

# **ANALYTICAL REPORT**

TestAmerica Laboratories, Inc.

TestAmerica Seattle 5755 8th Street East Tacoma, WA 98424 Tel: (253)922-2310

TestAmerica Job ID: 580-78169-1 Client Project/Site: 10325 Takilma Rd

#### For:

East Fork Agriculture, LLC 9543B Takilma Rd. Cave Junction, Oregon 97523

Attn: Aaron Howard

Kaysesalman

Authorized for release by: 6/28/2018 12:27:44 PM

Kayse Zalmai, Project Manager I (253)922-2310

kayse.zalmai@testamericainc.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: East Fork Agriculture, LLC Project/Site: 10325 Takilma Rd

TestAmerica Job ID: 580-78169-1

# **Table of Contents**

Cover Page	1
Table of Contents	
Case Narrative	3
Definitions	4
Client Sample Results	5
QC Sample Results	6
Chronicle	8
Certification Summary	
Sample Summary	10
Chain of Custody	11
Racaint Chacklists	12

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#### **Case Narrative**

Client: East Fork Agriculture, LLC Project/Site: 10325 Takilma Rd

TestAmerica Job ID: 580-78169-1

Job ID: 580-78169-1

**Laboratory: TestAmerica Seattle** 

**Narrative** 

Job Narrative 580-78169-1

#### Receipt

The sample was received on 6/19/2018 10:45 AM. The temperature of the cooler at receipt was 15.4° C.

#### **Receipt Exceptions**

The Field Sampler was not listed on the Chain of Custody.

The Chain-of-Custody (COC) was incomplete as received and/or improperly completed. The COC was not relinquished by the client.

The following sample was received at the laboratory outside the required temperature criteria: 10325 Takilma Rd (580-78169-1). The sample was 15.4°C on receipt.

#### Metals

Method(s) 6010C: The continuing calibration verification (CCV) associated with batch 580-277326 recovered above the upper control limit for TI. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### **General Chemistry**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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### **Definitions/Glossary**

Client: East Fork Agriculture, LLC Project/Site: 10325 Takilma Rd

TestAmerica Job ID: 580-78169-1

### **Qualifiers**

#### **Metals**

Qualifier	Qualifier Description
٨	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
L	A negative instrument reading had an absolute value greater than the reporting limit

### Glossary

ND

PQL

QC RER

RL

RPD TEF

TEQ

Glossary	
Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated

Not Detected at the reporting limit (or MDL or EDL if shown)

Relative Percent Difference, a measure of the relative difference between two points

Reporting Limit or Requested Limit (Radiochemistry)

Practical Quantitation Limit

Relative Error Ratio (Radiochemistry)

Toxicity Equivalent Factor (Dioxin)
Toxicity Equivalent Quotient (Dioxin)

**Quality Control** 

TestAmerica Seattle

6/28/2018

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### **Client Sample Results**

Client: East Fork Agriculture, LLC Project/Site: 10325 Takilma Rd

Date Collected: 06/15/18 14:00

Date Received: 06/19/18 10:45

Client Sample ID: 10325 Takilma Rd

TestAmerica Job ID: 580-78169-1

Lab Sample ID: 580-78169-1

**Matrix: Solid** 

Percent Solids: 88.3

Method: 6010C - Metals (ICP)	- "					_			
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	11		2.5		mg/Kg	₩.	06/22/18 10:18		1
Arsenic	ND		2.5		mg/Kg	☼	06/22/18 10:18	06/25/18 15:45	1
Beryllium	ND		0.82		mg/Kg	☼	06/22/18 10:18	06/25/18 15:45	1
Cadmium	ND		0.82		mg/Kg	₩	06/22/18 10:18	06/25/18 15:45	1
Chromium	770		11		mg/Kg	₩	06/22/18 10:18	06/25/18 15:49	10
Copper	42		2.1		mg/Kg	☼	06/22/18 10:18	06/25/18 15:45	1
Lead	5.4		1.2		mg/Kg	≎	06/22/18 10:18	06/25/18 15:45	1
Nickel	1200		8.2		mg/Kg	☼	06/22/18 10:18	06/25/18 15:49	10
Selenium	ND		4.1		mg/Kg	₩	06/22/18 10:18	06/25/18 15:45	1
Silver	ND		2.1		mg/Kg	₽	06/22/18 10:18	06/25/18 15:45	1
Thallium	ND	^ L	4.1		mg/Kg	₩	06/22/18 10:18	06/25/18 15:45	1
Zinc	76		3.3		mg/Kg	₩	06/22/18 10:18	06/25/18 15:45	1
	AA)								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.033		0.028		mg/Kg	<u> </u>	06/25/18 12:25	06/25/18 17:56	1
General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	88.3		0.1		%			06/19/18 17:17	1
Percent Moisture	11.7		0.1		%			06/19/18 17:17	1

6/28/2018

### **QC Sample Results**

Client: East Fork Agriculture, LLC TestAmerica Job ID: 580-78169-1 Project/Site: 10325 Takilma Rd

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 580-277035/18-A

**Matrix: Solid** 

Analysis Batch: 277326

Client Sample ID: Method Blank

Prep Type: Total/NA **Prep Batch: 277035** 

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		3.0		mg/Kg		06/22/18 10:18	06/25/18 14:29	1
Arsenic	ND		3.0		mg/Kg		06/22/18 10:18	06/25/18 14:29	1
Beryllium	ND		1.0		mg/Kg		06/22/18 10:18	06/25/18 14:29	1
Cadmium	ND		1.0		mg/Kg		06/22/18 10:18	06/25/18 14:29	1
Chromium	ND		1.3		mg/Kg		06/22/18 10:18	06/25/18 14:29	1
Copper	ND		2.5		mg/Kg		06/22/18 10:18	06/25/18 14:29	1
Lead	ND		1.5		mg/Kg		06/22/18 10:18	06/25/18 14:29	1
Nickel	ND		1.0		mg/Kg		06/22/18 10:18	06/25/18 14:29	1
Selenium	ND		5.0		mg/Kg		06/22/18 10:18	06/25/18 14:29	1
Silver	ND		2.5		mg/Kg		06/22/18 10:18	06/25/18 14:29	1
Thallium	ND		5.0		mg/Kg		06/22/18 10:18	06/25/18 14:29	1
Zinc	ND		4.0		mg/Kg		06/22/18 10:18	06/25/18 14:29	1
<u></u>									

Lab Sample ID: LCS 580-277035/19-A

**Matrix: Solid** 

**Analysis Batch: 277326** 

**Client Sample ID: Lab Control Sample** Prep Type: Total/NA

**Prep Batch: 277035** 

7 man <b>y</b> 510 2410 m 21 1 020	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Antimony	150	144		mg/Kg		96	80 - 120
Arsenic	200	193		mg/Kg		96	80 - 120
Beryllium	5.00	5.00		mg/Kg		100	80 - 120
Cadmium	5.00	4.99		mg/Kg		100	80 - 120
Chromium	20.0	21.1		mg/Kg		106	80 - 120
Copper	25.0	24.3		mg/Kg		97	80 - 120
Lead	50.0	50.2		mg/Kg		100	80 - 120
Nickel	50.0	51.0		mg/Kg		102	80 - 120
Selenium	200	190		mg/Kg		95	80 - 120
Silver	30.0	30.5		mg/Kg		102	80 - 120
Thallium	200	198		mg/Kg		99	80 - 120
Zinc	200	197		mg/Kg		99	80 - 120

Lab Sample ID: LCSD 580-277035/20-A

**Matrix: Solid** 

Analysis Ratch: 277326

**Client Sample ID: Lab Control Sample Dup** 

**Prep Type: Total/NA** 

Analysis Batch: 27/326							Prep Ba	itcn: 2/	7035
	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Antimony	150	148		mg/Kg		99	80 - 120	3	20
Arsenic	200	201		mg/Kg		100	80 - 120	4	20
Beryllium	5.00	5.18		mg/Kg		104	80 - 120	3	20
Cadmium	5.00	5.18		mg/Kg		104	80 - 120	4	20
Chromium	20.0	21.9		mg/Kg		110	80 - 120	4	20
Copper	25.0	25.2		mg/Kg		101	80 - 120	4	20
Lead	50.0	52.0		mg/Kg		104	80 - 120	4	20
Nickel	50.0	52.9		mg/Kg		106	80 - 120	4	20
Selenium	200	199		mg/Kg		100	80 - 120	5	20
Silver	30.0	31.8		mg/Kg		106	80 - 120	4	20
Thallium	200	235		mg/Kg		117	80 - 120	17	20
Zinc	200	202		mg/Kg		101	80 - 120	2	20

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Page 6 of 12

6/28/2018

### QC Sample Results

Client: East Fork Agriculture, LLC
Project/Site: 10325 Takilma Rd

TestAmerica Job ID: 580-78169-1

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 580-277291/16-A

Matrix: Solid

Analysis Batch: 277354

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 277291

MB MB

 Analyte
 Result Mercury
 Qualifier
 RL ND
 MDL mit mg/Kg
 D mg/Kg
 Prepared noise
 Analyzed noise
 Dil Fac noise

Lab Sample ID: LCS 580-277291/17-A **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 277354** Prep Batch: 277291 Spike LCS LCS %Rec. Added Result Qualifier Limits Analyte Unit %Rec 80 - 120 Mercury 0.167 0.146 mg/Kg 88

Lab Sample ID: LCSD 580-277291/18-A **Client Sample ID: Lab Control Sample Dup Matrix: Solid** Prep Type: Total/NA Analysis Batch: 277354 **Prep Batch: 277291** Spike LCSD LCSD %Rec. **RPD** Added Analyte Result Qualifier Limits RPD Limit Unit D %Rec Mercury 0.167 0.143 mg/Kg 86 80 - 120

Method: D 2216 - Percent Moisture

Lab Sample ID: 580-78169-1 DU

Client Sample ID: 10325 Takilma Rd

Matrix: Solid

Prep Type: Total/NA

**Analysis Batch: 276737** 

DU DU RPD Sample Sample Analyte Result Qualifier Result Qualifier Unit RPD Limit D Percent Solids 88.3 88.88 % 0.5 20 Percent Moisture 11.7 11.2 % 20

TestAmerica Seattle

Page 7 of 12 6/28/2018

### **Lab Chronicle**

Client: East Fork Agriculture, LLC Project/Site: 10325 Takilma Rd

TestAmerica Job ID: 580-78169-1

Lab Sample ID: 580-78169-1

Matrix: Solid

Client Sample ID: 10325 Takilma Rd Date Collected: 06/15/18 14:00

Date Received: 06/19/18 10:45

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	D 2216			276737	06/19/18 17:17	BAH	TAL SEA

Client Sample ID: 10325 Takilma Rd Lab Sample ID: 580-78169-1

Date Collected: 06/15/18 14:00 Date Received: 06/19/18 10:45 Matrix: Solid
Percent Solids: 88.3

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			277035	06/22/18 10:18	CJB	TAL SEA
Total/NA	Analysis	6010C		1	277326	06/25/18 15:45	HJM	TAL SEA
Total/NA	Prep	3050B			277035	06/22/18 10:18	CJB	TAL SEA
Total/NA	Analysis	6010C		10	277326	06/25/18 15:49	HJM	TAL SEA
Total/NA	Prep	7471A			277291	06/25/18 12:25	CJB	TAL SEA
Total/NA	Analysis	7471A		1	277354	06/25/18 17:56	FCW	TAL SEA

#### **Laboratory References:**

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

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### **Accreditation/Certification Summary**

Client: East Fork Agriculture, LLC
Project/Site: 10325 Takilma Rd

TestAmerica Job ID: 580-78169-1

### **Laboratory: TestAmerica Seattle**

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	<b>Expiration Date</b>
Alaska (UST)	State Program	10	17-024	01-19-19
ANAB	DoD ELAP		L2236	01-19-19
ANAB	ISO/IEC 17025		L2236	01-19-19
California	State Program	9	2901	11-05-18
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-05-18
US Fish & Wildlife	Federal		LE058448-0	10-31-18
USDA	Federal		P330-14-00126	02-10-20
Washington	State Program	10	C553	02-17-19

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## **Sample Summary**

Client: East Fork Agriculture, LLC Project/Site: 10325 Takilma Rd

TestAmerica Job ID: 580-78169-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-78169-1	10325 Takilma Rd	Solid	06/15/18 14:00	06/19/18 10:45

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5755 8th Street Stast

### Chain of Custody Record

TestAmerica Management (Management) Management (Management)

78169

Tacoma, WA 98424-1317

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Client Contact	Project Manager: Aaron	Roward	Site Contact:	Date: 8/15/18	COC No
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Form No. CA.C.WI-002, Rev. 4.14, dated 9/22/2017

### **Login Sample Receipt Checklist**

Client: East Fork Agriculture, LLC

Job Number: 580-78169-1

Login Number: 78169 List Source: TestAmerica Seattle

List Number: 1

Creator: Blankinship, Tom X

Creator: Biankinsnip, Tom X			
Question	Answer	Comment	
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True		
The cooler's custody seal, if present, is intact.	True		
Sample custody seals, if present, are intact.	True		
The cooler or samples do not appear to have been compromised or tampered with.	True		
Samples were received on ice.	False	Refer to Job Narrative for details.	
Cooler Temperature is acceptable.	True		
Cooler Temperature is recorded.	True		
COC is present.	True		
COC is filled out in ink and legible.	True		
COC is filled out with all pertinent information.	False	COC not relinquished.	
Is the Field Sampler's name present on COC?	False	Refer to Job Narrative for details.	
There are no discrepancies between the containers received and the COC.	True		
Samples are received within Holding Time (excluding tests with immediate HTs)	True		
Sample containers have legible labels.	True	container lacks sampling date and time.	
Containers are not broken or leaking.	True		
Sample collection date/times are provided.	True		
Appropriate sample containers are used.	True		
Sample bottles are completely filled.	True		
Sample Preservation Verified.	N/A		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True		
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A		
Multiphasic samples are not present.	True		
Samples do not require splitting or compositing.	True		
Residual Chlorine Checked.	N/A		

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