JETT ENVIRONMENTAL CONSULTING

November 24, 2015

RECEIVED
DEC - 1 2015
DIVISION OF WASTE MANAGEMENT
SOLID WASTE BRANCH

Mr. Lawrie Green
Kentucky Department for Environmental Protection
Division of Waste Management
Solid Waste Branch
200 Fair Oaks Lane, 2nd Floor
Frankfort, KY 40601

Re: Fourth Quarter 2015 Groundwater Sampling Event, Statistical Analysis Report
Green Valley Landfill, Ashland, Kentucky

Dear Mr. Green:

On behalf of the Green Valley Landfill, Jett Environmental Consulting is submitting a hardcopy of the Fourth Quarter 2015 Groundwater Statistical Analysis Report. Also included are copies of the groundwater and surface water monitoring sample data reporting forms.

If you have any questions or comments, please contact me at steve.jett@jettenviro.com or 314-496-4654.

Sincerely,

1592
4Q GWSWST
CMN 15-01

Steve Jett, P.G.
Owner

Attachment: *Groundwater Statistical Analysis Report (1 Copy)*

cc: *Green Valley Landfill (1 Hardcopy)*
Bill Chlebowy, Republic Services, Inc. (PDF via Email)

10 Quiet Brook Court
St. Charles, MO 63303

314-496-4654
www.jettenviro.com

GROUNDWATER
AND
SURFACE WATER MONITORING
SAMPLE DATA REPORTING FORM

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF WASTE MANAGEMENT
SOLID WASTE BRANCH
14 REILLY ROAD
FRANKFORT, KY 40601

RECEIVED
DEC - 1 2015
DIVISION OF WASTE MANAGEMENT
SOLID WASTE BRANCH

Facility Name Green Valley Landfill **Activity** Residential / Contained / CDD Landfill
(As officially shown on DWM Permit Face)

Permit No. 045-00012 **Finds/Unit No.** _____ **Quarter & Year** 4TH, 2015

Please check only ONE of the following:

__**Characterization** _X_**Quarterly** __**Semi-Annual** __**Annual** __**Assessment**

Please check applicable submittal: __X__**Groundwater** ____**Surface Water**

This form is to be utilized by those sites required by regulation (Kentucky Waste Management Regulations - 401 KAR 48:300 and 45:160) or by statue (Kentucky Revised Statues Chapter 224) to conduct groundwater and surface water monitoring under the jurisdiction of the Division of Waste Management. **You must report any indication of contamination within forty-eight (48) hours of making the determination using statistical analyses, direct comparison, or other similar techniques. Submitting the lab report is NOT considered notification.** Instructions for completing the form are attached. Do not submit the instruction pages.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for such violations.

William L Chlebowy 11-24-2015

SIGNATURE DATE

William L. Chlebowy; Environmental Manager

NAME AND TITLE - PLEASE PRINT

FACILITY INFORMATION SHEET

Sampling Date: 10/20/2015 County: Greenup Permit No.: 045-00012.

Facility Name Green Valley Landfill
(As officially shown on DWM Permit Face)

Site Address 100 Addington Rd. Ashland, KY 41102
Street City Zip

Phone No.: 606-928-0239 Latitude 38° 23' 00" Longitude 82° 48' 58"

OWNER INFORMATION

Facility Owner: Green Valley Environmental Corp. Phone No.: (606) 928-0239

Contact Person: Bill Chlebowy Phone No.:

Contact Person Title: Environmental Manager

Mailing Address: 100 Addington Rd. Ashland, KY 41102
Street City Zip

SAMPLING PERSONNEL

(IF OTHER THAN LANDFILL OR LABORATORY)

Company: Kenvirons, Inc.

Contact Person: Bill Knarr Phone No.:(502) 695-4357

Mailing Address: 452 Versailles Rd. Frankfort, Ky 40601
Street City Zip

LABORATORY RECORD #1

Laboratory: Pace Analytical Services INC . Lab ID No.:

Contact Person: Karl Anderson Phone No.:(317) 875-5894 x119

Mailing Address: 7726 Moller Rd Indianapolis, IN 46268
Street City Zip

LABORATORY RECORD #2

Laboratory: Keystone Laboratories, Inc. Lab ID No.:

Contact Person: Sue Thompson Phone No.(800) 858-5227

Mailing Address: 600 East 17th Street South Newton, IA 50208
Street City Zip

Division of Waste Management
Solid Waste Branch
14 Reilly Road
Frankfort, KY 40601 (502) 564-6716

RESIDENTIAL/CONTAINED-QUARTERLY
Facility:Green Valley Landfill
Permit Number:045-00012

FINDS/UNIT: _____
LAB ID: _____
For Official Use Only

GROUNDWATER SAMPLE ANALYSES

AKGWA NUMBER1, Facility Well/Spring Number						NA		NA		8000-8086		8000-2931	
Facility's Local Well or Spring Number (e.g. MW-1, MW-2, etc.)						Dup		FB		MW-1		MW-1A	
Sample Sequence #						1		1		1		1	
If sample is a Blank, specify Type (F)ield, (T)rip, (M)ethod, or (E)quipment						NA		NA		NA		NA	
Sample Date and Time (Month/Day/Year hour:minutes)						10/20/2015	08:00	10/20/2015	08:00	10/20/2015	10:45	10/20/2015	11:15
Duplicate ("Y" or "N")2						Yes		No		No		No	
Split ("Y" or "N")3						No		No		No		No	
Facility Sample ID Number (If applicable)						Dup		FB		MW-1		MW-1A	
Laboratory Sample ID Number (if applicable)						50130404005		50130404006		50130404001		50130404002	
Date of Analysis (Month/Day/Year)						10/22/15 - 11/02/15		10/22/15 - 11/02/15		10/20/15 - 11/03/15		10/20/15 - 11/02/15	
Gradient with respect to Monitored Unit (UP, DOWN, SIDE, UNKNOWN)						UNKNOWN		UNKNOWN		SIDE		SIDE	
CAS RN4		**CONSTITUENT**	**T D5**	**UNIT OF MEASURE**	**METHOD**	**DETECTED VALUE OR PQL6**	**FLAGS**	**DETECTED VALUE OR PQL6**	**FLAGS**	**DETECTED VALUE OR PQL6**	**FLAGS**	**DETECTED VALUE OR PQL6**	**FLAGS**
S0906	0	Static Water Level Elevation	T	ft/msl						612.27		614.99	
S0907	0	Temperature	T	deg C						14.72		12.48	
16887-00-6	2	Chloride(s)	T	mg/L	EPA 9056	14.6		<0.25	U	1.2		3.3	
S0130	0	Chemical Oxygen Demand	T	mg/L	EPA 410.4	<10.0	U	<10.0	U	31.1		<10.0	U
S0266	0	Total Dissolved Solids	T	mg/L	SM 2540C	234		<10.0	U	48.0		238	
S0268	1	Total Organic Carbon	T	mg/L	SM 5310C	1.1		<1.0	U	7.8		<1.0	U
S0145	1	Specific Conductance Field	T	umhos/cm						72		378	

1AKGWA # is 0000-0000 for any type of blank.
2Respond "Y" if the sample was a duplicate of another sample in this report.
3Respond "Y" if the sample was split and analyzed by separate laboratories.
4Chemical Abstracts Service Registry Number or unique identifier number assigned by agency.
5"T" = Total; "D" = Dissolved
6 "<"? indicates a non-detect; do not use "ND" or "BDL". Value then shown is Practical Quantification Limit.

STANDARD FLAGS:
J = Estimated value
B = Analyte found in blank
A = Average value
N = Presumptive ID
D = Concentration from analysis of a secondary dilution factor

Facility:

Permit Number:

FINDS/UNIT: _____

LAB ID: _____

For Official Use Only

GROUNDWATER SAMPLE ANALYSES - (Cont.)

AKGWA NUMBER1, Facility Well/Spring Number													
Facility's Local Well or Spring Number (e.g. MW-1, MW-2, etc.)						Dup		FB		MW-1		MW-1A	
CAS RN4		CONSTITUENT	T D5	UNIT OF MEASURE	METHOD	DETECTED VALUE OR PQL6	FLAGS	DETECTED VALUE OR PQL6	FLAGS	DETECTED VALUE OR PQL6	FLAGS	DETECTED VALUE OR PQL6	FLAGS
S0595	0	Nitrate & Nitrite	T										
S0586	0	Total Organic Halides	T	mg/L	EPA 9020	<0.010	U	<0.010	U	<0.010	U	<0.010	U
S0296	0	pH	T	Std. Units						5.91		6.73	
7440-36-0	0	Antimony	T										
7440-38-2	0	Arsenic	T										
7440-39-3	0	Barium	T										
7440-41-7	0	Beryllium	T										
7440-43-9	0	Cadmium	T										
7440-47-3	0	Chromium	T										
7440-48-4	0	Cobalt	T										
7440-50-8	0	Copper	T										
7439-89-6	0	Iron	T	mg/L	EPA 6010	12.3		<0.020	U	0.48		0.91	
7439-92-1	0	Lead	T										
7439-97-6	0	Mercury	T										
7440-02-0	0	Nickel	T										
7782-49-2	0	Selenium	T										
7440-22-4	0	Silver	T										
7440-23-5	0	Sodium	T	mg/L	EPA 6010	11.4		<0.10	U	2.2		21.7	
7440-28-0	0	Thallium	T										
7440-62-2	0	Vanadium	T										
7440-66-6	0	Zinc	T										
108-05-4	2	Acetic acid ethenyl ester	T										

Facility:

Permit Number:

FINDS/UNIT: _____

LAB ID: _____

For Official Use Only

GROUNDWATER SAMPLE ANALYSES - (Cont.)

AKGWA NUMBER1, Facility Well/Spring Number													
Facility's Local Well or Spring Number (e.g. MW-1, MW-2, etc.)						Dup		FB		MW-1		MW-1A	
CAS RN4		CONSTITUENT	TD5	UNIT OF MEASURE	METHOD	DETECTED VALUE OR PQL6	FLAGS	DETECTED VALUE OR PQL6	FLAGS	DETECTED VALUE OR PQL6	FLAGS	DETECTED VALUE OR PQL6	FLAGS
67-64-1	0	Acetone	T										
107-02-8	3	Acrolein	T										
107-13-1	0	Acrylonitrile	T										
71-43-2	0	Benzene	T										
108-90-7	1	Benzene, chloro	T										
1330-20-7	3	Benzene, dimethyl	T										
100-42-5	1	Benzene, ethenyl	T										
108-88-3	1	Benzene, methyl	T										
74-97-5	0	Bromochloromethane	T										
75-27-4	3	Bromodichloromethane	T										
75-25-2	0	Bromoform	T										
74-83-9	0	Bromomethane	T										
78-93-3	0	2-Butanone (Methyl ethyl ketone)	T										
110-57-6	0	2-Butene, 1,4-dichloro-, (E)-	T										
75-15-0	0	Carbon disulfide	T										
75-00-3	0	Chloroethane	T										
67-66-3	0	Chloroform	T										
74-87-3	0	Chloromethane	T										
156-59-2	0	cis-1,2-Dichloroethene	T										
74-95-3	0	Dibromomethane	T										
75-71-8	0	Dichlorodifluoromethane	T										
75-34-3	0	1,1-Dichloroethane	T										

Facility:

Permit Number:

FINDS/UNIT: _____

LAB ID: _____

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GROUNDWATER SAMPLE ANALYSES - (Cont.)

AKGWA NUMBER1, Facility Well/Spring Number													
Facility's Local Well or Spring Number (e.g. MW-1, MW-2, etc.)						Dup		FB		MW-1		MW-1A	
CAS RN4		CONSTITUENT	TD5	UNIT OF MEASURE	METHOD	DETECTED VALUE OR PQL6	FLAGS	DETECTED VALUE OR PQL6	FLAGS	DETECTED VALUE OR PQL6	FLAGS	DETECTED VALUE OR PQL6	FLAGS
107-06-2	0	1,2-Dichloroethane	T										
75-35-4	0	1,1-Dichloroethene	T										
540-36-3	0	1,4-Difluorobenzene	T										
106-93-4	6	Ethane, 1,2-dibromo	T										
79-34-5	4	Ethane, 1,1,2,2-Tetrachloro	T										
71-55-6	5	Ethane, 1,1,1-Trichloro-	T										
79-00-5	3	Ethane, 1,1,2-Trichloro-	T										
630-20-6	3	Ethane, 1,11,,2-Tetrachloro-	T										
64-17-5	0	Ethanol	T										
75-01-4	2	Ethene, chloro	T										
110-75-8	1	Ethene, (2Chloroethoxy) -	T										
127-18-4	7	Ethene, tetrachloro	T										
79-01-6	5	Ethene, trichloro	T										
100-41-4	0	Ethylbenzene	T										
97-63-2	0	Ethyl methacrylate	T										
591-78-6	3	2-Hexanone	T										
74-88-4	4	Iodomethane	T										
124-48-1	4	Methane, Dibromochloro-	T										
56-23-5	1	Methane, Tetrachloro	T										
75-09-2	0	Methylene chloride	T										
108-10-1	4	4-Methyl-2-pentanone	T										
96-12-8	2	Propane, 1,2-dichloro-3-chloro	T										

Facility:

Permit Number:

FINDS/UNIT: _____

LAB ID: _____

For Official Use Only

GROUNDWATER SAMPLE ANALYSES - (Cont.)

AKGWA NUMBER1, Facility Well/Spring Number													
Facility's Local Well or Spring Number (e.g. MW-1, MW-2, etc.)						Dup		FB		MW-1		MW-1A	
CAS RN4		CONSTITUENT	TD5	UNIT OF MEASURE	METHOD	DETECTED VALUE OR PQL6	FLAGS	DETECTED VALUE OR PQL6	FLAGS	DETECTED VALUE OR PQL6	FLAGS	DETECTED VALUE OR PQL6	FLAGS
78-87-5	1	Propane, 1,2-dichloro-	T										
10061-02-6	3	1-Propene, 1,3-dichloro- (E)	T										
10061-01-5	4	1-Propene, 1,3-dichloro- (Z)	T										
156-60-5	2	Trans-1,2,-dichloroethene	T										
75-69-4	0	Trichlorofluoromethane	T										
96-18-4	0	1,2,3-Trichloropropane	T										
95-50-1	7	Benzene 1,2 - Dichloro	T										
106-46-7	6	Benzene 1,4 - Dichloro -	T										

Division of Waste Management
Solid Waste Branch
14 Reilly Road
Frankfort, KY 40601 (502) 564-6716

RESIDENTIAL/CONTAINED-QUARTERLY
Facility:Green Valley Landfill
Permit Number:045-00012

FINDS/UNIT: _____
LAB ID: _____
For Official Use Only

GROUNDWATER SAMPLE ANALYSES

AKGWA NUMBER1, Facility Well/Spring Number						8000-2932		8005-7101		8005-7102		8005-7103		
Facility's Local Well or Spring Number (e.g. MW-1, MW-2, etc.)						MW-1B		MW-28C		MW-28D		MW-28E		
Sample Sequence #						1		1		1		1		
If sample is a Blank, specify Type (F)ield, (T)rip, (M)ethod, or (E)quipment						NA		NA		NA		NA		
Sample Date and Time (Month/Day/Year hour:minutes)						10/20/2015	11:40	10/20/2015	13:35	10/20/2015	12:55	10/20/2015	13:15	
Duplicate ("Y" or "N")2						No		No		No		No		
Split ("Y" or "N")3						No		No		No		No		
Facility Sample ID Number (If applicable)						MW-1B		MW-28C		MW-28D		MW-28E		
Laboratory Sample ID Number (if applicable)						50130404003		50130404009		50130404007		50130404008		
Date of Analysis (Month/Day/Year)						10/20/15 - 11/02/15		10/20/15 - 11/02/15		10/20/15 - 11/02/15		10/20/15 - 11/02/15		
Gradient with respect to Monitored Unit (UP, DOWN, SIDE, UNKNOWN)						SIDE		DOWN		DOWN		DOWN		
CAS RN4		**CONSTITUENT**	**T D5**	**UNIT OF MEASURE**	**METHOD**	**DETECTED VALUE OR PQL6**	**F L A G S**	**DETECTED VALUE OR PQL6**	**F L A G S**	**DETECTED VALUE OR PQL6**	**F L A G S**	**DETECTED VALUE OR PQL6**	**F L A G S**	
S0906	0	Static Water Level Elevation	T	ft/msl		612.14		669.78		669.88		667.44		
S0907	0	Temperature	T	deg C		12.75		16.99		16.05		16.35		
16887-00-6	2	Chloride(s)	T	mg/L	EPA 9056	37.9		20.3		28.5		1.6		
S0130	0	Chemical Oxygen Demand	T	mg/L	EPA 410.4	<10.0	U	<10.0	U	<10.0	U	<10.0	U	
S0266	0	Total Dissolved Solids	T	mg/L	SM 2540C	380		302		475		166		
S0268	1	Total Organic Carbon	T	mg/L	SM 5310C	<1.0	U	1.8		1.3		<1.0	U	
S0145	1	Specific Conductance Field	T	umhos/cm		658		457		700		292		

1AKGWA # is 0000-0000 for any type of blank.
2Respond "Y" if the sample was a duplicate of another sample in this report.
3Respond "Y" if the sample was split and analyzed by separate laboratories.
4Chemical Abstracts Service Registry Number or unique identifier number assigned by agency.
5"T" = Total; "D" = Dissolved
6 "<"? indicates a non-detect; do not use "ND" or "BDL". Value then shown is Practical Quantification Limit.

STANDARD FLAGS:
J = Estimated value
B = Analyte found in blank
A = Average value
N = Presumptive ID
D = Concentration from analysis of a secondary dilution factor

Facility:

Permit Number:

FINDS/UNIT: _____

LAB ID: _____

For Official Use Only

GROUNDWATER SAMPLE ANALYSES - (Cont.)

AKGWA NUMBER1, Facility Well/Spring Number													
Facility's Local Well or Spring Number (e.g. MW-1, MW-2, etc.)						MW-1B		MW-28C		MW-28D		MW-28E	
CAS RN4		CONSTITUENT	TD5	UNIT OF MEASURE	METHOD	DETECTED VALUE OR PQL6	FLAGS	DETECTED VALUE OR PQL6	FLAGS	DETECTED VALUE OR PQL6	FLAGS	DETECTED VALUE OR PQL6	FLAGS
S0595	0	Nitrate & Nitrite	T										
S0586	0	Total Organic Halides	T	mg/L	EPA 9020	<0.010	U	0.024		0.015		<0.010	U
S0296	0	pH	T	Std. Units		7.35		5.40		5.99		6.42	
7440-36-0	0	Antimony	T										
7440-38-2	0	Arsenic	T										
7440-39-3	0	Barium	T										
7440-41-7	0	Beryllium	T										
7440-43-9	0	Cadmium	T										
7440-47-3	0	Chromium	T										
7440-48-4	0	Cobalt	T										
7440-50-8	0	Copper	T										
7439-89-6	0	Iron	T	mg/L	EPA 6010	0.44		15.8		20.0		0.44	
7439-92-1	0	Lead	T										
7439-97-6	0	Mercury	T										
7440-02-0	0	Nickel	T										
7782-49-2	0	Selenium	T										
7440-22-4	0	Silver	T										
7440-23-5	0	Sodium	T	mg/L	EPA 6010	133		17.1		29.3		10.8	
7440-28-0	0	Thallium	T										
7440-62-2	0	Vanadium	T										
7440-66-6	0	Zinc	T										
108-05-4	2	Acetic acid ethenyl ester	T										

Facility:

Permit Number:

FINDS/UNIT: _____

LAB ID: _____

For Official Use Only

GROUNDWATER SAMPLE ANALYSES - (Cont.)

AKGWA NUMBER1, Facility Well/Spring Number													
Facility's Local Well or Spring Number (e.g. MW-1, MW-2, etc.)						MW-1B		MW-28C		MW-28D		MW-28E	
CAS RN4		CONSTITUENT	TD5	UNIT OF MEASURE	METHOD	DETECTED VALUE OR PQL6	FLAGS	DETECTED VALUE OR PQL6	FLAGS	DETECTED VALUE OR PQL6	FLAGS	DETECTED VALUE OR PQL6	FLAGS
67-64-1	0	Acetone	T										
107-02-8	3	Acrolein	T										
107-13-1	0	Acrylonitrile	T										
71-43-2	0	Benzene	T										
108-90-7	1	Benzene, chloro	T										
1330-20-7	3	Benzene, dimethyl	T										
100-42-5	1	Benzene, ethenyl	T										
108-88-3	1	Benzene, methyl	T										
74-97-5	0	Bromochloromethane	T										
75-27-4	3	Bromodichloromethane	T										
75-25-2	0	Bromoform	T										
74-83-9	0	Bromomethane	T										
78-93-3	0	2-Butanone (Methyl ethyl ketone)	T										
110-57-6	0	2-Butene, 1,4-dichloro-, (E)-	T										
75-15-0	0	Carbon disulfide	T										
75-00-3	0	Chloroethane	T										
67-66-3	0	Chloroform	T										
74-87-3	0	Chloromethane	T										
156-59-2	0	cis-1,2-Dichloroethene	T										
74-95-3	0	Dibromomethane	T										
75-71-8	0	Dichlorodifluoromethane	T										
75-34-3	0	1,1-Dichloroethane	T										

Facility:

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GROUNDWATER SAMPLE ANALYSES - (Cont.)

AKGWA NUMBER1, Facility Well/Spring Number													
Facility's Local Well or Spring Number (e.g. MW-1, MW-2, etc.)						MW-1B		MW-28C		MW-28D		MW-28E	
CAS RN4		CONSTITUENT	TD5	UNIT OF MEASURE	METHOD	DETECTED VALUE OR PQL6	FLAGS	DETECTED VALUE OR PQL6	FLAGS	DETECTED VALUE OR PQL6	FLAGS	DETECTED VALUE OR PQL6	FLAGS
107-06-2	0	1,2-Dichloroethane	T										
75-35-4	0	1,1-Dichloroethene	T										
540-36-3	0	1,4-Difluorobenzene	T										
106-93-4	6	Ethane, 1,2-dibromo	T										
79-34-5	4	Ethane, 1,1,2,2-Tetrachloro	T										
71-55-6	5	Ethane, 1,1,1-Trichloro-	T										
79-00-5	3	Ethane, 1,1,2-Trichloro-	T										
630-20-6	3	Ethane, 1,11,,2-Tetrachloro-	T										
64-17-5	0	Ethanol	T										
75-01-4	2	Ethene, chloro	T										
110-75-8	1	Ethene, (2Chloroethoxy) -	T										
127-18-4	7	Ethene, tetrachloro	T										
79-01-6	5	Ethene, trichloro	T										
100-41-4	0	Ethylbenzene	T										
97-63-2	0	Ethyl methacrylate	T										
591-78-6	3	2-Hexanone	T										
74-88-4	4	Iodomethane	T										
124-48-1	4	Methane, Dibromochloro-	T										
56-23-5	1	Methane, Tetrachloro	T										
75-09-2	0	Methylene chloride	T										
108-10-1	4	4-Methyl-2-pentanone	T										
96-12-8	2	Propane, 1,2-dichloro-3-chloro	T										

Facility:

Permit Number:

FINDS/UNIT: _____

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GROUNDWATER SAMPLE ANALYSES - (Cont.)

AKGWA NUMBER1, Facility Well/Spring Number													
Facility's Local Well or Spring Number (e.g. MW-1, MW-2, etc.)						MW-1B		MW-28C		MW-28D		MW-28E	
CAS RN4		CONSTITUENT	TD5	UNIT OF MEASURE	METHOD	DETECTED VALUE OR PQL6	FLAGS	DETECTED VALUE OR PQL6	FLAGS	DETECTED VALUE OR PQL6	FLAGS	DETECTED VALUE OR PQL6	FLAGS
78-87-5	1	Propane, 1,2-dichloro-	T										
10061-02-6	3	1-Propene, 1,3-dichloro- (E)	T										
10061-01-5	4	1-Propene, 1,3-dichloro- (Z)	T										
156-60-5	2	Trans-1,2,-dichloroethene	T										
75-69-4	0	Trichlorofluoromethane	T										
96-18-4	0	1,2,3-Trichloropropane	T										
95-50-1	7	Benzene 1,2 - Dichloro	T										
106-46-7	6	Benzene 1,4 - Dichloro -	T										

Division of Waste Management
Solid Waste Branch
14 Reilly Road
Frankfort, KY 40601 (502) 564-6716

RESIDENTIAL/CONTAINED-QUARTERLY
Facility:Green Valley Landfill
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FINDS/UNIT: _____
LAB ID: _____
For Official Use Only

GROUNDWATER SAMPLE ANALYSES

AKGWA NUMBER1, Facility Well/Spring Number						8000-8085							
Facility's Local Well or Spring Number (e.g. MW-1, MW-2, etc.)						MW-3							
Sample Sequence #						1							
If sample is a Blank, specify Type (F)ield, (T)rip, (M)ethod, or (E)quipment						NA							
Sample Date and Time (Month/Day/Year hour:minutes)						10/20/2015	12:28						
Duplicate ("Y" or "N")2						No							
Split ("Y" or "N")3						No							
Facility Sample ID Number (If applicable)						MW-3							
Laboratory Sample ID Number (if applicable)						50130404004							
Date of Analysis (Month/Day/Year)						10/20/15 - 11/02/15							
Gradient with respect to Monitored Unit (UP, DOWN, SIDE, UNKNOWN)						DOWN							
CAS RN4		**CONSTITUENT**	**T D5**	**UNIT OF MEASURE**	**METHOD**	**DETECTED VALUE OR PQL6**	**F L A G S**	**DETECTED VALUE OR PQL6**	**F L A G S**	**DETECTED VALUE OR PQL6**	**F L A G S**	**DETECTED VALUE OR PQL6**	**F L A G S**
S0906	0	Static Water Level Elevation	T		ft/msl	625.29							
S0907	0	Temperature	T	deg C		15.70							
16887-00-6	2	Chloride(s)	T	mg/L	EPA 9056	18.9							
S0130	0	Chemical Oxygen Demand	T	mg/L	EPA 410.4	<10.0	U						
S0266	0	Total Dissolved Solids	T	mg/L	SM 2540C	227							
S0268	1	Total Organic Carbon	T	mg/L	SM 5310C	1.2							
S0145	1	Specific Conductance Field	T	umhos/cm		343							

1AKGWA # is 0000-0000 for any type of blank.
2Respond "Y" if the sample was a duplicate of another sample in this report.
3Respond "Y" if the sample was split and analyzed by separate laboratories.
4Chemical Abstracts Service Registry Number or unique identifier number assigned by agency.
5"T" = Total; "D" = Dissolved
6 "<"? indicates a non-detect; do not use "ND" or "BDL". Value then shown is Practical Quantification Limit.

STANDARD FLAGS:
J = Estimated value
B = Analyte found in blank
A = Average value
N = Presumptive ID
D = Concentration from analysis of a secondary dilution factor

Facility:

Permit Number:

FINDS/UNIT: _____

LAB ID: _____

For Official Use Only

GROUNDWATER SAMPLE ANALYSES - (Cont.)

AKGWA NUMBER1, Facility Well/Spring Number													
Facility's Local Well or Spring Number (e.g. MW-1, MW-2, etc.)						MW-3							
CAS RN4		CONSTITUENT	T D5	UNIT OF MEASURE	METHOD	DETECTED VALUE OR PQL6	FLAGS	DETECTED VALUE OR PQL6	FLAGS	DETECTED VALUE OR PQL6	FLAGS	DETECTED VALUE OR PQL6	FLAGS
S0595	0	Nitrate & Nitrite	T										
S0586	0	Total Organic Halides	T	mg/L	EPA 9020	<0.010	U						
S0296	0	pH	T	Std. Units		6.15							
7440-36-0	0	Antimony	T										
7440-38-2	0	Arsenic	T										
7440-39-3	0	Barium	T										
7440-41-7	0	Beryllium	T										
7440-43-9	0	Cadmium	T										
7440-47-3	0	Chromium	T										
7440-48-4	0	Cobalt	T										
7440-50-8	0	Copper	T										
7439-89-6	0	Iron	T	mg/L	EPA 6010	16.1							
7439-92-1	0	Lead	T										
7439-97-6	0	Mercury	T										
7440-02-0	0	Nickel	T										
7782-49-2	0	Selenium	T										
7440-22-4	0	Silver	T										
7440-23-5	0	Sodium	T	mg/L	EPA 6010	11.6							
7440-28-0	0	Thallium	T										
7440-62-2	0	Vanadium	T										
7440-66-6	0	Zinc	T										
108-05-4	2	Acetic acid ethenyl ester	T										

Facility:

Permit Number:

FINDS/UNIT: _____

LAB ID: _____

For Official Use Only

GROUNDWATER SAMPLE ANALYSES - (Cont.)

AKGWA NUMBER1, Facility Well/Spring Number													
Facility's Local Well or Spring Number (e.g. MW-1, MW-2, etc.)						MW-3							
CAS RN4		CONSTITUENT	TD5	UNIT OF MEASURE	METHOD	DETECTED VALUE OR PQL6	FLAGS	DETECTED VALUE OR PQL6	FLAGS	DETECTED VALUE OR PQL6	FLAGS	DETECTED VALUE OR PQL6	FLAGS
67-64-1	0	Acetone	T										
107-02-8	3	Acrolein	T										
107-13-1	0	Acrylonitrile	T										
71-43-2	0	Benzene	T										
108-90-7	1	Benzene, chloro	T										
1330-20-7	3	Benzene, dimethyl	T										
100-42-5	1	Benzene, ethenyl	T										
108-88-3	1	Benzene, methyl	T										
74-97-5	0	Bromochloromethane	T										
75-27-4	3	Bromodichloromethane	T										
75-25-2	0	Bromoform	T										
74-83-9	0	Bromomethane	T										
78-93-3	0	2-Butanone (Methyl ethyl ketone)	T										
110-57-6	0	2-Butene, 1,4-dichloro-, (E)-	T										
75-15-0	0	Carbon disulfide	T										
75-00-3	0	Chloroethane	T										
67-66-3	0	Chloroform	T										
74-87-3	0	Chloromethane	T										
156-59-2	0	cis-1,2-Dichloroethene	T										
74-95-3	0	Dibromomethane	T										
75-71-8	0	Dichlorodifluoromethane	T										
75-34-3	0	1,1-Dichloroethane	T										

Facility:

Permit Number:

FINDS/UNIT: _____

LAB ID: _____

For Official Use Only

GROUNDWATER SAMPLE ANALYSES - (Cont.)

AKGWA NUMBER1, Facility Well/Spring Number													
Facility's Local Well or Spring Number (e.g. MW-1, MW-2, etc.)						MW-3							
CAS RN4		CONSTITUENT	TD5	UNIT OF MEASURE	METHOD	DETECTED VALUE OR PQL6	FLAGS	DETECTED VALUE OR PQL6	FLAGS	DETECTED VALUE OR PQL6	FLAGS	DETECTED VALUE OR PQL6	FLAGS
107-06-2	0	1,2-Dichloroethane	T										
75-35-4	0	1,1-Dichloroethene	T										
540-36-3	0	1,4-Difluorobenzene	T										
106-93-4	6	Ethane, 1,2-dibromo	T										
79-34-5	4	Ethane, 1,1,2,2-Tetrachloro	T										
71-55-6	5	Ethane, 1,1,1-Trichloro-	T										
79-00-5	3	Ethane, 1,1,2-Trichloro-	T										
630-20-6	3	Ethane, 1,11,,2-Tetrachloro-	T										
64-17-5	0	Ethanol	T										
75-01-4	2	Ethene, chloro	T										
110-75-8	1	Ethene, (2Chloroethoxy) -	T										
127-18-4	7	Ethene, tetrachloro	T										
79-01-6	5	Ethene, trichloro	T										
100-41-4	0	Ethylbenzene	T										
97-63-2	0	Ethyl methacrylate	T										
591-78-6	3	2-Hexanone	T										
74-88-4	4	Iodomethane	T										
124-48-1	4	Methane, Dibromochloro-	T										
56-23-5	1	Methane, Tetrachloro	T										
75-09-2	0	Methylene chloride	T										
108-10-1	4	4-Methyl-2-pentanone	T										
96-12-8	2	Propane, 1,2-dichloro-3-chloro	T										

Facility:

Permit Number:

FINDS/UNIT: _____

LAB ID: _____

For Official Use Only

GROUNDWATER SAMPLE ANALYSES - (Cont.)

AKGWA NUMBER1, Facility Well/Spring Number													
Facility's Local Well or Spring Number (e.g. MW-1, MW-2, etc.)						MW-3							
CAS RN4		CONSTITUENT	T D5	UNIT OF MEASURE	METHOD	DETECTED VALUE OR PQL6	FLAGS	DETECTED VALUE OR PQL6	FLAGS	DETECTED VALUE OR PQL6	FLAGS	DETECTED VALUE OR PQL6	FLAGS
78-87-5	1	Propane, 1,2-dichloro-	T										
10061-02-6	3	1-Propene, 1,3-dichloro- (E)	T										
10061-01-5	4	1-Propene, 1,3-dichloro- (Z)	T										
156-60-5	2	Trans-1,2,-dichloroethene	T										
75-69-4	0	Trichlorofluoromethane	T										
96-18-4	0	1,2,3-Trichloropropane	T										
95-50-1	7	Benzene 1,2 - Dichloro	T										
106-46-7	6	Benzene 1,4 - Dichloro -	T										

GROUNDWATER
AND
SURFACE WATER MONITORING
SAMPLE DATA REPORTING FORM

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF WASTE MANAGEMENT
SOLID WASTE BRANCH
14 REILLY ROAD
FRANKFORT, KY 40601

Facility Name Green Valley Landfill **Activity** Residential / Contained / CDD Landfill
(As officially shown on DWM Permit Face)

Permit No. 045-00012 **Finds/Unit No.** _____ **Quarter & Year** 4th, 2015

Please check only ONE of the following:

__Characterization _X_Quarterly __Semi-Annual __Annual __Assessment

Please check applicable submittal: **____Groundwater** **___X__Surface Water**

This form is to be utilized by those sites required by regulation (Kentucky Waste Management Regulations - 401 KAR 48:300 and 45:160) or by statue (Kentucky Revised Statues Chapter 224) to conduct groundwater and surface water monitoring under the jurisdiction of the Division of Waste Management. **You must report any indication of contamination within forty-eight (48) hours of making the determination using statistical analyses, direct comparison, or other similar techniques. Submitting the lab report is NOT considered notification.** Instructions for completing the form are attached. Do not submit the instruction pages.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for such violations.

SIGNATURE 11-24-2015 DATE

William L. Chlebowy; Environmental Manager

NAME AND TITLE - PLEASE PRINT

FACILITY INFORMATION SHEET

Sampling Date: 10/20/2015 County: Greenup Permit No.: 045-00012.

Facility Name Green Valley Landfill
(As officially shown on DWM Permit Face)

Site Address 100 Addington Rd. Ashland, KY 41102
Street City Zip

Phone No.: 606-928-0239 Latitude 38° 23' 00" Longitude 82° 48' 58"

OWNER INFORMATION

Facility Owner: Green Valley Environmental Corp. Phone No.: (606) 928-0239

Contact Person: Bill Chlebowy Phone No.:

Contact Person Title: Environmental Manager

Mailing Address: 100 Addington Rd. Ashland, KY 41102
Street City Zip

SAMPLING PERSONNEL

(IF OTHER THAN LANDFILL OR LABORATORY)

Company: Kenvirons, Inc.

Contact Person: Bill Knarr Phone No.:(502) 695-4357

Mailing Address: 452 Versailles Rd. Frankfort, Ky 40601
Street City Zip

LABORATORY RECORD #1

Laboratory: Pace Analytical Services INC . Lab ID No.:

Contact Person: Karl Anderson Phone No.:(317) 875-5894 x119

Mailing Address: 7726 Moller Road Indianapolis, IN 46268
Street City Zip

LABORATORY RECORD #2

Laboratory: _____ Lab ID No.:

Contact Person: _____ Phone No.

Mailing Address: _____
Street City Zip

Division of Waste Management
Solid Waste Branch
14 Reilly Road
Frankfort, KY 40601 (502) 564-6716

RESIDENTIAL/CONTAINED-QUARTERLY
Facility:Green Valley Landfill
Permit Number:045-00012

FINDS/UNIT: _____
LAB ID: _____
For Official Use Only

SURFACE WATER SAMPLE ANALYSES (w)

Monitoring Point (KPDES Discharge Number, or "UPSTREAM", or "DOWNSTREAM")						SW-4								
Sample Sequence #						1								
If sample is a Blank, specify Type (F)ield, (T)rip, (M)ethod, or (E)quipment						NA								
Sample Date and Time (Month/Day/Year hour:minutes)						10/20/2015	09:30							
Duplicate ("Y" or "N")1						N								
Split ("Y" or "N")2						N								
Facility Sample ID Number (If applicable)						SW-4								
Laboratory Sample ID Number (if applicable)						50130709001								
Date of Analysis (Month/Day/Year)						10/20/15 - 11/05/15								
CAS RN3		**CONSTITUENT**	**T D4**	**UNIT OF MEASURE**	**METHOD**	**DETECTED VALUE OR PQL5**	**FLAGS**	**DETECTED VALUE OR PQL5**	**FLAGS**	**DETECTED VALUE OR PQL5**	**FLAGS**	**DETECTED VALUE OR PQL5**	**FLAGS**
A200-00-0	0	Flow	T										
16887-00-6	2	Chloride(s)	T	mg/L	EPA 9056	12.2							
14808-79-8	0	Sulfate	T	mg/L	EPA 9056	612							
7439-89-6	0	Iron	T	mg/L	EPA 6010	0.48							
7440-23-5	0	Sodium	T	mg/L	EPA 6010	11.2							
S0268	0	Organic Carbon	T	mg/L	SM 5310C	2.1							
S0097	0	BOD	T										

1Respond "Y" if the sample was a duplicate of another sample in this report.
2Respond "Y" if the sample was split and analyzed by separate laboratories.
3Chemical Abstracts Service Registry Number or unique identifier number assigned by agency.
4"T" = Total; "D" = Dissolved
5"<" indicates a non-detect; do not use "ND" or "BDL"
Value then shown is Practical Quantification Limit
6Facility has either/or option on Organic Carbon and
(BOD) Biological Oxygen Demand = Both are not required

STANDARD FLAGS:
J = Estimated value
B = Analyte found in blank
A = Average value
N = Presumptive ID
D = Concentration from analysis of a secondary dilution factor
X = Exceeds Regulatory Limit

Division of Waste Management
Solid Waste Branch
14 Reilly Road
Frankfort, KY 40601 (502) 564-6716

RESIDENTIAL/CONTAINED-QUARTERLY
Facility:
Permit Number:

FINDS/UNIT: _____
LAB ID: _____
For Official Use Only

SURFACE WATER SAMPLE ANALYSES - (Cont.)

Monitoring Point (KPDES Discharge Number, or "UPSTREAM", or "DOWNSTREAM")						SW-4							
CAS RN3		CONSTITUENT	TD4	UNIT OF MEASURE	METHOD	DETECTED VALUE OR PQL5	FLAGS	DETECTED VALUE OR PQL5	FLAGS	DETECTED VALUE OR PQL5	FLAGS	DETECTED VALUE OR PQL5	FLAGS
S0130	0	Chemical Oxygen Demand	T	mg/L	EPA 410.4	<10.0	U						
S0145	1	Specific Conductance, Field	T	umhos/cm		1200							
S0270	0	Total Suspended Solids	T	mg/L	SM 2540D	<5.00	U						
S0266	0	Total Dissolved Solids	T	mg/L	SM 2540C	995							
S0269	0	Total Solids	T	mg/L	SM 2540B	1060							
S0296	0	pH, Field	T	Std. Units		7.26							

Groundwater
Statistical Analysis Report

Fourth Quarter 2015
Sampling Event

Green Valley Landfill
Ashland, Kentucky
Permit No. 045-00012

November 2015

Prepared by:

JETT ENVIRONMENTAL CONSULTING

10 Quiet Brook Court
St. Charles, MO 63303

314-496-4654
www.jettenviro.com

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TABLES

APPENDICES

1.0 INTRODUCTION

On behalf of Green Valley Landfill General Partnership, Jett Environmental Consulting statistically evaluated the Fourth Quarter (October) 2015 groundwater data. Sampling was performed by Kenvirons, Inc. and analytical testing was performed by Pace Analytical Services, Inc. The statistical evaluation software package utilized, *Sanitas™,* follows a documented decision logic that incorporates the following applicable guidance document: USEPA "Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance" (March 2009).

2.0 SITE BACKGROUND AND MONITORING NETWORK

Jett Environmental Consulting statistically analyzed parameters from the Green Valley Landfill Fourth Quarter 2015 monitoring event using intra-well prediction limits from the historical background data. Prediction limits are considered a powerful tool for groundwater statistical analysis, when feasible, due to their inherent low false negative and false positive rates utilizing confirmatory resampling, if necessary. **Table 1** lists the groundwater monitoring wells at the site. The site submitted a Groundwater Statistical Monitoring Plan on December 9, 2011. The Kentucky Department for Environmental Protection (KDEP) approved the statistical analysis plan for the monitoring wells in correspondence dated August 16, 2012. **Table 2** details background dates and parameters used for statistical evaluations at the site. The background database for the Green Valley Landfill will be updated approximately every one to two years.

The facility received KDEP permission on August 16, 2012 to reduce the groundwater program to annual sampling for parameters in KAR Title 401 Chapter 48:300 Section 11(3)(a) and (b) and quarterly sampling for parameters in KAR Title 401 Chapter 48:300 Section 11(3)(f).

During the Fourth Quarter 2015 sampling event, each well was sampled for the quarterly parameters listed in Section 11(3)(f).

3.0 SITE HYDROGEOLOGY

As identified in the *Modification to Permit No. 045-00012,* dated July 1997 by Kenvirons, Inc. hydrogeologic conditions at the site consist of three aquifers: alluvial/fracture zone, Princess No. 3 coal zone, and the Fire Clay coal zone. Recharge for the alluvial/fracture zone is from secondary porosity due to naturally occurring stress relief fractures in the upper zone of the bedrock. The direction of flow in the alluvium/fracture zone aquifer is a subdued reflection of the topographic relief with the area of recharge limited to the watershed divide.

The alluvium/fracture zone is considered the uppermost aquifer at the site and is utilized for detection of possible facility impacts. **Appendix A** provides a potentiometric surface map for the alluvial/fracture zone utilizing groundwater level data from the Fourth Quarter 2015 event. Groundwater flow direction for the Fourth Quarter 2015 event is generally to the west/northwest, consistent with past events. Groundwater flow rate for the Fourth Quarter 2015 event was estimated to be 3.5 feet/year, consistent with past events. Flow rate calculations are available in **Appendix A**.

4.0 STATISTICAL PROCEDURES

The *Sanitas™* program was utilized to compile and statistically evaluate the data for the October 2015 sampling event. Summary tables for the intra-well prediction interval analysis are available in **Appendix B**.

4.1 Outlier Analysis

The background data were evaluated for the presence of statistical outliers. Methodologies for determining a statistical outlier are defined in the EPA document, Statistical Analysis of Ground-Water Monitoring Data at RCRA Facilities – Unified Guidance (March 2009). Any statistical outliers that were determined were removed from the background data set prior to performing prediction interval statistical analysis. According to the EPA guidance documents above, data that are not normally or log-normally distributed are not recommended for evaluation of outliers. In cases where the data were not normally or log-normally distributed, outliers were not removed from the data set. Background outliers flagged for removal are identified on the statistical plots provided in **Appendix B**.

4.2 Intra-Well Prediction Intervals

The prediction interval is a statistical method used to compare a single observation to a group of observations. The prediction interval is calculated to include observations from the same population with a specified confidence. In groundwater monitoring, a prediction interval approach may be used to make comparisons between background and compliance data. The interval is developed to contain all future observations, within a certain probability. For the site, intra-well prediction intervals have been developed based on a 99% confidence that future observations will fall within the range. If any future observation exceeds the prediction interval, this is considered statistically significant evidence that the observation is not representative of the background group.

During parametric prediction interval analysis, the mean and the standard deviation are calculated for the raw or transformed background data. The number of comparison observations, *K*, is defined to be included in the interval. If less than 15% of the background observations are nondetects, the nondetects are replaced with one half of the reporting limit prior to performing the analysis. If more than 15% but less than 50% of the background data are below the reporting limit, the data's sample mean and standard deviation are adjusted according to the Kaplan-Meier method. However, when the background data are not transformed-normal or contain greater than 50% observations below the reporting limit, *Sanitas™* automatically constructs a nonparametric prediction interval. During nonparametric analysis, the highest value from the background data is used to set the upper limit of the prediction interval.

During the October 2015 event, three results exceeded an intra-well prediction limit: chloride at MW-3, chloride at MW-28D, and total dissolved solids (TDS) at MW-28D. Chloride and TDS do not have an established National Primary Drinking Water Standard-Maximum Contaminant Level (MCL) or KDEP MCL. **Table 3** summarizes the October 2015 prediction limit exceedances. Included in **Appendix B** are the prediction interval summary tables.

The statistical exceedance for chloride at MW-28D during the October 2015 event was observed during the previous five quarterly events, and represents a confirmed exceedance. It is recommended to utilize the next quarterly event (January 2016) as a verification sampling event to confirm the two new exceedances (chloride at MW-3 and TDS at MW-28D).

The following points are noted with respect to the intra-well prediction limit exceedances observed during the October 2015 event:

- The October 2015 chloride concentrations at MW-3 (18.9 mg/L) and MW-28D (28.5 mg/L) are well below the National Secondary Drinking Water Standard of 250 mg/L. The October 2015 chloride concentrations at MW-3 and MW-28D are consistent with historical concentrations at MW-28C (5.8 to 38 mg/L) and MW-1B (6.23 to 52.4 mg/L). The chloride increase during the October 2015 event at MW-3 and MW-28D appears to be due to naturally occurring conditions.

- The October 2015 TDS concentration at MW-28D (475 mg/L) is below the National Secondary Drinking Water Standard of 500 mg/L. The October 2015 TDS concentration at MW-28D is consistent with

historical concentrations at adjacent well MW-28C (250 to 510 mg/L). The TDS increase during the October 2015 event at MW-28D appears to be due to naturally occurring conditions.

Included in **Appendix B** are time series plots for each of the parameters statistically analyzed for this reporting period. **Appendix C** contains a copy of the laboratory analytical report and field information logs for the October 2015 event.

5.0 STATISTICAL RESULTS SUMMARY

During the October 2015 event, three results exceeded an intra-well prediction limit: chloride at MW-3, chloride at MW-28D, and TDS at MW-28D. Chloride and TDS do not have an established National Primary Drinking Water Standard-MCL or KDEP MCL.

One of the three statistical exceedances observed during the October 2015 event (chloride at MW-28D) was observed during the previous five quarterly events, and represents a confirmed exceedance. The remaining two exceedances observed during the October 2015 event (chloride at MW-3 and TDS at MW-28D) represent initial, unconfirmed exceedances. It is recommended to utilize the next quarterly event (January 2016) as a verification sampling event to confirm the two new exceedances.

The October 2015 chloride concentrations at MW-3 (18.9 mg/L) and MW-28D (28.5 mg/L) are well below the National Secondary Drinking Water Standard of 250 mg/L. The October 2015 chloride concentrations at MW-3 and MW-28D are consistent with historical concentrations at MW-28C (5.8 to 38 mg/L) and MW-1B (6.23 to 52.4 mg/L). The chloride increase during the October 2015 event at MW-3 and MW-28D appears to be due to naturally occurring conditions.

The October 2015 TDS concentration at MW-28D (475 mg/L) is below the National Secondary Drinking Water Standard of 500 mg/L. The October 2015 TDS concentration at MW-28D is consistent with historical concentrations at adjacent well MW-28C (250 to 510 mg/L). The TDS increase during the October 2015 event at MW-28D appears to be due to naturally occurring conditions.

Continuation of Detection Monitoring is recommended for the site.

TABLES

TABLE 1 GROUNDWATER MONITORING WELLS GREEN VALLEY LANDFILL
MW-1, MW-1A, MW-1B, MW-3, MW-28C, MW-28D, MW-28E

TABLE 2 BACKGROUND DATA USED IN STATISTICAL REPORTING GREEN VALLEY LANDFILL		
Well	**Parameters**	**Background Dates**
MW-1, MW-1A, MW-1B, MW-3	Annual	9/1992 - 5/2013
	Quarterly	9/1992 - 11/2013
MW-28C, MW-28D, MW-28E	Annual	10/2009 - 5/2013
	Quarterly	10/2009 - 11/2013

Notes:

•Annual sampling includes parameters listed in KAR Title 401 Chapter 48:300 Section 11(3)(a) and (b).

•Quarterly sampling includes parameters listed in KAR Title 401 Chapter 48:300 Section 11(3)(f).

•Background dates taken from Groundwater Statistical Monitoring Plan dated December 9, 2011 and approved by KDEP on August 16, 2012.

TABLE 3
INTRA-WELL PREDICTION LIMIT EXCEEDANCES
FOURTH QUARTER 2015 MONITORING EVENT
GREEN VALLEY LANDFILL

Well	Parameter	Results	Prediction Limit
MW-3	Chloride	18.9 mg/L	15 mg/L
MW-28D	Chloride	28.5 mg/L	23 mg/L
	Total Dissolved Solids	475 mg/L	460 mg/L

APPENDICES

APPENDIX A

POTENTIOMETRIC SURFACE MAP

LEGEND

- MW-1 — GROUNDWATER MONITORING WELL
- 612.27 — GROUNDWATER ELEVATION (fmsl)
- 660 — POTENTIOMETRIC SURFACE CONTOUR (fmsl)
- FOOTPRINT
- PROPERTY BOUNDARY
- PERMIT BOUNDARY
- RESERVED EASEMENT
- 250' BUFFER

Water levels collected by Kenvirons, Inc. on October 20, 2015.

Groundwater elevation calculations available in Appendix B.

Base map courtesy of Kenvirons, Inc.

Aerial topography of landfill area dated December 12, 2012 provided by Cooper Aerial Surveys Co.

NORTH

0 225 450 900 1800

Scale in Feet
Graphic Scale: 1 inch = 900 feet

MW-1
612.27

MW-1B
612.14

MW-1A
614.99

620

640

660

RESERVED EASEMENT

MW-3
625.29

250' BUFFER ZONE

MW-28E
667.44

MW-28D
669.88

MW-28C
669.78

PHASE I

PHASE II & III

PERMIT BOUNDARY

GREEN VALLEY LANDFILL
GENERAL PARTNERSHIP
PROPERTY BOUNDARY

JETT ENVIRONMENTAL CONSULTING
10 Quiet Brook Court
St. Charles, MO 63303
314-496-4654
www.jettenviro.com

Fourth Quarter 2015 Event
Alluvial-Fracture Zone, Potentiometric Surface Map
Green Valley Landfill, Ashland, Kentucky

Groundwater Elevation Summary Table
Green Valley Landfill

Well	Top of PVC Casing Elevation (fmsl)[1]	Depth to Water (ft)[2]	Groundwater Elevation (fmsl)
MW-1	617.80	5.53	612.27
MW-1A	618.60	3.61	614.99
MW-1B	618.70	6.56	612.14
MW-3	630.80	5.51	625.29
MW-28C	674.40	4.62	669.78
MW-28D	675.20	5.32	669.88
MW-28E	677.00	9.56	667.44

Note 1: Top of PVC Casing Elevations for MW-1, MW-1A, MW-1B, and MW-3 from the Groundwater Monitoring Plan compiled by Kenvirons, Inc. dated 4/23/04. Top of PVC Casing Elevations for MW-28C, MW-28D, and MW-28E from the Summary of Monitoring Well Abandonments and Installations by Stantec Consulting Services, Inc. dated 10/2/09.

Note 2: Depth to water collected by Kenvirons, Inc. on 10/20/15.

Groundwater Flow Velocity Calculations
Green Valley Landfill, Kentucky
Fourth Quarter 2015 Event

Velocity
$V = [(k)(i)]/(n)$
$V = [(1 \times 10^2 \text{ ft/year})(0.007 \text{ ft/ft})]/0.20$
$V =$ **3.5 ft/year**

Hydraulic conductivity (k_1) of the alluvium/fracture zone was noted in a Fuller, Mossbarger, Scott, & May (FMSM) Engineers, Inc. report entitled "Report of Geotechnical Exploration", dated August, 1992. The geotechnical exploration report indicates the alluvium to be predominantly silty and clayey sands type soils. As noted in the August 1992 FMSM "Report of Geotechnical Exploration", a hydraulic conductivity value of 1×10^2 feet/year, typical for silty and clayey sand soils was assumed for the alluvium.

Effective porosity (n): An effective porosity (n) of 0.20 was assumed for the alluvium.

Gradient (i) is from the average gradient at site using the potentiometric surface map from well MW-28C to well MW-1.

Gradient(i) = Change in Groundwater Elevation along Flow Path
i: From MW-28C (669.78 fmsl) to MW-1 (612.27 fmsl)/ Distance = 57.51 ft / 8,199 ft = 0.007

APPENDIX B

STATISTICAL EVALUATIONS

INTRA-WELL PREDICTION LIMITS
OLDER WELLS
QUARTERLY PARAMETERS

Prediction Limit

Green Valley Client: RSI Data: GREENVALLEY Printed 11/11/2015, 2:40 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Chemical Oxygen Demand [COD] (mg/L)	MW-1	46	n/a	10/20/2015	31.1	No	84	n/a	n/a	61.9	n/a	n/a	0.0002756	NP Intra (NDs) 1 of 2
Chemical Oxygen Demand [COD] (mg/L)	MW-1A	47	n/a	10/20/2015	5ND	No	85	n/a	n/a	71.76	n/a	n/a	0.0002694	NP Intra (NDs) 1 of 2
Chemical Oxygen Demand [COD] (mg/L)	MW-1B	41	n/a	10/20/2015	5ND	No	85	n/a	n/a	67.06	n/a	n/a	0.0002694	NP Intra (NDs) 1 of 2
Chemical Oxygen Demand [COD] (mg/L)	MW-3	47	n/a	10/20/2015	5ND	No	82	n/a	n/a	69.51	n/a	n/a	0.000288	NP Intra (NDs) 1 of 2
Chloride (mg/L)	MW-1	10	n/a	10/20/2015	1.2	No	84	n/a	n/a	13.1	n/a	n/a	0.0002756	NP Intra (normality) 1 of 2
Chloride (mg/L)	MW-1A	4	n/a	10/20/2015	3.3	No	85	10.16	2.663	0	None	x^2	0.000418	Param Intra 1 of 2
Chloride (mg/L)	MW-1B	52	n/a	10/20/2015	37.9	No	85	n/a	n/a	0	n/a	n/a	0.0002694	NP Intra (normality) 1 of 2
Chloride (mg/L)	**MW-3**	**15**	**n/a**	**10/20/2015**	**18.9**	**Yes**	**82**	**n/a**	**n/a**	**15.85**	**n/a**	**n/a**	**0.000288**	**NP Intra (normality) 1 of 2**
Iron Total (mg/L)	MW-1	23	n/a	10/20/2015	0.48	No	84	n/a	n/a	0	n/a	n/a	0.0002756	NP Intra (normality) 1 of 2
Iron Total (mg/L)	MW-1A	9.6	n/a	10/20/2015	0.91	No	85	0.7703	0.7023	0	None	ln(x)	0.000418	Param Intra 1 of 2
Iron Total (mg/L)	MW-1B	11	n/a	10/20/2015	0.7357	No	85	n/a	n/a	4.706	n/a	n/a	0.0002694	NP Intra (normality) 1 of 2 Deseas
Iron Total (mg/L)	MW-3	58	n/a	10/20/2015	16.1	No	82	n/a	n/a	3.659	n/a	n/a	0.000288	NP Intra (normality) 1 of 2
pH [Field] (su)	MW-1	8.4	4.6	10/20/2015	5.91	No	84	6.5	0.8894	0	None	No	0.000209	Param Intra 1 of 2
pH [Field] (su)	MW-1A	8	6.2	10/20/2015	6.73	No	84	1.92	0.03908	0	None	x^(1/3)	0.000209	Param Intra 1 of 2
pH [Field] (su)	MW-1B	9.8	6.2	10/20/2015	7.35	No	85	n/a	n/a	0	n/a	n/a	0.0005389	NP Intra (normality) 1 of 2
pH [Field] (su)	MW-3	8.2	4.5	10/20/2015	6.15	No	81	1.806	0.138	0	None	ln(x)	0.000209	Param Intra 1 of 2
Sodium Total (mg/L)	MW-1	4.6	n/a	10/20/2015	2.178	No	82	0.703	0.3848	0	None	ln(x)	0.000418	Param Intra 1 of 2 Deseas
Sodium Total (mg/L)	MW-1A	360	n/a	10/20/2015	21.7	No	85	n/a	n/a	0	n/a	n/a	0.0002694	NP Intra (normality) 1 of 2
Sodium Total (mg/L)	MW-1B	600	n/a	10/20/2015	133	No	85	n/a	n/a	0	n/a	n/a	0.0002694	NP Intra (normality) 1 of 2
Sodium Total (mg/L)	MW-3	340	n/a	10/20/2015	11.6	No	82	n/a	n/a	0	n/a	n/a	0.000288	NP Intra (normality) 1 of 2
Specific Conductance [Field] (umhos/cm)	MW-1	880	n/a	10/20/2015	11.45	No	84	n/a	n/a	0	n/a	n/a	0.0002756	NP Intra (normality) 1 of 2 Deseas
Specific Conductance [Field] (umhos/cm)	MW-1A	440	n/a	10/20/2015	378	No	82	120248	36097	0	None	x^2	0.000418	Param Intra 1 of 2
Specific Conductance [Field] (umhos/cm)	MW-1B	770	n/a	10/20/2015	658	No	83	318256	127304	0	None	x^2	0.000418	Param Intra 1 of 2
Specific Conductance [Field] (umhos/cm)	MW-3	460	n/a	10/20/2015	343	No	82	5.006	0.5279	0	None	ln(x)	0.000418	Param Intra 1 of 2
Total Dissolved Solids [TDS] (mg/L)	MW-1	120	n/a	10/20/2015	48	No	83	6.981	1.883	3.614	None	sqrt(x)	0.000418	Param Intra 1 of 2
Total Dissolved Solids [TDS] (mg/L)	MW-1A	410	n/a	10/20/2015	238	No	85	n/a	n/a	0	n/a	n/a	0.0002694	NP Intra (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	MW-1B	920	n/a	10/20/2015	380	No	85	n/a	n/a	0	n/a	n/a	0.0002694	NP Intra (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	MW-3	340	n/a	10/20/2015	227	No	82	4.647	0.5563	0	None	ln(x)	0.000418	Param Intra 1 of 2
Total Organic Carbon [TOC] (mg/L)	MW-1	10	n/a	10/20/2015	7.8	No	84	n/a	n/a	41.67	n/a	n/a	0.0002756	NP Intra (normality) 1 of 2
Total Organic Carbon [TOC] (mg/L)	MW-1A	26	n/a	10/20/2015	0.5ND	No	85	n/a	n/a	61.18	n/a	n/a	0.0002694	NP Intra (NDs) 1 of 2
Total Organic Carbon [TOC] (mg/L)	MW-1B	38	n/a	10/20/2015	0.5ND	No	85	n/a	n/a	58.82	n/a	n/a	0.0002694	NP Intra (NDs) 1 of 2
Total Organic Carbon [TOC] (mg/L)	MW-3	16	n/a	10/20/2015	1.2	No	82	n/a	n/a	21.95	n/a	n/a	0.000288	NP Intra (normality) 1 of 2
Total Organic Halides (mg/L)	MW-1	0.33	n/a	10/20/2015	0.005ND	No	84	n/a	n/a	78.57	n/a	n/a	0.0002756	NP Intra (NDs) 1 of 2
Total Organic Halides (mg/L)	MW-1A	1.0	n/a	10/20/2015	0.005ND	No	85	n/a	n/a	74.12	n/a	n/a	0.0002694	NP Intra (NDs) 1 of 2
Total Organic Halides (mg/L)	MW-1B	0.27	n/a	10/20/2015	0.005ND	No	85	n/a	n/a	60	n/a	n/a	0.0002694	NP Intra (NDs) 1 of 2
Total Organic Halides (mg/L)	MW-3	0.37	n/a	10/20/2015	0.005ND	No	82	n/a	n/a	67.07	n/a	n/a	0.000288	NP Intra (NDs) 1 of 2

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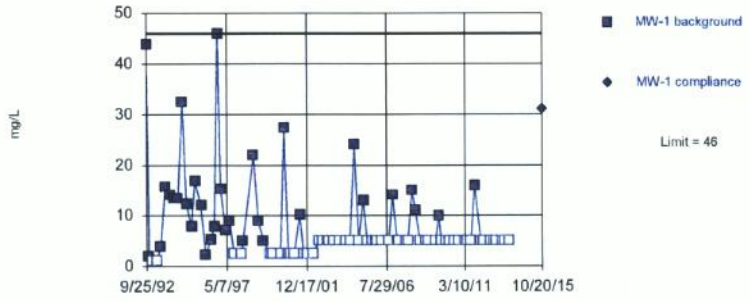
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 84 background values. 61.9% NDs. Well-constituent pair annual alpha = 0.001102. Individual comparison alpha = 0.0002756 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated. Seasonality was not detected with 95% confidence.

Constituent: Chemical Oxygen Demand [COD] Analysis Run 11/11/2015 2:38 PM
Green Valley Client: RSI Data: GREENVALLEY

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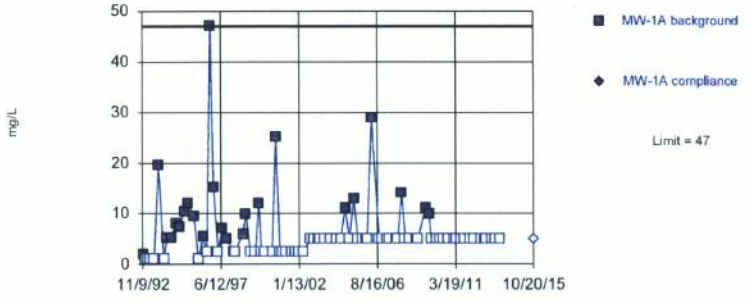
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 85 background values. 71.76% NDs. Well-constituent pair annual alpha = 0.001077. Individual comparison alpha = 0.0002694 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated. Seasonality was not detected with 95% confidence.

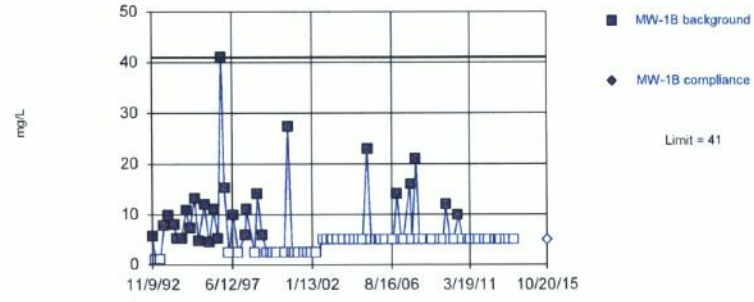
Constituent: Chemical Oxygen Demand [COD] Analysis Run 11/11/2015 2:38 PM
Green Valley Client: RSI Data: GREENVALLEY

Sanitas™ v.9.5.19 Sanitas software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 85 background values. 67.06% NDs. Well-constituent pair annual alpha = 0.001077. Individual comparison alpha = 0.0002694 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated. Seasonality was not detected with 95% confidence.

Constituent: Chemical Oxygen Demand [COD] Analysis Run 11/11/2015 2:38 PM
Green Valley Client: RSI Data: GREENVALLEY

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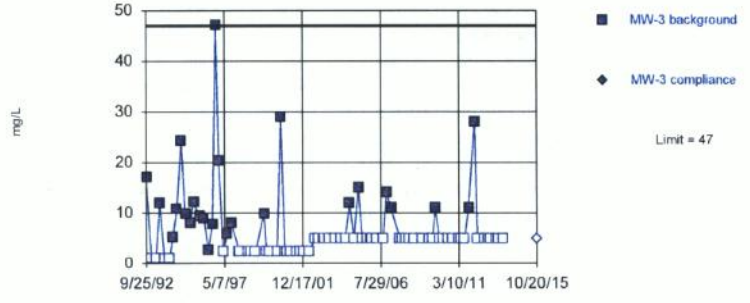
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 82 background values. 69.51% NDs. Well-constituent pair annual alpha = 0.001152. Individual comparison alpha = 0.000288 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated. Seasonality was not detected with 95% confidence.

Constituent: Chemical Oxygen Demand [COD] Analysis Run 11/11/2015 2:38 PM
Green Valley Client: RSI Data: GREENVALLEY

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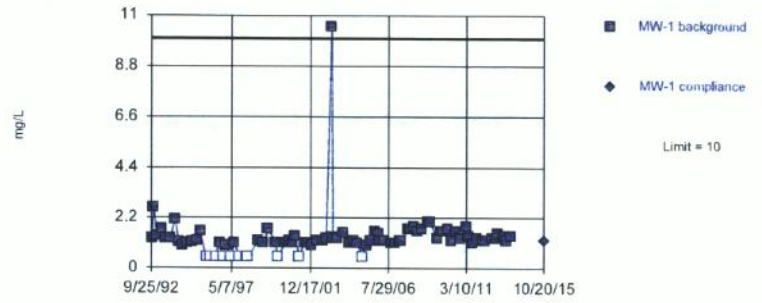
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 84 background values. 13.1% NDs. Well-constituent pair annual alpha = 0.001102. Individual comparison alpha = 0.0002756 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated. Seasonality was not detected with 95% confidence.

Constituent: Chloride Analysis Run 11/11/2015 2:38 PM
Green Valley Client: RSI Data: GREENVALLEY

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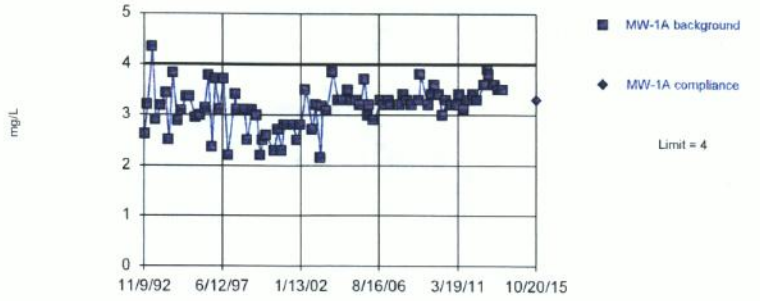
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square transformation): Mean=10.16, Std. Dev.=2.663, n=85. Seasonality was not detected with 95% confidence. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.971, critical = 0.961. Kappa = 2.12 (c=9, w=7, 1 of 2, event alpha = 0.026). Report alpha = 0.000418. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Chloride Analysis Run 11/11/2015 2:38 PM
Green Valley Client: RSI Data: GREENVALLEY

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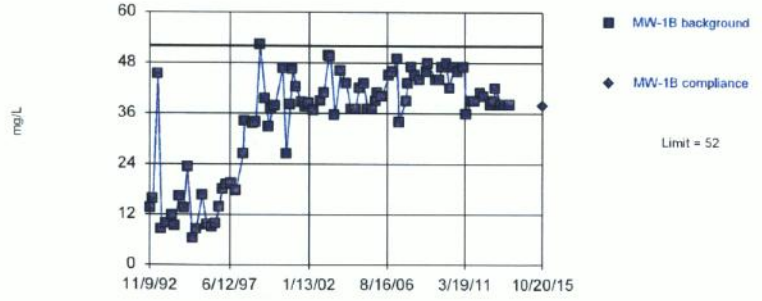
Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 85 background values. Well-constituent pair annual alpha = 0.001077. Individual comparison alpha = 0.0002694 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated. Seasonality was not detected with 95% confidence.

Constituent: Chloride Analysis Run 11/11/2015 2:38 PM
Green Valley Client: RSI Data: GREENVALLEY

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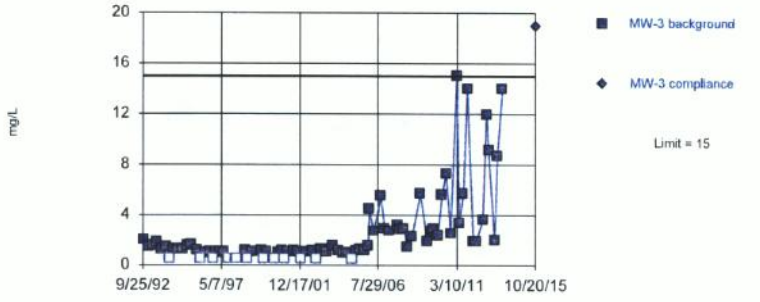
Hollow symbols indicate censored values.

Exceeds Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 82 background values. 15.85% NDs. Well-constituent pair annual alpha = 0.001152. Individual comparison alpha = 0.000288 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated. Seasonality was not detected with 95% confidence.

Constituent: Chloride Analysis Run 11/11/2015 2:38 PM
Green Valley Client: RSI Data: GREENVALLEY

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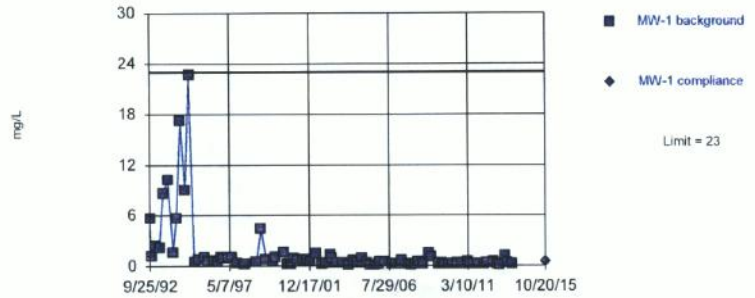
Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 84 background values. Well-constituent pair annual alpha = 0.001102. Individual comparison alpha = 0.0002756 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated. Seasonality was not detected with 95% confidence.

Constituent: Iron Total Analysis Run 11/11/2015 2:38 PM
Green Valley Client: RSI Data: GREENVALLEY

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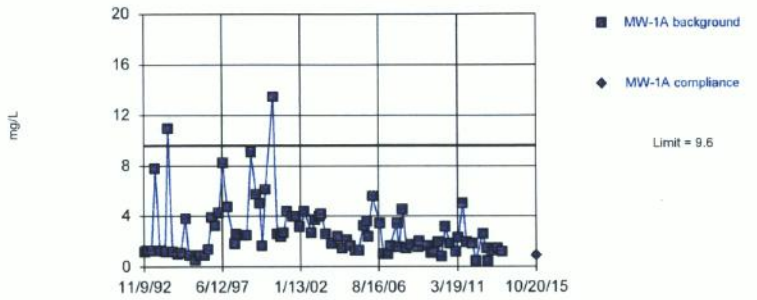
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on natural log transformation): Mean=0.7703, Std. Dev.=0.7023, n=85. Seasonality was not detected with 95% confidence. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.986, critical = 0.961. Kappa = 2.12 (c=9, w=7, 1 of 2, event alpha = 0.026). Report alpha = 0.000418. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Iron Total Analysis Run 11/11/2015 2:38 PM
Green Valley Client: RSI Data: GREENVALLEY

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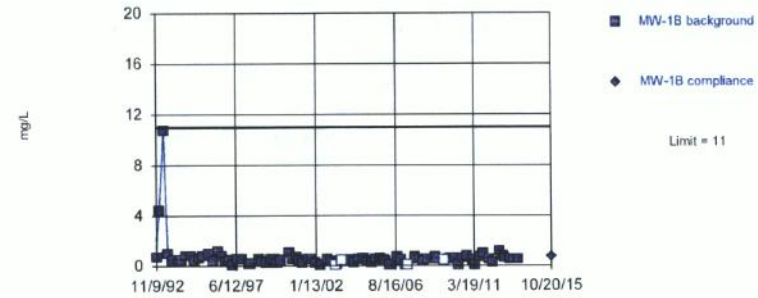
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 85 background values. 4.706% NDs. Well-constituent pair annual alpha = 0.001077. Individual comparison alpha = 0.0002694 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated. Data were deseasonalized.

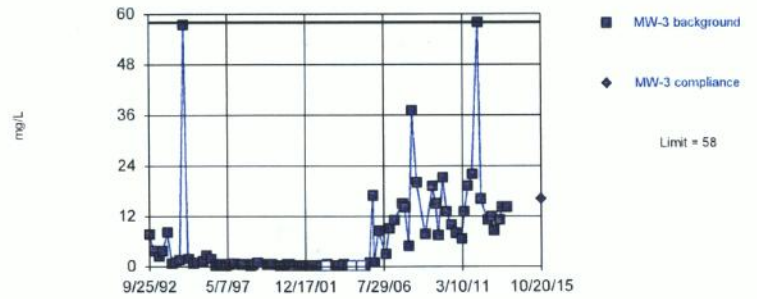
Constituent: Iron Total Analysis Run 11/11/2015 2:38 PM
Green Valley Client: RSI Data: GREENVALLEY

Sanitas™ v.9.5.19 Sanitas software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 82 background values. 3.659% NDs. Well-constituent pair annual alpha = 0.001152. Individual comparison alpha = 0.000288 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated. Seasonality was not detected with 95% confidence.

Constituent: Iron Total Analysis Run 11/11/2015 2:38 PM
Green Valley Client: RSI Data: GREENVALLEY

Sanitas™ v.9.5.19 Sanitas software licensed to Jett Environmental Consulting, UG

Within Limits

Prediction Limit

Intrawell Parametric

Background Data Summary: Mean=6.5, Std. Dev.=0.8894, n=84. Seasonality was not detected with 95% confidence. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9812, critical = 0.96. Kappa = 2.121 (c=9, w=7, 1 of 2, event alpha = 0.026). Report alpha = 0.000418. Rosner's outlier test was performed on the background data. No background outliers were found.

Constituent: pH [Field] Analysis Run 11/11/2015 2:38 PM

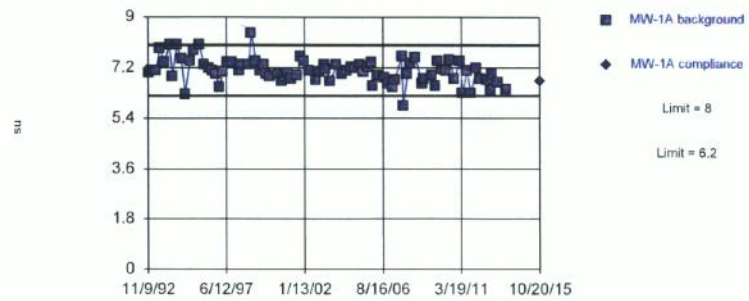
Green Valley Client: RSI Data: GREENVALLEY

Sanitas™ v.9.5.19 Sanitas software licensed to Jett Environmental Consulting, UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary (based on cube root transformation): Mean=1.92, Std. Dev.=0.03908, n=84. Seasonality was not detected with 95% confidence. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9748, critical = 0.96. Kappa = 2.121 (c=9, w=7, 1 of 2, event alpha = 0.026). Report alpha = 0.000418. Rosner's outlier test was performed on the background data. One background outlier was removed: 5.53 (7/17/2013).

Constituent: pH [Field] Analysis Run 11/11/2015 2:38 PM

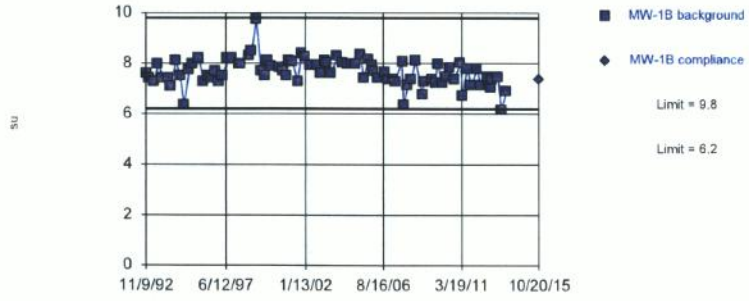
Green Valley Client: RSI Data: GREENVALLEY

Sanitas™ v.9.5.19 Sanitas software licensed to Jett Environmental Consulting, UG

Within Limits

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 85 background values. Well-constituent pair annual alpha = 0.002155. Individual comparison alpha = 0.0005389 (1 of 2). Distribution was found to be non-normal after removal of suspect values, so outliers could not be indentified. Seasonality was not detected with 95% confidence.

Constituent: pH [Field] Analysis Run 11/11/2015 2:38 PM

Green Valley Client: RSI Data: GREENVALLEY

Sanitas™ v.9.5.19 Sanitas software licensed to Jett Environmental Consulting, UG

Within Limits

Prediction Limit

Intrawell Parametric

Background Data Summary (based on natural log transformation): Mean=1.806, Std. Dev.=0.138, n=81. Seasonality was not detected with 95% confidence. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9896, critical = 0.958. Kappa = 2.124 (c=9, w=7, 1 of 2, event alpha = 0.026). Report alpha = 0.000418. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: pH [Field] Analysis Run 11/11/2015 2:38 PM

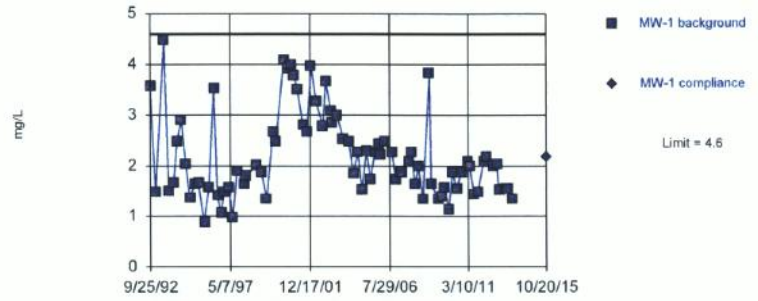
Green Valley Client: RSI Data: GREENVALLEY

Sanitas™ v.9.5.19 Sanitas software licensed to Jett Environmental Consulting, UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on natural log transformation): Mean=0.703, Std. Dev.=0.3848, n=82. Seasonality was detected with 95% confidence and data were deseasonalized. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9718, critical = 0.959. Kappa = 2.123 (c=9, w=7, 1 of 2, event alpha = 0.026). Report alpha = 0.000418. Rosner's outlier test was performed on the background data. Two background outliers were removed: 26.4 (11/9/1992); 131 (4/26/1993).

Constituent: Sodium Total Analysis Run 11/11/2015 2:39 PM
Green Valley Client: RSI Data: GREENVALLEY

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Within Limit

Prediction Limit

Intrawell Non-parametric

Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 85 background values. Well-constituent pair annual alpha = 0.001077. Individual comparison alpha = 0.0002694 (1 of 2). Distribution was found to be non-normal after removal of suspect values, so outliers could not be indentified. Seasonality was not detected with 95% confidence.

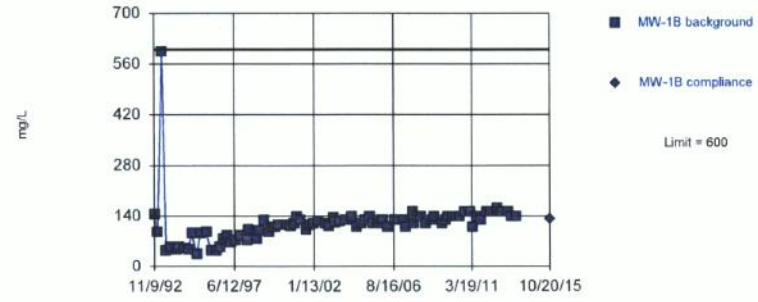
Constituent: Sodium Total Analysis Run 11/11/2015 2:39 PM
Green Valley Client: RSI Data: GREENVALLEY

Sanitas™ v.9.5.19 Sanitas software licensed to Jett Environmental Consulting, UG

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 85 background values. Well-constituent pair annual alpha = 0.001077. Individual comparison alpha = 0.0002694 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated. Seasonality was not detected with 95% confidence.

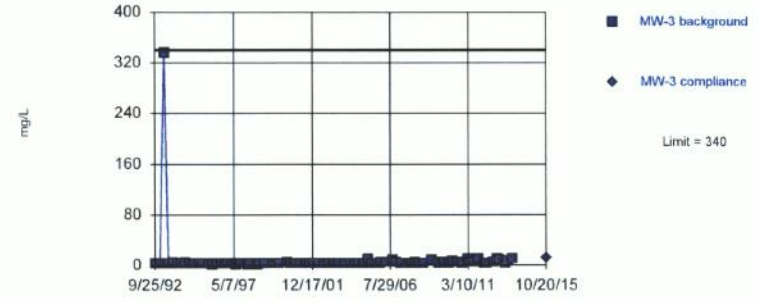
Constituent: Sodium Total Analysis Run 11/11/2015 2:39 PM
Green Valley Client: RSI Data: GREENVALLEY

Sanitas™ v.9.5.19 Sanitas software licensed to Jett Environmental Consulting, UG

Within Limit

Prediction Limit

Intrawell Non-parametric



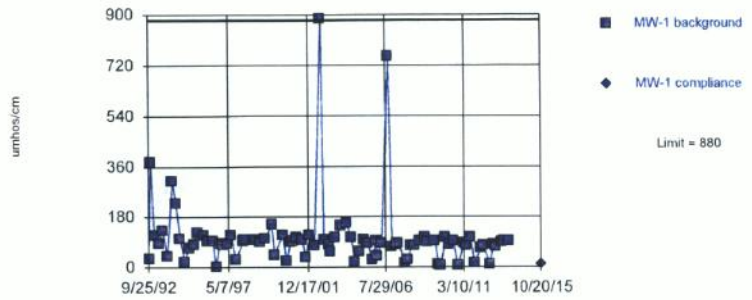
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 82 background values. Well-constituent pair annual alpha = 0.001152. Individual comparison alpha = 0.000288 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated. Seasonality was not detected with 95% confidence.

Constituent: Sodium Total Analysis Run 11/11/2015 2:39 PM
Green Valley Client: RSI Data: GREENVALLEY

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 84 background values. Well-constituent pair annual alpha = 0.001102. Individual comparison alpha = 0.0002756 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated. Data were deseasonalized.

Constituent: Specific Conductance [Field] Analysis Run 11/11/2015 2:39 PM
Green Valley Client: RSI Data: GREENVALLEY

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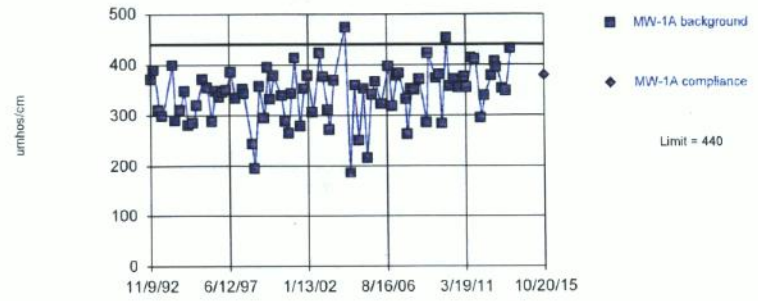
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square transformation): Mean=120248, Std. Dev.=36097, n=82. Seasonality was not detected with 95% confidence. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9855, critical = 0.959. Kappa = 2.123 (c=9, w=7, 1 of 2, event alpha = 0.026). Report alpha = 0.000418. Rosner's outlier test was performed on the background data. Three background outliers were removed: 100 (10/19/1993); 640 (11/25/2003); 140 (1/9/2006).

Constituent: Specific Conductance [Field] Analysis Run 11/11/2015 2:39 PM
Green Valley Client: RSI Data: GREENVALLEY

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Within Limit

Prediction Limit

Intrawell Parametric

Background Data Summary (based on square transformation): Mean=318256, Std. Dev.=127304, n=83. Seasonality was not detected with 95% confidence. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9926, critical = 0.96. Kappa = 2.122 (c=9, w=7, 1 of 2, event alpha = 0.026). Report alpha = 0.000418. Rosner's outlier test was performed on the background data. Two background outliers were removed: 100 (10/19/1993); 1038 (1/14/2002).

Constituent: Specific Conductance [Field] Analysis Run 11/11/2015 2:39 PM
Green Valley Client: RSI Data: GREENVALLEY

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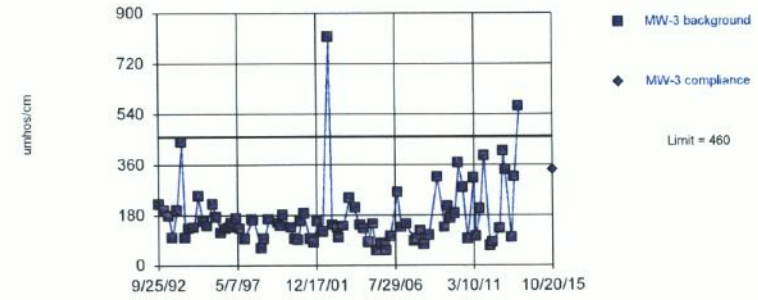
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on natural log transformation): Mean=5.006, Std. Dev.=0.5279, n=82. Seasonality was not detected with 95% confidence. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9676, critical = 0.959. Kappa = 2.123 (c=9, w=7, 1 of 2, event alpha = 0.026). Report alpha = 0.000418. Rosner's outlier test was performed on the background data. No background outliers were found.

Constituent: Specific Conductance [Field] Analysis Run 11/11/2015 2:39 PM
Green Valley Client: RSI Data: GREENVALLEY

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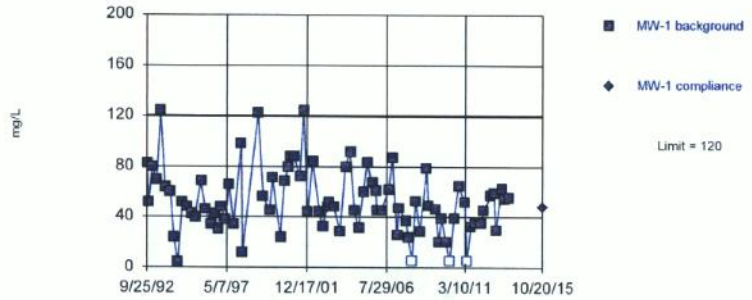
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=6.981, Std. Dev.=1.883, n=83, 3.614% NDs. Seasonality was not detected with 95% confidence. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9688, critical = 0.96. Kappa = 2.122 (c=9, w=7, 1 of 2, event alpha = 0.026). Report alpha = 0.000418. Rosner's outlier test was performed on the background data. One background outlier was removed: 308 (12/1/1998).

Constituent: Total Dissolved Solids [TDS] Analysis Run 11/11/2015 2:39 PM
Green Valley Client: RSI Data: GREENVALLEY

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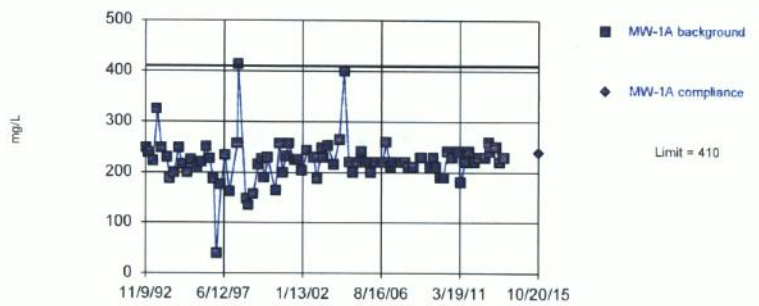
Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 85 background values. Well-constituent pair annual alpha = 0.001077. Individual comparison alpha = 0.0002694 (1 of 2). Distribution was found to be non-normal after removal of suspect values, so outliers could not be indentified. Seasonality was not detected with 95% confidence.

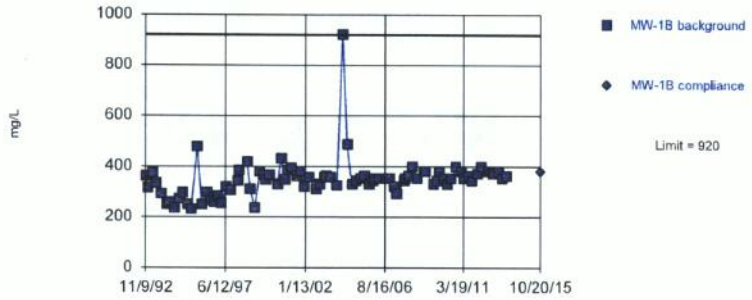
Constituent: Total Dissolved Solids [TDS] Analysis Run 11/11/2015 2:39 PM
Green Valley Client: RSI Data: GREENVALLEY

Sanitas™ v.9.5.19 Sanitas software licensed to Jett Environmental Consulting, UG

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 85 background values. Well-constituent pair annual alpha = 0.001077. Individual comparison alpha = 0.0002694 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated. Seasonality was not detected with 95% confidence.

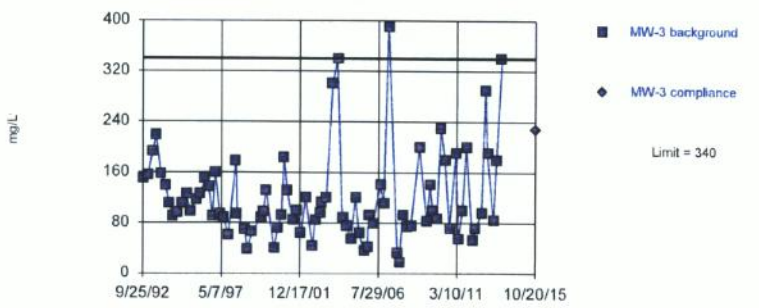
Constituent: Total Dissolved Solids [TDS] Analysis Run 11/11/2015 2:39 PM
Green Valley Client: RSI Data: GREENVALLEY

Sanitas™ v.9.5.19 Sanitas software licensed to Jett Environmental Consulting, UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on natural log transformation): Mean=4.647, Std. Dev.=0.5563, n=82. Seasonality was not detected with 95% confidence. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9784, critical = 0.959. Kappa = 2.123 (c=9, w=7, 1 of 2, event alpha = 0.026). Report alpha = 0.000418. Rosner's outlier test was performed on the background data. No background outliers were found.

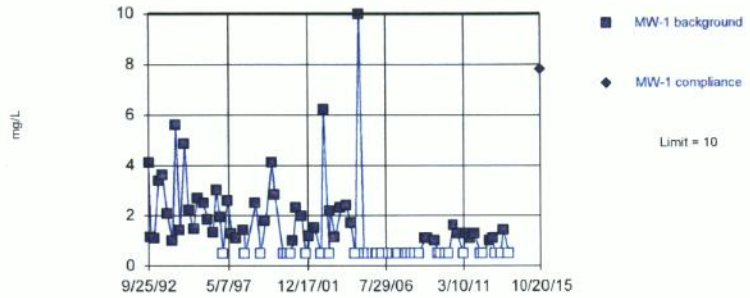
Constituent: Total Dissolved Solids [TDS] Analysis Run 11/11/2015 2:39 PM
Green Valley Client: RSI Data: GREENVALLEY

Sanitas™ v.9.5.19 Sanitas software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 84 background values. 41.67% NDs. Well-constituent pair annual alpha = 0.001102. Individual comparison alpha = 0.0002756 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated. Seasonality was not detected with 95% confidence.

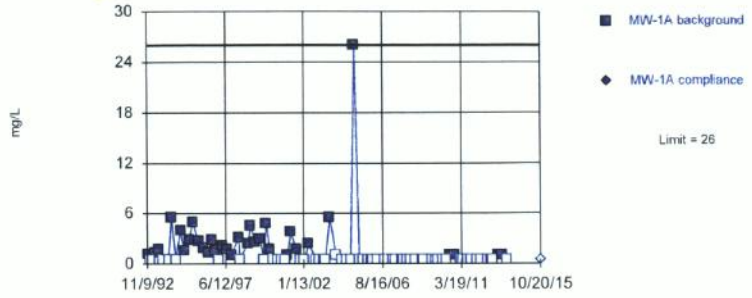
Constituent: Total Organic Carbon [TOC] Analysis Run 11/11/2015 2:39 PM
Green Valley Client: RSI Data: GREENVALLEY

Sanitas™ v.9.5.19 Sanitas software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 85 background values. 61.18% NDs. Well-constituent pair annual alpha = 0.001077. Individual comparison alpha = 0.0002694 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated. Seasonality was not detected with 95% confidence.

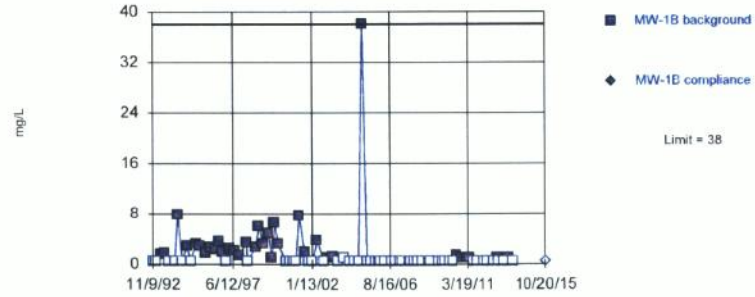
Constituent: Total Organic Carbon [TOC] Analysis Run 11/11/2015 2:39 PM
Green Valley Client: RSI Data: GREENVALLEY

Sanitas™ v.9.5.19 Sanitas software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 85 background values. 58.82% NDs. Well-constituent pair annual alpha = 0.001077. Individual comparison alpha = 0.0002694 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated. Seasonality was not detected with 95% confidence.

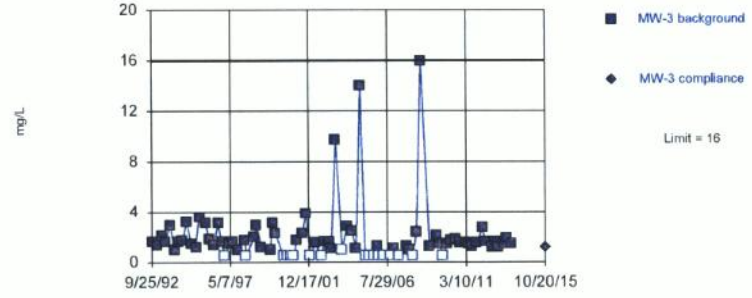
Constituent: Total Organic Carbon [TOC] Analysis Run 11/11/2015 2:39 PM
Green Valley Client: RSI Data: GREENVALLEY

Sanitas™ v.9.5.19 Sanitas software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 82 background values. 21.95% NDs. Well-constituent pair annual alpha = 0.001152. Individual comparison alpha = 0.000288 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated. Seasonality was not detected with 95% confidence.

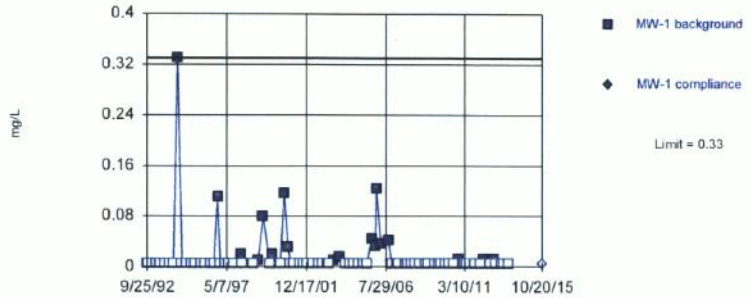
Constituent: Total Organic Carbon [TOC] Analysis Run 11/11/2015 2:39 PM
Green Valley Client: RSI Data: GREENVALLEY

Sanitas™ v.9.5.19 Sanitas software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 84 background values. 78.57% NDs. Well-constituent pair annual alpha = 0.001102. Individual comparison alpha = 0.0002756 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated. Seasonality was not detected with 95% confidence.

Constituent: Total Organic Halides Analysis Run 11/11/2015 2:39 PM

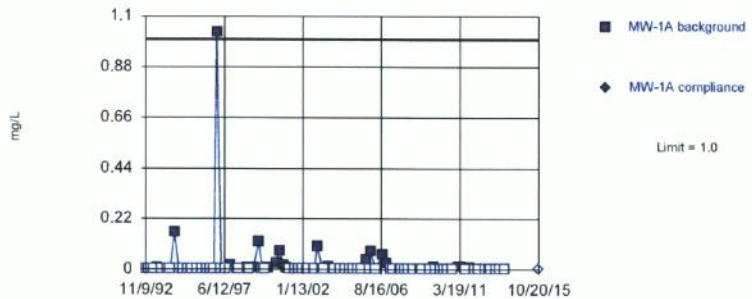
Green Valley Client: RSI Data: GREENVALLEY

Sanitas™ v.9.5.19 Sanitas software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 85 background values. 74.12% NDs. Well-constituent pair annual alpha = 0.001077. Individual comparison alpha = 0.0002694 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated. Seasonality was not detected with 95% confidence.

Constituent: Total Organic Halides Analysis Run 11/11/2015 2:39 PM

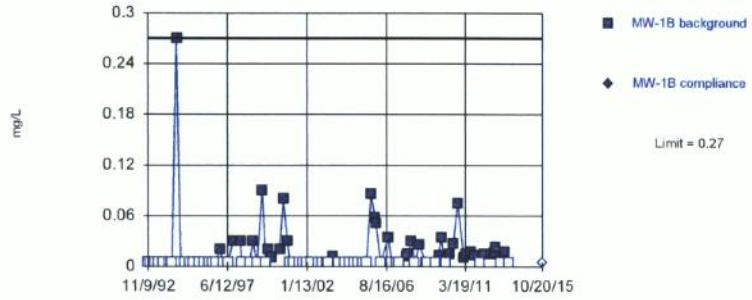
Green Valley Client: RSI Data: GREENVALLEY

Sanitas™ v.9.5.19 Sanitas software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 85 background values. 60% NDs. Well-constituent pair annual alpha = 0.001077. Individual comparison alpha = 0.0002694 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated. Seasonality was not detected with 95% confidence.

Constituent: Total Organic Halides Analysis Run 11/11/2015 2:39 PM

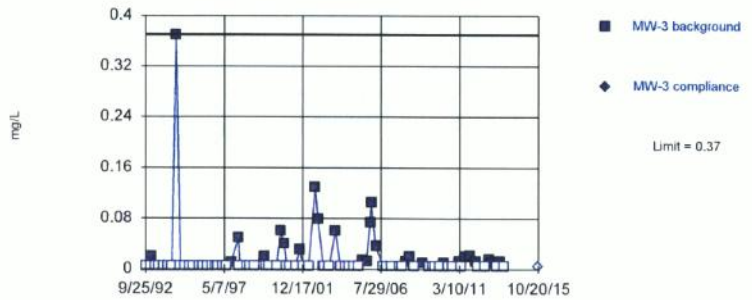
Green Valley Client: RSI Data: GREENVALLEY

Sanitas™ v.9.5.19 Sanitas software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 82 background values. 67.07% NDs. Well-constituent pair annual alpha = 0.001152. Individual comparison alpha = 0.000288 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated. Seasonality was not detected with 95% confidence.

Constituent: Total Organic Halides Analysis Run 11/11/2015 2:39 PM

Green Valley Client: RSI Data: GREENVALLEY

INTRA-WELL PREDICTION LIMITS
NEWER WELLS
QUARTERLY PARAMETERS

Prediction Limit

Green Valley Client: RSI Data: GREENVALLEY Printed 11/11/2015, 2:47 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Chemical Oxygen Demand [COD] (mg/L)	MW-28E	5.0	n/a	10/20/2015	5ND	No	19	n/a	n/a	100	n/a	n/a	0.004738	NP Intra (NDs) 1 of 2
Chemical Oxygen Demand [COD] (mg/L)	MW-28D	12	n/a	10/20/2015	5ND	No	19	n/a	n/a	89.47	n/a	n/a	0.004738	NP Intra (NDs) 1 of 2
Chemical Oxygen Demand [COD] (mg/L)	MW-28C	27	n/a	10/20/2015	5ND	No	19	n/a	n/a	73.68	n/a	n/a	0.004738	NP Intra (NDs) 1 of 2
Chloride (mg/L)	MW-28E	2.4	n/a	10/20/2015	1.6	No	19	8.769	2.198	0	None	x^3	0.000418	Param Intra 1 of 2
Chloride (mg/L)	**MW-28D**	**23**	**n/a**	**10/20/2015**	**28.5**	**Yes**	**19**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.004738**	**NP Intra (normality) 1 of 2**
Chloride (mg/L)	MW-28C	43	n/a	10/20/2015	20.3	No	19	2.507	0.4018	0	None	x^(1/3)	0.000418	Param Intra 1 of 2
Iron Total (mg/L)	MW-28E	2.3	n/a	10/20/2015	0.44	No	19	-1.962	1.111	5.263	None	ln(x)	0.000418	Param Intra 1 of 2
Iron Total (mg/L)	MW-28D	24	n/a	10/20/2015	20	No	19	n/a	n/a	0	n/a	n/a	0.004738	NP Intra (xform) 1 of 2
Iron Total (mg/L)	MW-28C	72	n/a	10/20/2015	15.8	No	19	n/a	n/a	0	n/a	n/a	0.004738	NP Intra (normality) 1 of 2
pH [Field] (su)	MW-28E	7.1	5.9	10/20/2015	6.42	No	16	1.866	0.03519	0	None	ln(x)	0.000209	Param Intra 1 of 2
pH [Field] (su)	MW-28D	6.8	4.2	10/20/2015	5.99	No	19	195.1	48.09	0	None	x^3	0.000209	Param Intra 1 of 2
pH [Field] (su)	MW-28C	6.6	3.6	10/20/2015	5.4	No	19	167.2	48.45	0	None	x^3	0.000209	Param Intra 1 of 2
Sodium Total (mg/L)	MW-28E	22	n/a	10/20/2015	10.8	No	19	247.1	96.1	0	None	x^2	0.000418	Param Intra 1 of 2
Sodium Total (mg/L)	MW-28D	39	n/a	10/20/2015	29.3	No	19	722.6	316.8	0	None	x^2	0.000418	Param Intra 1 of 2
Sodium Total (mg/L)	MW-28C	29	n/a	10/20/2015	17.1	No	19	16.86	4.952	0	None	No	0.000418	Param Intra 1 of 2
Specific Conductance [Field] (umhos/cm)	MW-28E	420	n/a	10/20/2015	292	No	18	5.799	0.09481	0	None	ln(x)	0.000418	Param Intra 1 of 2
Specific Conductance [Field] (umhos/cm)	MW-28D	810	n/a	10/20/2015	700	No	19	334002	126564	0	None	x^2	0.000418	Param Intra 1 of 2
Specific Conductance [Field] (umhos/cm)	MW-28C	850	n/a	10/20/2015	457	No	19	536.5	124.3	0	None	No	0.000418	Param Intra 1 of 2
Total Dissolved Solids [TDS] (mg/L)	MW-28E	240	n/a	10/20/2015	166	No	18	6646389	2842487	0	None	x^3	0.000418	Param Intra 1 of 2
Total Dissolved Solids [TDS] (mg/L)	**MW-28D**	**460**	**n/a**	**10/20/2015**	**475**	**Yes**	**19**	**3.7e15**	**2.4e15**	**0**	**None**	**x^6**	**0.000418**	**Param Intra 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	MW-28C	540	n/a	10/20/2015	302	No	19	360.5	71.53	0	None	No	0.000418	Param Intra 1 of 2
Total Organic Carbon [TOC] (mg/L)	MW-28E	1.7	n/a	10/20/2015	0.5ND	No	19	1.11	0.228	21.05	Kaplan-Meier	No	0.000418	Param Intra 1 of 2
Total Organic Carbon [TOC] (mg/L)	MW-28D	2.2	n/a	10/20/2015	1.3	No	19	0.4476	0.1376	0	None	ln(x)	0.000418	Param Intra 1 of 2
Total Organic Carbon [TOC] (mg/L)	MW-28C	2.9	n/a	10/20/2015	1.8	No	17	0.6108	0.1771	0	None	ln(x)	0.000418	Param Intra 1 of 2
Total Organic Halides (mg/L)	MW-28E	0.034	n/a	10/20/2015	0.005ND	No	19	n/a	n/a	73.68	n/a	n/a	0.004738	NP Intra (NDs) 1 of 2
Total Organic Halides (mg/L)	MW-28D	0.034	n/a	10/20/2015	0.005ND	No	19	n/a	n/a	36.84	n/a	n/a	0.004738	NP Intra (normality) 1 of 2
Total Organic Halides (mg/L)	MW-28C	0.061	n/a	10/20/2015	0.005ND	No	19	0.2636	0.05244	10.53	None	x^(1/3)	0.000418	Param Intra 1 of 2

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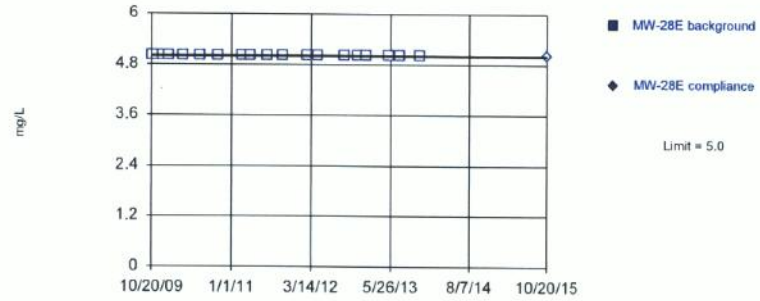
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 19 background values. 100% NDs. Well-constituent pair annual alpha = 0.01882. Individual comparison alpha = 0.004738 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated. Seasonality was not detected with 95% confidence.

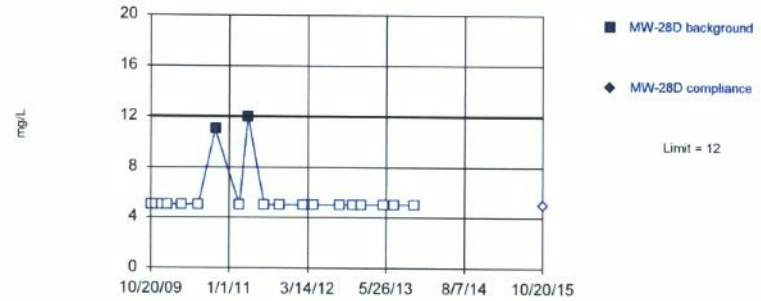
Constituent: Chemical Oxygen Demand [COD] Analysis Run 11/11/2015 2:46 PM
Green Valley Client: RSI Data: GREENVALLEY

Sanitas™ v.9.5.19 Sanitas software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 19 background values. 89.47% NDs. Well-constituent pair annual alpha = 0.01882. Individual comparison alpha = 0.004738 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated. Seasonality was not detected with 95% confidence.

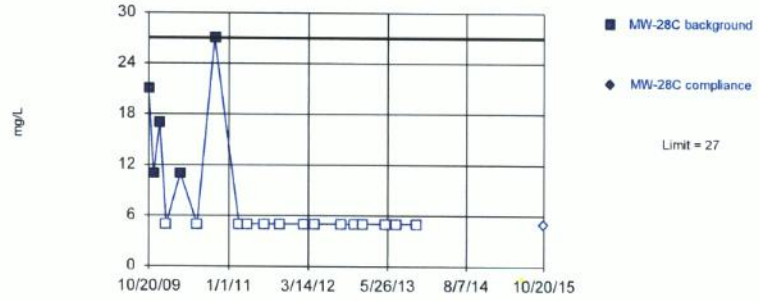
Constituent: Chemical Oxygen Demand [COD] Analysis Run 11/11/2015 2:47 PM
Green Valley Client: RSI Data: GREENVALLEY

Sanitas™ v.9.5.19 Sanitas software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 19 background values. 73.68% NDs. Well-constituent pair annual alpha = 0.01882. Individual comparison alpha = 0.004738 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated. Seasonality was not detected with 95% confidence.

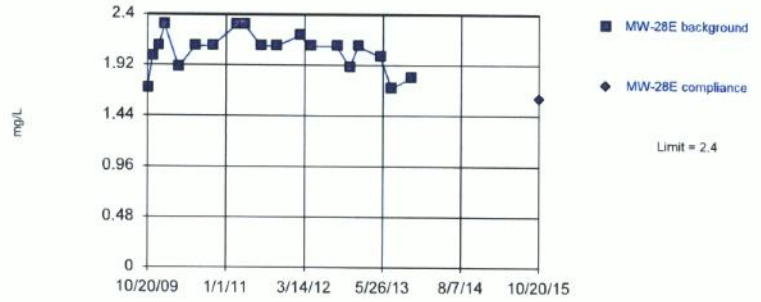
Constituent: Chemical Oxygen Demand [COD] Analysis Run 11/11/2015 2:47 PM
Green Valley Client: RSI Data: GREENVALLEY

Sanitas™ v.9.5.19 Sanitas software licensed to Jett Environmental Consulting, UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on cube transformation): Mean=8.769, Std. Dev.=2.198, n=19. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9124, critical = 0.901. Kappa = 2.498 (c=9, w=7, 1 of 2, event alpha = 0.026). Report alpha = 0.000418. After outlier removal distribution was non-normal, so outlier results were invalidated.

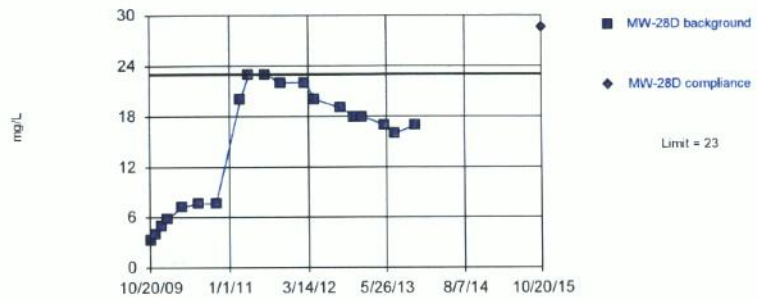
Constituent: Chloride Analysis Run 11/11/2015 2:47 PM
Green Valley Client: RSI Data: GREENVALLEY

Sanitas™ v.9.5.19 Sanitas software licensed to Jett Environmental Consulting, UG

Exceeds Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 19 background values. Well-constituent pair annual alpha = 0.01882. Individual comparison alpha = 0.004738 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated. Seasonality was not detected with 95% confidence.

Constituent: Chloride Analysis Run 11/11/2015 2:47 PM
Green Valley Client: RSI Data: GREENVALLEY

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Within Limit

Prediction Limit

Intrawell Parametric

Background Data Summary (based on cube root transformation): Mean=2.507, Std. Dev.=0.4018, n=19. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.979, critical = 0.901. Kappa = 2.498 (c=9, w=7, 1 of 2, event alpha = 0.026). Report alpha = 0.000418. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

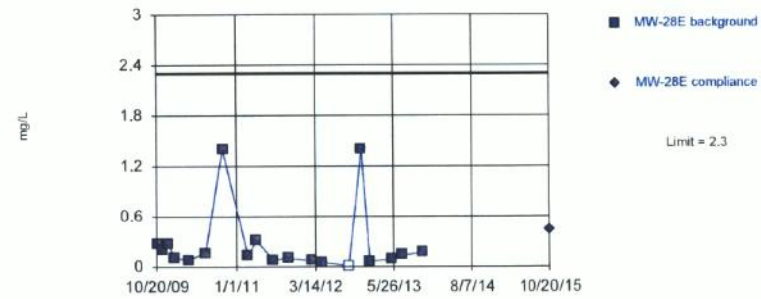
Constituent: Chloride Analysis Run 11/11/2015 2:47 PM
Green Valley Client: RSI Data: GREENVALLEY

Sanitas™ v.9.5.19 Sanitas software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on natural log transformation): Mean=-1.962, Std. Dev.=1.111, n=19, 5.263% NDs. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9173, critical = 0.901. Kappa = 2.498 (c=9, w=7, 1 of 2, event alpha = 0.026). Report alpha = 0.000418. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Iron Total Analysis Run 11/11/2015 2:47 PM
Green Valley Client: RSI Data: GREENVALLEY

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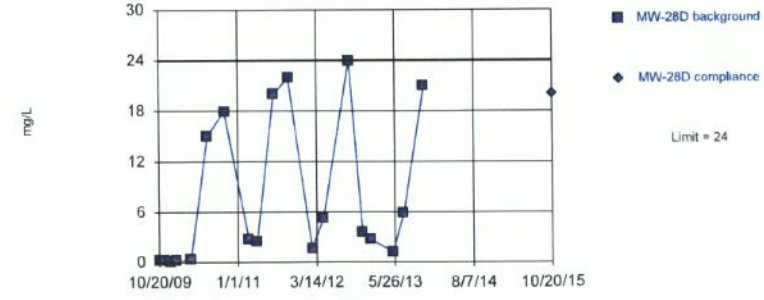
Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used after natural log transformation resulted in a parametric limit of 261, which exceeds 10 times the highest background value (user-adjustable cutoff). Limit is highest of 19 background values. Well-constituent pair annual alpha = 0.01882. Individual comparison alpha = 0.004738 (1 of 2). EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found. Seasonality was not detected with 95% confidence.

Constituent: Iron Total Analysis Run 11/11/2015 2:47 PM
Green Valley Client: RSI Data: GREENVALLEY

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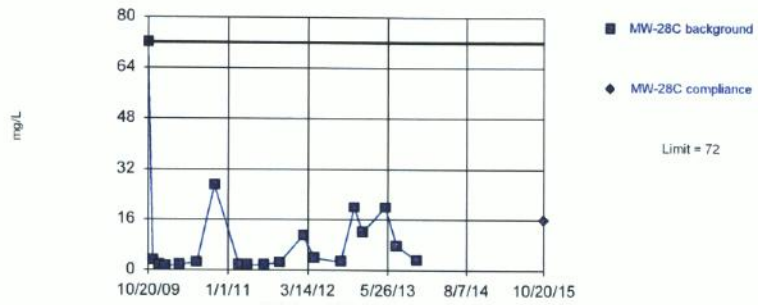
Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 19 background values. Well-constituent pair annual alpha = 0.01882. Individual comparison alpha = 0.004738 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated. Seasonality was not detected with 95% confidence.

Constituent: Iron Total Analysis Run 11/11/2015 2:47 PM
Green Valley Client: RSI Data: GREENVALLEY

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Within Limits

Prediction Limit

Intrawell Parametric

Background Data Summary (based on natural log transformation): Mean=1.866, Std. Dev.=0.03519, n=16. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9494, critical = 0.887. Kappa = 2.595 (c=9, w=7, 1 of 2, event alpha = 0.026). Report alpha = 0.000418. Dixon's outlier test was performed on the background data. Three background outliers were removed: 4.76 (4/19/2011); 5.29 (10/11/2011); 5.44 (5/15/2013).

Constituent: pH [Field] Analysis Run 11/11/2015 2:47 PM
Green Valley Client: RSI Data: GREENVALLEY

Sanitas™ v.9.5.19 Sanitas software licensed to Jett Environmental Consulting, UG

Within Limits

Prediction Limit

Intrawell Parametric

Background Data Summary (based on cube transformation): Mean=195.1, Std. Dev.=48.09, n=19. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.989, critical = 0.901. Kappa = 2.498 (c=9, w=7, 1 of 2, event alpha = 0.026). Report alpha = 0.000418. Dixon's outlier test was performed on the background data. No background outliers were found.

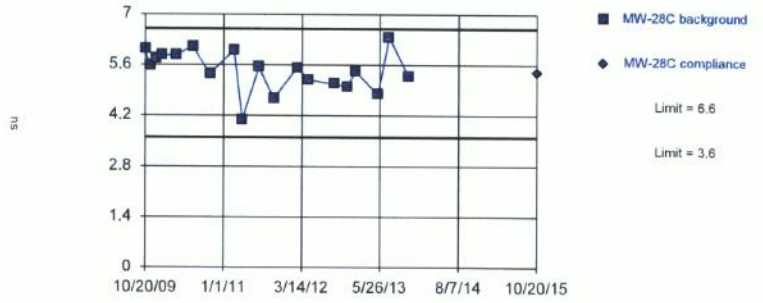
Constituent: pH [Field] Analysis Run 11/11/2015 2:47 PM
Green Valley Client: RSI Data: GREENVALLEY

Sanitas™ v.9.5.19 Sanitas software licensed to Jett Environmental Consulting, UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary (based on cube transformation): Mean=167.2, Std. Dev.=48.45, n=19. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9925, critical = 0.901. Kappa = 2.498 (c=9, w=7, 1 of 2, event alpha = 0.026). Report alpha = 0.000418. Dixon's outlier test was performed on the background data. No background outliers were found.

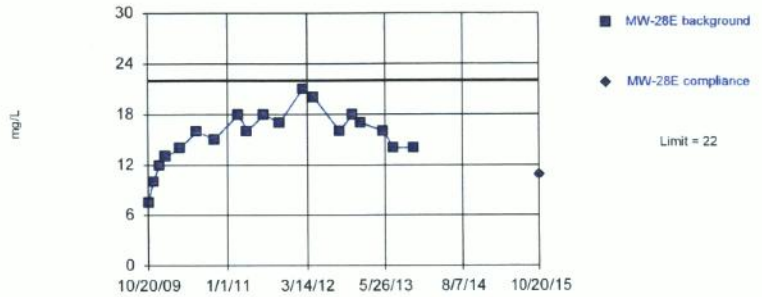
Constituent: pH [Field] Analysis Run 11/11/2015 2:47 PM
Green Valley Client: RSI Data: GREENVALLEY

Sanitas™ v.9.5.19 Sanitas software licensed to Jett Environmental Consulting, UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square transformation): Mean=247.1, Std. Dev.=96.1, n=19. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9822, critical = 0.901, Kappa = 2.498 (c=9, w=7, 1 of 2, event alpha = 0.026). Report alpha = 0.000418. Dixon's outlier test was performed on the background data. No background outliers were found.

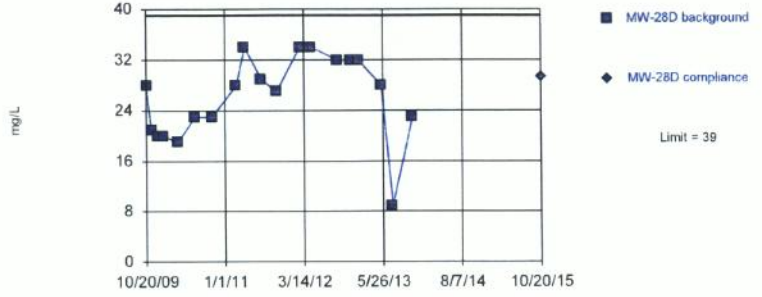
Constituent: Sodium Total Analysis Run 11/11/2015 2:47 PM
Green Valley Client: RSI Data: GREENVALLEY

Sanitas™ v.9.5.19 Sanitas software licensed to Jett Environmental Consulting, UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square transformation): Mean=722.6, Std. Dev.=316.8, n=19. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9382, critical = 0.901, Kappa = 2.498 (c=9, w=7, 1 of 2, event alpha = 0.026). Report alpha = 0.000418. Dixon's outlier test was performed on the background data. No background outliers were found.

Constituent: Sodium Total Analysis Run 11/11/2015 2:47 PM
Green Valley Client: RSI Data: GREENVALLEY

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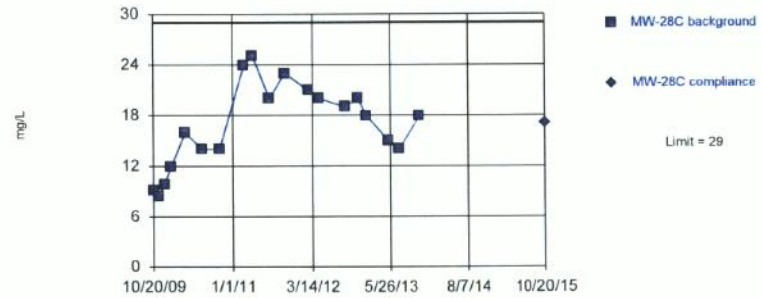
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=16.86, Std. Dev.=4.952, n=19. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9629, critical = 0.901. Kappa = 2.498 (c=9, w=7, 1 of 2, event alpha = 0.026). Report alpha = 0.000418. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

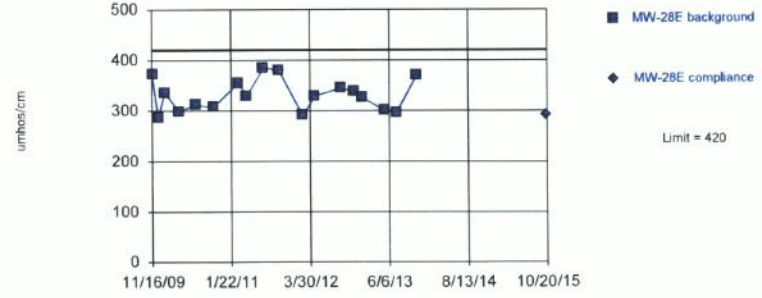
Constituent: Sodium Total Analysis Run 11/11/2015 2:47 PM
Green Valley Client: RSI Data: GREENVALLEY

Sanitas™ v.9.5.19 Sanitas software licensed to Jett Environmental Consulting, UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on natural log transformation): Mean=5.799, Std. Dev.=0.09481, n=18. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9463, critical = 0.897. Kappa = 2.531 (c=9, w=7, 1 of 2, event alpha = 0.026). Report alpha = 0.000418. Dixon's outlier test was performed on the background data. One background outlier was removed: 210 (10/20/2009).

Constituent: Specific Conductance [Field] Analysis Run 11/11/2015 2:47 PM
Green Valley Client: RSI Data: GREENVALLEY

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Within Limit

Prediction Limit

Intrawell Parametric

Background Data Summary (based on square transformation): Mean=334002, Std. Dev.=126564, n=19. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9603, critical = 0.901. Kappa = 2.498 (c=9, w=7, 1 of 2, event alpha = 0.026). Report alpha = 0.000418. Dixon's outlier test was performed on the background data. No background outliers were found.

Constituent: Specific Conductance [Field] Analysis Run 11/11/2015 2:47 PM
Green Valley Client: RSI Data: GREENVALLEY

Sanitas™ v.9.5.19 Sanitas software licensed to Jett Environmental Consulting, UG

Within Limit

Prediction Limit

Intrawell Parametric

Background Data Summary: Mean=536.5, Std. Dev.=124.3, n=19. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9702, critical = 0.901. Kappa = 2.498 (c=9, w=7, 1 of 2, event alpha = 0.026). Report alpha = 0.000418. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

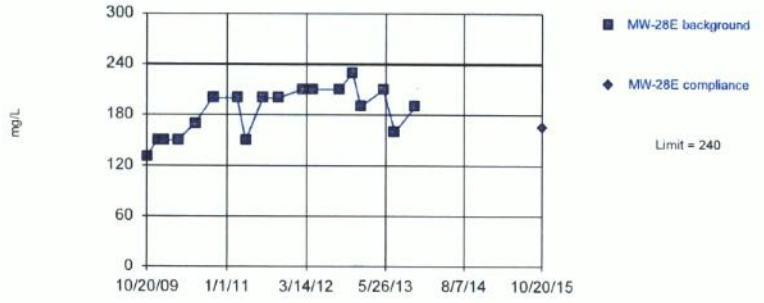
Constituent: Specific Conductance [Field] Analysis Run 11/11/2015 2:47 PM
Green Valley Client: RSI Data: GREENVALLEY

Sanitas™ v.9.5.19 Sanitas software licensed to Jett Environmental Consulting, UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on cube transformation): Mean=6646389, Std. Dev.=2842487, n=18. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.916, critical = 0.897. Kappa = 2.531 (c=9, w=7, 1 of 2, event alpha = 0.026). Report alpha = 0.000418. Dixon's outlier test was performed on the background data. One background outlier was removed: 910 (11/16/2009).

Constituent: Total Dissolved Solids [TDS] Analysis Run 11/11/2015 2:47 PM
Green Valley Client: RSI Data: GREENVALLEY

Sanitas™ v.9.5.19 Sanitas software licensed to Jett Environmental Consulting, UG

Exceeds Limit

Prediction Limit

Intrawell Parametric

Background Data Summary (based on x^6 transformation): Mean=3.7e15, Std. Dev.=2.4e15, n=19. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9093, critical = 0.901. Kappa = 2.498 (c=9, w=7, 1 of 2, event alpha = 0.026). Report alpha = 0.000418. After outlier removal distribution was non-normal, so outlier results were invalidated.

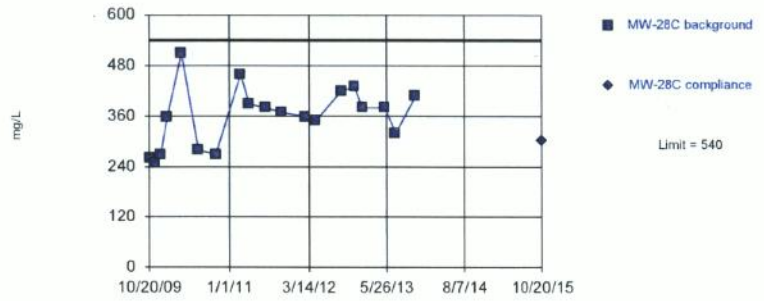
Constituent: Total Dissolved Solids [TDS] Analysis Run 11/11/2015 2:47 PM
Green Valley Client: RSI Data: GREENVALLEY

Sanitas™ v.9.5.19 Sanitas software licensed to Jett Environmental Consulting, UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=360.5, Std. Dev.=71.53, n=19. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9537, critical = 0.901. Kappa = 2.498 (c=9, w=7, 1 of 2, event alpha = 0.026). Report alpha = 0.000418. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Total Dissolved Solids [TDS] Analysis Run 11/11/2015 2:47 PM

Green Valley Client: RSI Data: GREENVALLEY

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Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric

Background Data Summary (after Kaplan-Meier Adjustment): Mean=1.11, Std. Dev.=0.228, n=19, 21.05% NDs. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9147, critical = 0.901. Kappa = 2.498 (c=9, w=7, 1 of 2, event alpha = 0.026). Report alpha = 0.000418. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Total Organic Carbon [TOC] Analysis Run 11/11/2015 2:47 PM

Green Valley Client: RSI Data: GREENVALLEY

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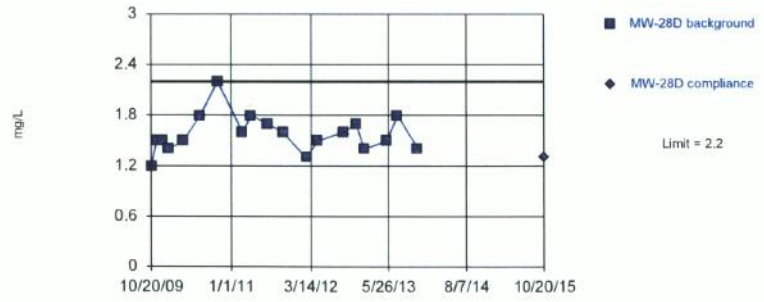
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on natural log transformation): Mean=0.4476, Std. Dev.=0.1376, n=19. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9607, critical = 0.901. Kappa = 2.498 (c=9, w=7, 1 of 2, event alpha = 0.026). Report alpha = 0.000418. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Total Organic Carbon [TOC] Analysis Run 11/11/2015 2:47 PM

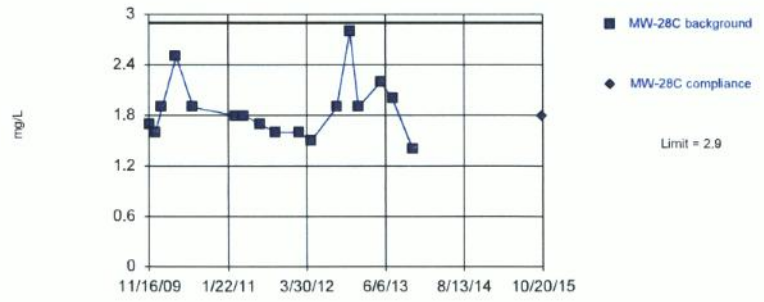
Green Valley Client: RSI Data: GREENVALLEY

Sanitas™ v.9.5.19 Sanitas software licensed to Jett Environmental Consulting, UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on natural log transformation): Mean=0.6108, Std. Dev.=0.1771, n=17. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9361, critical = 0.892. Kappa = 2.563 (c=9, w=7, 1 of 2, event alpha = 0.026). Report alpha = 0.000418. Dixon's outlier test was performed on the background data. Two background outliers were removed: 5.9 (10/20/2009); 7.5 (10/19/2010).

Constituent: Total Organic Carbon [TOC] Analysis Run 11/11/2015 2:47 PM

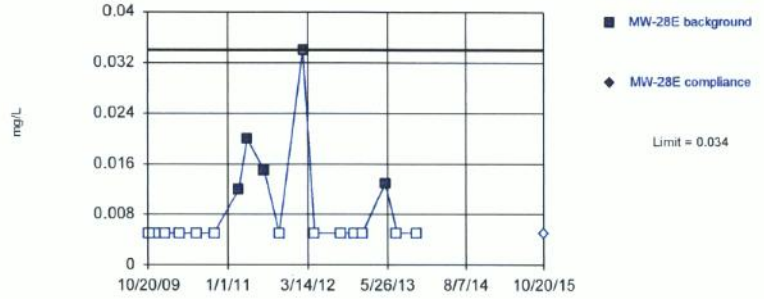
Green Valley Client: RSI Data: GREENVALLEY

Sanitas™ v.9.5.19 Sanitas software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 19 background values. 73.68% NDs. Well-constituent pair annual alpha = 0.01882. Individual comparison alpha = 0.004738 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated. Seasonality was not detected with 95% confidence.

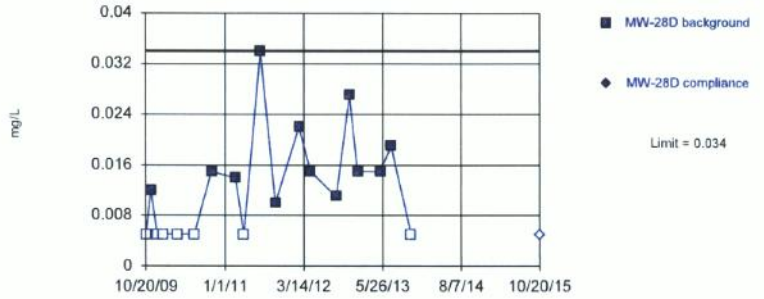
Constituent: Total Organic Halides Analysis Run 11/11/2015 2:47 PM
Green Valley Client: RSI Data: GREENVALLEY

Sanitas™ v.9.5.19 Sanitas software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 19 background values. 36.84% NDs. Well-constituent pair annual alpha = 0.01882. Individual comparison alpha = 0.004738 (1 of 2). After outlier removal distribution was non-normal, so outlier results were invalidated. Seasonality was not detected with 95% confidence.

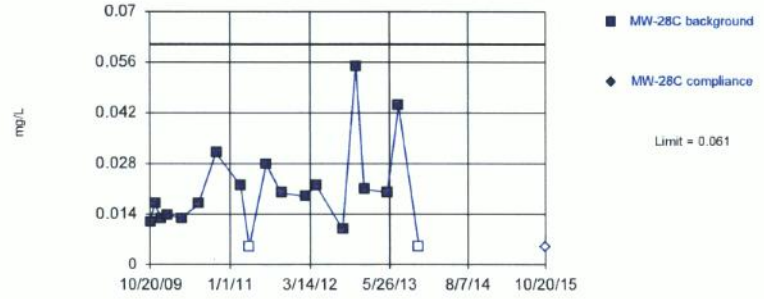
Constituent: Total Organic Halides Analysis Run 11/11/2015 2:47 PM
Green Valley Client: RSI Data: GREENVALLEY

Sanitas™ v.9.5.19 Sanitas software licensed to Jett Environmental Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on cube root transformation): Mean=0.2636, Std. Dev.=0.05244, n=19, 10.53% NDs. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9585, critical = 0.901. Kappa = 2.498 (c=9, w=7, 1 of 2, event alpha = 0.026). Report alpha = 0.000418. EPA 1989 outlier screening was performed on the background data (to establish suspected outliers for Dixon's/Rosner's). No background outliers were found.

Constituent: Total Organic Halides Analysis Run 11/11/2015 2:47 PM
Green Valley Client: RSI Data: GREENVALLEY

TIME SERIES PLOTS & DATA

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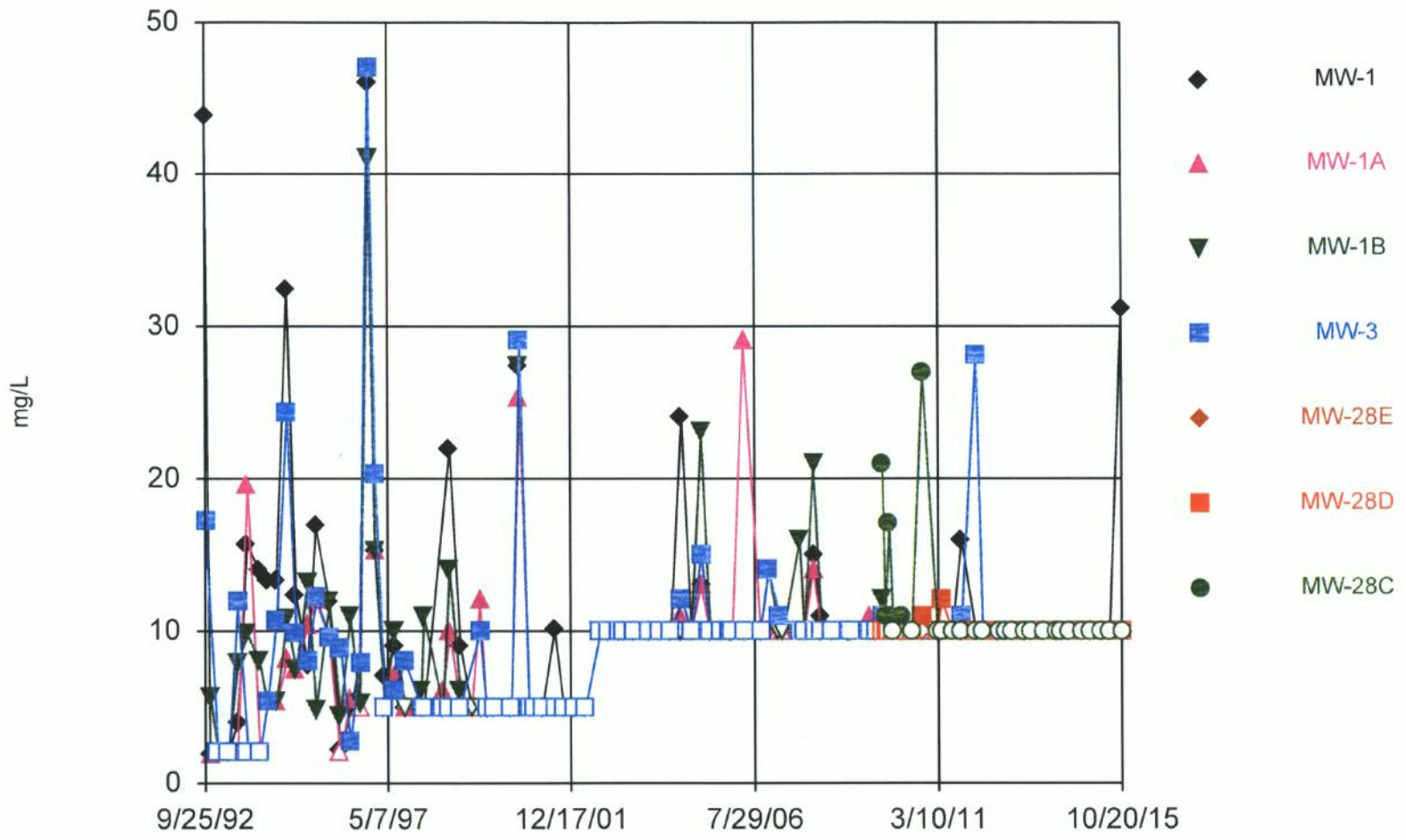
Hollow symbols indicate censored values.

Time Series



Constituent: Chemical Oxygen Demand [COD] Analysis Run 11/11/2015 3:32 PM

Green Valley Client: RSI Data: GREENVALLEY

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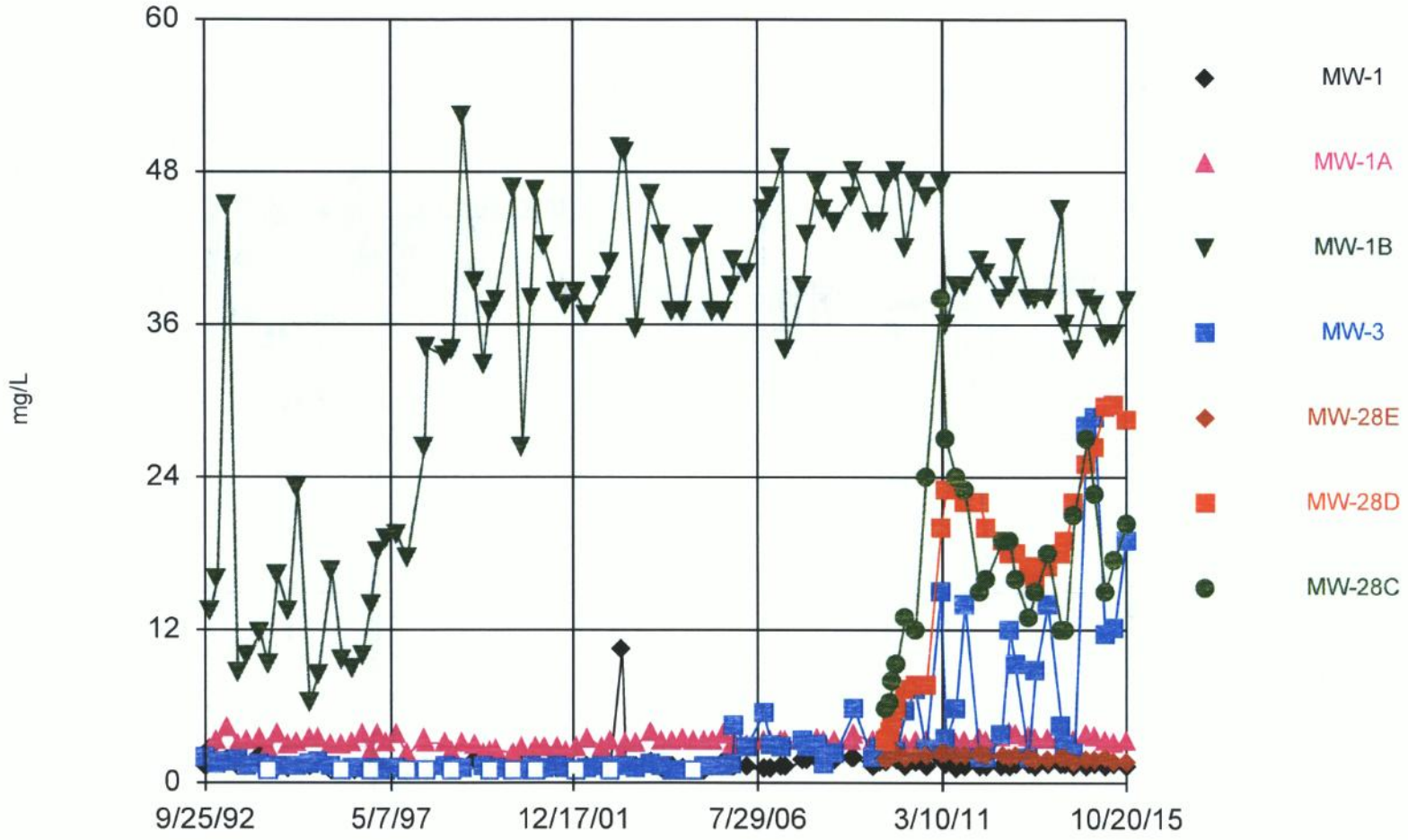
Hollow symbols indicate censored values.

Time Series



Constituent: Chloride Analysis Run 11/11/2015 3:32 PM

Green Valley Client: RSI Data: GREENVALLEY

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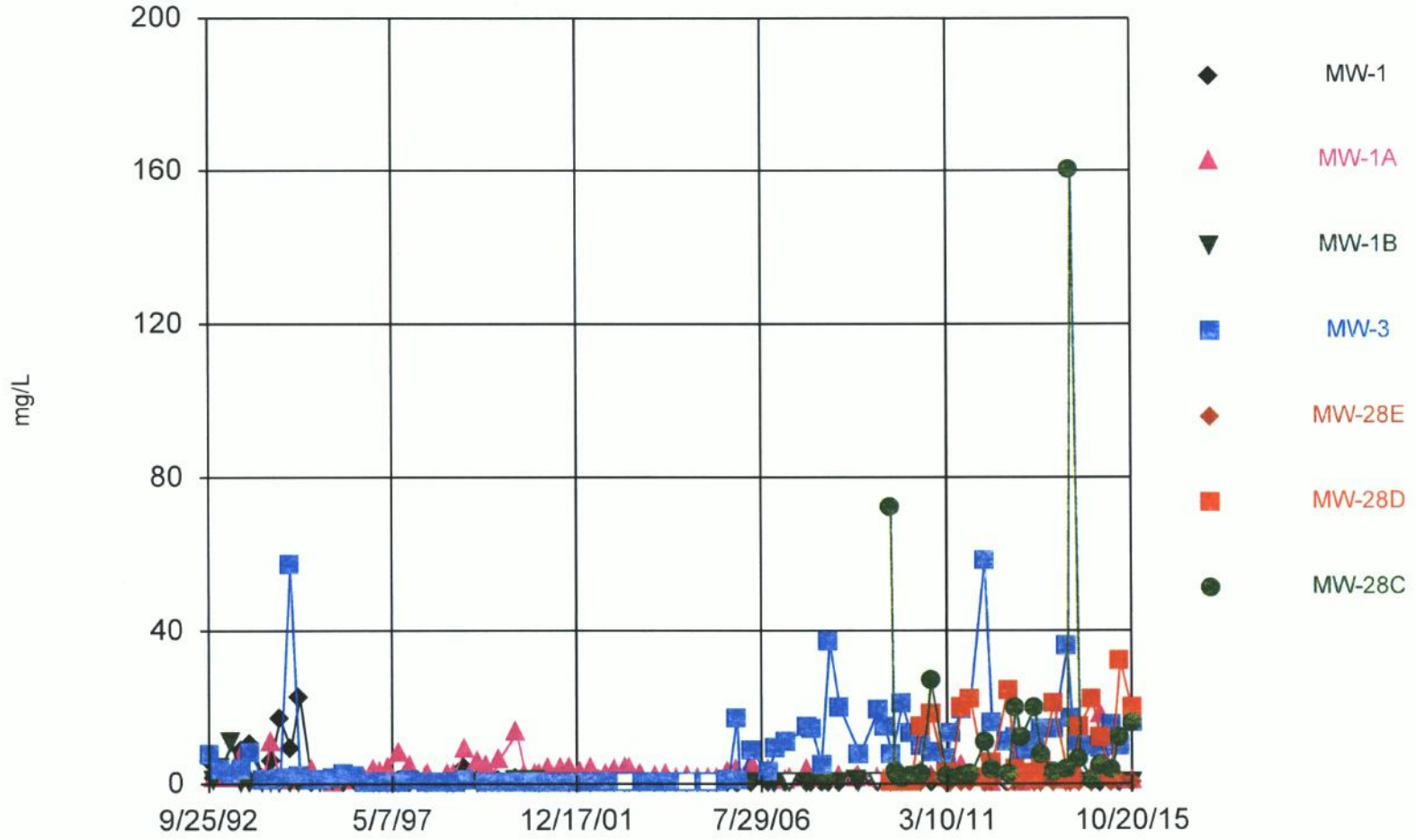
Hollow symbols indicate censored values.

Time Series

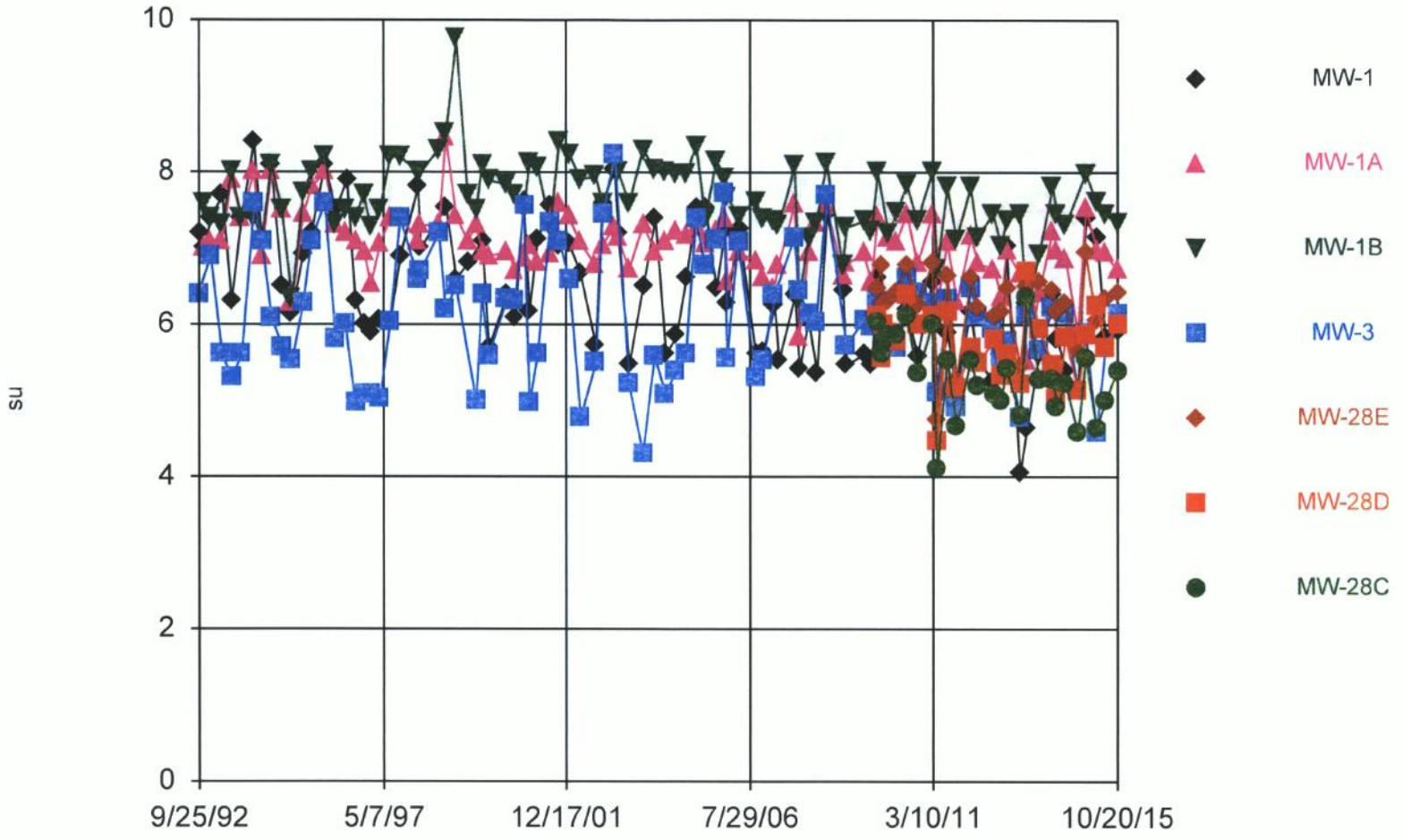


Constituent: Iron Total Analysis Run 11/11/2015 3:33 PM

Green Valley Client: RSI Data: GREENVALLEY

Sanitas™ v.9.5.19 Sanitas software licensed to Jett Environmental Consulting. UG

Time Series



Constituent: pH [Field] Analysis Run 11/11/2015 3:33 PM

Green Valley Client: RSI Data: GREENVALLEY

Sanitas™ v.9.5.19 Sanitas software licensed to Jett Environmental Consulting. UG

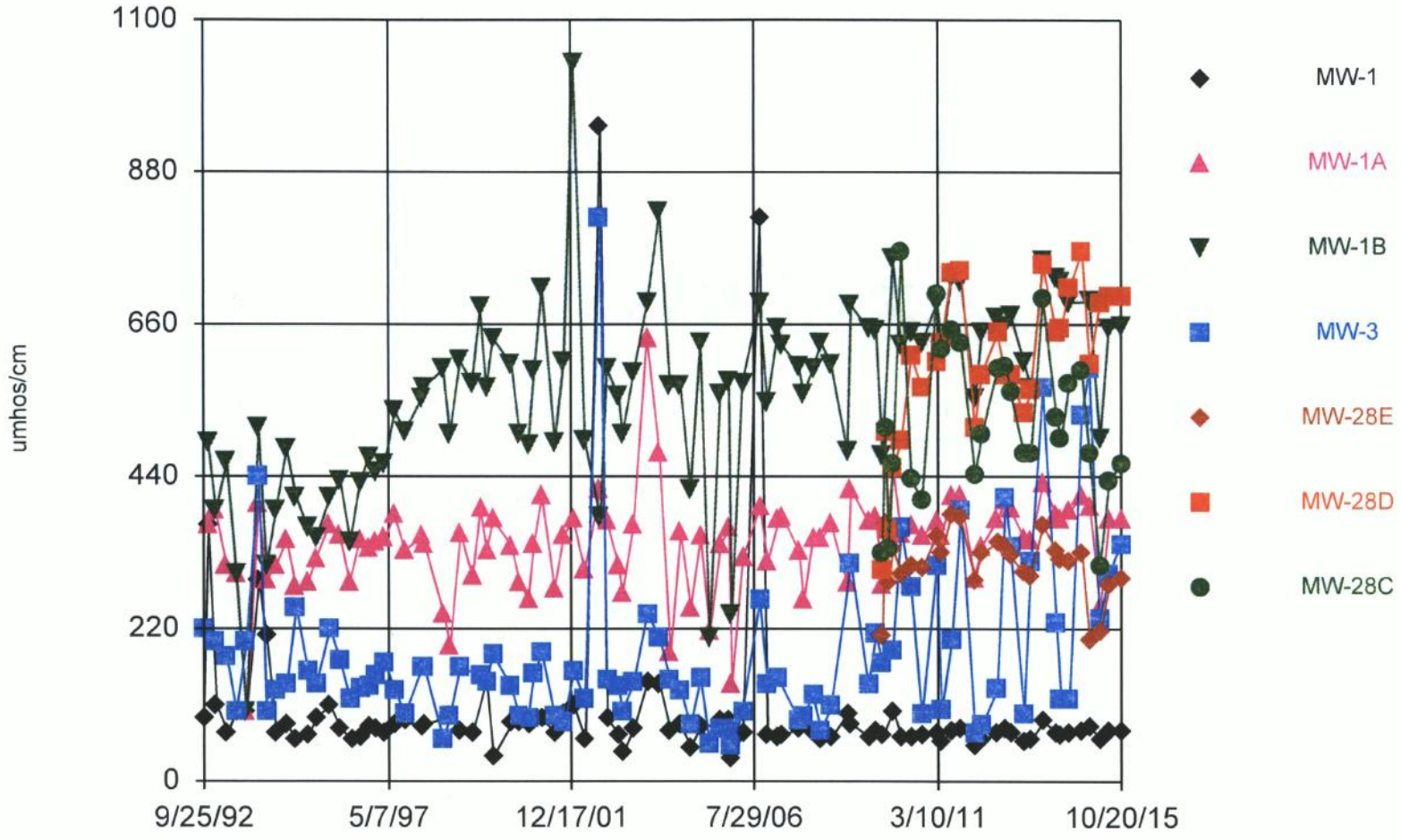
Time Series

Constituent: Sodium Total Analysis Run 11/11/2015 3:33 PM

Green Valley Client: RSI Data: GREENVALLEY

Sanitas™ v.9.5.19 Sanitas software licensed to Jett Environmental Consulting. UG

Time Series

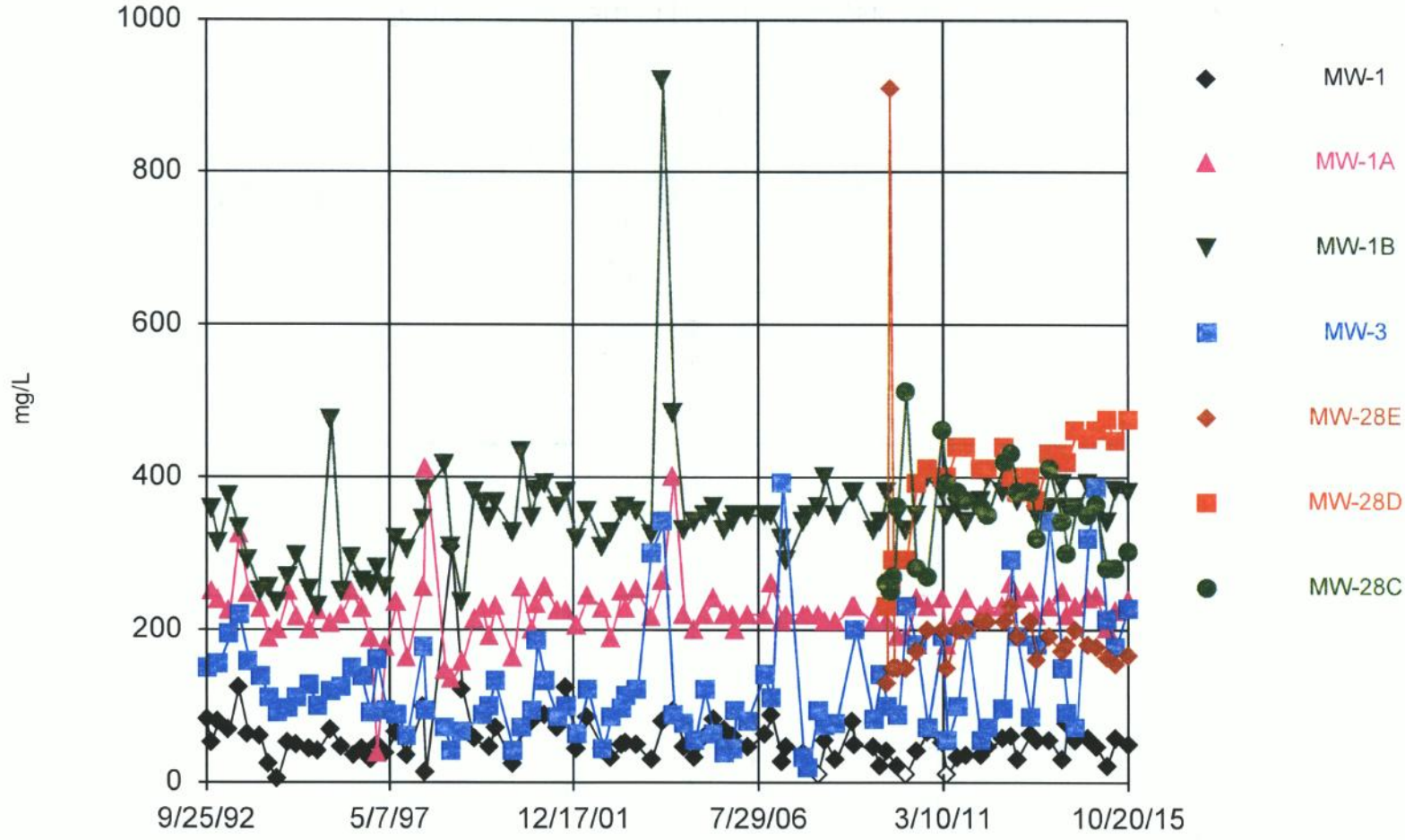


Constituent: Specific Conductance [Field] Analysis Run 11/11/2015 3:33 PM

Green Valley Client: RSI Data: GREENVALLEY

Sanitas™ v.9.5.19 Sanitas software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Time Series

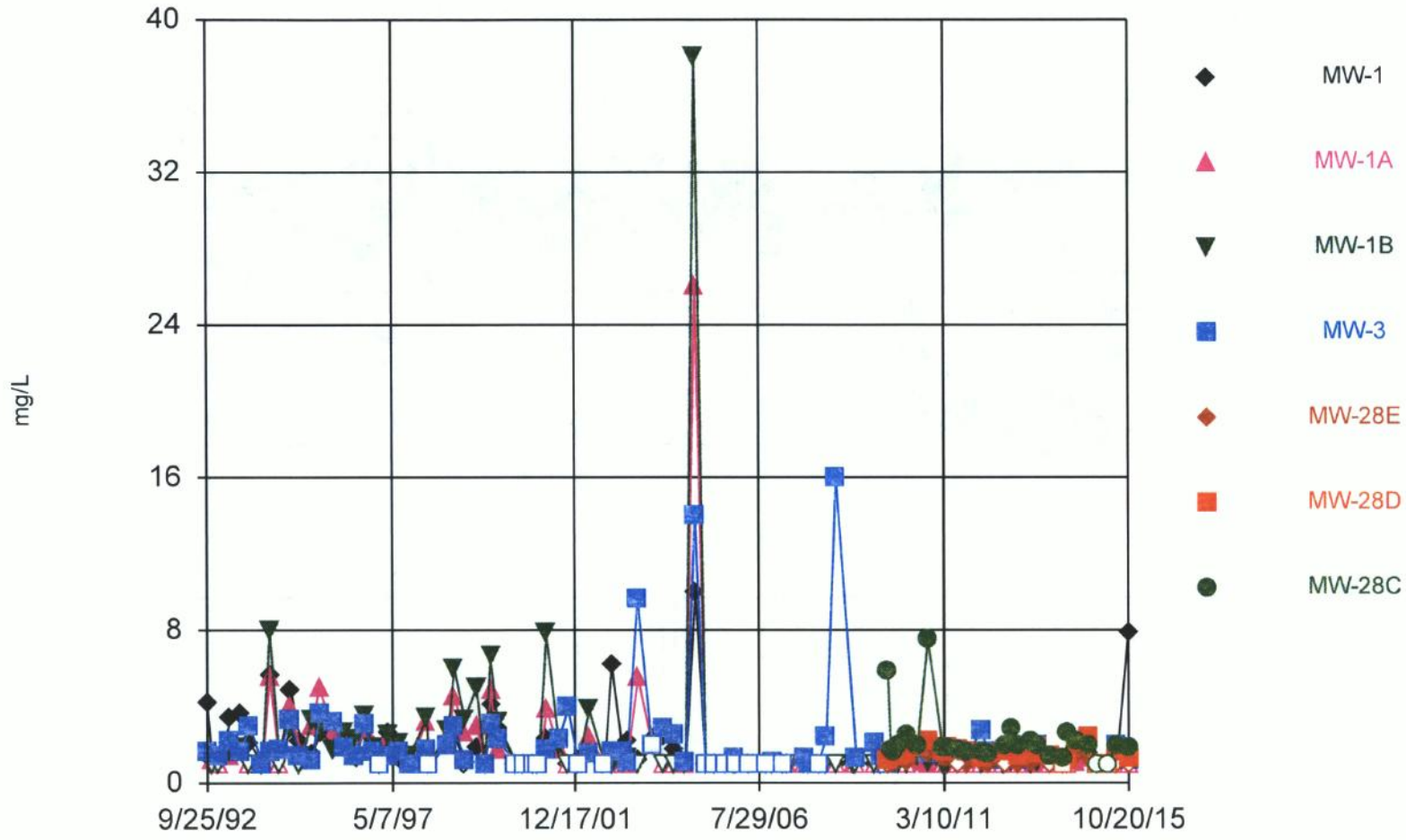


Constituent: Total Dissolved Solids [TDS] Analysis Run 11/11/2015 3:33 PM

Green Valley Client: RSI Data: GREENVALLEY

Sanitas™ v.9.5.19 Sanitas software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Time Series

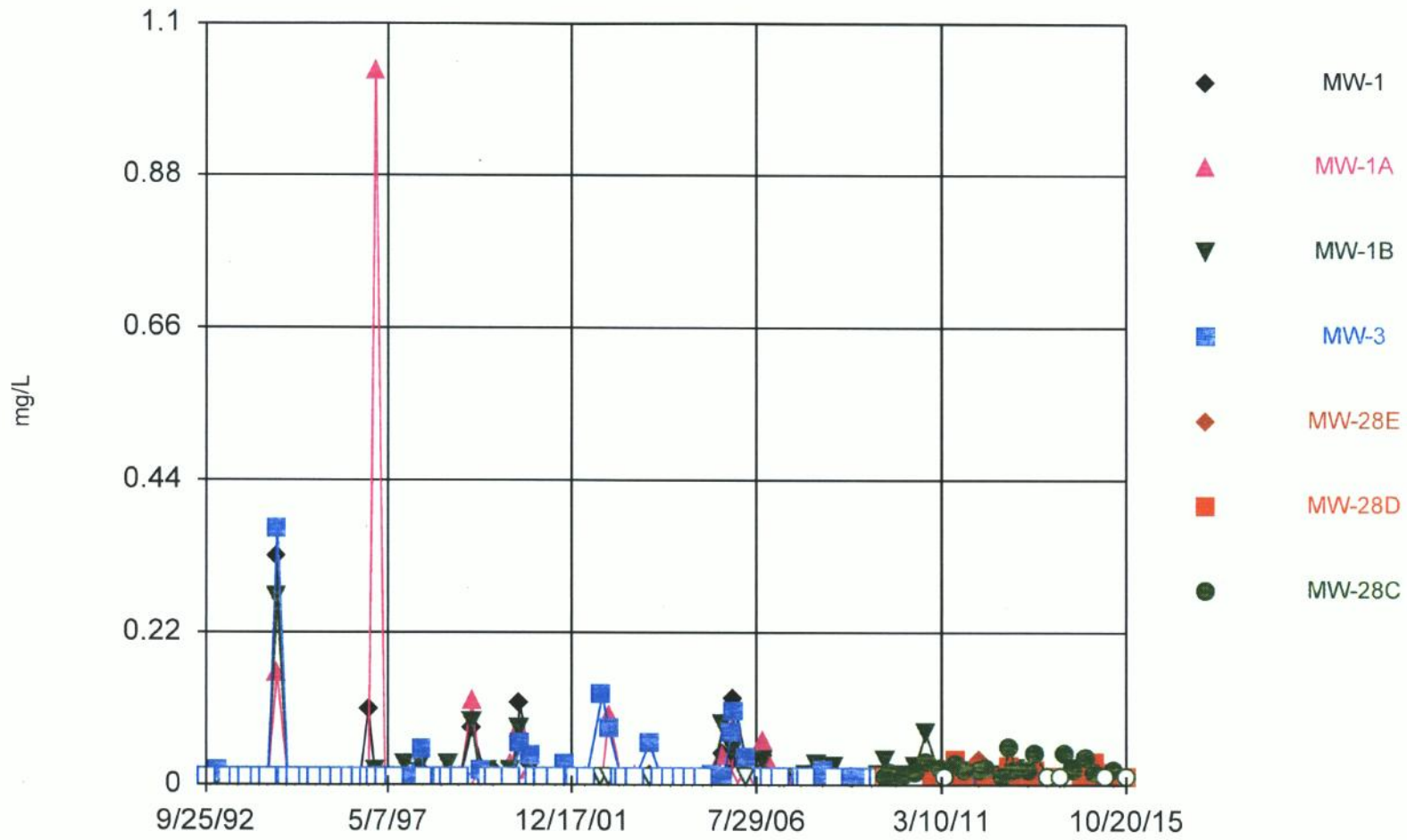


Constituent: Total Organic Carbon [TOC] Analysis Run 11/11/2015 3:33 PM

Green Valley Client: RSI Data: GREENVALLEY

Sanitas™ v.9.5.19 Sanitas software licensed to Jett Environmental Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Total Organic Halides Analysis Run 11/11/2015 3:33 PM

Green Valley Client: RSI Data: GREENVALLEY

Time Series

Constituent: Chemical Oxygen Demand [COD] (mg/L) Analysis Run 11/11/2015 3:35 PM

Green Valley Client: RSI Data: GREENVALLEY

	MW-1	MW-1A	MW-1B	MW-3	MW-28E	MW-28D	MW-28C
9/25/1992	43.8			17.2			
11/9/1992	1.9	1.9	5.71				
1/18/1993		<2		<2			
1/19/1993	<2		<2				
4/26/1993	<2	<2	<2	<2			
7/19/1993	3.92	<2	7.84				
7/20/1993				11.9			
10/19/1993	15.7	19.6	9.8				
10/20/1993				<2			
2/8/1994	14	<2	8				
2/9/1994				<2			
4/18/1994	13.3	5.33	5.33				
4/20/1994				5.33			
7/13/1994				10.7			
7/14/1994	13.3	5.33	5.33				
10/18/1994				24.3			
10/19/1994	32.4	8.11	10.8				
1/11/1995	12.3	7.41	7.41	9.88			
4/25/1995				8			
4/26/1995	7.79	10.4	13.2				
7/10/1995				12.2			
7/11/1995	16.9	12	4.82				
11/14/1995	11.9	9.52		9.52			
11/15/1995			11.9				
2/19/1996				8.89			
2/20/1996	2.22	<2	4.44				
5/21/1996		5.48		2.74			
5/22/1996			11				
6/5/1996	5.13						
8/19/1996	7.89	<5	5.26	7.89			
11/5/1996	46	47	41	47			
1/7/1997	15.2	15.2	15.2	20.3			
4/8/1997	7	<5	<5	<5			
7/8/1997	9	7	10	6			
10/9/1997	<5	5	<5	8			
3/19/1998	<5	<5	6	<5			
4/14/1998	5	<5	11	<5			
9/30/1998		6	<5	<5			
12/1/1998	22	10	14	<5			
3/9/1999	9	<5	6	<5			
6/22/1999	5	<5	<5				
9/7/1999		12	<5	10			
11/2/1999	<5	<5	<5	<5			
1/5/2000	<5	<5	<5	<5			
6/19/2000				<5			
6/20/2000	<5	<5	<5				
9/6/2000	27.3	25.3	27.4	29			
11/28/2000	<5	<5	<5	<5			
1/22/2001	<5	<5	<5	<5			
4/2/2001	<5	<5	<5	<5			
7/26/2001	10.1	<5	<5	<5			
10/18/2001	<5	<5	<5				

Time Series

Constituent: Chemical Oxygen Demand [COD] (mg/L) Analysis Run 11/11/2015 3:35 PM

Green Valley Client: RSI Data: GREENVALLEY

	MW-1	MW-1A	MW-1B	MW-3	MW-28E	MW-28D	MW-28C
10/19/2001				<5			
1/14/2002	<5	<5	<5				
1/15/2002				<5			
4/29/2002	<5	<5	<5				
4/30/2002				<5			
9/18/2002	<10	<10	<10	<10			
11/19/2002	<10	<10	<10	<10			
3/10/2003	<10	<10	<10	<10			
4/10/2003	<10	<10	<10	<10			
7/22/2003	<10	<10	<10	<10			
11/25/2003	<10	<10	<10				
11/26/2003				<10			
3/16/2004				<10			
3/17/2004	<10	<10	<10				
6/23/2004	<10	<10	<10	<10			
9/29/2004	24	11	<10	12			
12/27/2004	<10	<10	<10	<10			
3/30/2005	13	13	23	15			
6/20/2005	<10	<10	<10	<10			
9/27/2005	<10	<10	<10	<10			
12/16/2005	<10	<10	<10	<10			
1/9/2006	<10	<10	<10	<10			
4/19/2006	<10	29	<10	<10			
9/24/2006	<10	<10	<10	<10			
12/5/2006	14	<10	14	14			
3/14/2007				11			
3/16/2007	<10	<10	<10				
4/23/2007	<10	<10	<10				
9/19/2007	<10	<10	16	<10			
10/30/2007	<10	<10	<10	<10			
1/23/2008	15	14	21	<10			
4/7/2008	11	<10	<10				
4/8/2008				<10			
7/9/2008	<10	<10	<10	<10			
12/2/2008	<10	<10	<10				
1/7/2009	<10	<10	<10	<10			
6/15/2009	<10	11	<10	<10			
8/26/2009	10	10	<10	<10			
10/20/2009	<10	<10	12	11	<10	<10	21
11/16/2009					<10	<10	11
12/21/2009					<10	<10	17
1/25/2010	<10	<10	<10	<10	<10	<10	<10
4/13/2010	<10	<10	<10	<10	<10	<10	11
7/14/2010				<10	<10	<10	<10
7/15/2010	<10	<10	10				
10/19/2010	<10	<10	<10	<10	<10	11	27
3/3/2011	<10	<10	<10	<10	<10	<10	<10
4/19/2011	<10	<10	<10	<10	<10	12	<10
7/20/2011	<10	<10	<10	<10	<10	<10	<10
10/11/2011				11	<10	<10	<10
10/12/2011	16	<10	<10				
2/20/2012	<10	<10	<10	28	<10	<10	<10

Time Series

Constituent: Chemical Oxygen Demand [COD] (mg/L) Analysis Run 11/11/2015 3:35 PM

Green Valley Client: RSI Data: GREENVALLEY

	MW-1	MW-1A	MW-1B	MW-3	MW-28E	MW-28D	MW-28C
4/23/2012	<10	<10	<10	<10	<10	<10	<10
9/10/2012	<10	<10	<10	<10			
9/14/2012					<10	<10	<10
11/26/2012	<10	<10	<10	<10	<10	<10	<10
1/10/2013				<10	<10	<10	<10
1/11/2013	<10	<10	<10				
5/15/2013	<10	<10	<10	<10	<10	<10	<10
7/17/2013	<10	<10	<10	<10	<10	<10	<10
11/6/2013	<10	<10	<10	<10	<10	<10	<10
3/12/2014	<10	<10	<10	<10	<10	<10	<10
4/21/2014	<10	<10	<10	<10	<10	<10	<10
7/8/2014	<10	<10	<10	<10	<10	<10	<10
10/29/2014	<10	<10	<10	<10	<10	<10	<10
1/7/2015	<10	<10	<10	<10	<10	<10	<10
4/13/2015				<10	<10	<10	<10
4/14/2015	<10	<10	<10				
7/2/2015	<10	<10	<10				
7/7/2015				<10	<10	<10	<10
10/20/2015	31.1	<10	<10	<10	<10	<10	<10

Time Series

Constituent: Chloride (mg/L) Analysis Run 11/11/2015 3:35 PM

Green Valley Client: RSI Data: GREENVALLEY

	MW-1	MW-1A	MW-1B	MW-3	MW-28E	MW-28D	MW-28C
9/25/1992	1.29			1.98			
11/9/1992	2.61	2.61	13.4				
1/18/1993		3.2		1.47			
1/19/1993	1.39		15.9				
4/26/1993	1.71	4.34	45.3	1.53			
7/19/1993	1.32	2.89	8.65				
7/20/1993				1.81			
10/19/1993	1.31	3.18	9.91				
10/20/1993				1.3			
2/8/1994	2.14	3.44	11.8				
2/9/1994				1.45			
4/18/1994	1.13	2.51	9.25				
4/20/1994				<1			
7/13/1994				1.22			
7/14/1994	1.01	3.83	16.3				
10/18/1994				1.3			
10/19/1994	1.08	2.88	13.4				
1/11/1995	1.17	3.09	23.2	1.3			
4/25/1995				1.5			
4/26/1995	1.18	3.36	6.23				
7/10/1995				1.59			
7/11/1995	1.59	3.36	8.51				
11/14/1995	<1	2.94		1.18			
11/15/1995			16.7				
2/19/1996				<1			
2/20/1996	<1	2.99	9.61				
5/21/1996		3.13		1.02			
5/22/1996			9.02				
6/5/1996	<1						
8/19/1996	1.1	3.79	9.98	1.04			
11/5/1996	<1	2.36	13.9	<1			
1/7/1997	1	3.7	18.1	1.1			
4/8/1997	<1	3.1	19.2	1			
7/8/1997	1.1	3.7	19.5	1.1			
10/9/1997	<1	2.2	17.6	<1			
3/19/1998	<1	3.4	26.4	<1			
4/14/1998	<1	3.1	34.2	<1			
9/30/1998		3.1	33.5	1.2			
12/1/1998	1.2	2.49	34	<1			
3/9/1999	1.1	3.1	52.4	1.1			
6/22/1999	1.7	3	39.4				
9/7/1999		2.2	32.8	1.2			
11/2/1999	1.1	2.5	37.1	<1			
1/5/2000	<1	2.6	37.9	1.1			
6/19/2000				<1			
6/20/2000	1.1	2.3	46.7				
9/6/2000	1.2	2.7	26.4	1			
11/28/2000	1.1	2.3	38.1	1.2			
1/22/2001	1.4	2.8	46.5	<1			
4/2/2001	<1	2.8	42.2	1.1			
7/26/2001	1.1	2.8	38.6	1.2			
10/18/2001	1.1	2.5	37.6				

Time Series

Constituent: Chloride (mg/L) Analysis Run 11/11/2015 3:35 PM

Green Valley Client: RSI Data: GREENVALLEY

	MW-1	MW-1A	MW-1B	MW-3	MW-28E	MW-28D	MW-28C
10/19/2001				1.1			
1/14/2002	1	2.8	38.5				
1/15/2002				<1			
4/29/2002	1.2	3.5	36.7				
4/30/2002				1.1			
9/18/2002	1.2	2.7	39	1.2			
11/19/2002	1.3	3.2	40.9	<1			
3/10/2003	10.5	2.16	49.9	1.27			
4/10/2003	1.36	3.17	49.6	1.28			
7/22/2003	1.29	3.09	35.7	1.03			
11/25/2003	1.55	3.85	46.2				
11/26/2003				1.5			
3/16/2004				1.2			
3/17/2004	1.1	3.3	43				
6/23/2004	1.2	3.3	37	0.96			
9/29/2004	1.1	3.5	37	1			
12/27/2004	<1	3.3	42	<1			
3/30/2005	1	3.3	43	1.2			
6/20/2005	1.2	3.2	37	1.3			
9/27/2005	1.6	3.7	37	1.2			
12/16/2005	1.5	3	39	1.5			
1/9/2006	1.2	3.2	41	4.5			
4/19/2006	1.2	2.9	40	2.7			
9/24/2006	1.1	3.3	45	5.5			
12/5/2006	1.1	3.2	46	2.9			
3/14/2007				2.7			
3/16/2007	1.2	3.3	49				
4/23/2007	1.2	3.2	34				
9/19/2007	1.7	3.2	39	3.2			
10/30/2007	1.7	3.2	43	2.8			
1/23/2008	1.8	3.4	47	2.9			
4/7/2008	1.6	3.3	45				
4/8/2008				1.4			
7/9/2008	1.7	3.2	44	2.3			
12/2/2008	2	3.3	46				
1/7/2009	2	3.8	48	5.7			
6/15/2009	1.3	3.2	44	1.9			
8/26/2009	1.6	3.4	44	2.7			
10/20/2009	1.6	3.6	47	2.9	1.7	3.3	5.8
11/16/2009					2	4	6.3
12/21/2009					2.1	5	7.9
1/25/2010	1.7	3.4	48	2.4	2.3	5.8	9.3
4/13/2010	1.2	3	42	5.6	1.9	7.2	13
7/14/2010				7.3	2.1	7.6	12
7/15/2010	1.6	3.3	47				
10/19/2010	1.3	3.2	46	2.6	2.1	7.6	24
3/3/2011	1.8	3.2	47	15	2.3	20	38
4/19/2011	1.4	3.4	36	3.4	2.3	23	27
7/20/2011	1.1	3.1	39	5.7	2.1	23	24
10/11/2011				14	2.1	22	23
10/12/2011	1.3	3.3	39				
2/20/2012	1.2	3.4	41	1.9	2.2	22	15

Time Series

Constituent: Chloride (mg/L) Analysis Run 11/11/2015 3:35 PM

Green Valley Client: RSI Data: GREENVALLEY

	MW-1	MW-1A	MW-1B	MW-3	MW-28E	MW-28D	MW-28C
4/23/2012	1.2	3.3	40	1.9	2.1	20	16
9/10/2012	1.3	3.6	38	3.7			
9/14/2012					2.1	19	19
11/26/2012	1.3	3.9	39	12	1.9	18	19
1/10/2013				9.2	2.1	18	16
1/11/2013	1.5	3.8	42				
5/15/2013	1.4	3.6	38	2	2	17	13
7/17/2013	1.2	3.5	38	8.7	1.7	16	15
11/6/2013	1.4	3.5	38	14	1.8	17	18
3/12/2014	1.5	3.5	45	4.5	1.9	18	12
4/21/2014	1.4	3.4	36	2.9	1.9	19	12
7/8/2014	1.2	3.3	34	2.2	1.6	22	21
10/29/2014	1.3	3.7	38	28	1.7	25	27
1/7/2015	1.4	3.6	37.5	28.7	1.7	26.4	22.6
4/13/2015				11.6	1.9	29.5	14.9
4/14/2015	1.2	3.3	35				
7/2/2015	1.4	3.1	35.1				
7/7/2015				12.2	1.6	29.7	17.5
10/20/2015	1.2	3.3	37.9	18.9	1.6	28.5	20.3

Time Series

Constituent: Iron Total (mg/L) Analysis Run 11/11/2015 3:35 PM

Green Valley Client: RSI Data: GREENVALLEY

	MW-1	MW-1A	MW-1B	MW-3	MW-28E	MW-28D	MW-28C
9/25/1992	5.59			7.74			
11/9/1992	1.16	1.16	0.64				
1/18/1993		1.27		3.71			
1/19/1993	2.41		4.34				
4/26/1993	2.22	1.27	10.7	2.32			
7/19/1993	8.55	7.79	0.49				
7/20/1993				3.65			
10/19/1993	10.3	1.24	0.1				
10/20/1993				8.25			
2/8/1994	1.62	1.19	0.32				
2/9/1994				0.71			
4/18/1994	5.66	10.9	0.38				
4/20/1994				1.02			
7/13/1994				1.42			
7/14/1994	17.2	1.16	0.37				
10/18/1994				57.3			
10/19/1994	9.02	0.95	0.47				
1/11/1995	22.7	1.05	0.36	1.92			
4/25/1995				0.68			
4/26/1995	0.46	3.81	0.56				
7/10/1995				0.879			
7/11/1995	0.7	0.871	0.354				
11/14/1995	1.04	0.51		1.12			
11/15/1995			0.87				
2/19/1996				2.77			
2/20/1996	0.47	0.89	0.37				
5/21/1996		0.85		1.72			
5/22/1996			0.7				
6/5/1996	0.6						
8/19/1996	0.44	1.32	0.47	0.22			
11/5/1996	1.08	3.85	0.27	0.37			
1/7/1997	0.91	3.24	0.33	0.31			
4/8/1997	1.01	4.2	0.07	0.25			
7/8/1997	1.1	8.23	0.05	0.47			
10/9/1997	0.35	4.69	0.19	0.67			
3/19/1998	0.27	1.84	0.18	0.34			
4/14/1998	0.16	2.53	0.1	0.29			
9/30/1998		2.42	0.25	0.18			
12/1/1998	0.45	2.49	0.21	0.37			
3/9/1999	4.36	9.03	0.21	0.98			
6/22/1999	0.76	5.75	0.05				
9/7/1999		4.97	0.19	0.39			
11/2/1999	0.43	1.59	0.15	0.3			
1/5/2000	0.98	6.13	0.359	0.5			
6/19/2000				0.25			
6/20/2000	1.62	13.4	0.6				
9/6/2000	0.23	2.58	0.26	0.17			
11/28/2000	0.14	2.36	0.62	0.43			
1/22/2001	0.96	2.62	0.36	0.34			
4/2/2001	0.75	4.33	0.2	0.06			
7/26/2001	0.58	3.99	0.07	0.14			
10/18/2001	0.82	3.93	0.19				

Time Series

Constituent: Iron Total (mg/L) Analysis Run 11/11/2015 3:35 PM

Green Valley Client: RSI Data: GREENVALLEY

	MW-1	MW-1A	MW-1B	MW-3	MW-28E	MW-28D	MW-28C
10/19/2001				0.17			
1/14/2002	0.43	3.15	0.16				
1/15/2002				0.07			
4/29/2002	1.44	4.28	0.02				
4/30/2002				0.16			
9/18/2002	0.144	2.63	0.2	0.113			
11/19/2002	0.354	3.64	0.211	0.185			
3/10/2003	1.38	3.97	<0.02	<0.02			
4/10/2003	0.85	4.1	0.146	0.305			
7/22/2003	0.37	2.53	<0.02	0.164			
11/25/2003	0.41	1.82	0.386				
11/26/2003				0.109			
3/16/2004				0.28			
3/17/2004	0.08	2.4	0.23				
6/23/2004	0.65	1.4	0.059	0.17			
9/29/2004	0.36	2.1	0.28	<0.02			
12/27/2004	0.87	1.6	0.27	0.042			
3/30/2005	0.32	1.3	0.21	<0.02			
6/20/2005	0.12	1.3	0.027	0.26			
9/27/2005	0.11	3.2	0.29	1.1			
12/16/2005	0.22	3.6	0.36	17			
1/9/2006	0.46	2.4	0.26	1			
4/19/2006	0.5	5.5	0.02	8.6			
9/24/2006	0.15	3.4	0.36	3			
12/5/2006	0.23	0.97	0.34	9.1			
3/14/2007				11			
3/16/2007	0.18	0.95	0.046				
4/23/2007	0.56	1.6	<0.02				
9/19/2007	0.24	3.4	0.44	15			
10/30/2007	0.13	1.5	0.22	14			
1/23/2008	0.19	4.5	0.44	5			
4/7/2008	0.45	1.4	0.37				
4/8/2008				37			
7/9/2008	0.23	1.7	0.042	20			
12/2/2008	1.5	1.5	0.58				
1/7/2009	1	2	0.47	7.7			
6/15/2009	0.16	1.6	<0.02	19			
8/26/2009	0.33	1.1	0.26	15			
10/20/2009	0.15	1.1	0.29	7.4	0.27	0.26	72
11/16/2009					0.2	0.23	3
12/21/2009					0.27	0.08	1.8
1/25/2010	0.22	1.9	0.52	21	0.1	0.18	1.2
4/13/2010	0.16	0.78	0.028	13	0.082	0.35	1.8
7/14/2010				10	0.16	15	2.4
7/15/2010	0.32	3.1	0.13				
10/19/2010	0.14	1.8	0.5	8	1.4	18	27
3/3/2011	0.53	1.2	0.45	6.5	0.13	2.7	1.7
4/19/2011	0.21	2.3	0.036	13	0.31	2.4	1.5
7/20/2011	0.21	5	0.21	19	0.08	20	1.8
10/11/2011				22	0.1	22	2.4
10/12/2011	0.21	1.9	0.71				
2/20/2012	0.24	1.8	0.54	58	0.071	1.6	11

Time Series

Constituent: Iron Total (mg/L) Analysis Run 11/11/2015 3:35 PM

Green Valley Client: RSI Data: GREENVALLEY

	MW-1	MW-1A	MW-1B	MW-3	MW-28E	MW-28D	MW-28C
4/23/2012	0.38	0.46	0.23	16	0.054	5.2	3.8
9/10/2012	0.46	2.6	0.84	11			
9/14/2012					<0.02	24	2.7
11/26/2012	0.23	1.4	0.67	12	1.4	3.6	20
1/10/2013				8.6	0.064	2.7	12
1/11/2013	0.07	0.45	0.57				
5/15/2013	1.2	1.3	0.033	11	0.092	1.2	20
7/17/2013	0.32	1.4	0.035	14	0.14	6	7.6
11/6/2013	0.27	1.2	0.41	14	0.17	21	3
3/12/2014	0.68	0.68	0.41	36	0.031	2.4	3.5
4/21/2014	1.4	1	0.13	17	0.17	1.3	160
7/8/2014	0.13	1.9	0.028	11	0.09	15	6.2
10/29/2014	0.22	2	0.4	9.5	0.056	22	0.56
1/7/2015	0.55	18.1	0.44	9.3	2.2	11.8	4.8
4/13/2015				15.4	0.23	1.9	3.7
4/14/2015	0.18	1.6	0.051				
7/2/2015	0.15	1	0.074				
7/7/2015				9.9	0.79	32.2	12.1
10/20/2015	0.48	0.91	0.44	16.1	0.44	20	15.8

Time Series

Constituent: pH [Field] (su) Analysis Run 11/11/2015 3:35 PM

Green Valley Client: RSI Data: GREENVALLEY

	MW-1	MW-1A	MW-1B	MW-3	MW-28E	MW-28D	MW-28C
9/25/1992	7.2			6.4			
11/9/1992	7	7	7.6				
1/18/1993		7.1		6.9			
1/19/1993	7.4		7.4				
4/26/1993	7.7	7.1	7.3	5.6			
7/19/1993	6.3	7.9	8				
7/20/1993				5.3			
10/19/1993	7.4	7.4	7.4				
10/20/1993				5.6			
2/8/1994	8.4	8	7.4				
2/9/1994				7.6			
4/18/1994	7.1	6.9	7.1				
4/20/1994				7.1			
7/13/1994				6.1			
7/14/1994	8.1	8	8.1				
10/18/1994				5.7			
10/19/1994	6.5	7.5	7.5				
1/11/1995	6.155 (D)	6.275 (D)	6.335 (D)	5.52 (D)			
4/25/1995				6.28			
4/26/1995	6.93	7.45	7.73				
7/10/1995				7.1			
7/11/1995	7.2	7.8	8				
11/14/1995	8.1	8		7.6			
11/15/1995			8.2				
2/19/1996				5.8			
2/20/1996	7.5	7.3	7.3				
5/21/1996		7.2		6			
5/22/1996			7.5				
6/5/1996	7.9						
8/19/1996	6.32	7.09	7.4	4.96			
11/5/1996	5.99	6.96	7.71	5.09			
1/7/1997	5.9	6.52	7.28	5.07			
4/8/1997	6.05	7.07	7.5	5.03			
7/8/1997	6.03	7.4	8.2	6.03			
10/9/1997	6.9	7.4	8.2	7.4			
3/19/1998	7.8	7.1	8	6.6			
4/14/1998	7	7.3	8	6.7			
9/30/1998		7.3	8.3	7.2			
12/1/1998	7.54	8.45	8.5	6.2			
3/9/1999	6.6	7.42	9.75	6.5			
6/22/1999	6.8	7.1	7.7				
9/7/1999		7.3	7.5	5			
11/2/1999	7.1	6.95	8.1	6.39			
1/5/2000	5.69	6.9	7.89	5.58			
6/19/2000				6.35			
6/20/2000	6.39	6.95	7.84				
9/6/2000	6.08	6.71	7.7	6.32			
11/28/2000	7.61	6.87	7.51	7.56			
1/22/2001	6.18	7.03	8.11	4.96			
4/2/2001	7.12	6.8	8.06	5.61			
7/26/2001	7.57	6.91	7.29	7.35			
10/18/2001	7.03	7.6	8.4				

Time Series

Constituent: pH [Field] (su) Analysis Run 11/11/2015 3:35 PM

Green Valley Client: RSI Data: GREENVALLEY

	MW-1	MW-1A	MW-1B	MW-3	MW-28E	MW-28D	MW-28C
10/19/2001				7.1			
1/14/2002	7.07	7.41	8.24				
1/15/2002				6.58			
4/29/2002	6.67	7.08	7.91				
4/30/2002				4.77			
9/18/2002	5.73	6.77	7.94	5.49			
11/19/2002	7.6	7.04	7.59	7.44			
3/10/2003	8.04	7.29	8.1	8.24			
4/10/2003	7.2	7.14	8.01				
7/22/2003	5.47	6.72	7.6	5.22			
11/25/2003	6.5	7.3	8.3				
11/26/2003				4.3			
3/16/2004				5.58			
3/17/2004	7.39	6.96	8.03				
6/23/2004	5.61	7.08	8	5.09			
9/29/2004	5.85	7.24	7.99	5.4			
12/27/2004	6.62	7.18	7.98	5.6			
3/30/2005	7.54	7.29	8.35	7.39			
6/20/2005	7.53	7.07	7.4	6.78			
9/27/2005	6.47	7.22	8.16	7.11			
12/16/2005	7.24	7.4	7.93	7.74			
1/9/2006	6.27	6.57	7.68	5.56			
4/19/2006	7.26	6.94	7.43	7.1			
9/24/2006	5.6	6.85	7.63	5.3			
12/5/2006	5.64	6.62	7.39	5.52			
3/14/2007				6.38			
3/16/2007	6.24	6.49	7.38				
4/23/2007	5.53	6.78	7.3				
9/19/2007	6.38	7.58	8.08	7.15			
10/30/2007	5.42	5.84	6.34	6.44			
1/23/2008	6.05	6.96	7.15	6.15			
4/7/2008	5.37	7.35	7.35				
4/8/2008				6.02			
7/9/2008	7.46	7.57	8.13	7.71			
12/2/2008	6.46	6.65	6.77				
1/7/2009	5.47	6.8	7.28	5.73			
6/15/2009	5.61	6.94	7.36	6.07			
8/26/2009	5.46	6.55	7.22	5.98			
10/20/2009	6.61	7.43	8	6.31	6.49	6.11	6.04
11/16/2009					6.79	5.55	5.6
12/21/2009					6.29	5.99	5.78
1/25/2010	5.84	7.14	7.21	5.8	6.31	5.9	5.87
4/13/2010	5.72	7.1	7.47	5.71	6.43	5.77	5.87
7/14/2010				6.61	6.78	6.4	6.12
7/15/2010	6.21	7.46	7.84				
10/19/2010	5.58	6.8	7.36	6.41	6.24	6	5.35
3/3/2011	6.57	7.45	8.01	6.28	6.82	6.12	6.01
4/19/2011	5.15	6.28	6.74	5.12	4.76	4.46	4.1
7/20/2011	5.9	7.09	7.8	6.34	6.65	6.18	5.54
10/11/2011				4.91	5.29	5.16	4.67
10/12/2011	5.24	6.3	7.13				
2/20/2012	6.16	7.17	7.81	6.49	6.61	5.7	5.53

Time Series

Constituent: pH [Field] (su) Analysis Run 11/11/2015 3:35 PM

Green Valley Client: RSI Data: GREENVALLEY

	MW-1	MW-1A	MW-1B	MW-3	MW-28E	MW-28D	MW-28C
4/23/2012	5.55	6.81	7.15	6.11	6.22	5.5	5.19
9/10/2012	5.25	6.74	7.46	5.96			
9/14/2012					6.12	5.8	5.08
11/26/2012	5.61	6.37	7.03	5.57	6.16	5.33	5.01
1/10/2013				5.77	6.47	5.62	5.43
1/11/2013	7.02	6.98	7.38				
5/15/2013	4.04	6.66	7.46	4.77	5.44	5.22	4.8
7/17/2013	4.63	5.53	6.16	6.11	6.5	6.69	6.37
11/6/2013	5.6	6.43	6.92	5.68	6.57	5.94	5.28
3/12/2014	6.4	7.24	7.81	6.22	6.46	5.48	5.27
4/21/2014	5.8	6.97	7.44	6.2	6.18	5.02	4.92
7/8/2014	5.38	6.87	7.31	6.13	6.29	5.83	5.22
10/29/2014	5.16	5.88		5.15	5.66	5.14	4.57
1/7/2015	7.39	7.53	7.99	5.89	6.94	5.86	5.56
4/13/2015				4.59	6.07	6.25	4.65
4/14/2015	7.15	6.99	7.61				
7/2/2015	5.84	6.95	7.45				
7/7/2015				5.7	6.34	5.71	5
10/20/2015	5.91	6.73	7.35	6.15	6.42	5.99	5.4

Time Series

Constituent: Sodium Total (mg/L) Analysis Run 11/11/2015 3:35 PM

Green Valley Client: RSI Data: GREENVALLEY

	MW-1	MW-1A	MW-1B	MW-3	MW-28E	MW-28D	MW-28C
9/25/1992	3.6			3.44			
11/9/1992	26.4	26.4	144				
1/18/1993		21.2		3.06			
1/19/1993	1.96		95				
4/26/1993	131	365	595	336			
7/19/1993	4.43	26.2	42.8				
7/20/1993				3.19			
10/19/1993	1.53	21.4	52.5				
10/20/1993				4.38			
2/8/1994	1.19	22.1	45.6				
2/9/1994				2.03			
4/18/1994	2	25.9	53				
4/20/1994				2.55			
7/13/1994				4.62			
7/14/1994	2.85	23.9	51.2				
10/18/1994				2.8			
10/19/1994	2.06	21.6	45.9				
1/11/1995	1.83	21.1	92.5	1.91			
4/25/1995				1.95			
4/26/1995	1.16	20.2	34.7				
7/10/1995				2.51			
7/11/1995	1.63	19.5	92.5				
11/14/1995	1.34	22.8		2.29			
11/15/1995			94.5				
2/19/1996				1.58			
2/20/1996	1.1	19.3	42.8				
5/21/1996		22.5		2.5			
5/22/1996			44.5				
6/5/1996	3.49						
8/19/1996	1.43	15	54.4	2.25			
11/5/1996	1.52	16.2	76.2	2.28			
1/7/1997	1.95	26.2	85	1.92			
4/8/1997	1.1	15	67.5	1.95			
7/8/1997	0.93	21.3	73.8	1.03			
10/9/1997	1.91	21.3	87.5	2.91			
3/19/1998	1.15	13	72.5	1.5			
4/14/1998	1.32	20.6	102	2.25			
9/30/1998		9.75	76.3	1.28			
12/1/1998	2.48	16.4	98.1	2.28			
3/9/1999	1.4	18.1	130	2			
6/22/1999	1.3	15.7	97				
9/7/1999		18.8	110	2.39			
11/2/1999	3.13	18.3	110	2.27			
1/5/2000	2.95	21.7	115	2.63			
6/19/2000				3.98			
6/20/2000	4.03	21.4	116				
9/6/2000	3.93	21.9	112	3.66			
11/28/2000	4.46	22.1	120	3.71			
1/22/2001	4.25	23.3	138	3.18			
4/2/2001	3.01	21.1	128	2.78			
7/26/2001	2.76	18.4	103	2.91			
10/18/2001	2.68	19.4	117				

Time Series

Constituent: Sodium Total (mg/L) Analysis Run 11/11/2015 3:35 PM

Green Valley Client: RSI Data: GREENVALLEY

	MW-1	MW-1A	MW-1B	MW-3	MW-28E	MW-28D	MW-28C
10/19/2001				2.95			
1/14/2002	4.44	20.1	118				
1/15/2002				3.37			
4/29/2002	2.78	23.7	124				
4/30/2002				3.05			
9/18/2002	2.79	20.8	120	3.16			
11/19/2002	4.13	23.2	113	3.24			
3/10/2003	2.6	19.4	136	2.31			
4/10/2003	2.38	19.8	123	2.86			
7/22/2003	2.95	21.7	125	3.44			
11/25/2003	3	23	129				
11/26/2003				3.26			
3/16/2004				2.4			
3/17/2004	2	22	140				
6/23/2004	1.8	22	110	2.7			
9/29/2004	2.3	23	120	2.6			
12/27/2004	2	24	130	2.6			
3/30/2005	1.8	22	140	9.9			
6/20/2005	1.7	23	120	2.7			
9/27/2005	2.3	22	120	2.7			
12/16/2005	2.9	21	130	3.1			
1/9/2006	2.7	24	130	3.8			
4/19/2006	2	23	110	4.8			
9/24/2006	2.3	22	130	9			
12/5/2006	2.2	22	130	4.6			
3/14/2007				3.6			
3/16/2007	1.4	20	130				
4/23/2007	1.4	20	110				
9/19/2007	2.1	25	150	3			
10/30/2007	2.3	23	120	2.9			
1/23/2008	2.1	24	140	5.1			
4/7/2008	1.5	22	140				
4/8/2008				3			
7/9/2008	1.3	19	120	3.1			
12/2/2008	4.3	22	130				
1/7/2009	2.1	25	140	9			
6/15/2009	1.3	19	120	3.5			
8/26/2009	1.4	21	130	4.2			
10/20/2009	1.6	24	140	4.7	7.4	28	9.1
11/16/2009					10	21	8.4
12/21/2009					12	20	9.9
1/25/2010	1.6	22	140	3.7	13	20	12
4/13/2010	1.4	20	140	6	14	19	16
7/14/2010				5.5	16	23	14
7/15/2010	1.5	21	140				
10/19/2010	1.9	22	150	3.3	15	23	14
3/3/2011	1.6	22	150	9.8	18	28	24
4/19/2011	1.5	19	110	4.2	16	34	25
7/20/2011	1.4	20	140	5.3	18	29	20
10/11/2011				9.8	17	27	23
10/12/2011	1.5	21	130				
2/20/2012	1.6	22	150	3.6	21	34	21

Time Series

Constituent: Sodium Total (mg/L) Analysis Run 11/11/2015 3:35 PM

Green Valley Client: RSI Data: GREENVALLEY

	MW-1	MW-1A	MW-1B	MW-3	MW-28E	MW-28D	MW-28C
4/23/2012	1.7	21	150	3.4	20	34	20
9/10/2012	2	26	160	4.6			
9/14/2012					16	32	19
11/26/2012	2.5	27	150	10	18	32	20
1/10/2013				8.9	17	32	18
1/11/2013	2	24	150				
5/15/2013	1.5	25	150	3.2	16	28	15
7/17/2013	1.5	21	140	6.9	14	8.9	14
11/6/2013	1.8	20	140	11	14	23	18
3/12/2014	1.8	23	160	6.2	15	30	16
4/21/2014	1.8	22	160	3.9	14	33	14
7/8/2014	1.4	20	130	3.1	11	29	15
10/29/2014	1.7	23	120	15	11	30	18
1/7/2015	2.4	22.4	130	17.3	12	28.4	17.2
4/13/2015				9.2	11.2	29.1	13.3
4/14/2015	1.7	19.6	120				
7/2/2015	2	19.8	125				
7/7/2015				7.8	10.3	27.8	14.2
10/20/2015	2.2	21.7	133	11.6	10.8	29.3	17.1

Time Series

Constituent: Specific Conductance [Field] (umhos/cm) Analysis Run 11/11/2015 3:35 PM

Green Valley Client: RSI Data: GREENVALLEY

	MW-1	MW-1A	MW-1B	MW-3	MW-28E	MW-28D	MW-28C
9/25/1992	90			220			
11/9/1992	370	370	490				
1/18/1993		390		200			
1/19/1993	110		390				
4/26/1993	70	310	460	180			
7/19/1993	100	300	300				
7/20/1993				100			
10/19/1993	100	100	100				
10/20/1993				200			
2/8/1994	290	400	510				
2/9/1994				440			
4/18/1994	210	290	310				
4/20/1994				100			
7/13/1994				130			
7/14/1994	70	310	390				
10/18/1994				138			
10/19/1994	80	348	480				
1/11/1995	60	280	410	250			
4/25/1995				158			
4/26/1995	65	285	365				
7/10/1995				140			
7/11/1995	90	320	350				
11/14/1995	110	370		220			
11/15/1995			410				
2/19/1996				172			
2/20/1996	75	355	434				
5/21/1996		287		117			
5/22/1996			346				
6/5/1996	60.3						
8/19/1996	64.3	347	429	133			
11/5/1996	77	337	466	135			
1/7/1997	74	345	445	151			
4/8/1997	70	351	458	170			
7/8/1997	81	384	535	131			
10/9/1997	86	333	505	96			
3/19/1998	78	353	554	164			
4/14/1998	82	342	569	163			
9/30/1998		242	595	60			
12/1/1998	93	195	501	93			
3/9/1999	71	358	607	164			
6/22/1999	70	295	576				
9/7/1999		394	685	152			
11/2/1999	145	332	567	142			
1/5/2000	36	377	640	183			
6/19/2000				135			
6/20/2000	84	339	601				
9/6/2000	84	287	502	93			
11/28/2000	81	263	486	89			
1/22/2001	86	343	593	156			
4/2/2001	90	412	713	185			
7/26/2001	68	278	490	94			
10/18/2001	96.6	353.3	605				

Time Series

Constituent: Specific Conductance [Field] (umhos/cm) Analysis Run 11/11/2015 3:35 PM

Green Valley Client: RSI Data: GREENVALLEY

	MW-1	MW-1A	MW-1B	MW-3	MW-28E	MW-28D	MW-28C
10/19/2001				83.3			
1/14/2002	108	379	1038				
1/15/2002				158			
4/29/2002	60	305	492				
4/30/2002				118			
9/18/2002	945	421	380	815			
11/19/2002	90	375	596	146			
3/10/2003	65	311	555	136			
4/10/2003	40	270	500	100			
7/22/2003	76	369	589	142			
11/25/2003	143	640	690				
11/26/2003				242			
3/16/2004				208			
3/17/2004	140	474	823				
6/23/2004	73	186	570	145			
9/29/2004	80	360	570	130			
12/27/2004	49	250	421	80			
3/30/2005	78.7	353	633	148			
6/20/2005	52.1	215	208	54			
9/27/2005	87.1	341	560	75.7			
12/16/2005	88	366	577	74			
1/9/2006	33	140	239	52			
4/19/2006	69	322	576	101			
9/24/2006	814	397	691	262			
12/5/2006	66	318	547	138			
3/14/2007				148			
3/16/2007	63	377	655				
4/23/2007	67	382	629				
9/19/2007	75	331	598	87			
10/30/2007	88	261	560	94			
1/23/2008	70	352	595	125			
4/7/2008	61	351	634				
4/8/2008				72			
7/9/2008	63	371	602	108			
12/2/2008	98	286	476				
1/7/2009	82	422	688	315			
6/15/2009	64	374	653	138			
8/26/2009	71	381	650	212			
10/20/2009	65	282	471	171	210	306	329
11/16/2009					373	503	510
12/21/2009					287	364	337
1/25/2010	101	452	754	188	336	452	458
4/13/2010	63	358	629	365	300	491	764
7/14/2010				279	312	615	436
7/15/2010	64	370	649				
10/19/2010	65	355	633	95	308	568	406
3/3/2011	69	376	691	312	355	605	703
4/19/2011	58	355	619	102	329	634	624
7/20/2011	73	413	727	203	386	734	650
10/11/2011				392	380	737	632
10/12/2011	76	411	721				
2/20/2012	51	294	552	68	291	511	442

Time Series

Constituent: Specific Conductance [Field] (umhos/cm) Analysis Run 11/11/2015 3:35 PM

Green Valley Client: RSI Data: GREENVALLEY

	MW-1	MW-1A	MW-1B	MW-3	MW-28E	MW-28D	MW-28C
4/23/2012	59	339	649	80	329	588	501
9/10/2012	69	377	669	133			
9/14/2012					345	647	596
11/26/2012	75	405	658	409	338	587	599
1/10/2013				340	326	587	562
1/11/2013	68	394	674				
5/15/2013	56	352	606	98	301	532	473
7/17/2013	61	347	568	316	297	564	474
11/6/2013	86	431	753	567	370	745	698
3/12/2014	70	384	728	229	333	649	526
4/21/2014	67	378	721	117	319	653	494
7/8/2014	70	391	692	117	316	713	575
10/29/2014	72	412		528	329	766	594
1/7/2015	79	397	693	595	205	602	474
4/13/2015				233	217	691	310
4/14/2015	61	252	494				
7/2/2015	71	377	655				
7/7/2015				300	284	701	434
10/20/2015	72	378	658	343	292	700	457

Time Series

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 11/11/2015 3:35 PM

Green Valley Client: RSI Data: GREENVALLEY

	MW-1	MW-1A	MW-1B	MW-3	MW-28E	MW-28D	MW-28C
9/25/1992	82			149			
11/9/1992	52	248	359				
1/18/1993		239		155			
1/19/1993	80		313				
4/26/1993	69	223	374	193			
7/19/1993	124	325	333				
7/20/1993				218			
10/19/1993	64	247	292				
10/20/1993				158			
2/8/1994	60	228	248				
2/9/1994				138			
4/18/1994	24	188	256				
4/20/1994				110			
7/13/1994				90			
7/14/1994	4	200	234				
10/18/1994				96			
10/19/1994	52	248	270				
1/11/1995	48	216	296	110			
4/25/1995				126			
4/26/1995	42	198	251				
7/10/1995				98			
7/11/1995	40	224	229				
11/14/1995	68	208		117			
11/15/1995			476				
2/19/1996				125			
2/20/1996	46	220	248				
5/21/1996		250		150			
5/22/1996			294				
6/5/1996	34						
8/19/1996	42	226	264	137			
11/5/1996	30	188	258	90			
1/7/1997	48	38	280	160			
4/8/1997	38	176	254	94			
7/8/1997	66	234	318	88			
10/9/1997	34	162	306	60			
3/19/1998	98	256	344	178			
4/14/1998	12	412	382	94			
9/30/1998		147	416	70			
12/1/1998	308	134	307	39			
3/9/1999	122	158	236	66			
6/22/1999	56	214	379				
9/7/1999		226	367	88			
11/2/1999	45	190	348	98			
1/5/2000	71	230	365	132			
6/19/2000				40			
6/20/2000	24	164	328				
9/6/2000	68	256	432	72			
11/28/2000	80	200	348	92			
1/22/2001	88	232	384	184			
4/2/2001	88	256	392	132			
7/26/2001	72	224	360	84			
10/18/2001	124	224	380				

Time Series

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 11/11/2015 3:35 PM

Green Valley Client: RSI Data: GREENVALLEY

	MW-1	MW-1A	MW-1B	MW-3	MW-28E	MW-28D	MW-28C
10/19/2001				100			
1/14/2002	44	204	320				
1/15/2002				64			
4/29/2002	84	244	356				
4/30/2002				120			
9/18/2002	44	228	308	44			
11/19/2002	32	188	328	84			
3/10/2003	48	248	356	96			
4/10/2003	52	228	360	112			
7/22/2003	48	252	356	120			
11/25/2003	28	216	324				
11/26/2003				300			
3/16/2004				340			
3/17/2004	80	264	920				
6/23/2004	92	400	484	88			
9/29/2004	45	220	330	76			
12/27/2004	31	200	340	54			
3/30/2005	60	220	350	120			
6/20/2005	83	240	360	64			
9/27/2005	67	220	330	37			
12/16/2005	61	220	340	42			
1/9/2006	45	200	350	93			
4/19/2006	45	220	350	80			
9/24/2006	62	220	350	140			
12/5/2006	87	260	350	110			
3/14/2007				390			
3/16/2007	26	210	320				
4/23/2007	47	220	290				
9/19/2007	37	220	340	33			
10/30/2007	24	220	350	18			
1/23/2008	<10	220	360	92			
4/7/2008	53	210	400				
4/8/2008				74			
7/9/2008	28	210	350	76			
12/2/2008	79	230	380				
1/7/2009	49	230	380	200			
6/15/2009	46	210	330	82			
8/26/2009	20	230	340	140			
10/20/2009	39	210	380	100	130	230	260
11/16/2009					910	260	250
12/21/2009					150	290	270
1/25/2010	20	190	350	87	150	290	360
4/13/2010	<10	190	330	230	150	290	510
7/14/2010				180	170	390	280
7/15/2010	39	240	350				
10/19/2010	65	230	400	72	200	410	270
3/3/2011	52	240	380	190	200	400	460
4/19/2011	<10	180	350	54	150	400	390
7/20/2011	32	220	360	100	200	440	380
10/11/2011				200	200	440	370
10/12/2011	35	240	340				
2/20/2012	35	220	370	53	210	410	360

Time Series

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 11/11/2015 3:35 PM

Green Valley Client: RSI Data: GREENVALLEY

	MW-1	MW-1A	MW-1B	MW-3	MW-28E	MW-28D	MW-28C
4/23/2012	45	230	400	71	210	410	350
9/10/2012	57	230	380	96			
9/14/2012					210	440	420
11/26/2012	59	260	380	290	230	400	430
1/10/2013				190	190	380	380
1/11/2013	29	240	370				
5/15/2013	63	250	380	84	210	400	380
7/17/2013	54	220	350	180	160	370	320
11/6/2013	55	230	360	340	190	430	410
3/12/2014	28	250	390	150	170	430	340
4/21/2014	77	220	360	91	180	420	300
7/8/2014	53	230	360	70	200	460	360
10/29/2014	56	240	390	320	180	450	350
1/7/2015	47	244	383	385	177	460	364
4/13/2015				214	162	474	281
4/14/2015	22	201	341				
7/2/2015	56	223	383				
7/7/2015				177	155	446	281
10/20/2015	48	238	380	227	166	475	302

Time Series

Constituent: Total Organic Carbon [TOC] (mg/L) Analysis Run 11/11/2015 3:35 PM

Green Valley Client: RSI Data: GREENVALLEY

	MW-1	MW-1A	MW-1B	MW-3	MW-28E	MW-28D	MW-28C
9/25/1992	4.13			1.67			
11/9/1992	1.13	1.13	<1				
1/18/1993		<1		1.39			
1/19/1993	1.11		<1				
4/26/1993	3.38	1.37	1.63	2.13			
7/19/1993	3.6	1.75	1.84				
7/20/1993				1.64			
10/19/1993	2.07	<1	<1				
10/20/1993				2.96			
2/8/1994	1	<1	<1				
2/9/1994				1			
4/18/1994	5.6	5.54	7.99				
4/20/1994				1.59			
7/13/1994				1.71			
7/14/1994	1.41	<1	<1				
10/18/1994				3.24			
10/19/1994	4.85	3.96	2.87				
1/11/1995	2.22	1.61	<1	1.44			
4/25/1995				1.13			
4/26/1995	1.45	2.92	3.33				
7/10/1995				3.59			
7/11/1995	2.67	4.93	2.83				
11/14/1995	2.47	2.66		3.14			
11/15/1995			1.72				
2/19/1996				1.86			
2/20/1996	1.84	1.83	2.61				
5/21/1996		1.39		1.36			
5/22/1996			2.28				
6/5/1996	1.31						
8/19/1996	3	2.86	3.55	3.07			
11/5/1996	1.93	1.66	1.88	1.62			
1/7/1997	<1	<1	<1	<1			
4/8/1997	2.6	2.2	2.5	1.4			
7/8/1997	1.3	1.7	2.1	1.6			
10/9/1997	1.1	1	1.4	1			
3/19/1998	1.4	3.2	3.4	1.7			
4/14/1998	<1	<1	<1	<1			
9/30/1998		2.4	2.7	2			
12/1/1998	2.5	4.5	6	2.9			
3/9/1999	<1	2.6	3.3	1.2			
6/22/1999	1.8	3	5				
9/7/1999		<1	1	1			
11/2/1999	4.1	4.8	6.6	3.1			
1/5/2000	2.8	1.7	3.2	2.3			
6/19/2000				<1			
6/20/2000	<1	<1	<1				
9/6/2000	<1	<1	<1	<1			
11/28/2000	<1	<1	<1	<1			
1/22/2001	1	1	<1	<1			
4/2/2001	2.3	3.8	7.8	1.7			
7/26/2001	2	1.7	1.9	2.3			
10/18/2001	<1	<1	<1				

Time Series

Constituent: Total Organic Carbon [TOC] (mg/L) Analysis Run 11/11/2015 3:35 PM

Green Valley Client: RSI Data: GREENVALLEY

	MW-1	MW-1A	MW-1B	MW-3	MW-28E	MW-28D	MW-28C
10/19/2001				3.9			
1/14/2002	1.2	<1	<1				
1/15/2002				<1			
4/29/2002	1.5	2.4	3.8				
4/30/2002				1.5			
9/18/2002	<1	<1	<1	<1			
11/19/2002	6.2	<1	1	1.6			
3/10/2003	<1	<1	1.01	1.64			
4/10/2003	2.15	<1	1.3	1.03			
7/22/2003	1.14	5.52	<1	9.68			
11/25/2003	2.3	<2	<2				
11/26/2003				<2			
3/16/2004				2.8			
3/17/2004	2.4	<1	<1				
6/23/2004	1.7	<1	<1	2.5			
9/29/2004	<1	<1	<1	1.1			
12/27/2004	10	26	38	14			
3/30/2005	<1	<1	<1	<1			
6/20/2005	<1	<1	<1	<1			
9/27/2005	<1	<1	<1	<1			
12/16/2005	<1	<1	<1	1.3			
1/9/2006	<1	<1	<1	<1			
4/19/2006	<1	<1	<1	<1			
9/24/2006	<1	<1	<1	<1			
12/5/2006	<1	<1	<1	1.1			
3/14/2007				<1			
3/16/2007	<1	<1	<1				
4/23/2007	<1	<1	<1				
9/19/2007	<1	<1	<1	1.3			
10/30/2007	<1	<1	<1	1			
1/23/2008	<1	<1	<1	<1			
4/7/2008	<1	<1	<1				
4/8/2008				2.4			
7/9/2008	<1	<1	<1	16			
12/2/2008	1.1	<1	<1				
1/7/2009	1.1	<1	<1	1.3			
6/15/2009	1	<1	<1	2.1			
8/26/2009	<1	<1	<1	1.4			
10/20/2009	<1	<1	<1	<1	<1	1.2	5.9
11/16/2009					1	1.5	1.7
12/21/2009					1.1	1.5	1.6
1/25/2010	<1	<1	<1	1.4	1.2	1.4	1.9
4/13/2010	<1	<1	<1	1.7	1.1	1.5	2.5
7/14/2010				1.8	1.9	1.8	1.9
7/15/2010	1.6	1.1	1.4				
10/19/2010	1.3	1	1.1	1.5	1.5	2.2	7.5
3/3/2011	<1	<1	1	1.5	1.3	1.6	1.8
4/19/2011	1.3	<1	1	1.4	1.3	1.8	1.8
7/20/2011	1.1	<1	<1	1.3	<1	1.7	1.7
10/11/2011				1.5	1	1.6	1.6
10/12/2011	1.3	<1	<1				
2/20/2012	<1	<1	<1	2.7	1.1	1.3	1.6

Time Series

Constituent: Total Organic Carbon [TOC] (mg/L) Analysis Run 11/11/2015 3:35 PM

Green Valley Client: RSI Data: GREENVALLEY

	MW-1	MW-1A	MW-1B	MW-3	MW-28E	MW-28D	MW-28C
4/23/2012	<1	<1	<1	1.6	1	1.5	1.5
9/10/2012	1	<1	<1	1.2			
9/14/2012					<1	1.6	1.9
11/26/2012	1.1	<1	1.1	1.6	1.5	1.7	2.8
1/10/2013				1.2	1	1.4	1.9
1/11/2013	<1	<1	<1				
5/15/2013	<1	1	<1	1.4	1.1	1.5	2.2
7/17/2013	1.4	1.1	1.1	1.9	1.3	1.8	2
11/6/2013	<1	<1	<1	1.4	<1	1.4	1.4
3/12/2014	<1	<1	<1	1.2	<1	<1	1.3
4/21/2014	1	<1	<1	1.2	<1	1.2	2.6
7/8/2014	1.3	1.1	1.4	1.8	1.4	2.1	2.2
10/29/2014	1.5	1.3	1.6	2.3	1.3	2.4	2
1/7/2015	<1	<1	<1	<1	<1	<1	<1
4/13/2015				<1	<1	<1	<1
4/14/2015	<1	<1	<1				
7/2/2015	1	<1	<1				
7/7/2015				1.9	<1	1.6	2
10/20/2015	7.8	<1	<1	1.2	<1	1.3	1.8

Time Series

Constituent: Total Organic Halides (mg/L) Analysis Run 11/11/2015 3:35 PM

Green Valley Client: RSI Data: GREENVALLEY

	MW-1	MW-1A	MW-1B	MW-3	MW-28E	MW-28D	MW-28C
9/25/1992	<0.01			<0.01			
11/9/1992	<0.01	<0.01	<0.01				
1/18/1993		<0.01		0.02			
1/19/1993	<0.01		<0.01				
4/26/1993	<0.01	<0.01	<0.01	<0.01			
7/19/1993	<0.01	0.01	<0.01				
7/20/1993				<0.01			
10/19/1993	<0.01	<0.01	<0.01				
10/20/1993				<0.01			
2/8/1994	<0.01	<0.01	<0.01				
2/9/1994				<0.01			
4/18/1994	<0.01	<0.01	<0.01				
4/20/1994				<0.01			
7/13/1994				0.37			
7/14/1994	0.33	0.16	0.27				
10/18/1994				<0.01			
10/19/1994	<0.01	<0.01	<0.01				
1/11/1995	<0.01	<0.01	<0.01	<0.01			
4/25/1995				<0.01			
4/26/1995	<0.01	<0.01	<0.01				
7/10/1995				<0.01			
7/11/1995	<0.01	<0.01	<0.01				
11/14/1995	<0.01	<0.01		<0.01			
11/15/1995			<0.01				
2/19/1996				<0.01			
2/20/1996	<0.01	<0.01	<0.01				
5/21/1996		<0.01		<0.01			
5/22/1996			<0.01				
6/5/1996	<0.01						
8/19/1996	<0.01	<0.01	<0.01	<0.01			
11/5/1996	0.11	<0.01	<0.01	<0.01			
1/7/1997	<0.01	1.03	0.02	<0.01			
4/8/1997	<0.01	<0.01	<0.01	<0.01			
7/8/1997	<0.01	<0.01	<0.01	<0.01			
10/9/1997	<0.01	0.02	0.03	0.01			
3/19/1998	0.02	<0.01	0.03	0.05			
4/14/1998	<0.01	<0.01	<0.01	<0.01			
9/30/1998		0.01	<0.01	<0.01			
12/1/1998	<0.01	<0.01	0.03	<0.01			
3/9/1999	0.01	0.01	<0.01	<0.01			
6/22/1999	0.08	0.12	0.09				
9/7/1999		<0.01	<0.01	0.02			
11/2/1999	<0.01	<0.01	0.02	<0.01			
1/5/2000	0.02	0.01	0.01	<0.01			
6/19/2000				<0.01			
6/20/2000	<0.01	0.03	0.02				
9/6/2000	0.117	0.08	0.08	0.06			
11/28/2000	0.03	0.02	0.03	0.04			
1/22/2001	<0.01	0.01	<0.01	<0.01			
4/2/2001	<0.01	<0.01	<0.01	<0.01			
7/26/2001	<0.01	<0.01	<0.01	<0.01			
10/18/2001	<0.01	<0.01	<0.01				

Time Series

Constituent: Total Organic Halides (mg/L) Analysis Run 11/11/2015 3:35 PM

Green Valley Client: RSI Data: GREENVALLEY

	MW-1	MW-1A	MW-1B	MW-3	MW-28E	MW-28D	MW-28C
10/19/2001				0.03			
1/14/2002	<0.01	<0.01	<0.01				
1/15/2002				<0.01			
4/29/2002	<0.01	<0.01	<0.01				
4/30/2002				<0.01			
9/18/2002	<0.01	<0.01	<0.01	0.13			
11/19/2002	<0.01	0.1	<0.01	0.08			
3/10/2003	<0.01	<0.01	<0.01	<0.01			
4/10/2003	<0.01	<0.01	<0.01	<0.01			
7/22/2003	0.01	0.014	0.012	<0.01			
11/25/2003	0.015	<0.01	<0.01				
11/26/2003				0.061			
3/16/2004				<0.01			
3/17/2004	<0.01	<0.01	<0.01				
6/23/2004	<0.01	<0.01	<0.01	<0.01			
9/29/2004	<0.01	<0.01	<0.01	<0.01			
12/27/2004	<0.01	<0.01	<0.01	<0.01			
3/30/2005	<0.01	<0.01	<0.01	<0.01			
6/20/2005	<0.01	<0.01	<0.01	0.014			
9/27/2005	0.043	0.042	0.086	0.012			
12/16/2005	0.033	<0.01	0.058	0.074			
1/9/2006	0.123	0.081	0.051	0.105			
4/19/2006	0.037	<0.01	<0.01	0.037			
9/24/2006	0.042	0.064	0.034	<0.01			
12/5/2006	<0.01	0.028	<0.01	<0.01			
3/14/2007				<0.01			
3/16/2007	<0.01	<0.01	<0.01				
4/23/2007	<0.01	<0.01	<0.01				
9/19/2007	<0.01	<0.01	0.012	<0.01			
10/30/2007	<0.01	<0.01	0.014	<0.01			
1/23/2008	<0.01	<0.01	0.03	0.012			
4/7/2008	<0.01	<0.01	<0.01				
4/8/2008				0.019			
7/9/2008	<0.01	<0.01	0.026	<0.01			
12/2/2008	<0.01	<0.01	<0.01				
1/7/2009	<0.01	<0.01	<0.01	0.01			
6/15/2009	<0.01	<0.01	<0.01	<0.01			
8/26/2009	<0.01	0.015	0.013	<0.01			
10/20/2009	<0.01	<0.01	0.034	<0.01	<0.01	<0.01	0.012
11/16/2009					<0.01	0.012	0.017
12/21/2009					<0.01	<0.01	0.013
1/25/2010	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.014
4/13/2010	<0.01	<0.01	0.014	0.011	<0.01	<0.01	0.013
7/14/2010				<0.01	<0.01	<0.01	0.017
7/15/2010	<0.01	<0.01	0.027				
10/19/2010	0.012	<0.01	0.075	<0.01	<0.01	0.015	0.031
3/3/2011	<0.01	0.014	0.011	0.012	0.012	0.014	0.022
4/19/2011	<0.01	0.011	0.015	<0.01	0.02	<0.01	<0.01
7/20/2011	<0.01	<0.01	0.017	0.019	0.015	0.034	0.028
10/11/2011				0.021	<0.01	0.01	0.02
10/12/2011	<0.01	0.01	0.013				
2/20/2012	<0.01	<0.01	<0.01	0.012	0.034	0.022	0.019

Time Series

Constituent: Total Organic Halides (mg/L) Analysis Run 11/11/2015 3:35 PM

Green Valley Client: RSI Data: GREENVALLEY

	MW-1	MW-1A	MW-1B	MW-3	MW-28E	MW-28D	MW-28C
4/23/2012	0.012	<0.01	0.015	<0.01	<0.01	0.015	0.022
9/10/2012	<0.01	<0.01	0.015	<0.01			
9/14/2012					<0.01	0.011	0.01
11/26/2012	0.012	<0.01	0.016	0.015	<0.01	0.027	0.055
1/10/2013				0.01	<0.01	0.015	0.021
1/11/2013	<0.01	<0.01	0.023				
5/15/2013	<0.01	<0.01	<0.01	<0.01	0.013	0.015	0.02
7/17/2013	<0.01	<0.01	0.018	0.013	<0.01	0.019	0.044
11/6/2013	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
3/12/2014	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
4/21/2014	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.045
7/8/2014	<0.01	<0.01	0.022	<0.01	<0.01	0.011	0.021
10/29/2014	<0.01	0.015	0.026	0.032	<0.01	0.013	0.039
1/7/2015	0.01	<0.01	0.014	<0.01	<0.01	0.033	0.017
4/13/2015				<0.01	<0.01	0.016	<0.01
4/14/2015	<0.01	0.015	0.014				
7/2/2015	<0.01	<0.01	<0.01				
7/7/2015				<0.01	<0.01	0.012	0.021
10/20/2015	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

APPENDIX C

LABORATORY ANALYTICAL REPORT
&
FIELD INFORMATION LOGS

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November 04, 2015

Environmental Manager
Republic Services, Inc. - Green Valley Landfill
100 Addington Road
Ashland, KY 41102

RE: Project: Green Valley Landfill GW
Pace Project No.: 50130404

Dear Environmental Manager:
Enclosed are the analytical results for sample(s) received by the laboratory on October 21, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

Some analyses have been subcontracted outside of the Pace Network. The subcontracted laboratory report has been attached.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Chris Sarkan
chris.sarkan@pacelabs.com
Project Manager

Enclosures

cc: Mr. Steve Jett, Jett Environmental Consulting
Mr. Bill Knarr, Kenvirons, Inc.

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CERTIFICATIONS

Project: Green Valley Landfill GW
Pace Project No.: 50130404

Indiana Certification IDs
7726 Moller Road, Indianapolis, IN 46268
Illinois Certification #: 200074
Indiana Certification #: C-49-06
Kansas Certification #:E-10177
Kentucky UST Certification #: 0042
Kentucky WW Certification #:98019
Louisiana Certification #: 04076
Ohio VAP Certification #: CL-0065
Oklahoma Certification #: 2014-148
Texas Certification #: T104704355-15-9
West Virginia Certification #: 330
Wisconsin Certification #: 999788130
USDA Soil Permit #: P330-10-00128

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SAMPLE SUMMARY

Project: Green Valley Landfill GW
Pace Project No.: 50130404

Lab ID	Sample ID	Matrix	Date Collected	Date Received
50130404001	**MW-1**	Water	10/20/15 10:45	10/21/15 09:25
50130404002	**MW-1A**	Water	10/20/15 11:15	10/21/15 09:25
50130404003	**MW-1B**	Water	10/20/15 11:40	10/21/15 09:25
50130404004	**MW-3**	Water	10/20/15 12:28	10/21/15 09:25
50130404005	**Dup**	Water	10/20/15 08:00	10/21/15 09:25
50130404006	**FB**	Water	10/20/15 08:00	10/21/15 09:25
50130404007	**MW-28D**	Water	10/20/15 12:55	10/21/15 09:25
50130404008	**MW-28E**	Water	10/20/15 13:15	10/21/15 09:25
50130404009	**MW-28C**	Water	10/20/15 13:35	10/21/15 09:25

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SAMPLE ANALYTE COUNT

Project: Green Valley Landfill GW
Pace Project No.: 50130404

Lab ID	Sample ID	Method	Analysts	Analytes Reported
50130404001	**MW-1**	EPA 9056	RID	1
		EPA 6010	MJC	2
		SM 2540C	ESC	1
		EPA 410.4	ZM	1
		SM 5310C	EJS	1
50130404002	**MW-1A**	EPA 9056	RID	1
		EPA 6010	FRW	2
		SM 2540C	ESC	1
		EPA 410.4	ZM	1
		SM 5310C	EJS	1
50130404003	**MW-1B**	EPA 9056	RID	1
		EPA 6010	FRW	2
		SM 2540C	ESC	1
		EPA 410.4	ZM	1
		SM 5310C	EJS	1
50130404004	**MW-3**	EPA 9056	RID	1
		EPA 6010	FRW	2
		SM 2540C	ESC	1
		EPA 410.4	ZM	1
		SM 5310C	EJS	1
50130404005	**Dup**	EPA 9056	RID	1
		EPA 6010	FRW	2
		SM 2540C	ESC	1
		EPA 410.4	ZM	1
		SM 5310C	EJS	1
50130404006	**FB**	EPA 9056	RID	1
		EPA 6010	FRW	2
		SM 2540C	ESC	1
		EPA 410.4	ZM	1
		SM 5310C	EJS	1
50130404007	**MW-28D**	EPA 9056	RID	1
		EPA 6010	FRW	2
		SM 2540C	ESC	1
		EPA 410.4	ZM	1
		SM 5310C	EJS	1
50130404008	**MW-28E**	EPA 9056	RID	1
		EPA 6010	FRW	2

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Green Valley Landfill GW
Pace Project No.: 50130404

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		SM 2540C	ESC	1
		EPA 410.4	ZM	1
		SM 5310C	EJS	1
50130404009	**MW-28C**	EPA 9056	RID	1
		EPA 6010	FRW	2
		SM 2540C	ESC	1
		EPA 410.4	ZM	1
		SM 5310C	EJS	1

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SUMMARY OF DETECTION

Project: Green Valley Landfill GW
Pace Project No.: 50130404

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
50130404001	**MW-1**					
	Field pH	5.91	Std. Units		10/20/15 00:00	
	Field Temperature	14.72	deg C		10/20/15 00:00	
	Field Specific Conductance	72	umhos/cm		10/20/15 00:00	
	Oxygen, Dissolved	4.02	mg/L		10/20/15 00:00	
	Total Well Depth	14.80	feet		10/20/15 00:00	
	Elevation Water Level	612.27	ft/msl		10/20/15 00:00	
	Collar Elevation	617.80	ft/msl		10/20/15 00:00	
	Depth to Water	5.53	feet		10/20/15 00:00	
EPA 9056	Chloride	1.2	mg/L	0.25	10/23/15 12:54	
EPA 6010	Iron	0.48	mg/L	0.020	11/03/15 12:39	
EPA 6010	Sodium	2.2	mg/L	0.10	11/03/15 12:39	
SM 2540C	Total Dissolved Solids	48	mg/L	10.0	10/22/15 16:16	
EPA 410.4	Chemical Oxygen Demand	31.1	mg/L	10.0	10/22/15 18:27	
SM 5310C	Total Organic Carbon	7.8	mg/L	1.0	10/27/15 09:24	
50130404002	**MW-1A**					
	Field pH	6.73	Std. Units		10/20/15 00:00	
	Field Temperature	12.48	deg C		10/20/15 00:00	
	Field Specific Conductance	378	umhos/cm		10/20/15 00:00	
	Oxygen, Dissolved	2.48	mg/L		10/20/15 00:00	
	Total Well Depth	41.00	feet		10/20/15 00:00	
	Elevation Water Level	614.99	ft/msl		10/20/15 00:00	
	Collar Elevation	618.60	ft/msl		10/20/15 00:00	
	Depth to Water	3.61	feet		10/20/15 00:00	
EPA 9056	Chloride	3.3	mg/L	0.25	10/23/15 13:13	
EPA 6010	Iron	0.91	mg/L	0.020	11/02/15 08:47	
EPA 6010	Sodium	21.7	mg/L	0.10	11/02/15 08:47	
SM 2540C	Total Dissolved Solids	238	mg/L	10.0	10/22/15 16:16	
50130404003	**MW-1B**					
	Field pH	7.35	Std. Units		10/20/15 00:00	
	Field Temperature	12.75	deg C		10/20/15 00:00	
	Field Specific Conductance	658	umhos/cm		10/20/15 00:00	
	Oxygen, Dissolved	2.77	mg/L		10/20/15 00:00	
	Total Well Depth	61.00	feet		10/20/15 00:00	
	Elevation Water Level	612.14	ft/msl		10/20/15 00:00	
	Collar Elevation	618.70	ft/msl		10/20/15 00:00	
	Depth to Water	6.56	feet		10/20/15 00:00	
EPA 9056	Chloride	37.9	mg/L	2.5	10/23/15 13:31	
EPA 6010	Iron	0.44	mg/L	0.020	11/02/15 08:50	
EPA 6010	Sodium	133	mg/L	0.10	11/02/15 08:50	
SM 2540C	Total Dissolved Solids	380	mg/L	10.0	10/22/15 16:16	
50130404004	**MW-3**					
	Field pH	6.15	Std. Units		10/20/15 00:00	
	Field Temperature	15.70	deg C		10/20/15 00:00	
	Field Specific Conductance	343	umhos/cm		10/20/15 00:00	
	Oxygen, Dissolved	2.27	mg/L		10/20/15 00:00	
	Total Well Depth	14.10	feet		10/20/15 00:00	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: Green Valley Landfill GW
Pace Project No.: 50130404

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
50130404004	**MW-3**					
	Elevation Water Level	625.29	ft/msl		10/20/15 00:00	
	Collar Elevation	630.80	ft/msl		10/20/15 00:00	
	Depth to Water	5.51	feet		10/20/15 00:00	
EPA 9056	Chloride	18.9	mg/L	2.5	10/26/15 15:22	
EPA 6010	Iron	16.1	mg/L	0.020	11/02/15 08:52	
EPA 6010	Sodium	11.6	mg/L	0.10	11/02/15 08:52	
SM 2540C	Total Dissolved Solids	227	mg/L	10.0	10/22/15 16:18	
SM 5310C	Total Organic Carbon	1.2	mg/L	1.0	10/27/15 09:24	
50130404005	**Dup**					
	Collected Date	10/20/2015	no units		10/20/15 00:00	
EPA 9056	Chloride	14.6	mg/L	2.5	10/23/15 14:27	
EPA 6010	Iron	12.3	mg/L	0.020	11/02/15 09:06	
EPA 6010	Sodium	11.4	mg/L	0.10	11/02/15 09:06	
SM 2540C	Total Dissolved Solids	234	mg/L	10.0	10/22/15 16:18	
SM 5310C	Total Organic Carbon	1.1	mg/L	1.0	10/27/15 09:24	
50130404006	**FB**					
	Collected Date	10/20/2015	no units		10/20/15 00:00	
50130404007	**MW-28D**					
	Field pH	5.99	Std. Units		10/20/15 00:00	
	Field Temperature	16.05	deg C		10/20/15 00:00	
	Field Specific Conductance	700	umhos/cm		10/20/15 00:00	
	Oxygen, Dissolved	1.34	mg/L		10/20/15 00:00	
	Total Well Depth	16.30	feet		10/20/15 00:00	
	Elevation Water Level	669.88	ft/msl		10/20/15 00:00	
	Collar Elevation	675.20	ft/msl		10/20/15 00:00	
	Depth to Water	5.32	feet		10/20/15 00:00	
EPA 9056	Chloride	28.5	mg/L	2.5	10/27/15 01:47	
EPA 6010	Iron	20.0	mg/L	0.020	11/02/15 09:25	
EPA 6010	Sodium	29.3	mg/L	0.10	11/02/15 09:25	
SM 2540C	Total Dissolved Solids	475	mg/L	10.0	10/22/15 16:23	
SM 5310C	Total Organic Carbon	1.3	mg/L	1.0	10/27/15 09:24	
50130404008	**MW-28E**					
	Field pH	6.42	Std. Units		10/20/15 00:00	
	Field Temperature	16.35	deg C		10/20/15 00:00	
	Field Specific Conductance	292	umhos/cm		10/20/15 00:00	
	Oxygen, Dissolved	2.11	mg/L		10/20/15 00:00	
	Total Well Depth	27.30	feet		10/20/15 00:00	
	Elevation Water Level	667.44	ft/msl		10/20/15 00:00	
	Collar Elevation	677.00	ft/msl		10/20/15 00:00	
	Depth to Water	9.56	feet		10/20/15 00:00	
EPA 9056	Chloride	1.6	mg/L	0.25	10/27/15 02:43	
EPA 6010	Iron	0.44	mg/L	0.020	11/02/15 09:28	
EPA 6010	Sodium	10.8	mg/L	0.10	11/02/15 09:28	
SM 2540C	Total Dissolved Solids	166	mg/L	10.0	10/22/15 16:23	

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SUMMARY OF DETECTION

Project: Green Valley Landfill GW
Pace Project No.: 50130404

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
50130404009	**MW-28C**					
	Field pH	5.40	Std. Units		10/20/15 00:00	
	Field Temperature	16.99	deg C		10/20/15 00:00	
	Field Specific Conductance	457	umhos/cm		10/20/15 00:00	
	Oxygen, Dissolved	2.24	mg/L		10/20/15 00:00	
	Total Well Depth	12.90	feet		10/20/15 00:00	
	Elevation Water Level	669.78	ft/msl		10/20/15 00:00	
	Collar Elevation	674.40	ft/msl		10/20/15 00:00	
	Depth to Water	4.62	feet		10/20/15 00:00	
EPA 9056	Chloride	20.3	mg/L	2.5	10/27/15 03:01	
EPA 6010	Iron	15.8	mg/L	0.020	11/02/15 09:30	
EPA 6010	Sodium	17.1	mg/L	0.10	11/02/15 09:30	
SM 2540C	Total Dissolved Solids	302	mg/L	10.0	10/22/15 16:24	
SM 5310C	Total Organic Carbon	1.8	mg/L	1.0	10/27/15 09:24	

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ANALYTICAL RESULTS

Project: Green Valley Landfill GW
Pace Project No.: 50130404

Sample: MW-1 **Lab ID: 50130404001** Collected: 10/20/15 10:45 Received: 10/21/15 09:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:							
Field pH	**5.91**	Std. Units		1		10/20/15 00:00		
Field Temperature	**14.72**	deg C		1		10/20/15 00:00		
Field Specific Conductance	**72**	umhos/cm		1		10/20/15 00:00		
Oxygen, Dissolved	**4.02**	mg/L		1		10/20/15 00:00	7782-44-7	
Total Well Depth	**14.80**	feet		1		10/20/15 00:00		
Elevation Water Level	**612.27**	ft/msl		1		10/20/15 00:00		
Collar Elevation	**617.80**	ft/msl		1		10/20/15 00:00		
Depth to Water	**5.53**	feet		1		10/20/15 00:00		
9056 IC Anions	Analytical Method: EPA 9056							
Chloride	**1.2**	mg/L	0.25	1		10/23/15 12:54	16887-00-6	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Iron	**0.48**	mg/L	0.020	1	10/29/15 07:16	11/03/15 12:39	7439-89-6	
Sodium	**2.2**	mg/L	0.10	1	10/29/15 07:16	11/03/15 12:39	7440-23-5	
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	**48**	mg/L	10.0	1		10/22/15 16:16		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4							
Chemical Oxygen Demand	**31.1**	mg/L	10.0	1	10/22/15 15:25	10/22/15 18:27		
5310C TOC	Analytical Method: SM 5310C							
Total Organic Carbon	**7.8**	mg/L	1.0	1		10/27/15 09:24	7440-44-0	

Sample: MW-1A **Lab ID: 50130404002** Collected: 10/20/15 11:15 Received: 10/21/15 09:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:							
Field pH	**6.73**	Std. Units		1		10/20/15 00:00		
Field Temperature	**12.48**	deg C		1		10/20/15 00:00		
Field Specific Conductance	**378**	umhos/cm		1		10/20/15 00:00		
Oxygen, Dissolved	**2.48**	mg/L		1		10/20/15 00:00	7782-44-7	
Total Well Depth	**41.00**	feet		1		10/20/15 00:00		
Elevation Water Level	**614.99**	ft/msl		1		10/20/15 00:00		
Collar Elevation	**618.60**	ft/msl		1		10/20/15 00:00		
Depth to Water	**3.61**	feet		1		10/20/15 00:00		
9056 IC Anions	Analytical Method: EPA 9056							
Chloride	**3.3**	mg/L	0.25	1		10/23/15 13:13	16887-00-6	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Iron	**0.91**	mg/L	0.020	1	10/28/15 18:20	11/02/15 08:47	7439-89-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Green Valley Landfill GW
Pace Project No.: 50130404

Sample: MW-1A **Lab ID: 50130404002** Collected: 10/20/15 11:15 Received: 10/21/15 09:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Sodium	**21.7**	mg/L	0.10	1	10/28/15 18:20	11/02/15 08:47	7440-23-5	
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	**238**	mg/L	10.0	1		10/22/15 16:16		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4							
Chemical Oxygen Demand	ND	mg/L	10.0	1	10/22/15 15:25	10/22/15 18:27		
5310C TOC	Analytical Method: SM 5310C							
Total Organic Carbon	ND	mg/L	1.0	1		10/27/15 09:24	7440-44-0	

Sample: MW-1B **Lab ID: 50130404003** Collected: 10/20/15 11:40 Received: 10/21/15 09:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:							
Field pH	**7.35**	Std. Units		1		10/20/15 00:00		
Field Temperature	**12.75**	deg C		1		10/20/15 00:00		
Field Specific Conductance	**658**	umhos/cm		1		10/20/15 00:00		
Oxygen, Dissolved	**2.77**	mg/L		1		10/20/15 00:00	7782-44-7	
Total Well Depth	**61.00**	feet		1		10/20/15 00:00		
Elevation Water Level	**612.14**	ft/msl		1		10/20/15 00:00		
Collar Elevation	**618.70**	ft/msl		1		10/20/15 00:00		
Depth to Water	**6.56**	feet		1		10/20/15 00:00		
9056 IC Anions	Analytical Method: EPA 9056							
Chloride	**37.9**	mg/L	2.5	10		10/23/15 13:31	16887-00-6	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Iron	**0.44**	mg/L	0.020	1	10/28/15 18:20	11/02/15 08:50	7439-89-6	
Sodium	**133**	mg/L	0.10	1	10/28/15 18:20	11/02/15 08:50	7440-23-5	
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	**380**	mg/L	10.0	1		10/22/15 16:16		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4							
Chemical Oxygen Demand	ND	mg/L	10.0	1	10/22/15 15:25	10/22/15 18:27		
5310C TOC	Analytical Method: SM 5310C							
Total Organic Carbon	ND	mg/L	1.0	1		10/27/15 09:24	7440-44-0	

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ANALYTICAL RESULTS

Project: Green Valley Landfill GW
Pace Project No.: 50130404

Sample: MW-3 **Lab ID: 50130404004** Collected: 10/20/15 12:28 Received: 10/21/15 09:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:							
Field pH	**6.15**	Std. Units		1		10/20/15 00:00		
Field Temperature	**15.70**	deg C		1		10/20/15 00:00		
Field Specific Conductance	**343**	umhos/cm		1		10/20/15 00:00		
Oxygen, Dissolved	**2.27**	mg/L		1		10/20/15 00:00	7782-44-7	
Total Well Depth	**14.10**	feet		1		10/20/15 00:00		
Elevation Water Level	**625.29**	ft/msl		1		10/20/15 00:00		
Collar Elevation	**630.80**	ft/msl		1		10/20/15 00:00		
Depth to Water	**5.51**	feet		1		10/20/15 00:00		
9056 IC Anions	Analytical Method: EPA 9056							
Chloride	**18.9**	mg/L	2.5	10		10/26/15 15:22	16887-00-6	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Iron	**16.1**	mg/L	0.020	1	10/28/15 18:20	11/02/15 08:52	7439-89-6	
Sodium	**11.6**	mg/L	0.10	1	10/28/15 18:20	11/02/15 08:52	7440-23-5	
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	**227**	mg/L	10.0	1		10/22/15 16:18		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4							
Chemical Oxygen Demand	ND	mg/L	10.0	1	10/22/15 15:25	10/22/15 18:27		
5310C TOC	Analytical Method: SM 5310C							
Total Organic Carbon	**1.2**	mg/L	1.0	1		10/27/15 09:24	7440-44-0	

Sample: Dup **Lab ID: 50130404005** Collected: 10/20/15 08:00 Received: 10/21/15 09:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:							
Collected Date	**10/20/2015**	no units		1		10/20/15 00:00		
9056 IC Anions	Analytical Method: EPA 9056							
Chloride	**14.6**	mg/L	2.5	10		10/23/15 14:27	16887-00-6	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Iron	**12.3**	mg/L	0.020	1	10/28/15 18:20	11/02/15 09:06	7439-89-6	
Sodium	**11.4**	mg/L	0.10	1	10/28/15 18:20	11/02/15 09:06	7440-23-5	
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	**234**	mg/L	10.0	1		10/22/15 16:18		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4							
Chemical Oxygen Demand	ND	mg/L	10.0	1	10/22/15 15:25	10/22/15 18:27		

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ANALYTICAL RESULTS

Project: Green Valley Landfill GW
Pace Project No.: 50130404

Sample: Dup **Lab ID: 50130404005** Collected: 10/20/15 08:00 Received: 10/21/15 09:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
5310C TOC	Analytical Method: SM 5310C							
Total Organic Carbon	**1.1**	mg/L	1.0	1		10/27/15 09:24	7440-44-0	

Sample: FB **Lab ID: 50130404006** Collected: 10/20/15 08:00 Received: 10/21/15 09:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:							
Collected Date	**10/20/2015**	no units		1		10/20/15 00:00		
9056 IC Anions	Analytical Method: EPA 9056							
Chloride	ND	mg/L	0.25	1		10/22/15 17:13	16887-00-6	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Iron	ND	mg/L	0.020	1	10/28/15 18:20	11/02/15 10:19	7439-89-6	
Sodium	ND	mg/L	0.10	1	10/28/15 18:20	11/02/15 10:19	7440-23-5	
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	ND	mg/L	10.0	1		10/22/15 16:18		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4							
Chemical Oxygen Demand	ND	mg/L	10.0	1	10/22/15 15:25	10/22/15 18:27		
5310C TOC	Analytical Method: SM 5310C							
Total Organic Carbon	ND	mg/L	1.0	1		10/27/15 09:24	7440-44-0	

Sample: MW-28D **Lab ID: 50130404007** Collected: 10/20/15 12:55 Received: 10/21/15 09:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:							
Field pH	**5.99**	Std. Units		1		10/20/15 00:00		
Field Temperature	**16.05**	deg C		1		10/20/15 00:00		
Field Specific Conductance	**700**	umhos/cm		1		10/20/15 00:00		
Oxygen, Dissolved	**1.34**	mg/L		1		10/20/15 00:00	7782-44-7	
Total Well Depth	**16.30**	feet		1		10/20/15 00:00		
Elevation Water Level	**669.88**	ft/msl		1		10/20/15 00:00		
Collar Elevation	**675.20**	ft/msl		1		10/20/15 00:00		
Depth to Water	**5.32**	feet		1		10/20/15 00:00		
9056 IC Anions	Analytical Method: EPA 9056							
Chloride	**28.5**	mg/L	2.5	10		10/27/15 01:47	16887-00-6	

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ANALYTICAL RESULTS

Project: Green Valley Landfill GW
Pace Project No.: 50130404

Sample: MW-28D **Lab ID: 50130404007** Collected: 10/20/15 12:55 Received: 10/21/15 09:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Iron	**20.0**	mg/L	0.020	1	10/28/15 18:20	11/02/15 09:25	7439-89-6	
Sodium	**29.3**	mg/L	0.10	1	10/28/15 18:20	11/02/15 09:25	7440-23-5	
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	**475**	mg/L	10.0	1		10/22/15 16:23		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4							
Chemical Oxygen Demand	ND	mg/L	10.0	1	10/22/15 15:25	10/22/15 18:27		
5310C TOC	Analytical Method: SM 5310C							
Total Organic Carbon	**1.3**	mg/L	1.0	1		10/27/15 09:24	7440-44-0	

Sample: MW-28E **Lab ID: 50130404008** Collected: 10/20/15 13:15 Received: 10/21/15 09:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:							
Field pH	**6.42**	Std. Units		1		10/20/15 00:00		
Field Temperature	**16.35**	deg C		1		10/20/15 00:00		
Field Specific Conductance	**292**	umhos/cm		1		10/20/15 00:00		
Oxygen, Dissolved	**2.11**	mg/L		1		10/20/15 00:00	7782-44-7	
Total Well Depth	**27.30**	feet		1		10/20/15 00:00		
Elevation Water Level	**667.44**	ft/msl		1		10/20/15 00:00		
Collar Elevation	**677.00**	ft/msl		1		10/20/15 00:00		
Depth to Water	**9.56**	feet		1		10/20/15 00:00		
9056 IC Anions	Analytical Method: EPA 9056							
Chloride	**1.6**	mg/L	0.25	1		10/27/15 02:43	16887-00-6	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Iron	**0.44**	mg/L	0.020	1	10/28/15 18:20	11/02/15 09:28	7439-89-6	
Sodium	**10.8**	mg/L	0.10	1	10/28/15 18:20	11/02/15 09:28	7440-23-5	
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	**166**	mg/L	10.0	1		10/22/15 16:23		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4							
Chemical Oxygen Demand	ND	mg/L	10.0	1	10/22/15 15:25	10/22/15 18:27		
5310C TOC	Analytical Method: SM 5310C							
Total Organic Carbon	ND	mg/L	1.0	1		10/27/15 09:24	7440-44-0	

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ANALYTICAL RESULTS

Project: Green Valley Landfill GW
Pace Project No.: 50130404

Sample: MW-28C **Lab ID: 50130404009** Collected: 10/20/15 13:35 Received: 10/21/15 09:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:							
Field pH	**5.40**	Std. Units		1		10/20/15 00:00		
Field Temperature	**16.99**	deg C		1		10/20/15 00:00		
Field Specific Conductance	**457**	umhos/cm		1		10/20/15 00:00		
Oxygen, Dissolved	**2.24**	mg/L		1		10/20/15 00:00	7782-44-7	
Total Well Depth	**12.90**	feet		1		10/20/15 00:00		
Elevation Water Level	**669.78**	ft/msl		1		10/20/15 00:00		
Collar Elevation	**674.40**	ft/msl		1		10/20/15 00:00		
Depth to Water	**4.62**	feet		1		10/20/15 00:00		
9056 IC Anions	Analytical Method: EPA 9056							
Chloride	**20.3**	mg/L	2.5	10		10/27/15 03:01	16887-00-6	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Iron	**15.8**	mg/L	0.020	1	10/28/15 18:20	11/02/15 09:30	7439-89-6	
Sodium	**17.1**	mg/L	0.10	1	10/28/15 18:20	11/02/15 09:30	7440-23-5	
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	**302**	mg/L	10.0	1		10/22/15 16:24		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4							
Chemical Oxygen Demand	ND	mg/L	10.0	1	10/22/15 15:25	10/22/15 18:27		
5310C TOC	Analytical Method: SM 5310C							
Total Organic Carbon	**1.8**	mg/L	1.0	1		10/27/15 09:24	7440-44-0	

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QUALITY CONTROL DATA

Project: Green Valley Landfill GW
Pace Project No.: 50130404

QC Batch: GCSV/17216 Analysis Method: EPA 9056
QC Batch Method: EPA 9056 Analysis Description: 9056 IC Anions
Associated Lab Samples: 50130404001, 50130404002, 50130404003, 50130404004, 50130404005, 50130404006

METHOD BLANK: 1406833 Matrix: Water
Associated Lab Samples: 50130404001, 50130404002, 50130404003, 50130404004, 50130404005, 50130404006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	0.25	10/23/15 00:33	

LABORATORY CONTROL SAMPLE: 1406834

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	1.2	1.2	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1406835 1406836

Parameter	Units	50130395003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	2.9	1.2	1.2	4.1	4.3	102	115	80-120	4	15	

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QUALITY CONTROL DATA

Project: *Green Valley Landfill GW*
Pace Project No.: 50130404

QC Batch: GCSV/17223 Analysis Method: EPA 9056
QC Batch Method: EPA 9056 Analysis Description: 9056 IC Anions
Associated Lab Samples: 50130404007, 50130404008, 50130404009

METHOD BLANK: 1407149 Matrix: Water
Associated Lab Samples: 50130404007, 50130404008, 50130404009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	0.25	10/27/15 01:10	

LABORATORY CONTROL SAMPLE: 1407150

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	1.2	1.4	108	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1407151 1407152

Parameter	Units	50130404007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	28.5	12.5	12.5	40.5	40.4	96	95	80-120	0	15	

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QUALITY CONTROL DATA

Project: Green Valley Landfill GW
Pace Project No.: 50130404

QC Batch: MPRP/18344
QC Batch Method: EPA 3010
Analysis Method: EPA 6010
Analysis Description: 6010 MET
Associated Lab Samples: 50130404001

METHOD BLANK: 1407230 Matrix: Water
Associated Lab Samples: 50130404001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Iron	mg/L	ND	0.020	11/03/15 12:35	
Sodium	mg/L	ND	0.10	11/03/15 12:35	

LABORATORY CONTROL SAMPLE: 1407231

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron	mg/L	10	10	100	80-120	
Sodium	mg/L	10	10.1	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1407232 1407233

Parameter	Units	50130413003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Iron	mg/L	44400 ug/L	10	10	52.1	51.1	78	67	75-125	2	20	P6
Sodium	mg/L	31000 ug/L	10	10	40.2	39.5	92	84	75-125	2	20	

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QUALITY CONTROL DATA

Project: Green Valley Landfill GW
Pace Project No.: 50130404

QC Batch: MPRP/18406 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET
Associated Lab Samples: 50130404002, 50130404003, 50130404004, 50130404005, 50130404006, 50130404007, 50130404008, 50130404009

METHOD BLANK: 1409680 Matrix: Water
Associated Lab Samples: 50130404002, 50130404003, 50130404004, 50130404005, 50130404006, 50130404007, 50130404008, 50130404009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Iron	mg/L	0.027	0.020	11/02/15 10:01	P8
Sodium	mg/L	ND	0.10	11/02/15 08:06	

LABORATORY CONTROL SAMPLE: 1409681

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron	mg/L	10	10.4	104	80-120	
Sodium	mg/L	10	10.2	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1409682 1409683

Parameter	Units	50130404004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Iron	mg/L	16.1	10	10	26.5	27.0	104	110	75-125	2	20	
Sodium	mg/L	11.6	10	10	21.6	22.1	101	106	75-125	2	20	

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QUALITY CONTROL DATA

Project: Green Valley Landfill GW
Pace Project No.: 50130404

QC Batch: WET/25123 Analysis Method: SM 2540C
QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids
Associated Lab Samples: 50130404001, 50130404002, 50130404003, 50130404004, 50130404005, 50130404006, 50130404007, 50130404008, 50130404009

METHOD BLANK: 1407434 Matrix: Water
Associated Lab Samples: 50130404001, 50130404002, 50130404003, 50130404004, 50130404005, 50130404006, 50130404007, 50130404008, 50130404009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10/22/15 16:12	

LABORATORY CONTROL SAMPLE: 1407435

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	300	289	96	80-120	

SAMPLE DUPLICATE: 1407436

Parameter	Units	50130394001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	1440	1440	0	10	

SAMPLE DUPLICATE: 1407454

Parameter	Units	50130413010 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	1460	1450	1	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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Dublin, OH 43017
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: Green Valley Landfill GW
Pace Project No.: 50130404

QC Batch: WET/25120 Analysis Method: EPA 410.4
QC Batch Method: EPA 410.4 Analysis Description: 410.4 COD
Associated Lab Samples: 50130404001, 50130404002, 50130404003, 50130404004, 50130404005, 50130404006, 50130404007, 50130404008, 50130404009

METHOD BLANK: 1407164 Matrix: Water
Associated Lab Samples: 50130404001, 50130404002, 50130404003, 50130404004, 50130404005, 50130404006, 50130404007, 50130404008, 50130404009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	ND	10.0	10/22/15 18:27	

LABORATORY CONTROL SAMPLE: 1407165

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	100	99.9	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1407166 1407167

Parameter	Units	50130387001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	<10.0	100	100	102	96.5	102	96	90-110	5	20	

MATRIX SPIKE SAMPLE: 1407168

Parameter	Units	50130394001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	ND	100	104	99	90-110	

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QUALITY CONTROL DATA

Project: Green Valley Landfill GW
Pace Project No.: 50130404

QC Batch: WETA/18467 Analysis Method: SM 5310C
QC Batch Method: SM 5310C Analysis Description: 5310C Total Organic Carbon
Associated Lab Samples: 50130404001, 50130404002, 50130404003, 50130404004, 50130404005, 50130404006, 50130404007, 50130404008, 50130404009

METHOD BLANK: 1409383 Matrix: Water
Associated Lab Samples: 50130404001, 50130404002, 50130404003, 50130404004, 50130404005, 50130404006, 50130404007, 50130404008, 50130404009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Organic Carbon	mg/L	ND	1.0	10/27/15 09:24	

LABORATORY CONTROL SAMPLE: 1409384

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	10	10.1	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1409385 1409386

Parameter	Units	50130404002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Total Organic Carbon	mg/L	ND	10	10	10.9	10.4	105	100	80-120	4	20	

MATRIX SPIKE SAMPLE: 1409387

Parameter	Units	50130404009 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	1.8	10	12.3	104	80-120	

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QUALIFIERS

Project: Green Valley Landfill GW
Pace Project No.: 50130404

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

P6	Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.
P8	Analyte was detected in the method blank. All associated samples had concentrations of at least ten times greater than the blank or were below the reporting limit.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Green Valley Landfill GW
Pace Project No.: 50130404

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
50130404001	MW-1		FLD/1711		
50130404002	MW-1A		FLD/1711		
50130404003	MW-1B		FLD/1711		
50130404004	MW-3		FLD/1711		
50130404005	Dup		FLD/1711		
50130404006	FB		FLD/1711		
50130404007	MW-28D		FLD/1711		
50130404008	MW-28E		FLD/1711		
50130404009	MW-28C		FLD/1711		
50130404001	MW-1	EPA 9056	GCSV/17216		
50130404002	MW-1A	EPA 9056	GCSV/17216		
50130404003	MW-1B	EPA 9056	GCSV/17216		
50130404004	MW-3	EPA 9056	GCSV/17216		
50130404005	Dup	EPA 9056	GCSV/17216		
50130404006	FB	EPA 9056	GCSV/17216		
50130404007	MW-28D	EPA 9056	GCSV/17223		
50130404008	MW-28E	EPA 9056	GCSV/17223		
50130404009	MW-28C	EPA 9056	GCSV/17223		
50130404001	MW-1	EPA 3010	MPRP/18344	EPA 6010	ICP/22384
50130404002	MW-1A	EPA 3010	MPRP/18406	EPA 6010	ICP/22346
50130404003	MW-1B	EPA 3010	MPRP/18406	EPA 6010	ICP/22346
50130404004	MW-3	EPA 3010	MPRP/18406	EPA 6010	ICP/22346
50130404005	Dup	EPA 3010	MPRP/18406	EPA 6010	ICP/22346
50130404006	FB	EPA 3010	MPRP/18406	EPA 6010	ICP/22346
50130404007	MW-28D	EPA 3010	MPRP/18406	EPA 6010	ICP/22346
50130404008	MW-28E	EPA 3010	MPRP/18406	EPA 6010	ICP/22346
50130404009	MW-28C	EPA 3010	MPRP/18406	EPA 6010	ICP/22346
50130404001	MW-1	SM 2540C	WET/25123		
50130404002	MW-1A	SM 2540C	WET/25123		
50130404003	MW-1B	SM 2540C	WET/25123		
50130404004	MW-3	SM 2540C	WET/25123		
50130404005	Dup	SM 2540C	WET/25123		
50130404006	FB	SM 2540C	WET/25123		
50130404007	MW-28D	SM 2540C	WET/25123		
50130404008	MW-28E	SM 2540C	WET/25123		
50130404009	MW-28C	SM 2540C	WET/25123		
50130404001	MW-1	EPA 410.4	WET/25120	EPA 410.4	WET/25128
50130404002	MW-1A	EPA 410.4	WET/25120	EPA 410.4	WET/25128
50130404003	MW-1B	EPA 410.4	WET/25120	EPA 410.4	WET/25128
50130404004	MW-3	EPA 410.4	WET/25120	EPA 410.4	WET/25128
50130404005	Dup	EPA 410.4	WET/25120	EPA 410.4	WET/25128
50130404006	FB	EPA 410.4	WET/25120	EPA 410.4	WET/25128
50130404007	MW-28D	EPA 410.4	WET/25120	EPA 410.4	WET/25128
50130404008	MW-28E	EPA 410.4	WET/25120	EPA 410.4	WET/25128
50130404009	MW-28C	EPA 410.4	WET/25120	EPA 410.4	WET/25128

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(317)228-3100

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Green Valley Landfill GW
Pace Project No.: 50130404

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
50130404001	**MW-1**	SM 5310C	WETA/18467		
50130404002	**MW-1A**	SM 5310C	WETA/18467		
50130404003	**MW-1B**	SM 5310C	WETA/18467		
50130404004	**MW-3**	SM 5310C	WETA/18467		
50130404005	**Dup**	SM 5310C	WETA/18467		
50130404006	**FB**	SM 5310C	WETA/18467		
50130404007	**MW-28D**	SM 5310C	WETA/18467		
50130404008	**MW-28E**	SM 5310C	WETA/18467		
50130404009	**MW-28C**	SM 5310C	WETA/18467		

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KENVIRONS
452 Versailles Road
Frankfort, Kentucky 40601
Office: 502-695-4357
Fax: 502-695-4363

CHAIN-OF-CUSTODY / ANALYTICAL REQUEST DOCUMENT

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 1

Section A Required Client Information:

Company:	Kenvirons, Inc.
Address:	452 Versailles Road
	Frankfort, KY 40601
Email To:	bknarr@kenvirons.com
Phone: (502)695-4357	Fax: (502)695-4363
Requested Due Date/TAT:	Standard

Section B Required Project Information:

Report To:	Bill Knarr
Copy To:	
Purchase Order No.:	20070016
Project Name:	Green Valley Landfill Groundwater
Project Number:	20070016

Section C Invoice Information:

Attention:	Bill Knarr
Company Name:	Kenvirons, Inc.
Address:	452 Versailles Rd. Frankfort, KY
Quote Reference:	
Project Manager:	Chris Boyle
Profile #:	4634

REGULATORY AGENCY: ☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: KY

Section D Required Client Information

Valid Matrix Codes: DRINKING WATER DW; WATER WT; WASTE WATER WW; LEACHATE LE; SOIL/SOLID SL; OIL OL; WIPE WP; AIR AR; OTHER OT; TISSUE TS

ITEM #	SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	DATE	TIME	FLOW	TEMPERATURE	PH	SPECIFIC CONDUCTIVITY	TURBIDITY OR DISSOLVED OXYGEN (CIRCLE)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N: Tox	Fe, Mn	COD, TOC	Cl, TDS	Residual Chlorine (Y/N)	Project No./ Lab I.D.
1	MW-1	10/20/15	1045	—	14.72	5.91	72	4.02	GW	G	4	1	2	1						X	X	X	X		001
2	MW-1B	10/20/15	1115	—	12.48	6.73	378	2.48	GW	G	4	1	2	1						X	X	X	X		002
3	MW-1B	10/20/15	1140	—	12.75	7.35	658	2.77	GW	G	4	1	2	1						X	X	X	X		003
4	MW-3	10/20/15	1228	—	15.70	6.15	343	2.27	GW	G	4	1	2	1						X	X	X	X		004
5	Dup	10/20/15	—	—	—	—	—	—	GW	G	4	1	2	1						X	X	X	X		005
6	FB	10/20/15	—	—	—	—	—	—	WT	G	4	1	2	1						X	X	X	X		006
7	MW-2BD	10/20/15	1255	—	16.05	5.99	700	1.34	GW	G	4	1	2	1						X	X	X	X		007
8	MW-2BE	10/20/15	1315	—	16.35	6.42	292	2.11	GW	G	4	1	2	1						X	X	X	X		008
9	MW-2BC	10/20/15	1335	—	16.99	5.40	457	2.24	GW	G	4	1	2	1						X	X	X	X		009
10																									
11																									
12																									

50130404
~~50130398~~ BLK

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
	Bill F Knarr III	10/20/15	1600	Sent via Fed Ex	10/20/15	1600
	FEDEX				10/21/15	0925

SAMPLE CONDITIONS	Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	1.3	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Bill F. Knarr, III

SIGNATURE of SAMPLER: Bill F. Knarr III

DATE Signed (MM/DD/YY): 10/20/15

Sample Condition Upon Receipt

Pace Analytical

Client Name: GREEN VALLEY

Project # 50130404

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Tracking #: 6467 4541 8164

Custody Seal on Cooler/Box Present: ☑ yes ☐ no Seals intact: ☑ yes ☐ no

Date/Time 5035A kits placed in freezer: _____

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other _____

Thermometer 123456 ABCDEF

Type of ice: ~~Wet~~ Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature 1.3

(Corrected, if applicable)

Ice Visible in Sample Containers: ☐ yes ☑ no

Temp should be above freezing to 6°C

Date and initials of person examining contents: [illegible] 10/21/15

		Comments:
Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.
Short Hold Time Analysis (<72hr):	☐Yes ☑No ☐N/A	5.
Rush Turn Around Time Requested:	☐Yes ☑No ☐N/A	6.
Containers Intact:	☑Yes ☐No ☐N/A	7.
Sample Labels match COC: -Includes date/time/ID/Analysis	☑Yes ☐No ☐N/A	8.
All containers needing acid/base pres. have been checked? exceptions: VOA, coliform, TOC, O&G All containers needing preservation are found to be in compliance with EPA recommendation (<2, >9, >12) unless otherwise noted.	☑Yes ☐No ☐N/A	9. (Circle) ~~HNO3~~ H2SO4 NaOH NaOH/ZnAc
Residual Chlorine Check (SVOC 625 Pest/PCB 608)		10. Present Absent
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☑N/A	11.
Headspace TCLP Volatiles	☐Yes ☐No	12
Headspace Wisconsin Sulfide / Acidity	☐Yes ☐No	13
Trip Blank Present:	☐Yes ☐No ☑N/A	14
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A	
Project Manager Review		
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	15.
Sufficient Volume:	☑Yes ☐No ☐N/A	16.
Correct Containers Used:	☑Yes ☐No ☐N/A	17.

Field Data Required? Y / N

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____

Comments/ Resolution:

Project Manager Review: CBB **Date:** 10-23-15

Form F-IN-Q-290-rev.07, 11May2015

Sample Container Count

CLIENT: GREEN VALLEY

COC PAGE ___ of ___

COC ID# _____

Project # S0130404

Sample Line Item	DG9H	AG1U	WGFU	AG0U	R	4 / 6	BP2N	BP2U	BP2S	BP3N	BP3U	BP3S	AG3S	AG1H	BP3C	BP1U	SP5T	AG2U	pH <2	pH >9	pH>12
1										1	1		2								
2																					
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

Container Codes

DG9H	40mL HCL amber voa vial	AG0U	100mL unpreserved amber glass	BP1N	1 liter HNO3 plastic	DG9P	40mL TSP amber vial
AG1U	1liter unpreserved amber glass	AG1H	1 liter HCL amber glass	BP1S	1 liter H2SO4 plastic	DG9S	40mL H2SO4 amber vial
WGFU	4oz clear soil jar	AG1S	1 liter H2SO4 amber glass	BP1U	1 liter unpreserved plastic	DG9T	40mL Na Thio amber vial
R	terra core kit	AG1T	1 liter Na Thiosulfate amber glass	BP1Z	1 liter NaOH, Zn, Ac	DG9U	40mL unpreserved **amber** vial
BP2N	500mL HNO3 plastic	AG2N	500mL HNO3 amber glass	BP2A	500mL NaOH, Asc Acid plastic	SP5T	120mL Coliform Na Thiosulfate
BP2U	500mL unpreserved plastic	AG2S	500mL H2SO4 amber glass	BP2O	500mL NaOH plastic	JGFU	4oz unpreserved amber wide
BP2S	500mL H2SO4 plastic	AG2U	500mL unpreserved amber glass	BP2Z	500mL NaOH, Zn Ac	U	Summa Can
BP3N	250mL HNO3 plastic	AG3U	250mL unpreserved amber glass	AF	Air Filter	VG9H	40mL HCL clear vial
BP3U	250mL unpreserved plastic	BG1H	1 liter HCL clear glass	BP3C	250mL NaOH plastic	VG9T	40mL Na Thio. clear vial
BP3S	250mL H2SO4 plastic	BG1S	1 liter H2SO4 clear glass	BP3Z	250mL NaOH, Zn Ac plastic	VG9U	40mL unpreserved **clear** vial
AG3S	250mL H2SO4 glass amber	BG1T	1 liter Na Thiosulfate clear glass	C	Air Cassettes	VSG	Headspace septa vial & HCL
AG1S	1 liter H2SO4 amber glass	BG1U	1 liter unpreserved glass	DG9B	40mL Na Bisulfate amber vial	WGFX	4oz wide jar w/hexane wipe
BP1U	1 liter unpreserved plastic	BP1A	1 liter NaOH, Asc Acid plastic	DG9M	40mL MeOH clear vial	ZPLC	Ziploc Bag

GREEN VALLEY LANDFILL
GROUNDWATER ELEVATION DATA
2007006

Well	Top of Casing	AKGWA #	Total Depth of Well	Depth to Water	Groundwater Elevation	Date	Time
MW-1	617.80	8000-8086	14.80	5.53	612.27	10/20/15	1025
MW-1A	618.60	8000-2931	41.00	3.61	614.99	10/20/15	1047
MW-1B	618.70	8000-2932	61.00	6.56	612.14	10/20/15	1120
MW-3	630.80	8000-8085	14.10	5.51	625.29	10/20/15	1205
MW-28C	674.40	8005-7101	12.90	~~5.32~~ 4.62	~~669.88~~ 669.78	10/20/15	~~1240~~ 1320
MW-28D	675.20	8005-7102	16.30	5.32	669.88	10/20/15	1240
MW-28E	677.00	8005-7103	27.30	9.56	667.44	10/20/15	1258

TECHNICIAN Bill F. Knapp, III DATE 10/20/15 QUARTER 4th

Keystone
LABORATORIES, INC.

MEMBER ACIL

November 03 2015

Chris Boyle
Pace Analytical-IN
7726 Moller Road
Indianapolis, IN 46268

RE: PAS Subcontract-CB
50130404

Enclosed are the results of analyses for samples received by the laboratory on 10/22/15 10:30. If you have any questions concerning this report, please feel free to contact me at 1-800-858-5227.

ANALYTICAL REPORT FOR SAMPLES

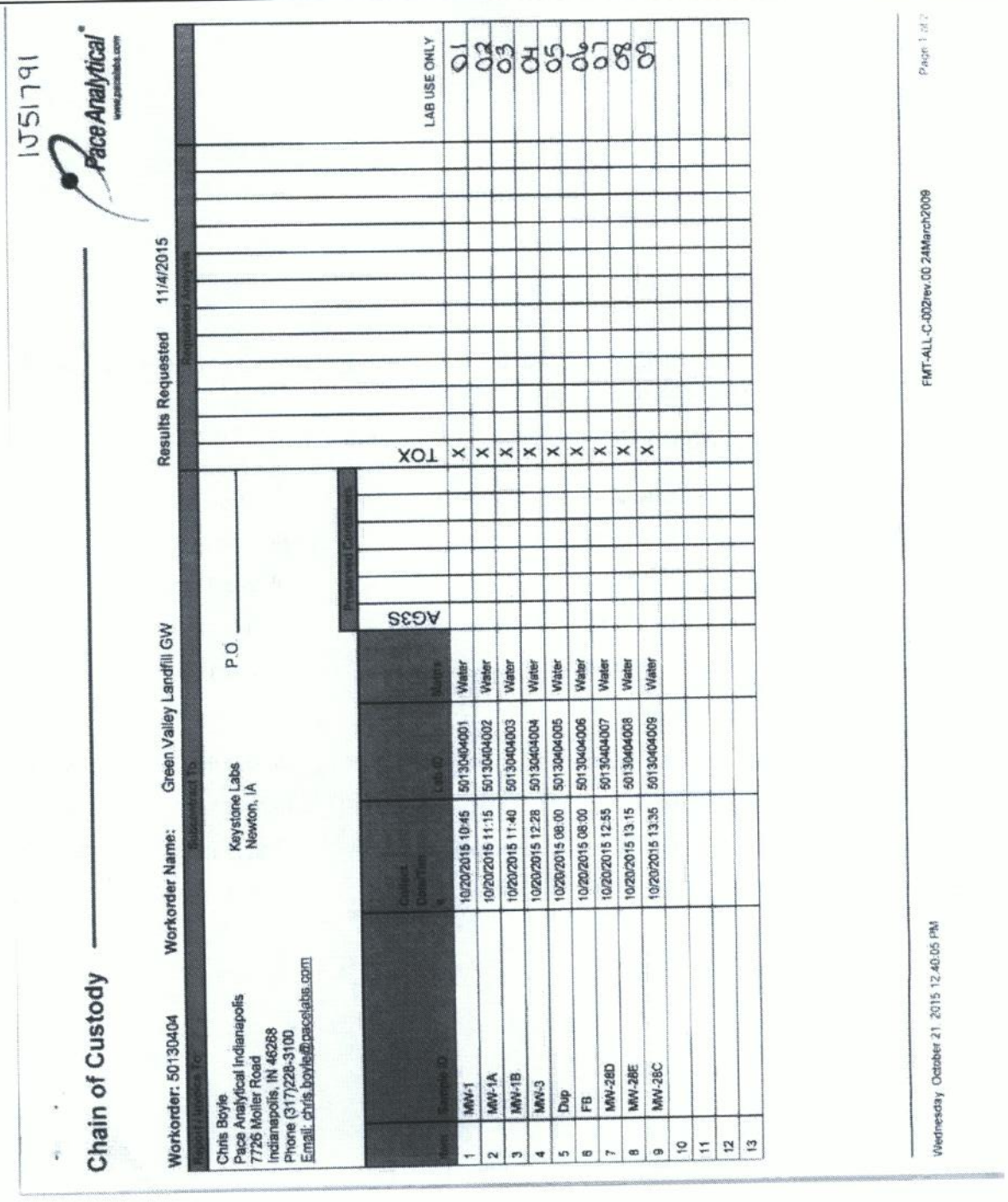
Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
50130404001 MW-1	1J51791-01	Water	10/20/15 10:45	10/22/15 10:30
50130404002 MW-1A	1J51791-02	Water	10/20/15 11:15	10/22/15 10:30
50130404003 MW-1B	1J51791-03	Water	10/20/15 11:40	10/22/15 10:30
50130404004 MW-3	1J51791-04	Water	10/20/15 12:28	10/22/15 10:30
50130404005 Dup	1J51791-05	Water	10/20/15 08:00	10/22/15 10:30
50130404006 FB	1J51791-06	Water	10/20/15 08:00	10/22/15 10:30
50130404007 MW-28D	1J51791-07	Water	10/20/15 12:55	10/22/15 10:30
50130404008 MW-28E	1J51791-08	Water	10/20/15 13:15	10/22/15 10:30
50130404009 MW-28C	1J51791-09	Water	10/20/15 13:35	10/22/15 10:30

The results in this report apply to the samples analyzed in accordance with the Chain-of-Custody record. This report must be reproduced in its entirety.

Phone 641-792-8451
600 East 17th Street South
Newton, IA 50208
Fax 641-792-8963

Page 29 of 83

Pace Analytical-IN 7726 Moller Road Indianapolis, IN 46268	Project: PAS Subcontract-CB Project Number: 50130404 Project Manager: Chris Boyle	Reported 11/03/15 16:38



Chain of Custody

Pace Analytical
www.pacelabs.com

1051791

Workorder: 50130404 Workorder Name: Green Valley Landfill GW Results Requested 11/4/2015

Report To
Chris Boyle
Pace Analytical Indianapolis
7726 Moller Road
Indianapolis, IN 46268
Phone (317)228-3100
Email: chris.boyle@pacelabs.com

Subcontract To
Keystone Labs
Newton, IA

P.O.

Item	Sample ID	Collect Date/Time	Lab ID	Matrix	AG3S	Preserved Containers	TOX	Requested Analysis	LAB USE ONLY
1	MW-1	10/20/2015 10:45	50130404001	Water			X		01
2	MW-1A	10/20/2015 11:15	50130404002	Water			X		02
3	MW-1B	10/20/2015 11:40	50130404003	Water			X		03
4	MW-3	10/20/2015 12:28	50130404004	Water			X		04
5	Dup	10/20/2015 08:00	50130404005	Water			X		05
6	FB	10/20/2015 08:00	50130404006	Water			X		06
7	MW-26D	10/20/2015 12:55	50130404007	Water			X		07
8	MW-28E	10/20/2015 13:15	50130404008	Water			X		08
9	MW-28C	10/20/2015 13:35	50130404009	Water			X		09
10									
11									
12									
13									

Wednesday, October 21, 2015 12:40:05 PM

FMT-ALL-C-002rev.00 24March2009

Page 1 of 2

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600 East 17th Street South
Newton, IA 50208

Fax 641-792-7093

Keystone
LABORATORIES, INC.

Pace Analytical-IN
7726 Moller Road
Indianapolis, IN 46268

Project: PAS Subcontract-CB
Project Number: 50130404
Project Manager: Chris Boyle

Reported
11/03/15 16:38

1361791

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1		10/21/15 1700	Kara Hanson	10/21/15 1020	
2					
3					

Cooler Temperature on Receipt °C Custody Seal Y or N Received on Ice Y or N Samples Intact Y or N

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document. This chain of custody is considered complete as is since this information is available in the owner laboratory.

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Newton, IA 50208
Fax 641-792-8993

Pace Analytical-IN 7726 Moller Road Indianapolis, IN 46268	Project: PAS Subcontract-CB Project Number: 50130404 Project Manager: Chris Boyle	Reported 11/03/15 16:38

50130404001 MW-1

1J51791-01 (Water)

Date Sampled:10/20/2015 10:45:00AM

Keystone Laboratories, Inc. - Newton

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Determination of Conventional Chemistry Parameters									
Total Organic Halogens (TOX)	ND	0.010	mg/L	1	1YK0101	11/02/15	11/03/15 12:22	EPA 9020	

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Newton, IA 50208

Fax 641-792-7093

Pace Analytical-IN 7726 Moller Road Indianapolis, IN 46268	Project: PAS Subcontract-CB Project Number: 50130404 Project Manager: Chris Boyle	Reported 11/03/15 16:38

50130404002 MW-1A

1J51791-02 (Water)

Date Sampled:10/20/2015 11:15:00AM

Keystone Laboratories, Inc. - Newton

Determination of Conventional Chemistry Parameters

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total Organic Halogens (TOX)	ND	0.010	mg/L	1	1YK0101	11/02/15	11/03/15 12:22	EPA 9020	

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Newton, IA 50208

Fax 641-792-7093

Pace Analytical-IN 7726 Moller Road Indianapolis, IN 46268	Project: PAS Subcontract-CB Project Number: 50130404 Project Manager: Chris Boyle	Reported 11/03/15 16:38

50130404003 MW-1B

1J51791-03 (Water)

Date Sampled:10/20/2015 11:40:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Keystone Laboratories, Inc. - Newton									
Determination of Conventional Chemistry Parameters									
Total Organic Halogens (TOX)	ND	0.010	mg/L	1	1YK0101	11/02/15	11/03/15 12:22	EPA 9020	

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Fax 641-792-7093

Pace Analytical-IN	Project: PAS Subcontract-CB	Reported
7726 Moller Road	Project Number: 50130404	11/03/15 16:38
Indianapolis, IN 46268	Project Manager: Chris Boyle	

50130404004 MW-3

1J51791-04 (Water)

Date Sampled:10/20/2015 12:28:00PM

Keystone Laboratories, Inc. - Newton

Determination of Conventional Chemistry Parameters

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total Organic Halogens (TOX)	ND	0.010	mg/L	1	1YK0101	11/02/15	11/03/15 12:22	EPA 9020	

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Fax 641-792-9685

Pace Analytical-IN 7726 Moller Road Indianapolis, IN 46268	Project: PAS Subcontract-CB Project Number: 50130404 Project Manager: Chris Boyle	Reported 11/03/15 16:38

50130404005 Dup

1J51791-05 (Water)

Date Sampled:10/20/2015 8:00:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Keystone Laboratories, Inc. - Newton									
Determination of Conventional Chemistry Parameters									
Total Organic Halogens (TOX)	ND	0.010	mg/L	1	1YK0101	11/02/15	11/03/15 12:22	EPA 9020	

Phone 641-792-8451

600 East 17th Street South
Newton, IA 50208

Fax 641-792-7093

Pace Analytical-IN	Project: PAS Subcontract-CB	Reported
7726 Moller Road	Project Number: 50130404	11/03/15 16:38
Indianapolis, IN 46268	Project Manager: Chris Boyle	

50130404006 FB

1J51791-06 (Water)

Date Sampled:10/20/2015 8:00:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Keystone Laboratories, Inc. - Newton									
Determination of Conventional Chemistry Parameters									
Total Organic Halogens (TOX)	ND	0.010	mg/L	1	1YK0101	11/02/15	11/03/15 12:22	EPA 9020	

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Pace Analytical-IN 7726 Moller Road Indianapolis, IN 46268	Project: PAS Subcontract-CB Project Number: 50130404 Project Manager: Chris Boyle	Reported 11/03/15 16:38

50130404007 MW-28D

1J51791-07 (Water)

Date Sampled:10/20/2015 12:55:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Keystone Laboratories, Inc. - Newton									
Determination of Conventional Chemistry Parameters									
Total Organic Halogens (TOX)	**0.015**	0.010	mg/L	1	1YK0101	11/02/15	11/03/15 12:22	EPA 9020	

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Fax 641-792-8456

Pace Analytical-IN	Project: PAS Subcontract-CB	Reported
7726 Moller Road	Project Number: 50130404	11/03/15 16:38
Indianapolis, IN 46268	Project Manager: Chris Boyle	

50130404008 MW-28E

1J51791-08 (Water)

Date Sampled:10/20/2015 1:15:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Keystone Laboratories, Inc. - Newton									
Determination of Conventional Chemistry Parameters									
Total Organic Halogens (TOX)	ND	0.010	mg/L	1	1YK0101	11/02/15	11/03/15 12:22	EPA 9020	

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Fax 641-792-8993

Pace Analytical-IN 7726 Moller Road Indianapolis, IN 46268	Project: PAS Subcontract-CB Project Number: 50130404 Project Manager: Chris Boyle	Reported 11/03/15 16:38

50130404009 MW-28C

1J51791-09 (Water)

Date Sampled:10/20/2015 1:35:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Keystone Laboratories, Inc. - Newton									
Determination of Conventional Chemistry Parameters									
Total Organic Halogens (TOX)	**0.024**	0.010	mg/L	1	1YK0101	11/02/15	11/03/15 12:22	EPA 9020	

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Pace Analytical-IN	Project: PAS Subcontract-CB	Reported
7726 Moller Road	Project Number: 50130404	11/03/15 16:38
Indianapolis, IN 46268	Project Manager: Chris Boyle	

Determination of Conventional Chemistry Parameters - Quality Control

Keystone Laboratories, Inc. - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1YK0101 - TOX/TX/EOX										
Blank (1YK0101-BLK1)				Prepared: 11/02/15 Analyzed: 11/03/15						
Total Organic Halogens (TOX)	ND	0.010	mg/L							
LCS (1YK0101-BS1)				Prepared: 11/02/15 Analyzed: 11/03/15						
Total Organic Halogens (TOX)	0.1040	0.010	mg/L	0.0996300		104	69-125			
LCS Dup (1YK0101-BSD1)				Prepared: 11/02/15 Analyzed: 11/03/15						
Total Organic Halogens (TOX)	0.1022	0.010	mg/L	0.0996300		103	69-125	1.72	21	
Reference (1YK0101-SRM1)				Prepared: 11/02/15 Analyzed: 11/03/15						
Total Organic Halogens (TOX)	0.1006	0.010	mg/L	0.101917		98.7	90-110			
Reference (1YK0101-SRM2)				Prepared: 11/02/15 Analyzed: 11/03/15						
Total Organic Halogens (TOX)	0.1018	0.010	mg/L	0.101917		99.9	90-110			
Reference (1YK0101-SRM3)				Prepared: 11/02/15 Analyzed: 11/03/15						
Total Organic Halogens (TOX)	0.0972	0.010	mg/L	0.101917		95.4	90-110			

Certified Analyses Included in This Report

Method/Matrix	Analyte	Certifications
EPA 9020 in Water		
	Total Organic Halogens (TOX)	KS-NT,SIA1X

Code	Certifying Authority	Certificate Number	Expires
KS-KC	Kansas Department of Health and Environment-KC	E-10110	09/30/2015
KS-NT	Kansas Department of Health and Environment (NELAP	E-10287	01/31/2016
MO-KC	Missouri Department of Natural Resources	140	04/30/2015
SIA1X	Iowa Department of Natural Resources	95	02/01/2016

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Fax 641-792-1789

Pace Analytical-IN 7726 Moller Road Indianapolis, IN 46268	Project: PAS Subcontract-CB Project Number: 50130404 Project Manager: Chris Boyle	Reported 11/03/15 16:38

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

Phone 641-792-8451

600 East 17th Street South
Newton, IA 50208

Fax 641-792-7993

Pace Analytical-IN 7726 Moller Road Indianapolis, IN 46268	Project: PAS Subcontract-CB Project Number: 50130404 Project Manager: Chris Boyle	Reported 11/03/15 16:38

Sue Thompson

Sue Thompson
Project Manager II

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Indianapolis, IN 46268
(317)228-3100

November 09, 2015

Environmental Manager
Republic Services, Inc. - Green Valley Landfill
100 Addington Road
Ashland, KY 41102

RE: Project: Green Valley SW 4Q 2015
Pace Project No.: 50130709

Dear Environmental Manager:
Enclosed are the analytical results for sample(s) received by the laboratory on October 23, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Chris Sarkan
chris.sarkan@pacelabs.com
Project Manager

Enclosures

cc: Mr. Steve Jett, Jett Environmental Consulting
Mr. Bill Knarr, Kenvirons, Inc.

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CERTIFICATIONS

Project: Green Valley SW 4Q 2015
Pace Project No.: 50130709

Indiana Certification IDs
7726 Moller Road, Indianapolis, IN 46268
Illinois Certification #: 200074
Indiana Certification #: C-49-06
Kansas Certification #:E-10177
Kentucky UST Certification #: 0042
Kentucky WW Certification #:98019
Louisiana Certification #: 04076
Ohio VAP Certification #: CL-0065
Oklahoma Certification #: 2014-148
Texas Certification #: T104704355-15-9
West Virginia Certification #: 330
Wisconsin Certification #: 999788130
USDA Soil Permit #: P330-10-00128

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SAMPLE SUMMARY

Project: Green Valley SW 4Q 2015
Pace Project No.: 50130709

Lab ID	Sample ID	Matrix	Date Collected	Date Received
50130709001	**SW-4**	Water	10/20/15 09:30	10/23/15 09:25

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SAMPLE ANALYTE COUNT

Project: Green Valley SW 4Q 2015
Pace Project No.: 50130709

Lab ID	Sample ID	Method	Analysts	Analytes Reported
50130709001	**SW-4**	EPA 9056	RID	2
		EPA 6010	MJC	2
		SM 2540B	ESC	1
		SM 2540C	ESC	1
		SM 2540D	ESC	1
		EPA 410.4	ZM	1
		SM 5310C	BAL	1

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SUMMARY OF DETECTION

Project: Green Valley SW 4Q 2015
Pace Project No.: 50130709

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
50130709001	**SW-4**					
	Field pH	7.26	Std. Units		10/20/15 00:00	
	Field Temperature	9.26	deg C		10/20/15 00:00	
	Field Specific Conductance	1200	umhos/cm		10/20/15 00:00	
EPA 9056	Chloride	12.2	mg/L	2.5	10/30/15 01:27	
EPA 9056	Sulfate	612	mg/L	25.0	10/30/15 17:03	
EPA 6010	Iron	0.48	mg/L	0.020	11/05/15 09:50	
EPA 6010	Sodium	11.2	mg/L	0.10	11/05/15 09:50	
SM 2540B	Total Solids	1060	mg/L	10.0	10/26/15 15:33	
SM 2540C	Total Dissolved Solids	995	mg/L	10.0	10/26/15 12:34	
SM 5310C	Total Organic Carbon	2.1	mg/L	1.0	10/31/15 09:54	

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ANALYTICAL RESULTS

Project: Green Valley SW 4Q 2015
Pace Project No.: 50130709

Sample: SW-4 **Lab ID: 50130709001** Collected: 10/20/15 09:30 Received: 10/23/15 09:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:							
Field pH	**7.26**	Std. Units		1		10/20/15 00:00		
Field Temperature	**9.26**	deg C		1		10/20/15 00:00		
Field Specific Conductance	**1200**	umhos/cm		1		10/20/15 00:00		
9056 IC Anions	Analytical Method: EPA 9056							
Chloride	**12.2**	mg/L	2.5	10		10/30/15 01:27	16887-00-6	
Sulfate	**612**	mg/L	25.0	100		10/30/15 17:03	14808-79-8	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Iron	**0.48**	mg/L	0.020	1	11/02/15 15:50	11/05/15 09:50	7439-89-6	
Sodium	**11.2**	mg/L	0.10	1	11/02/15 15:50	11/05/15 09:50	7440-23-5	
2540B Total Solids	Analytical Method: SM 2540B							
Total Solids	**1060**	mg/L	10.0	1		10/26/15 15:33		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	**995**	mg/L	10.0	1		10/26/15 12:34		
2540D Total Suspended Solids	Analytical Method: SM 2540D							
Total Suspended Solids	ND	mg/L	5.0	1		10/24/15 11:01		
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4							
Chemical Oxygen Demand	ND	mg/L	10.0	1	10/28/15 10:37	10/28/15 16:41		
5310C TOC	Analytical Method: SM 5310C							
Total Organic Carbon	**2.1**	mg/L	1.0	1		10/31/15 09:54	7440-44-0	

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QUALITY CONTROL DATA

Project: Green Valley SW 4Q 2015
Pace Project No.: 50130709

QC Batch: GCSV/17279
QC Batch Method: EPA 9056
Analysis Method: EPA 9056
Analysis Description: 9056 IC Anions
Associated Lab Samples: 50130709001

METHOD BLANK: 1411099 Matrix: Water
Associated Lab Samples: 50130709001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	0.25	10/29/15 22:59	
Sulfate	mg/L	ND	0.25	10/29/15 22:59	

LABORATORY CONTROL SAMPLE: 1411100

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	1.2	1.2	95	80-120	
Sulfate	mg/L	2.5	2.5	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1411101 1411102

Parameter	Units	50130916001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	236	125	125	356	355	96	95	80-120	0	15	
Sulfate	mg/L	71.2	25	25	94.8	94.6	95	94	80-120	0	15	

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QUALITY CONTROL DATA

Project: Green Valley SW 4Q 2015
Pace Project No.: 50130709

QC Batch: MPRP/18417
QC Batch Method: EPA 3010
Analysis Method: EPA 6010
Analysis Description: 6010 MET
Associated Lab Samples: 50130709001

METHOD BLANK: 1409817 Matrix: Water
Associated Lab Samples: 50130709001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Iron	mg/L	ND	0.020	11/05/15 09:45	
Sodium	mg/L	ND	0.10	11/05/15 09:45	

LABORATORY CONTROL SAMPLE: 1409818

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron	mg/L	10	9.5	95	80-120	
Sodium	mg/L	10	9.8	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1409819 1409820

Parameter	Units	50130645003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Iron	mg/L	ND	10	10	9.3	9.3	92	92	75-125	0	20	
Sodium	mg/L	38700 ug/L	10	10	48.8	48.7	101	100	75-125	0	20	

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QUALITY CONTROL DATA

Project: Green Valley SW 4Q 2015
Pace Project No.: 50130709

QC Batch: WET/25187
QC Batch Method: SM 2540B
Analysis Method: SM 2540B
Analysis Description: 2540B Total Solids
Associated Lab Samples: 50130709001

METHOD BLANK: 1409469
Matrix: Water
Associated Lab Samples: 50130709001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Solids	mg/L	ND	10.0	10/26/15 15:32	

LABORATORY CONTROL SAMPLE: 1409470

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Solids	mg/L	300	301	100	80-120	

SAMPLE DUPLICATE: 1409471

Parameter	Units	50130709001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Solids	mg/L	1060	1060	0	10	

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QUALITY CONTROL DATA

Project: Green Valley SW 4Q 2015
Pace Project No.: 50130709

QC Batch: WET/25169
QC Batch Method: SM 2540C
Analysis Method: SM 2540C
Analysis Description: 2540C Total Dissolved Solids
Associated Lab Samples: 50130709001

METHOD BLANK: 1409098 Matrix: Water
Associated Lab Samples: 50130709001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10/26/15 12:27	

LABORATORY CONTROL SAMPLE: 1409099

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	300	294	98	80-120	

SAMPLE DUPLICATE: 1409100

Parameter	Units	50130228004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	143	156	9	10	

SAMPLE DUPLICATE: 1409101

Parameter	Units	50130744001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	363	365	1	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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4860 Blazer Parkway
Dublin, OH 43017
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: Green Valley SW 4Q 2015
Pace Project No.: 50130709

QC Batch: WET/25156
QC Batch Method: SM 2540D
Analysis Method: SM 2540D
Analysis Description: 2540D Total Suspended Solids
Associated Lab Samples: 50130709001

METHOD BLANK: 1408905 Matrix: Water
Associated Lab Samples: 50130709001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Suspended Solids	mg/L	ND	5.0	10/24/15 10:59	

LABORATORY CONTROL SAMPLE: 1408906

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Suspended Solids	mg/L	100	87	87	80-120	

SAMPLE DUPLICATE: 1408907

Parameter	Units	50130384007 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Suspended Solids	mg/L	<5.0	ND		10	

SAMPLE DUPLICATE: 1408908

Parameter	Units	50130414001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Suspended Solids	mg/L	10	10	0	10	

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QUALITY CONTROL DATA

Project: Green Valley SW 4Q 2015
Pace Project No.: 50130709

QC Batch: WET/25229
QC Batch Method: EPA 410.4
Analysis Method: EPA 410.4
Analysis Description: 410.4 COD
Associated Lab Samples: 50130709001

METHOD BLANK: 1410656 Matrix: Water
Associated Lab Samples: 50130709001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	ND	10.0	10/28/15 16:41	

LABORATORY CONTROL SAMPLE: 1410657

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	100	105	105	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1410658 1410659

Parameter	Units	50130645001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chemical Oxygen Demand	mg/L	12.6	100	100	107	105	95	93	90-110	2	20	

MATRIX SPIKE SAMPLE: 1410660

Parameter	Units	50130818001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	12.6	100	116	103	90-110	

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QUALITY CONTROL DATA

Project: Green Valley SW 4Q 2015
Pace Project No.: 50130709

QC Batch: WETA/18549
QC Batch Method: SM 5310C
Analysis Method: SM 5310C
Analysis Description: 5310C Total Organic Carbon
Associated Lab Samples: 50130709001

METHOD BLANK: 1412780 Matrix: Water
Associated Lab Samples: 50130709001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Organic Carbon	mg/L	ND	1.0	10/31/15 09:54	

LABORATORY CONTROL SAMPLE: 1412781

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	10	10.0	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1412782 1412783

Parameter	Units	50130670021 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Total Organic Carbon	mg/L	1.4	10	10	12.9	12.9	115	115	80-120	0	20	

MATRIX SPIKE SAMPLE: 1412784

Parameter	Units	50130670031 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	2.1	10	13.6	114	80-120	

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QUALIFIERS

Project: Green Valley SW 4Q 2015
Pace Project No.: 50130709

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Green Valley SW 4Q 2015
Pace Project No.: 50130709

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
50130709001	**SW-4**		FLD/1715		
50130709001	**SW-4**	EPA 9056	GCSV/17279		
50130709001	**SW-4**	EPA 3010	MPRP/18417	EPA 6010	ICP/22436
50130709001	**SW-4**	SM 2540B	WET/25187		
50130709001	**SW-4**	SM 2540C	WET/25169		
50130709001	**SW-4**	SM 2540D	WET/25156		
50130709001	**SW-4**	EPA 410.4	WET/25229	EPA 410.4	WET/25244
50130709001	**SW-4**	SM 5310C	WETA/18549		

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KENVIRONS

452 Versailles Road
Frankfort, Kentucky 40601
Office: 502-695-4357
Fax: 502-695-4363

CHAIN-OF-CUSTODY / ANALYTICAL REQUEST DOCUMENT

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

So130709

Page: 1 of 1

Section A Required Client Information:

Company:	Kenvirons, Inc.
Address:	452 Versailles Road
	Frankfort, KY 40601
Email To:	bknarr@kenvirons.com
Phone: (502)695-4357	Fax: (502)695-4363
Requested Due Date/TAT:	Standard

Section B Required Project Information:

Report To:	Bill Knarr
Copy To:	
Purchase Order No.:	2011033
Project Name:	Green Valley Surface water
Project Number:	2011033

Section C Invoice Information:

Attention:	Bill Knarr
Company Name:	Kenvirons, Inc.
Address:	452 Versailles Rd. Frankford, KY
Quote Reference:	
Project Manager:	Chris Boyle
Profile #:	46341

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: KY

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
LEACHATE	LE
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

ITEM #	SAMPLE ID	DATE	TIME	FLOW	TEMPERATURE	PH	SPECIFIC CONDUCTIVITY	TURBIDITY OR DISSOLVED OXYGEN (CIRCLE)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Requested Analysis Filtered (Y/N)	Analysis Test Y/N	TSS, TDS, TS, Cl	SO_4	Fe, Na	COD, TOC	Residual Chlorine (Y/N)	Project No./ Lab I.D.
1	SW-4	10/20/15	0930	Z	9.26	7.26	1700	—	SW		3	1	1	1								X	X	X	X		
2																											
3																											
4																											
5																											
6																											
7																											
8																											
9																											
10																											
11																											
12																											

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	Bill F. Knarr III	10/20/15	1600	Sent Via Fed Ex	10/20/15	1600				
	BTT	10/21/15	1600	Shipped Via FedEx						
	FedEx (MB 10/23/15)	10/23/15	9[illegible]	Marcia Bennett/Pace	10/23/15	9:25	0.9°c	Y	Y	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Bill F. Knarr, III

SIGNATURE of SAMPLER: Bill F. Knarr III

DATE Signed (MM/DD/YY): 10/20/15

Sample Condition Upon Receipt

Pace Analytical

Client Name: Kenvirons

Project # 50130709

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Tracking #: 774793858645

Custody Seal on Cooler/Box Present: ☑ yes ☐ no Seals intact: ☑ yes ☐ no

Date/Time 5035A kits placed in freezer: _____

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☑ Other Ziploc

Thermometer 1 2 3 4 5 6 A B C D E F Type of Ice: (Wet) Blue None ☑ Samples on ice, cooling process has begun

Cooler Temperature (Initial/Corrected) 0.9°C Ice Visible in Sample Containers: ☐ yes ☑ no

Temp should be above freezing to 6°C

Date and Initials of person examining contents: MB 10/23/15

		Comments:
Are samples from West Virginia? Document any containers out of temp.	☐Yes ☑No	1.
Chain of Custody Present:	☑Yes ☐No ☐N/A	2.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	3.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	4.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes ☐No ☑N/A	6.
Rush Turn Around Time Requested:	☐Yes ☐No ☑N/A	7.
Containers Intact:	☑Yes ☐No ☐N/A	8.
Sample Labels match COC: -Includes date/time/ID/Analysis	☑Yes ☐No ☐N/A	9.
All containers needing acid/base pres. have been checked? exceptions: VOA, coliform, TOC, O&G	☑Yes ☐No ☐N/A	10 (Circle) HNO3 H2SO4 NaOH NaOH/ZnAc
All containers needing preservation are found to be in compliance with EPA recommendation (<2, >9, >12) unless otherwise noted.		did not pH H_2SO_4 because of TOC MB
Residual Chlorine Check (SVOC 625 Pest/PCB 608)	(N/A)	11. Present Absent
Residual Chlorine Check (Total/Amenable/Free Cyanide)	(N/A)	12. Present Absent
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☑N/A	13
Headspace Wisconsin Sulfide	☐Yes ☐No (N/A)	14
Trip Blank Present:	☐Yes ☐No ☑N/A	15
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A	
Project Manager Review		
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	15.
Sufficient Volume:	☑Yes ☐No ☐N/A	16.
Correct Containers Used:	☑Yes ☐No ☐N/A	17.

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution:

Project Manager Review: _____ **Date:** 10-26-15

Form F-IN-Q-290-rev.09, 13Oct2015

Sample Container Count

CLIENT: Kenvirons

COC PAGE 1 of 1

COC ID# _____

Project # 5013070 9

Sample Line Item	DG9H	AG1U	WGFU	AG0U	R	4 / 6	BP2N	BP2U	BP2S	BP3N	BP3U	BP3S	AG3S	AG1H	BP3C	BP1U	SP5T	AG2U					pH <2	pH >9	pH>12
1								1		1			1										✓		
2																									
3																									
4																									
5																									
6																									
7																									
8																									
9																									
10																									
11																									
12																									

Container Codes

DG9H	40mL HCL amber voa vial	AG0U	100mL unpreserved amber glass	BP1N	1 liter HNO3 plastic	DG9P	40mL TSP amber vial
AG1U	1liter unpreserved amber glass	AG1H	1 liter HCL amber glass	BP1S	1 liter H2SO4 plastic	DG9S	40mL H2SO4 amber vial
WGFU	4oz clear soil jar	AG1S	1 liter H2SO4 amber glass	BP1U	1 liter unpreserved plastic	DG9T	40mL Na Thio amber vial
R	terra core kit	AG1T	1 liter Na Thiosulfate amber glass	BP1Z	1 liter NaOH, Zn, Ac	DG9U	40mL unpreserved **amber** vial
BP2N	500mL HNO3 plastic	AG2N	500mL HNO3 amber glass	BP2A	500mL NaOH, Asc Acid plastic	SP5T	120mL Coliform Na Thiosulfate
BP2U	500mL unpreserved plastic	AG2S	500mL H2SO4 amber glass	BP2O	500mL NaOH plastic	JGFU	4oz unpreserved amber wide
BP2S	500mL H2SO4 plastic	AG2U	500mL unpreserved amber glass	BP2Z	500mL NaOH, Zn Ac	U	Summa Can
BP3N	250mL HNO3 plastic	AG3U	250mL unpreserved amber glass	AF	Air Filter	VG9H	40mL HCL clear vial
BP3U	250mL unpreserved plastic	BG1H	1 liter HCL clear glass	BP3C	250mL NaOH plastic	VG9T	40mL Na Thio. clear vial
BP3S	250mL H2SO4 plastic	BG1S	1 liter H2SO4 clear glass	BP3Z	250mL NaOH, Zn Ac plastic	VG9U	40mL unpreserved **clear** vial
AG3S	250mL H2SO4 glass amber	BG1T	1 liter Na Thiosulfate clear glass	C	Air Cassettes	VSG	Headspace septa vial & HCL
AG1S	1 liter H2SO4 amber glass	BG1U	1 liter unpreserved glass	DG9B	40mL Na Bisulfate amber vial	WGFX	4oz wide jar w/hexane wipe
BP1U	1 liter unpreserved plastic	BP1A	1 liter NaOH, Asc Acid plastic	DG9M	40mL MeOH clear vial	ZPLC	Ziploc Bag

KENVIRONS, INC.
452 Versailles Road
Frankfort, KY 40601
502-695-4357
502-695-4363 (fax)

Green Valley Landfill (2007006)

Well No.	Depth to water	Well Depth	AKGWA No.	Sample Collected		Well / Under Drain Dry	Insufficient Recharge
				YES	NO		
MW-1	5.53	14.80	8000-8086	☒	☐	☐	☐
MW-1A	3.61	41.00	8000-2931	☒	☐	☐	☐
MW-1B	6.56	61.00	8000-2932	☒	☐	☐	☐
MW-3	5.51	14.10	8000-8085	☒	☐	☐	☐
MW-28C	4.62	12.90	8000-2937	☒	☐	☐	☐
MW-28D	5.32	16.30	8000-2938	☒	☐	☐	☐
MW-28E	9.56	27.30	8000-2939	☒	☐	☐	☐
DUP	—	-	-	X			
FB	—	-	-	X			

Notes:

TECHNICIAN Bill F. Knapp, III DATE ~~10/19/11~~ 10/20/15

KENVIRONS, INC.

Well / Spring Field Reading Log

Facility: Green Valley LF

Date: 10/20/15 Sampler(s) BFK JJE IZRZ

Well / Spring No.		pH	Conductivity	Temp	DO	ORP	Turbidity
Well No.	mw-1	5.91	72	14.72	4.02	—	13.7
Well No.	mw-1A	6.73	378	12.48	2.48	—	15.7
Well No.	mw-1B	7.35	658	12.75	2.77	—	16.1
Well No.	mw-3	6.15	343	15.70	2.27	—	10.3
Well No.	mw-28C	5.40	457	16.99	2.24	—	101.9
Well No.	mw-28D	5.99	700	16.05	1.34	—	21.1
Well No.	mw28E	6.42	292	16.35	2.11	—	15.1
Well No.							
Well No.							
Well No.							
Well No.							
Well No.							
Well No.							
Well No.							
Well No.							
Well No.							
Well No.							
Well No.							
Well No.							

Sampler(s) Signature: Bill F. KEM Date: 10/20/15

GREEN VALLEY LANDFILL
GROUNDWATER ELEVATION DATA
2007006

Well	Top of Casing	AKGWA #	Total Depth of Well	Depth to Water	Groundwater Elevation	Date	Time
MW-1	617.80	8000-8086	14.80	5.53	612.27	10/20/15	1025
MW-1A	618.60	8000-2931	41.00	3.61	614.99	10/20/15	1047
MW-1B	618.70	8000-2932	61.00	6.56	612.14	10/20/15	1120
MW-3	630.80	8000-8085	14.10	5.51	625.29	10/20/15	1205
MW-28C	674.40	8005-7101	12.90	~~5.32~~ 4.62	~~669.88~~ 669.78	10/20/15	~~1240~~ 1320
MW-28D	675.20	8005-7102	16.30	5.32	669.88	10/20/15	1240
MW-28E	677.00	8005-7103	27.30	9.56	667.44	10/20/15	1258

TECHNICIAN Bill F. Krapf, III DATE 10/20/15 QUARTER 4th

KENVIRONS INC.,
GROUNDWATER FIELD LOG

Site Name: Green Valley Landfill	Well No. MW-1	Total Depth (ft) 14.80	Initial Depth to Water (ft.) 5.53	Height of Water Column (ft.) 9.27	Date 10/20	Time 1025	Project No. 2007006
Site Location Greenup Co., KY	AKGWA # 8000 – 8086	Casing Diameter ☐ 4" ☐ 2" Conversion fact. 4"- 0.67/2"- 0.16	Measuring Point (ft. MSL) 617.80	Groundwater Elevation 612.27	Well Volume (gallons) 6.21		Z # —

☐ Rain ☐ Sleet/Freezing Rain ☐ Snow ☐ Fog ☒ Clear ☐ Partly Cloudy ☐ Overcast ☐ Windy Temp._____ (F° / C°)

Time	ET (min)	Depth to Water (ft)	Purge Rate ml/min	Volume Purged (L)	Temp (°C)	Sp. Cond (µS or mS)	DO (mg/L)	pH (SU)	eH/ORP (mV)	Turbidity (ntu)	Cont./Pres.	#
1032	0	5.53	100	0	14.42	84	4.54	6.54	—	11.1	GA- 40ml Vials HCL	
1035	3		100	.3	14.60	84	2.91	6.07	—	12.9	G- 40ml Vials HCL	
1038	6		100	.6	14.67	80	2.79	5.89	—	13.1	P-500 ml HNO_3	
1041	9		100	.9	14.73	75	3.54	5.89	—	13.9	P-500 ml H_2SO_4	
1044	12	5.73	100	1.2	14.72	72	4.02	5.91	—	13.7	P-500 ml Unp.	
											P-1L Unp.	
											P-1L NaOH	
											P-1L NaOH + Zn A	
											P-120 ml Unp.	
											GA- 250 ml H_2SO_4	
											GA- 250 ml H_3PO_4	
											GA- 500 ml H_2SO_4	
											GA- 1L Unp.	
											G- 1L Unp.	
											Comments	
											Weeds overgrown around well & pad.	
For Three (3) Consecutive Readings			Required Purge	Actual Purge	+/- 1 (°C)	+/- 10%	+/- .3 (Mg/L)	+/- .10 SU	+/- 10% mV	+/- 10% unless <10 NTU		

Well Cond.	Pad Cond	Lock Funct.	Bladder Pump	Casing S.S. ☐ Casing PVC ☒	☐ Field Blank Collected Time:
OK	overgrown w/weeds	☒ Yes ☐ No	☒ Yes ☐ No	Filtered: ☐ Yes ☒ No	Split Sample ☐ Yes ☒ No With:

Sample Time	Depth to Water (ft)	Color	Odor	Temp (°C)	Sp. Cond (µS or mS)	DO (mg/L)	pH (SU)	eH/ORP (mV)	Turbidity (ntu)	Appearance
1045	5.73	None	None	14.72	72	4.02	5.91	—	13.7	clear

☐ Annual ☐ Semi-Annual ☒ Quarterly ☐ Monthly ☐ Other ☐ Duplicate Collected Time: DTW:

Sampler(s) Signature Bill Klein **Date** 10/20/15

F:\WORK IN PROGRESS\BTB\Files from Old Computer\SAMPLING FORMS\GREEN VALLEY\GROUNDWATER 2007006\GREEN VALLEY STABILIZATION FORM.doc

KENVIRONS INC.,
GROUNDWATER FIELD LOG

Site Name: Green Valley Landfill	Well No.	Total Depth (ft)	Initial Depth to Water (ft.)	Height of Water Column (ft.)	Date	Time	Project No.
	MW-1A	41.00	3.61	37.39	10/20	1047	2007006

Site Location	AKGWA #	Casing Diameter	Measuring Point (ft. MSL)	Groundwater Elevation	Well Volume (gallons)	Z #
Greenup Co., KY	8000 – 2931	☐ 4" ☐ 2" Conversion fact. 4"- 0.67/2"- 0.16	618.60	614.99	25.05	—

☐ Rain ☐ Sleet/Freezing Rain ☐ Snow ☐ Fog ☒ Clear ☐ Partly Cloudy ☐ Overcast ☐ Windy Temp._____ (F° / C°)

Time	ET (min)	Depth to Water (ft)	Purge Rate ml/min	Volume Purged (L)	Temp (°C)	Sp. Cond (µS or mS)	DO (mg/L)	pH (SU)	eH/ORP (mV)	Turbidity (ntu)	Cont./Pres.	#
1053	0	3.61	100	0	12.75	369	7.47	6.29	—	15.9	GA- 40ml Vials HCL	
1056	3		100	.3	12.44	378	3.31	6.29	—	15.6	G- 40ml Vials HCL	
1059	6		100	.6	12.42	378	2.95	6.45	—	15.3	P-500 ml HNO_3	
1102	9		100	.9	12.42	377	2.68	6.59	—	15.3	P-500 ml H_2SO_4	
1105	12		100	1.2	12.44	378	2.37	6.68	—	15.1	P-500 ml Unp.	
1108	15		100	1.5	12.45	378	2.95	6.69	—	15.4	P-1L Unp.	
1111	18	4.64	100	1.8	12.48	378	2.48	6.73	—	15.7	P-1L NaOH	
											P-1L NaOH + Zn A	
											P-120 ml Unp.	
											GA- 250 ml H_2SO_4	
											GA- 250 ml H_3PO_4	
											GA- 500 ml H_2SO_4	
											GA- 1L Unp.	
											G- 1L Unp.	
											Comments	
											overgrown by weeds around well & pad.	
For Three (3) Consecutive Readings			Required Purge	Actual Purge	+/- 1 (°C)	+/- 10%	+/- .3 (Mg/L)	+/- .10 SU	+/- 10% mV	+/- 10% unless <10 NTU		

Well Cond.	Pad Cond	Lock Funct.	Bladder Pump	Casing S.S. ☐ Casing PVC ☒	☐ Field Blank Collected Time:
OK	overgrown w/weeds	☒ Yes ☐ No	☒ Yes ☐ No	Filtered: ☐ Yes ☒ No	Split Sample ☐ Yes ☑ No With:

Sample Time	Depth to Water (ft)	Color	Odor	Temp (°C)	Sp. Cond (µS or mS)	DO (mg/L)	pH (SU)	eH/ORP (mV)	Turbidity (ntu)	Appearance
1115	4.64	None	None	12.48	378	2.48	6.73	—	15.7	Clear

☐ Annual ☐ Semi-Annual ☒ Quarterly ☐ Monthly ☐ Other ☐ Duplicate Collected Time: DTW:

Sampler(s) Signature BTB EK TM **Date** 10/20/15

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KENVIRONS INC.,
GROUNDWATER FIELD LOG

Site Name: Green Valley Landfill	Well No. MW-18	Total Depth (ft) 101.00	Initial Depth to Water (ft.) 6.56 ~~101.00~~	Height of Water Column (ft.) 94.44	Date 10/20	Time 1120	Project No. 2007006
Site Location Greenup Co., KY	AKGWA # 8000 – 2932	Casing Diameter ☐ 4" ☐ 2" Conversion fact. 4"- 0.67/2"- 0.16	Measuring Point (ft. MSL) 618.70	Groundwater Elevation 612.14	Well Volume (gallons) 36.47		Z # —

☐ Rain ☐ Sleet/Freezing Rain ☐ Snow ☐ Fog ☒ Clear ☐ Partly Cloudy ☐ Overcast ☐ Windy Temp. 45 (F° / C°)

Time	ET (min)	Depth to Water (ft)	Purge Rate ml/min	Volume Purged (L)	Temp (°C)	Sp. Cond (µS or mS)	DO (mg/L)	pH (SU)	eH/ORP (mV)	Turbidity (ntu)	Cont./Pres.	#
1122	0	6.56	100	0	12.47	680	2.48	6.83	—	18.9	GA- 40ml Vials HCL	
1125	3		100	.3	12.61	661	2.63	6.97	—	17.3	G- 40ml Vials HCL	
1128	6		100	.6	12.67	658	2.60	7.14	—	16.3	P-500 ml HNO_3	
1131	9		100	.9	12.70	658	2.60	7.28	—	16.1	P-500 ml H_2SO_4	
1134	12		100	1.2	12.74	658	2.87	7.31	—	16.3	P-500 ml Unp.	
1137	15	7.44	100	1.5	12.75	658	2.77	7.35	—	16.1	P-1L Unp.	
											P-1L NaOH	
											P-1L NaOH + Zn A	
											P-120 ml Unp.	
											GA- 250 ml H_2SO_4	
											GA- 250 ml H_3PO_4	
											GA- 500 ml H_2SO_4	
											GA- 1L Unp.	
											G- 1L Unp.	
											Comments	
For Three (3) Consecutive Readings			Required Purge	Actual Purge	+/- 1 (°C)	+/- 10%	+/- .3 (Mg/L)	+/- .10 SU	+/- 10% mV	+/- 10% unless <10 NTU		

Well Cond.	Pad Cond	Lock Funct.	Bladder Pump	Casing S.S. ☐ Casing PVC ☒	☐ Field Blank Collected Time:
OK	overgrown w/weeds	☒ Yes ☐ No	☒ Yes ☐ No	Filtered: ☐ Yes ☒ No	Split Sample ☐ Yes ☒ No With:

Sample Time	Depth to Water (ft)	Color	Odor	Temp (°C)	Sp. Cond (µS or mS)	DO (mg/L)	pH (SU)	eH/ORP (mV)	Turbidity (ntu)	Appearance
1140	7.44	None	None	12.75	658	2.77	7.35	—	16.1	clear

☐ Annual ☐ Semi-Annual ☒ Quarterly ☐ Monthly ☐ Other ☐ Duplicate Collected Time: DTW:

Sampler(s) Signature BSD P. K—TM **Date** 10/20/15

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4.6-8

KENVIRONS INC.,
GROUNDWATER FIELD LOG

Site Name: Green Valley Landfill	Well No. MW-3	Total Depth (ft) 14.10	Initial Depth to Water (ft.) 5.51	Height of Water Column (ft.) 8.59	Date 10/20	Time 1205	Project No. 2007006
Site Location Greenup Co., KY	AKGWA # 8000-8085	Casing Diameter ☐ 4" ☐ 2" Conversion fact. 4"- 0.67/2"- 0.16	Measuring Point (ft. MSL) 630.80	Groundwater Elevation 625.29	Well Volume (gallons) 5.75		Z # —

☐ Rain ☐ Sleet/Freezing Rain ☐ Snow ☐ Fog ☒ Clear ☐ Partly Cloudy ☐ Overcast ☐ Windy Temp. 55 (F° / C°)

Time	ET (min)	Depth to Water (ft)	Purge Rate ml/min	Volume Purged (L)	Temp (°C)	Sp. Cond (µS or mS)	DO (mg/L)	pH (SU)	eH/ORP (mV)	Turbidity (ntu)	Cont./Pres.	#
1210	0	5.51	100	0	15.70	293	7.05	7.56	—	11.3	GA- 40ml Vials HCL	
1213	3		100	.3	15.67	296	3.24	6.79	—	10.1	G- 40ml Vials HCL	
1216	6		100	.6	15.70	283	2.89	6.39	—	10.4	P-500 ml HNO_3	
1219	9		100	.9	15.68	310	2.31	6.22	—	10.4	P-500 ml H_2SO_4	
1222	12		100	1.2	15.69	328	2.14	6.19	—	10.2	P-500 ml Unp.	
1225	15	6.58	100	1.5	15.70	343	2.27	6.15	—	10.3	P-1L Unp.	
											P-1L NaOH	
											P-1L NaOH + Zn A	
											P-120 ml Unp.	
											GA- 250 ml H_2SO_4	
											GA- 250 ml H_3PO_4	
											GA- 500 ml H_2SO_4	
											GA- 1L Unp.	
											G- 1L Unp.	
											Comments	
											well & pad overgrown by weeds.	
For Three (3) Consecutive Readings			Required Purge	Actual Purge	+/- 1 (°C)	+/- 10%	+/- .3 (Mg/L)	+/- .10 SU	+/- 10% mV	+/- 10% unless <10 NTU		

Well Cond.	Pad Cond	Lock Funct.	Bladder Pump	Casing S.S. ☐ Casing PVC ☒	☒ Field Blank Collected Time: 1235
OK	overgrown w/ weeds	☒ Yes ☐ No	☒ Yes ☐ No	Filtered: ☐ Yes ☒ No	Split Sample ☐ Yes ☒ No With:

Sample Time	Depth to Water (ft)	Color	Odor	Temp (°C)	Sp. Cond (µS or mS)	DO (mg/L)	pH (SU)	eH/ORP (mV)	Turbidity (ntu)	Appearance
1228	6.58	None	None	15.70	343	2.27	6.15	—	10.3	clear

☐ Annual ☐ Semi-Annual ☒ Quarterly ☐ Monthly ☐ Other ☒ Duplicate Collected Time: 1238 DTW: 7.89

Sampler(s) Signature Bob E. Kenty **Date** 10/20/15

3.9-6.5

KENVIRONS INC.,
GROUNDWATER FIELD LOG

Site Name: Green Valley Landfill	Well No. MW-28C	Total Depth (ft) 12.90	Initial Depth to Water (ft.) 4.62	Height of Water Column (ft.) 8.28	Date 10/20	Time 1320	Project No. 2007006
Site Location Greenup Co., KY	AKGWA # 8005 - 7101	Casing Diameter ☐ 4" ☐ 2" Conversion fact. 4"- 0.67/2"- 0.16	Measuring Point (ft. MSL) 674.40	Groundwater Elevation 669.78	Well Volume (gallons) 5.54		Z # —

☐ Rain ☐ Sleet/Freezing Rain ☐ Snow ☐ Fog ☒ Clear ☐ Partly Cloudy ☐ Overcast ☐ Windy Temp._____ (F° / C°)

Time	ET (min)	Depth to Water (ft)	Purge Rate ml/min	Volume Purged (L)	Temp (°C)	Sp. Cond (µS or mS)	DO (mg/L)	pH (SU)	eH/ORP (mV)	Turbidity (ntu)	Cont./Pres.	#
1322	0	4.62	100	0	17.86	437	6.85	6.22	—	77.7	GA- 40ml Vials HCL	
1325	3		100	.3	16.99	457	2.95	5.43	—	99.7	G- 40ml Vials HCL	
1328	6		100	.6	16.97	458	2.45	5.41	—	101.3	P-500 ml HNO_3	
1331	9	6.11	100	.9	16.99	457	2.24	5.40	—	101.9	P-500 ml H_2SO_4	
											P-500 ml Unp.	
											P-1L Unp.	
											P-1L NaOH	
											P-1L NaOH + Zn A	
											P-120 ml Unp.	
											GA- 250 ml H_2SO_4	
											GA- 250 ml H_3PO_4	
											GA- 500 ml H_2SO_4	
											GA- 1L Unp.	
											G- 1L Unp.	
											Comments	
For Three (3) Consecutive Readings			Required Purge	Actual Purge	+/- 1 (°C)	+/- 10%	+/- .3 (Mg/L)	+/- .10 SU	+/- 10% mV	+/- 10% unless <10 NTU		

Well Cond.	Pad Cond	Lock Funct.	Bladder Pump	Casing S.S. ☐ Casing PVC ☒	☐ Field Blank Collected Time:
OK	OK	☒ Yes ☐ No	☒ Yes ☐ No	Filtered: ☐ Yes ☒ No	Split Sample ☐ Yes ☒ No With:

Sample Time	Depth to Water (ft)	Color	Odor	Temp (°C)	Sp. Cond (µS or mS)	DO (mg/L)	pH (SU)	eH/ORP (mV)	Turbidity (ntu)	Appearance
1335	6.11	orange	slight	16.99	457	2.24	5.40	—	101.9	murky

☐ Annual ☐ Semi-Annual ☒ Quarterly ☐ Monthly ☐ Other ☐ Duplicate Collected Time: DTW:

Sampler(s) Signature BTB F. KM **Date** 10/20/15

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4.4 - 6.7

KENVIRONS INC.,
GROUNDWATER FIELD LOG

Site Name: Green Valley Landfill	Well No. MW-28D	Total Depth (ft) 16.30	Initial Depth to Water (ft.) 5.32	Height of Water Column (ft.) 10.98	Date 10/20	Time 1240	Project No. 2007006
Site Location Greenup Co., KY	AKGWA # 8005-7102	Casing Diameter ☐ 4" ☐ 2" Conversion fact. 4"- 0.67/2"- 0.16	Measuring Point (ft. MSL) 675.20	Groundwater Elevation 669.88	Well Volume (gallons) 7.35		Z # —

☐ Rain ☐ Sleet/Freezing Rain ☐ Snow ☐ Fog ☒ Clear ☐ Partly Cloudy ☐ Overcast ☐ Windy Temp. 55 (F) / C°)

Time	ET (min)	Depth to Water (ft)	Purge Rate ml/min	Volume Purged (L)	Temp (°C)	Sp. Cond (µS or mS)	DO (mg/L)	pH (SU)	eH/ORP (mV)	Turbidity (ntu)	Cont./Pres.	#
1244	0	5.32	100	0	16.80	644	7.11	5.92	—	23.1	GA- 40ml Vials HCL	
1247	3		100	.3	16.23	688	3.08	5.94	—	24.1	G- 40ml Vials HCL	
1250	6		100	.6	16.09	698	1.44	5.97	—	22.0	P-500 ml HNO_3	
1253	9	6.41	100	.9	16.05	700	1.34	5.99	—	21.1	P-500 ml H_2SO_4	
											P-500 ml Unp.	
											P-1L Unp.	
											P-1L NaOH	
											P-1L NaOH + Zn A	
											P-120 ml Unp.	
											GA- 250 ml H_2SO_4	
											GA- 250 ml H_3PO_4	
											GA- 500 ml H_2SO_4	
											GA- 1L Unp.	
											G- 1L Unp.	
											Comments	
For Three (3) Consecutive Readings			Required Purge	Actual Purge	+/- 1 (°C)	+/- 10%	+/- .3 (Mg/L)	+/- .10 SU	+/- 10% mV	+/- 10% unless <10 NTU		

Well Cond.	Pad Cond	Lock Funct.	Bladder Pump	Casing S.S. ☐ Casing PVC ☒	☐ Field Blank Collected Time:
OK	OK	☒ Yes ☐ No	☒ Yes ☐ No	Filtered: ☐ Yes ☒ No	Split Sample ☐ Yes ☒ No With:

Sample Time	Depth to Water (ft)	Color	Odor	Temp (°C)	Sp. Cond (µS or mS)	DO (mg/L)	pH (SU)	eH/ORP (mV)	Turbidity (ntu)	Appearance
1255	6.41	None	None	16.05	700	1.34	5.99	—	21.1	clear

☐ Annual ☐ Semi-Annual ☒ Quarterly ☐ Monthly ☐ Other ☐ Duplicate Collected Time: DTW:

Sampler(s) Signature BTB K-M **Date** 10/20/15

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6-7

KENVIRONS INC.,
GROUNDWATER FIELD LOG

Site Name: Green Valley Landfill	Well No. MW-28E	Total Depth (ft) 27.30	Initial Depth to Water (ft.) 9.56	Height of Water Column (ft.) 17.74	Date 10/20	Time 1258	Project No. 2007006
Site Location Greenup Co., KY	AKGWA # 8005-7103	Casing Diameter ☐ 4" ☐ 2" Conversion fact. 4"- 0.67/2"- 0.16	Measuring Point (ft. MSL) 677.00	Groundwater Elevation 667.44	Well Volume (gallons) 11.88		Z # —

☐ Rain ☐ Sleet/Freezing Rain ☐ Snow ☐ Fog ☒ Clear ☐ Partly Cloudy ☐ Overcast ☐ Windy Temp. 60 (F) / C°)

Time	ET (min)	Depth to Water (ft)	Purge Rate ml/min	Volume Purged (L)	Temp (°C)	Sp. Cond (µS or mS)	DO (mg/L)	pH (SU)	eH/ORP (mV)	Turbidity (ntu)	Cont./Pres.	#
1305	0	9.56	100	0	17.65	309	8.42	6.52	—	21.3	GA- 40ml Vials HCL	
1308	3		100	.3	16.52	297	3.61	6.40	—	19.7	G- 40ml Vials HCL	
1311	6		100	.6	16.40	294	2.32	6.42	—	17.7	P-500 ml HNO_3	
1314	9	10.84	100	.9	16.35	292	2.11	6.42	—	15.1	P-500 ml H_2SO_4	
											P-500 ml Unp.	
											P-1L Unp.	
											P-1L NaOH	
											P-1L NaOH + Zn A	
											P-120 ml Unp.	
											GA- 250 ml H_2SO_4	
											GA- 250 ml H_3PO_4	
											GA- 500 ml H_2SO_4	
											GA- 1L Unp.	
											G- 1L Unp.	
											Comments	
For Three (3) Consecutive Readings			Required Purge	Actual Purge	+/- 1 (°C)	+/- 10%	+/- .3 (Mg/L)	+/- .10 SU	+/- 10% mV	+/- 10% unless <10 NTU		

Well Cond.	Pad Cond	Lock Funct	Bladder Pump	Casing S.S. ☐ Casing PVC ☒	☐ Field Blank Collected Time:
Ok	Ok	☒ Yes ☐ No	☒ Yes ☐ No	Filtered: ☐ Yes ☒ No	Split Sample ☐ Yes ☒ No With:

Sample Time	Depth to Water (ft)	Color	Odor	Temp (°C)	Sp. Cond (µS or mS)	DO (mg/L)	pH (SU)	eH/ORP (mV)	Turbidity (ntu)	Appearance
1315	10.84	None	None	16.35	292	2.11	6.42	—	15.1	clear

☐ Annual ☐ Semi-Annual ☒ Quarterly ☐ Monthly ☐ Other ☐ Duplicate Collected Time: DTW:

Sampler(s) Signature Bill E. Kim **Date** 10/20/15

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KENVIRONS, INC.
452 Versailles Road
Frankfort, KY 40601
502-695-4357
502-695-4363 (fax)

Green Valley Landfill -ALLIED - Greenup Co., KY Project No. 2007007

Sample Point	Z#	Date	Flow (Sampled)		No Flow	Preceeding Precipitation Event Within 24 Hr. Period	
			YES	NO	YES	YES	NO
SW-1A		10/20/15	☐	☒	☒	☐	☒
SW-2		10/20/15	☐	☒	☒	☐	☒
SW-3		10/20/15	☐	☒	☒	☐	☒
SW-4		10/20/15	☒	☐	☐	☐	☒
SW-5		10/20/15	☐	☒	☒	☐	☒
SW-6		10/20/15	☐	☒	☒	☐	☒

Notes:

TECHNICIAN Bill F. Knarr, III DATE 10/20/15

KENVIRONS, INC.
POND / SURFACE WATER LOG

FACILITY	GREEN VALLEY	PROJECT NO.	2011033
LOCATION	GREENUP CO, KY	DATE	10/20/15
SAMPLE ID	SW-6	SAMPLER(S)	BFK III / ZRZ
WEATHER	Clear	Z#	

CALIBRATION DATA

PH	4.0		7.0		10.0	
CONDUCTIVITY (uS)					TEMP (° C)	

FIELD DATA

SAMPLE DATA			
COLOR		pH (S. U.)	
ODOR		TEMP (° C)	
APPEARANCE		CONDUCTIVITY (uS)	
TIME	0805	FLOW (GPM)	No Flow

NUMBER AND TYPE OF CONTAINERS _____

☐ ANNUAL ☐ SEMI-ANNUAL ☒ QUARTERLY ☐ MONTHLY ☐ OTHER

SPLIT SAMPLE ☐ YES ☒ NO IF YES, WITH WHOM _____

COMMENTS _____

SAMPLER(S) SIGNATURE _____ DATE 10/20/15

KENVIRONS, INC.
POND / SURFACE WATER LOG

FACILITY	GREEN VALLEY	PROJECT NO.	2011033
LOCATION	GREENUP CO, KY	DATE	10/20/15
SAMPLE ID	SW-2	SAMPLER(S)	BFK III ZRZ
WEATHER	Clear	Z#	—

CALIBRATION DATA

PH	4.0		7.0		10.0	
CONDUCTIVITY (uS)					TEMP (° C)	

FIELD DATA

SAMPLE DATA			
COLOR		PH (S. U.)	
ODOR		TEMP (° C)	
APPEARANCE		CONDUCTIVITY (uS)	
TIME	0810	FLOW (GPM)	No Flow

NUMBER AND TYPE OF CONTAINERS _____

☐ ANNUAL ☐ SEMI-ANNUAL ☒ QUARTERLY ☐ MONTHLY ☐ OTHER

SPLIT SAMPLE ☐ YES ☒ NO IF YES, WITH WHOM _____

COMMENTS _____

SAMPLER(S) SIGNATURE Bill F. Kerr DATE 10/20/15

KENVIRONS, INC.
POND / SURFACE WATER LOG

FACILITY	GREEN VALLEY	PROJECT NO.	2011033
LOCATION	GREENUP CO, KY	DATE	10/20/15
SAMPLE ID	SW-3	SAMPLER(S)	BFK JH / ZRZ
WEATHER	Clear	Z#	—

CALIBRATION DATA

PH	4.0		7.0		10.0	
CONDUCTIVITY (uS)					TEMP (° C)	

FIELD DATA

SAMPLE DATA			
COLOR		pH (S. U.)	
ODOR		TEMP (° C)	
APPEARANCE		CONDUCTIVITY (uS)	
TIME	0920	FLOW (GPM)	No Flow

NUMBER AND TYPE OF CONTAINERS _____

☐ ANNUAL ☐ SEMI-ANNUAL ☒ QUARTERLY ☐ MONTHLY ☐ OTHER

SPLIT SAMPLE ☐ YES ☒ NO IF YES, WITH WHOM _____

COMMENTS _____

SAMPLER(S) SIGNATURE B-Ql F. K TW DATE 10/20/15

KENVIRONS, INC.
POND / SURFACE WATER LOG

FACILITY	GREEN VALLEY	PROJECT NO.	2011033
LOCATION	GREENUP CO, KY	DATE	10/20/15
SAMPLE ID	SW-04	SAMPLER(S)	BFK III / ZRZ
WEATHER	Clear	Z#	

CALIBRATION DATA

PH	4.0		7.0		10.0	
CONDUCTIVITY (uS)					TEMP (^{o} C)	

FIELD DATA

SAMPLE DATA			
COLOR	None	PH (S. U.)	7.26
ODOR	None	TEMP (^{o} C)	9.26
APPEARANCE	Clear	CONDUCTIVITY (uS)	1200
TIME	0930	FLOW (GPM)	

NUMBER AND TYPE OF CONTAINERS _____

☐ ANNUAL ☐ SEMI-ANNUAL ☒ QUARTERLY ☐ MONTHLY ☐ OTHER

SPLIT SAMPLE ☐ YES ☒ NO IF YES, WITH WHOM _____

COMMENTS _____

SAMPLER(S) SIGNATURE _____ DATE 10/20/15

KENVIRONS, INC.
POND / SURFACE WATER LOG

FACILITY	GREEN VALLEY	PROJECT NO.	2011033
LOCATION	GREENUP CO, KY	DATE	10/20/15
SAMPLE ID	SW-#5	SAMPLER(S)	BOK JH IZRZ
WEATHER	Clear	Z#	

CALIBRATION DATA

PH	4.0		7.0		10.0	
CONDUCTIVITY (uS)					TEMP (° C)	

FIELD DATA

SAMPLE DATA			
COLOR		pH (S. U.)	
ODOR		TEMP (° C)	
APPEARANCE		CONDUCTIVITY (uS)	
TIME	0940	FLOW (GPM)	No Flow

NUMBER AND TYPE OF CONTAINERS _____

☐ ANNUAL ☐ SEMI-ANNUAL ☒ QUARTERLY ☐ MONTHLY ☐ OTHER

SPLIT SAMPLE ☐ YES ☒ NO IF YES, WITH WHOM _____

COMMENTS _____

SAMPLER(S) SIGNATURE BOK F Kerr DATE 10/20/15

KENVIRONS, INC.
POND / SURFACE WATER LOG

FACILITY	GREEN VALLEY	PROJECT NO.	2011033
LOCATION	GREENUP CO, KY	DATE	10/20/15
SAMPLE ID	SW-1A	SAMPLER(S)	BFK III / ZRZ
WEATHER	Clear	Z#	

CALIBRATION DATA

PH	4.0		7.0		10.0	
CONDUCTIVITY (uS)					TEMP (° C)	

FIELD DATA

SAMPLE DATA			
COLOR		pH (S. U.)	
ODOR		TEMP (° C)	
APPEARANCE		CONDUCTIVITY (uS)	
TIME	0940	FLOW (GPM)	No Flow

NUMBER AND TYPE OF CONTAINERS _____

☐ ANNUAL ☐ SEMI-ANNUAL ☒ QUARTERLY ☐ MONTHLY ☐ OTHER

SPLIT SAMPLE ☐ YES ☒ NO IF YES, WITH WHOM _____

COMMENTS _____

SAMPLER(S) SIGNATURE _____ DATE 10/20/15