Silver State Labs-Reno 1135 Financial Blvd (775) 857-2400 FAX: (888) 398-7002 www.ssalabs.com

December 05, 2018 Workorder 18110705

Jay Flakus CITY OF YERINGTON 102 South Main Street Yerington, NV 89447

Project: W07

Dear Jay Flakus:

It is the policy of Silver State Analytical Laboratory - Reno to strictly adhere to a comprehensive Quality Assurance Plan that ensures the data presented in this report are both accurate and precise. Silver State Analytical Laboratory - Reno maintains accreditation in the State of Nevada (NV-00015) and the State of California (ELAP 2990).

The data presented in this report was obtained from the analysis of samples received under a chain of custody. Unless otherwise noted below, samples were received in good condition, properly preserved and within the hold time for the requested analyses. Any anomalies associated with the analysis of the samples have been flagged with an appropriate explanation in the Analysis Report section of the Laboratory Report.

18110705: CARBAMATES 531, DBCP&EDB-504, DIQUAT-549, ENDOTHALL-548, GLYPHOSATE 547, HERB-515, PEST&PCB 508, and SVOC-525-R have been Sub Contracted.

Note: Endothall bottle broke, client will resample.

Sincerely,

Carlyllal

Carly Wood Laboratory Director 1135 Financial Blvd Reno, NV 89502



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**Analytical Report** 

Workorder#: 18110705 Date Reported: 12/5/2018

**Client:** CITY OF YERINGTON Sampled By J. Flakus

**Project Name:** W07

PO #:

Laboratory Accreditation Number NV015/CA2990

**Client Sample ID Date Received Date/Time Sampled** Laboratory ID

18110705-01 W07 11/14/2018 8:30 11/14/2018

Date/Time Data Method Result Units **MCL** Analyzed Flag **Parameter** Analyst **Digestion Turbidity Check** EPA 200.8 < 1.0 NTU KL 11/15/2018 14:37 Sodium 25 mg/L JF 11/16/2018 18:53 EPA 200.7 JF Uranium EPA 200.8 0.027 mg/L 0.03 11/30/2018 1:15

Laboratory Accreditation Number NV015/CA2990

**Date Received** Laboratory ID **Client Sample ID Date/Time Sampled** W07 11/14/2018 18110705-02 11/14/2018 8:30

Date/Time Data Result Units **MCL** Analyzed Flag **Parameter** Method **Analyst** Carbamates See Report CW EPA 531 **DBCP & EDB EPA 504** See Report CW Diquat EPA 549 See Report CW Glyphosate See Report CW EPA 547 See Report CW Herbicides EPA 515 PCB & Pesticides See Report CW **EPA 508** SVOC CW **EPA 525** See Report



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# **Quality Control Report**

R23532

**Batch ID:** 

WO#: **18110705** 

12/5/2018

**Analysis:** Metals 200.7 **Method:** EPA 200.7

Method Blank

RunID: 23532 SeqNo 522867 Units: mg/L Analysis Date: 11/16/2018 12:18:52 PM Analysis JF

Analyte	Result	Rep Limit	Rep Qual
Sodium	< 0.50	0.50	

### **Laboratory Control Sample (LCS)**

RunID: 23532 SeqNo 522869 Units: mg/L Analysis Date: 11/16/2018 12:23:20 PM Analysi: JF

Analyte	LCS Spike Added	LCS Result	LCS % Recovery		 RPD	RPD Limit	Low Limit	High Limit	Qual
Sodium	30.00	29	96.3						

## Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 18101581-01A

RunID: 23532 SeqNo 522981 Units: mg/L Analysis Date: 11/16/2018 5:46:57 PM Analysi: JF

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit	Qual
Sodium	20.67	20.00	37	80.4	20.00	37	82.6	1.17	20	70	130	

Analysis: Metals 200.8

**Method:** EPA 200.8 **Batch ID: R23935** 

#### **Laboratory Control Sample (LCS)**

RunID: 23935 SeqNo 533354 Units: mg/L Analysis Date: 11/29/2018 9:40:23 PM Analysi: JF

	Analyte	LCS Spike Added	LCS Result		 	LCSD % Recovery	RPD	RPD Limit	Low Limit	High Limit	Qual
Ī	Uranium	0.1000	0.10	100							

#### **Laboratory Control Sample (LCS)**

RunID: 23935 SeqNo 533394 Units: mg/L Analysis Date: 11/30/2018 2:48:39 AM Analyst: JF

Analyte	LCS Spike Added	LCS Result	LCS % Recovery	 	LCSD % Recovery	RPD	RPD Limit	Low Limit	High Limit	Qual	
Uranium	0.1000	0.10	103								

### Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 18110686-01B

RunID: 23935 SeqNo 533384 Units: mg/L

Original



Silver State Labs-Reno

**Quality Control Report** 

WO#: 18110705

12/5/2018

(775) 857-2400 FAX: (888) 398-7002 www.ssalabs.com

Analysis Date: 11/30/2018 12:55:52 AM Analyst: JF

	Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit	Qual
Uraniu	m	0.01591	0.2000	0.22	102	0.2000	0.23	105	2.61	20	70	130	

A8K1989 12/04/2018

Invoice: A835668

Joe Nava Sierra Environmental Monitoring 1135 Financial Blvd Reno, NV 89502

RE: Report for A8K1989 Drinking Water Organics - NV

Dear Joe Nava.

Thank you for using BSK Associates for your analytical testing needs. In the following pages, you will find the test results for the samples submitted to our laboratory on 11/16/2018. The results have been approved for release by our Laboratory Director as indicated by the authorizing signature below.

The samples were analyzed for the test(s) indicated on the Chain of Custody (see attached) and the results relate only to the samples analyzed. BSK certifies that the testing was performed in accordance with the quality system requirements specified in the 2009 TNI Standard. Any deviations from this standard or from the method requirements for each test procedure performed will be annotated alongside the analytical result or noted in the Case Narrative. Unless otherwise noted, the sample results are reported on an "as received" basis.

This certificate of analysis shall not be reproduced except in full, without written approval of the laboratory.

If additional clarification of any information is required, please contact your Project Manager, Heather S. White , at 559-497-2888.

Thank you again for using BSK Associates. We value your business and appreciate your loyalty.

Sincerely,

Adam Trevarrow, Project Manager



Accredited in Accordance with NELAP ORELAP #4021-009

A8K1989 FINAL 12042018 1501

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### **Drinking Water Organics - NV**



### **Case Narrative**

Project and Report Details Invoice Details

Client: Sierra Environmental Monitoring Invoice To: Sierra Environmental Monitoring

Report To:Joe NavaInvoice Attn: Kimberly GroverProject #:18110705Project PO#:18110705

**Report Due:** 12/04/2018

**Sample Receipt Conditions** 

Cooler: Default Cooler Containers Intact

Temperature on Receipt °C: 1.0 COC/Labels Agree
Received On Wet Ice

Packing Material - Bubble Wrap

Sample(s) were received in temperature range.

Initial receipt at BSK-FAL

**Detailed Narrative** 

**Analysis Comment** 

Date: 12/4/18 Initials: AJT

Comment: EPA 548 bottle received broken, analysis cancelled.

**Data Qualifiers** 

The following qualifiers have been applied to one or more analytical results:

MS1.0 Matrix spike recoveries exceed control limits.

**Report Distribution** 

Recipient(s) Report Format CC:

Joe Nava NEVADA.RPT cwood@ssalabs.com

Kimberly Grover NEVADA.RPT

A8K1989 FINAL 12042018 1501

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## **Sample Summary**

Sierra Environmental Monitoring 1135 Financial Blvd Reno, NV 89502

Analysis	Method	Laboratory Container ID Client Container ID
A8K1989-01		
SampleName: 18110705-02A		Sampled: 11/14/2018 08:30
Matrix: Water		Received: 11/16/2018 10:55
EDB and DBCP by GC-ECD (Federal)	EPA 504.1	J
Organohalide Pesticides, PCBs by GC-ECD (Federal)	EPA 505	J
Chlorinated Acid Herbicides by GC-ECD (40 CFR 141.	EPA 515.4	С
Semi-Volatile Organics by GC-MS (Federal)	EPA 525.3	A
Carbamates by HPLC (Federal)	EPA 531.1	M
Glyphosate by HPLC (Federal)	EPA 547	G
Diquat by HPLC (Federal)	EPA 549.2	D







## **Certificate of Analysis**

Sample ID: A8K1989-01 **Sample Date - Time:** 11/14/18 - 08:30 Sampled By: J Flakus

Matrix: Drinking Water

Sample Type: Grab Sample Description: 18110705-02A // W07

## BSK Associates Laboratory Fresno **Organics**

					RL				
Analyte	Method	Result	RL	Units	Mult	Batch	Prepared	Analyzed	Qual
EDB and DBCP by GC-ECD (Fe	ederal)								
Dibromochloropropane (DBCP)	EPA 504.1	ND	0.020	ug/L	1	A817440	11/19/18	11/20/18	
Ethylene Dibromide (EDB)	EPA 504.1	ND	0.010	ug/L	1	A817440	11/19/18	11/20/18	
Surrogate: 1-Br-2-Nitrobenzene	EPA 504.1	101 %	Acceptable	range: 70	-130 %				
Organohalide Pesticides, PCB	s by GC-ECD (Fede	ral)							
Aldrin	EPA 505	ND	0.075	ug/L	1	A817440	11/19/18	11/20/18	
Chlordane	EPA 505	ND	0.20	ug/L	1	A817440	11/19/18	11/20/18	
Dieldrin	EPA 505	ND	0.020	ug/L	1	A817440	11/19/18	11/20/18	
Endrin	EPA 505	ND	0.010	ug/L	1	A817440	11/19/18	11/20/18	
Heptachlor	EPA 505	ND	0.040	ug/L	1	A817440	11/19/18	11/20/18	
Heptachlor Epoxide	EPA 505	ND	0.020	ug/L	1	A817440	11/19/18	11/20/18	
Hexachlorobenzene	EPA 505	ND	0.10	ug/L	1	A817440	11/19/18	11/20/18	
Hexachlorocyclopentadiene	EPA 505	ND	0.10	ug/L	1	A817440	11/19/18	11/20/18	
Lindane	EPA 505	ND	0.020	ug/L	1	A817440	11/19/18	11/20/18	
Methoxychlor	EPA 505	ND	0.10	ug/L	1	A817440	11/19/18	11/20/18	
PCB Aroclor Screen	EPA 505	ND	0.10	ug/L	1		11/19/18	11/20/18	
Toxaphene	EPA 505	ND	1.0	ug/L	1	A817440	11/19/18	11/20/18	
Surrogate: 1-Br-2-Nitrobenzene	EPA 505	101 %	Acceptable	range: 70	-130 %				
Chlorinated Acid Herbicides by	y GC-ECD (40 CFR	<u>141.</u>							
2,4,5-T	EPA 515.4	ND	1.0	ug/L	1	A817537	11/20/18	11/22/18	
2,4,5-TP (Silvex)	EPA 515.4	ND	0.20	ug/L	1	A817537	11/20/18	11/22/18	
2,4-D	EPA 515.4	ND	0.10	ug/L	1		11/20/18	11/22/18	
Bentazon	EPA 515.4	ND	2.0	ug/L	1	A817537	11/20/18	11/22/18	
Dalapon	EPA 515.4	ND	1.0	ug/L	1		11/20/18	11/22/18	
Dicamba	EPA 515.4	ND	1.5	ug/L	1	A817537		11/22/18	
Dinoseb	EPA 515.4	ND	0.20	ug/L	1	A817537		11/22/18	
Pentachlorophenol	EPA 515.4	ND	0.040	ug/L	1		11/20/18	11/22/18	
Picloram	EPA 515.4	ND	0.10	ug/L	1	A817537	11/20/18	11/22/18	
Surrogate: DCPAA	EPA 515.4	95 %	Acceptable	range: 70	-130 %				
Semi-Volatile Organics by GC-									
Alachlor	EPA 525.3	ND	0.20	ug/L	1	A817701		11/27/18	
Atrazine	EPA 525.3	ND	0.10	ug/L	1	A817701		11/27/18	
Benzo(a)pyrene	EPA 525.3	ND	0.020	ug/L	1		11/26/18	11/27/18	
Bis(2-ethylhexyl) adipate	EPA 525.3	ND	0.60	ug/L	1	A817701	11/26/18	11/27/18	
Bis(2-ethylhexyl) phthalate	EPA 525.3	ND	0.60	ug/L	1	A817701		11/27/18	
Bromacil	EPA 525.3	ND	1.0	ug/L	1	A817701		11/27/18	
Butachlor	EPA 525.3	ND	0.38	ug/L	1	A817701		11/27/18	
Diazinon	EPA 525.3	ND	0.25	ug/L	1	A817701		11/27/18	
Dimethoate	EPA 525.3	ND	10	ug/L	1	A817701		11/27/18	
Metolachlor	EPA 525.3	ND	0.50	ug/L	1	A817701		11/27/18	
Metribuzin	EPA 525.3	ND	0.50	ug/L	1	A817701		11/27/18	
Molinate	EPA 525.3	ND	2.0	ug/L	1	A817701	11/26/18	11/27/18	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.





# **Drinking Water Organics - NV**

18110705

## **Certificate of Analysis**

Sample ID: A8K1989-01 Sampled By: J Flakus

Sample Description: 18110705-02A // W07

**Sample Date - Time:** 11/14/18 - 08:30

Matrix: Drinking Water

Sample Type: Grab

## **Organics**

Analyte	Method	Result	RL	Units	RL Mult	Batch	Prepared	Analyzed	Qual
Semi-Volatile Organics by GC-M	IS (Federal)								
Propachlor	EPA 525.3	ND	0.50	ug/L	1	A817701	11/26/18	11/27/18	
Simazine	EPA 525.3	ND	0.070	ug/L	1	A817701	11/26/18	11/27/18	
Thiobencarb	EPA 525.3	ND	1.0	ug/L	1	A817701	11/26/18	11/27/18	
Surrogate: 1,3-Dimethyl-2-nitrobenzene	EPA 525.3	90 %	Acceptable	range:	70-130 %				
Surrogate: Benzo(a)pyrene-d12	EPA 525.3	113 %	Acceptable	range:	70-130 %				
Surrogate: Triphenyl Phosphate	EPA 525.3	94 %	Acceptable	range:	70-130 %				
Carbamates by HPLC (Federal)									
3-Hydroxycarbofuran	EPA 531.1	ND	2.0	ug/L	1	A817435	11/19/18	11/20/18	
Aldicarb	EPA 531.1	ND	0.50	ug/L	1	A817435	11/19/18	11/20/18	
Aldicarb Sulfone	EPA 531.1	ND	0.80	ug/L	1	A817435	11/19/18	11/20/18	
Aldicarb Sulfoxide	EPA 531.1	ND	0.50	ug/L	1	A817435	11/19/18	11/20/18	
Carbaryl	EPA 531.1	ND	2.0	ug/L	1	A817435	11/19/18	11/20/18	
Carbofuran	EPA 531.1	ND	0.90	ug/L	1	A817435	11/19/18	11/20/18	
Methomyl	EPA 531.1	ND	2.0	ug/L	1	A817435	11/19/18	11/20/18	
Oxamyl	EPA 531.1	ND	2.0	ug/L	1	A817435	11/19/18	11/20/18	
Glyphosate by HPLC (Federal)									
Glyphosate	EPA 547	ND	6.0	ug/L	1	A817373	11/18/18	11/19/18	
Surrogate: AMPA	EPA 547	90 %	Acceptable	range:	70-130 %				
Diquat by HPLC (Federal)									
Diquat	EPA 549.2	ND	0.40	ug/L	1	A817546	11/21/18	11/26/18	

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				Spike	Source		%REC		RPD	Date	
Analyte	Result	RL	Units	Level	Result	%REC	Limits	RPD	Limit	Analyzed Qual	
		EPA 50	4.1 - Qւ	uality Co	ntrol						
Batch: A817440										Prepared: 11/19	/201
Prep Method: EPA 505										Analyst	: VT
Blank (A817440-BLK1)											
Dibromochloropropane (DBCP)	ND	0.020	ug/L							11/20/18	
Ethylene Dibromide (EDB)	ND	0.010	ug/L							11/20/18	
Surrogate: 1-Br-2-Nitrobenzene	0.47			0.46		104	70-130			11/20/18	
Blank Spike (A817440-BS1)											
Dibromochloropropane (DBCP)	0.11	0.020	ug/L	0.10	ND	108	70-130			11/19/18	
Ethylene Dibromide (EDB)	0.11	0.010	ug/L	0.10	ND	111	70-130			11/19/18	
Surrogate: 1-Br-2-Nitrobenzene	0.46		_	0.46		101	70-130			11/19/18	
Blank Spike Dup (A817440-BSD1)											
Dibromochloropropane (DBCP)	0.11	0.020	ug/L	0.10	ND	111	70-130	2	20	11/20/18	
Ethylene Dibromide (EDB)	0.11	0.010	ug/L	0.10	ND	112	70-130	1	20	11/20/18	
Surrogate: 1-Br-2-Nitrobenzene	0.53			0.46		116	70-130			11/20/18	
Matrix Spike (A817440-MS1), Source	e: A8K1354-01										
Dibromochloropropane (DBCP)	0.21	0.020	ug/L	0.099	0.11	100	65-135			11/20/18	
Ethylene Dibromide (EDB)	0.11	0.010	ug/L	0.099	ND	108	65-135			11/20/18	
Surrogate: 1-Br-2-Nitrobenzene	0.44			0.45		98	70-130			11/20/18	
		EPA 5	05 - Qua	ality Con	trol						
Batch: A817440										Prepared: 11/19	/201
Prep Method: EPA 505										Analyst	: VT
· · · · · · · · · · · · · · · · · · ·											
Blank (A817440-BLK1)										· · · · · · · · · · · · · · · · · · ·	
Blank (A817440-BLK1)	ND	0.075	ug/L							11/20/18	
- Blank (A817440-BLK1) Aldrin	ND ND	0.075 0.20	ug/L ug/L							-	
Blank (A817440-BLK1) Aldrin Chlordane			_							11/20/18	
Blank (A817440-BLK1) Aldrin Chlordane Dieldrin	ND	0.20	ug/L							11/20/18 11/20/18	
Blank (A817440-BLK1) Aldrin Chlordane Dieldrin Endrin	ND ND	0.20 0.020	ug/L ug/L							11/20/18 11/20/18 11/20/18	
Blank (A817440-BLK1) Aldrin Chlordane Dieldrin Endrin Heptachlor	ND ND ND	0.20 0.020 0.010	ug/L ug/L ug/L							11/20/18 11/20/18 11/20/18 11/20/18	
Blank (A817440-BLK1) Aldrin Chlordane Dieldrin Endrin Heptachlor Heptachlor Epoxide	ND ND ND ND	0.20 0.020 0.010 0.040	ug/L ug/L ug/L ug/L							11/20/18 11/20/18 11/20/18 11/20/18 11/20/18	
Blank (A817440-BLK1) Aldrin Chlordane Dieldrin Endrin Heptachlor Heptachlor Epoxide Hexachlorobenzene	ND ND ND ND ND	0.20 0.020 0.010 0.040 0.020	ug/L ug/L ug/L ug/L ug/L							11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18	
Blank (A817440-BLK1) Aldrin Chlordane Dieldrin Endrin Heptachlor Heptachlor Epoxide Hexachlorobenzene Hexachlorocyclopentadiene	ND ND ND ND ND	0.20 0.020 0.010 0.040 0.020 0.10	ug/L ug/L ug/L ug/L ug/L ug/L							11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18	
Blank (A817440-BLK1)  Aldrin Chlordane Dieldrin Endrin Heptachlor Heptachlor Epoxide Hexachlorobenzene Hexachlorocyclopentadiene Lindane	ND ND ND ND ND ND	0.20 0.020 0.010 0.040 0.020 0.10	ug/L ug/L ug/L ug/L ug/L ug/L ug/L							11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18	
Blank (A817440-BLK1) Aldrin Chlordane Dieldrin Endrin Heptachlor Heptachlor Epoxide Hexachlorobenzene Hexachlorocyclopentadiene Lindane Methoxychlor	ND ND ND ND ND ND	0.20 0.020 0.010 0.040 0.020 0.10 0.10	ug/L ug/L ug/L ug/L ug/L ug/L ug/L							11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18	
Blank (A817440-BLK1) Aldrin Chlordane Dieldrin Endrin Heptachlor Heptachlor Epoxide Hexachlorobenzene Hexachlorocyclopentadiene Lindane Methoxychlor PCB Aroclor Screen	ND N	0.20 0.020 0.010 0.040 0.020 0.10 0.10 0.020 0.10	ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L							11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18	
Blank (A817440-BLK1)  Aldrin Chlordane Dieldrin Endrin Heptachlor Heptachlor Epoxide Hexachlorobenzene Hexachlorocyclopentadiene Lindane Methoxychlor PCB Aroclor Screen Toxaphene	ND N	0.20 0.020 0.010 0.040 0.020 0.10 0.020 0.10 0.10	ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L	0.46		104	70-130			11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18	
Blank (A817440-BLK1) Aldrin Chlordane Dieldrin Endrin Heptachlor Heptachlor Epoxide Hexachlorobenzene Hexachlorocyclopentadiene Lindane Methoxychlor PCB Aroclor Screen Toxaphene Surrogate: 1-Br-2-Nitrobenzene	ND N	0.20 0.020 0.010 0.040 0.020 0.10 0.020 0.10 0.10	ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L	0.46		104	70-130			11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18	
Blank (A817440-BLK1) Aldrin Chlordane Dieldrin Endrin Heptachlor Heptachlor Epoxide Hexachlorobenzene Hexachlorocyclopentadiene Lindane Methoxychlor PCB Aroclor Screen Toxaphene Surrogate: 1-Br-2-Nitrobenzene  Blank Spike (A817440-BS1) Aldrin	ND ND ND ND ND ND ND ND ND ND ND ND	0.20 0.020 0.010 0.040 0.020 0.10 0.020 0.10 0.10 1.0	ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L	0.74	ND	115	70-130			11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18	
Blank (A817440-BLK1) Aldrin Chlordane Dieldrin Endrin Heptachlor Heptachlor Epoxide Hexachlorobenzene Hexachlorocyclopentadiene Lindane Methoxychlor PCB Aroclor Screen Toxaphene Surrogate: 1-Br-2-Nitrobenzene Blank Spike (A817440-BS1) Aldrin Dieldrin	ND ND ND ND ND ND ND ND ND ND ND O.47	0.20 0.020 0.010 0.040 0.020 0.10 0.020 0.10 1.0	ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L	0.74 0.20	ND	115 112	70-130 70-130			11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18	
Blank (A817440-BLK1) Aldrin Chlordane Dieldrin Endrin Heptachlor Heptachlor Epoxide Hexachlorobenzene Hexachlorocyclopentadiene Lindane Methoxychlor PCB Aroclor Screen Toxaphene Surrogate: 1-Br-2-Nitrobenzene Blank Spike (A817440-BS1) Aldrin Dieldrin Endrin	ND ND ND ND ND ND ND ND ND ND O.47	0.20 0.020 0.010 0.040 0.020 0.10 0.020 0.10 1.0 0.075 0.075 0.020 0.010	ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L	0.74 0.20 0.10	ND ND	115 112 107	70-130 70-130 70-130			11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18	
Blank (A817440-BLK1) Aldrin Chlordane Dieldrin Endrin Heptachlor Heptachlor Epoxide Hexachlorobenzene Hexachlorocyclopentadiene Lindane Methoxychlor PCB Aroclor Screen Toxaphene Surrogate: 1-Br-2-Nitrobenzene Blank Spike (A817440-BS1) Aldrin Dieldrin Endrin Heptachlor	ND ND ND ND ND ND ND ND ND ND 0.47	0.20 0.020 0.010 0.040 0.020 0.10 0.10 0.10 0.10 0.10 0.10 0.	ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L	0.74 0.20 0.10 0.10	ND ND ND	115 112 107 103	70-130 70-130 70-130 70-130			11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18	
Blank (A817440-BLK1) Aldrin Chlordane Dieldrin Endrin Heptachlor Heptachlor Epoxide Hexachlorobenzene Hexachlorocyclopentadiene Lindane Methoxychlor PCB Aroclor Screen Toxaphene Surrogate: 1-Br-2-Nitrobenzene Blank Spike (A817440-BS1) Aldrin Dieldrin Endrin Heptachlor Epoxide	ND ND ND ND ND ND ND ND ND ND 0.47	0.20 0.020 0.010 0.040 0.020 0.10 0.10 0.10 1.0  0.075 0.020 0.010 0.040 0.040 0.020	ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L	0.74 0.20 0.10 0.10 0.10	ND ND ND ND	115 112 107 103 107	70-130 70-130 70-130 70-130 70-130			11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/19/18 11/19/18 11/19/18 11/19/18 11/19/18 11/19/18	
•	ND ND ND ND ND ND ND ND ND ND 0.47	0.20 0.020 0.010 0.040 0.020 0.10 0.10 0.10 0.10 0.10 0.10 0.	ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L	0.74 0.20 0.10 0.10	ND ND ND	115 112 107 103	70-130 70-130 70-130 70-130			11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18 11/20/18	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Date Analyzed Qual
	- Result			ality Con			Emilio	- RI D	Emilit	- Tanany Eca Quan
Batch: A817440		LIAS	QU	ianty Ooi	01					Prepared: 11/19/201
Prep Method: EPA 505										Analyst: VT
Trep metriod. El A 303										Analyst. V
Blank Spike (A817440-BS1)										
Lindane	0.21	0.020	ug/L	0.20	ND	106	70-130			11/19/18
Methoxychlor	1.1	0.10	ug/L	1.0	ND	111	70-130			11/19/18
Surrogate: 1-Br-2-Nitrobenzene	0.46			0.46		101	70-130			11/19/18
Blank Spike Dup (A817440-BSD1)										
Aldrin	0.85	0.075	ug/L	0.74	ND	115	70-130	0	20	11/20/18
Dieldrin	0.20	0.020	ug/L	0.20	ND	99	70-130	12	20	11/20/18
Endrin	0.093	0.010	ug/L	0.10	ND	93	70-130	14	20	11/20/18
Heptachlor	0.10	0.040	ug/L	0.10	ND	105	70-130	2	20	11/20/18
Heptachlor Epoxide	0.11	0.020	ug/L	0.10	ND	114	70-130	7	20	11/20/18
 Hexachlorobenzene	1.0	0.10	ug/L	1.0	ND	105	70-130	2	20	11/20/18
Hexachlorocyclopentadiene	0.99	0.10	ug/L	1.0	ND	99	70-130	17	20	11/20/18
indane	0.23	0.020	ug/L	0.20	ND	114	70-130	7	20	11/20/18
Methoxychlor	1.2	0.10	ug/L	1.0	ND	117	70-130	5	20	11/20/18
Surrogate: 1-Br-2-Nitrobenzene	0.53			0.46		116	70-130			11/20/18
Matrix Spike (A817440-MS1), Source	e: A8K1354-01									
Aldrin	0.82	0.075	ug/L	0.73	ND	111	65-135			11/20/18
Dieldrin	0.17	0.020	ug/L	0.20	ND	83	65-135			11/20/18
Endrin	0.094	0.010	ug/L	0.099	ND	95	65-135			11/20/18
Heptachlor	0.10	0.040	ug/L	0.099	ND	102	65-135			11/20/18
Heptachlor Epoxide	0.098	0.020	ug/L	0.099	ND	99	65-135			11/20/18
Hexachlorobenzene	0.96	0.10	ug/L	0.99	ND	97	65-135			11/20/18
Hexachlorocyclopentadiene	1.1	0.10	ug/L	0.99	ND	103	65-135			11/20/18
Lindane	0.21	0.020	ug/L	0.20	ND	104	65-135			11/20/18
Methoxychlor	1.0	0.10	ug/L	0.99	ND	106	65-135			11/20/18
Surrogate: 1-Br-2-Nitrobenzene	0.44		Ü	0.45		98	70-130			11/20/18
		EPA 51	15.4 - Q	uality Co	ntrol					
Batch: A817537				_						Prepared: 11/20/201
Prep Method: EPA 515.4										Analyst: V1
Blank (A817537-BLK1)										
2,4,5-T	ND	1.0	ug/L							11/22/18
2,4,5-TP (Silvex)	ND	0.20	ug/L							11/22/18
2,4-D	ND	0.10	ug/L							11/22/18
Bentazon	ND	2.0	ug/L							11/22/18
Dalapon	ND	1.0	ug/L							11/22/18
Dicamba	ND	1.5	ug/L							11/22/18
Dinoseb	ND	0.20	ug/L							11/22/18
Pentachlorophenol	ND	0.040	ug/L							11/22/18
Picloram	ND	0.10	ug/L							11/22/18
Surrogate: DCPAA	34		•	36		94	70-130			11/22/18
Blank Spike (A817537-BS1)										
2,4,5-T	1.6	1.0	ug/L	1.6	ND	101	70-130			11/22/18
the results in this report apply to the samp ccordance with the chain of custody docu	les analyzed in	1.0	ug/L	1.0	ND	101	70-100	Å	48K198	9 FINAL 12042018

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



				Spike	Source		%REC		RPD	Date	
Analyte	Result	RL	Units	Level	Result	%REC	Limits	RPD		Analyzed	Qual
		FPΔ 51	54-0	uality Co	ntrol						
Batch: A817537		LIAU	10.4 - Q	dunty 00						Prepared	: 11/20/2018
Prep Method: EPA 515.4											nalyst: VTI
										•	
Blank Spike (A817537-BS1)											
2,4,5-TP (Silvex)	0.98	0.20	ug/L	0.80	ND	122	70-130			11/22/18	
2,4-D	0.37	0.10	ug/L	0.40	ND	93	70-130			11/22/18	
Bentazon	2.0	2.0	ug/L	2.0	ND	100	70-130			11/22/18	
Dalapon	4.1	1.0	ug/L	4.0	ND	103	70-130			11/22/18	
Dicamba	0.79	1.5	ug/L	0.80	ND	98	70-130			11/22/18	
Dinoseb	0.81	0.20	ug/L	0.80	ND	101	70-130			11/22/18	
Pentachlorophenol	0.16	0.040	ug/L	0.16	ND	101	70-130			11/22/18	
Picloram	0.39	0.10	ug/L	0.40	ND	98	70-130			11/22/18	
Surrogate: DCPAA	33			36		93	70-130			11/22/18	
Blank Spike Dup (A817537-BSD1)											
2,4,5-T	1.7	1.0	ug/L	1.6	ND	106	70-130	5	20	11/22/18	
2,4,5-TP (Silvex)	0.98	0.20	ug/L	0.80	ND	122	70-130	0	20	11/22/18	
2,4-D	0.36	0.10	ug/L	0.40	ND	89	70-130	4	20	11/22/18	
Bentazon	2.1	2.0	ug/L	2.0	ND	103	70-130	3	20	11/22/18	
Dalapon	4.0	1.0	ug/L	4.0	ND	101	70-130	1	20	11/22/18	
Dicamba	0.78	1.5	ug/L	0.80	ND	98	70-130	0	20	11/22/18	
Dinoseb	0.83	0.20	ug/L	0.80	ND	103	70-130	3	20	11/22/18	
Pentachlorophenol	0.17	0.040	ug/L	0.16	ND	103	70-130	3	20	11/22/18	
Picloram	0.43	0.10	ug/L	0.40	ND	109	70-130	10	20	11/22/18	
Surrogate: DCPAA	34	0.10	ug/L	36	ND	93	70-130	10	20	11/22/18	
Matrix Spike (A817537-MS1), Source: A	∆8K1971-01										
2,4,5-T	1.5	1.0	ug/L	1.6	ND	93	70-130			11/22/18	
2,4,5-T 2,4,5-TP (Silvex)	0.70	0.20	ug/L ug/L	0.80	ND	93 88	70-130			11/22/18	
	0.70		-		ND		70-130			11/22/18	
2,4-D		0.10	ug/L	0.40		70					
Bentazon	1.7	2.0	ug/L	2.0	ND	86	70-130			11/22/18	
Dalapon	4.0	1.0	ug/L	4.0	ND	99	70-130			11/22/18	
Dicamba	0.75	1.5	ug/L	0.80	ND	94	70-130			11/22/18	
Dinoseb	0.73	0.20	ug/L	0.80	ND	92	70-130			11/22/18	
Pentachlorophenol	0.081	0.040	ug/L	0.16	ND	51	70-130				MS1.0 <i>Low</i>
Picloram	0.41	0.10	ug/L	0.40	ND	102	70-130			11/22/18	
Surrogate: DCPAA	33			36		92	70-130			11/22/18	
Matrix Spike Dup (A817537-MSD1), So											
2,4,5-T	1.5	1.0	ug/L	1.6	ND	96	70-130	3	30	11/22/18	
2,4,5-TP (Silvex)	0.78	0.20	ug/L	0.80	ND	97	70-130	10	30	11/22/18	
2,4-D	0.29	0.10	ug/L	0.40	ND	72	70-130	2	30	11/22/18	
Bentazon	1.7	2.0	ug/L	2.0	ND	87	70-130	1	30	11/22/18	
Dalapon	4.0	1.0	ug/L	4.0	ND	101	70-130	2	30	11/22/18	
Dicamba	0.76	1.5	ug/L	0.80	ND	95	70-130	1	30	11/22/18	
Dinoseb	0.78	0.20	ug/L	0.80	ND	97	70-130	6	30	11/22/18	
Pentachlorophenol	0.081	0.040	ug/L	0.16	ND	51	70-130	1	30	11/22/18	MS1.0 <i>Low</i>
Picloram	0.43	0.10	ug/L	0.40	ND	107	70-130	5	30	11/22/18	
Surrogate: DCPAA	34			36		93	70-130			11/22/18	

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				Spike	Source		%REC		RPD	Date	
Analyte	Result	RL	Units	Level	Result	%REC	Limits	RPD	Limit	Analyzed	Qual
		EPA 52	25.3 - Qı	uality Co	ntrol						
Batch: A817701										Prepared	: 11/26/201
Prep Method: EPA 525.3										Α	nalyst: JKI
Blank (A817701-BLK1)											
Alachlor	ND	0.20	ug/L							11/27/18	
Atrazine	ND	0.10	ug/L							11/27/18	
Benzo(a)pyrene	ND	0.020	ug/L							11/27/18	
Bis(2-ethylhexyl) adipate	ND	0.60	ug/L							11/27/18	
Bis(2-ethylhexyl) phthalate	ND	0.60	ug/L							11/27/18	
Bromacil	ND	1.0	ug/L							11/27/18	
Butachlor	ND	0.38	ug/L							11/27/18	
Diazinon	ND	0.25	ug/L							11/27/18	
Dimethoate	ND	10	ug/L							11/27/18	
Metolachlor	ND	0.50	ug/L							11/27/18	
Metribuzin	ND	0.50	ug/L							11/27/18	
Molinate	ND	2.0	ug/L							11/27/18	
Propachlor	ND	0.50	ug/L							11/27/18	
Simazine	ND	0.070	ug/L							11/27/18	
Thiobencarb	ND	1.0	ug/L							11/27/18	
Surrogate: 1,3-Dimethyl-2-nitrobenzene	1.0		~g/ _	1.0		102	70-130			11/27/18	
Surrogate: Benzo(a)pyrene-d12	1.1			1.0		114	70-130			11/27/18	
Surrogate: Triphenyl Phosphate	0.99			1.0		99	70-130			11/27/18	
Blank Spike (A817701-BS1)											
Alachlor	0.88	0.20	ug/L	1.0	ND	88	70-130			11/27/18	
Atrazine	0.40	0.10	ug/L	0.50	ND	80	70-130			11/27/18	
Benzo(a)pyrene	0.11	0.020	ug/L	0.10	ND	111	70-130			11/27/18	
Bis(2-ethylhexyl) adipate	2.0	0.60	ug/L	2.0	ND	99	70-130			11/27/18	
Bis(2-ethylhexyl) phthalate	3.0	0.60	ug/L	3.0	ND	99	70-130			11/27/18	
Bromacil	0.97	1.0	ug/L	1.0	ND	97	70-130			11/27/18	
Butachlor	0.83	0.38	ug/L	1.0	ND	83	70-130			11/27/18	
Diazinon	1.1	0.25	ug/L	1.3	ND	88	70-130			11/27/18	
Dimethoate	1.8	10	-	2.0	ND	90	70-130			11/27/18	
			ug/L								
Metolachlor Metribuzin	1.1	0.50	ug/L	1.3	ND ND	85 92	70-130			11/27/18	
Metribuzin Melinate	0.92	0.50	ug/L	1.0	ND ND	92 111	70-130			11/27/18	
Molinate	2.2	2.0	ug/L	2.0	ND	111	70-130			11/27/18	
Propachlor	0.44	0.50	ug/L	0.50	ND	88	70-130			11/27/18	
Simazine	0.32	0.070	ug/L	0.35	ND	93	70-130			11/27/18	
Thiobencarb	0.95	1.0	ug/L	1.0	ND	95 07	70-130			11/27/18	
Surrogate: 1,3-Dimethyl-2-nitrobenzene	0.97			1.0		97	70-130			11/27/18	
Blank Spike Dup (A817701-BSD1)											
Alachlor	0.94	0.20	ug/L	1.0	ND	94	70-130	6	30	11/27/18	
Atrazine	0.46	0.10	ug/L	0.50	ND	91	70-130	13	30	11/27/18	
Benzo(a)pyrene	0.11	0.020	ug/L	0.10	ND	109	70-130	2	30	11/27/18	
Bis(2-ethylhexyl) adipate	1.8	0.60	ug/L	2.0	ND	89	70-130	11	30	11/27/18	
Bis(2-ethylhexyl) phthalate	3.0	0.60	ug/L	3.0	ND	99	70-130	0	30	11/27/18	
Bromacil	1.1	1.0	ug/L	1.0	ND	110	70-130	12	30	11/27/18	
Butachlor	0.87	0.38	ug/L	1.0	ND	87	70-130	5	30	11/27/18	
Diazinon	1.1	0.25	ug/L	1.3	ND	89	70-130	1	30	11/27/18	

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analytical report must be reproduced in its entirety.

## BSK Associates Laboratory Fresno Organics Quality Control Report

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Date Analyzed	Qual
		EPA 5	25.3 - Q	uality Co	ntrol						
Batch: A817701				-						Prepared	: 11/26/20
Prep Method: EPA 525.3											nalyst: J
Blank Spike Dup (A817701-BSD1)											
Dimethoate	2.1	10	ug/L	2.0	ND	103	70-130	14	30	11/27/18	
Metolachlor	1.1	0.50	ug/L	1.3	ND	89	70-130	5	30	11/27/18	
/letribuzin	1.0	0.50	ug/L	1.0	ND	101	70-130	9	30	11/27/18	
Molinate	2.2	2.0	ug/L	2.0	ND	110	70-130	0	30	11/27/18	
Propachlor	0.45	0.50	ug/L	0.50	ND	89	70-130	1	30	11/27/18	
Simazine	0.34	0.070	ug/L	0.35	ND	97	70-130	5	30	11/27/18	
hiobencarb	0.96	1.0	ug/L	1.0	ND	96	70-130	1	30	11/27/18	
Surrogate: 1,3-Dimethyl-2-nitrobenzene	0.99			1.0		99	70-130			11/27/18	
Matrix Spike (A817701-MS1), Source: A	\8K1984-01										
lachlor	1.1	0.20	ug/L	1.3	ND	86	70-130			11/27/18	
Atrazine	0.51	0.10	ug/L	0.65	ND	77	70-130			11/27/18	
Benzo(a)pyrene	0.13	0.020	ug/L	0.13	ND	99	70-130			11/27/18	
Bis(2-ethylhexyl) adipate	2.3	0.60	ug/L	2.6	ND	88	70-130			11/27/18	
Bis(2-ethylhexyl) phthalate	3.7	0.60	ug/L	3.9	ND	87	70-130			11/27/18	
Bromacil	1.2	1.0	ug/L	1.3	ND	90	70-130			11/27/18	
Butachlor	1.1	0.38	ug/L	1.3	ND	82	70-130			11/27/18	
Diazinon	1.3	0.25	ug/L	1.6	ND	77	70-130			11/27/18	
Dimethoate	2.3	10	ug/L	2.6	ND	84	70-130			11/27/18	
/letolachlor	1.3	0.50	ug/L	1.6	ND	80	70-130			11/27/18	
Metribuzin etribuzin	1.1	0.50	ug/L	1.3	ND	87	70-130			11/27/18	
Molinate	2.6	2.0	ug/L	2.6	ND	99	70-130			11/27/18	
Propachlor	0.54	0.50	ug/L	0.65	ND	82	70-130			11/27/18	
Simazine	0.38	0.070	ug/L	0.46	ND	83	70-130			11/27/18	
Γhiobencarb	1.1	1.0	ug/L	1.3	ND	85	70-130			11/27/18	
Surrogate: 1,3-Dimethyl-2-nitrobenzene	0.84			0.93		90	70-130			11/27/18	
		EPA 5	31.1 - Q	uality Co	ntrol						
Batch: A817435										Prepared	: 11/19/20
Prep Method: EPA 531.1										Α	nalyst: P
Blank (A817435-BLK1)											
B-Hydroxycarbofuran	ND	2.0	ug/L							11/20/18	
Aldicarb	ND	0.50	ug/L							11/20/18	
Aldicarb Sulfone	ND	0.80	ug/L							11/20/18	
Aldicarb Sulfoxide	ND	0.50	ug/L							11/20/18	
Carbaryl	ND	2.0	ug/L							11/20/18	
Carbofuran	ND	0.90	ug/L							11/20/18	
Methomyl	ND	2.0	ug/L							11/20/18	
Dxamyl	ND	2.0	ug/L							11/20/18	
Blank Spike (A817435-BS1)											
B-Hydroxycarbofuran	8.5	2.0	ug/L	8.7	ND	98	80-120			11/20/18	
Aldicarb	4.5	0.50	ug/L	4.3	ND	103	80-120			11/20/18	
Aldicarb Sulfone	6.9	0.80	ug/L	7.0	ND	99	80-120			11/20/18	
Aldicarb Sulfoxide	4.3	0.50	ug/L	4.3	ND	99	80-120			11/20/18	
			,					,	\ Q  <b>X</b> 4 O O		N2010 1E
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				Spike	Source		%REC		RPD	Date	
Analyte	Result	RL	Units	Level	Result	%REC	Limits	RPD	Limit	Analyzed	Qual
		EPA 53	31.1 - Q	uality Co	ntrol						
Batch: A817435										Prepared	: 11/19/201
Prep Method: EPA 531.1										Α	nalyst: PN
Blank Spike (A817435-BS1)											
Carbaryl	7.9	2.0	ug/L	8.7	ND	91	80-120			11/20/18	
Carbofuran	8.6	0.90	ug/L	7.8	ND	110	80-120			11/20/18	
Methomyl	8.8	2.0	ug/L	8.7	ND	101	80-120			11/20/18	
Oxamyl	8.7	2.0	ug/L	8.7	ND	100	80-120			11/20/18	
Blank Spike Dup (A817435-BSD1)											
3-Hydroxycarbofuran	8.7	2.0	ug/L	8.7	ND	100	80-120	2	20	11/20/18	
Aldicarb	4.4	0.50	ug/L	4.3	ND	101	80-120	2	20	11/20/18	
Aldicarb Sulfone	6.8	0.80	ug/L	7.0	ND	98	80-120	1	20	11/20/18	
Aldicarb Sulfoxide	4.2	0.50	ug/L	4.3	ND	97	80-120	2	20	11/20/18	
Carbaryl	7.8	2.0	ug/L	8.7	ND	90	80-120	1	20	11/20/18	
Carbofuran	8.6	0.90	ug/L	7.8	ND	110	80-120	0	20	11/20/18	
Methomyl	8.4	2.0	ug/L	8.7	ND	97	80-120	4	20	11/20/18	
Oxamyl	8.5	2.0	ug/L	8.7	ND	97	80-120	2	20	11/20/18	
Matrix Spike (A817435-MS1), Source:	A8J2937-05										
3-Hydroxycarbofuran	8.8	2.0	ug/L	8.7	ND	99	65-135			11/20/18	
Aldicarb	4.5	0.50	ug/L	4.3	0.54	90	65-135			11/20/18	
Aldicarb Sulfone	6.9	0.80	ug/L	7.0	ND	99	65-135			11/20/18	
Aldicarb Sulfoxide	4.4	0.50	ug/L	4.3	ND	101	65-135			11/20/18	
Carbaryl	7.9	2.0	ug/L	8.7	ND	90	65-135			11/20/18	
Carbofuran	11	0.90	ug/L	7.8	ND	138	65-135				MS1.0 <i>Hig</i>
Methomyl	8.4	2.0	ug/L	8.7	ND	96	65-135			11/20/18	
Oxamyl	8.6	2.0	ug/L	8.7	ND	97	65-135			11/20/18	
		EPA 5	47 - Qu	ality Con	ntrol						
Batch: A817373										Prepared	: 11/18/201
Prep Method: EPA 547										A	nalyst: JN
Blank (A817373-BLK1)											
Glyphosate	ND	6.0	ug/L							11/18/18	
Surrogate: AMPA	84			100		84	70-130			11/18/18	
Blank Spike (A817373-BS1)											
Glyphosate	93	6.0	ug/L	100	ND	93	70-130			11/18/18	
Surrogate: AMPA	100			100		103	70-130			11/18/18	
Blank Spike Dup (A817373-BSD1)											
Glyphosate	93	6.0	ug/L	100	ND	93	70-130	0	30	11/18/18	
Surrogate: AMPA	94			100		94	70-130			11/18/18	
•											
Matrix Spike (A817373-MS1), Source:	A8K0291-01										
-	<b>A8K0291-01</b>	6.0	ug/L	100	ND	100	70-130			11/18/18	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



				Spike	Source		%REC		RPD	Date
Analyte	Result	RL	Units	Level	Result	%REC	Limits	RPD	Limit	Analyzed Qual
		EPA 54	47 - Qu	ality Con	itrol					
Batch: A817373										Prepared: 11/18/20
Prep Method: EPA 547										Analyst: Ji
Matrix Spike Dup (A817373-MSD1), S	Source: A8K0291-01									
Glyphosate	95	6.0	ug/L	100	ND	95	70-130	5	30	11/18/18
Surrogate: AMPA	100			100		103	70-130			11/18/18
		EPA 54	9.2 - Q	uality Co	ntrol					
Batch: A817546										Prepared: 11/21/20
Prep Method: EPA 549.2										Analyst: V
Blank (A817546-BLK1)										
Diquat	ND	0.40	ug/L							11/26/18
Blank Spike (A817546-BS1)										
Diquat	4.1	0.40	ug/L	4.0	ND	102	70-130			11/26/18
Blank Spike Dup (A817546-BSD1)										
Diquat	4.2	0.40	ug/L	4.0	ND	104	70-130	2	30	11/26/18
Matrix Spike (A817546-MS1), Source	e: A8K1923-02									
Diquat	1.0	0.40	ug/L	4.0	ND	26	70-130			11/26/18 MS1.0 <i>La</i>
Matrix Spike (A817546-MS2), Source	e: A8K1937-01									
Diquat	0.90	0.40	ug/L	4.0	ND	23	70-130			11/26/18 MS1.0 <i>L</i> c
			-							



## **Certificate of Analysis**

#### Notes:

- The Chain of Custody document and Sample Integrity Sheet are part of the analytical report.
- Any remaining sample(s) for testing will be disposed of according to BSK's sample retention policy unless other arrangements are made in advance
- All positive results for EPA Methods 504.1 and 524.2 require the analysis of a Field Reagent Blank (FRB) to confirm that the results are not a contamination error from field sampling steps. If Field Reagent Blanks were not submitted with the samples, this method requirement has not been performed.
- Samples collected by BSK Analytical Laboratories were collected in accordance with the BSK Sampling and Collection Standard Operating Procedures.
- J-value is equivalent to DNQ (Detected, not quantified) which is a trace value. A trace value is an analyte detected between the MDL and the laboratory reporting limit. This result is of an unknown data quality and is only qualitative (estimated). Baseline noise, calibration curve extrapolation below the lowest calibrator, method blank detections, and integration artifacts can all produce apparent DNQ values, which contribute to the un-reliability of these values.
- (1) Residual chlorine and pH analysis have a 15 minute holding time for both drinking and waste water samples as defined by the EPA and 40 CFR 136. Waste water and ground water (monitoring well) samples must be field filtered to meet the 15 minute holding time for dissolved metals.
- Summations of analytes (i.e. Total Trihalomethanes) may appear to add individual amounts incorrectly, due to rounding of analyte values occurring before or after the total value is calculated, as well as rounding of the total value.
- · RL Multiplier is the factor used to adjust the reporting limit (RL) due to variations in sample preparation procedures and dilutions required for matrix interferences
- Due to the subjective nature of the Threshold Odor Method, all characterizations of the detected odor are the opinion of the panel of analysts. The characterizations can be found in Standard Methods 2170B Figure 2170:1.
- The MCLs provided in this report (if applicable) represent the primary MCLs for that analyte.

#### **Definitions**

mg/L:	Milligrams/Liter (ppm)	MDL:	Method Detection Limit	MDA95:	Min. Detected Activity
mg/Kg:	Milligrams/Kilogram (ppm)	RL:	Reporting Limit: DL x Dilution	MPN:	Most Probable Number
μg/L:	Micrograms/Liter (ppb)	ND:	None Detected at RL	CFU:	Colony Forming Unit
μg/Kg:	Micrograms/Kilogram (ppb)	pCi/L:	PicoCuries per Liter	Absent:	Less than 1 CFU/100mLs
%:	Percent	RL Mult:	RL Multiplier	Present:	1 or more CFU/100mLs
NR:	Non-Reportable	MCL:	Maximum Contaminant Limit		

Please see the individual Subcontract Lab's report for applicable certifications.

BSK is not accredited under the NELAP program for the following parameters: \*\*NA\*\*

Certifications: Please refer to our website for a copy of our Accredited Fields of Testing under each certification.

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EPA - UCMR4	CA00079	Los Angeles CSD	9254479	NELAP certified	4021-010
State of California - ELAP	1180	State of Hawaii	4021	State of Nevada	CA000792019-1
State of Oregon - NELAP	4021-010	State of Washington	C997-18		

Sacramento

State of California - ELAP 2435

San Bernardino

Los Angeles CSD 9254478 NELAP certified 4119-003 State of California - ELAP 2993

State of Oregon - NELAP 4119-003

Vancouver

NELAP certified WA100008-011 State of Oregon - NELAP WA100008-011 State of Washington C824-18b

A8K1989 FINAL 12042018 1501

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11162018

Sierr2400

Turnaround: Standard

Due Date: 12/4/2018



Sierra Environmental Monitoring







CHAIN OF CUSTODY RECORD

A8K1989 Sierr2400

11/16/2018

COC ID: 4031

PAGE: OF:

Silver State Labs-Reno 1135 Financial Blvd ADDRESS

TEL: (775) 857-2400

Website: www.ssalabs.com

Report to: jnava@ssalabs.com cwood@ssalabs.com N.V. Sample ANALYTICAL PARAMETERS SUB-HERB-SIS-R (SUB) SPÉCIAL INSTRUCTIONS / COMMENTS: SUB-PESTPCB 508-R (SUB) SUB-SVOC-525-R (SUB) FAX: (888) 398-7002 Reno, NV 89502

ITEM #

SAMPLE ID

Client Sample ID

Bottle Type

MATRIX

DATE COLLECTED

CONTAINERS

SUB-CARBAMATES 531-R (SUB)

SUB-DBCPEDB-504-R (SUB) SUB-DIQUAT-549-R (E549)

Drinking Water

11/14/2018 8:30

<u>ر</u>

(S)

18110705-02A W07

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#

PHONE: (559) 497-2888

ACCOUNT #

18110705

SAMPLER: J. Flakus

EMAIL:

CITY, STATE, ZIP: Fresno, CA 93706

SUB CONTRATOR: BSK-R

COMPANY

**BSK Laboratory** 

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ADDRESS:

1414 Stanislaus Street

Relinquished By: TAT: Standard 💋 Date Time RUSH Received By Next BD Note: RUSH requests will incur surcharges! 学を 2nd BD 711816 Date: Date: 3rd BD Time OS Time Time ☐ HARDCOPY (extra cost) Temp of samples REPORT TRANSMITTAL DESIRED: FOR LAB USE ONLY Attempt to Cool ? ☐ EMAIL ONLINE

br. K. TX

Page 15 of 16

Labels checked by: # @ #27 RUSH Paged by: Page

RUSH Paged by: Page 20 @22 Page 16 of 16

CHAIN-OF-COOLODI-INECOND

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O:	Report Attention.		ssalabs.com		7
	Jay Flakus, Public Works Director		sem-analytical.com envirotech	Analytical Laboratories	Sierra Environmental Monitoring Phone (702) 873-4478 Fax: (702) 873-7867 (EPA#: NV00930, CA2885)
		Project Number:	envirotechonline.com	invirolech.	erra Environmental Monitoring
o:		1		P1:	P.
o Company:	Jay Flakus	Invoice Attention:		X   O   O   NV 89502   X   Phone (775) 857-2400 Fax: (888) 398-7002 (EPA#: NV00015, CA2526)	one (702) 873-4478 Fax: (702) 873-7967
	OPEN	PO# (		502 (EPA#: NV00015, CA2526)	(EPA#: NV00930, CA2885)
		Quote #			CHAIN-O
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On-Site pH: Chlorine:		NI	per/Ty			5 Day:	2 Day:	
Field Meas		1	-	3208		4 Day:  Rush results will be issued after 4:00 p.m.	1 Day:	
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Preservative\*\* 1=H<sub>2</sub>SO<sub>4</sub>, 2=HNO<sub>3</sub>, 3=HCl, 4=NaOH, 5=Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>, 6=None, 7=Other Matrix\* DW-Drinking Water, WW-Waste Water, GW-Ground Water, SW-Surface Water, SS-Soil, S-Soild, OT-Other

legal services are required to recover said fees, your organization will be responsible for all fees and costs in addition to service fees.

ntainer\*\*\* P-Plastic, G-Glass, V-Voa Vial, OT-Other



Silver State Labs-Reno 1135 Financial Blvd (775) 857-2400 FAX: (888) 398-7002

## **Definitions & Qualifiers**

WO#: 18110705 Date: 12/5/2018

#### Definitions:

LCS: Laboratory Control Sample; prepared by adding a known mass of target analytes to a specified amount of de-ionized water and prepared with the batch of samples, used to calculate Accuracy (%REC).

LCSD: LCS Duplicate; used to calculate both Accuracy (%REC) and Precision (%RPD)

MBLK: Method Blank; a sample of similar matrix that is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedure, and in which no target analytes or interferences are present at concentrations that impact the analytical results for sample analyses.

MS: Matrix Spike; prepared by adding a known mass of target analytes to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available, used to calculate Accuracy (%REC)

MSD: Matrix Spike Duplicate; used to calculate both Accuracy (%REC) and Precision (%RPD)

RPD: Relative Percent Difference; comparison between sample and duplicate and/or MS and MSD.

POL: Practical Quantitation Limit; the limit to which data is quantitated for reporting.

MDL: Method Detection Limit; the limit to which the instrument can reliably detect.

MCL: Maximum Contaminant Level; value set according to EPA guidelines.

#### **Oualifiers:**

- \* Analyte exceeds Safe Drinking Water Act MCL, does not meet drinking water standards.
- C Analyte value below Safe Drinking Water Act MCL, does not meet drinking water standards.
- B Analyte found above the PQL in associated method blank.
- G Calibration blank analyte detected above POL.
- H Sample analyzed beyond holding time for this parameter.
- J Estimated Value; Analyte found between MDL and PQL limits.
- L Sample concentration is at least 5 times greater than spike contribution. Spike recovery criteria do not apply.
- R RPD between sample and duplicate sample outside the RPD acceptance limits.
- S Batch MS and/or MSD were outside acceptance limits, batch LCS was acceptable.
- W Sample temperature when recieved was out of limit as specified by method.