

March 14, 2019

Paradise Irrigation District
 6332 Clark Road
 Paradise, CA 95969

Lab ID : CH 1971530
 Customer : 7-5855

Laboratory Report

Introduction: This report package contains total of 10 pages divided into 3 sections:

Case Narrative	(2 pages) : An overview of the work performed at FGL.
Sample Results	(2 pages) : Results for each sample submitted.
Quality Control	(6 pages) : Supporting Quality Control (QC) results.

Case Narrative

This Case Narrative pertains to the following samples:

Sample Description	Date Sampled	Date Received	FGL Lab ID #	Matrix
871 Big Sky	03/01/2019	03/01/2019	CH 1971530-001	DW

Sampling and Receipt Information: All samples were received in acceptable condition and within temperature requirements, unless noted on the Condition Upon Receipt (CUR) form. All samples arrived on ice. All samples were prepared and analyzed within the method specified hold time. All samples were checked for pH if acid or base preservation is required (except for VOAs). For details of sample receipt information, please see the attached Chain of Custody and Condition Upon Receipt Form.

Quality Control: All samples were prepared and analyzed according to the following tables:

Organic QC

524.2	03/05/2019:203274 All analysis quality controls are within established criteria, except: The following note applies to 2-Chlorotoluene, Bromomethane (Methyl Bromide), Trichlorofluoromethane F-11, Chloroethane (Ethyl Chloride), Chloromethane: 360 CCV above Acceptance Range (AR). Samples which were non detect for this analyte were accepted.
	03/05/2019:202515 All preparation quality controls are within established criteria, except: The following note applies to tert-Butanol: 435 Sample matrix may be affecting this analyte. Data was accepted based on the LCS or CCV recovery.

Discussion of Analytical Results: -

Amended Report - 03/14/2019 - Amended to report tert-butanol (t-butyl alcohol) by EPA 524.2.

March 14, 2019
Paradise Irrigation District

Lab ID : CH 1971530
Customer : 7-5855

Certification:: I certify that this data package is in compliance with ELAP standards, both technically and for completeness, except for any conditions listed above. Release of the data contained in this data package is authorized by the Laboratory Director or his designee, as verified by the following electronic signature.

KD:DMB

Approved By **David Terz, B.A., M.B.A.**



Digitally signed by David Terz, B.A., M.B.A.
Title: QA Director
Date: 2019-03-14

March 14, 2019

Lab ID : CH 1971530-001

Customer ID : 7-5855

Paradise Irrigation District

6332 Clark Road

Paradise, CA 95969

Sampled On : March 1, 2019-09:05

Sampled By : Laura Capra

Received On : March 1, 2019-10:30

Matrix : Drinking Water

Description : 871 Big Sky

Project : Camp Fire

Sample Result - Organic

Constituent	Result	PQL	Units	MCL/AL	Sample Preparation		Sample Analysis	
					Method	Date/ID	Method	Date/ID
EPA 524.2								
4-Bromofluorobenzene [‡]	96.6	70-130	%	1	524.2	03/05/19:202515	524.2	03/05/19:203274
1,2-Dichlorobenzene-d4 [‡]	98.7	70-130	%		524.2	03/05/19:202515	524.2	03/05/19:203274
Benzene	ND	0.5	ug/L		524.2	03/05/19:202515	524.2	03/05/19:203274
Bromobenzene	ND	0.5	ug/L		524.2	03/05/19:202515	524.2	03/05/19:203274
Bromochloromethane	ND	0.5	ug/L		524.2	03/05/19:202515	524.2	03/05/19:203274
Bromomethane	ND	0.5	ug/L	0.5	524.2	03/05/19:202515	524.2	03/05/19:203274
n-Butylbenzene	ND	0.5	ug/L		524.2	03/05/19:202515	524.2	03/05/19:203274
sec-Butylbenzene	ND	0.5	ug/L		524.2	03/05/19:202515	524.2	03/05/19:203274
tert-Butylbenzene	ND	0.5	ug/L		524.2	03/05/19:202515	524.2	03/05/19:203274
Carbon Tetrachloride	ND	0.5	ug/L		524.2	03/05/19:202515	524.2	03/05/19:203274
tert-Butanol	ND	2	ug/L	70	524.2	03/05/19:202515	524.2	03/05/19:203274
Chlorobenzene	ND	0.5	ug/L		524.2	03/05/19:202515	524.2	03/05/19:203274
Chloroethane	ND	0.5	ug/L		524.2	03/05/19:202515	524.2	03/05/19:203274
Chloromethane	ND	0.5	ug/L		524.2	03/05/19:202515	524.2	03/05/19:203274
2-Chlorotoluene	ND	0.5	ug/L		524.2	03/05/19:202515	524.2	03/05/19:203274
4-Chlorotoluene	ND	0.5	ug/L	600	524.2	03/05/19:202515	524.2	03/05/19:203274
Dibromomethane	ND	0.5	ug/L		524.2	03/05/19:202515	524.2	03/05/19:203274
1,2-Dichlorobenzene	ND	0.5	ug/L		524.2	03/05/19:202515	524.2	03/05/19:203274
1,3-Dichlorobenzene	ND	0.5	ug/L		524.2	03/05/19:202515	524.2	03/05/19:203274
1,4-Dichlorobenzene	ND	0.5	ug/L		524.2	03/05/19:202515	524.2	03/05/19:203274
Dichlorodifluoromethane	ND	0.5	ug/L	5	524.2	03/05/19:202515	524.2	03/05/19:203274
1,1-Dichloroethane	ND	0.5	ug/L		524.2	03/05/19:202515	524.2	03/05/19:203274
1,2-Dichloroethane	ND	0.5	ug/L		524.2	03/05/19:202515	524.2	03/05/19:203274
1,1-Dichloroethylene	ND	0.5	ug/L		524.2	03/05/19:202515	524.2	03/05/19:203274
cis-1,2-Dichloroethylene	ND	0.5	ug/L		524.2	03/05/19:202515	524.2	03/05/19:203274
trans-1,2-Dichloroethylene	ND	0.5	ug/L	10	524.2	03/05/19:202515	524.2	03/05/19:203274
1,2-Dichloropropane	ND	0.5	ug/L		524.2	03/05/19:202515	524.2	03/05/19:203274
1,3-Dichloropropane	ND	0.5	ug/L		524.2	03/05/19:202515	524.2	03/05/19:203274
Dichloromethane	ND	0.5	ug/L		524.2	03/05/19:202515	524.2	03/05/19:203274
2,2-Dichloropropane	ND	0.5	ug/L		524.2	03/05/19:202515	524.2	03/05/19:203274
1,1-Dichloropropene	ND	0.5	ug/L	5	524.2	03/05/19:202515	524.2	03/05/19:203274
1,3-Dichloropropene (Total)	ND	--	ug/L		524.2	03/05/19:202515	524.2	03/05/19:203274
cis-1,3-Dichloropropene	ND	0.5	ug/L		524.2	03/05/19:202515	524.2	03/05/19:203274
trans-1,3-Dichloropropene	ND	0.5	ug/L		524.2	03/05/19:202515	524.2	03/05/19:203274
Di-isopropyl ether (DIPE)	ND	3	ug/L		524.2	03/05/19:202515	524.2	03/05/19:203274

March 14, 2019
Description : 871 Big Sky

Lab ID : CH 1971530-001
Customer ID : 7-5855

Sample Result - Organic

Constituent	Result	PQL	Units	MCL/AL	Sample Preparation		Sample Analysis	
					Method	Date/ID	Method	Date/ID
EPA 524.2								
Ethyl Benzene	ND	0.5	ug/L	300	524.2	03/05/19:202515	524.2	03/05/19:203274
Ethyl tert-Butyl Ether (ETBE)	ND	3	ug/L		524.2	03/05/19:202515	524.2	03/05/19:203274
Hexachlorobutadiene	ND	0.5	ug/L		524.2	03/05/19:202515	524.2	03/05/19:203274
Isopropylbenzene	ND	0.5	ug/L		524.2	03/05/19:202515	524.2	03/05/19:203274
p-Isopropyltoluene	ND	0.5	ug/L		524.2	03/05/19:202515	524.2	03/05/19:203274
Methyl tert-Butyl Ether (MTBE)	ND	1	ug/L	13	524.2	03/05/19:202515	524.2	03/05/19:203274
Naphthalene	ND	0.5	ug/L		524.2	03/05/19:202515	524.2	03/05/19:203274
n-Propylbenzene	ND	0.5	ug/L		524.2	03/05/19:202515	524.2	03/05/19:203274
Styrene	ND	0.5	ug/L	100	524.2	03/05/19:202515	524.2	03/05/19:203274
Tert-amyl-methyl Ether (TAME)	ND	3	ug/L		524.2	03/05/19:202515	524.2	03/05/19:203274
1,1,1,2-Tetrachloroethane	ND	0.5	ug/L		524.2	03/05/19:202515	524.2	03/05/19:203274
1,1,2,2-Tetrachloroethane	ND	0.5	ug/L	1	524.2	03/05/19:202515	524.2	03/05/19:203274
Tetrachloroethylene	ND	0.5	ug/L	5	524.2	03/05/19:202515	524.2	03/05/19:203274
Toluene	ND	0.5	ug/L	150	524.2	03/05/19:202515	524.2	03/05/19:203274
1,2,3-Trichlorobenzene	ND	0.5	ug/L		524.2	03/05/19:202515	524.2	03/05/19:203274
1,2,4-Trichlorobenzene	ND	0.5	ug/L	5	524.2	03/05/19:202515	524.2	03/05/19:203274
1,1,1-Trichloroethane	ND	0.5	ug/L	200	524.2	03/05/19:202515	524.2	03/05/19:203274
1,1,2-Trichloroethane	ND	0.5	ug/L	5	524.2	03/05/19:202515	524.2	03/05/19:203274
Trichloroethylene	ND	0.5	ug/L	5	524.2	03/05/19:202515	524.2	03/05/19:203274
Trichlorofluoromethane	ND	0.5	ug/L	150	524.2	03/05/19:202515	524.2	03/05/19:203274
1,1,2-Trichlorotrifluoroethane	ND	0.5	ug/L	1200	524.2	03/05/19:202515	524.2	03/05/19:203274
1,2,4-Trimethylbenzene	ND	0.5	ug/L		524.2	03/05/19:202515	524.2	03/05/19:203274
1,3,5-Trimethylbenzene	ND	0.5	ug/L		524.2	03/05/19:202515	524.2	03/05/19:203274
Vinyl Chloride	ND	0.5	ug/L	0.5	524.2	03/05/19:202515	524.2	03/05/19:203274
Xylenes (Total)	ND	--	ug/L	1750	524.2	03/05/19:202515	524.2	03/05/19:203274
Xylenes m,p	ND	0.5	ug/L	1750	524.2	03/05/19:202515	524.2	03/05/19:203274
Xylenes o	ND	0.5	ug/L	1750	524.2	03/05/19:202515	524.2	03/05/19:203274

ND=Non-Detected. PQL=Practical Quantitation Limit. ‡Surrogate. * PQL adjusted for dilution.

MCL = Maximum Contamination Level. 2 - Secondary Standard. 3 - CDPH Notification Level. AL = Regulatory Action Level.

March 14, 2019
Paradise Irrigation District

Lab ID : CH 1971530
Customer : 7-5855

Quality Control - Organic

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Organic								
1,1,1,2-Tetrachloroethane	524.2	03/05/19:202515VRG (SP 1902619-003)	Blank	ug/L		ND	<0.5	
			MS	ug/L	10.00	113 %	12-178	
			MSD	ug/L	10.00	96.1 %	12-178	
			MSRPD	ug/L	10.00	16.4%	≤39	
1,1,1-Trichloroethane(TCA)	524.2	03/05/19:203274VRG	CCV	ug/L	10.00	109 %	70-130	
			Blank	ug/L		ND	<0.5	
			MS	ug/L	10.00	136 %	9-176	
			MSD	ug/L	10.00	121 %	9-176	
1,1,2-Tetrachloroethane	524.2	03/05/19:202515VRG (SP 1902619-003)	MSRPD	ug/L	10.00	12.0%	≤33	
			CCV	ug/L	10.00	124 %	70-130	
			Blank	ug/L		ND	<0.5	
			MS	ug/L	10.00	108 %	23-180	
1,1,2-Trichloroethane	524.2	03/05/19:203274VRG	MSD	ug/L	10.00	86.3 %	23-180	
			MSRPD	ug/L	10.00	22.1%	≤34	
			CCV	ug/L	10.00	98.8 %	70-130	
			Blank	ug/L		ND	<0.5	
1,1-Dichloroethane	524.2	03/05/19:202515VRG (SP 1902619-003)	MS	ug/L	10.00	102 %	25-173	
			MSD	ug/L	10.00	83.5 %	25-173	
			MSRPD	ug/L	10.00	20.0%	≤29	
			CCV	ug/L	10.00	97.2 %	70-130	
1,1-Dichloroethylene	524.2	03/05/19:202515VRG (SP 1902619-003)	Blank	ug/L		ND	<0.5	
			MS	ug/L	10.00	131 %	15-161	
			MSD	ug/L	10.00	113 %	15-161	
			MSRPD	ug/L	10.00	14.9%	≤36	
1,1-Dichloropropene	524.2	03/05/19:203274VRG	CCV	ug/L	10.00	122 %	70-130	
			Blank	ug/L		ND	<0.5	
			MS	ug/L	10.00	140 %	0-162	
			MSD	ug/L	10.00	131 %	0-162	
1,2,3-Trichlorobenzene	524.2	03/05/19:202515VRG (SP 1902619-003)	MSRPD	ug/L	10.00	6.5%	≤33	
			CCV	ug/L	10.00	128 %	70-130	
			Blank	ug/L		ND	<0.5	
			MS	ug/L	10.00	133 %	0-171	
1,2,4-Trichlorobenzene	524.2	03/05/19:203274VRG	MSD	ug/L	10.00	117 %	0-171	
			MSRPD	ug/L	10.00	13.3%	≤31	
			CCV	ug/L	10.00	120 %	70-130	
			Blank	ug/L		ND	<0.5	
1,2,4-Trimethylbenzene	524.2	03/05/19:202515VRG (SP 1902619-003)	MS	ug/L	10.00	112 %	14-181	
			MSD	ug/L	10.00	94.4 %	14-181	
			MSRPD	ug/L	10.00	16.7%	≤34	
			CCV	ug/L	10.00	106 %	70-130	
1,2-Dichlorobenzene	524.2	03/05/19:203274VRG	Blank	ug/L		ND	<0.5	
			MS	ug/L	10.00	110 %	10-180	
			MSD	ug/L	10.00	93.2 %	10-180	
			MSRPD	ug/L	10.00	16.5%	≤32	
1,2-Dichlorobenzene	524.2	03/05/19:202515VRG (SP 1902619-003)	CCV	ug/L	10.00	104 %	70-130	
			Blank	ug/L		ND	<0.5	
			MS	ug/L	10.00	117 %	2-192	
			MSD	ug/L	10.00	100 %	2-192	
1,2-Dichlorobenzene	524.2	03/05/19:203274VRG	MSRPD	ug/L	10.00	15.6%	≤39	
			CCV	ug/L	10.00	111 %	70-130	
			Blank	ug/L		ND	<0.5	
			MS	ug/L	10.00	113 %	13-191	
1,2-Dichlorobenzene	524.2	03/05/19:202515VRG (SP 1902619-003)	MSD	ug/L	10.00	92.6 %	13-191	
			MSRPD	ug/L	10.00	20.2%	≤35	
			CCV	ug/L	10.00	107 %	70-130	
			Blank	ug/L		ND	<0.5	

March 14, 2019
Paradise Irrigation District

Lab ID : CH 1971530
Customer : 7-5855

Quality Control - Organic

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Organic								
1,2-Dichlorobenzene-d4	524.2	03/05/19:202515VRG (SP 1902619-003)	Blank	ug/L	10.00	96.2 %	70-130	
			MS	ug/L	10.00	99.5 %	70-130	
			MSD	ug/L	10.00	97.5 %	70-130	
			MSRPD	ug/L	10.00	2.0%	≤20	
	524.2	03/05/19:203274VRG	CCV	ug/L	10.00	99.2 %	70-130	
1,2-Dichloroethane (EDC)	524.2	03/05/19:202515VRG (SP 1902619-003)	Blank	ug/L	10.00	ND	<0.5	
			MS	ug/L	10.00	116 %	18-162	
			MSD	ug/L	10.00	96.8 %	18-162	
			MSRPD	ug/L	10.00	18.0%	≤33	
	524.2	03/05/19:203274VRG	CCV	ug/L	10.00	110 %	70-130	
1,2-Dichloropropane	524.2	03/05/19:202515VRG (SP 1902619-003)	Blank	ug/L	10.00	ND	<0.5	
			MS	ug/L	10.00	114 %	10-163	
			MSD	ug/L	10.00	95.7 %	10-163	
			MSRPD	ug/L	10.00	17.8%	≤34	
	524.2	03/05/19:203274VRG	CCV	ug/L	10.00	108 %	70-130	
1,3,5-Trimethylbenzene	524.2	03/05/19:202515VRG (SP 1902619-003)	Blank	ug/L	10.00	ND	<0.5	
			MS	ug/L	10.00	119 %	0-210	
			MSD	ug/L	10.00	102 %	0-210	
			MSRPD	ug/L	10.00	15.2%	≤40	
	524.2	03/05/19:203274VRG	CCV	ug/L	10.00	111 %	70-130	
1,3-Dichlorobenzene	524.2	03/05/19:202515VRG (SP 1902619-003)	Blank	ug/L	10.00	ND	<0.5	
			MS	ug/L	10.00	109 %	17-182	
			MSD	ug/L	10.00	90.5 %	17-182	
			MSRPD	ug/L	10.00	19.0%	≤39	
	524.2	03/05/19:203274VRG	CCV	ug/L	10.00	102 %	70-130	
1,3-Dichloropropane	524.2	03/05/19:202515VRG (SP 1902619-003)	Blank	ug/L	10.00	ND	<0.5	
			MS	ug/L	10.00	110 %	0-178	
			MSD	ug/L	10.00	90.2 %	0-178	
			MSRPD	ug/L	10.00	19.9%	≤29	
	524.2	03/05/19:203274VRG	CCV	ug/L	10.00	104 %	70-130	
1,4-Dichlorobenzene	524.2	03/05/19:202515VRG (SP 1902619-003)	Blank	ug/L	10.00	ND	<0.5	
			MS	ug/L	10.00	108 %	19-183	
			MSD	ug/L	10.00	91.2 %	19-183	
			MSRPD	ug/L	10.00	17.2%	≤37	
	524.2	03/05/19:203274VRG	CCV	ug/L	10.00	103 %	70-130	
2,2-Dichloropropane	524.2	03/05/19:202515VRG (SP 1902619-003)	Blank	ug/L	10.00	ND	<0.5	
			MS	ug/L	10.00	152 %	0-288	
			MSD	ug/L	10.00	140 %	0-288	
			MSRPD	ug/L	10.00	7.9%	≤33	
	524.2	03/05/19:203274VRG	CCV	ug/L	10.00	129 %	70-130	
2-Chlorotoluene	524.2	03/05/19:202515VRG (SP 1902619-003)	Blank	ug/L	10.00	ND	<0.5	
			MS	ug/L	10.00	116 %	17-180	
			MSD	ug/L	10.00	101 %	17-180	
			MSRPD	ug/L	10.00	14.6%	≤38	
	524.2	03/05/19:203274VRG	CCV	ug/L	10.00	186 %	70-130	360
4-Bromofluorobenzene	524.2	03/05/19:202515VRG (SP 1902619-003)	Blank	ug/L	10.00	97.9 %	70-130	
			MS	ug/L	10.00	95.3 %	70-130	
			MSD	ug/L	10.00	94.6 %	70-130	
			MSRPD	ug/L	10.00	0.7%	≤30	
	524.2	03/05/19:203274VRG	CCV	ug/L	10.00	96.9 %	70-130	
4-Chlorotoluene	524.2	03/05/19:202515VRG (SP 1902619-003)	Blank	ug/L	10.00	ND	<0.5	
			MS	ug/L	10.00	114 %	11-177	
			MSD	ug/L	10.00	95.6 %	11-177	
			MSRPD	ug/L	10.00	17.5%	≤41	

March 14, 2019
Paradise Irrigation District

Lab ID : CH 1971530
Customer : 7-5855

Quality Control - Organic

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Organic								
4-Chlorotoluene	524.2	03/05/19:203274VRG	CCV	ug/L	10.00	93.8 %	70-130	
Benzene	524.2	03/05/19:202515VRG (SP 1902619-003)	Blank	ug/L		ND	<0.5	
			MS	ug/L	10.00	119 %	12-158	
			MSD	ug/L	10.00	103 %	12-158	
			MSRPD	ug/L	10.00	14.8%	≤36	
	524.2	03/05/19:203274VRG	CCV	ug/L	10.00	113 %	70-130	
Bromobenzene	524.2	03/05/19:202515VRG (SP 1902619-003)	Blank	ug/L		ND	<0.5	
			MS	ug/L	10.00	105 %	23-177	
			MSD	ug/L	10.00	88.2 %	23-177	
			MSRPD	ug/L	10.00	17.1%	≤40	
	524.2	03/05/19:203274VRG	CCV	ug/L	10.00	98.5 %	70-130	
Bromochloromethane	524.2	03/05/19:202515VRG (SP 1902619-003)	Blank	ug/L		ND	<0.5	
			MS	ug/L	10.00	119 %	4-186	
			MSD	ug/L	10.00	96.8 %	4-186	
			MSRPD	ug/L	10.00	20.3%	≤30	
	524.2	03/05/19:203274VRG	CCV	ug/L	10.00	107 %	70-130	
Bromomethane (Methyl Bromide)	524.2	03/05/19:202515VRG (SP 1902619-003)	Blank	ug/L		ND	<0.5	
			MS	ug/L	10.00	157 %	0-196	
			MSD	ug/L	10.00	119 %	0-196	
			MSRPD	ug/L	10.00	27.5%	≤40	
	524.2	03/05/19:203274VRG	CCV	ug/L	10.00	151 %	70-130	360
Carbon Tetrachloride	524.2	03/05/19:202515VRG (SP 1902619-003)	Blank	ug/L		ND	<0.5	
			MS	ug/L	10.00	135 %	5-175	
			MSD	ug/L	10.00	119 %	5-175	
			MSRPD	ug/L	10.00	12.7%	≤32	
	524.2	03/05/19:203274VRG	CCV	ug/L	10.00	123 %	70-130	
Chlorobenzene	524.2	03/05/19:202515VRG (SP 1902619-003)	Blank	ug/L		ND	<0.5	
			MS	ug/L	10.00	112 %	14-175	
			MSD	ug/L	10.00	94.2 %	14-175	
			MSRPD	ug/L	10.00	17.7%	≤35	
	524.2	03/05/19:203274VRG	CCV	ug/L	10.00	106 %	70-130	
Chloroethane (Ethyl Chloride)	524.2	03/05/19:202515VRG (SP 1902619-003)	Blank	ug/L		ND	<0.5	
			MS	ug/L	10.00	157 %	0-184	
			MSD	ug/L	10.00	121 %	0-184	
			MSRPD	ug/L	10.00	25.7%	≤40	
	524.2	03/05/19:203274VRG	CCV	ug/L	10.00	148 %	70-130	360
Chloromethane(Methyl Chloride)	524.2	03/05/19:202515VRG (SP 1902619-003)	Blank	ug/L		ND	<0.5	
			MS	ug/L	10.00	163 %	0-224	
			MSD	ug/L	10.00	115 %	0-224	
			MSRPD	ug/L	10.00	34.9%	≤39	
	524.2	03/05/19:203274VRG	CCV	ug/L	10.00	153 %	70-130	360
cis-1,2-Dichloroethylene	524.2	03/05/19:202515VRG (SP 1902619-003)	Blank	ug/L		ND	<0.5	
			MS	ug/L	10.00	122 %	16-172	
			MSD	ug/L	10.00	104 %	16-172	
			MSRPD	ug/L	10.00	15.8%	≤34	
	524.2	03/05/19:203274VRG	CCV	ug/L	10.00	116 %	70-130	
cis-1,3-Dichloropropene	524.2	03/05/19:202515VRG (SP 1902619-003)	Blank	ug/L		ND	<0.5	
			MS	ug/L	9.550	124 %	5-158	
			MSD	ug/L	9.550	101 %	5-158	
			MSRPD	ug/L	10.00	20.3%	≤38	
	524.2	03/05/19:203274VRG	CCV	ug/L	9.550	119 %	70-130	
Dibromomethane	524.2	03/05/19:202515VRG (SP 1902619-003)	Blank	ug/L		ND	<0.5	
			MS	ug/L	10.00	118 %	11-168	
			MSD	ug/L	10.00	95.2 %	11-168	

March 14, 2019
Paradise Irrigation District

Lab ID : CH 1971530
Customer : 7-5855

Quality Control - Organic

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Organic								
Dibromomethane	524.2	03/05/19:202515VRG	MSRPD	ug/L	10.00	21.2%	≤28	
	524.2	03/05/19:203274VRG	CCV	ug/L	10.00	105 %	70-130	
Dichlorodifluoromethane	524.2	03/05/19:202515VRG (SP 1902619-003)	Blank	ug/L		ND	<0.5	
			MS	ug/L	10.00	133 %	0-334	
			MSD	ug/L	10.00	105 %	0-334	
			MSRPD	ug/L	10.00	24.2%	≤39	
Dichloromethane	524.2	03/05/19:203274VRG (SP 1902619-003)	CCV	ug/L	10.00	121 %	70-130	
			Blank	ug/L		ND	<0.5	
			MS	ug/L	10.00	107 %	20-157	
			MSD	ug/L	10.00	90.1 %	20-157	
Ethyl tert-Butyl Ether	524.2	03/05/19:202515VRG (SP 1902619-003)	MSRPD	ug/L	10.00	16.2%	≤36	
			Blank	ug/L		ND	<3	
			MS	ug/L	10.00	128 %	11-165	
			MSD	ug/L	10.00	114 %	11-165	
Ethylbenzene	524.2	03/05/19:203274VRG (SP 1902619-003)	MSRPD	ug/L	10.00	1.4	≤3	
			CCV	ug/L	10.00	116 %	70-130	
			Blank	ug/L		ND	<0.5	
			MS	ug/L	10.00	115 %	9-174	
Freon-11	524.2	03/05/19:202515VRG (SP 1902619-003)	MSD	ug/L	10.00	99.2 %	9-174	
			MSRPD	ug/L	10.00	14.8%	≤37	
			CCV	ug/L	10.00	108 %	70-130	
			Blank	ug/L		ND	<0.5	
Hexachlorobutadiene	524.2	03/05/19:202515VRG (SP 1902619-003)	MS	ug/L	10.00	155 %	0-232	
			MSD	ug/L	10.00	119 %	0-232	
			MSRPD	ug/L	10.00	26.6%	≤35	
			Blank	ug/L		ND	<0.5	
Isopropyl Ether	524.2	03/05/19:203274VRG (SP 1902619-003)	MS	ug/L	10.00	116 %	14-200	
			MSD	ug/L	10.00	100 %	14-200	
			MSRPD	ug/L	10.00	15.0%	≤40	
			CCV	ug/L	10.00	110 %	70-130	
Isopropylbenzene	524.2	03/05/19:202515VRG (SP 1902619-003)	Blank	ug/L		ND	<3	
			MS	ug/L	10.00	130 %	8-165	
			MSD	ug/L	10.00	110 %	8-165	
			MSRPD	ug/L	10.00	2.0	≤3	
Methyl tert-Butyl Ether	524.2	03/05/19:203274VRG (SP 1902619-003)	CCV	ug/L	10.00	123 %	70-130	
			Blank	ug/L		ND	<0.5	
			MS	ug/L	10.00	115 %	4-159	
			MSD	ug/L	10.00	99.9 %	4-159	
Methyl tert-Butyl Ether (MTBE)	524.2	03/05/19:203274VRG (SP 1902619-003)	MSRPD	ug/L	10.00	14.2%	≤37	
			CCV	ug/L	10.00	109 %	70-130	
			Blank	ug/L		ND	<1.0	
			MS	ug/L	10.00	126 %	11-168	
Methylene Chloride	524.2	03/05/19:202515VRG (SP 1902619-003)	MSD	ug/L	10.00	109 %	11-168	
			MSRPD	ug/L	10.00	14.4%	≤29	
			CCV	ug/L	10.00	136 %	70-130	360
			Blank	ug/L		ND	<0.5	
Naphthalene	524.2	03/05/19:203274VRG (SP 1902619-003)	MS	ug/L	10.00	114 %	0-189	
			MSD	ug/L	10.00	93.6 %	0-189	
			MSRPD	ug/L	10.00	19.4%	≤32	
			CCV	ug/L	10.00	105 %	70-130	
n-Butylbenzene	524.2	03/05/19:202515VRG (SP 1902619-003)	Blank	ug/L		ND	<0.5	
			MS	ug/L	10.00	123 %	4-186	
			MSD	ug/L	10.00	107 %	4-186	

March 14, 2019
Paradise Irrigation District

Lab ID : CH 1971530
Customer : 7-5855

Quality Control - Organic

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Organic								
n-Butylbenzene	524.2	03/05/19:202515VRG	MSRPD	ug/L	10.00	13.3%	≤37	
	524.2	03/05/19:203274VRG	CCV	ug/L	10.00	115 %	70-130	
n-Propylbenzene	524.2	03/05/19:202515VRG (SP 1902619-003)	Blank	ug/L		ND	<0.5	
			MS	ug/L	10.00	122 %	0-174	
			MSD	ug/L	10.00	105 %	0-174	
			MSRPD	ug/L	10.00	15.0%	≤37	
p-Isopropyltoluene	524.2	03/05/19:203274VRG (SP 1902619-003)	CCV	ug/L	10.00	113 %	70-130	
			Blank	ug/L		ND	<0.5	
			MS	ug/L	10.00	121 %	0-193	
			MSD	ug/L	10.00	104 %	0-193	
sec-Butylbenzene	524.2	03/05/19:202515VRG (SP 1902619-003)	MSRPD	ug/L	10.00	15.6%	≤40	
			CCV	ug/L	10.00	112 %	70-130	
			Blank	ug/L		ND	<0.5	
			MS	ug/L	10.00	126 %	0-177	
Styrene	524.2	03/05/19:202515VRG (SP 1902619-003)	MSD	ug/L	10.00	109 %	0-177	
			MSRPD	ug/L	10.00	14.1%	≤40	
			CCV	ug/L	10.00	116 %	70-130	
			Blank	ug/L		ND	<0.5	
TAME	524.2	03/05/19:202515VRG (SP 1902619-003)	MS	ug/L	10.00	108 %	0-198	
			MSD	ug/L	10.00	90.3 %	0-198	
			MSRPD	ug/L	10.00	17.6%	≤37	
			CCV	ug/L	10.00	105 %	70-130	
tert-Butanol	524.2	03/05/19:202515VRG (SP 1902619-003)	Blank	ug/L		ND	<3	
			MS	ug/L	10.00	117 %	15-162	
			MSD	ug/L	10.00	102 %	15-162	
			MSRPD	ug/L	10.00	1.4	≤3	
tert-Butylbenzene	524.2	03/05/19:202515VRG (SP 1902619-003)	CCV	ug/L	10.00	105 %	70-130	
			Blank	ug/L		ND	<2	
			MS	ug/L	50.00	213 %	0-198	435
			MSD	ug/L	50.00	163 %	0-198	
Tetrachloroethylene (PCE)	524.2	03/05/19:202515VRG (SP 1902619-003)	MSRPD	ug/L	10.00	26.5%	≤39	
			CCV	ug/L	50.00	165 %	70-130	360
			Blank	ug/L		ND	<0.5	
			MS	ug/L	10.00	124 %	9-179	
Toluene	524.2	03/05/19:202515VRG (SP 1902619-003)	MSD	ug/L	10.00	107 %	9-179	
			MSRPD	ug/L	10.00	14.3%	≤38	
			CCV	ug/L	10.00	116 %	30-130	
			Blank	ug/L		ND	<0.5	
trans-1,2-Dichloroethylene	524.2	03/05/19:202515VRG (SP 1902619-003)	MS	ug/L	10.00	119 %	14-186	
			MSD	ug/L	10.00	104 %	14-186	
			MSRPD	ug/L	10.00	13.8%	≤33	
			CCV	ug/L	10.00	111 %	70-130	
trans-1,3-Dichloropropene	524.2	03/05/19:202515VRG (SP 1902619-003)	Blank	ug/L		ND	<0.5	
			MS	ug/L	10.00	130 %	5-165	
			MSD	ug/L	10.00	115 %	5-165	
			MSRPD	ug/L	10.00	12.2%	≤40	
trans-1,3-Dichloropropene	524.2	03/05/19:202515VRG	CCV	ug/L	10.00	121 %	70-130	
			Blank	ug/L		ND	<0.5	
			MS	ug/L	9.200	118 %	0-169	

March 14, 2019
Paradise Irrigation District

Lab ID : CH 1971530
Customer : 7-5855

Quality Control - Organic

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Organic trans-1,3-Dichloropropene	524.2	(SP 1902619-003)	MSD	ug/L	9.200	94.4 %	0-169	
			MSRPD	ug/L	10.00	22.6%	≤31	
Trichloroethylene (TCE)	524.2	03/05/19:203274VRG	CCV	ug/L	9.200	115 %	70-130	
	524.2	03/05/19:202515VRG (SP 1902619-003)	Blank	ug/L		ND	<0.5	
			MS	ug/L	10.00	118 %	11-167	
			MSD	ug/L	10.00	103 %	11-167	
		MSRPD	ug/L	10.00	13.1%	≤35		
	524.2	03/05/19:203274VRG	CCV	ug/L	10.00	113 %	70-130	
Trichlorofluoromethane F-11	524.2	03/05/19:203274VRG	CCV	ug/L	10.00	141 %	70-130	360
Trichlorotrifluoroethane F-113	524.2	03/05/19:202515VRG (SP 1902619-003)	Blank	ug/L		ND	<0.5	
			MS	ug/L	10.00	131 %	0-183	
			MSD	ug/L	10.00	115 %	0-183	
			MSRPD	ug/L	10.00	12.3%	≤33	
	524.2	03/05/19:203274VRG	CCV	ug/L	10.00	111 %	70-130	
Vinyl Chloride	524.2	03/05/19:202515VRG (SP 1902619-003)	Blank	ug/L		ND	<0.5	
			MS	ug/L	10.00	163 %	0-208	
			MSD	ug/L	10.00	124 %	0-208	
			MSRPD	ug/L	10.00	27.2%	≤40	
	524.2	03/05/19:203274VRG	CCV	ug/L	10.00	159 %	30-130	360
Xylenes m,p	524.2	03/05/19:202515VRG (SP 1902619-003)	Blank	ug/L		ND	<0.5	
			MS	ug/L	20.00	115 %	0-193	
			MSD	ug/L	20.00	99.3 %	0-193	
			MSRPD	ug/L	10.00	15.1%	≤37	
	524.2	03/05/19:203274VRG	CCV	ug/L	20.00	110 %	70-130	
Xylenes o	524.2	03/05/19:202515VRG (SP 1902619-003)	Blank	ug/L		ND	<0.5	
			MS	ug/L	10.00	117 %	0-188	
			MSD	ug/L	10.00	99.5 %	0-188	
			MSRPD	ug/L	10.00	15.9%	≤36	
	524.2	03/05/19:203274VRG	CCV	ug/L	10.00	86.6 %	70-130	
Definition								
CCV : Continuing Calibration Verification - Analyzed to verify the instrument calibration is within criteria.								
Blank : Method Blank - Prepared to verify that the preparation process is not contributing contamination to the samples.								
MS : Matrix Spikes - A random sample is spiked with a known amount of analyte. The recoveries are an indication of how that sample matrix affects analyte recovery.								
MSD : Matrix Spike Duplicate of MS/MSD pair - A random sample duplicate is spiked with a known amount of analyte. The recoveries are an indication of how that sample matrix affects analyte recovery.								
MSRPD : MS/MSD Relative Percent Difference (RPD) - The MS relative percent difference is an indication of precision for the preparation and analysis.								
ND : Non-detect - Result was below the DQO listed for the analyte.								
DQO : Data Quality Objective - This is the criteria against which the quality control data is compared.								
Explanation								
360 : CCV above Acceptance Range (AR). Samples which were non detect for this analyte were accepted.								
435 : Sample matrix may be affecting this analyte. Data was accepted based on the LCS or CCV recovery.								