0.50	ug/L	50.00	0.49	100	70-130			
Selenium	250	2.5	ug/L	250.0	0.70	101	70-130			
Silver	35	0.50	ug/L	50.00	0.022	71	70-130			
Thallium	49	0.50	ug/L	50.00	ND	99	70-130			
Batch 1303005 - E 245.1										
Blank (1303005-BLK1)				Prepared & Analyzed: 03/01/2013						
Mercury	ND	1.0	ug/L							
LCS (1303005-BS1)				Prepared & Analyzed: 03/01/2013						
Mercury	5.2	1.0	ug/L	5.000		105	85-115			

Turner Laboratories, Inc.

Date: 03/21/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13B0610
Date Received: 02/21/2013

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1303005 - E 245.1										
LCS Dup (1303005-BSD1)				Prepared & Analyzed: 03/01/2013						
Mercury	5.2	1.0	ug/L	5.000		103	85-115	2	20	
Matrix Spike (1303005-MS1)		**Source: 13B0703-01**		Prepared & Analyzed: 03/01/2013						
Mercury	5.3	1.0	ug/L	5.000	ND	106	85-115			
Matrix Spike Dup (1303005-MSD1)		**Source: 13B0703-01**		Prepared & Analyzed: 03/01/2013						
Mercury	5.3	1.0	ug/L	5.000	ND	105	85-115	1	10	

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13B0610
Date Received: 02/21/2013

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302279 - GEN CHEM										
Duplicate (1302279-DUP1)		**Source: 13B0417-01**		Prepared: 02/22/2013 Analyzed: 02/25/2013						
Total Suspended Solids	37	10	mg/L		38			3	5	
Duplicate (1302279-DUP2)		**Source: 13B0418-01**		Prepared: 02/22/2013 Analyzed: 02/25/2013						
Total Suspended Solids	82	10	mg/L		83			1	5	
Batch 1302291 - GEN CHEM										
Blank (1302291-BLK1)				Prepared: 02/28/2013 Analyzed: 03/04/2013						
Nitrogen, Total Kjeldahl	ND	0.50	mg/L							
LCS (1302291-BS1)				Prepared: 02/28/2013 Analyzed: 03/04/2013						
Nitrogen, Total Kjeldahl	5.4	0.50	mg/L	5.000		108	80-120			
LCS Dup (1302291-BSD1)				Prepared: 02/28/2013 Analyzed: 03/04/2013						
Nitrogen, Total Kjeldahl	5.1	0.50	mg/L	5.000		102	80-120	6	20	
Matrix Spike (1302291-MS1)		**Source: 13B0606-01**		Prepared: 02/28/2013 Analyzed: 03/04/2013						
Nitrogen, Total Kjeldahl	5.1	0.50	mg/L	5.000	0.35	94	80-120			
Matrix Spike (1302291-MS2)		**Source: 13B0623-01**		Prepared: 02/28/2013 Analyzed: 03/04/2013						
Nitrogen, Total Kjeldahl	4.2	0.50	mg/L	5.000	0.53	74	80-120			M7
Matrix Spike Dup (1302291-MSD1)		**Source: 13B0606-01**		Prepared: 02/28/2013 Analyzed: 03/04/2013						
Nitrogen, Total Kjeldahl	4.9	0.50	mg/L	5.000	0.35	92	80-120	2	20	
Matrix Spike Dup (1302291-MSD2)		**Source: 13B0623-01**		Prepared: 02/28/2013 Analyzed: 03/04/2013						
Nitrogen, Total Kjeldahl	4.4	0.50	mg/L	5.000	0.53	78	80-120	4	20	M7
Batch 1302293 - SPECTRO PREP										
Blank (1302293-BLK1)				Prepared: 02/25/2013 Analyzed: 02/26/2013						
Cyanide	ND	100	ug/L							
LCS (1302293-BS1)				Prepared: 02/25/2013 Analyzed: 02/26/2013						
Cyanide	2000	100	ug/L	2000		101	90-110			
LCS Dup (1302293-BSD1)				Prepared: 02/25/2013 Analyzed: 02/26/2013						
Cyanide	2000	100	ug/L	2000		98	90-110	3	20	
Matrix Spike (1302293-MS1)		**Source: 13B0631-03**		Prepared: 02/25/2013 Analyzed: 02/26/2013						
Cyanide	1700	100	ug/L	2000	ND	83	70-130			
Matrix Spike Dup (1302293-MSD1)		**Source: 13B0631-03**		Prepared: 02/25/2013 Analyzed: 02/26/2013						
Cyanide	1500	100	ug/L	2000	ND	77	70-130	7	20	
Batch 1302300 - GEN CHEM										
Blank (1302300-BLK1)				Prepared & Analyzed: 02/25/2013						
Oil & Grease	ND	5.00	mg/L							
LCS (1302300-BS1)				Prepared & Analyzed: 02/25/2013						
Oil & Grease	36.2	5.00	mg/L	40.00		91	78-114			

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13B0610
Date Received: 02/21/2013

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302300 - GEN CHEM										
LCS Dup (1302300-BSD1)				Prepared & Analyzed: 02/25/2013						
Oil & Grease	35.2	5.00	mg/L	40.00		88	78-114	3	18	
Matrix Spike (1302300-MS1)		**Source: 13B0411-02**		Prepared & Analyzed: 02/25/2013						
Oil & Grease	50.2	5.00	mg/L	40.00	14.5	89	78-114			
Batch 1302301 - GEN CHEM										
Blank (1302301-BLK1)				Prepared: 02/21/2013 Analyzed: 02/26/2013						
Biochemical Oxygen Demand	ND	2.0	mg/L							
LCS (1302301-BS1)				Prepared: 02/21/2013 Analyzed: 02/26/2013						
Biochemical Oxygen Demand	180		mg/L	198.0		91	85-115			
Batch 1302302 - GEN CHEM										
Duplicate (1302302-DUP1)		**Source: 13B0610-02**		Prepared & Analyzed: 02/21/2013						
pH (pH Units)	7.0	0.0	-		7.0			0.1	200	
Temperature (°C)	19		-		19			0.5	200	
Batch 1302318 - GEN CHEM										
Duplicate (1302318-DUP1)		**Source: 13B0529-01**		Prepared: 02/22/2013 Analyzed: 02/27/2013						
Total Dissolved Solids (Residue, Filterable)	1200	20	mg/L		1200			0.2	5	
Batch 1302331 - GEN CHEM										
Blank (1302331-BLK1)				Prepared & Analyzed: 02/28/2013						
Nitrogen, Ammonia (As N)	ND	0.50	mg/L							
LCS (1302331-BS1)				Prepared & Analyzed: 02/28/2013						
Nitrogen, Ammonia (As N)	5.2	0.50	mg/L	5.000		105	90-110			
LCS Dup (1302331-BSD1)				Prepared & Analyzed: 02/28/2013						
Nitrogen, Ammonia (As N)	5.0	0.50	mg/L	5.000		99	90-110	5	10	
Matrix Spike (1302331-MS1)		**Source: 13B0562-05**		Prepared & Analyzed: 02/28/2013						
Nitrogen, Ammonia (As N)	4.8	0.50	mg/L	5.000	0.18	93	70-130			
Matrix Spike (1302331-MS2)		**Source: 13B0679-03**		Prepared & Analyzed: 02/28/2013						
Nitrogen, Ammonia (As N)	4.9	0.50	mg/L	5.000	0.40	90	70-130			
Matrix Spike Dup (1302331-MSD1)		**Source: 13B0562-05**		Prepared & Analyzed: 02/28/2013						
Nitrogen, Ammonia (As N)	5.2	0.50	mg/L	5.000	0.18	100	70-130	7	20	
Matrix Spike Dup (1302331-MSD2)		**Source: 13B0679-03**		Prepared & Analyzed: 02/28/2013						
Nitrogen, Ammonia (As N)	4.8	0.50	mg/L	5.000	0.40	89	70-130	1	20	
Batch 1302332 - SPECTRO PREP										
Blank (1302332-BLK1)				Prepared & Analyzed: 02/28/2013						
Chemical Oxygen Demand	ND	20	mg/L							

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302332 - SPECTRO PREP										
LCS (1302332-BS1)				Prepared & Analyzed: 02/28/2013						
Chemical Oxygen Demand	500	20	mg/L	500.0		100	70-130			
LCS Dup (1302332-BSD1)				Prepared & Analyzed: 02/28/2013						
Chemical Oxygen Demand	520	20	mg/L	500.0		103	70-130	3	20	
Matrix Spike (1302332-MS1)		**Source: 13B0427-01**		Prepared & Analyzed: 02/28/2013						
Chemical Oxygen Demand	810	20	mg/L	500.0	320	97	70-130			
Matrix Spike Dup (1302332-MSD1)		**Source: 13B0427-01**		Prepared & Analyzed: 02/28/2013						
Chemical Oxygen Demand	830	20	mg/L	500.0	320	102	70-130	3	20	
Batch 1303053 - SPECTRO PREP										
Blank (1303053-BLK1)				Prepared & Analyzed: 03/04/2013						
Total Phosphorus (as P)	ND	0.10	mg/L							
LCS (1303053-BS1)				Prepared & Analyzed: 03/04/2013						
Total Phosphorus (as P)	0.49	0.10	mg/L	0.5000		98	90-110			
LCS Dup (1303053-BSD1)				Prepared & Analyzed: 03/04/2013						
Total Phosphorus (as P)	0.50	0.10	mg/L	0.5000		100	90-110	2	10	
Matrix Spike (1303053-MS1)		**Source: 13B0610-01**		Prepared & Analyzed: 03/04/2013						
Total Phosphorus (as P)	0.64	0.10	mg/L	0.5000	0.16	96	85-115			
Matrix Spike Dup (1303053-MSD1)		**Source: 13B0610-01**		Prepared & Analyzed: 03/04/2013						
Total Phosphorus (as P)	0.65	0.10	mg/L	0.5000	0.16	98	85-115	2	15	
Batch 1303072 - GEN CHEM										
Blank (1303072-BLK1)				Prepared & Analyzed: 03/06/2013						
Total Petroleum Hydrocarbons	ND	5.00	mg/L							
LCS (1303072-BS1)				Prepared & Analyzed: 03/06/2013						
Total Petroleum Hydrocarbons	17.7	5.00	mg/L	20.00		89	64-132			
LCS Dup (1303072-BSD1)				Prepared & Analyzed: 03/06/2013						
Total Petroleum Hydrocarbons	17.8	5.00	mg/L	20.00		89	64-132	0.6	34	
Matrix Spike (1303072-MS1)		**Source: 13B0610-02**		Prepared & Analyzed: 03/06/2013						
Total Petroleum Hydrocarbons	17.5	5.00	mg/L	20.00	ND	88	64-132			

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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302274 - SW 846 3520C										
Blank (1302274-BLK1)				Prepared: 02/21/2013 Analyzed: 02/25/2013						
Aroclor 1016	ND	1.0	ug/L							
Aroclor 1221	ND	1.0	ug/L							
Aroclor 1232	ND	1.0	ug/L							
Aroclor 1242	ND	1.0	ug/L							
Aroclor 1248	ND	1.0	ug/L							
Aroclor 1254	ND	1.0	ug/L							
Aroclor 1260	ND	1.0	ug/L							
Surrogate: Decachlorobiphenyl	*2.00*		*ug/L*	*2.000*		*100*	*52.7-155.1*			
LCS (1302274-BS1)				Prepared: 02/21/2013 Analyzed: 02/25/2013						
Aroclor 1016	8.8	1.0	ug/L	10.00		88	65.2-120.7			
Aroclor 1254	ND	1.0	ug/L				70-130			
Aroclor 1260	9.4	1.0	ug/L	10.00		94	65.3-133.7			
Surrogate: Decachlorobiphenyl	*1.97*		*ug/L*	*2.000*		*99*	*52.7-155.1*			
LCS Dup (1302274-BSD1)				Prepared: 02/21/2013 Analyzed: 02/25/2013						
Aroclor 1016	9.0	1.0	ug/L	10.00		90	65.2-120.7	2	30	
Aroclor 1254	ND	1.0	ug/L				70-130		30	
Aroclor 1260	9.5	1.0	ug/L	10.00		95	65.3-133.7	1	30	
Surrogate: Decachlorobiphenyl	*1.98*		*ug/L*	*2.000*		*99*	*52.7-155.1*			
Matrix Spike (1302274-MS1)		**Source: 13B0612-01**		Prepared: 02/21/2013 Analyzed: 02/25/2013						
Aroclor 1016	9.5	1.0	ug/L	10.03	ND	94	70-130			
Aroclor 1254	ND	1.0	ug/L		0.0		70-130			
Aroclor 1260	9.0	1.0	ug/L	10.03	ND	89	70-130			
Surrogate: Decachlorobiphenyl	*1.94*		*ug/L*	*2.006*		*96*	*52.7-155.1*			
Matrix Spike Dup (1302274-MSD1)		**Source: 13B0612-01**		Prepared: 02/21/2013 Analyzed: 02/25/2013						
Aroclor 1016	9.9	1.0	ug/L	10.25	ND	96	70-130	4	30	
Aroclor 1254	ND	1.0	ug/L		0.0		70-130		30	
Aroclor 1260	9.3	1.0	ug/L	10.25	ND	91	70-130	4	30	
Surrogate: Decachlorobiphenyl	*1.99*		*ug/L*	*2.049*		*97*	*52.7-155.1*			
Batch 1302297 - SW 846 3535										

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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302297 - SW 846 3535										
Blank (1302297-BLK1)				Prepared: 02/26/2013 Analyzed: 03/13/2013						
1,2,4-Trichlorobenzene	ND	10	ug/L							
1,2-Dichlorobenzene	ND	10	ug/L							
1,2-Diphenylhydrazine	ND	10	ug/L							
1,3-Dichlorobenzene	ND	10	ug/L							
1,4-Dichlorobenzene	ND	10	ug/L							
2,4,5-Trichlorophenol	ND	10	ug/L							
2,4,6-Trichlorophenol	ND	10	ug/L							
2,4-Dichlorophenol	ND	10	ug/L							
2,4-Dimethylphenol	ND	10	ug/L							
2,4-Dinitrophenol	ND	50	ug/L							
2,4-Dinitrotoluene	ND	10	ug/L							
2,6-Dinitrotoluene	ND	10	ug/L							
2-Chloronaphthalene	ND	10	ug/L							
2-Chlorophenol	ND	10	ug/L							
2-Methylnaphthalene	ND	5.0	ug/L							
2-Methylphenol	ND	10	ug/L							
2-Nitroaniline	ND	20	ug/L							
2-Nitrophenol	ND	10	ug/L							
3,3´-Dichlorobenzidine	ND	20	ug/L							
3,4-Methylphenol	ND	10	ug/L							
3-Nitroaniline	ND	20	ug/L							
4,6-Dinitro-2-methylphenol	ND	20	ug/L							
4-Bromophenyl phenyl ether	ND	10	ug/L							
4-Chloro-3-methylphenol	ND	10	ug/L							
4-Chloroaniline	ND	20	ug/L							
4-Chlorophenyl phenyl ether	ND	10	ug/L							
4-Methylphenol	ND	10	ug/L							
4-Nitroaniline	ND	20	ug/L							
4-Nitrophenol	ND	50	ug/L							
Acenaphthene	ND	5.0	ug/L							
Acenaphthylene	ND	5.0	ug/L							
Aniline	ND	20	ug/L							
Anthracene	ND	5.0	ug/L							
Benzo[a]anthracene	ND	5.0	ug/L							
Benzo[a]pyrene	ND	5.0	ug/L							
Benzo[b,k]fluoranthene	ND	10	ug/L							
Benzo[g,h,i]perylene	ND	5.0	ug/L							
Benzoic acid	ND	50	ug/L							
Benzyl alcohol	ND	5.0	ug/L							
Bis(2-chloroethoxy)methane	ND	10	ug/L							
Bis(2-chloroethyl)ether	ND	10	ug/L							
Bis(2-chloroisopropyl)ether	ND	10	ug/L							
Bis(2-ethylhexyl)phthalate	ND	10	ug/L							
Butyl benzyl phthalate	ND	10	ug/L							
Chrysene	ND	5.0	ug/L							
Dibenz[a,h]anthracene	ND	5.0	ug/L							
Dibenzofuran	ND	5.0	ug/L							

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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302297 - SW 846 3535										
Blank (1302297-BLK1)				Prepared: 02/26/2013 Analyzed: 03/13/2013						
Diethyl phthalate	ND	10	ug/L							
Dimethyl phthalate	ND	10	ug/L							
Di-n-butyl phthalate	ND	10	ug/L							
Di-n-octyl phthalate	ND	10	ug/L							
Fluoranthene	ND	5.0	ug/L							
Fluorene	ND	5.0	ug/L							
Hexachlorobenzene	ND	10	ug/L							
Hexachlorobutadiene	ND	10	ug/L							
Hexachlorocyclopentadiene	ND	10	ug/L							
Hexachloroethane	ND	10	ug/L							
Indeno[1,2,3-cd]pyrene	ND	5.0	ug/L							
Isophorone	ND	10	ug/L							
Naphthalene	ND	5.0	ug/L							
Nitrobenzene	ND	10	ug/L							
N-Nitrosodimethylamine	ND	10	ug/L							
N-Nitrosodiphenylamine	ND	10	ug/L							
N-Nitrosodipropylamine	ND	10	ug/L							
Pentachlorophenol	ND	30	ug/L							
Phenanthrene	ND	5.0	ug/L							
Phenol	ND	10	ug/L							
Pyrene	ND	5.0	ug/L							
Surrogate: 2,4,6-Tribromophenol	*70.5*		*ug/L*	*100.0*		*71*	*61.48-125.96*			
Surrogate: 2-Fluorobiphenyl	*81.0*		*ug/L*	*100.0*		*81*	*41.02-91.53*			
Surrogate: 2-Fluorophenol	*45.8*		*ug/L*	*100.0*		*46*	*38.35-57.43*			
Surrogate: 4-Terphenyl-d14	*54.0*		*ug/L*	*100.0*		*54*	*14.66-124.11*			
Surrogate: Nitrobenzene-d5	*69.1*		*ug/L*	*100.0*		*69*	*49.49-85.19*			
Surrogate: Phenol-d6	*49.9*		*ug/L*	*100.0*		*50*	*28.68-69.45*			
LCS (1302297-BS1)				Prepared: 02/26/2013 Analyzed: 03/13/2013						
1,2,4-Trichlorobenzene	36	10	ug/L	50.00		73	28.14-85.64			
1,4-Dichlorobenzene	28	10	ug/L	50.00		57	27.79-64.15			
2,4-Dinitrotoluene	35	10	ug/L	50.00		70	39.27-79.35			
2-Chlorophenol	59	10	ug/L	100.0		59	24.62-79.98			
4-Chloro-3-methylphenol	59	10	ug/L	100.0		59	37.66-82.55			
4-Nitrophenol	67	50	ug/L	100.0		67	26.58-91.73			
Acenaphthene	33	5.0	ug/L	50.00		66	41.63-72.14			
N-Nitrosodipropylamine	36	10	ug/L	50.00		71	36.81-88.63			
Pentachlorophenol	71	30	ug/L	100.0		71	32.14-95.92			
Phenol	36	10	ug/L	100.0		36	7.96-52.41			
Pyrene	33	5.0	ug/L	50.00		67	41.65-82.75			
Surrogate: 2,4,6-Tribromophenol	*74.0*		*ug/L*	*100.0*		*74*	*32.57-112.08*			
Surrogate: 2-Fluorobiphenyl	*76.7*		*ug/L*	*100.0*		*77*	*36.69-77.45*			
Surrogate: 2-Fluorophenol	*46.4*		*ug/L*	*100.0*		*46*	*0-86.73*			
Surrogate: 4-Terphenyl-d14	*52.6*		*ug/L*	*100.0*		*53*	*37.21-81.06*			
Surrogate: Nitrobenzene-d5	*69.2*		*ug/L*	*100.0*		*69*	*36.8-79.16*			
Surrogate: Phenol-d6	*44.2*		*ug/L*	*100.0*		*44*	*0-56.2*			

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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302297 - SW 846 3535										
LCS Dup (1302297-BSD1)				Prepared: 02/26/2013 Analyzed: 03/13/2013						
1,2,4-Trichlorobenzene	42	10	ug/L	50.00		85	28.14-85.64	15	30	
1,4-Dichlorobenzene	32	10	ug/L	50.00		65	27.79-64.15	13	30	L1
2,4-Dinitrotoluene	39	10	ug/L	50.00		78	39.27-79.35	11	30	
2-Chlorophenol	67	10	ug/L	100.0		67	24.62-79.98	13	30	
4-Chloro-3-methylphenol	66	10	ug/L	100.0		66	37.66-82.55	12	30	
4-Nitrophenol	79	50	ug/L	100.0		79	26.58-91.73	16	30	
Acenaphthene	38	5.0	ug/L	50.00		75	41.63-72.14	13	30	L1
N-Nitrosodipropylamine	39	10	ug/L	50.00		78	36.81-88.63	8	30	
Pentachlorophenol	83	30	ug/L	100.0		83	32.14-95.92	15	30	
Phenol	44	10	ug/L	100.0		44	7.96-52.41	20	30	
Pyrene	32	5.0	ug/L	50.00		64	41.65-82.75	3	30	
Surrogate: 2,4,6-Tribromophenol	*82.2*		*ug/L*	*100.0*		*82*	*32.57-112.08*			
Surrogate: 2-Fluorobiphenyl	*85.0*		*ug/L*	*100.0*		*85*	*36.69-77.45*			*S4*
Surrogate: 2-Fluorophenol	*54.5*		*ug/L*	*100.0*		*54*	*0-86.73*			
Surrogate: 4-Terphenyl-d14	*52.9*		*ug/L*	*100.0*		*53*	*37.21-81.06*			
Surrogate: Nitrobenzene-d5	*80.2*		*ug/L*	*100.0*		*80*	*36.8-79.16*			*S4*
Surrogate: Phenol-d6	*55.3*		*ug/L*	*100.0*		*55*	*0-56.2*			
Matrix Spike (1302297-MS1)		**Source: 13B0612-01**		Prepared: 02/26/2013 Analyzed: 03/14/2013						
1,2,4-Trichlorobenzene	33	20	ug/L	50.20	ND	67	51.67-99.16			
1,4-Dichlorobenzene	25	20	ug/L	50.20	ND	50	44.91-69.29			
2,4-Dinitrotoluene	43	20	ug/L	50.20	ND	85	45.63-98.31			
2-Chlorophenol	69	20	ug/L	100.4	ND	69	53.62-77.95			
4-Chloro-3-methylphenol	76	20	ug/L	100.4	ND	76	54.19-87.12			
4-Nitrophenol	110	100	ug/L	100.4	ND	114	33.45-100.91			M1
Acenaphthene	42	10	ug/L	50.20	ND	84	10.45-102.26			
N-Nitrosodipropylamine	40	20	ug/L	50.20	ND	80	50.37-110.06			
Pentachlorophenol	120	60	ug/L	100.4	ND	116	52.6-111			M1
Phenol	56	20	ug/L	100.4	ND	55	25.68-69.53			
Pyrene	40	10	ug/L	50.20	ND	80	58.09-82.37			
Surrogate: 2,4,6-Tribromophenol	*91.5*		*ug/L*	*100.4*		*91*	*61.48-125.96*			
Surrogate: 2-Fluorobiphenyl	*91.2*		*ug/L*	*100.4*		*91*	*41.02-91.53*			
Surrogate: 2-Fluorophenol	*59.1*		*ug/L*	*100.4*		*59*	*38.35-57.43*			*S4*
Surrogate: 4-Terphenyl-d14	*80.2*		*ug/L*	*100.4*		*80*	*14.66-124.11*			
Surrogate: Nitrobenzene-d5	*80.4*		*ug/L*	*100.4*		*80*	*49.49-85.19*			
Surrogate: Phenol-d6	*67.2*		*ug/L*	*100.4*		*67*	*28.68-69.45*			
Batch 1302298 - SW 846 3520C										

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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302298 - SW 846 3520C										
Blank (1302298-BLK1)				Prepared: 02/27/2013 Analyzed: 03/04/2013						
4,4´-DDD	ND	0.10	ug/L							
4,4´-DDE	ND	0.10	ug/L							
4,4´-DDT	ND	0.10	ug/L							
Aldrin	ND	0.10	ug/L							
alpha-BHC	ND	0.10	ug/L							
alpha-Chlordane	ND	0.10	ug/L							
beta-BHC	ND	0.10	ug/L							
delta-BHC	ND	0.10	ug/L							
Dieldrin	ND	0.10	ug/L							
Endosulfan I	ND	0.10	ug/L							
Endosulfan II	ND	0.10	ug/L							
Endosulfan sulfate	ND	0.10	ug/L							
Endrin	ND	0.10	ug/L							
Endrin aldehyde	ND	0.10	ug/L							
Endrin ketone	ND	0.10	ug/L							
gamma-BHC	ND	0.10	ug/L							
gamma-Chlordane	ND	0.10	ug/L							
Heptachlor	ND	0.10	ug/L							
Heptachlor epoxide	ND	0.10	ug/L							
Methoxychlor	ND	0.10	ug/L							
Toxaphene	ND	1.0	ug/L							
Surrogate: Decachlorobiphenyl	*0.966*		*ug/L*	*1.000*		*97*	*51.1-138.5*			
Surrogate: Tetrachloro-m-xylene	*0.854*		*ug/L*	*1.000*		*85*	*39.1-120*			
LCS (1302298-BS1)				Prepared: 02/27/2013 Analyzed: 03/04/2013						
4,4´-DDT	1.0	0.10	ug/L	1.000		100	57-116.5			
Aldrin	0.43	0.10	ug/L	0.5000		85	48.4-113.2			
Dieldrin	0.81	0.10	ug/L	1.000		81	53.2-117.5			
Endrin	0.91	0.10	ug/L	1.000		91	49.2-123.7			
gamma-BHC	0.46	0.10	ug/L	0.5000		92	58.9-127.4			
Heptachlor	0.41	0.10	ug/L	0.5000		83	48.1-120			
Surrogate: Decachlorobiphenyl	*0.962*		*ug/L*	*1.000*		*96*	*51.6-128.7*			
Surrogate: Tetrachloro-m-xylene	*0.811*		*ug/L*	*1.000*		*81*	*37.1-110.6*			
LCS Dup (1302298-BSD1)				Prepared: 02/27/2013 Analyzed: 03/04/2013						
4,4´-DDT	0.99	0.10	ug/L	1.000		99	57-116.5	1	30	
Aldrin	0.41	0.10	ug/L	0.5000		83	48.4-113.2	3	30	
Dieldrin	0.80	0.10	ug/L	1.000		80	53.2-117.5	1	30	
Endrin	0.89	0.10	ug/L	1.000		89	49.2-123.7	2	30	
gamma-BHC	0.44	0.10	ug/L	0.5000		89	58.9-127.4	4	30	
Heptachlor	0.41	0.10	ug/L	0.5000		82	48.1-120	1	30	
Surrogate: Decachlorobiphenyl	*0.947*		*ug/L*	*1.000*		*95*	*51.6-128.7*			
Surrogate: Tetrachloro-m-xylene	*0.792*		*ug/L*	*1.000*		*79*	*37.1-110.6*			

Turner Laboratories, Inc.

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Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302298 - SW 846 3520C										
Matrix Spike (1302298-MS1)		**Source: 13B0612-01**		Prepared: 02/27/2013 Analyzed: 03/04/2013						
4,4´-DDT	0.30	0.10	ug/L	1.004	ND	29	16.5-164.5			
Aldrin	0.13	0.10	ug/L	0.5020	ND	27	20.7-143.6			
Dieldrin	0.45	0.10	ug/L	1.004	ND	45	53.5-127.4			M2
Endrin	0.34	0.10	ug/L	1.004	ND	34	52.9-133.2			M2
gamma-BHC	0.38	0.10	ug/L	0.5020	ND	75	51.9-134.6			
Heptachlor	0.31	0.10	ug/L	0.5020	ND	62	32.7-141.3			
Surrogate: Decachlorobiphenyl	*0.744*		*ug/L*	*1.004*		*74*	*51.1-138.5*			
Surrogate: Tetrachloro-m-xylene	*0.716*		*ug/L*	*1.004*		*71*	*39.1-120*			
Matrix Spike Dup (1302298-MSD1)		**Source: 13B0612-01**		Prepared: 02/27/2013 Analyzed: 03/04/2013						
4,4´-DDT	0.30	0.10	ug/L	1.029	ND	29	16.5-164.5	1	30	
Aldrin	0.12	0.10	ug/L	0.5144	ND	24	20.7-143.6	8	30	
Dieldrin	0.44	0.10	ug/L	1.029	ND	43	53.5-127.4	0.8	30	M2
Endrin	0.33	0.10	ug/L	1.029	ND	33	52.9-133.2	2	30	M2
gamma-BHC	0.39	0.10	ug/L	0.5144	ND	76	51.9-134.6	4	30	
Heptachlor	0.30	0.10	ug/L	0.5144	ND	59	32.7-141.3	3	30	
Surrogate: Decachlorobiphenyl	*0.714*		*ug/L*	*1.029*		*69*	*51.1-138.5*			
Surrogate: Tetrachloro-m-xylene	*0.685*		*ug/L*	*1.029*		*67*	*39.1-120*			

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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302251 - VOA_GCMS										

Turner Laboratories, Inc.

Date: 03/21/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
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Date Received: 02/21/2013

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302251 - VOA_GCMS										
Blank (1302251-BLK1)				Prepared & Analyzed: 02/20/2013						
1,1,1-Trichloroethane	ND	2.0	ug/L							
1,1,2,2-Tetrachloroethane	ND	2.0	ug/L							
1,1,2-Trichloroethane	ND	2.0	ug/L							
1,1-Dichloroethane	ND	2.0	ug/L							
1,1-Dichloroethene	ND	2.0	ug/L							
1,2,4-Trimethylbenzene	ND	2.0	ug/L							
1,2-Dichlorobenzene	ND	2.0	ug/L							
1,2-Dichloroethane	ND	2.0	ug/L							
1,2-Dichloropropane	ND	2.0	ug/L							
1,3,5-Trimethylbenzene	ND	2.0	ug/L							
1,3-Dichlorobenzene	ND	2.0	ug/L							
1,4-Dichlorobenzene	ND	2.0	ug/L							
2-Chloroethylvinylether	ND	10	ug/L							
2-Chloroethylvinylether	ND	10	ug/L							
Acetone	ND	10	ug/L							
Acrolein	ND	10	ug/L							
Acrolein	ND	10	ug/L							
Acrylonitrile	ND	10	ug/L							
Acrylonitrile	ND	10	ug/L							
Benzene	ND	2.0	ug/L							
Bromodichloromethane	ND	2.0	ug/L							
Bromoform	ND	2.0	ug/L							
Bromomethane	ND	2.0	ug/L							
Carbon tetrachloride	ND	2.0	ug/L							
Chlorobenzene	ND	2.0	ug/L							
Chloroethane	ND	5.0	ug/L							
Chloroform	ND	2.0	ug/L							
Chloromethane	ND	5.0	ug/L							
cis-1,3-Dichloropropene	ND	2.0	ug/L							
Dibromochloromethane	ND	2.0	ug/L							
Dichlorodifluoromethane	ND	5.0	ug/L							
Ethylbenzene	ND	2.0	ug/L							
Methyl Isobutyl Ketone (MIBK)	ND	10	ug/L							
Methylene chloride	ND	10	ug/L							
Tetrachloroethene	ND	2.0	ug/L							
Tetrahydrofuran	ND	10	ug/L							
Toluene	ND	2.0	ug/L							
trans-1,2-Dichloroethene	ND	2.0	ug/L							
trans-1,3-Dichloropropene	ND	2.0	ug/L							
Trichloroethene	ND	2.0	ug/L							
Trichlorofluoromethane	ND	5.0	ug/L							
Vinyl chloride	ND	2.0	ug/L							
Xylenes, Total	ND	6.0	ug/L							
Surrogate: 1,2-Dichloroethane-d4	*29.3*		*ug/L*	*28.00*		*105*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*29.3*		*ug/L*	*28.00*		*105*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*28.6*		*ug/L*	*28.00*		*102*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*28.6*		*ug/L*	*28.00*		*102*	*70-130*			

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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302251 - VOA_GCMS										
Blank (1302251-BLK1)				Prepared & Analyzed: 02/20/2013						
Surrogate: Fluorobenzene	*29.1*		*ug/L*	*28.00*		*104*	*70-130*			
Surrogate: Fluorobenzene	*29.1*		*ug/L*	*28.00*		*104*	*70-130*			

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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302251 - VOA_GCMS										
LCS (1302251-BS1)				Prepared & Analyzed: 02/20/2013						
1,1,1-Trichloroethane	21		ug/L	20.00		103	52-162			L1
1,1,2,2-Tetrachloroethane	19		ug/L	20.00		95	46-157			
1,1,2-Trichloroethane	20		ug/L	20.00		100	52-150			
1,1-Dichloroethane	21		ug/L	20.00		106	59-155			
1,1-Dichloroethene	22		ug/L	20.00		108	2-234			
1,2,4-Trimethylbenzene	22		ug/L	20.00		111	0-200			
1,2-Dichlorobenzene	22		ug/L	20.00		110	18-190			
1,2-Dichloroethane	20		ug/L	20.00		102	49-155			
1,2-Dichloropropane	20		ug/L	20.00		99	2-210			
1,3,5-Trimethylbenzene	0.0		ug/L	20.00			0-200			
1,3-Dichlorobenzene	22		ug/L	20.00		111	59-156			
1,4-Dichlorobenzene	22		ug/L	20.00		109	18-190			
2-Chloroethylvinylether	20		ug/L	20.00		98	10-305			
2-Chloroethylvinylether	20		ug/L	20.00		98	10-305			
Acetone	97		ug/L	100.0		97	70-130			
Acrolein	140		ug/L	100.0		139	88-118			L1
Acrolein	140		ug/L	100.0		139	88-118			L1
Acrylonitrile	94		ug/L	100.0		94	71-135			
Acrylonitrile	94		ug/L	100.0		94	71-135			
Benzene	21		ug/L	20.00		104	37-151			
Bromodichloromethane	20		ug/L	20.00		101	35-155			
Bromoform	20		ug/L	20.00		98	45-169			
Bromomethane	23		ug/L	20.00		113	2-242			
Carbon tetrachloride	20		ug/L	20.00		100	70-140			
Chlorobenzene	21		ug/L	20.00		105	37-160			
Chloroethane	20		ug/L	20.00		102	14-230			
Chloroform	21		ug/L	20.00		103	51-138			
Chloromethane	21		ug/L	20.00		103	5-273			
cis-1,3-Dichloropropene	20		ug/L	20.00		100	2-227			
Dibromochloromethane	19		ug/L	20.00		95	53-149			
Dichlorodifluoromethane	21		ug/L	20.00		104	5-273			
Ethylbenzene	21		ug/L	20.00		107	37-162			
Isopropyl Alcohol	1500		ug/L	1000		151	70-130			L1
Methyl Isobutyl Ketone (MIBK)	96		ug/L	100.0		96	70-130			
Methylene chloride	20		ug/L	20.00		100	10-221			
Tetrachloroethene	22		ug/L	20.00		108	64-148			
Tetrahydrofuran	84		ug/L	100.0		84	70-130			
Toluene	21		ug/L	20.00		107	47-150			
trans-1,2-Dichloroethene	21		ug/L	20.00		104	54-156			
trans-1,3-Dichloropropene	19		ug/L	20.00		94	17-183			
Trichloroethene	21		ug/L	20.00		106	71-157			
Trichlorofluoromethane	21		ug/L	20.00		104	17-181			
Vinyl chloride	21		ug/L	20.00		105	2-251			
Xylenes, Total	65		ug/L	60.00		108	37-162			
Surrogate: 1,2-Dichloroethane-d4	*28.1*		*ug/L*	*28.00*		*100*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*28.1*		*ug/L*	*28.00*		*100*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*29.4*		*ug/L*	*28.00*		*105*	*70-130*			

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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302251 - VOA_GCMS										
LCS (1302251-BS1)				Prepared & Analyzed: 02/20/2013						
Surrogate: 4-Bromofluorobenzene	*29.4*		*ug/L*	*28.00*		*105*	*70-130*			
Surrogate: Fluorobenzene	*28.5*		*ug/L*	*28.00*		*102*	*70-130*			
Surrogate: Fluorobenzene	*28.5*		*ug/L*	*28.00*		*102*	*70-130*			

Turner Laboratories, Inc.

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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302251 - VOA_GCMS										
LCS Dup (1302251-BSD1)				Prepared: 02/20/2013 Analyzed: 02/21/2013						
1,1,1-Trichloroethane	21		ug/L	20.00		103	52-162	0.8	30	L1
1,1,2,2-Tetrachloroethane	21		ug/L	20.00		103	46-157	7	30	
1,1,2-Trichloroethane	20		ug/L	20.00		101	52-150	1	30	
1,1-Dichloroethane	21		ug/L	20.00		107	59-155	0.7	30	
1,1-Dichloroethene	21		ug/L	20.00		105	2-234	3	30	
1,2,4-Trimethylbenzene	23		ug/L	20.00		115	0-200	3	200	
1,2-Dichlorobenzene	23		ug/L	20.00		115	18-190	5	30	
1,2-Dichloroethane	20		ug/L	20.00		101	49-155	1	30	
1,2-Dichloropropane	21		ug/L	20.00		104	2-210	5	30	
1,3,5-Trimethylbenzene	0.0		ug/L	20.00			0-200		200	
1,3-Dichlorobenzene	23		ug/L	20.00		116	59-156	4	30	
1,4-Dichlorobenzene	22		ug/L	20.00		112	18-190	2	30	
2-Chloroethylvinylether	20		ug/L	20.00		99	10-305	0.9	30	
2-Chloroethylvinylether	20		ug/L	20.00		99	10-305	0.9	30	
Acetone	93		ug/L	100.0		93	70-130	3	30	
Acrolein	140		ug/L	100.0		138	88-118	0.5	30	L1
Acrolein	140		ug/L	100.0		138	88-118	0.5	30	L1
Acrylonitrile	93		ug/L	100.0		93	71-135	1	30	
Acrylonitrile	93		ug/L	100.0		93	71-135	1	30	
Benzene	21		ug/L	20.00		104	37-151	0.4	30	
Bromodichloromethane	20		ug/L	20.00		101	35-155	0.3	30	
Bromoform	18		ug/L	20.00		89	45-169	10	30	
Bromomethane	22		ug/L	20.00		109	2-242	4	30	
Carbon tetrachloride	20		ug/L	20.00		98	70-140	2	30	
Chlorobenzene	20		ug/L	20.00		101	37-160	4	30	
Chloroethane	22		ug/L	20.00		108	14-230	5	30	
Chloroform	21		ug/L	20.00		103	51-138	0.8	30	
Chloromethane	21		ug/L	20.00		107	5-273	3	30	
cis-1,3-Dichloropropene	19		ug/L	20.00		97	2-227	2	30	
Dibromochloromethane	19		ug/L	20.00		97	53-149	2	30	
Dichlorodifluoromethane	20		ug/L	20.00		102	5-273	2	30	
Ethylbenzene	21		ug/L	20.00		106	37-162	2	30	
Isopropyl Alcohol	1500		ug/L	1000		151	70-130	0.2	200	L1
Methyl Isobutyl Ketone (MIBK)	94		ug/L	100.0		94	70-130	2	30	
Methylene chloride	20		ug/L	20.00		98	10-221	2	30	
Tetrachloroethene	21		ug/L	20.00		104	64-148	3	30	
Tetrahydrofuran	78		ug/L	100.0		78	70-130	8	30	
Toluene	21		ug/L	20.00		105	47-150	2	30	
trans-1,2-Dichloroethene	20		ug/L	20.00		101	54-156	3	30	
trans-1,3-Dichloropropene	18		ug/L	20.00		90	17-183	4	30	
Trichloroethene	21		ug/L	20.00		107	71-157	0.5	30	
Trichlorofluoromethane	21		ug/L	20.00		105	17-181	1	30	
Vinyl chloride	21		ug/L	20.00		107	2-251	2	30	
Xylenes, Total	63		ug/L	60.00		105	37-162	3	30	
Surrogate: 1,2-Dichloroethane-d4	*27.5*		*ug/L*	*28.00*		*98*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*27.5*		*ug/L*	*28.00*		*98*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*30.5*		*ug/L*	*28.00*		*109*	*70-130*			

Turner Laboratories, Inc.

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Client: City of Tucson - Transportation Department
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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302251 - VOA_GCMS										
LCS Dup (1302251-BSD1)				Prepared: 02/20/2013 Analyzed: 02/21/2013						
Surrogate: 4-Bromofluorobenzene	*30.5*		*ug/L*	*28.00*		*109*	*70-130*			
Surrogate: Fluorobenzene	*28.8*		*ug/L*	*28.00*		*103*	*70-130*			
Surrogate: Fluorobenzene	*28.8*		*ug/L*	*28.00*		*103*	*70-130*			

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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302251 - VOA_GCMS										
Matrix Spike (1302251-MS1)		**Source: 13B0016-02**		Prepared: 02/20/2013 Analyzed: 03/20/2013						
1,1,1-Trichloroethane	0.0		ug/L	20.00	ND		52-162			
1,1,2,2-Tetrachloroethane	0.0		ug/L	20.00	ND		46-157			
1,1,2-Trichloroethane	0.0		ug/L	20.00	ND		52-150			
1,1-Dichloroethane	0.0		ug/L	20.00	ND		59-155			
1,1-Dichloroethene	0.0		ug/L	20.00	ND		2-234			
1,2,4-Trimethylbenzene	0.0		ug/L	20.00	1.9	NR	0-200			
1,2-Dichlorobenzene	0.0		ug/L	20.00	ND		18-190			
1,2-Dichloroethane	0.0		ug/L	20.00	ND		49-155			
1,2-Dichloropropane	0.0		ug/L	20.00	0.0		2-210			
1,3,5-Trimethylbenzene	0.0		ug/L	20.00	0.0		0-200			
1,3-Dichlorobenzene	0.0		ug/L	20.00	ND		59-156			
1,4-Dichlorobenzene	0.0		ug/L	20.00	ND		18-190			
2-Chloroethylvinylether	20		ug/L	20.00	ND	101	10-305			
2-Chloroethylvinylether	0.0		ug/L	20.00	ND		10-305			
Acetone	0.0		ug/L	100.0	130	NR	70-130			
Acrolein	80		ug/L	100.0	ND	80	88-118			
Acrolein	0.0		ug/L	100.0	0.0		88-118			
Acrylonitrile	95		ug/L	100.0	ND	95	71-135			
Acrylonitrile	0.0		ug/L	100.0	ND		71-135			
Benzene	0.0		ug/L	20.00	ND		37-151			
Bromodichloromethane	0.0		ug/L	20.00	ND		35-155			
Bromoform	0.0		ug/L	20.00	ND		45-169			
Bromomethane	0.0		ug/L	20.00	ND		2-242			
Carbon tetrachloride	0.0		ug/L	20.00	ND		70-140			
Chlorobenzene	0.0		ug/L	20.00	ND		37-160			
Chloroethane	0.0		ug/L	20.00	ND		14-230			
Chloroform	0.0		ug/L	20.00	ND		51-138			
Chloromethane	0.0		ug/L	20.00	ND		5-273			
cis-1,3-Dichloropropene	0.0		ug/L	20.00	ND		2-221			
Dibromochloromethane	0.0		ug/L	20.00	ND		53-149			
Dichlorodifluoromethane	0.0		ug/L	20.00	ND		5-273			
Ethylbenzene	0.0		ug/L	20.00	0.68	NR	37-162			
Isopropyl Alcohol	0.0		ug/L	1000	ND		70-130			
Methyl Isobutyl Ketone (MIBK)	0.0		ug/L	100.0	0.0		70-130			
Methylene chloride	0.0		ug/L	20.00	ND		10-221			
Tetrachloroethene	0.0		ug/L	20.00	ND		64-148			
Tetrahydrofuran	0.0		ug/L	100.0	ND		70-130			
Toluene	0.0		ug/L	20.00	0.29	NR	47-150			
trans-1,2-Dichloroethene	0.0		ug/L	20.00	ND		54-156			
trans-1,3-Dichloropropene	0.0		ug/L	20.00	0.53	NR	17-183			
Trichloroethene	0.0		ug/L	20.00	ND		71-157			
Trichlorofluoromethane	0.0		ug/L	20.00	0.0		17-181			
Vinyl chloride	0.0		ug/L	20.00	ND		2-251			
Xylenes, Total	0.0		ug/L	60.00	1.8	NR	37-162			
Surrogate: 1,2-Dichloroethane-d4	*28.0*		*ug/L*	*28.00*		*100*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.00*		*ug/L*	*28.00*			*70-130*			
Surrogate: 4-Bromofluorobenzene	*30.4*		*ug/L*	*28.00*		*109*	*70-130*			

Turner Laboratories, Inc.

Date: 03/21/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13B0610
Date Received: 02/21/2013

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302251 - VOA_GCMS										
Matrix Spike (1302251-MS1)		**Source: 13B0016-02**		Prepared: 02/20/2013 Analyzed: 03/20/2013						
Surrogate: 4-Bromofluorobenzene	*0.00*		*ug/L*	*28.00*			*70-130*			
Surrogate: Fluorobenzene	*29.4*		*ug/L*	*28.00*		*105*	*70-130*			
Surrogate: Fluorobenzene	*0.00*		*ug/L*	*28.00*			*70-130*			

Turner Laboratories, Inc.

Date: 03/21/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13B0610
Date Received: 02/21/2013

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302251 - VOA_GCMS										
Matrix Spike (1302251-MS2)		**Source: 13B0016-02**		Prepared & Analyzed: 02/20/2013						
1,1,1-Trichloroethane	15		ug/L	20.00	ND	76	52-162			
1,1,2,2-Tetrachloroethane	20		ug/L	20.00	ND	101	46-157			
1,1,2-Trichloroethane	20		ug/L	20.00	ND	101	52-150			
1,1-Dichloroethane	18		ug/L	20.00	ND	91	59-155			
1,1-Dichloroethene	16		ug/L	20.00	ND	78	2-234			
1,2,4-Trimethylbenzene	21		ug/L	20.00	1.9	97	0-200			
1,2-Dichlorobenzene	20		ug/L	20.00	ND	100	18-190			
1,2-Dichloroethane	20		ug/L	20.00	ND	101	49-155			
1,2-Dichloropropane	19		ug/L	20.00	0.0	93	2-210			
1,3,5-Trimethylbenzene	0.0		ug/L	20.00	0.0		0-200			
1,3-Dichlorobenzene	20		ug/L	20.00	ND	99	59-156			
1,4-Dichlorobenzene	20		ug/L	20.00	ND	102	18-190			
2-Chloroethylvinylether	0.0		ug/L	20.00	ND		10-305			
2-Chloroethylvinylether	0.0		ug/L	20.00	ND		10-305			
Acetone	200		ug/L	100.0	130	70	70-130			M2
Acrolein	0.0		ug/L	100.0	ND		88-118			
Acrolein	0.0		ug/L	100.0	0.0		88-118			
Acrylonitrile	0.0		ug/L	100.0	ND		71-135			
Acrylonitrile	0.0		ug/L	100.0	ND		71-135			
Benzene	18		ug/L	20.00	ND	90	37-151			
Bromodichloromethane	19		ug/L	20.00	ND	97	35-155			
Bromoform	19		ug/L	20.00	ND	96	45-169			
Bromomethane	19		ug/L	20.00	ND	93	2-242			
Carbon tetrachloride	15		ug/L	20.00	ND	75	70-140			
Chlorobenzene	19		ug/L	20.00	ND	93	37-160			
Chloroethane	16		ug/L	20.00	ND	81	14-230			
Chloroform	19		ug/L	20.00	ND	93	51-138			
Chloromethane	16		ug/L	20.00	ND	81	5-273			
cis-1,3-Dichloropropene	18		ug/L	20.00	ND	92	2-221			
Dibromochloromethane	19		ug/L	20.00	ND	96	53-149			
Dichlorodifluoromethane	14		ug/L	20.00	ND	72	5-273			
Ethylbenzene	18		ug/L	20.00	0.68	85	37-162			
Isopropyl Alcohol	640		ug/L	1000	ND	64	70-130			
Methyl Isobutyl Ketone (MIBK)	100		ug/L	100.0	0.0	100	70-130			
Methylene chloride	18		ug/L	20.00	ND	92	10-221			
Tetrachloroethene	17		ug/L	20.00	ND	83	64-148			
Tetrahydrofuran	86		ug/L	100.0	ND	86	70-130			
Toluene	18		ug/L	20.00	0.29	89	47-150			
trans-1,2-Dichloroethene	17		ug/L	20.00	ND	83	54-156			
trans-1,3-Dichloropropene	18		ug/L	20.00	0.53	88	17-183			
Trichloroethene	18		ug/L	20.00	ND	88	71-157			
Trichlorofluoromethane	15		ug/L	20.00	0.0	77	17-181			
Vinyl chloride	15		ug/L	20.00	ND	75	2-251			
Xylenes, Total	56		ug/L	60.00	1.8	90	37-162			
Surrogate: 1,2-Dichloroethane-d4	*0.00*		*ug/L*	*28.00*			*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*27.6*		*ug/L*	*28.00*		*99*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*0.00*		*ug/L*	*28.00*			*70-130*			

Turner Laboratories, Inc.

Date: 03/21/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13B0610
Date Received: 02/21/2013

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302251 - VOA_GCMS										
Matrix Spike (1302251-MS2)		**Source: 13B0016-02**		Prepared & Analyzed: 02/20/2013						
Surrogate: 4-Bromofluorobenzene	*28.6*		*ug/L*	*28.00*		*102*	*70-130*			
Surrogate: Fluorobenzene	*0.00*		*ug/L*	*28.00*			*70-130*			
Surrogate: Fluorobenzene	*28.4*		*ug/L*	*28.00*		*101*	*70-130*			

Turner Laboratories, Inc.

Date: 03/21/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13B0610
Date Received: 02/21/2013

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302264 - IC PREP										
Blank (1302264-BLK1)				Prepared & Analyzed: 02/21/2013						
Nitrogen, Nitrate (As N)	ND	1.0	mg/L							
Nitrogen, Nitrite (As N)	ND	0.10	mg/L							
LCS (1302264-BS1)				Prepared & Analyzed: 02/21/2013						
Nitrogen, Nitrate (As N)	4.8	1.0	mg/L	5.000		96	90-110			
Nitrogen, Nitrite (As N)	2.5	0.10	mg/L	2.500		98	90-110			
LCS Dup (1302264-BSD1)				Prepared & Analyzed: 02/21/2013						
Nitrogen, Nitrate (As N)	4.8	1.0	mg/L	5.000		96	90-110	0.3	10	
Nitrogen, Nitrite (As N)	2.5	0.10	mg/L	2.500		98	90-110	0.08	10	
Matrix Spike (1302264-MS1)		**Source: 13B0606-02**		Prepared & Analyzed: 02/21/2013						
Nitrogen, Nitrate (As N)	8.6	1.0	mg/L	5.000	3.4	104	80-120			
Nitrogen, Nitrite (As N)	2.5	0.10	mg/L	2.500	0.25	90	80-120			
Matrix Spike (1302264-MS2)		**Source: 13B0618-01**		Prepared & Analyzed: 02/21/2013						
Nitrogen, Nitrite (As N)	2.5	0.10	mg/L	2.500	0.065	95	80-120			
Matrix Spike (1302264-MS3)		**Source: 13B0618-01**		Prepared: 02/22/2013 Analyzed: 02/23/2013						
Nitrogen, Nitrate (As N)	17	2.0	mg/L	10.00	7.7	94	80-120			
Nitrogen, Nitrite (As N)	4.8	0.20	mg/L	5.000	0.065	94	80-120			
Matrix Spike Dup (1302264-MSD1)		**Source: 13B0606-02**		Prepared & Analyzed: 02/21/2013						
Nitrogen, Nitrate (As N)	8.7	1.0	mg/L	5.000	3.4	105	80-120	0.5	10	
Nitrogen, Nitrite (As N)	2.5	0.10	mg/L	2.500	0.25	91	80-120	0.8	10	
Matrix Spike Dup (1302264-MSD2)		**Source: 13B0618-01**		Prepared & Analyzed: 02/21/2013						
Nitrogen, Nitrite (As N)	2.5	0.10	mg/L	2.500	0.065	96	80-120	0.9	10	
Matrix Spike Dup (1302264-MSD3)		**Source: 13B0618-01**		Prepared: 02/22/2013 Analyzed: 02/23/2013						
Nitrogen, Nitrate (As N)	17	2.0	mg/L	10.00	7.7	95	80-120	0.8	10	
Nitrogen, Nitrite (As N)	4.8	0.20	mg/L	5.000	0.065	95	80-120	0.9	10	
Batch 1302275 - IC PREP										
Blank (1302275-BLK1)				Prepared & Analyzed: 02/22/2013						
Nitrogen, Nitrate (As N)	ND	1.0	mg/L							
Nitrogen, Nitrite (As N)	ND	0.10	mg/L							
Phosphorus, Dissolved Orthophosphate (As P)	ND	0.50	mg/L							
LCS (1302275-BS1)				Prepared & Analyzed: 02/22/2013						
Nitrogen, Nitrate (As N)	4.8	1.0	mg/L	5.000		96	90-110			
Nitrogen, Nitrite (As N)	2.4	0.10	mg/L	2.500		98	90-110			
Phosphorus, Dissolved Orthophosphate (As P)	2.7	0.50	mg/L	2.500		106	90-110			
LCS Dup (1302275-BSD1)				Prepared & Analyzed: 02/22/2013						
Nitrogen, Nitrate (As N)	4.8	1.0	mg/L	5.000		95	90-110	0.7	10	
Nitrogen, Nitrite (As N)	2.4	0.10	mg/L	2.500		97	90-110	0.1	10	
Phosphorus, Dissolved Orthophosphate (As P)	2.6	0.50	mg/L	2.500		104	90-110	2	10	

Turner Laboratories, Inc.

Date: 03/21/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13B0610
Date Received: 02/21/2013

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302275 - IC PREP										
Matrix Spike (1302275-MS1)		**Source: 13B0529-01**		Prepared & Analyzed: 02/22/2013						
Nitrogen, Nitrate (As N)	5.5	1.0	mg/L	5.000	0.86	93	80-120			
Nitrogen, Nitrite (As N)	2.4	0.10	mg/L	2.500	ND	94	80-120			
Matrix Spike (1302275-MS2)		**Source: 13B0610-01**		Prepared & Analyzed: 03/13/2013						
Phosphorus, Dissolved Orthophosphate (As P)	2.8	0.50	mg/L	2.500	ND	112	80-120			
Matrix Spike Dup (1302275-MSD1)		**Source: 13B0529-01**		Prepared & Analyzed: 02/22/2013						
Nitrogen, Nitrate (As N)	5.5	1.0	mg/L	5.000	0.86	93	80-120	0.2	10	
Nitrogen, Nitrite (As N)	2.4	0.10	mg/L	2.500	ND	94	80-120	0.1	10	
Matrix Spike Dup (1302275-MSD2)		**Source: 13B0610-01**		Prepared & Analyzed: 03/13/2013						
Phosphorus, Dissolved Orthophosphate (As P)	2.9	0.50	mg/L	2.500	ND	115	80-120	3	10	

TURNER LABORATORIES INC.
2445 N. Coyote Drive, Suite 104
Tucson, Arizona 85745
(520) 882-5880
Fax: (520) 882-9788
www.turnerlabs.com

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

TURNER WORK ORDER # 13B0610 DATE 2/21/13 PAGE 1 OF 1

PROJECT NAME: Stormwater Samples Site # 1, 2, 3, 4, 5 (circle)

CONTACT NAME: Bev Hester

COMPANY NAME: City of Tucson

ADDRESS: PO Box 27210, Tucson AZ 85726-7210

PHONE: 837-4935

FAX: 791-4343

SAMPLER'S SIGNATURE: C McNellis

CIRCLE ANALYSIS REQUESTED AND/OR CHECK THE APPROPRIATE BOX

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX*	NUMBER OF CONTAINERS	Hardness	Total Dissolved Solids (TDS)	Total Suspended Solids (TSS)	Biological Oxygen Demand (BOD)	Chemical Oxygen Demand (COD)	Cyanide	Metals*	Nitrate + Nitrite Sum	Nitrogen, Ammonia as N	Nitrogen, Total Kjeldahl	Phosphorus as P, Total	Orthophosphate by Ion Chromatography	Total Petroleum Hydrocarbons (TPH)	Oil & Grease	Volatile Organic Compounds by 624	Semivolatile Organic Acid Extractables by 8270	Semivolatile Organic Base Neutrals by 8270	PCBs by 8082	Organochlorine Pesticides by SW 8081
Composite	2/20	12:20pm		ST	20	x	x	x	x	x		x	x	x	x	x	x							x
Grab/Discrete	2/20	12:20pm		ST	9						x							x	x	x			x	
sVOC's-composite	2/20	12:20pm		ST	~~13~~ 2																x	x		
					14																			

1. RELINQUISHED BY: C McNellis
Signature: C McNellis
Printed Name: COT Stormwater
Firm: 2/21/13 9:45am
Date/Time

2. RECEIVED BY:
Signature
Printed Name
Firm
Date/Time

TURNAROUND REQUIREMENTS:
_X_ Standard (approx.10 days)*
___Next day ___2 Day ___5 Day*
_X_ Email Preliminary Results To: Bev.Hester@tucsonaz.gov
* Working Days

REPORT REQUIREMENTS:
___ I. Routine Report
___ II. Report (includes DUP,MS,MSD, as required, may be charged as samples)
___ III. Date Validation Report (Includes All Raw Data)
Add 10% to invoice

INVOICE INFORMATION:
Account ___ Y ___ N
P.O. # ___
Bill to: ___

SAMPLE RECEIPT:
Total Containers 43
Temperature 2/21/2013 6
☐ Wet Ice ☐ Blue Ice

3. RELINQUISHED BY:
Signature
Printed Name
Date/Time

4. RECEIVED BY:
Signature
Printed Name
TURNER LABORATORIES, INC.
Firm
2/21/13 9:45
Date/Time

*LEGEND
DW = DRINKING WATER
GW = GROUNDWATER
SD = SOLID
SG = SLUDGE
SL = SOIL
ST = STORMWATER
WW = WASTEWATER

SPECIAL INSTRUCTIONS/COMMENTS:

Compliance Analysis: ☐ Yes ☐ No	Custody Seals ☐	Preservation Confirmation ☐
ADEQ Forms: ☐ Yes ☐ No	Container Intact ☐	Appropriate Head Space ☐
Mail ADEQ Forms: ☐ Yes ☐ No	COC/Labels Agree ☐	Received Within Hold Time ☐

Metals; Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Hg, Ni, Se, Ag, Tl, Zn
Cyanide, Metals, VOCs, sVOCs, PCBs, Pesticides; report in ug/L

City of Tucson's
Sampling Aliquot Form

Site #: 3 El Con Commercial Date of Sample: 02/20/13

Sample ID: 130220 # 3 Sampler(s): Chris McNellis

Maximum Sample Size: 2,000 *mL* Aliquot Begin Time: 12:20:00 PM
default (2000)

Elapsed Time after 1st Sample	Depth		Site 4 Only Width	Time		Flowrate for Site 3	
Minutes	*Inches*		*Feet*	*Seconds*		*cfs*	
0	8.00	1				6.21	0.00
20	4.00	2				1.74	0.00
40	4.00	3				1.74	0.00
60	3.50	4				1.34	0.00
80	2.25	5				0.48	0.00
100	1.50	6				0.22	0.00
120	1.50	7				0.22	0.00
140	1.50	8				0.22	0.00
160	1.50	9				0.22	0.00
180	1.00	10				0.15	0.00
				Average Flowrate: (CFS):		1.25	0.00

Time Aliquot Collected	Aliquot #	Aliquot Volumes Calculated Using Maximum Aliquot	Aliquot Volumes for Laboratory *mL*
12:20 PM	1	2,000	1,877
12:40 PM	2	560	525
1:00 PM	3	560	525
1:20 PM	4	431	404
1:40 PM	5	153	144
2:00 PM	6	70	66
2:20 PM	7	70	66
2:40 PM	8	70	66
3:00 PM	9	70	66
3:20 PM	10	47	44
		4,032	3,783

February 26, 2013

Beverley Hester
City of Tucson - Transportation Department
PO Box 27210
Tucson, AZ 85726-7210

TEL 520-837-4935
FAX (520) 791-4373

Work Order No.: 13B0588
Order Name: Storm Water Annual #

RE: Storm Water Biannual

Dear Beverley Hester,

Turner Laboratories, Inc. received 1 sample(s) on 02/20/2013 for the analyses presented in the following report.

All results are intended to be considered in their entirety, and Turner Laboratories, Inc. is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Samples will be disposed of 30 days after issue of our report unless special arrangements are made.

The pages that follow may contain sensitive, privileged or confidential information intended solely for the addressee named above. If you receive this message and are not the agent or employee of the addressee, this communication has been sent in error. Please do not disseminate or copy any of the attached and notify the sender immediately by telephone. Please also return the attached sheet(s) to the sender by mail.

Please call if you have any questions.

Respectfully submitted,

Turner Laboratories, Inc.
ADHS License AZ0066

Dawn Weyer

Dawn Weyer
Project Manager

Turner Laboratories, Inc.

Date: 02/26/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13B0588
Date Received: 02/20/2013

Order: Storm Water Annual #3

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date/Time
13B0588-01	Grab	Storm Water	02/20/2013 1220

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13B0588
Date Received: 02/20/2013

Case Narrative

E Value is above quantitation range.

All soil, sludge, and solid matrix determinations are reported on a wet weight basis unless otherwise noted.

ND Not Detected at or above the PQL

PQL Practical Quantitation Limit

DF Dilution Factor

Turner Laboratories, Inc.

Date: 02/26/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13B0588
Lab Sample ID: 13B0588-01

Client Sample ID: Grab
Collection Date/Time: 02/20/2013 1220
Matrix: Storm Water
Order Name: Storm Water Annual #3

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Total Coliform & E. Coli, MPN-SM9223B									
E.Coli	580		1.0		MPN/100 mL	1	02/20/2013 1445	02/21/2013 1615	AC
Total Coliform	2400		1.0	E	MPN/100 mL	1	02/20/2013 1445	02/21/2013 1615	AC

TURNER LABORATORIES, INC.
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CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

TURNER WORK ORDER # 13B0588 DATE _____ PAGE ____ OF ____

PROJECT NAME: Stormwater Samples Site # 1, 2, 3, 4, 5 (circle)
CONTACT NAME Chris McNellis
COMPANY NAME City of Tucson - Transportation Dept
ADDRESS P.O. Box 27210
CITY Tucson STATE AZ ZIP CODE 85726
PHONE (520) 837-6583 FAX (520) 791-4373
SAMPLER'S SIGNATURE C McNellis

CIRCLE ANALYSIS REQUESTED AND/OR CHECK THE APPROPRIATE BOX

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX*	NUMBER OF CONTAINERS	MPN
Grab	2/20/13	12:20 pm		Storm Water	1	X

1. RELINQUISHED BY: C McNellis
Signature: C McNellis
Printed Name: City of Tucson Trans. Dept
Firm: 2/20/13 1:32pm
Date/Time

2. RECEIVED BY: Bev Hester
Signature: Bev Hester
Printed Name:
Firm: 2/20/13 1:32pm
Date/Time

TURNAROUND REQUIREMENTS:
____ Standard (approx.10 days)*
____ Next day ____ 2 Day ____ 5 Day*
____ Email Preliminary Results To:
* Working Days

REPORT REQUIREMENTS:
____ I. Routine Report
____ II. Report (includes DUP,MS,MSD, as required, may be charged as samples)
____ III. Data Validation Report (Includes All Raw Data)
Add 10% to invoice

INVOICE INFORMATION:
Account ____ Y ____ N
P.O. # _____
Bill to: _____

SAMPLE RECEIPT:
Total Containers: 1
Temperature: 4.4
[X] Wet Ice [ ] Blue Ice

3. RELINQUISHED BY: Bev Hester
Signature: Bev Hester
Printed Name:
Firm: 2/20/13 2:10pm
Date/Time

4. RECEIVED BY: [illegible]
Signature: [illegible]
Printed Name: TURNER LABORATORIES, INC.
Firm: 2/20/13 2:10pm
Date/Time

*LEGEND
DW = DRINKING WATER
GW = GROUNDWATER
SD = SOLID
SG = SLUDGE
SL = SOIL
ST = STORMWATER
WW = WASTEWATER

SPECIAL INSTRUCTIONS/COMMENTS:

Compliance Analysis:	[ ] Yes [ ] No	Custody Seals	[ ]	Preservation Confirmation	[X]
ADEQ Forms:	[ ] Yes [ ] No	Container Intact	[X]	Appropriate Head Space	[X]
Mail ADEQ Forms:	[ ] Yes [ ] No	COC/Labels Agree	[X]	Received Within Hold Time	[X]

*Ni, Hg, Ag, Cr, Cd, Be, Ba, As, Cu, Sb, Zn, Se, Pb, Tl, Ca, Mg
Composite poured at lab per C.O.T. Specifications

March 21, 2013

Beverley Hester
City of Tucson - Transportation Department
PO Box 27210
Tucson, AZ 85726-7210

TEL 520-837-4935
FAX (520) 791-4373

Work Order No.: 13B0612
Order Name: Site #4

RE: Storm Water Biannual

Dear Beverley Hester,

Turner Laboratories, Inc. received 2 sample(s) on 02/21/2013 for the analyses presented in the following report.

The attached report has been revised. Please refer to the Case Narrative page for an explanation of the changes. We apologize for any inconvenience this may have caused you.

All results are intended to be considered in their entirety, and Turner Laboratories, Inc. is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Samples will be disposed of 30 days after issue of our report unless special arrangements are made.

The pages that follow may contain sensitive, privileged or confidential information intended solely for the addressee named above. If you receive this message and are not the agent or employee of the addressee, this communication has been sent in error. Please do not disseminate or copy any of the attached and notify the sender immediately by telephone. Please also return the attached sheet(s) to the sender by mail.

Please call if you have any questions.

Respectfully submitted,
Turner Laboratories, Inc.
ADHS License AZ0066

Terri L. Garcia

Terri Garcia
Technical Director

Turner Laboratories, Inc.

Date: 03/21/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13B0612
Date Received: 02/21/2013

Order: Site #4

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date/Time
13B0612-01	Composite	Storm Water	02/20/2013 1203
13B0612-02	Grab	Storm Water	02/20/2013 1203

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13B0612
Date Received: 02/21/2013

Case Narrative

EPA 624: Recovery of Acrolein was below acceptance limits in the Matrix Spike .

EPA 8270C: There was insufficient sample volume available to perform the method-required Matrix Spike Duplicate. A Matrix Spike was analyzed. (ADHS qualifier Q9). The PQLs are elevated. The sample required a dilution due to matrix interferences. (ADHS qualifier D5).

EPA 8081: Technical Chlordane is reported as a pattern-compared compound in addition to the alpha and gamma Chlordane reported by EPA 8081.

This report was originally generated on 3/20/2013. It is being revised on 3/21/2013 to include pentachlorophenol reporting to the MDL, which was not on the original report.

C4	Confirmatory analysis was past holding time
D5	Minimum Reporting Limit (MRL) is adjusted due to sample dilution; analyte was non-detect in the sample.
E4	Concentration estimated. Analyte was detected below laboratory Minimum Reporting Limit (MRL) but above MDL.
E8	Analyte reported to MDL per project specification. Target analyte was not detected in the sample.
L1	The associated LCS/LCSD recovery was above laboratory acceptance limits.
M1	Matrix spike recovery was high; the associated LCS/LCSD was acceptable.
M2	Matrix spike recovery was low; the associated LCS/LCSD was acceptable.
M7	Matrix spike recovery was low. Data reported per ADEQ policy 0154.000. Matrix interference was confirmed.
S4	Surrogate recovery was above laboratory and method acceptance limits. No target analytes were detected in the sample.
T2	Cited ADHS Licensed method does not contain this analyte as part of the method compound list.
V1	CCV recovery was above method acceptance limits. This target analyte was not detected in the sample.

All soil, sludge, and solid matrix determinations are reported on a wet weight basis unless otherwise noted.

ND	Not Detected at or above the PQL
PQL	Practical Quantitation Limit
DF	Dilution Factor

Turner Laboratories, Inc.

Date: 03/21/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13B0612
Lab Sample ID: 13B0612-01

Client Sample ID: Composite
Collection Date/Time: 02/20/2013 1203
Matrix: Storm Water
Order Name: Site #4

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Hardness-Calculation									
Hardness, Calcium/Magnesium (As CaCO3)	180				mg/L	1	02/25/2013 1015	02/26/2013 1142	RAD
Nitrate + Nitrite Sum-Calculation									
Nitrate and Nitrite Sum	ND		0.10		mg/L	1	02/21/2013 1200	02/21/2013 1751	EW
ICP Total Metals-E200.7									
Arsenic	ND		40		ug/L	1	02/25/2013 1015	02/26/2013 1142	RAD
Barium	270		50		ug/L	1	02/25/2013 1015	02/26/2013 1142	RAD
Beryllium	ND		2.0		ug/L	1	02/25/2013 1015	02/26/2013 1142	RAD
Cadmium	ND		2.0		ug/L	1	02/25/2013 1015	02/26/2013 1142	RAD
Calcium	57000		4000		ug/L	1	02/25/2013 1015	02/26/2013 1142	RAD
Chromium	ND		30		ug/L	1	02/25/2013 1015	02/26/2013 1142	RAD
Copper	160		20		ug/L	1	02/25/2013 1015	02/26/2013 1142	RAD
Magnesium	9500		3000		ug/L	1	02/25/2013 1015	02/26/2013 1142	RAD
Nickel	ND		50		ug/L	1	02/25/2013 1015	02/26/2013 1142	RAD
Zinc	440		40		ug/L	1	02/25/2013 1015	02/26/2013 1142	RAD
ICP/MS Total Metals-E200.8									
Antimony	2.5		0.50		ug/L	1	02/28/2013 0935	03/01/2013 1156	RAD
Lead	42		0.50		ug/L	1	02/28/2013 0935	03/01/2013 1156	RAD
Selenium	1.9		13	D5	ug/L	5	02/28/2013 0935	03/05/2013 1038	RAD
Silver	0.24	0.0054	0.50	E4	ug/L	1	02/28/2013 0935	03/01/2013 1156	RAD
Thallium	0.10		0.50		ug/L	1	02/28/2013 0935	03/01/2013 1156	RAD
CVAA Total Mercury-E245.1									
Mercury	ND	0.032	1.0	E8	ug/L	1	03/01/2013 0930	03/01/2013 1533	RAD
Anions by Ion Chromatography-E300									
Nitrogen, Nitrate (As N)	ND		1.0		mg/L	1	02/21/2013 1200	02/21/2013 1751	EW
Nitrogen, Nitrite (As N)	ND		0.10		mg/L	1	02/21/2013 1200	02/21/2013 1751	EW
Phosphorus, Dissolved Orthophosphate (As P)	ND		0.50	C4	mg/L	1	02/22/2013 1300	02/22/2013 1437	EW
Total Phosphorous as P-H8190									
Total Phosphorus (as P)	0.50		0.20		mg/L	2	03/04/2013 1315	03/04/2013 1650	AC

Turner Laboratories, Inc.

Date: 03/21/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13B0612
Lab Sample ID: 13B0612-01

Client Sample ID: Composite
Collection Date/Time: 02/20/2013 1203
Matrix: Storm Water
Order Name: Site #4

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Chemical Oxygen Demand-Hach 8000									
Chemical Oxygen Demand	370		20		mg/L	1	02/28/2013 1000	02/28/2013 1700	EW
Total Kjeldahl Nitrogen-PAI-DK01									
Nitrogen, Total Kjeldahl	2.4		0.50		mg/L	1	02/28/2013 0900	03/04/2013 1545	EW
Total Dissolved Solids (Residue, Filterable)-SM2540 C									
Total Dissolved Solids (Residue, Filterable)	130		20		mg/L	1	02/22/2013 1430	02/26/2013 1510	AC
Total Suspended Solids (Residue, Non-Filterable)-SM2540 D									
Total Suspended Solids	590		10		mg/L	1	02/22/2013 1334	02/25/2013 1720	AC
Ammonia as N-SM4500-NH3 B,C									
Nitrogen, Ammonia (As N)	0.99		0.50		mg/L	1	02/28/2013 0915	02/28/2013 1545	EW
BOD, 5 day-SM5210 B									
Biochemical Oxygen Demand	26		2.0		mg/L	1	02/21/2013 1645	02/26/2013 1645	AC
Organochlorine Pesticides-SW8081A									
4,4´-DDD	ND		0.099		ug/L	1	02/27/2013 0815	03/04/2013 1743	MD
4,4´-DDE	ND		0.099		ug/L	1	02/27/2013 0815	03/04/2013 1743	MD
4,4´-DDT	ND		0.099		ug/L	1	02/27/2013 0815	03/04/2013 1743	MD
Aldrin	ND		0.099		ug/L	1	02/27/2013 0815	03/04/2013 1743	MD
alpha-BHC	ND		0.099		ug/L	1	02/27/2013 0815	03/04/2013 1743	MD
alpha-Chlordane	ND		0.099		ug/L	1	02/27/2013 0815	03/04/2013 2208	MD
beta-BHC	ND		0.099		ug/L	1	02/27/2013 0815	03/04/2013 1743	MD
Chlordane	0.0			T2	ug/L	1	02/27/2013 0815	03/04/2013 1743	MD
delta-BHC	ND		0.099		ug/L	1	02/27/2013 0815	03/04/2013 1743	MD
Dieldrin	ND		0.099		ug/L	1	02/27/2013 0815	03/04/2013 1743	MD
Endosulfan I	ND		0.099		ug/L	1	02/27/2013 0815	03/04/2013 1743	MD
Endosulfan II	ND		0.099		ug/L	1	02/27/2013 0815	03/04/2013 1743	MD
Endosulfan sulfate	ND		0.099		ug/L	1	02/27/2013 0815	03/04/2013 1743	MD
Endrin	ND		0.099		ug/L	1	02/27/2013 0815	03/04/2013 1743	MD

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13B0612
Lab Sample ID: 13B0612-01
Client Sample ID: Composite
Collection Date/Time: 02/20/2013 1203
Matrix: Storm Water
Order Name: Site #4

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Endrin aldehyde	ND		0.099		ug/L	1	02/27/2013 0815	03/04/2013 1743	MD
Endrin ketone	ND		0.099		ug/L	1	02/27/2013 0815	03/04/2013 1743	MD
gamma-BHC	ND		0.099		ug/L	1	02/27/2013 0815	03/04/2013 1743	MD
gamma-Chlordane	ND		0.099		ug/L	1	02/27/2013 0815	03/04/2013 2208	MD
Heptachlor	ND		0.099		ug/L	1	02/27/2013 0815	03/04/2013 1743	MD
Heptachlor epoxide	ND		0.099		ug/L	1	02/27/2013 0815	03/04/2013 1743	MD
Methoxychlor	ND		0.099		ug/L	1	02/27/2013 0815	03/04/2013 1743	MD
Toxaphene	ND		0.99		ug/L	1	02/27/2013 0815	03/04/2013 1743	MD
Surr: Decachlorobiphenyl	*70*	*51.1-138.5*			*%REC*	*1*	*02/27/2013 0815*	*03/04/2013 1743*	*MD*
Surr: Tetrachloro-m-xylene	*73*	*39.1-120*			*%REC*	*1*	*02/27/2013 0815*	*03/04/2013 1743*	*MD*
PCBs-SW8082									
Aroclor 1016	ND		1.0		ug/L	1	02/21/2013 1514	02/26/2013 0000	MD
Aroclor 1221	ND		1.0		ug/L	1	02/21/2013 1514	02/26/2013 0000	MD
Aroclor 1232	ND		1.0		ug/L	1	02/21/2013 1514	02/26/2013 0000	MD
Aroclor 1242	ND		1.0		ug/L	1	02/21/2013 1514	02/26/2013 0000	MD
Aroclor 1248	ND		1.0		ug/L	1	02/21/2013 1514	02/26/2013 0000	MD
Aroclor 1254	ND		1.0		ug/L	1	02/21/2013 1514	02/26/2013 0000	MD
Aroclor 1260	ND		1.0		ug/L	1	02/21/2013 1514	02/26/2013 0000	MD
Surr: Decachlorobiphenyl	*87*	*52.7-155.1*			*%REC*	*1*	*02/21/2013 1514*	*02/26/2013 000*	*MD*
Semivolatile Organic Compounds-SW8270C									
1,2,4-Trichlorobenzene	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
1,2-Dichlorobenzene	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
1,2-Diphenylhydrazine	ND	4.9	20	E8	ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
1,3-Dichlorobenzene	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
1,4-Dichlorobenzene	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
2,4,5-Trichlorophenol	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
2,4,6-Trichlorophenol	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
2,4-Dichlorophenol	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
2,4-Dimethylphenol	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
2,4-Dinitrophenol	ND		98		ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
2,4-Dinitrotoluene	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
2,6-Dinitrotoluene	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
2-Chloronaphthalene	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
2-Chlorophenol	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
2-Methylnaphthalene	ND		9.8		ug/L	2	02/26/2013 0814	03/14/2013 0357	MD

Turner Laboratories, Inc.

Date: 03/21/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13B0612
Lab Sample ID: 13B0612-01

Client Sample ID: Composite
Collection Date/Time: 02/20/2013 1203
Matrix: Storm Water
Order Name: Site #4

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
2-Methylphenol	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
2-Nitroaniline	ND		39		ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
2-Nitrophenol	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
3,3´-Dichlorobenzidine	ND	2.0	39	E8	ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
3,4-Methylphenol	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
3-Nitroaniline	ND		39	V1	ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
4,6-Dinitro-2-methylphenol	ND		39		ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
4-Bromophenyl phenyl ether	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
4-Chloro-3-methylphenol	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
4-Chloroaniline	ND		39		ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
4-Chlorophenyl phenyl ether	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
4-Methylphenol	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
4-Nitroaniline	ND		39		ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
4-Nitrophenol	ND		98		ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
Acenaphthene	ND		9.8		ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
Acenaphthylene	ND		9.8		ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
Aniline	ND		39		ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
Anthracene	ND		9.8		ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
Benzo[a]anthracene	ND	1.2	9.8	E8	ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
Benzo[a]pyrene	ND	1.5	9.8	E8	ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
Benzo[b,k]fluoranthene	ND	3.2	20	E8	ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
Benzo[g,h,i]perylene	ND		9.8		ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
Benzoic acid	110		98		ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
Benzyl alcohol	ND		9.8		ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
Bis(2-chloroethoxy)methane	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
Bis(2-chloroethyl)ether	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
Bis(2-chloroisopropyl)ether	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
Bis(2-ethylhexyl)phthalate	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
Butyl benzyl phthalate	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
Chrysene	ND		9.8		ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
Dibenz[a,h]anthracene	ND	1.9	9.8	E8	ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
Dibenzofuran	ND		9.8		ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
Diethyl phthalate	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
Dimethyl phthalate	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
Di-n-butyl phthalate	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
Di-n-octyl phthalate	ND		20		ug/L	2	02/26/2013 0814	03/19/2013 0009	MD
Fluoranthene	ND		9.8		ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
Fluorene	ND		9.8		ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
Hexachlorobenzene	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
Hexachlorobutadiene	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
Hexachlorocyclopentadiene	ND		20	V1	ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
Hexachloroethane	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0357	MD

Turner Laboratories, Inc.

Date: 03/21/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13B0612
Lab Sample ID: 13B0612-01

Client Sample ID: Composite
Collection Date/Time: 02/20/2013 1203
Matrix: Storm Water
Order Name: Site #4

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Indeno[1,2,3-cd]pyrene	ND	1.6	9.8	E8	ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
Isophorone	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
Naphthalene	ND		9.8		ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
Nitrobenzene	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
N-Nitrosodimethylamine	ND	3.2	20	E8	ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
N-Nitrosodiphenylamine	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
N-Nitrosodipropylamine	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
Pentachlorophenol	ND	2.9	59	E8	ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
Phenanthrene	ND		9.8		ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
Phenol	ND		20		ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
Pyrene	ND		9.8		ug/L	2	02/26/2013 0814	03/14/2013 0357	MD
Surr: 2,4,6-Tribromophenol	*93*	*61.48-125.9*			*%REC*	*2*	*02/26/2013 0814*	*03/14/2013 357*	*MD*
Surr: 2-Fluorobiphenyl	*82*	*41.02-91.53*			*%REC*	*2*	*02/26/2013 0814*	*03/14/2013 357*	*MD*
Surr: 2-Fluorophenol	*56*	*38.35-57.43*			*%REC*	*2*	*02/26/2013 0814*	*03/14/2013 357*	*MD*
Surr: 4-Terphenyl-d14	*75*	*14.66-124.1*			*%REC*	*2*	*02/26/2013 0814*	*03/14/2013 357*	*MD*
Surr: Nitrobenzene-d5	*69*	*49.49-85.19*			*%REC*	*2*	*02/26/2013 0814*	*03/14/2013 357*	*MD*
Surr: Phenol-d6	*67*	*28.68-69.45*			*%REC*	*2*	*02/26/2013 0814*	*03/14/2013 357*	*MD*

Turner Laboratories, Inc.

Date: 03/21/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13B0612
Lab Sample ID: 13B0612-02

Client Sample ID: Grab
Collection Date/Time: 02/20/2013 1203
Matrix: Storm Water
Order Name: Site #4

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
N-Hexane Extractable Material (SGT-HEM)-E 1664A									
Total Petroleum Hydrocarbons	ND		5.00		mg/L	1	03/06/2013 1045	03/06/2013 1620	AC
N-Hexane Extractable Material (HEM)-E1664A									
Oil & Grease	8.50		5.00		mg/L	1	02/25/2013 0845	02/25/2013 1715	AC
Volatile Organic Compounds by GCMS-EPA 624									
1,1,1-Trichloroethane	ND		2.0	T2	ug/L	1	02/20/2013 1643	02/21/2013 1615	KP
1,1,2,2-Tetrachloroethane	ND		2.0		ug/L	1	02/20/2013 1643	02/21/2013 1615	KP
1,1,2-Trichloroethane	ND		2.0		ug/L	1	02/20/2013 1643	02/21/2013 1615	KP
1,1-Dichloroethane	ND		2.0		ug/L	1	02/20/2013 1643	02/21/2013 1615	KP
1,1-Dichloroethene	ND		2.0		ug/L	1	02/20/2013 1643	02/21/2013 1615	KP
1,2,4-Trimethylbenzene	ND		2.0	T2	ug/L	1	02/20/2013 1643	02/21/2013 1615	KP
1,2-Dichlorobenzene	ND		2.0		ug/L	1	02/20/2013 1643	02/21/2013 1615	KP
1,2-Dichloroethane	ND		2.0		ug/L	1	02/20/2013 1643	02/21/2013 1615	KP
1,2-Dichloropropane	ND		2.0		ug/L	1	02/20/2013 1643	02/21/2013 1615	KP
1,3,5-Trimethylbenzene	ND		2.0	T2	ug/L	1	02/20/2013 1643	02/21/2013 1615	KP
1,3-Dichlorobenzene	ND		2.0		ug/L	1	02/20/2013 1643	02/21/2013 1615	KP
1,4-Dichlorobenzene	ND		2.0		ug/L	1	02/20/2013 1643	02/21/2013 1615	KP
2-Chloroethylvinylether	ND		10		ug/L	1	02/20/2013 1643	02/21/2013 1615	KP
Acetone	13		10	T2	ug/L	1	02/20/2013 1643	02/21/2013 1615	KP
Acrolein	ND		10		ug/L	1	02/20/2013 1643	02/21/2013 1615	KP
Acrylonitrile	ND		10		ug/L	1	02/20/2013 1643	02/21/2013 1615	KP
Benzene	ND		2.0		ug/L	1	02/20/2013 1643	02/21/2013 1615	KP
Bromodichloromethane	ND		2.0		ug/L	1	02/20/2013 1643	02/21/2013 1615	KP
Bromoform	ND		2.0		ug/L	1	02/20/2013 1643	02/21/2013 1615	KP
Bromomethane	ND		2.0		ug/L	1	02/20/2013 1643	02/21/2013 1615	KP
Carbon tetrachloride	ND		2.0		ug/L	1	02/20/2013 1643	02/21/2013 1615	KP
Chlorobenzene	ND		2.0		ug/L	1	02/20/2013 1643	02/21/2013 1615	KP
Chloroethane	ND		5.0		ug/L	1	02/20/2013 1643	02/21/2013 1615	KP
Chloroform	ND		2.0		ug/L	1	02/20/2013 1643	02/21/2013 1615	KP
Chloromethane	ND		5.0		ug/L	1	02/20/2013 1643	02/21/2013 1615	KP
cis-1,3-Dichloropropene	ND		2.0		ug/L	1	02/20/2013 1643	02/21/2013 1615	KP
Dibromochloromethane	ND		2.0		ug/L	1	02/20/2013 1643	02/21/2013 1615	KP
Dichlorodifluoromethane	ND		5.0	T2	ug/L	1	02/20/2013 1643	02/21/2013 1615	KP
Ethylbenzene	ND		2.0		ug/L	1	02/20/2013 1643	02/21/2013 1615	KP
Methyl Isobutyl Ketone (MIBK)	ND		10	T2	ug/L	1	02/20/2013 1643	02/21/2013 1615	KP
Methylene chloride	ND		10		ug/L	1	02/20/2013 1643	02/21/2013 1615	KP
Tetrachloroethene	ND		2.0		ug/L	1	02/20/2013 1643	02/21/2013 1615	KP

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Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13B0612
Lab Sample ID: 13B0612-02

Client Sample ID: Grab
Collection Date/Time: 02/20/2013 1203
Matrix: Storm Water
Order Name: Site #4

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Tetrahydrofuran	ND		10	T2	ug/L	1	02/20/2013 1643	02/21/2013 1615	KP
Toluene	ND		2.0		ug/L	1	02/20/2013 1643	02/21/2013 1615	KP
trans-1,2-Dichloroethene	ND		2.0		ug/L	1	02/20/2013 1643	02/21/2013 1615	KP
trans-1,3-Dichloropropene	ND		2.0		ug/L	1	02/20/2013 1643	02/21/2013 1615	KP
Trichloroethene	ND		2.0		ug/L	1	02/20/2013 1643	02/21/2013 1615	KP
Trichlorofluoromethane	ND		5.0		ug/L	1	02/20/2013 1643	02/21/2013 1615	KP
Vinyl chloride	ND		2.0		ug/L	1	02/20/2013 1643	02/21/2013 1615	KP
Xylenes, Total	ND		6.0	T2	ug/L	1	02/20/2013 1643	02/21/2013 1615	KP
Surr: 1,2-Dichloroethane-d4	*102*	*70-130*			*%REC*	*1*	*02/20/2013 1643*	*02/21/2013 1615*	*KP*
Surr: 4-Bromofluorobenzene	*87*	*70-130*			*%REC*	*1*	*02/20/2013 1643*	*02/21/2013 1615*	*KP*
Surr: Fluorobenzene	*94*	*70-130*			*%REC*	*1*	*02/20/2013 1643*	*02/21/2013 1615*	*KP*
Cyanide-SM4500-CN BE									
Cyanide	ND		100		ug/L	1	02/25/2013 0900	02/26/2013 1715	EW

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Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13B0612
Date Received: 02/21/2013

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302295 - E 200.2 ICP										
Blank (1302295-BLK1)				Prepared: 02/25/2013 Analyzed: 02/26/2013						
Arsenic	ND	40	ug/L							
Barium	ND	50	ug/L							
Beryllium	ND	2.0	ug/L							
Cadmium	ND	2.0	ug/L							
Calcium	ND	4000	ug/L							
Chromium	ND	30	ug/L							
Copper	ND	20	ug/L							
Magnesium	ND	3000	ug/L							
Nickel	ND	50	ug/L							
Zinc	ND	40	ug/L							
LCS (1302295-BS1)				Prepared: 02/25/2013 Analyzed: 02/26/2013						
Arsenic	1910	40	ug/L	2000		95	85-115			
Barium	1900	50	ug/L	2000		97	85-115			
Beryllium	48	2.0	ug/L	50.00		96	85-115			
Cadmium	49	2.0	ug/L	50.00		98	85-115			
Calcium	10000	4000	ug/L	10000		100	85-115			
Chromium	200	30	ug/L	200.0		99	85-115			
Copper	240	20	ug/L	250.0		97	85-115			
Magnesium	10000	3000	ug/L	10000		101	85-115			
Nickel	490	50	ug/L	500.0		97	85-115			
Zinc	490	40	ug/L	500.0		98	85-115			
LCS Dup (1302295-BSD1)				Prepared: 02/25/2013 Analyzed: 02/26/2013						
Arsenic	1950	40	ug/L	2000		98	85-115	2	20	
Barium	2000	50	ug/L	2000		99	85-115	2	20	
Beryllium	49	2.0	ug/L	50.00		98	85-115	2	20	
Cadmium	50	2.0	ug/L	50.00		100	85-115	2	20	
Calcium	10000	4000	ug/L	10000		102	85-115	2	20	
Chromium	200	30	ug/L	200.0		101	85-115	2	20	
Copper	250	20	ug/L	250.0		100	85-115	2	20	
Magnesium	10000	3000	ug/L	10000		103	85-115	2	20	
Nickel	500	50	ug/L	500.0		99	85-115	2	20	
Zinc	500	40	ug/L	500.0		100	85-115	2	20	
Matrix Spike (1302295-MS1)	**Source: 13B0420-01**			Prepared: 02/25/2013 Analyzed: 02/26/2013						
Arsenic	1920	40	ug/L	2000	7.26	96	70-130			
Barium	1900	50	ug/L	2000	42	92	70-130			
Beryllium	47	2.0	ug/L	50.00	ND	95	70-130			
Cadmium	46	2.0	ug/L	50.00	0.85	91	70-130			
Calcium	33000	4000	ug/L	10000	25000	81	70-130			
Chromium	190	30	ug/L	200.0	0.91	92	70-130			
Copper	260	20	ug/L	250.0	3.0	102	70-130			
Magnesium	12000	3000	ug/L	10000	2900	94	70-130			
Nickel	480	50	ug/L	500.0	5.6	95	70-130			
Zinc	490	40	ug/L	500.0	14	95	70-130			

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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302295 - E 200.2 ICP										
Matrix Spike (1302295-MS2)		**Source: 13B0598-01**		Prepared: 02/25/2013 Analyzed: 02/26/2013						
Arsenic	2100	40	ug/L	2000	21.6	104	70-130			
Barium	520	50	ug/L	2000	1.8	26	70-130			M2
Beryllium	43	2.0	ug/L	50.00	0.40	85	70-130			
Cadmium	53	2.0	ug/L	50.00	9.2	87	70-130			
Calcium	40000	4000	ug/L	10000	32000	87	70-130			
Chromium	180	30	ug/L	200.0	0.96	91	70-130			
Copper	270	20	ug/L	250.0	5.0	105	70-130			
Magnesium	11000	3000	ug/L	10000	1700	95	70-130			
Nickel	530	50	ug/L	500.0	30	100	70-130			
Zinc	520	40	ug/L	500.0	1.5	103	70-130			
Batch 1302340 - E 200.8 ICP/MS										
Blank (1302340-BLK1)				Prepared & Analyzed: 02/28/2013						
Antimony	0.0060	0.50	ug/L							
Lead	ND	0.50	ug/L							
Selenium	ND	2.5	ug/L							
Silver	ND	0.50	ug/L							
Thallium	ND	0.50	ug/L							
LCS (1302340-BS1)				Prepared & Analyzed: 02/28/2013						
Antimony	50	0.50	ug/L	50.00		99	85-115			
Lead	48	0.50	ug/L	50.00		95	85-115			
Selenium	260	2.5	ug/L	250.0		103	85-115			
Silver	48	0.50	ug/L	50.00		96	85-115			
Thallium	47	0.50	ug/L	50.00		95	85-115			
LCS Dup (1302340-BSD1)				Prepared & Analyzed: 02/28/2013						
Antimony	50	0.50	ug/L	50.00		99	85-115	0.4	20	
Lead	48	0.50	ug/L	50.00		97	85-115	2	20	
Selenium	260	2.5	ug/L	250.0		104	85-115	0.9	20	
Silver	48	0.50	ug/L	50.00		96	85-115	0.4	20	
Thallium	48	0.50	ug/L	50.00		96	85-115	0.6	20	
Matrix Spike (1302340-MS1)		**Source: 13B0633-02**		Prepared: 02/28/2013 Analyzed: 03/01/2013						
Antimony	46	0.50	ug/L	50.00	0.14	92	70-130			
Lead	51	0.50	ug/L	50.00	0.49	100	70-130			
Selenium	250	2.5	ug/L	250.0	0.70	101	70-130			
Silver	35	0.50	ug/L	50.00	0.022	71	70-130			
Thallium	49	0.50	ug/L	50.00	ND	99	70-130			
Batch 1303005 - E 245.1										
Blank (1303005-BLK1)				Prepared & Analyzed: 03/01/2013						
Mercury	ND	1.0	ug/L							
LCS (1303005-BS1)				Prepared & Analyzed: 03/01/2013						
Mercury	5.2	1.0	ug/L	5.000		105	85-115			

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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1303005 - E 245.1										
LCS Dup (1303005-BSD1)				Prepared & Analyzed: 03/01/2013						
Mercury	5.2	1.0	ug/L	5.000		103	85-115	2	20	
Matrix Spike (1303005-MS1)		**Source: 13B0703-01**		Prepared & Analyzed: 03/01/2013						
Mercury	5.3	1.0	ug/L	5.000	ND	106	85-115			
Matrix Spike Dup (1303005-MSD1)		**Source: 13B0703-01**		Prepared & Analyzed: 03/01/2013						
Mercury	5.3	1.0	ug/L	5.000	ND	105	85-115	1	10	

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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302279 - GEN CHEM										
Duplicate (1302279-DUP1)		**Source: 13B0417-01**		Prepared: 02/22/2013 Analyzed: 02/25/2013						
Total Suspended Solids	37	10	mg/L		38			3	5	
Duplicate (1302279-DUP2)		**Source: 13B0418-01**		Prepared: 02/22/2013 Analyzed: 02/25/2013						
Total Suspended Solids	82	10	mg/L		83			1	5	
Batch 1302291 - GEN CHEM										
Blank (1302291-BLK1)				Prepared: 02/28/2013 Analyzed: 03/04/2013						
Nitrogen, Total Kjeldahl	ND	0.50	mg/L							
LCS (1302291-BS1)				Prepared: 02/28/2013 Analyzed: 03/04/2013						
Nitrogen, Total Kjeldahl	5.4	0.50	mg/L	5.000		108	80-120			
LCS Dup (1302291-BSD1)				Prepared: 02/28/2013 Analyzed: 03/04/2013						
Nitrogen, Total Kjeldahl	5.1	0.50	mg/L	5.000		102	80-120	6	20	
Matrix Spike (1302291-MS1)		**Source: 13B0606-01**		Prepared: 02/28/2013 Analyzed: 03/04/2013						
Nitrogen, Total Kjeldahl	5.1	0.50	mg/L	5.000	0.35	94	80-120			
Matrix Spike (1302291-MS2)		**Source: 13B0623-01**		Prepared: 02/28/2013 Analyzed: 03/04/2013						
Nitrogen, Total Kjeldahl	4.2	0.50	mg/L	5.000	0.53	74	80-120			M7
Matrix Spike Dup (1302291-MSD1)		**Source: 13B0606-01**		Prepared: 02/28/2013 Analyzed: 03/04/2013						
Nitrogen, Total Kjeldahl	4.9	0.50	mg/L	5.000	0.35	92	80-120	2	20	
Matrix Spike Dup (1302291-MSD2)		**Source: 13B0623-01**		Prepared: 02/28/2013 Analyzed: 03/04/2013						
Nitrogen, Total Kjeldahl	4.4	0.50	mg/L	5.000	0.53	78	80-120	4	20	M7
Batch 1302293 - SPECTRO PREP										
Blank (1302293-BLK1)				Prepared: 02/25/2013 Analyzed: 02/26/2013						
Cyanide	ND	100	ug/L							
LCS (1302293-BS1)				Prepared: 02/25/2013 Analyzed: 02/26/2013						
Cyanide	2000	100	ug/L	2000		101	90-110			
LCS Dup (1302293-BSD1)				Prepared: 02/25/2013 Analyzed: 02/26/2013						
Cyanide	2000	100	ug/L	2000		98	90-110	3	20	
Matrix Spike (1302293-MS1)		**Source: 13B0631-03**		Prepared: 02/25/2013 Analyzed: 02/26/2013						
Cyanide	1700	100	ug/L	2000	ND	83	70-130			
Matrix Spike Dup (1302293-MSD1)		**Source: 13B0631-03**		Prepared: 02/25/2013 Analyzed: 02/26/2013						
Cyanide	1500	100	ug/L	2000	ND	77	70-130	7	20	
Batch 1302300 - GEN CHEM										
Blank (1302300-BLK1)				Prepared & Analyzed: 02/25/2013						
Oil & Grease	ND	5.00	mg/L							
LCS (1302300-BS1)				Prepared & Analyzed: 02/25/2013						
Oil & Grease	36.2	5.00	mg/L	40.00		91	78-114			

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302300 - GEN CHEM										
LCS Dup (1302300-BSD1)				Prepared & Analyzed: 02/25/2013						
Oil & Grease	35.2	5.00	mg/L	40.00		88	78-114	3	18	
Matrix Spike (1302300-MS1)		**Source: 13B0411-02**		Prepared & Analyzed: 02/25/2013						
Oil & Grease	50.2	5.00	mg/L	40.00	14.5	89	78-114			
Batch 1302301 - GEN CHEM										
Blank (1302301-BLK1)				Prepared: 02/21/2013 Analyzed: 02/26/2013						
Biochemical Oxygen Demand	ND	2.0	mg/L							
LCS (1302301-BS1)				Prepared: 02/21/2013 Analyzed: 02/26/2013						
Biochemical Oxygen Demand	180		mg/L	198.0		91	85-115			
Batch 1302318 - GEN CHEM										
Duplicate (1302318-DUP1)		**Source: 13B0529-01**		Prepared: 02/22/2013 Analyzed: 02/27/2013						
Total Dissolved Solids (Residue, Filterable)	1200	20	mg/L		1200			0.2	5	
Batch 1302331 - GEN CHEM										
Blank (1302331-BLK1)				Prepared & Analyzed: 02/28/2013						
Nitrogen, Ammonia (As N)	ND	0.50	mg/L							
LCS (1302331-BS1)				Prepared & Analyzed: 02/28/2013						
Nitrogen, Ammonia (As N)	5.2	0.50	mg/L	5.000		105	90-110			
LCS Dup (1302331-BSD1)				Prepared & Analyzed: 02/28/2013						
Nitrogen, Ammonia (As N)	5.0	0.50	mg/L	5.000		99	90-110	5	10	
Matrix Spike (1302331-MS1)		**Source: 13B0562-05**		Prepared & Analyzed: 02/28/2013						
Nitrogen, Ammonia (As N)	4.8	0.50	mg/L	5.000	0.18	93	70-130			
Matrix Spike (1302331-MS2)		**Source: 13B0679-03**		Prepared & Analyzed: 02/28/2013						
Nitrogen, Ammonia (As N)	4.9	0.50	mg/L	5.000	0.40	90	70-130			
Matrix Spike Dup (1302331-MSD1)		**Source: 13B0562-05**		Prepared & Analyzed: 02/28/2013						
Nitrogen, Ammonia (As N)	5.2	0.50	mg/L	5.000	0.18	100	70-130	7	20	
Matrix Spike Dup (1302331-MSD2)		**Source: 13B0679-03**		Prepared & Analyzed: 02/28/2013						
Nitrogen, Ammonia (As N)	4.8	0.50	mg/L	5.000	0.40	89	70-130	1	20	
Batch 1302332 - SPECTRO PREP										
Blank (1302332-BLK1)				Prepared & Analyzed: 02/28/2013						
Chemical Oxygen Demand	ND	20	mg/L							
LCS (1302332-BS1)				Prepared & Analyzed: 02/28/2013						
Chemical Oxygen Demand	500	20	mg/L	500.0		100	70-130			
LCS Dup (1302332-BSD1)				Prepared & Analyzed: 02/28/2013						
Chemical Oxygen Demand	520	20	mg/L	500.0		103	70-130	3	20	

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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302332 - SPECTRO PREP										
Matrix Spike (1302332-MS1)		**Source: 13B0427-01**		Prepared & Analyzed: 02/28/2013						
Chemical Oxygen Demand	810	20	mg/L	500.0	320	97	70-130			
Matrix Spike Dup (1302332-MSD1)		**Source: 13B0427-01**		Prepared & Analyzed: 02/28/2013						
Chemical Oxygen Demand	830	20	mg/L	500.0	320	102	70-130	3	20	
Batch 1303053 - SPECTRO PREP										
Blank (1303053-BLK1)				Prepared & Analyzed: 03/04/2013						
Total Phosphorus (as P)	ND	0.10	mg/L							
LCS (1303053-BS1)				Prepared & Analyzed: 03/04/2013						
Total Phosphorus (as P)	0.49	0.10	mg/L	0.5000		98	90-110			
LCS Dup (1303053-BSD1)				Prepared & Analyzed: 03/04/2013						
Total Phosphorus (as P)	0.50	0.10	mg/L	0.5000		100	90-110	2	10	
Matrix Spike (1303053-MS1)		**Source: 13B0610-01**		Prepared & Analyzed: 03/04/2013						
Total Phosphorus (as P)	0.64	0.10	mg/L	0.5000	0.16	96	85-115			
Matrix Spike Dup (1303053-MSD1)		**Source: 13B0610-01**		Prepared & Analyzed: 03/04/2013						
Total Phosphorus (as P)	0.65	0.10	mg/L	0.5000	0.16	98	85-115	2	15	
Batch 1303072 - GEN CHEM										
Blank (1303072-BLK1)				Prepared & Analyzed: 03/06/2013						
Total Petroleum Hydrocarbons	ND	5.00	mg/L							
LCS (1303072-BS1)				Prepared & Analyzed: 03/06/2013						
Total Petroleum Hydrocarbons	17.7	5.00	mg/L	20.00		89	64-132			
LCS Dup (1303072-BSD1)				Prepared & Analyzed: 03/06/2013						
Total Petroleum Hydrocarbons	17.8	5.00	mg/L	20.00		89	64-132	0.6	34	
Matrix Spike (1303072-MS1)		**Source: 13B0610-02**		Prepared & Analyzed: 03/06/2013						
Total Petroleum Hydrocarbons	17.5	5.00	mg/L	20.00	ND	88	64-132			

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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302274 - SW 846 3520C										
Blank (1302274-BLK1)				Prepared: 02/21/2013 Analyzed: 02/25/2013						
Aroclor 1016	ND	1.0	ug/L							
Aroclor 1221	ND	1.0	ug/L							
Aroclor 1232	ND	1.0	ug/L							
Aroclor 1242	ND	1.0	ug/L							
Aroclor 1248	ND	1.0	ug/L							
Aroclor 1254	ND	1.0	ug/L							
Aroclor 1260	ND	1.0	ug/L							
Surrogate: Decachlorobiphenyl	*2.00*		*ug/L*	*2.000*		*100*	*52.7-155.1*			
LCS (1302274-BS1)				Prepared: 02/21/2013 Analyzed: 02/25/2013						
Aroclor 1016	8.8	1.0	ug/L	10.00		88	65.2-120.7			
Aroclor 1254	ND	1.0	ug/L				70-130			
Aroclor 1260	9.4	1.0	ug/L	10.00		94	65.3-133.7			
Surrogate: Decachlorobiphenyl	*1.97*		*ug/L*	*2.000*		*99*	*52.7-155.1*			
LCS Dup (1302274-BSD1)				Prepared: 02/21/2013 Analyzed: 02/25/2013						
Aroclor 1016	9.0	1.0	ug/L	10.00		90	65.2-120.7	2	30	
Aroclor 1254	ND	1.0	ug/L				70-130		30	
Aroclor 1260	9.5	1.0	ug/L	10.00		95	65.3-133.7	1	30	
Surrogate: Decachlorobiphenyl	*1.98*		*ug/L*	*2.000*		*99*	*52.7-155.1*			
Matrix Spike (1302274-MS1)		**Source: 13B0612-01**		Prepared: 02/21/2013 Analyzed: 02/25/2013						
Aroclor 1016	9.5	1.0	ug/L	10.03	ND	94	70-130			
Aroclor 1254	ND	1.0	ug/L		0.0		70-130			
Aroclor 1260	9.0	1.0	ug/L	10.03	ND	89	70-130			
Surrogate: Decachlorobiphenyl	*1.94*		*ug/L*	*2.006*		*96*	*52.7-155.1*			
Matrix Spike Dup (1302274-MSD1)		**Source: 13B0612-01**		Prepared: 02/21/2013 Analyzed: 02/25/2013						
Aroclor 1016	9.9	1.0	ug/L	10.25	ND	96	70-130	4	30	
Aroclor 1254	ND	1.0	ug/L		0.0		70-130		30	
Aroclor 1260	9.3	1.0	ug/L	10.25	ND	91	70-130	4	30	
Surrogate: Decachlorobiphenyl	*1.99*		*ug/L*	*2.049*		*97*	*52.7-155.1*			
Batch 1302297 - SW 846 3535										

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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302297 - SW 846 3535										
Blank (1302297-BLK1)				Prepared: 02/26/2013 Analyzed: 03/13/2013						
1,2,4-Trichlorobenzene	ND	10	ug/L							
1,2-Dichlorobenzene	ND	10	ug/L							
1,2-Diphenylhydrazine	ND	10	ug/L							
1,3-Dichlorobenzene	ND	10	ug/L							
1,4-Dichlorobenzene	ND	10	ug/L							
2,4,5-Trichlorophenol	ND	10	ug/L							
2,4,6-Trichlorophenol	ND	10	ug/L							
2,4-Dichlorophenol	ND	10	ug/L							
2,4-Dimethylphenol	ND	10	ug/L							
2,4-Dinitrophenol	ND	50	ug/L							
2,4-Dinitrotoluene	ND	10	ug/L							
2,6-Dinitrotoluene	ND	10	ug/L							
2-Chloronaphthalene	ND	10	ug/L							
2-Chlorophenol	ND	10	ug/L							
2-Methylnaphthalene	ND	5.0	ug/L							
2-Methylphenol	ND	10	ug/L							
2-Nitroaniline	ND	20	ug/L							
2-Nitrophenol	ND	10	ug/L							
3,3´-Dichlorobenzidine	ND	20	ug/L							
3,4-Methylphenol	ND	10	ug/L							
3-Nitroaniline	ND	20	ug/L							
4,6-Dinitro-2-methylphenol	ND	20	ug/L							
4-Bromophenyl phenyl ether	ND	10	ug/L							
4-Chloro-3-methylphenol	ND	10	ug/L							
4-Chloroaniline	ND	20	ug/L							
4-Chlorophenyl phenyl ether	ND	10	ug/L							
4-Methylphenol	ND	10	ug/L							
4-Nitroaniline	ND	20	ug/L							
4-Nitrophenol	ND	50	ug/L							
Acenaphthene	ND	5.0	ug/L							
Acenaphthylene	ND	5.0	ug/L							
Aniline	ND	20	ug/L							
Anthracene	ND	5.0	ug/L							
Benzo[a]anthracene	ND	5.0	ug/L							
Benzo[a]pyrene	ND	5.0	ug/L							
Benzo[b,k]fluoranthene	ND	10	ug/L							
Benzo[g,h,i]perylene	ND	5.0	ug/L							
Benzoic acid	ND	50	ug/L							
Benzyl alcohol	ND	5.0	ug/L							
Bis(2-chloroethoxy)methane	ND	10	ug/L							
Bis(2-chloroethyl)ether	ND	10	ug/L							
Bis(2-chloroisopropyl)ether	ND	10	ug/L							
Bis(2-ethylhexyl)phthalate	ND	10	ug/L							
Butyl benzyl phthalate	ND	10	ug/L							
Chrysene	ND	5.0	ug/L							
Dibenz[a,h]anthracene	ND	5.0	ug/L							
Dibenzofuran	ND	5.0	ug/L							

Turner Laboratories, Inc.

Date: 03/21/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13B0612
Date Received: 02/21/2013

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302297 - SW 846 3535										
Blank (1302297-BLK1)				Prepared: 02/26/2013 Analyzed: 03/13/2013						
Diethyl phthalate	ND	10	ug/L							
Dimethyl phthalate	ND	10	ug/L							
Di-n-butyl phthalate	ND	10	ug/L							
Di-n-octyl phthalate	ND	10	ug/L							
Fluoranthene	ND	5.0	ug/L							
Fluorene	ND	5.0	ug/L							
Hexachlorobenzene	ND	10	ug/L							
Hexachlorobutadiene	ND	10	ug/L							
Hexachlorocyclopentadiene	ND	10	ug/L							
Hexachloroethane	ND	10	ug/L							
Indeno[1,2,3-cd]pyrene	ND	5.0	ug/L							
Isophorone	ND	10	ug/L							
Naphthalene	ND	5.0	ug/L							
Nitrobenzene	ND	10	ug/L							
N-Nitrosodimethylamine	ND	10	ug/L							
N-Nitrosodiphenylamine	ND	10	ug/L							
N-Nitrosodipropylamine	ND	10	ug/L							
Pentachlorophenol	ND	30	ug/L							
Phenanthrene	ND	5.0	ug/L							
Phenol	ND	10	ug/L							
Pyrene	ND	5.0	ug/L							
Surrogate: 2,4,6-Tribromophenol	*70.5*		*ug/L*	*100.0*		*71*	*61.48-125.96*			
Surrogate: 2-Fluorobiphenyl	*81.0*		*ug/L*	*100.0*		*81*	*41.02-91.53*			
Surrogate: 2-Fluorophenol	*45.8*		*ug/L*	*100.0*		*46*	*38.35-57.43*			
Surrogate: 4-Terphenyl-d14	*54.0*		*ug/L*	*100.0*		*54*	*14.66-124.11*			
Surrogate: Nitrobenzene-d5	*69.1*		*ug/L*	*100.0*		*69*	*49.49-85.19*			
Surrogate: Phenol-d6	*49.9*		*ug/L*	*100.0*		*50*	*28.68-69.45*			
LCS (1302297-BS1)				Prepared: 02/26/2013 Analyzed: 03/13/2013						
1,2,4-Trichlorobenzene	36	10	ug/L	50.00		73	28.14-85.64			
1,4-Dichlorobenzene	28	10	ug/L	50.00		57	27.79-64.15			
2,4-Dinitrotoluene	35	10	ug/L	50.00		70	39.27-79.35			
2-Chlorophenol	59	10	ug/L	100.0		59	24.62-79.98			
4-Chloro-3-methylphenol	59	10	ug/L	100.0		59	37.66-82.55			
4-Nitrophenol	67	50	ug/L	100.0		67	26.58-91.73			
Acenaphthene	33	5.0	ug/L	50.00		66	41.63-72.14			
N-Nitrosodipropylamine	36	10	ug/L	50.00		71	36.81-88.63			
Pentachlorophenol	71	30	ug/L	100.0		71	32.14-95.92			
Phenol	36	10	ug/L	100.0		36	7.96-52.41			
Pyrene	33	5.0	ug/L	50.00		67	41.65-82.75			
Surrogate: 2,4,6-Tribromophenol	*74.0*		*ug/L*	*100.0*		*74*	*32.57-112.08*			
Surrogate: 2-Fluorobiphenyl	*76.7*		*ug/L*	*100.0*		*77*	*36.69-77.45*			
Surrogate: 2-Fluorophenol	*46.4*		*ug/L*	*100.0*		*46*	*0-86.73*			
Surrogate: 4-Terphenyl-d14	*52.6*		*ug/L*	*100.0*		*53*	*37.21-81.06*			
Surrogate: Nitrobenzene-d5	*69.2*		*ug/L*	*100.0*		*69*	*36.8-79.16*			
Surrogate: Phenol-d6	*44.2*		*ug/L*	*100.0*		*44*	*0-56.2*			

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13B0612
Date Received: 02/21/2013

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302297 - SW 846 3535										
LCS Dup (1302297-BSD1)				Prepared: 02/26/2013 Analyzed: 03/13/2013						
1,2,4-Trichlorobenzene	42	10	ug/L	50.00		85	28.14-85.64	15	30	
1,4-Dichlorobenzene	32	10	ug/L	50.00		65	27.79-64.15	13	30	L1
2,4-Dinitrotoluene	39	10	ug/L	50.00		78	39.27-79.35	11	30	
2-Chlorophenol	67	10	ug/L	100.0		67	24.62-79.98	13	30	
4-Chloro-3-methylphenol	66	10	ug/L	100.0		66	37.66-82.55	12	30	
4-Nitrophenol	79	50	ug/L	100.0		79	26.58-91.73	16	30	
Acenaphthene	38	5.0	ug/L	50.00		75	41.63-72.14	13	30	L1
N-Nitrosodipropylamine	39	10	ug/L	50.00		78	36.81-88.63	8	30	
Pentachlorophenol	83	30	ug/L	100.0		83	32.14-95.92	15	30	
Phenol	44	10	ug/L	100.0		44	7.96-52.41	20	30	
Pyrene	32	5.0	ug/L	50.00		64	41.65-82.75	3	30	
Surrogate: 2,4,6-Tribromophenol	*82.2*		*ug/L*	*100.0*		*82*	*32.57-112.08*			
Surrogate: 2-Fluorobiphenyl	*85.0*		*ug/L*	*100.0*		*85*	*36.69-77.45*			*S4*
Surrogate: 2-Fluorophenol	*54.5*		*ug/L*	*100.0*		*54*	*0-86.73*			
Surrogate: 4-Terphenyl-d14	*52.9*		*ug/L*	*100.0*		*53*	*37.21-81.06*			
Surrogate: Nitrobenzene-d5	*80.2*		*ug/L*	*100.0*		*80*	*36.8-79.16*			*S4*
Surrogate: Phenol-d6	*55.3*		*ug/L*	*100.0*		*55*	*0-56.2*			
Matrix Spike (1302297-MS1)		**Source: 13B0612-01**		Prepared: 02/26/2013 Analyzed: 03/14/2013						
1,2,4-Trichlorobenzene	33	20	ug/L	50.20	ND	67	51.67-99.16			
1,4-Dichlorobenzene	25	20	ug/L	50.20	ND	50	44.91-69.29			
2,4-Dinitrotoluene	43	20	ug/L	50.20	ND	85	45.63-98.31			
2-Chlorophenol	69	20	ug/L	100.4	ND	69	53.62-77.95			
4-Chloro-3-methylphenol	76	20	ug/L	100.4	ND	76	54.19-87.12			
4-Nitrophenol	110	100	ug/L	100.4	ND	114	33.45-100.91			M1
Acenaphthene	42	10	ug/L	50.20	ND	84	10.45-102.26			
N-Nitrosodipropylamine	40	20	ug/L	50.20	ND	80	50.37-110.06			
Pentachlorophenol	120	60	ug/L	100.4	ND	116	52.6-111			M1
Phenol	56	20	ug/L	100.4	ND	55	25.68-69.53			
Pyrene	40	10	ug/L	50.20	ND	80	58.09-82.37			
Surrogate: 2,4,6-Tribromophenol	*91.5*		*ug/L*	*100.4*		*91*	*61.48-125.96*			
Surrogate: 2-Fluorobiphenyl	*91.2*		*ug/L*	*100.4*		*91*	*41.02-91.53*			
Surrogate: 2-Fluorophenol	*59.1*		*ug/L*	*100.4*		*59*	*38.35-57.43*			*S4*
Surrogate: 4-Terphenyl-d14	*80.2*		*ug/L*	*100.4*		*80*	*14.66-124.11*			
Surrogate: Nitrobenzene-d5	*80.4*		*ug/L*	*100.4*		*80*	*49.49-85.19*			
Surrogate: Phenol-d6	*67.2*		*ug/L*	*100.4*		*67*	*28.68-69.45*			
Batch 1302298 - SW 846 3520C										

Turner Laboratories, Inc.

Date: 03/21/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13B0612
Date Received: 02/21/2013

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302298 - SW 846 3520C										
Blank (1302298-BLK1)				Prepared: 02/27/2013 Analyzed: 03/04/2013						
4,4´-DDD	ND	0.10	ug/L							
4,4´-DDE	ND	0.10	ug/L							
4,4´-DDT	ND	0.10	ug/L							
Aldrin	ND	0.10	ug/L							
alpha-BHC	ND	0.10	ug/L							
alpha-Chlordane	ND	0.10	ug/L							
beta-BHC	ND	0.10	ug/L							
delta-BHC	ND	0.10	ug/L							
Dieldrin	ND	0.10	ug/L							
Endosulfan I	ND	0.10	ug/L							
Endosulfan II	ND	0.10	ug/L							
Endosulfan sulfate	ND	0.10	ug/L							
Endrin	ND	0.10	ug/L							
Endrin aldehyde	ND	0.10	ug/L							
Endrin ketone	ND	0.10	ug/L							
gamma-BHC	ND	0.10	ug/L							
gamma-Chlordane	ND	0.10	ug/L							
Heptachlor	ND	0.10	ug/L							
Heptachlor epoxide	ND	0.10	ug/L							
Methoxychlor	ND	0.10	ug/L							
Toxaphene	ND	1.0	ug/L							
Surrogate: Decachlorobiphenyl	*0.966*		*ug/L*	*1.000*		*97*	*51.1-138.5*			
Surrogate: Tetrachloro-m-xylene	*0.854*		*ug/L*	*1.000*		*85*	*39.1-120*			
LCS (1302298-BS1)				Prepared: 02/27/2013 Analyzed: 03/04/2013						
4,4´-DDT	1.0	0.10	ug/L	1.000		100	57-116.5			
Aldrin	0.43	0.10	ug/L	0.5000		85	48.4-113.2			
Dieldrin	0.81	0.10	ug/L	1.000		81	53.2-117.5			
Endrin	0.91	0.10	ug/L	1.000		91	49.2-123.7			
gamma-BHC	0.46	0.10	ug/L	0.5000		92	58.9-127.4			
Heptachlor	0.41	0.10	ug/L	0.5000		83	48.1-120			
Surrogate: Decachlorobiphenyl	*0.962*		*ug/L*	*1.000*		*96*	*51.6-128.7*			
Surrogate: Tetrachloro-m-xylene	*0.811*		*ug/L*	*1.000*		*81*	*37.1-110.6*			
LCS Dup (1302298-BSD1)				Prepared: 02/27/2013 Analyzed: 03/04/2013						
4,4´-DDT	0.99	0.10	ug/L	1.000		99	57-116.5	1	30	
Aldrin	0.41	0.10	ug/L	0.5000		83	48.4-113.2	3	30	
Dieldrin	0.80	0.10	ug/L	1.000		80	53.2-117.5	1	30	
Endrin	0.89	0.10	ug/L	1.000		89	49.2-123.7	2	30	
gamma-BHC	0.44	0.10	ug/L	0.5000		89	58.9-127.4	4	30	
Heptachlor	0.41	0.10	ug/L	0.5000		82	48.1-120	1	30	
Surrogate: Decachlorobiphenyl	*0.947*		*ug/L*	*1.000*		*95*	*51.6-128.7*			
Surrogate: Tetrachloro-m-xylene	*0.792*		*ug/L*	*1.000*		*79*	*37.1-110.6*			

Turner Laboratories, Inc.

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Client: City of Tucson - Transportation Department
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Work Order: 13B0612
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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302298 - SW 846 3520C										
Matrix Spike (1302298-MS1)		**Source: 13B0612-01**		Prepared: 02/27/2013 Analyzed: 03/04/2013						
4,4´-DDT	0.30	0.10	ug/L	1.004	ND	29	16.5-164.5			
Aldrin	0.13	0.10	ug/L	0.5020	ND	27	20.7-143.6			
Dieldrin	0.45	0.10	ug/L	1.004	ND	45	53.5-127.4			M2
Endrin	0.34	0.10	ug/L	1.004	ND	34	52.9-133.2			M2
gamma-BHC	0.38	0.10	ug/L	0.5020	ND	75	51.9-134.6			
Heptachlor	0.31	0.10	ug/L	0.5020	ND	62	32.7-141.3			
Surrogate: Decachlorobiphenyl	*0.744*		*ug/L*	*1.004*		*74*	*51.1-138.5*			
Surrogate: Tetrachloro-m-xylene	*0.716*		*ug/L*	*1.004*		*71*	*39.1-120*			
Matrix Spike Dup (1302298-MSD1)		**Source: 13B0612-01**		Prepared: 02/27/2013 Analyzed: 03/04/2013						
4,4´-DDT	0.30	0.10	ug/L	1.029	ND	29	16.5-164.5	1	30	
Aldrin	0.12	0.10	ug/L	0.5144	ND	24	20.7-143.6	8	30	
Dieldrin	0.44	0.10	ug/L	1.029	ND	43	53.5-127.4	0.8	30	M2
Endrin	0.33	0.10	ug/L	1.029	ND	33	52.9-133.2	2	30	M2
gamma-BHC	0.39	0.10	ug/L	0.5144	ND	76	51.9-134.6	4	30	
Heptachlor	0.30	0.10	ug/L	0.5144	ND	59	32.7-141.3	3	30	
Surrogate: Decachlorobiphenyl	*0.714*		*ug/L*	*1.029*		*69*	*51.1-138.5*			
Surrogate: Tetrachloro-m-xylene	*0.685*		*ug/L*	*1.029*		*67*	*39.1-120*			

Turner Laboratories, Inc.

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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302251 - VOA_GCMS										

Turner Laboratories, Inc.

Date: 03/21/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13B0612
Date Received: 02/21/2013

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302251 - VOA_GCMS										
Blank (1302251-BLK1)				Prepared & Analyzed: 02/20/2013						
1,1,1-Trichloroethane	ND	2.0	ug/L							
1,1,2,2-Tetrachloroethane	ND	2.0	ug/L							
1,1,2-Trichloroethane	ND	2.0	ug/L							
1,1-Dichloroethane	ND	2.0	ug/L							
1,1-Dichloroethene	ND	2.0	ug/L							
1,2,4-Trimethylbenzene	ND	2.0	ug/L							
1,2-Dichlorobenzene	ND	2.0	ug/L							
1,2-Dichloroethane	ND	2.0	ug/L							
1,2-Dichloropropane	ND	2.0	ug/L							
1,3,5-Trimethylbenzene	ND	2.0	ug/L							
1,3-Dichlorobenzene	ND	2.0	ug/L							
1,4-Dichlorobenzene	ND	2.0	ug/L							
2-Chloroethylvinylether	ND	10	ug/L							
2-Chloroethylvinylether	ND	10	ug/L							
Acetone	ND	10	ug/L							
Acrolein	ND	10	ug/L							
Acrolein	ND	10	ug/L							
Acrylonitrile	ND	10	ug/L							
Acrylonitrile	ND	10	ug/L							
Benzene	ND	2.0	ug/L							
Bromodichloromethane	ND	2.0	ug/L							
Bromoform	ND	2.0	ug/L							
Bromomethane	ND	2.0	ug/L							
Carbon tetrachloride	ND	2.0	ug/L							
Chlorobenzene	ND	2.0	ug/L							
Chloroethane	ND	5.0	ug/L							
Chloroform	ND	2.0	ug/L							
Chloromethane	ND	5.0	ug/L							
cis-1,3-Dichloropropene	ND	2.0	ug/L							
Dibromochloromethane	ND	2.0	ug/L							
Dichlorodifluoromethane	ND	5.0	ug/L							
Ethylbenzene	ND	2.0	ug/L							
Methyl Isobutyl Ketone (MIBK)	ND	10	ug/L							
Methylene chloride	ND	10	ug/L							
Tetrachloroethene	ND	2.0	ug/L							
Tetrahydrofuran	ND	10	ug/L							
Toluene	ND	2.0	ug/L							
trans-1,2-Dichloroethene	ND	2.0	ug/L							
trans-1,3-Dichloropropene	ND	2.0	ug/L							
Trichloroethene	ND	2.0	ug/L							
Trichlorofluoromethane	ND	5.0	ug/L							
Vinyl chloride	ND	2.0	ug/L							
Xylenes, Total	ND	6.0	ug/L							
Surrogate: 1,2-Dichloroethane-d4	*29.3*		*ug/L*	*28.00*		*105*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*29.3*		*ug/L*	*28.00*		*105*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*28.6*		*ug/L*	*28.00*		*102*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*28.6*		*ug/L*	*28.00*		*102*	*70-130*			

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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302251 - VOA_GCMS										
Blank (1302251-BLK1)				Prepared & Analyzed: 02/20/2013						
Surrogate: Fluorobenzene	*29.1*		*ug/L*	*28.00*		*104*	*70-130*			
Surrogate: Fluorobenzene	*29.1*		*ug/L*	*28.00*		*104*	*70-130*			

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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302251 - VOA_GCMS										
LCS (1302251-BS1)				Prepared & Analyzed: 02/20/2013						
1,1,1-Trichloroethane	21		ug/L	20.00		103	52-162			L1
1,1,2,2-Tetrachloroethane	19		ug/L	20.00		95	46-157			
1,1,2-Trichloroethane	20		ug/L	20.00		100	52-150			
1,1-Dichloroethane	21		ug/L	20.00		106	59-155			
1,1-Dichloroethene	22		ug/L	20.00		108	2-234			
1,2,4-Trimethylbenzene	22		ug/L	20.00		111	0-200			
1,2-Dichlorobenzene	22		ug/L	20.00		110	18-190			
1,2-Dichloroethane	20		ug/L	20.00		102	49-155			
1,2-Dichloropropane	20		ug/L	20.00		99	2-210			
1,3,5-Trimethylbenzene	0.0		ug/L	20.00			0-200			
1,3-Dichlorobenzene	22		ug/L	20.00		111	59-156			
1,4-Dichlorobenzene	22		ug/L	20.00		109	18-190			
2-Chloroethylvinylether	20		ug/L	20.00		98	10-305			
2-Chloroethylvinylether	20		ug/L	20.00		98	10-305			
Acetone	97		ug/L	100.0		97	70-130			
Acrolein	140		ug/L	100.0		139	88-118			L1
Acrolein	140		ug/L	100.0		139	88-118			L1
Acrylonitrile	94		ug/L	100.0		94	71-135			
Acrylonitrile	94		ug/L	100.0		94	71-135			
Benzene	21		ug/L	20.00		104	37-151			
Bromodichloromethane	20		ug/L	20.00		101	35-155			
Bromoform	20		ug/L	20.00		98	45-169			
Bromomethane	23		ug/L	20.00		113	2-242			
Carbon tetrachloride	20		ug/L	20.00		100	70-140			
Chlorobenzene	21		ug/L	20.00		105	37-160			
Chloroethane	20		ug/L	20.00		102	14-230			
Chloroform	21		ug/L	20.00		103	51-138			
Chloromethane	21		ug/L	20.00		103	5-273			
cis-1,3-Dichloropropene	20		ug/L	20.00		100	2-227			
Dibromochloromethane	19		ug/L	20.00		95	53-149			
Dichlorodifluoromethane	21		ug/L	20.00		104	5-273			
Ethylbenzene	21		ug/L	20.00		107	37-162			
Isopropyl Alcohol	1500		ug/L	1000		151	70-130			L1
Methyl Isobutyl Ketone (MIBK)	96		ug/L	100.0		96	70-130			
Methylene chloride	20		ug/L	20.00		100	10-221			
Tetrachloroethene	22		ug/L	20.00		108	64-148			
Tetrahydrofuran	84		ug/L	100.0		84	70-130			
Toluene	21		ug/L	20.00		107	47-150			
trans-1,2-Dichloroethene	21		ug/L	20.00		104	54-156			
trans-1,3-Dichloropropene	19		ug/L	20.00		94	17-183			
Trichloroethene	21		ug/L	20.00		106	71-157			
Trichlorofluoromethane	21		ug/L	20.00		104	17-181			
Vinyl chloride	21		ug/L	20.00		105	2-251			
Xylenes, Total	65		ug/L	60.00		108	37-162			
Surrogate: 1,2-Dichloroethane-d4	*28.1*		*ug/L*	*28.00*		*100*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*28.1*		*ug/L*	*28.00*		*100*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*29.4*		*ug/L*	*28.00*		*105*	*70-130*			

Turner Laboratories, Inc.

Date: 03/21/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13B0612
Date Received: 02/21/2013

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302251 - VOA_GCMS										
LCS (1302251-BS1)				Prepared & Analyzed: 02/20/2013						
Surrogate: 4-Bromofluorobenzene	*29.4*		*ug/L*	*28.00*		*105*	*70-130*			
Surrogate: Fluorobenzene	*28.5*		*ug/L*	*28.00*		*102*	*70-130*			
Surrogate: Fluorobenzene	*28.5*		*ug/L*	*28.00*		*102*	*70-130*			

Turner Laboratories, Inc.

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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302251 - VOA_GCMS										
LCS Dup (1302251-BSD1)				Prepared: 02/20/2013 Analyzed: 02/21/2013						
1,1,1-Trichloroethane	21		ug/L	20.00		103	52-162	0.8	30	L1
1,1,2,2-Tetrachloroethane	21		ug/L	20.00		103	46-157	7	30	
1,1,2-Trichloroethane	20		ug/L	20.00		101	52-150	1	30	
1,1-Dichloroethane	21		ug/L	20.00		107	59-155	0.7	30	
1,1-Dichloroethene	21		ug/L	20.00		105	2-234	3	30	
1,2,4-Trimethylbenzene	23		ug/L	20.00		115	0-200	3	200	
1,2-Dichlorobenzene	23		ug/L	20.00		115	18-190	5	30	
1,2-Dichloroethane	20		ug/L	20.00		101	49-155	1	30	
1,2-Dichloropropane	21		ug/L	20.00		104	2-210	5	30	
1,3,5-Trimethylbenzene	0.0		ug/L	20.00			0-200		200	
1,3-Dichlorobenzene	23		ug/L	20.00		116	59-156	4	30	
1,4-Dichlorobenzene	22		ug/L	20.00		112	18-190	2	30	
2-Chloroethylvinylether	20		ug/L	20.00		99	10-305	0.9	30	
2-Chloroethylvinylether	20		ug/L	20.00		99	10-305	0.9	30	
Acetone	93		ug/L	100.0		93	70-130	3	30	
Acrolein	140		ug/L	100.0		138	88-118	0.5	30	L1
Acrolein	140		ug/L	100.0		138	88-118	0.5	30	L1
Acrylonitrile	93		ug/L	100.0		93	71-135	1	30	
Acrylonitrile	93		ug/L	100.0		93	71-135	1	30	
Benzene	21		ug/L	20.00		104	37-151	0.4	30	
Bromodichloromethane	20		ug/L	20.00		101	35-155	0.3	30	
Bromoform	18		ug/L	20.00		89	45-169	10	30	
Bromomethane	22		ug/L	20.00		109	2-242	4	30	
Carbon tetrachloride	20		ug/L	20.00		98	70-140	2	30	
Chlorobenzene	20		ug/L	20.00		101	37-160	4	30	
Chloroethane	22		ug/L	20.00		108	14-230	5	30	
Chloroform	21		ug/L	20.00		103	51-138	0.8	30	
Chloromethane	21		ug/L	20.00		107	5-273	3	30	
cis-1,3-Dichloropropene	19		ug/L	20.00		97	2-227	2	30	
Dibromochloromethane	19		ug/L	20.00		97	53-149	2	30	
Dichlorodifluoromethane	20		ug/L	20.00		102	5-273	2	30	
Ethylbenzene	21		ug/L	20.00		106	37-162	2	30	
Isopropyl Alcohol	1500		ug/L	1000		151	70-130	0.2	200	L1
Methyl Isobutyl Ketone (MIBK)	94		ug/L	100.0		94	70-130	2	30	
Methylene chloride	20		ug/L	20.00		98	10-221	2	30	
Tetrachloroethene	21		ug/L	20.00		104	64-148	3	30	
Tetrahydrofuran	78		ug/L	100.0		78	70-130	8	30	
Toluene	21		ug/L	20.00		105	47-150	2	30	
trans-1,2-Dichloroethene	20		ug/L	20.00		101	54-156	3	30	
trans-1,3-Dichloropropene	18		ug/L	20.00		90	17-183	4	30	
Trichloroethene	21		ug/L	20.00		107	71-157	0.5	30	
Trichlorofluoromethane	21		ug/L	20.00		105	17-181	1	30	
Vinyl chloride	21		ug/L	20.00		107	2-251	2	30	
Xylenes, Total	63		ug/L	60.00		105	37-162	3	30	
Surrogate: 1,2-Dichloroethane-d4	*27.5*		*ug/L*	*28.00*		*98*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*27.5*		*ug/L*	*28.00*		*98*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*30.5*		*ug/L*	*28.00*		*109*	*70-130*			

Turner Laboratories, Inc.

Date: 03/21/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13B0612
Date Received: 02/21/2013

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302251 - VOA_GCMS										
LCS Dup (1302251-BSD1)				Prepared: 02/20/2013 Analyzed: 02/21/2013						
Surrogate: 4-Bromofluorobenzene	*30.5*		*ug/L*	*28.00*		*109*	*70-130*			
Surrogate: Fluorobenzene	*28.8*		*ug/L*	*28.00*		*103*	*70-130*			
Surrogate: Fluorobenzene	*28.8*		*ug/L*	*28.00*		*103*	*70-130*			

Turner Laboratories, Inc.

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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302251 - VOA_GCMS										
Matrix Spike (1302251-MS1)		**Source: 13B0016-02**		Prepared: 02/20/2013 Analyzed: 03/20/2013						
1,1,1-Trichloroethane	0.0		ug/L	20.00	ND		52-162			
1,1,2,2-Tetrachloroethane	0.0		ug/L	20.00	ND		46-157			
1,1,2-Trichloroethane	0.0		ug/L	20.00	ND		52-150			
1,1-Dichloroethane	0.0		ug/L	20.00	ND		59-155			
1,1-Dichloroethene	0.0		ug/L	20.00	ND		2-234			
1,2,4-Trimethylbenzene	0.0		ug/L	20.00	1.9	NR	0-200			
1,2-Dichlorobenzene	0.0		ug/L	20.00	ND		18-190			
1,2-Dichloroethane	0.0		ug/L	20.00	ND		49-155			
1,2-Dichloropropane	0.0		ug/L	20.00	0.0		2-210			
1,3,5-Trimethylbenzene	0.0		ug/L	20.00	0.0		0-200			
1,3-Dichlorobenzene	0.0		ug/L	20.00	ND		59-156			
1,4-Dichlorobenzene	0.0		ug/L	20.00	ND		18-190			
2-Chloroethylvinylether	20		ug/L	20.00	ND	101	10-305			
2-Chloroethylvinylether	0.0		ug/L	20.00	ND		10-305			
Acetone	0.0		ug/L	100.0	130	NR	70-130			
Acrolein	80		ug/L	100.0	ND	80	88-118			
Acrolein	0.0		ug/L	100.0	0.0		88-118			
Acrylonitrile	95		ug/L	100.0	ND	95	71-135			
Acrylonitrile	0.0		ug/L	100.0	ND		71-135			
Benzene	0.0		ug/L	20.00	ND		37-151			
Bromodichloromethane	0.0		ug/L	20.00	ND		35-155			
Bromoform	0.0		ug/L	20.00	ND		45-169			
Bromomethane	0.0		ug/L	20.00	ND		2-242			
Carbon tetrachloride	0.0		ug/L	20.00	ND		70-140			
Chlorobenzene	0.0		ug/L	20.00	ND		37-160			
Chloroethane	0.0		ug/L	20.00	ND		14-230			
Chloroform	0.0		ug/L	20.00	ND		51-138			
Chloromethane	0.0		ug/L	20.00	ND		5-273			
cis-1,3-Dichloropropene	0.0		ug/L	20.00	ND		2-221			
Dibromochloromethane	0.0		ug/L	20.00	ND		53-149			
Dichlorodifluoromethane	0.0		ug/L	20.00	ND		5-273			
Ethylbenzene	0.0		ug/L	20.00	0.68	NR	37-162			
Isopropyl Alcohol	0.0		ug/L	1000	ND		70-130			
Methyl Isobutyl Ketone (MIBK)	0.0		ug/L	100.0	0.0		70-130			
Methylene chloride	0.0		ug/L	20.00	ND		10-221			
Tetrachloroethene	0.0		ug/L	20.00	ND		64-148			
Tetrahydrofuran	0.0		ug/L	100.0	ND		70-130			
Toluene	0.0		ug/L	20.00	0.29	NR	47-150			
trans-1,2-Dichloroethene	0.0		ug/L	20.00	ND		54-156			
trans-1,3-Dichloropropene	0.0		ug/L	20.00	0.53	NR	17-183			
Trichloroethene	0.0		ug/L	20.00	ND		71-157			
Trichlorofluoromethane	0.0		ug/L	20.00	0.0		17-181			
Vinyl chloride	0.0		ug/L	20.00	ND		2-251			
Xylenes, Total	0.0		ug/L	60.00	1.8	NR	37-162			
Surrogate: 1,2-Dichloroethane-d4	*28.0*		*ug/L*	*28.00*		*100*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.00*		*ug/L*	*28.00*			*70-130*			
Surrogate: 4-Bromofluorobenzene	*30.4*		*ug/L*	*28.00*		*109*	*70-130*			

Turner Laboratories, Inc.

Date: 03/21/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13B0612
Date Received: 02/21/2013

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302251 - VOA_GCMS										
Matrix Spike (1302251-MS1)		**Source: 13B0016-02**		Prepared: 02/20/2013 Analyzed: 03/20/2013						
Surrogate: 4-Bromofluorobenzene	*0.00*		*ug/L*	*28.00*			*70-130*			
Surrogate: Fluorobenzene	*29.4*		*ug/L*	*28.00*		*105*	*70-130*			
Surrogate: Fluorobenzene	*0.00*		*ug/L*	*28.00*			*70-130*			

Turner Laboratories, Inc.

Date: 03/21/2013

Client: City of Tucson - Transportation Department
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Work Order: 13B0612
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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302251 - VOA_GCMS										
Matrix Spike (1302251-MS2)		**Source: 13B0016-02**		Prepared & Analyzed: 02/20/2013						
1,1,1-Trichloroethane	15		ug/L	20.00	ND	76	52-162			
1,1,2,2-Tetrachloroethane	20		ug/L	20.00	ND	101	46-157			
1,1,2-Trichloroethane	20		ug/L	20.00	ND	101	52-150			
1,1-Dichloroethane	18		ug/L	20.00	ND	91	59-155			
1,1-Dichloroethene	16		ug/L	20.00	ND	78	2-234			
1,2,4-Trimethylbenzene	21		ug/L	20.00	1.9	97	0-200			
1,2-Dichlorobenzene	20		ug/L	20.00	ND	100	18-190			
1,2-Dichloroethane	20		ug/L	20.00	ND	101	49-155			
1,2-Dichloropropane	19		ug/L	20.00	0.0	93	2-210			
1,3,5-Trimethylbenzene	0.0		ug/L	20.00	0.0		0-200			
1,3-Dichlorobenzene	20		ug/L	20.00	ND	99	59-156			
1,4-Dichlorobenzene	20		ug/L	20.00	ND	102	18-190			
2-Chloroethylvinylether	0.0		ug/L	20.00	ND		10-305			
2-Chloroethylvinylether	0.0		ug/L	20.00	ND		10-305			
Acetone	200		ug/L	100.0	130	70	70-130			M2
Acrolein	0.0		ug/L	100.0	ND		88-118			
Acrolein	0.0		ug/L	100.0	0.0		88-118			
Acrylonitrile	0.0		ug/L	100.0	ND		71-135			
Acrylonitrile	0.0		ug/L	100.0	ND		71-135			
Benzene	18		ug/L	20.00	ND	90	37-151			
Bromodichloromethane	19		ug/L	20.00	ND	97	35-155			
Bromoform	19		ug/L	20.00	ND	96	45-169			
Bromomethane	19		ug/L	20.00	ND	93	2-242			
Carbon tetrachloride	15		ug/L	20.00	ND	75	70-140			
Chlorobenzene	19		ug/L	20.00	ND	93	37-160			
Chloroethane	16		ug/L	20.00	ND	81	14-230			
Chloroform	19		ug/L	20.00	ND	93	51-138			
Chloromethane	16		ug/L	20.00	ND	81	5-273			
cis-1,3-Dichloropropene	18		ug/L	20.00	ND	92	2-221			
Dibromochloromethane	19		ug/L	20.00	ND	96	53-149			
Dichlorodifluoromethane	14		ug/L	20.00	ND	72	5-273			
Ethylbenzene	18		ug/L	20.00	0.68	85	37-162			
Isopropyl Alcohol	640		ug/L	1000	ND	64	70-130			
Methyl Isobutyl Ketone (MIBK)	100		ug/L	100.0	0.0	100	70-130			
Methylene chloride	18		ug/L	20.00	ND	92	10-221			
Tetrachloroethene	17		ug/L	20.00	ND	83	64-148			
Tetrahydrofuran	86		ug/L	100.0	ND	86	70-130			
Toluene	18		ug/L	20.00	0.29	89	47-150			
trans-1,2-Dichloroethene	17		ug/L	20.00	ND	83	54-156			
trans-1,3-Dichloropropene	18		ug/L	20.00	0.53	88	17-183			
Trichloroethene	18		ug/L	20.00	ND	88	71-157			
Trichlorofluoromethane	15		ug/L	20.00	0.0	77	17-181			
Vinyl chloride	15		ug/L	20.00	ND	75	2-251			
Xylenes, Total	56		ug/L	60.00	1.8	90	37-162			
Surrogate: 1,2-Dichloroethane-d4	*0.00*		*ug/L*	*28.00*			*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*27.6*		*ug/L*	*28.00*		*99*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*0.00*		*ug/L*	*28.00*			*70-130*			

Turner Laboratories, Inc.

Date: 03/21/2013

Client: City of Tucson - Transportation Department
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Work Order: 13B0612
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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302251 - VOA_GCMS										
Matrix Spike (1302251-MS2)		**Source: 13B0016-02**		Prepared & Analyzed: 02/20/2013						
Surrogate: 4-Bromofluorobenzene	*28.6*		*ug/L*	*28.00*		*102*	*70-130*			
Surrogate: Fluorobenzene	*0.00*		*ug/L*	*28.00*			*70-130*			
Surrogate: Fluorobenzene	*28.4*		*ug/L*	*28.00*		*101*	*70-130*			

Turner Laboratories, Inc.

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Client: City of Tucson - Transportation Department
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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302264 - IC PREP										
Blank (1302264-BLK1)				Prepared & Analyzed: 02/21/2013						
Nitrogen, Nitrate (As N)	ND	1.0	mg/L							
Nitrogen, Nitrite (As N)	ND	0.10	mg/L							
LCS (1302264-BS1)				Prepared & Analyzed: 02/21/2013						
Nitrogen, Nitrate (As N)	4.8	1.0	mg/L	5.000		96	90-110			
Nitrogen, Nitrite (As N)	2.5	0.10	mg/L	2.500		98	90-110			
LCS Dup (1302264-BSD1)				Prepared & Analyzed: 02/21/2013						
Nitrogen, Nitrate (As N)	4.8	1.0	mg/L	5.000		96	90-110	0.3	10	
Nitrogen, Nitrite (As N)	2.5	0.10	mg/L	2.500		98	90-110	0.08	10	
Matrix Spike (1302264-MS1)		**Source: 13B0606-02**		Prepared & Analyzed: 02/21/2013						
Nitrogen, Nitrate (As N)	8.6	1.0	mg/L	5.000	3.4	104	80-120			
Nitrogen, Nitrite (As N)	2.5	0.10	mg/L	2.500	0.25	90	80-120			
Matrix Spike (1302264-MS2)		**Source: 13B0618-01**		Prepared & Analyzed: 02/21/2013						
Nitrogen, Nitrite (As N)	2.5	0.10	mg/L	2.500	0.065	95	80-120			
Matrix Spike (1302264-MS3)		**Source: 13B0618-01**		Prepared: 02/22/2013 Analyzed: 02/23/2013						
Nitrogen, Nitrate (As N)	17	2.0	mg/L	10.00	7.7	94	80-120			
Nitrogen, Nitrite (As N)	4.8	0.20	mg/L	5.000	0.065	94	80-120			
Matrix Spike Dup (1302264-MSD1)		**Source: 13B0606-02**		Prepared & Analyzed: 02/21/2013						
Nitrogen, Nitrate (As N)	8.7	1.0	mg/L	5.000	3.4	105	80-120	0.5	10	
Nitrogen, Nitrite (As N)	2.5	0.10	mg/L	2.500	0.25	91	80-120	0.8	10	
Matrix Spike Dup (1302264-MSD2)		**Source: 13B0618-01**		Prepared & Analyzed: 02/21/2013						
Nitrogen, Nitrite (As N)	2.5	0.10	mg/L	2.500	0.065	96	80-120	0.9	10	
Matrix Spike Dup (1302264-MSD3)		**Source: 13B0618-01**		Prepared: 02/22/2013 Analyzed: 02/23/2013						
Nitrogen, Nitrate (As N)	17	2.0	mg/L	10.00	7.7	95	80-120	0.8	10	
Nitrogen, Nitrite (As N)	4.8	0.20	mg/L	5.000	0.065	95	80-120	0.9	10	
Batch 1302275 - IC PREP										
Blank (1302275-BLK1)				Prepared & Analyzed: 02/22/2013						
Phosphorus, Dissolved Orthophosphate (As P)	ND	0.50	mg/L							
LCS (1302275-BS1)				Prepared & Analyzed: 02/22/2013						
Phosphorus, Dissolved Orthophosphate (As P)	2.7	0.50	mg/L	2.500		106	90-110			
LCS Dup (1302275-BSD1)				Prepared & Analyzed: 02/22/2013						
Phosphorus, Dissolved Orthophosphate (As P)	2.6	0.50	mg/L	2.500		104	90-110	2	10	
Matrix Spike (1302275-MS2)		**Source: 13B0610-01**		Prepared & Analyzed: 03/13/2013						
Phosphorus, Dissolved Orthophosphate (As P)	2.8	0.50	mg/L	2.500	ND	112	80-120			

Turner Laboratories, Inc.

Date: 03/21/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13B0612
Date Received: 02/21/2013

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302275 - IC PREP										
Matrix Spike Dup (1302275-MSD2)		**Source: 13B0610-01**		Prepared & Analyzed: 03/13/2013						
Phosphorus, Dissolved Orthophosphate (As P)	2.9	0.50	mg/L	2.500	ND	115	80-120	3	10	

TURNER LABORATORIES INC.
2445 N. Coyote Drive, Suite 104
Tucson, Arizona 85745
(520) 882-5880
Fax: (520) 882-9788
www.turnerlabs.com

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

TURNER WORK ORDER # 13B0012 DATE _____ PAGE _____ OF _____

PROJECT NAME: Stormwater Samples Site # 1, 2, 3, (4), 5 (circle)
CONTACT NAME: Bev Hester
COMPANY NAME: City of Tucson
ADDRESS: PO Box 27210, Tucson AZ 85726-7210
PHONE: 837-4935
FAX: 791-4343
SAMPLER'S SIGNATURE: Eric Ross

CIRCLE ANALYSIS REQUESTED AND/OR CHECK THE APPROPRIATE BOX

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX*	NUMBER OF CONTAINERS	Hardness	Total Dissolved Solids (TDS)	Total Suspended Solids (TSS)	Biological Oxygen Demand (BOD)	Chemical Oxygen Demand (COD)	Cyanide	Metals*	Nitrate + Nitrite Sum	Nitrogen, Ammonia as N	Nitrogen, Total Kjeldahl	Phosphorus as P, Total	Orthophosphate by Ion Chromatography	Total Petroleum Hydrocarbons (TPH)	Oil & Grease	Volatile Organic Compounds by 624	Semivolatile Organic Acid Extractables by 8270	Semivolatile Organic Base Neutrals by 8270	PCBs by 8082	Organochlorine Pesticides by SW 8081
Composite	2-20-13	12:03		ST	16	x	x	x	x	x		x	x	x	x	x	x							x
Grab/Discrete	2-20-13	12:03		ST	9						x							x	x	x			x	
sVOC's-composite	2-20-13	12:03		ST	~~13~~ 11																x	x		

1. RELINQUISHED BY: Eric Ross
Signature: ERIC ROSS
Printed Name: C.O.T.
Firm: 2-21-13 / 9:54 AM
Date/Time

2. RECEIVED BY:
Signature
Printed Name
Firm
Date/Time

TURNAROUND REQUIREMENTS:
X Standard (approx.10 days)*
Next day ___ 2 Day ___ 5 Day*
X Email Preliminary Results To: Bev.Hester@tucsonaz.gov
* Working Days

REPORT REQUIREMENTS:
I. Routine Report
II. Report (includes DUP,MS,MSD, as required, may be charged as samples)
III. Date Validation Report (Includes All Raw Data)
Add 10% to invoice

INVOICE INFORMATION:
Account ___ Y ___ N
P.O. #
Bill to:

SAMPLE RECEIPT:
Total Containers 30
Temperature 1.6
Wet Ice Blue Ice

3. RELINQUISHED BY:
Signature
Printed Name
Time

4. RECEIVED BY:
Signature
Printed Name
TURNER LABORATORIES, INC.
Firm
2/21/2013 0954
Date/Time

*LEGEND
DW = DRINKING WATER
GW = GROUNDWATER
SD = SOLID
SG = SLUDGE
SL = SOIL
ST = STORMWATER
WW = WASTEWATER

SPECIAL INSTRUCTIONS/COMMENTS:

Compliance Analysis: Yes No	Custody Seals	Preservation Confirmation
ADEQ Forms: Yes No	Container Intact	Appropriate Head Space
Mail ADEQ Forms: Yes No	COC/Labels Agree	Received Within Hold Time

Metals; Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Hg, Ni, Se, Ag, Tl, Zn
Cyanide, Metals, VOCs, sVOCs, PCBs, Pesticides; report in ug/L

City of Tucson's
Sampling Aliquot Form

Site #: 4 17th St. Industrial

Date of Sample: 02/20/13

Sample ID: 130220 # 4

Sampler(s): Eric Ross

Maximum Sample Size: 2,000 mL
default (2000)

Aliquot Begin Time: 12:03:00 PM

Elapsed Time after 1st Sample	Depth		Site 4 Only Width	Time		Flowrate for Site 4	
Minutes	Inches		Feet	Seconds			cfs
0	1.00	1	14	10		0.00	1.17
20	1.50	2	16	12		0.00	1.67
40	1.50	3	14	11		0.00	1.59
60	1.00	4	14	12		0.00	0.97
80	1.00	5	12	12		0.00	0.83
100	1.00	6	11	13		0.00	0.71
120	0.50	7	8	17		0.00	0.20
140	0.25	8	4	20		0.00	0.04
						0.00	0.00
						0.00	0.00
				Average Flowrate: (CFS):		#DIV/0!	0.90

Time Aliquot Collected	Aliquot #	Aliquot Volumes Calculated Using Maximum Aliquot	Aliquot Volumes for Laboratory mL
12:03 PM	1	1,400	616
12:23 PM	2	2,000	879
12:43 PM	3	1,909	840
1:03 PM	4	1,167	513
1:23 PM	5	1,000	440
1:43 PM	6	846	372
2:03 PM	7	235	103
2:23 PM	8	50	22
		8,607	3,785

March 01, 2013

Beverley Hester
City of Tucson - Transportation Department
PO Box 27210
Tucson, AZ 85726-7210

TEL 520-837-4935
FAX (520) 791-4373

Work Order No.: 13B0589
Order Name: #4

RE: Storm Water Once per Season

Dear Beverley Hester,

Turner Laboratories, Inc. received 1 sample(s) on 02/20/2013 for the analyses presented in the following report.

All results are intended to be considered in their entirety, and Turner Laboratories, Inc. is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Samples will be disposed of 30 days after issue of our report unless special arrangements are made.

The pages that follow may contain sensitive, privileged or confidential information intended solely for the addressee named above. If you receive this message and are not the agent or employee of the addressee, this communication has been sent in error. Please do not disseminate or copy any of the attached and notify the sender immediately by telephone. Please also return the attached sheet(s) to the sender by mail.

Please call if you have any questions.

Respectfully submitted,

Turner Laboratories, Inc.
ADHS License AZ0066

Terri L. Garcia

Terri Garcia
Technical Director

Turner Laboratories, Inc.

Date: 03/01/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 13B0589
Date Received: 02/20/2013

Order: #4

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date/Time
13B0589-01	Grab	Storm Water	02/20/2013 1230

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 13B0589
Date Received: 02/20/2013

Case Narrative

E	Value is above quantitation range.
H5	This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time.

All soil, sludge, and solid matrix determinations are reported on a wet weight basis unless otherwise noted.

ND	Not Detected at or above the PQL
PQL	Practical Quantitation Limit
DF	Dilution Factor

Turner Laboratories, Inc.

Date: 03/01/2013

Client:	City of Tucson - Transportation Department	**Client Sample ID:**	Grab
Project:	Storm Water Once per Season	**Collection Date/Time:**	02/20/2013 1230
Work Order:	13B0589	**Matrix:**	Storm Water
Lab Sample ID:	13B0589-01	**Order Name:**	#4

Analyses	Result	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
pH-SM4500-H+ B								
pH (pH Units)	7.9	0.0	H5	-	1	02/20/2013 1423	02/20/2013 1426	EW
Temperature (°C)	22		H5	-	1	02/20/2013 1423	02/20/2013 1426	EW
Total Coliform & E. Coli, MPN-SM9223B								
E.Coli	54	1.0		MPN/100mL	1	02/20/2013 1445	02/21/2013 1615	AC
Total Coliform	2400	1.0	E	MPN/100mL	1	02/20/2013 1445	02/21/2013 1615	AC

Turner Laboratories, Inc.

Date: 03/01/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Once per Season
Work Order: 13B0589
Date Received: 02/20/2013

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302290 - SM4500-H+ B										
Duplicate (1302290-DUP1)		**Source: 13B0589-01**		Prepared & Analyzed: 02/20/2013						
pH (pH Units)	8.0	0.0	-		7.9			1	200	
Temperature (°C)	22		-		22			2	200	

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CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

TURNER WORK ORDER # 13B0589 DATE _____ PAGE _____ OF _____

PROJECT NAME: Stormwater Samples Site # 1, 2, 3, (4) 5 (circle)

CONTACT NAME Chris McNellis

COMPANY NAME City of Tucson - Transportation Dept

ADDRESS P.O. Box 27210

CITY Tucson STATE AZ ZIP CODE 85726

PHONE (520) 837-6583 FAX (520) 791-4373

SAMPLER'S SIGNATURE _____

CIRCLE ANALYSIS REQUESTED AND/OR CHECK THE APPROPRIATE BOX

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX*	NUMBER OF CONTAINERS	MPN	pH
Grab	2-20-13	12:03		Storm Water	1	X	X

1. RELINQUISHED BY: Signature; Eric Ross; Printed Name; City of Tucson Trans. Dept; Firm; 2-20-13 / 1:54 PM; Date/Time

2. RECEIVED BY: Signature; Bev Hester; Printed Name; Firm; 2-20-13 1:54PM; Date/Time

TURNAROUND REQUIREMENTS:
____ Standard (approx.10 days)*
____ Next day ____ 2 Day ____ 3 Day*
____ Email Preliminary Results To:
* Working Days

REPORT REQUIREMENTS:
____ I. Routine Report
____ II. Report (includes DUP,MS,MSD, as required, may be charged as samples)
____ III. Data Validation Report (includes All Raw Data)
Add 10% to invoice

INVOICE INFORMATION:
Account ____ Y ____ N
P.O. # _____
Bill to: _____

SAMPLE RECEIPT:
Total Containers 2
Temperature 4.4
[X] Wet Ice [ ] Blue Ice

3. RELINQUISHED BY: Signature; Bev Hester; Printed Name; Firm; 2/20/13 2:10 PM; Date/Time

4. RECEIVED BY: Signature; Printed Name; TURNER LABORATORIES, INC; Firm; 2/20/2013 2:10 PM; Date/Time

*LEGEND
DW = DRINKING WATER
GW = GROUNDWATER
SD = SOLID
SG = SLUDGE
SL = SOIL
ST = STORMWATER
WW = WASTEWATER

SPECIAL INSTRUCTIONS/COMMENTS:

Compliance Analysis: [ ] Yes [ ] No	Custody Seals [ ]	Preservation Confirmation [X]	
ADEQ Forms: [ ] Yes [ ] No	Container Intact [X]	Appropriate Head Space [X]	
Mail ADEQ Forms: [ ] Yes [ ] No	COC/Labels Agree [X]	Received Within Hold Time [X]	

*Ni, Hg, Ag, Cr, Cd, Be, Ba, As, Cu, Sb, Zn, Se, Pb, Tl, Ca, Mg

Composite poured at lab per C.O.T. Specifications

February 26, 2013

Beverley Hester
City of Tucson - Transportation Department
PO Box 27210
Tucson, AZ 85726-7210

TEL 520-837-4935
FAX (520) 791-4373

Work Order No.: 13A0709
Order Name: Storm Water Annual

RE: Storm Water Biannual

Dear Beverley Hester,

Turner Laboratories, Inc. received 2 sample(s) on 01/26/2013 for the analyses presented in the following report.

All results are intended to be considered in their entirety, and Turner Laboratories, Inc. is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Samples will be disposed of 30 days after issue of our report unless special arrangements are made.

The pages that follow may contain sensitive, privileged or confidential information intended solely for the addressee named above. If you receive this message and are not the agent or employee of the addressee, this communication has been sent in error. Please do not disseminate or copy any of the attached and notify the sender immediately by telephone. Please also return the attached sheet(s) to the sender by mail.

Please call if you have any questions.

Respectfully submitted,

Turner Laboratories, Inc.
ADHS License AZ0066

Terri L. Garcia

Terri Garcia
Technical Director

Turner Laboratories, Inc.

Date: 02/26/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13A0709
Date Received: 01/26/2013

Order: Storm Water Annual

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date/Time
13A0709-01	Composite	Storm Water	01/26/2013 0519
13A0709-02	Grab	Storm Water	01/26/2013 0519

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13A0709
Date Received: 01/26/2013

Case Narrative

EPA 8270C: Insufficient sample volume was available to perform the method-recommend Matrix Spike and Matrix Spike Duplicate.

EPA 8082: Insufficient sample volume was available to perform the method-recommend Matrix Spike and Matrix Spike Duplicate.

EPA 8081: Insufficient sample volume was available to perform the method-recommend Matrix Spike and Matrix Spike Duplicate.

C4	Confirmatory analysis was past holding time
D5	Minimum Reporting Limit (MRL) is adjusted due to sample dilution; analyte was non-detect in the sample.
E8	Analyte reported to MDL per project specification. Target analyte was not detected in the sample.
M2	Matrix spike recovery was low; the associated LCS/LCSD was acceptable.
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS/LCSD recovery was acceptable.
S4	Surrogate recovery was above laboratory and method acceptance limits. No target analytes were detected in the sample.
T2	Cited ADHS Licensed method does not contain this analyte as part of the method compound list.
V1	CCV recovery was above method acceptance limits. This target analyte was not detected in the sample.

All soil, sludge, and solid matrix determinations are reported on a wet weight basis unless otherwise noted.

ND	Not Detected at or above the PQL
PQL	Practical Quantitation Limit
DF	Dilution Factor

Turner Laboratories, Inc.

Date: 02/26/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13A0709
Lab Sample ID: 13A0709-01

Client Sample ID: Composite
Collection Date/Time: 01/26/2013 0519
Matrix: Storm Water
Order Name: Storm Water Annual

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Hardness-Calculation									
Hardness, Calcium/Magnesium (As CaCO3)	28				mg/L	1	01/28/2013 1110	01/29/2013 1837	RAD
Nitrate + Nitrite Sum-Calculation									
Nitrate and Nitrite Sum	ND		0.10		mg/L	1	01/27/2013 1400	01/27/2013 1704	AC
ICP Total Metals-E200.7									
Arsenic	ND		40		ug/L	1	01/28/2013 1110	01/31/2013 1129	RAD
Barium	ND		50		ug/L	1	01/28/2013 1110	01/29/2013 1838	RAD
Beryllium	ND		2.0		ug/L	1	01/28/2013 1110	01/29/2013 1838	RAD
Cadmium	ND		2.0		ug/L	1	01/28/2013 1110	01/29/2013 1838	RAD
Calcium	11000		4000		ug/L	1	01/28/2013 1110	01/29/2013 1837	RAD
Chromium	ND		30		ug/L	1	01/28/2013 1110	01/29/2013 1838	RAD
Copper	22		20		ug/L	1	01/28/2013 1110	01/29/2013 1838	RAD
Magnesium	ND		3000		ug/L	1	01/28/2013 1110	01/29/2013 1837	RAD
Nickel	ND		50		ug/L	1	01/28/2013 1110	01/29/2013 1838	RAD
Zinc	210		40		ug/L	1	01/28/2013 1110	01/29/2013 1838	RAD
ICP/MS Total Metals-E200.8									
Antimony	0.99		0.50		ug/L	1	01/28/2013 1330	01/31/2013 1450	RAD
Lead	12		0.50		ug/L	1	01/28/2013 1330	01/31/2013 1450	RAD
Selenium	0.36		2.5		ug/L	1	01/28/2013 1330	01/29/2013 1434	RAD
Silver	0.013		0.50		ug/L	1	01/28/2013 1521	01/31/2013 1450	RAD
Thallium	ND		0.50		ug/L	1	01/28/2013 1330	01/29/2013 1434	RAD
CVAA Total Mercury-E245.1									
Mercury	0.040		1.0		ug/L	1	02/04/2013 0910	02/04/2013 1556	RAD
Anions by Ion Chromatography-E300									
Nitrogen, Nitrate (As N)	ND		1.0		mg/L	1	01/27/2013 1400	01/27/2013 1704	AC
Nitrogen, Nitrite (As N)	ND		0.10		mg/L	1	01/27/2013 1400	01/27/2013 1704	AC
Phosphorus, Dissolved Orthophosphate (As P)	ND		0.50	C4	mg/L	1	01/28/2013 1200	01/28/2013 1754	EW
Total Phosphorous as P-H8190									
Total Phosphorus (as P)	0.55		0.50		mg/L	5	01/28/2013 1100	01/28/2013 1545	AC

Turner Laboratories, Inc.

Date: 02/26/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13A0709
Lab Sample ID: 13A0709-01

Client Sample ID: Composite
Collection Date/Time: 01/26/2013 0519
Matrix: Storm Water
Order Name: Storm Water Annual

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Chemical Oxygen Demand-Hach 8000									
Chemical Oxygen Demand	130		20		mg/L	1	02/05/2013 1000	02/05/2013 1640	EW
Total Kjeldahl Nitrogen-PAI-DK01									
Nitrogen, Total Kjeldahl	0.97		0.50		mg/L	1	01/28/2013 1510	01/29/2013 1630	EW
Total Dissolved Solids (Residue, Filterable)-SM2540 C									
Total Dissolved Solids (Residue, Filterable)	49		20		mg/L	1	01/29/2013 1005	01/31/2013 1225	AC
Total Suspended Solids (Residue, Non-Filterable)-SM2540 D									
Total Suspended Solids	160		10		mg/L	1	01/30/2013 0807	01/31/2013 1120	AC
Ammonia as N-SM4500-NH3 B,C									
Nitrogen, Ammonia (As N)	ND		0.50		mg/L	1	02/07/2013 0825	02/07/2013 1600	EW
BOD, 5 day-SM5210 B									
Biochemical Oxygen Demand	17		2.0		mg/L	1	01/26/2013 1605	01/31/2013 1605	AC
Organochlorine Pesticides-SW8081A									
4,4´-DDD	ND		0.10		ug/L	1	01/28/2013 1356	02/04/2013 1840	MD
4,4´-DDE	ND		0.10		ug/L	1	01/28/2013 1356	02/04/2013 1840	MD
4,4´-DDT	ND		0.10		ug/L	1	01/28/2013 1356	02/04/2013 1840	MD
Aldrin	ND		0.10		ug/L	1	01/28/2013 1356	02/04/2013 1840	MD
alpha-BHC	ND		0.10		ug/L	1	01/28/2013 1356	02/04/2013 1840	MD
alpha-Chlordane	ND		0.10		ug/L	1	01/28/2013 1356	02/04/2013 2306	MD
beta-BHC	ND		0.10		ug/L	1	01/28/2013 1356	02/04/2013 1840	MD
delta-BHC	ND		0.10		ug/L	1	01/28/2013 1356	02/04/2013 1840	MD
Dieldrin	ND		0.10		ug/L	1	01/28/2013 1356	02/04/2013 1840	MD
Endosulfan I	ND		0.10		ug/L	1	01/28/2013 1356	02/04/2013 1840	MD
Endosulfan II	ND		0.10		ug/L	1	01/28/2013 1356	02/04/2013 1840	MD
Endosulfan sulfate	ND		0.10		ug/L	1	01/28/2013 1356	02/04/2013 1840	MD
Endrin	ND		0.10		ug/L	1	01/28/2013 1356	02/04/2013 1840	MD
Endrin aldehyde	ND		0.10		ug/L	1	01/28/2013 1356	02/04/2013 1840	MD

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13A0709
Lab Sample ID: 13A0709-01

Client Sample ID: Composite
Collection Date/Time: 01/26/2013 0519
Matrix: Storm Water
Order Name: Storm Water Annual

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Endrin ketone	ND		0.10		ug/L	1	01/28/2013 1356	02/04/2013 1840	MD
gamma-BHC	ND		0.10		ug/L	1	01/28/2013 1356	02/04/2013 1840	MD
gamma-Chlordane	ND		0.10		ug/L	1	01/28/2013 1356	02/04/2013 2306	MD
Heptachlor	ND		0.10		ug/L	1	01/28/2013 1356	02/04/2013 1840	MD
Heptachlor epoxide	ND		0.10		ug/L	1	01/28/2013 1356	02/04/2013 1840	MD
Methoxychlor	ND		0.10		ug/L	1	01/28/2013 1356	02/04/2013 1840	MD
Toxaphene	ND		1.0		ug/L	1	01/28/2013 1356	02/04/2013 1840	MD
Surr: Decachlorobiphenyl	*78*	*51.1-138.5*			*%REC*	*1*	*01/28/2013 1356*	*02/04/2013 1840*	*MD*
Surr: Tetrachloro-m-xylene	*87*	*39.1-120*			*%REC*	*1*	*01/28/2013 1356*	*02/04/2013 1840*	*MD*
PCBs-SW8082									
Aroclor 1016	ND		1.0		ug/L	1	01/28/2013 1355	02/02/2013 0003	MD
Aroclor 1221	ND		1.0		ug/L	1	01/28/2013 1355	02/02/2013 0003	MD
Aroclor 1232	ND		1.0		ug/L	1	01/28/2013 1355	02/02/2013 0003	MD
Aroclor 1242	ND		1.0		ug/L	1	01/28/2013 1355	02/02/2013 0003	MD
Aroclor 1248	ND		1.0		ug/L	1	01/28/2013 1355	02/02/2013 0003	MD
Aroclor 1254	ND		1.0		ug/L	1	01/28/2013 1355	02/02/2013 0003	MD
Aroclor 1260	ND		1.0		ug/L	1	01/28/2013 1355	02/02/2013 0003	MD
Surr: Decachlorobiphenyl	*83*	*52.7-155.1*			*%REC*	*1*	*01/28/2013 1355*	*02/02/2013 003*	*MD*
Semivolatile Organic Compounds-SW8270C									
1,2,4-Trichlorobenzene	ND		10		ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
1,2-Dichlorobenzene	ND		10		ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
1,2-Diphenylhydrazine	ND		10		ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
1,3-Dichlorobenzene	ND		10		ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
1,4-Dichlorobenzene	ND		10		ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
2,4,5-Trichlorophenol	ND		10		ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
2,4,6-Trichlorophenol	ND		10	V1	ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
2,4-Dichlorophenol	ND		10		ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
2,4-Dimethylphenol	ND		10		ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
2,4-Dinitrophenol	ND		50		ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
2,4-Dinitrotoluene	ND		10		ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
2,6-Dinitrotoluene	ND		10		ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
2-Chloronaphthalene	ND		10		ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
2-Chlorophenol	ND		10		ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
2-Methylnaphthalene	ND		5.0		ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
2-Methylphenol	ND		10		ug/L	1	01/31/2013 0838	02/06/2013 1813	MD

Turner Laboratories, Inc.

Date: 02/26/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13A0709
Lab Sample ID: 13A0709-01

Client Sample ID: Composite
Collection Date/Time: 01/26/2013 0519
Matrix: Storm Water
Order Name: Storm Water Annual

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
2-Nitroaniline	ND		20		ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
2-Nitrophenol	ND		10		ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
3,3´-Dichlorobenzidine	ND	1.0	20	E8	ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
3,4-Methylphenol	ND		10		ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
3-Nitroaniline	ND		20	V1	ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
4,6-Dinitro-2-methylphenol	ND		20		ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
4-Bromophenyl phenyl ether	ND		10		ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
4-Chloro-3-methylphenol	ND		10		ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
4-Chloroaniline	ND		20		ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
4-Chlorophenyl phenyl ether	ND		10		ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
4-Methylphenol	ND		10		ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
4-Nitroaniline	ND		20		ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
4-Nitrophenol	ND		50		ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
Acenaphthene	ND		5.0		ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
Acenaphthylene	ND		5.0		ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
Aniline	ND		20		ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
Anthracene	ND		5.0		ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
Benzo[a]anthracene	ND	0.61	5.0	E8	ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
Benzo[a]pyrene	ND	0.76	5.0	E8	ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
Benzo[b,k]fluoranthene	ND	1.6	10	E8	ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
Benzo[g,h,i]perylene	ND		5.0		ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
Benzoic acid	ND		50		ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
Benzyl alcohol	ND		5.0		ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
Bis(2-chloroethoxy)methane	ND		10		ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
Bis(2-chloroethyl)ether	ND		10		ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
Bis(2-chloroisopropyl)ether	ND		10		ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
Bis(2-ethylhexyl)phthalate	ND		10		ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
Butyl benzyl phthalate	ND		10		ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
Chrysene	ND		5.0		ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
Dibenz[a,h]anthracene	ND	0.95	5.0	E8	ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
Dibenzofuran	ND		5.0		ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
Diethyl phthalate	ND		10		ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
Dimethyl phthalate	ND		10		ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
Di-n-butyl phthalate	ND		10		ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
Di-n-octyl phthalate	ND		10		ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
Fluoranthene	ND		5.0		ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
Fluorene	ND		5.0		ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
Hexachlorobenzene	ND		10		ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
Hexachlorobutadiene	ND		10		ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
Hexachlorocyclopentadiene	ND		10		ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
Hexachloroethane	ND		10		ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
Indeno[1,2,3-cd]pyrene	ND	0.82	5.0	E8	ug/L	1	01/31/2013 0838	02/06/2013 1813	MD

Turner Laboratories, Inc.

Date: 02/26/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13A0709
Lab Sample ID: 13A0709-01

Client Sample ID: Composite
Collection Date/Time: 01/26/2013 0519
Matrix: Storm Water
Order Name: Storm Water Annual

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Isophorone	ND		10		ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
Naphthalene	ND		5.0	V1	ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
Nitrobenzene	ND		10		ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
N-Nitrosodimethylamine	ND	1.6	10	E8	ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
N-Nitrosodiphenylamine	ND		10		ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
N-Nitrosodipropylamine	ND		10		ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
Pentachlorophenol	ND		30		ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
Phenanthrene	ND		5.0		ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
Phenol	ND		10		ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
Pyrene	ND		5.0		ug/L	1	01/31/2013 0838	02/06/2013 1813	MD
Surr: 2,4,6-Tribromophenol	*89*	*48.18-103.2*			*%REC*	*1*	*01/31/2013 0838*	*02/06/2013 1813*	*MD*
Surr: 2-Fluorobiphenyl	*86*	*44.86-97.28*			*%REC*	*1*	*01/31/2013 0838*	*02/06/2013 1813*	*MD*
Surr: 2-Fluorophenol	*63*	*17.76-99.38*			*%REC*	*1*	*01/31/2013 0838*	*02/06/2013 1813*	*MD*
Surr: 4-Terphenyl-d14	*107*	*38.67-92.68*	*S4*		*%REC*	*1*	*01/31/2013 0838*	*02/06/2013 1813*	*MD*
Surr: Nitrobenzene-d5	*77*	*23.73-103.2*			*%REC*	*1*	*01/31/2013 0838*	*02/06/2013 1813*	*MD*
Surr: Phenol-d6	*64*	*17.76-99.38*			*%REC*	*1*	*01/31/2013 0838*	*02/06/2013 1813*	*MD*

Turner Laboratories, Inc.

Date: 02/26/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13A0709
Lab Sample ID: 13A0709-02

Client Sample ID: Grab
Collection Date/Time: 01/26/2013 0519
Matrix: Storm Water
Order Name: Storm Water Annual

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
N-Hexane Extractable Material (SGT-HEM)-E 1664A									
Total Petroleum Hydrocarbons	ND		5.00		mg/L	1	02/04/2013 1000	02/04/2013 1445	AC
N-Hexane Extractable Material (HEM)-E1664A									
Oil & Grease	6.20		5.00		mg/L	1	02/01/2013 0800	02/01/2013 1620	AC
Additional Compounds by GCMS-E624									
2-Chloroethylvinylether	ND		50	D5	ug/L	5	02/05/2013 1726	02/06/2013 0053	KP
Acrolein	ND		50	D5	ug/L	5	02/05/2013 1726	02/06/2013 0053	KP
Acrylonitrile	ND		50	D5	ug/L	5	02/05/2013 1726	02/06/2013 0053	KP
Surr: 1,2-Dichloroethane-d4	*102*	*70-130*			*%REC*	*5*	*02/05/2013 1726*	*02/06/2013 053*	*KP*
Surr: 4-Bromofluorobenzene	*111*	*70-130*			*%REC*	*5*	*02/05/2013 1726*	*02/06/2013 053*	*KP*
Surr: Fluorobenzene	*102*	*70-130*			*%REC*	*5*	*02/05/2013 1726*	*02/06/2013 053*	*KP*
Volatile Organic Compounds by GCMS-EPA 624									
1,1,1-Trichloroethane	ND		10	D5	ug/L	5	02/05/2013 1726	02/06/2013 0020	KP
1,1,2,2-Tetrachloroethane	ND		10	D5	ug/L	5	02/05/2013 1726	02/06/2013 0020	KP
1,1,2-Trichloroethane	ND		10	D5	ug/L	5	02/05/2013 1726	02/06/2013 0020	KP
1,1-Dichloroethane	ND		10	D5	ug/L	5	02/05/2013 1726	02/06/2013 0020	KP
1,1-Dichloroethene	ND		10	D5	ug/L	5	02/05/2013 1726	02/06/2013 0020	KP
1,2,4-Trimethylbenzene	ND		10	D5	ug/L	5	02/05/2013 1726	02/06/2013 0020	KP
1,2-Dichlorobenzene	ND		10	D5	ug/L	5	02/05/2013 1726	02/06/2013 0020	KP
1,2-Dichloroethane	ND		10	D5	ug/L	5	02/05/2013 1726	02/06/2013 0020	KP
1,2-Dichloropropane	ND		10	D5	ug/L	5	02/05/2013 1726	02/06/2013 0020	KP
1,3,5-Trimethylbenzene	ND		10	D5	ug/L	5	02/05/2013 1726	02/06/2013 0020	KP
1,3-Dichlorobenzene	ND		10	D5	ug/L	5	02/05/2013 1726	02/06/2013 0020	KP
1,4-Dichlorobenzene	ND		10	D5	ug/L	5	02/05/2013 1726	02/06/2013 0020	KP
Acetone	ND		50	D5, T2	ug/L	5	02/05/2013 1726	02/06/2013 0020	KP
Benzene	ND		10	D5	ug/L	5	02/05/2013 1726	02/06/2013 0020	KP
Bromodichloromethane	ND		10	D5	ug/L	5	02/05/2013 1726	02/06/2013 0020	KP
Bromoform	ND		10	D5	ug/L	5	02/05/2013 1726	02/06/2013 0020	KP
Bromomethane	ND		10	D5	ug/L	5	02/05/2013 1726	02/06/2013 0020	KP
Carbon tetrachloride	ND		10	D5	ug/L	5	02/05/2013 1726	02/06/2013 0020	KP
Chlorobenzene	ND		10	D5	ug/L	5	02/05/2013 1726	02/06/2013 0020	KP
Chloroethane	ND		25	D5	ug/L	5	02/05/2013 1726	02/06/2013 0020	KP
Chloroform	ND		10	D5	ug/L	5	02/05/2013 1726	02/06/2013 0020	KP

Turner Laboratories, Inc.

Date: 02/26/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13A0709
Lab Sample ID: 13A0709-02

Client Sample ID: Grab
Collection Date/Time: 01/26/2013 0519
Matrix: Storm Water
Order Name: Storm Water Annual

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Chloromethane	ND		25	D5	ug/L	5	02/05/2013 1726	02/06/2013 0020	KP
cis-1,3-Dichloropropene	ND		10	D5	ug/L	5	02/05/2013 1726	02/06/2013 0020	KP
Dibromochloromethane	ND		10	D5	ug/L	5	02/05/2013 1726	02/06/2013 0020	KP
Dichlorodifluoromethane	ND		25	D5, T2	ug/L	5	02/05/2013 1726	02/06/2013 0020	KP
Ethylbenzene	ND		10	D5	ug/L	5	02/05/2013 1726	02/06/2013 0020	KP
Methyl Isobutyl Ketone (MIBK)	ND		50	D5, T2	ug/L	5	02/05/2013 1726	02/06/2013 0020	KP
Methylene chloride	ND		50	D5	ug/L	5	02/05/2013 1726	02/06/2013 0020	KP
Tetrachloroethene	ND		10	D5	ug/L	5	02/05/2013 1726	02/06/2013 0020	KP
Tetrahydrofuran	ND		50	D5, T2	ug/L	5	02/05/2013 1726	02/06/2013 0020	KP
Toluene	ND		10	D5	ug/L	5	02/05/2013 1726	02/06/2013 0020	KP
trans-1,2-Dichloroethene	ND		10	D5	ug/L	5	02/05/2013 1726	02/06/2013 0020	KP
trans-1,3-Dichloropropene	ND		10	D5	ug/L	5	02/05/2013 1726	02/06/2013 0020	KP
Trichloroethene	ND		10	D5	ug/L	5	02/05/2013 1726	02/06/2013 0020	KP
Trichlorofluoromethane	ND		25	D5	ug/L	5	02/05/2013 1726	02/06/2013 0020	KP
Vinyl chloride	ND		10	D5	ug/L	5	02/05/2013 1726	02/06/2013 0020	KP
Xylenes, Total	ND		30	D5, T2	ug/L	5	02/05/2013 1726	02/06/2013 0020	KP
Surr: 1,2-Dichloroethane-d4	*103*	*70-130*			*%REC*	*5*	*02/05/2013 1726*	*02/06/2013 020*	*KP*
Surr: 4-Bromofluorobenzene	*108*	*70-130*			*%REC*	*5*	*02/05/2013 1726*	*02/06/2013 020*	*KP*
Surr: Fluorobenzene	*101*	*70-130*			*%REC*	*5*	*02/05/2013 1726*	*02/06/2013 020*	*KP*

Cyanide-SM4500-CN BE

Cyanide	ND		100		ug/L	1	01/29/2013 0900	01/30/2013 1705	EW

Turner Laboratories, Inc.

Date: 02/26/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13A0709
Date Received: 01/26/2013

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1301336 - E 200.2 ICP										
Blank (1301336-BLK1)				Prepared: 01/28/2013 Analyzed: 01/29/2013						
Arsenic	ND	40	ug/L							
Barium	ND	50	ug/L							
Beryllium	ND	2.0	ug/L							
Cadmium	ND	2.0	ug/L							
Calcium	ND	4000	ug/L							
Chromium	ND	30	ug/L							
Copper	ND	20	ug/L							
Magnesium	ND	3000	ug/L							
Nickel	ND	50	ug/L							
Zinc	ND	40	ug/L							
LCS (1301336-BS1)				Prepared: 01/28/2013 Analyzed: 01/29/2013						
Arsenic	1710	40	ug/L	2000		85	85-115			
Barium	1800	50	ug/L	2000		91	85-115			
Beryllium	46	2.0	ug/L	50.00		91	85-115			
Cadmium	44	2.0	ug/L	50.00		87	85-115			
Calcium	9000	4000	ug/L	10000		90	85-115			
Chromium	180	30	ug/L	200.0		91	85-115			
Copper	230	20	ug/L	250.0		92	85-115			
Magnesium	9100	3000	ug/L	10000		91	85-115			
Nickel	450	50	ug/L	500.0		90	85-115			
Zinc	450	40	ug/L	500.0		90	85-115			
LCS Dup (1301336-BSD1)				Prepared: 01/28/2013 Analyzed: 01/29/2013						
Arsenic	1730	40	ug/L	2000		86	85-115	1	20	
Barium	1800	50	ug/L	2000		92	85-115	1	20	
Beryllium	46	2.0	ug/L	50.00		92	85-115	0.8	20	
Cadmium	45	2.0	ug/L	50.00		89	85-115	2	20	
Calcium	9100	4000	ug/L	10000		91	85-115	1	20	
Chromium	180	30	ug/L	200.0		91	85-115	0.8	20	
Copper	230	20	ug/L	250.0		93	85-115	2	20	
Magnesium	9200	3000	ug/L	10000		92	85-115	1	20	
Nickel	450	50	ug/L	500.0		90	85-115	0.7	20	
Zinc	460	40	ug/L	500.0		91	85-115	1	20	
Matrix Spike (1301336-MS1)		**Source: 13A0571-01**		Prepared: 01/28/2013 Analyzed: 01/29/2013						
Arsenic	1780	40	ug/L	2000	22.9	88	70-130			
Barium	1800	50	ug/L	2000	78	84	70-130			
Beryllium	45	2.0	ug/L	50.00	ND	91	70-130			
Cadmium	42	2.0	ug/L	50.00	ND	85	70-130			
Calcium	120000	4000	ug/L	10000	120000	28	70-130			M3
Chromium	180	30	ug/L	200.0	1.1	91	70-130			
Copper	300	20	ug/L	250.0	32	109	70-130			
Magnesium	34000	3000	ug/L	10000	25000	94	70-130			
Nickel	520	50	ug/L	500.0	31	98	70-130			
Zinc	670	40	ug/L	500.0	230	89	70-130			

Turner Laboratories, Inc.

Date: 02/26/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13A0709
Date Received: 01/26/2013

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1301336 - E 200.2 ICP										
Matrix Spike (1301336-MS2)		**Source: 13A0715-01**		Prepared: 01/28/2013 Analyzed: 01/29/2013						
Arsenic	1820	40	ug/L	2000	23.2	90	70-130			
Barium	300	50	ug/L	2000	0.64	15	70-130			M2
Beryllium	42	2.0	ug/L	50.00	ND	84	70-130			
Cadmium	62	2.0	ug/L	50.00	21	82	70-130			
Calcium	33000	4000	ug/L	10000	24000	82	70-130			
Chromium	190	30	ug/L	200.0	2.6	91	70-130			
Copper	310	20	ug/L	250.0	8.5	119	70-130			
Magnesium	11000	3000	ug/L	10000	1700	92	70-130			
Nickel	550	50	ug/L	500.0	19	107	70-130			
Zinc	490	40	ug/L	500.0	ND	98	70-130			
Batch 1301337 - E 200.8 ICP/MS										
Blank (1301337-BLK1)				Prepared: 01/28/2013 Analyzed: 01/29/2013						
Antimony	0.011	0.50	ug/L							
Lead	ND	0.50	ug/L							
Selenium	ND	2.5	ug/L							
Silver	0.020	0.50	ug/L							
Thallium	0.031	0.50	ug/L							
LCS (1301337-BS1)				Prepared: 01/28/2013 Analyzed: 01/29/2013						
Antimony	46	0.50	ug/L	50.00		92	85-115			
Lead	47	0.50	ug/L	50.00		94	85-115			
Selenium	240	2.5	ug/L	250.0		94	85-115			
Silver	48	0.50	ug/L	50.00		96	85-115			
Thallium	48	0.50	ug/L	50.00		96	85-115			
LCS Dup (1301337-BSD1)				Prepared: 01/28/2013 Analyzed: 01/29/2013						
Antimony	47	0.50	ug/L	50.00		94	85-115	1	20	
Lead	46	0.50	ug/L	50.00		92	85-115	3	20	
Selenium	240	2.5	ug/L	250.0		95	85-115	0.8	20	
Silver	48	0.50	ug/L	50.00		96	85-115	0.6	20	
Thallium	46	0.50	ug/L	50.00		91	85-115	5	20	
Matrix Spike (1301337-MS1)		**Source: 13A0709-01**		Prepared: 01/28/2013 Analyzed: 01/31/2013						
Antimony	52	0.50	ug/L	50.00	0.99	102	70-130			
Lead	66	0.50	ug/L	50.00	12	110	70-130			
Selenium	210	2.5	ug/L	250.0	0.36	85	70-130			
Silver	49	0.50	ug/L	50.00	0.013	98	70-130			
Thallium	47	0.50	ug/L	50.00	ND	94	70-130			
Batch 1302035 - E 245.1										
Blank (1302035-BLK1)				Prepared & Analyzed: 02/04/2013						
Mercury	ND	1.0	ug/L							
LCS (1302035-BS1)				Prepared & Analyzed: 02/04/2013						
Mercury	4.7	1.0	ug/L	5.000		93	85-115			

Turner Laboratories, Inc.

Date: 02/26/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13A0709
Date Received: 01/26/2013

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302035 - E 245.1										
LCS Dup (1302035-BSD1)				Prepared & Analyzed: 02/04/2013						
Mercury	4.8	1.0	ug/L	5.000		95	85-115	2	20	
Matrix Spike (1302035-MS1)		**Source: 13A0792-01**		Prepared: 02/04/2013 Analyzed: 02/08/2013						
Mercury	5.0	1.0	ug/L	5.000	ND	100	85-115			
Matrix Spike (1302035-MS2)		**Source: 13A0728-02**		Prepared & Analyzed: 02/04/2013						
Mercury	4.8	1.0	ug/L	5.000	ND	97	85-115			
Matrix Spike Dup (1302035-MSD1)		**Source: 13A0792-01**		Prepared: 02/04/2013 Analyzed: 02/08/2013						
Mercury	5.2	1.0	ug/L	5.000	ND	103	85-115	3	10	
Matrix Spike Dup (1302035-MSD2)		**Source: 13A0728-02**		Prepared & Analyzed: 02/04/2013						
Mercury	4.7	1.0	ug/L	5.000	ND	94	85-115	3	10	

Turner Laboratories, Inc.

Date: 02/26/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13A0709
Date Received: 01/26/2013

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1301316 - SPECTRO PREP										
Blank (1301316-BLK1)				Prepared: 01/29/2013 Analyzed: 01/30/2013						
Cyanide	ND	100	ug/L							
LCS (1301316-BS1)				Prepared: 01/29/2013 Analyzed: 01/30/2013						
Cyanide	1900	100	ug/L	2000		96	90-110			
LCS Dup (1301316-BSD1)				Prepared: 01/29/2013 Analyzed: 01/30/2013						
Cyanide	2000	100	ug/L	2000		102	90-110	6	20	
Matrix Spike (1301316-MS1)		**Source: 13A0714-01**		Prepared: 01/29/2013 Analyzed: 01/30/2013						
Cyanide	1800	100	ug/L	2000	ND	88	70-130			
Matrix Spike Dup (1301316-MSD1)		**Source: 13A0714-01**		Prepared: 01/29/2013 Analyzed: 01/30/2013						
Cyanide	1800	100	ug/L	2000	ND	88	70-130	0	20	
Batch 1301335 - GEN CHEM										
Blank (1301335-BLK1)				Prepared: 01/28/2013 Analyzed: 01/29/2013						
Nitrogen, Total Kjeldahl	ND	0.50	mg/L							
LCS (1301335-BS1)				Prepared: 01/28/2013 Analyzed: 01/29/2013						
Nitrogen, Total Kjeldahl	5.0	0.50	mg/L	5.000		100	80-120			
LCS Dup (1301335-BSD1)				Prepared: 01/28/2013 Analyzed: 01/29/2013						
Nitrogen, Total Kjeldahl	5.0	0.50	mg/L	5.000		100	80-120	0.4	20	
Matrix Spike (1301335-MS3)		**Source: 13A0574-01**		Prepared: 02/06/2013 Analyzed: 02/08/2013						
Nitrogen, Total Kjeldahl	82	5.0	mg/L	50.00	32	100	80-120			
Matrix Spike (1301335-MS4)		**Source: 13A0681-11RE1**		Prepared: 02/06/2013 Analyzed: 02/08/2013						
Nitrogen, Total Kjeldahl	4.7	0.50	mg/L	5.000	ND	94	80-120			
Matrix Spike Dup (1301335-MSD3)		**Source: 13A0574-01**		Prepared: 02/06/2013 Analyzed: 02/08/2013						
Nitrogen, Total Kjeldahl	80	5.0	mg/L	50.00	32	97	80-120	2	20	
Matrix Spike Dup (1301335-MSD4)		**Source: 13A0681-11RE1**		Prepared: 02/06/2013 Analyzed: 02/08/2013						
Nitrogen, Total Kjeldahl	4.7	0.50	mg/L	5.000	ND	95	80-120	1	20	
Batch 1301340 - SPECTRO PREP										
Blank (1301340-BLK1)				Prepared & Analyzed: 01/28/2013						
Total Phosphorus (as P)	ND	0.10	mg/L							
LCS (1301340-BS1)				Prepared & Analyzed: 01/28/2013						
Total Phosphorus (as P)	0.52	0.10	mg/L	0.5000		104	90-110			
LCS Dup (1301340-BSD1)				Prepared & Analyzed: 01/28/2013						
Total Phosphorus (as P)	0.50	0.10	mg/L	0.5000		100	90-110	4	10	
Matrix Spike (1301340-MS1)		**Source: 13A0718-01**		Prepared & Analyzed: 01/28/2013						
Total Phosphorus (as P)	2.8	0.50	mg/L	2.500	0.35	96	85-115			
Matrix Spike Dup (1301340-MSD1)		**Source: 13A0718-01**		Prepared & Analyzed: 01/28/2013						
Total Phosphorus (as P)	2.7	0.50	mg/L	2.500	0.35	92	85-115	4	15	

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1301355 - GEN CHEM										
Duplicate (1301355-DUP1)		**Source: 13A0716-02**		Prepared: 01/29/2013 Analyzed: 01/31/2013						
Total Dissolved Solids (Residue, Filterable)	780	20	mg/L		780			0.6	5	
Batch 1301357 - GEN CHEM										
Duplicate (1301357-DUP1)		**Source: 13A0709-01**		Prepared: 01/30/2013 Analyzed: 01/31/2013						
Total Suspended Solids	160	10	mg/L		160			2	5	
Duplicate (1301357-DUP2)		**Source: 13A0718-01**		Prepared: 01/30/2013 Analyzed: 01/31/2013						
Total Suspended Solids	24	10	mg/L		24			0	5	
Batch 1301372 - GEN CHEM										
Blank (1301372-BLK1)				Prepared & Analyzed: 02/07/2013						
Nitrogen, Ammonia (As N)	ND	0.50	mg/L							
LCS (1301372-BS1)				Prepared & Analyzed: 02/07/2013						
Nitrogen, Ammonia (As N)	5.0	0.50	mg/L	5.000		101	90-110			
LCS Dup (1301372-BSD1)				Prepared & Analyzed: 02/07/2013						
Nitrogen, Ammonia (As N)	5.3	0.50	mg/L	5.000		106	90-110	5	10	
Matrix Spike (1301372-MS1)		**Source: 13A0574-01**		Prepared & Analyzed: 02/07/2013						
Nitrogen, Ammonia (As N)	78	5.0	mg/L	50.00	29	97	70-130			
Matrix Spike (1301372-MS2)		**Source: 13A0741-05**		Prepared & Analyzed: 02/07/2013						
Nitrogen, Ammonia (As N)	4.4	0.50	mg/L	5.000	ND	88	70-130			
Matrix Spike Dup (1301372-MSD1)		**Source: 13A0574-01**		Prepared & Analyzed: 02/07/2013						
Nitrogen, Ammonia (As N)	78	5.0	mg/L	50.00	29	98	70-130	0.6	20	
Matrix Spike Dup (1301372-MSD2)		**Source: 13A0741-05**		Prepared & Analyzed: 02/07/2013						
Nitrogen, Ammonia (As N)	4.4	0.50	mg/L	5.000	ND	89	70-130	1	20	
Batch 1302009 - GEN CHEM										
Blank (1302009-BLK1)				Prepared & Analyzed: 02/01/2013						
Oil & Grease	ND	5.00	mg/L							
LCS (1302009-BS1)				Prepared & Analyzed: 02/01/2013						
Oil & Grease	34.0	5.00	mg/L	40.00		85	78-114			
LCS Dup (1302009-BSD1)				Prepared & Analyzed: 02/01/2013						
Oil & Grease	35.2	5.00	mg/L	40.00		88	78-114	3	18	
Matrix Spike (1302009-MS1)		**Source: 13A0666-02**		Prepared & Analyzed: 02/01/2013						
Oil & Grease	36.9	5.00	mg/L	40.00	2.40	86	78-114			
Batch 1302013 - GEN CHEM										
Blank (1302013-BLK1)				Prepared: 01/26/2013 Analyzed: 01/31/2013						
Biochemical Oxygen Demand	ND	2.0	mg/L							

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302013 - GEN CHEM										
LCS (1302013-BS1)				Prepared: 01/26/2013 Analyzed: 01/31/2013						
Biochemical Oxygen Demand	180		mg/L	198.0		90	85-115			
Batch 1302038 - GEN CHEM										
Blank (1302038-BLK1)				Prepared & Analyzed: 02/04/2013						
Total Petroleum Hydrocarbons	ND	5.00	mg/L							
LCS (1302038-BS1)				Prepared & Analyzed: 02/04/2013						
Total Petroleum Hydrocarbons	17.9	5.00	mg/L	20.00		90	64-132			
LCS Dup (1302038-BSD1)				Prepared & Analyzed: 02/04/2013						
Total Petroleum Hydrocarbons	17.0	5.00	mg/L	20.00		85	64-132	5	34	
Matrix Spike (1302038-MS1)		**Source: 13A0646-01**		Prepared & Analyzed: 02/04/2013						
Total Petroleum Hydrocarbons	15.1	5.00	mg/L	20.00	ND	76	64-132			
Batch 1302054 - SPECTRO PREP										
Blank (1302054-BLK1)				Prepared & Analyzed: 02/05/2013						
Chemical Oxygen Demand	ND	20	mg/L							
LCS (1302054-BS1)				Prepared & Analyzed: 02/05/2013						
Chemical Oxygen Demand	510	20	mg/L	500.0		103	70-130			
LCS Dup (1302054-BSD1)				Prepared & Analyzed: 02/05/2013						
Chemical Oxygen Demand	510	20	mg/L	500.0		101	70-130	2	20	
Matrix Spike (1302054-MS1)		**Source: 13A0718-01**		Prepared & Analyzed: 02/05/2013						
Chemical Oxygen Demand	570	20	mg/L	500.0	64	100	70-130			
Matrix Spike Dup (1302054-MSD1)		**Source: 13A0718-01**		Prepared & Analyzed: 02/05/2013						
Chemical Oxygen Demand	570	20	mg/L	500.0	64	102	70-130	1	20	

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1301328 - SW 846 3520C										
Blank (1301328-BLK1)				Prepared: 01/28/2013 Analyzed: 02/04/2013						
4,4´-DDD	ND	0.10	ug/L							
4,4´-DDE	ND	0.10	ug/L							
4,4´-DDT	ND	0.10	ug/L							
Aldrin	ND	0.10	ug/L							
alpha-BHC	ND	0.10	ug/L							
alpha-Chlordane	ND	0.10	ug/L							
beta-BHC	ND	0.10	ug/L							
delta-BHC	ND	0.10	ug/L							
Dieldrin	ND	0.10	ug/L							
Endosulfan I	ND	0.10	ug/L							
Endosulfan II	ND	0.10	ug/L							
Endosulfan sulfate	ND	0.10	ug/L							
Endrin	ND	0.10	ug/L							
Endrin aldehyde	ND	0.10	ug/L							
Endrin ketone	ND	0.10	ug/L							
gamma-BHC	ND	0.10	ug/L							
gamma-Chlordane	ND	0.10	ug/L							
Heptachlor	ND	0.10	ug/L							
Heptachlor epoxide	ND	0.10	ug/L							
Methoxychlor	ND	0.10	ug/L							
Toxaphene	ND	1.0	ug/L							
Surrogate: Decachlorobiphenyl	*0.893*		*ug/L*	*1.000*		*89*	*51.1-138.5*			
Surrogate: Tetrachloro-m-xylene	*0.637*		*ug/L*	*1.000*		*64*	*39.1-120*			
LCS (1301328-BS1)				Prepared: 01/28/2013 Analyzed: 02/04/2013						
4,4´-DDT	0.95	0.10	ug/L	1.000		95	57-116.5			
Aldrin	0.43	0.10	ug/L	0.5000		86	48.4-113.2			
Dieldrin	0.81	0.10	ug/L	1.000		81	53.2-117.5			
Endrin	0.89	0.10	ug/L	1.000		89	49.2-123.7			
gamma-BHC	0.44	0.10	ug/L	0.5000		88	58.9-127.4			
Heptachlor	0.42	0.10	ug/L	0.5000		84	48.1-120			
Surrogate: Decachlorobiphenyl	*0.939*		*ug/L*	*1.000*		*94*	*51.6-128.7*			
Surrogate: Tetrachloro-m-xylene	*0.825*		*ug/L*	*1.000*		*83*	*37.1-110.6*			
LCS Dup (1301328-BSD1)				Prepared: 01/28/2013 Analyzed: 02/04/2013						
4,4´-DDT	0.92	0.10	ug/L	1.000		92	57-116.5	3	30	
Aldrin	0.41	0.10	ug/L	0.5000		83	48.4-113.2	3	30	
Dieldrin	0.80	0.10	ug/L	1.000		80	53.2-117.5	2	30	
Endrin	0.84	0.10	ug/L	1.000		84	49.2-123.7	5	30	
gamma-BHC	0.43	0.10	ug/L	0.5000		86	58.9-127.4	3	30	
Heptachlor	0.41	0.10	ug/L	0.5000		81	48.1-120	3	30	
Surrogate: Decachlorobiphenyl	*0.929*		*ug/L*	*1.000*		*93*	*51.6-128.7*			
Surrogate: Tetrachloro-m-xylene	*0.745*		*ug/L*	*1.000*		*74*	*37.1-110.6*			
Batch 1301329 - SW 846 3520C										

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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1301329 - SW 846 3520C										
Blank (1301329-BLK1)				Prepared: 01/28/2013 Analyzed: 02/01/2013						
Aroclor 1016	ND	1.0	ug/L							
Aroclor 1221	ND	1.0	ug/L							
Aroclor 1232	ND	1.0	ug/L							
Aroclor 1242	ND	1.0	ug/L							
Aroclor 1248	ND	1.0	ug/L							
Aroclor 1254	ND	1.0	ug/L							
Aroclor 1260	ND	1.0	ug/L							
Surrogate: Decachlorobiphenyl	*1.88*		*ug/L*	*2.000*		*94*	*52.7-155.1*			
LCS (1301329-BS1)				Prepared: 01/28/2013 Analyzed: 02/01/2013						
Aroclor 1016	8.3	1.0	ug/L	10.00		83	65.2-120.7			
Aroclor 1254	ND	1.0	ug/L				70-130			
Aroclor 1260	8.9	1.0	ug/L	10.00		89	65.3-133.7			
Surrogate: Decachlorobiphenyl	*1.87*		*ug/L*	*2.000*		*93*	*52.7-155.1*			
LCS Dup (1301329-BSD1)				Prepared: 01/28/2013 Analyzed: 02/01/2013						
Aroclor 1016	7.9	1.0	ug/L	10.00		79	65.2-120.7	5	30	
Aroclor 1254	ND	1.0	ug/L				70-130		30	
Aroclor 1260	8.7	1.0	ug/L	10.00		87	65.3-133.7	2	30	
Surrogate: Decachlorobiphenyl	*1.84*		*ug/L*	*2.000*		*92*	*52.7-155.1*			
Batch 1301369 - SW 846 3535										

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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1301369 - SW 846 3535										
Blank (1301369-BLK1)				Prepared: 01/31/2013 Analyzed: 02/06/2013						
1,2,4-Trichlorobenzene	ND	10	ug/L							
1,2-Dichlorobenzene	ND	10	ug/L							
1,2-Diphenylhydrazine	ND	10	ug/L							
1,3-Dichlorobenzene	ND	10	ug/L							
1,4-Dichlorobenzene	ND	10	ug/L							
2,4,5-Trichlorophenol	ND	10	ug/L							
2,4,6-Trichlorophenol	ND	10	ug/L							
2,4-Dichlorophenol	ND	10	ug/L							
2,4-Dimethylphenol	ND	10	ug/L							
2,4-Dinitrophenol	ND	50	ug/L							
2,4-Dinitrotoluene	ND	10	ug/L							
2,6-Dinitrotoluene	ND	10	ug/L							
2-Chloronaphthalene	ND	10	ug/L							
2-Chlorophenol	ND	10	ug/L							
2-Methylnaphthalene	ND	5.0	ug/L							
2-Methylphenol	ND	10	ug/L							
2-Nitroaniline	ND	20	ug/L							
2-Nitrophenol	ND	10	ug/L							
3,3´-Dichlorobenzidine	ND	20	ug/L							
3,4-Methylphenol	ND	10	ug/L							
3-Nitroaniline	ND	20	ug/L							
4,6-Dinitro-2-methylphenol	ND	20	ug/L							
4-Bromophenyl phenyl ether	ND	10	ug/L							
4-Chloro-3-methylphenol	ND	10	ug/L							
4-Chloroaniline	ND	20	ug/L							
4-Chlorophenyl phenyl ether	ND	10	ug/L							
4-Methylphenol	ND	10	ug/L							
4-Nitroaniline	ND	20	ug/L							
4-Nitrophenol	ND	50	ug/L							
Acenaphthene	ND	5.0	ug/L							
Acenaphthylene	ND	5.0	ug/L							
Aniline	ND	20	ug/L							
Anthracene	ND	5.0	ug/L							
Benzo[a]anthracene	ND	5.0	ug/L							
Benzo[a]pyrene	ND	5.0	ug/L							
Benzo[b,k]fluoranthene	ND	10	ug/L							
Benzo[g,h,i]perylene	ND	5.0	ug/L							
Benzoic acid	ND	50	ug/L							
Benzyl alcohol	ND	5.0	ug/L							
Bis(2-chloroethoxy)methane	ND	10	ug/L							
Bis(2-chloroethyl)ether	ND	10	ug/L							
Bis(2-chloroisopropyl)ether	ND	10	ug/L							
Bis(2-ethylhexyl)phthalate	ND	10	ug/L							
Butyl benzyl phthalate	ND	10	ug/L							
Chrysene	ND	5.0	ug/L							
Dibenz[a,h]anthracene	ND	5.0	ug/L							
Dibenzofuran	ND	5.0	ug/L							

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1301369 - SW 846 3535										
Blank (1301369-BLK1)				Prepared: 01/31/2013 Analyzed: 02/06/2013						
Diethyl phthalate	ND	10	ug/L							
Dimethyl phthalate	ND	10	ug/L							
Di-n-butyl phthalate	ND	10	ug/L							
Di-n-octyl phthalate	ND	10	ug/L							
Fluoranthene	ND	5.0	ug/L							
Fluorene	ND	5.0	ug/L							
Hexachlorobenzene	ND	10	ug/L							
Hexachlorobutadiene	ND	10	ug/L							
Hexachlorocyclopentadiene	ND	10	ug/L							
Hexachloroethane	ND	10	ug/L							
Indeno[1,2,3-cd]pyrene	ND	5.0	ug/L							
Isophorone	ND	10	ug/L							
Naphthalene	ND	5.0	ug/L							
Nitrobenzene	ND	10	ug/L							
N-Nitrosodimethylamine	ND	10	ug/L							
N-Nitrosodiphenylamine	ND	10	ug/L							
N-Nitrosodipropylamine	ND	10	ug/L							
Pentachlorophenol	ND	30	ug/L							
Phenanthrene	ND	5.0	ug/L							
Phenol	ND	10	ug/L							
Pyrene	ND	5.0	ug/L							
Surrogate: 2,4,6-Tribromophenol	*79.7*		*ug/L*	*100.0*		*80*	*48.18-103.25*			
Surrogate: 2-Fluorobiphenyl	*75.4*		*ug/L*	*100.0*		*75*	*44.86-97.28*			
Surrogate: 2-Fluorophenol	*37.8*		*ug/L*	*100.0*		*38*	*17.76-99.38*			
Surrogate: 4-Terphenyl-d14	*82.1*		*ug/L*	*100.0*		*82*	*38.67-92.68*			*S4*
Surrogate: Nitrobenzene-d5	*54.3*		*ug/L*	*100.0*		*54*	*23.73-103.28*			
Surrogate: Phenol-d6	*36.9*		*ug/L*	*100.0*		*37*	*17.76-99.38*			
LCS (1301369-BS1)				Prepared: 01/31/2013 Analyzed: 02/06/2013						
1,2,4-Trichlorobenzene	31	10	ug/L	50.00		63	34.82-69.59			
1,4-Dichlorobenzene	21	10	ug/L	50.00		43	28.32-61.4			
2,4-Dinitrotoluene	31	10	ug/L	50.00		61	39.9-79.18			
2-Chlorophenol	58	10	ug/L	100.0		58	25.24-74.48			
4-Chloro-3-methylphenol	60	10	ug/L	100.0		60	40.3-77.78			
4-Nitrophenol	64	50	ug/L	100.0		64	19.31-103.56			
Acenaphthene	31	5.0	ug/L	50.00		63	41.54-75.46			
N-Nitrosodipropylamine	32	10	ug/L	50.00		65	40.18-80.63			
Pentachlorophenol	55	30	ug/L	100.0		55	40.22-81.99			
Phenol	32	10	ug/L	100.0		32	40.06-85.43			
Pyrene	32	5.0	ug/L	50.00		65	46.41-100.1			
Surrogate: 2,4,6-Tribromophenol	*66.2*		*ug/L*	*100.0*		*66*	*47.48-81.05*			
Surrogate: 2-Fluorobiphenyl	*75.5*		*ug/L*	*100.0*		*76*	*38.2-73.43*			
Surrogate: 2-Fluorophenol	*43.5*		*ug/L*	*100.0*		*44*	*0-78.37*			
Surrogate: 4-Terphenyl-d14	*70.2*		*ug/L*	*100.0*		*70*	*39.29-86.74*			
Surrogate: Nitrobenzene-d5	*62.0*		*ug/L*	*100.0*		*62*	*34.79-78.71*			
Surrogate: Phenol-d6	*42.4*		*ug/L*	*100.0*		*42*	*1.69-37.11*			

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1301369 - SW 846 3535										
LCS Dup (1301369-BSD1)				Prepared: 01/31/2013 Analyzed: 02/06/2013						
1,2,4-Trichlorobenzene	32	10	ug/L	50.00		65	34.82-69.59	4	30	
1,4-Dichlorobenzene	24	10	ug/L	50.00		49	28.32-61.4	13	30	
2,4-Dinitrotoluene	30	10	ug/L	50.00		60	39.9-79.18	2	30	
2-Chlorophenol	62	10	ug/L	100.0		62	25.24-74.48	7	30	
4-Chloro-3-methylphenol	62	10	ug/L	100.0		62	40.3-77.78	3	30	
4-Nitrophenol	65	50	ug/L	100.0		65	19.31-103.56	1	30	
Acenaphthene	33	5.0	ug/L	50.00		66	41.54-75.46	4	30	
N-Nitrosodipropylamine	36	10	ug/L	50.00		71	40.18-80.63	9	30	
Pentachlorophenol	61	30	ug/L	100.0		61	40.22-81.99	9	30	
Phenol	32	10	ug/L	100.0		32	40.06-85.43	0.5	30	
Pyrene	34	5.0	ug/L	50.00		67	46.41-100.1	4	30	
Surrogate: 2,4,6-Tribromophenol	*74.5*		*ug/L*	*100.0*		*74*	*47.48-81.05*			
Surrogate: 2-Fluorobiphenyl	*79.7*		*ug/L*	*100.0*		*80*	*38.2-73.43*			*S4*
Surrogate: 2-Fluorophenol	*45.7*		*ug/L*	*100.0*		*46*	*0-78.37*			
Surrogate: 4-Terphenyl-d14	*75.6*		*ug/L*	*100.0*		*76*	*39.29-86.74*			
Surrogate: Nitrobenzene-d5	*68.7*		*ug/L*	*100.0*		*69*	*34.79-78.71*			
Surrogate: Phenol-d6	*42.5*		*ug/L*	*100.0*		*42*	*1.69-37.11*			

Turner Laboratories, Inc.

Date: 02/26/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13A0709
Date Received: 01/26/2013

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302061 - VOA_GCMS										
Blank (1302061-BLK1)				Prepared & Analyzed: 02/05/2013						
1,1,1-Trichloroethane	ND	2.0	ug/L							
1,1,2,2-Tetrachloroethane	ND	2.0	ug/L							
1,1,2-Trichloroethane	ND	2.0	ug/L							
1,1-Dichloroethane	ND	2.0	ug/L							
1,1-Dichloroethene	ND	2.0	ug/L							
1,2-Dichlorobenzene	ND	2.0	ug/L							
1,2-Dichloroethane	ND	2.0	ug/L							
1,2-Dichloropropane	ND	2.0	ug/L							
1,3-Dichlorobenzene	ND	2.0	ug/L							
1,4-Dichlorobenzene	ND	2.0	ug/L							
2-Chloroethylvinylether	ND	10	ug/L							
2-Chloroethylvinylether	ND	10	ug/L							
Acetone	ND	10	ug/L							
Acrolein	ND	10	ug/L							
Acrolein	ND	10	ug/L							
Acrylonitrile	ND	10	ug/L							
Acrylonitrile	ND	10	ug/L							
Benzene	ND	2.0	ug/L							
Bromodichloromethane	ND	2.0	ug/L							
Bromoform	ND	2.0	ug/L							
Bromomethane	ND	2.0	ug/L							
Carbon tetrachloride	ND	2.0	ug/L							
Chlorobenzene	ND	2.0	ug/L							
Chloroethane	ND	5.0	ug/L							
Chloroform	ND	2.0	ug/L							
Chloromethane	ND	5.0	ug/L							
cis-1,3-Dichloropropene	ND	2.0	ug/L							
Dibromochloromethane	ND	2.0	ug/L							
Dichlorodifluoromethane	ND	5.0	ug/L							
Ethylbenzene	ND	2.0	ug/L							
Methyl Isobutyl Ketone (MIBK)	ND	10	ug/L							
Methylene chloride	ND	10	ug/L							
Tetrachloroethene	ND	2.0	ug/L							
Tetrahydrofuran	ND	10	ug/L							
Toluene	ND	2.0	ug/L							
trans-1,2-Dichloroethene	ND	2.0	ug/L							
trans-1,3-Dichloropropene	ND	2.0	ug/L							
Trichloroethene	ND	2.0	ug/L							
Trichlorofluoromethane	ND	5.0	ug/L							
Vinyl chloride	ND	2.0	ug/L							
Xylenes, Total	ND	6.0	ug/L							
Surrogate: 1,2-Dichloroethane-d4	*28.5*		*ug/L*	*28.00*		*102*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*28.5*		*ug/L*	*28.00*		*102*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*29.9*		*ug/L*	*28.00*		*107*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*29.9*		*ug/L*	*28.00*		*107*	*70-130*			
Surrogate: Fluorobenzene	*28.8*		*ug/L*	*28.00*		*103*	*70-130*			
Surrogate: Fluorobenzene	*28.8*		*ug/L*	*28.00*		*103*	*70-130*			

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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302061 - VOA_GCMS										
LCS (1302061-BS1)				Prepared & Analyzed: 02/05/2013						
1,1,1-Trichloroethane	21		ug/L	20.00		107	52-162			
1,1,2,2-Tetrachloroethane	21		ug/L	20.00		104	46-157			
1,1,2-Trichloroethane	20		ug/L	20.00		99	52-150			
1,1-Dichloroethane	20		ug/L	20.00		99	59-155			
1,1-Dichloroethene	21		ug/L	20.00		105	2-234			
1,2,4-Trimethylbenzene	23		ug/L	20.00		113	0-200			
1,2-Dichlorobenzene	22		ug/L	20.00		112	18-190			
1,2-Dichloroethane	21		ug/L	20.00		103	49-155			
1,2-Dichloropropane	21		ug/L	20.00		107	2-210			
1,3,5-Trimethylbenzene	22		ug/L	20.00		112	0-200			
1,3-Dichlorobenzene	22		ug/L	20.00		108	59-156			
1,4-Dichlorobenzene	22		ug/L	20.00		110	18-190			
2-Chloroethylvinylether	20		ug/L	20.00		101	10-305			
2-Chloroethylvinylether	20		ug/L	20.00		101	10-305			
Acetone	91		ug/L	100.0		91	70-130			
Acrolein	95		ug/L	100.0		95	88-118			
Acrolein	95		ug/L	100.0		95	88-118			
Acrylonitrile	100		ug/L	100.0		100	71-135			
Acrylonitrile	100		ug/L	100.0		100	71-135			
Benzene	21		ug/L	20.00		106	37-151			
Bromodichloromethane	21		ug/L	20.00		103	35-155			
Bromoform	22		ug/L	20.00		110	45-169			
Bromomethane	22		ug/L	20.00		110	2-242			
Carbon tetrachloride	21		ug/L	20.00		104	70-140			
Chlorobenzene	20		ug/L	20.00		102	37-160			
Chloroethane	21		ug/L	20.00		105	14-230			
Chloroform	20		ug/L	20.00		101	51-138			
Chloromethane	20		ug/L	20.00		101	5-273			
cis-1,3-Dichloropropene	20		ug/L	20.00		102	2-227			
Dibromochloromethane	20		ug/L	20.00		100	53-149			
Dichlorodifluoromethane	20		ug/L	20.00		99	5-273			
Ethylbenzene	21		ug/L	20.00		104	37-162			
Isopropyl Alcohol	1100		ug/L	1000		106	70-130			
Methyl Isobutyl Ketone (MIBK)	100		ug/L	100.0		101	70-130			
Methylene chloride	20		ug/L	20.00		98	10-221			
Tetrachloroethene	21		ug/L	20.00		106	64-148			
Tetrahydrofuran	110		ug/L	100.0		110	70-130			
Toluene	21		ug/L	20.00		105	47-150			
trans-1,2-Dichloroethene	20		ug/L	20.00		102	54-156			
trans-1,3-Dichloropropene	19		ug/L	20.00		97	17-183			
Trichloroethene	21		ug/L	20.00		106	71-157			
Trichlorofluoromethane	22		ug/L	20.00		111	17-181			
Vinyl chloride	23		ug/L	20.00		115	2-251			
Xylenes, Total	62		ug/L	60.00		103	37-162			
Surrogate: 1,2-Dichloroethane-d4	*29.1*		*ug/L*	*28.00*		*104*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*29.1*		*ug/L*	*28.00*		*104*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*29.3*		*ug/L*	*28.00*		*105*	*70-130*			

Turner Laboratories, Inc.

Date: 02/26/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13A0709
Date Received: 01/26/2013

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302061 - VOA_GCMS										
LCS (1302061-BS1)				Prepared & Analyzed: 02/05/2013						
Surrogate: 4-Bromofluorobenzene	*29.3*		*ug/L*	*28.00*		*105*	*70-130*			
Surrogate: Fluorobenzene	*29.3*		*ug/L*	*28.00*		*105*	*70-130*			
Surrogate: Fluorobenzene	*29.3*		*ug/L*	*28.00*		*105*	*70-130*			

Turner Laboratories, Inc.

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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302061 - VOA_GCMS										
LCS Dup (1302061-BSD1)				Prepared & Analyzed: 02/05/2013						
1,1,1-Trichloroethane	21		ug/L	20.00		103	52-162	3	30	
1,1,2,2-Tetrachloroethane	19		ug/L	20.00		95	46-157	9	30	
1,1,2-Trichloroethane	20		ug/L	20.00		99	52-150	0.1	30	
1,1-Dichloroethane	20		ug/L	20.00		100	59-155	1	30	
1,1-Dichloroethene	21		ug/L	20.00		103	2-234	2	30	
1,2,4-Trimethylbenzene	21		ug/L	20.00		107	0-200	5	200	
1,2-Dichlorobenzene	22		ug/L	20.00		108	18-190	4	30	
1,2-Dichloroethane	20		ug/L	20.00		101	49-155	2	30	
1,2-Dichloropropane	21		ug/L	20.00		104	2-210	3	30	
1,3,5-Trimethylbenzene	21		ug/L	20.00		104	0-200	7	200	
1,3-Dichlorobenzene	20		ug/L	20.00		102	59-156	5	30	
1,4-Dichlorobenzene	21		ug/L	20.00		103	18-190	6	30	
2-Chloroethylvinylether	20		ug/L	20.00		98	10-305	3	30	
2-Chloroethylvinylether	20		ug/L	20.00		98	10-305	3	30	
Acetone	92		ug/L	100.0		92	70-130	1	30	
Acrolein	94		ug/L	100.0		94	88-118	2	30	
Acrolein	94		ug/L	100.0		94	88-118	2	30	
Acrylonitrile	92		ug/L	100.0		92	71-135	8	30	
Acrylonitrile	92		ug/L	100.0		92	71-135	8	30	
Benzene	21		ug/L	20.00		105	37-151	0.6	30	
Bromodichloromethane	20		ug/L	20.00		101	35-155	2	30	
Bromoform	20		ug/L	20.00		100	45-169	9	30	
Bromomethane	21		ug/L	20.00		107	2-242	2	30	
Carbon tetrachloride	21		ug/L	20.00		104	70-140	0.2	30	
Chlorobenzene	21		ug/L	20.00		103	37-160	0.4	30	
Chloroethane	22		ug/L	20.00		109	14-230	4	30	
Chloroform	21		ug/L	20.00		104	51-138	2	30	
Chloromethane	20		ug/L	20.00		99	5-273	2	30	
cis-1,3-Dichloropropene	20		ug/L	20.00		99	2-227	3	30	
Dibromochloromethane	20		ug/L	20.00		99	53-149	1	30	
Dichlorodifluoromethane	21		ug/L	20.00		105	5-273	5	30	
Ethylbenzene	21		ug/L	20.00		105	37-162	1	30	
Isopropyl Alcohol	1100		ug/L	1000		108	70-130	2	200	
Methyl Isobutyl Ketone (MIBK)	100		ug/L	100.0		102	70-130	0.6	30	
Methylene chloride	20		ug/L	20.00		99	10-221	0.7	30	
Tetrachloroethene	22		ug/L	20.00		109	64-148	3	30	
Tetrahydrofuran	97		ug/L	100.0		97	70-130	13	30	
Toluene	21		ug/L	20.00		104	47-150	1	30	
trans-1,2-Dichloroethene	21		ug/L	20.00		103	54-156	1	30	
trans-1,3-Dichloropropene	19		ug/L	20.00		97	17-183	0.05	30	
Trichloroethene	21		ug/L	20.00		107	71-157	2	30	
Trichlorofluoromethane	22		ug/L	20.00		109	17-181	2	30	
Vinyl chloride	23		ug/L	20.00		113	2-251	1	30	
Xylenes, Total	61		ug/L	60.00		102	37-162	0.7	30	
Surrogate: 1,2-Dichloroethane-d4	*28.9*		*ug/L*	*28.00*		*103*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*28.9*		*ug/L*	*28.00*		*103*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*28.7*		*ug/L*	*28.00*		*103*	*70-130*			

Turner Laboratories, Inc.

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Work Order: 13A0709
Date Received: 01/26/2013

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302061 - VOA_GCMS										
LCS Dup (1302061-BSD1)				Prepared & Analyzed: 02/05/2013						
Surrogate: 4-Bromofluorobenzene	*28.7*		*ug/L*	*28.00*		*103*	*70-130*			
Surrogate: Fluorobenzene	*29.4*		*ug/L*	*28.00*		*105*	*70-130*			
Surrogate: Fluorobenzene	*29.4*		*ug/L*	*28.00*		*105*	*70-130*			
Matrix Spike (1302061-MS1)		**Source: 13A0718-02**		Prepared: 02/05/2013 Analyzed: 02/06/2013						
2-Chloroethylvinylether	22		ug/L	20.00	ND	110	10-305			
Acrolein	87		ug/L	100.0	ND	87	88-118			M2
Acrylonitrile	97		ug/L	100.0	ND	97	71-135			
Surrogate: 1,2-Dichloroethane-d4	*28.8*		*ug/L*	*28.00*		*103*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*28.6*		*ug/L*	*28.00*		*102*	*70-130*			
Surrogate: Fluorobenzene	*29.3*		*ug/L*	*28.00*		*105*	*70-130*			

Turner Laboratories, Inc.

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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1302061 - VOA_GCMS										
Matrix Spike (1302061-MS2)		**Source: 13A0718-02**		Prepared: 02/05/2013 Analyzed: 02/06/2013						
1,1,1-Trichloroethane	23		ug/L	20.00	ND	113	52-162			
1,1,2,2-Tetrachloroethane	21		ug/L	20.00	ND	106	46-157			
1,1,2-Trichloroethane	20		ug/L	20.00	ND	102	52-150			
1,1-Dichloroethane	21		ug/L	20.00	ND	106	59-155			
1,1-Dichloroethene	22		ug/L	20.00	ND	110	2-234			
1,2,4-Trimethylbenzene	24		ug/L	20.00	0.0	118	0-200			
1,2-Dichlorobenzene	23		ug/L	20.00	ND	114	18-190			
1,2-Dichloroethane	21		ug/L	20.00	ND	104	49-155			
1,2-Dichloropropane	23		ug/L	20.00	0.0	113	2-210			
1,3,5-Trimethylbenzene	23		ug/L	20.00	0.0	116	0-200			
1,3-Dichlorobenzene	22		ug/L	20.00	ND	111	59-156			
1,4-Dichlorobenzene	23		ug/L	20.00	ND	113	18-190			
Acetone	100		ug/L	100.0	22	81	70-130			
Benzene	22		ug/L	20.00	ND	110	37-151			
Bromodichloromethane	22		ug/L	20.00	ND	109	35-155			
Bromoform	24		ug/L	20.00	ND	118	45-169			
Bromomethane	21		ug/L	20.00	ND	107	2-242			
Carbon tetrachloride	23		ug/L	20.00	ND	113	70-140			
Chlorobenzene	22		ug/L	20.00	ND	110	37-160			
Chloroethane	21		ug/L	20.00	ND	104	14-230			
Chloroform	22		ug/L	20.00	ND	108	51-138			
Chloromethane	21		ug/L	20.00	ND	106	5-273			
cis-1,3-Dichloropropene	23		ug/L	20.00	ND	113	2-221			
Dibromochloromethane	22		ug/L	20.00	ND	109	53-149			
Dichlorodifluoromethane	18		ug/L	20.00	ND	89	5-273			
Ethylbenzene	22		ug/L	20.00	ND	111	37-162			
Isopropyl Alcohol	940		ug/L	1000	ND	94	70-130			
Methyl Isobutyl Ketone (MIBK)	100		ug/L	100.0	0.0	101	70-130			
Methylene chloride	20		ug/L	20.00	ND	101	10-221			
Tetrachloroethene	23		ug/L	20.00	ND	116	64-148			
Tetrahydrofuran	98		ug/L	100.0	17	81	70-130			
Toluene	22		ug/L	20.00	ND	111	47-150			
trans-1,2-Dichloroethene	22		ug/L	20.00	ND	110	54-156			
trans-1,3-Dichloropropene	22		ug/L	20.00	0.61	109	17-183			
Trichloroethene	22		ug/L	20.00	ND	109	71-157			
Trichlorofluoromethane	22		ug/L	20.00	0.0	109	17-181			
Vinyl chloride	21		ug/L	20.00	ND	107	2-251			
Xylenes, Total	67		ug/L	60.00	0.010	111	37-162			
Surrogate: 1,2-Dichloroethane-d4	*27.4*		*ug/L*	*28.00*		*98*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*29.2*		*ug/L*	*28.00*		*104*	*70-130*			
Surrogate: Fluorobenzene	*28.2*		*ug/L*	*28.00*		*101*	*70-130*			

Turner Laboratories, Inc.

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Work Order: 13A0709
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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1301307 - IC PREP										
Blank (1301307-BLK1)				Prepared & Analyzed: 01/27/2013						
Nitrogen, Nitrate (As N)	ND	1.0	mg/L							
Nitrogen, Nitrite (As N)	ND	0.10	mg/L							
LCS (1301307-BS1)				Prepared & Analyzed: 01/27/2013						
Nitrogen, Nitrate (As N)	4.9	1.0	mg/L	5.000		97	90-110			
Nitrogen, Nitrite (As N)	2.4	0.10	mg/L	2.500		97	90-110			
LCS Dup (1301307-BSD1)				Prepared & Analyzed: 01/27/2013						
Nitrogen, Nitrate (As N)	4.8	1.0	mg/L	5.000		96	90-110	0.7	10	
Nitrogen, Nitrite (As N)	2.4	0.10	mg/L	2.500		97	90-110	0.2	10	
Matrix Spike (1301307-MS1)		**Source: 13A0709-01**		Prepared & Analyzed: 01/27/2013						
Nitrogen, Nitrate (As N)	5.2	1.0	mg/L	5.000	0.59	92	80-120			
Nitrogen, Nitrite (As N)	2.4	0.10	mg/L	2.500	0.071	92	80-120			
Matrix Spike Dup (1301307-MSD1)		**Source: 13A0709-01**		Prepared & Analyzed: 01/27/2013						
Nitrogen, Nitrate (As N)	5.3	1.0	mg/L	5.000	0.59	93	80-120	0.9	10	
Nitrogen, Nitrite (As N)	2.4	0.10	mg/L	2.500	0.071	93	80-120	0.6	10	
Batch 1301318 - IC PREP										
Blank (1301318-BLK1)				Prepared & Analyzed: 01/28/2013						
Phosphorus, Dissolved Orthophosphate (As P)	ND	0.50	mg/L							
LCS (1301318-BS1)				Prepared & Analyzed: 01/28/2013						
Phosphorus, Dissolved Orthophosphate (As P)	2.5	0.50	mg/L	2.500		102	90-110			
LCS Dup (1301318-BSD1)				Prepared & Analyzed: 01/28/2013						
Phosphorus, Dissolved Orthophosphate (As P)	2.5	0.50	mg/L	2.500		100	90-110	2	10	
Matrix Spike (1301318-MS1)		**Source: 13A0733-01**		Prepared & Analyzed: 01/28/2013						
Phosphorus, Dissolved Orthophosphate (As P)	2.7	0.50	mg/L	2.500	ND	109	80-120			
Matrix Spike (1301318-MS2)		**Source: 13A0733-02**		Prepared & Analyzed: 01/28/2013						
Phosphorus, Dissolved Orthophosphate (As P)	3.0	0.50	mg/L	2.500	ND	118	80-120			
Matrix Spike Dup (1301318-MSD1)		**Source: 13A0733-01**		Prepared & Analyzed: 01/28/2013						
Phosphorus, Dissolved Orthophosphate (As P)	2.9	0.50	mg/L	2.500	ND	114	80-120	5	10	
Matrix Spike Dup (1301318-MSD2)		**Source: 13A0733-02**		Prepared & Analyzed: 01/28/2013						
Phosphorus, Dissolved Orthophosphate (As P)	2.9	0.50	mg/L	2.500	ND	116	80-120	2	10	

TURNER LABORATORIES INC.
2445 N. Coyote Drive, Suite 104
Tucson, Arizona 85745
(520) 882-5880
Fax: (520) 882-9788
www.turnerlabs.com

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

TURNER WORK ORDER # 1310709 DATE 1-26-13 PAGE ____ OF ____

PROJECT NAME: Stormwater Samples Site # 1, 2, 3, 4, 5 (circle)
CONTACT NAME: Bev Hester
COMPANY NAME: City of Tucson
ADDRESS: PO Box 27210, Tucson AZ 85726-7210
PHONE: 837-4935
FAX: 791-4343
SAMPLER'S SIGNATURE: C McNellis

CIRCLE ANALYSIS REQUESTED AND/OR CHECK THE APPROPRIATE BOX

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX*	NUMBER OF CONTAINERS	Hardness	Total Dissolved Solids (TDS)	Total Suspended Solids (TSS)	Biological Oxygen Demand (BOD)	Chemical Oxygen Demand (COD)	Cyanide	Metals*	Nitrate + Nitrite Sum	Nitrogen, Ammonia as N	Nitrogen, Total Kjeldahl	Phosphorus as P, Total	Orthophosphate by Ion Chromatography	Total Petroleum Hydrocarbons (TPH)	Oil & Grease	Volatile Organic Compounds by 624	Semivolatile Organic Acid Extractables by 8270	Semivolatile Organic Base Neutrals by 8270	PCBs by 8082	Organochlorine Pesticides by SW 8081
Composite	1/26	5:19am		ST	20	x	x	x	x	x		x	x	x	x	x	x							x
Grab/Discrete	1/26	5:19am		ST	9						x							x	x	x			x	
sVOC's-composite	1/26	5:19am		ST	13																x	x		

1. RELINQUISHED BY: C McNellis
Signature: C McNellis
Printed Name: C McNellis
Firm: City Stormwater
Date/Time: 1/26/13 9:26am

2. RECEIVED BY:
Signature:
Printed Name:
Firm:
Date/Time:

TURNAROUND REQUIREMENTS:
X Standard (approx.10 days)*
Next day ____ 2 Day ____ 5 Day*
X Email Preliminary Results To: Bev.Hester@tucsonaz.gov
* Working Days

REPORT REQUIREMENTS:
____ I. Routine Report
____ II. Report (includes DUP,MS,MSD, as required, may be charged as samples)
____ III. Date Validation Report (Includes All Raw Data)
Add 10% to invoice

INVOICE INFORMATION:
Account ____ Y ____ N
P.O. # ____
Bill to: ____

SAMPLE RECEIPT:
Total Containers 42
Temperature 3.5
☑ Wet Ice ☐ Blue Ice

3. RELINQUISHED BY:
Signature:
Printed Name:
Firm:
Date/Time:

4. RECEIVED BY:
Signature:
Printed Name: Andrew Calcutt
Firm: TURNER LABORATORIES, INC.
Date/Time: 1-26-13 / 0926

*LEGEND
DW = DRINKING WATER
GW = GROUNDWATER
SD = SOLID
SG = SLUDGE
SL = SOIL
ST = STORMWATER
WW = WASTEWATER

SPECIAL INSTRUCTIONS/COMMENTS:

Compliance Analysis:	☐ Yes ☐ No	Custody Seals	☐	Preservation Confirmation	☑
ADEQ Forms:	☐ Yes ☐ No	Container Intact	☑	Appropriate Head Space	☑
Mail ADEQ Forms:	☐ Yes ☐ No	COC/Labels Agree	☑	Received Within Hold Time	☑

Metals; Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Hg, Ni, Se, Ag, Tl, Zn
Cyanide, Metals, VOCs, sVOCs, PCBs, Pesticides; report in ug/L

City of Tucson's
Sampling Aliquot Form

13A0709-01

Site #: 5 Limberlost Mixed Use

Date of Sample: 01/26/13

Sample ID: 130126 # 5

Sampler(s): Chris /Eric

Maximum Sample Size: 2,000 *mL*
default (2000)

Aliquot Begin Time: 5:19:00 AM

Elapsed Time after 1st Sample	Depth		Site 4 Only Width	Time		Flowrate for Site 5	
Minutes	*Inches*		*Feet*	*Seconds*		*cfs*	
0	6.50	1	24	8		2.96	0.00
20	7.00	2	24	8		3.39	0.00
40	7.00	3	20	9		3.39	0.00
60	7.00	4	17	10		3.39	0.00
80	9.00	5	15	12		5.35	0.00
100	8.00	6	12	15		4.31	0.00
120	8.00	7	10	19		4.31	0.00
140	10.00	8	11	16		6.50	0.00
160	14.00	9	15	12		12.16	0.00
180	18.00	10	16	11		19.48	0.00
				Average Flowrate: (CFS):		6.52	#DIV/0!

Time Aliquot Collected	Aliquot #	Aliquot Volumes Calculated Using Maximum Aliquot	Aliquot Volumes for Laboratory *mL*
5:19 AM	1	304	172
5:39 AM	2	348	196
5:59 AM	3	348	196
6:19 AM	4	348	196
6:39 AM	5	549	310
6:59 AM	6	443	250
7:19 AM	7	443	250
7:39 AM	8	667	377
7:59 AM	9	1,249	706
8:19 AM	10	2,000	1,130
		6,698	3,783

January 28, 2013

Beverley Hester
City of Tucson - Transportation Department
PO Box 27210
Tucson, AZ 85726-7210

TEL 520-837-4935
FAX (520) 791-4373

Work Order No.: 13A0717
Order Name: Storm Water Annual
MPN

RE: Storm Water Biannual

Dear Beverley Hester,

Turner Laboratories, Inc. received 1 sample(s) on 01/26/2013 for the analyses presented in the following report.

All results are intended to be considered in their entirety, and Turner Laboratories, Inc. is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Samples will be disposed of 30 days after issue of our report unless special arrangements are made.

The pages that follow may contain sensitive, privileged or confidential information intended solely for the addressee named above. If you receive this message and are not the agent or employee of the addressee, this communication has been sent in error. Please do not disseminate or copy any of the attached and notify the sender immediately by telephone. Please also return the attached sheet(s) to the sender by mail.

Please call if you have any questions.

Respectfully submitted,

Turner Laboratories, Inc.
ADHS License AZ0066

Dawn Weyer
Project Manager

Turner Laboratories, Inc.

Date: 01/28/2013

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13A0717
Date Received: 01/26/2013

Order: Storm Water Annual MPN

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date/Time
13A0717-01	Grab	Storm Water	01/26/2013 0519

Client: City of Tucson - Transportation Department
Project: Storm Water Biannual
Work Order: 13A0717
Date Received: 01/26/2013

Case Narrative

E Value is above quantitation range.

All soil, sludge, and solid matrix determinations are reported on a wet weight basis unless otherwise noted.

ND Not Detected at or above the PQL

PQL Practical Quantitation Limit

DF Dilution Factor

Turner Laboratories, Inc.

Date: 01/28/2013

Client:	City of Tucson - Transportation Department	**Client Sample ID:**	Grab
Project:	Storm Water Biannual	**Collection Date/Time:**	01/26/2013 0519
Work Order:	13A0717	**Matrix:**	Storm Water
Lab Sample ID:	13A0717-01	**Order Name:**	Storm Water Annual MPN

Analyses	Result	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Total Coliform & E. Coli, MPN-SM9223B								
E.Coli	2400	1.0	E	MPN/100mL	1	01/26/2013 1100	01/27/2013 1425	AC
Total Coliform	2400	1.0	E	MPN/100mL	1	01/26/2013 1100	01/27/2013 1425	AC

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CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

TURNER WORK ORDER # 1380709 717 1/28/13 DATE 1-26-13 PAGE ____ OF ____

PROJECT NAME: Stormwater Samples Site # 1, 2, 3, 4, 5 (circle)

CONTACT NAME Chris McNellis

COMPANY NAME City of Tucson - Transportation Dept

ADDRESS P.O. Box 27210

CITY Tucson STATE AZ ZIP CODE 85726

PHONE (520) 837-6583 FAX (520) 791-4373

SAMPLER'S SIGNATURE C M McNellis

CIRCLE ANALYSIS REQUESTED AND/OR CHECK THE APPROPRIATE BOX

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX*	NUMBER OF CONTAINERS	MPN
Grab	1/26	5:19 am		Storm Water	1	X

1. RELINQUISHED BY: C M McNellis
Signature: C McNellis
Printed Name
City of Tucson Trans. Dept
Firm
1/26/13 9:26 am
Date/Time

2. RECEIVED BY:
Signature
Printed Name
Firm
Date/Time

TURNAROUND REQUIREMENTS:
____ Standard (approx.10 days)*
____ Next day ____ 2 Day ____ 5 Day*
____ Email Preliminary Results To:
* Working Days

REPORT REQUIREMENTS:
____ I. Routine Report
____ II. Report (includes DUP,MS,MSD, as required, may be charged as samples)
____ III. Date Validation Report (Includes All Raw Data)
Add 10% to invoice

INVOICE INFORMATION:
Account ____ Y ____ N
P.O. # ____
Bill to: ____

SAMPLE RECEIPT:
Total Containers 1
Temperature 3.5
☑ Wet Ice ☐ Blue Ice

3. RELINQUISHED BY:
Signature
Printed Name
Firm
Date/Time

4. RECEIVED BY:
Signature Andrew Calcaterra
Printed Name
TURNER LABORATORIES, INC.
Firm
1-26-13 / 0926
Date/Time

*LEGEND
DW = DRINKING WATER
GW = GROUNDWATER
SD = SOLID
SG = SLUDGE
SL = SOIL
ST = STORMWATER
WW = WASTEWATER

SPECIAL INSTRUCTIONS/COMMENTS:

Compliance Analysis: ☐ Yes ☐ No	Custody Seals ☐	Preservation Confirmation ☑
ADEQ Forms: ☐ Yes ☐ No	Container Intact ☑	Appropriate Head Space ☑
Mail ADEQ Forms: ☐ Yes ☐ No	COC/Labels Agree ☑	Received Within Hold Time ☑

*Ni, Hg, Ag, Cr, Cd, Be, Ba, As, Cu, Sb, Zn, Se, Pb, Tl, Ca, Mg

Composite poured at lab per C.O.T. Specifications

Pima Association of Governments Outreach Activities

FY 2012-13 Outreach Visuals Guide

PAGstorm.com

Facebook Page

Outreach Events

Watershed Pocket Guide

“De-Pollute Your Commute” Rack Card

“Scoop the Poop” Stickers

Vehicle Magnet for Stormwater Inspectors

Clean Water Starts with Me Bumper sticker

Clean Air/Water Sunshade

3D Display at Tucson International Airport

Bus Benches

Clean water starts with me!
Vehicles cause stormwater pollution.
Thanks for taking the bus and helping to keep our washes clean!
PAGstorm.com

Clean water starts with me!
Vehicles cause stormwater pollution.
Thanks for taking the bus and helping to keep our washes clean!
PAGstorm.com

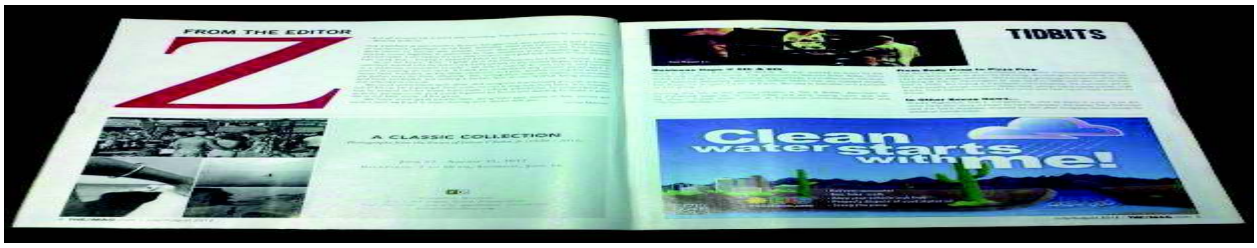
Bus Poster – English

Bus Poster – Spanish

Arizona Bilingual Magazine

Tucson Weekly

Zocalo Magazine



Bear Essential News

Clean water starts with me!

When it rains, stormwater picks up pollutants from our yards and streets and deposits them directly into our fragile desert washes. Remember to always throw trash into a garbage can and encourage your family to recycle and to use chemicals safely.

Stop the pollutants!

Find and circle the pollutants before they are carried into the wash.

Rain flows off the roof

Rain falls on the ground

Water flows into the street

Water flows off the yard

Stormdrains lead to the wash

Save the water!

Follow the arrows to find out where water collects when you harvest rainwater.

Start here

Water from the roof is collected in cisterns

Water flows from the land into washes and basins

Water is diverted from land surfaces

Rainwater harvesting is a great way to prevent stormwater pollution. Soil in rain gardens purifies water that is collected from our streets and yards. This helps water plants and prevents stormwater from carrying pollutants to our washes.

Visit our table at the FAIR for Education, June 24

PAG

Pima Association of Governments

PAGstorm.com

Television – English

Television – Spanish

Water Festival Sponsorship

MS4 Summit Sponsorship

Mrs. Green Radio Show & Blog

Radio

Text:

Support comes from the “Clean Water Starts With Me” outreach drive! After stormwater runs off streets, it can accumulate contaminants in fragile desert washes. Fix leaky vehicles and properly dispose of used oil to help prevent pollution. ‘Clean Water Starts With Me” is at P-A-G – storm – DOT – com and on Facebook.

New Public Outreach documents

Certificate of Excellence

The City of Tucson
Department of Transportation

Is pleased to acknowledge

2013

NAME

For their commendable efforts to maintain compliance with
Stormwater Regulations
and prevent stormwater pollution.

Daryl W. Cole, Director of Transportation

Date