



Date of Report: 05/26/2017

Paul Mason

Adobe Springs

P.O. Box 1417

Patterson, CA 95363

Client Project: Annual Title 21

BCL Project: Title 21 Source

BCL Work Order: 1711423

Invoice ID: B268808

Enclosed are the results of analyses for samples received by the laboratory on 4/28/2017. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Vanessa Sandoval
Client Service Rep

Authorized Signature

Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK UST101

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.
All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.

4100 Atlas Court Bakersfield, CA 93308 (661) 327-4911 FAX (661) 327-1918 www.bclabs.com



Table of Contents

Sample Information

Executive Summary - Detections.....	3
Chain of Custody and Cooler Receipt form.....	4
Laboratory / Client Sample Cross Reference.....	7

Sample Results

1711423-01 - Adobe Springs.....	8
---------------------------------	---

Subcontract Reports

WO_1711423_SUB_BSKSA.pdf.....	14
WO_1711423_SUB_FRNTL.pdf.....	24
WO_1711423_SUB_NTSTG.pdf.....	32
WO_1711423_SUB_PACEA.pdf.....	33
WO_1711423_SUB_WECKL.pdf.....	43

Notes

Notes and Definitions.....	46
----------------------------	----



Executive Summary - MCL Exceedances

Constituent	Result	PQL	MCL	Units	Method	Lab Quals
-------------	--------	-----	-----	-------	--------	-----------

No exceedances found



Chain of Custody

ANALYSIS REQUESTED

4100 Atlas Court Bakersfield, Ca. 93308 (661) 327-4911 • FAX (661) 327-1918 • www.bclabs.com

BC LABORATORIES

17-11423

TEMP:

Client/Company Name: **Adobe Springs** Report Attention: **Paul Mason** Phone #: FAX #: City: State: Zip: E-mail: BCL Quote #

How would you like your completed results sent? E-Mail Fax EDD Mail Only

QC Request STD Level II Result Request ** Surcharge STD 5 Day** 2 Day** 1 Day**

Sampler Name Printed / Signature: **Mark Ellis**

Matrix Types: RSW = Raw Surface Water CFW = Chlorinated Finished Water BW = Bottled Water
 RW = Raw Ground Water FW = Finished Water WW = Waste Water CW = Chlorinated Waste Water
 DW = Drinking Water SW = Storm Water SO = Solid

Carbon Copies: CDHS Fresno Co EPA Merced Co Tulare Co Other:

Regulatory Compliance Electronic Data Transfer: System No. * Y N

Comments / Station Code

Sample #	# Bottles	Sampled Date	Time	Sample Description / Location *	Matrix *	Relinquished by: (Signature and Printed Name)	Company	Time	Relinquished by: (Signature and Printed Name)	Company	Time
1	1	4/27/17	0915	Adobe Springs	BW	<i>[Signature]</i>	BC L	0930	<i>[Signature]</i>	BC L	0930
				CHIKY DISTRIBUTION							
				WATERSHED							
				SUB-OUT K							
				SHORT HOLDING TIME							
				Cr-6 NO. OP SC							
				DO Ch. BOD MBAS GOT							

Relinquished by: (Signature and Printed Name) *[Signature]* Mark Ellis Company BC L

Relinquished by: (Signature and Printed Name) *[Signature]* Company

Received for Lab by: (Signature and Printed Name) *[Signature]* Company

Payment Received at Delivery: Date: Amount: PIA #

Shipping Method: CAO UPS GSO WALK-IN SJVC FEDEX OTHER

Cooling Method: WET BLUE NONE

Packing Material:

SF-FL-0016-001 (Rev. 1/10)

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. All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.



BC LABORATORIES INC. COOLER RECEIPT FORM Page 1 of 2

Submission #: 17-11423

SHIPPING INFORMATION
 Fed Ex UPS Ontrac Hand Delivery
 BC Lab Field Service Other (Specify) GSO

SHIPPING CONTAINER
 Ice Chest None Box
 Other (Specify) _____

FREE LIQUID
 YES NO
 W / S

Refrigerant: Ice Blue Ice None Other Comments: _____

Custody Seals: Ice Chest Containers None
 Intact? Yes No Intact? Yes No

All samples received? Yes No All samples containers intact? Yes No Description(s) match COC? Yes No

COC Received YES NO
 Emissivity: 97 Container: QPR Thermometer ID: 208 Date/Time: 4-28-17
 Temperature: (A) 0 °C / (C) 0.3 °C Analyst Init: JD 09:00

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT PE UNPRES	I-M									
4oz / 8oz / 16oz PE UNPRES	I-M									
2oz Cr ⁶										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PIA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	096	ABC								
QT EPA 1664										
PT ODOR	128	P								
RADIOLOGICAL	RO8	NO								
BACTERIOLOGICAL										
40 ml VOA VIAL- 504	DEF									
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547	5W	H								
40ml EPA 531.1	099	G								
8oz EPA 548	041	Q								
QT EPA 549										
QT EPA 8015M										
QT EPA 8270										
8oz / 16oz / 32oz AMBER										
8oz / 16oz / 32oz JAR										
SOIL SLEEVE										
PCB VIAL 8oz Amber	089	R								
PLASTIC BAG										
FEDER BAG 8oz Amber	24	S								
FERROUS IRON										
ENCORE										
SMART KIT										
SUMMA CANISTER										

Comments: _____ Date/Time: 4-28-17 UJ
 Sample Numbering Completed By: UJ Rev 21 05/23/2016
 A = Actual / C = Corrected IS:\WPDoc\WordPerftech\LAB_DOCS\FORMS\SAMREC Rev 20!



BC LABORATORIES INC.

COOLER RECEIPT FORM

Page 2 Of 2

Submission #: 17-11423

SHIPPING INFORMATION
Fed Ex [] UPS [] Ontrac [] Hand Delivery []
BC Lab Field Service [] Other (Specify) GSO

SHIPPING CONTAINER
Ice Chest [x] None [] Box []
Other [] (Specify)

FREE LIQUID
YES [] NO []
W / S

Refrigerant: Ice [x] Blue Ice [] None [] Other [] Comments:

Custody Seals Ice Chest [] Containers [] None [x]
Intact? Yes [] No [] Intact? Yes [] No []

All samples received? Yes [x] No [] All samples containers intact? Yes [x] No [] Description(s) match COC? Yes [x] No []

COC Received
YES [x] NO []

Emissivity: 97 Container: APR Thermometer ID: 208
Temperature: (A) 0 °C / (C) 0.3 °C

Date/Time: 4-28-17
Analyst Initials: JDO

Table with columns for SAMPLE CONTAINERS and SAMPLE NUMBERS (1-10). Rows include various sample types like PE UNPRES, INORGANIC CHEMICAL METALS, NITROGEN FORMS, etc. Handwritten notations like 'TU', 'V', 'W', 'X', 'YZ', 'AD', 'AB', 'AC', 'AA', 'AE, AF, AG' are present in the sample number columns.

Comments: Sample Numbering Completed By: [Signature] Date/Time: 4-28-17 1100
= Actual / C = Corrected



Adobe Springs
P.O. Box 1417
Patterson, CA 95363

Reported: 05/26/2017 17:23
Project: Title 21 Source
Project Number: Annual Title 21
Project Manager: Paul Mason

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information		Receive Date:	04/28/2017 09:00
1711423-01	COC Number:	---	Sampling Date:	04/27/2017 09:15
	Project Number:	---	Sample Depth:	---
	Sampling Location:	---	Lab Matrix:	Water
	Sampling Point:	Adobe Springs	Sample Type:	Water
	Sampled By:	Mark Ellis		



Adobe Springs
P.O. Box 1417
Patterson, CA 95363

Reported: 05/26/2017 17:23
Project: Title 21 Source
Project Number: Annual Title 21
Project Manager: Paul Mason

BCL Sample ID: 1711423-01	Client Sample Name: Adobe Springs, 4/27/2017 9:15:00AM, Mark Ellis
----------------------------------	---

Constituent	Method	Result	Units	Dilution	PQL	BW-MCL	Prep Date	Run Date/Time	Lab Quals
-------------	--------	--------	-------	----------	-----	--------	-----------	---------------	-----------

Inorganics

Chloride	EPA-300.0	5.4	mg/L	1	0.50	250	04/28/17	04/29/17 00:42	
Fluoride	EPA-300.0	ND	mg/L	1	0.050	2.0	04/28/17	04/29/17 00:42	
Nitrate as N	EPA-300.0	0.77	mg/L	1	0.10	10	04/28/17	04/29/17 00:42	
Sulfate	EPA-300.0	20	mg/L	1	1.0	250	04/28/17	04/29/17 00:42	
Nitrate + Nitrite as N	Calc	0.78	mg/L	1	0.10	10	05/01/17	05/05/17 15:01	
Turbidity	EPA-180.1	0.40	NT Units	1	0.10	5	04/28/17	04/28/17 15:00	
Nitrite as N	EPA-353.2	ND	mg/L	1	0.050	1	04/28/17	04/28/17 16:35	

Metals

Total Recoverable Aluminum	EPA-200.7	ND	mg/L	1	0.050	0.2	05/08/17	05/08/17 18:08	
Total Recoverable Antimony	EPA-200.8	ND	mg/L	1	0.0020	0.006	05/01/17	05/02/17 00:21	
Total Recoverable Arsenic	EPA-200.8	ND	mg/L	1	0.0020	0.010	05/01/17	05/02/17 00:21	
Total Recoverable Barium	EPA-200.7	0.016	mg/L	1	0.010	2	05/08/17	05/08/17 18:08	
Total Recoverable Beryllium	EPA-200.8	ND	mg/L	1	0.0010	0.004	05/01/17	05/02/17 00:21	
Total Recoverable Cadmium	EPA-200.8	ND	mg/L	1	0.0010	0.005	05/01/17	05/02/17 00:21	
Total Recoverable Chromium	EPA-200.7	ND	mg/L	1	0.010	0.1	05/08/17	05/08/17 18:08	
Total Recoverable Copper	EPA-200.7	ND	mg/L	1	0.010	1.0	05/08/17	05/08/17 18:08	
Total Recoverable Iron	EPA-200.7	ND	mg/L	1	0.050	0.3	05/08/17	05/08/17 18:08	
Total Recoverable Lead	EPA-200.8	ND	mg/L	1	0.0010	0.005	05/01/17	05/02/17 00:21	
Total Recoverable Manganese	EPA-200.7	ND	mg/L	1	0.010	0.05	05/08/17	05/08/17 18:08	
Total Recoverable Mercury	EPA-245.1	ND	ug/L	1	0.20	2	05/02/17	05/03/17 11:45	
Total Recoverable Nickel	EPA-200.7	ND	mg/L	1	0.010	0.1	05/08/17	05/08/17 18:08	
Total Recoverable Selenium	EPA-200.8	ND	mg/L	1	0.0020	0.05	05/01/17	05/02/17 00:21	
Total Recoverable Silver	EPA-200.7	ND	mg/L	1	0.010	0.1	05/08/17	05/08/17 18:08	
Total Recoverable Thallium	EPA-200.8	ND	mg/L	1	0.0010	0.002	05/01/17	05/02/17 00:21	
Total Recoverable Zinc	EPA-200.7	0.051	mg/L	1	0.050	5.0	05/08/17	05/08/17 18:08	

Organics

1,2-Dibromo-3-chloropropane	EPA-504.1	ND	ug/L	0.955	0.010	0.2	05/04/17	05/04/17 16:14	
Ethylene dibromide	EPA-504.1	ND	ug/L	0.955	0.010	0.05	05/04/17	05/04/17 16:14	
Aldrin	EPA-508	ND	ug/L	1	0.0050	n/a	05/02/17	05/03/17 16:32	
alpha-BHC	EPA-508	ND	ug/L	1	0.0050	n/a	05/02/17	05/03/17 16:32	
beta-BHC	EPA-508	ND	ug/L	1	0.0050	n/a	05/02/17	05/03/17 16:32	
delta-BHC	EPA-508	ND	ug/L	1	0.0050	n/a	05/02/17	05/03/17 16:32	
gamma-BHC (Lindane)	EPA-508	ND	ug/L	1	0.0050	0.2	05/02/17	05/03/17 16:32	

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. All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.



Adobe Springs
P.O. Box 1417
Patterson, CA 95363

Reported: 05/26/2017 17:23
Project: Title 21 Source
Project Number: Annual Title 21
Project Manager: Paul Mason

BCL Sample ID: 1711423-01	Client Sample Name: Adobe Springs, 4/27/2017 9:15:00AM, Mark Ellis
----------------------------------	---

Constituent	Method	Result	Units	Dilution	PQL	BW-MCL	Prep Date	Run Date/Time	Lab Quals
Organics									
Chlordane (Technical)	EPA-508	ND	ug/L	1	0.10	2	05/02/17	05/03/17 16:32	
4,4'-DDD	EPA-508	ND	ug/L	1	0.0050	n/a	05/02/17	05/03/17 16:32	
4,4'-DDE	EPA-508	ND	ug/L	1	0.0050	n/a	05/02/17	05/03/17 16:32	
4,4'-DDT	EPA-508	ND	ug/L	1	0.0050	n/a	05/02/17	05/03/17 16:32	
Dieldrin	EPA-508	ND	ug/L	1	0.0050	n/a	05/02/17	05/03/17 16:32	
Endosulfan I	EPA-508	ND	ug/L	1	0.0050	n/a	05/02/17	05/03/17 16:32	
Endosulfan II	EPA-508	ND	ug/L	1	0.0050	n/a	05/02/17	05/03/17 16:32	
Endosulfan sulfate	EPA-508	ND	ug/L	1	0.0050	n/a	05/02/17	05/03/17 16:32	
Endrin	EPA-508	ND	ug/L	1	0.0050	2	05/02/17	05/03/17 16:32	
Endrin aldehyde	EPA-508	ND	ug/L	1	0.010	n/a	05/02/17	05/03/17 16:32	
Heptachlor	EPA-508	ND	ug/L	1	0.0050	0.4	05/02/17	05/03/17 16:32	
Heptachlor epoxide	EPA-508	ND	ug/L	1	0.0050	0.2	05/02/17	05/03/17 16:32	
Methoxychlor	EPA-508	ND	ug/L	1	0.0050	40	05/02/17	05/03/17 16:32	
Toxaphene	EPA-508	ND	ug/L	1	1.0	3	05/02/17	05/03/17 16:32	
PCB-1016	EPA-508	ND	ug/L	1	0.20	n/a	05/02/17	05/03/17 16:32	
PCB-1221	EPA-508	ND	ug/L	1	0.20	n/a	05/02/17	05/03/17 16:32	
PCB-1232	EPA-508	ND	ug/L	1	0.20	n/a	05/02/17	05/03/17 16:32	
PCB-1242	EPA-508	ND	ug/L	1	0.20	n/a	05/02/17	05/03/17 16:32	
PCB-1248	EPA-508	ND	ug/L	1	0.20	n/a	05/02/17	05/03/17 16:32	
PCB-1254	EPA-508	ND	ug/L	1	0.20	n/a	05/02/17	05/03/17 16:32	
PCB-1260	EPA-508	ND	ug/L	1	0.20	n/a	05/02/17	05/03/17 16:32	
Total PCB's (Summation)	EPA-508	ND	ug/L	1	0.20	0.5	05/02/17	05/03/17 16:32	
TCMX (Surrogate)	EPA-508	70.8	%	1	60 - 130 (LCL - UCL)		05/02/17	05/03/17 16:32	
Bentazon	EPA-515.1	ND	ug/L	1	0.80	n/a	05/01/17	05/02/17 21:16	
2,4-D	EPA-515.1	ND	ug/L	1	0.40	70	05/01/17	05/02/17 21:16	
Dalapon	EPA-515.1	ND	ug/L	1	5.0	200	05/01/17	05/02/17 21:16	
Dinoseb	EPA-515.1	ND	ug/L	1	0.20	7	05/01/17	05/02/17 21:16	
2,4,5-TP (Silvex)	EPA-515.1	ND	ug/L	1	0.070	50	05/01/17	05/02/17 21:16	
2,4-Dichlorophenylacetic acid (Surrogate)	EPA-515.1	75.5	%	1	40 - 120 (LCL - UCL)		05/01/17	05/02/17 21:16	
Benzene	EPA-524.2	ND	ug/L	1	0.50	5	05/01/17	05/01/17 13:22	
Bromobenzene	EPA-524.2	ND	ug/L	1	0.50	n/a	05/01/17	05/01/17 13:22	
Bromochloromethane	EPA-524.2	ND	ug/L	1	0.50	n/a	05/01/17	05/01/17 13:22	
Bromodichloromethane	EPA-524.2	ND	ug/L	1	0.50	n/a	05/01/17	05/01/17 13:22	
Bromoform	EPA-524.2	ND	ug/L	1	0.50	n/a	05/01/17	05/01/17 13:22	
Bromomethane	EPA-524.2	ND	ug/L	1	0.50	n/a	05/01/17	05/01/17 13:22	V11

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. All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.



Adobe Springs
P.O. Box 1417
Patterson, CA 95363

Reported: 05/26/2017 17:23
Project: Title 21 Source
Project Number: Annual Title 21
Project Manager: Paul Mason

BCL Sample ID: 1711423-01	Client Sample Name: Adobe Springs, 4/27/2017 9:15:00AM, Mark Ellis
----------------------------------	---

Constituent	Method	Result	Units	Dilution	PQL	BW-MCL	Prep Date	Run Date/Time	Lab Quals
Organics									
n-Butylbenzene	EPA-524.2	ND	ug/L	1	0.50	n/a	05/01/17	05/01/17 13:22	
sec-Butylbenzene	EPA-524.2	ND	ug/L	1	0.50	n/a	05/01/17	05/01/17 13:22	
tert-Butylbenzene	EPA-524.2	ND	ug/L	1	0.50	n/a	05/01/17	05/01/17 13:22	
Carbon tetrachloride	EPA-524.2	ND	ug/L	1	0.50	5	05/01/17	05/01/17 13:22	
Chlorobenzene	EPA-524.2	ND	ug/L	1	0.50	100	05/01/17	05/01/17 13:22	
Chloroethane	EPA-524.2	ND	ug/L	1	0.50	n/a	05/01/17	05/01/17 13:22	
Chloroform	EPA-524.2	ND	ug/L	1	0.50	n/a	05/01/17	05/01/17 13:22	
Chloromethane	EPA-524.2	ND	ug/L	1	0.50	n/a	05/01/17	05/01/17 13:22	
2-Chlorotoluene	EPA-524.2	ND	ug/L	1	0.50	n/a	05/01/17	05/01/17 13:22	
4-Chlorotoluene	EPA-524.2	ND	ug/L	1	0.50	n/a	05/01/17	05/01/17 13:22	
Dibromochloromethane	EPA-524.2	ND	ug/L	1	0.50	n/a	05/01/17	05/01/17 13:22	
1,2-Dibromo-3-chloropropane	EPA-524.2	ND	ug/L	1	1.0	0.2	05/01/17	05/01/17 13:22	
1,2-Dibromoethane	EPA-524.2	ND	ug/L	1	0.50	n/a	05/01/17	05/01/17 13:22	
Dibromomethane	EPA-524.2	ND	ug/L	1	0.50	n/a	05/01/17	05/01/17 13:22	
1,2-Dichlorobenzene	EPA-524.2	ND	ug/L	1	0.50	600	05/01/17	05/01/17 13:22	
1,3-Dichlorobenzene	EPA-524.2	ND	ug/L	1	0.50	n/a	05/01/17	05/01/17 13:22	
1,4-Dichlorobenzene	EPA-524.2	ND	ug/L	1	0.50	75	05/01/17	05/01/17 13:22	
Dichlorodifluoromethane	EPA-524.2	ND	ug/L	1	0.50	n/a	05/01/17	05/01/17 13:22	V11
1,1-Dichloroethane	EPA-524.2	ND	ug/L	1	0.50	n/a	05/01/17	05/01/17 13:22	
1,2-Dichloroethane	EPA-524.2	ND	ug/L	1	0.50	5	05/01/17	05/01/17 13:22	
1,1-Dichloroethene	EPA-524.2	ND	ug/L	1	0.50	7	05/01/17	05/01/17 13:22	
cis-1,2-Dichloroethene	EPA-524.2	ND	ug/L	1	0.50	70	05/01/17	05/01/17 13:22	
trans-1,2-Dichloroethene	EPA-524.2	ND	ug/L	1	0.50	100	05/01/17	05/01/17 13:22	
1,2-Dichloropropane	EPA-524.2	ND	ug/L	1	0.50	5	05/01/17	05/01/17 13:22	
1,3-Dichloropropane	EPA-524.2	ND	ug/L	1	0.50	n/a	05/01/17	05/01/17 13:22	
2,2-Dichloropropane	EPA-524.2	ND	ug/L	1	0.50	n/a	05/01/17	05/01/17 13:22	
1,1-Dichloropropene	EPA-524.2	ND	ug/L	1	0.50	n/a	05/01/17	05/01/17 13:22	
cis-1,3-Dichloropropene	EPA-524.2	ND	ug/L	1	0.50	n/a	05/01/17	05/01/17 13:22	
trans-1,3-Dichloropropene	EPA-524.2	ND	ug/L	1	0.50	n/a	05/01/17	05/01/17 13:22	
Total 1,3-Dichloropropene	EPA-524.2	ND	ug/L	1	0.50	n/a	05/01/17	05/01/17 13:22	
Ethylbenzene	EPA-524.2	ND	ug/L	1	0.50	700	05/01/17	05/01/17 13:22	
Hexachlorobutadiene	EPA-524.2	ND	ug/L	1	0.50	n/a	05/01/17	05/01/17 13:22	
Isopropylbenzene	EPA-524.2	ND	ug/L	1	0.50	n/a	05/01/17	05/01/17 13:22	
p-Isopropyltoluene	EPA-524.2	ND	ug/L	1	0.50	n/a	05/01/17	05/01/17 13:22	
Methylene chloride	EPA-524.2	ND	ug/L	1	0.50	n/a	05/01/17	05/01/17 13:22	

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. All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.



Adobe Springs
P.O. Box 1417
Patterson, CA 95363

Reported: 05/26/2017 17:23
Project: Title 21 Source
Project Number: Annual Title 21
Project Manager: Paul Mason

BCL Sample ID: 1711423-01	Client Sample Name: Adobe Springs, 4/27/2017 9:15:00AM, Mark Ellis
----------------------------------	---

Constituent	Method	Result	Units	Dilution	PQL	BW-MCL	Prep Date	Run Date/Time	Lab Quals
Organics									
Methyl t-butyl ether	EPA-524.2	ND	ug/L	1	0.50	n/a	05/01/17	05/01/17 13:22	
Naphthalene	EPA-524.2	ND	ug/L	1	0.50	n/a	05/01/17	05/01/17 13:22	
n-Propylbenzene	EPA-524.2	ND	ug/L	1	0.50	n/a	05/01/17	05/01/17 13:22	
Styrene	EPA-524.2	ND	ug/L	1	0.50	100	05/01/17	05/01/17 13:22	
1,1,1,2-Tetrachloroethane	EPA-524.2	ND	ug/L	1	0.50	n/a	05/01/17	05/01/17 13:22	
1,1,2,2-Tetrachloroethane	EPA-524.2	ND	ug/L	1	0.50	n/a	05/01/17	05/01/17 13:22	
Tetrachloroethene	EPA-524.2	ND	ug/L	1	0.50	5	05/01/17	05/01/17 13:22	
Toluene	EPA-524.2	ND	ug/L	1	0.50	1000	05/01/17	05/01/17 13:22	
1,2,3-Trichlorobenzene	EPA-524.2	ND	ug/L	1	0.50	n/a	05/01/17	05/01/17 13:22	
1,2,4-Trichlorobenzene	EPA-524.2	ND	ug/L	1	0.50	70	05/01/17	05/01/17 13:22	
1,1,1-Trichloroethane	EPA-524.2	ND	ug/L	1	0.50	200	05/01/17	05/01/17 13:22	
1,1,2-Trichloroethane	EPA-524.2	ND	ug/L	1	0.50	5	05/01/17	05/01/17 13:22	
Trichloroethene	EPA-524.2	ND	ug/L	1	0.50	5	05/01/17	05/01/17 13:22	
Trichlorofluoromethane	EPA-524.2	ND	ug/L	1	0.50	n/a	05/01/17	05/01/17 13:22	
1,2,3-Trichloropropane	EPA-524.2	ND	ug/L	1	1.0	n/a	05/01/17	05/01/17 13:22	
1,1,2-Trichloro-1,2,2-trifluoroethane	EPA-524.2	ND	ug/L	1	0.50	n/a	05/01/17	05/01/17 13:22	
1,2,4-Trimethylbenzene	EPA-524.2	ND	ug/L	1	0.50	n/a	05/01/17	05/01/17 13:22	
1,3,5-Trimethylbenzene	EPA-524.2	ND	ug/L	1	0.50	n/a	05/01/17	05/01/17 13:22	
Vinyl chloride	EPA-524.2	ND	ug/L	1	0.50	2	05/01/17	05/01/17 13:22	
Total Xylenes	EPA-524.2	ND	ug/L	1	0.50	10000	05/01/17	05/01/17 13:22	
Total Trihalomethanes	EPA-524.2	ND	ug/L	1	2.0	10	05/01/17	05/01/17 13:22	
t-Amyl Methyl ether	EPA-524.2	ND	ug/L	1	0.50	n/a	05/01/17	05/01/17 13:22	
t-Butyl alcohol	EPA-524.2	ND	ug/L	1	10	n/a	05/01/17	05/01/17 13:22	
Ethyl t-butyl ether	EPA-524.2	ND	ug/L	1	0.50	n/a	05/01/17	05/01/17 13:22	
p- & m-Xylenes	EPA-524.2	ND	ug/L	1	0.50	n/a	05/01/17	05/01/17 13:22	
o-Xylene	EPA-524.2	ND	ug/L	1	0.50	n/a	05/01/17	05/01/17 13:22	
1,2-Dichloroethane-d4 (Surrogate)	EPA-524.2	108	%	1	75 - 125 (LCL - UCL)		05/01/17	05/01/17 13:22	
Toluene-d8 (Surrogate)	EPA-524.2	100	%	1	80 - 120 (LCL - UCL)		05/01/17	05/01/17 13:22	
4-Bromofluorobenzene (Surrogate)	EPA-524.2	92.7	%	1	80 - 120 (LCL - UCL)		05/01/17	05/01/17 13:22	
Acenaphthylene	EPA-525.2	ND	ug/L	1	0.10	n/a	05/03/17	05/17/17 10:15	
Alachlor	EPA-525.2	ND	ug/L	1	0.20	2	05/03/17	05/17/17 10:15	
Anthracene	EPA-525.2	ND	ug/L	1	0.10	n/a	05/03/17	05/17/17 10:15	
Atraton	EPA-525.2	ND	ug/L	1	0.50	n/a	05/03/17	05/17/17 10:15	
Atrazine	EPA-525.2	ND	ug/L	1	0.30	3	05/03/17	05/17/17 10:15	
Benzo[a]anthracene	EPA-525.2	ND	ug/L	1	0.20	n/a	05/03/17	05/17/17 10:15	

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. All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.



Adobe Springs
P.O. Box 1417
Patterson, CA 95363

Reported: 05/26/2017 17:23
Project: Title 21 Source
Project Number: Annual Title 21
Project Manager: Paul Mason

BCL Sample ID: 1711423-01	Client Sample Name: Adobe Springs, 4/27/2017 9:15:00AM, Mark Ellis
----------------------------------	---

Constituent	Method	Result	Units	Dilution	PQL	BW-MCL	Prep Date	Run Date/Time	Lab Quals
Organics									
Benzo[b]fluoranthene	EPA-525.2	ND	ug/L	1	0.30	n/a	05/03/17	05/17/17 10:15	
Benzo[k]fluoranthene	EPA-525.2	ND	ug/L	1	0.30	n/a	05/03/17	05/17/17 10:15	
Benzo[a]pyrene	EPA-525.2	ND	ug/L	1	0.10	0.2	05/03/17	05/17/17 10:15	
Benzo[g,h,i]perylene	EPA-525.2	ND	ug/L	1	0.30	n/a	05/03/17	05/17/17 10:15	
Benzyl butyl phthalate	EPA-525.2	ND	ug/L	1	4.0	n/a	05/03/17	05/17/17 10:15	
delta-BHC	EPA-525.2	ND	ug/L	1	0.20	n/a	05/03/17	05/17/17 10:15	
gamma-BHC (Lindane)	EPA-525.2	ND	ug/L	1	0.20	0.2	05/03/17	05/17/17 10:15	
Bromacil	EPA-525.2	ND	ug/L	1	0.50	n/a	05/03/17	05/17/17 10:15	
Chrysene	EPA-525.2	ND	ug/L	1	0.30	n/a	05/03/17	05/17/17 10:15	
Diazinon	EPA-525.2	ND	ug/L	1	0.20	n/a	05/03/17	05/17/17 10:15	
Dibenzo[a,h]anthracene	EPA-525.2	ND	ug/L	1	0.30	n/a	05/03/17	05/17/17 10:15	
Di(2-ethylhexyl)adipate	EPA-525.2	ND	ug/L	1	1.0	400	05/03/17	05/17/17 10:15	
Dimethoate	EPA-525.2	ND	ug/L	1	2.0	n/a	05/03/17	05/17/17 10:15	
Dimethyl phthalate	EPA-525.2	ND	ug/L	1	1.0	n/a	05/03/17	05/17/17 10:15	
Di-n-butyl phthalate	EPA-525.2	ND	ug/L	1	1.0	n/a	05/03/17	05/17/17 10:15	
Fluorene	EPA-525.2	ND	ug/L	1	0.20	n/a	05/03/17	05/17/17 10:15	
Hexachlorobenzene	EPA-525.2	ND	ug/L	1	0.20	1	05/03/17	05/17/17 10:15	
Hexachlorocyclopentadiene	EPA-525.2	ND	ug/L	1	1.0	50	05/03/17	05/17/17 10:15	
Indeno[1,2,3-cd]pyrene	EPA-525.2	ND	ug/L	1	0.30	n/a	05/03/17	05/17/17 10:15	
Methoxychlor	EPA-525.2	ND	ug/L	1	0.30	40	05/03/17	05/17/17 10:15	
Metolachlor	EPA-525.2	ND	ug/L	1	0.50	n/a	05/03/17	05/17/17 10:15	
Metribuzin	EPA-525.2	ND	ug/L	1	0.50	n/a	05/03/17	05/17/17 10:15	
Molinate	EPA-525.2	ND	ug/L	1	0.50	n/a	05/03/17	05/17/17 10:15	
Phenanthrene	EPA-525.2	ND	ug/L	1	0.10	n/a	05/03/17	05/17/17 10:15	
Prometon	EPA-525.2	ND	ug/L	1	0.50	n/a	05/03/17	05/17/17 10:15	
Prometryn	EPA-525.2	ND	ug/L	1	0.50	n/a	05/03/17	05/17/17 10:15	
Pyrene	EPA-525.2	ND	ug/L	1	0.10	n/a	05/03/17	05/17/17 10:15	
Secbumeton	EPA-525.2	ND	ug/L	1	0.50	n/a	05/03/17	05/17/17 10:15	
Simazine	EPA-525.2	ND	ug/L	1	0.30	4	05/03/17	05/17/17 10:15	
Terbutryn	EPA-525.2	ND	ug/L	1	0.50	n/a	05/03/17	05/17/17 10:15	
Thiobencarb	EPA-525.2	ND	ug/L	1	0.50	n/a	05/03/17	05/17/17 10:15	
Perylene-d12 (Surrogate)	EPA-525.2	80.8	%	1	60 - 140 (LCL - UCL)		05/03/17	05/17/17 10:15	
Endothal	EPA-548.1	ND	ug/L	10	20	100	05/01/17	05/02/17 12:27	
Diquat	EPA-549.2	ND	ug/L	1	4.0	20	05/01/17	05/09/17 11:23	

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. All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.



Adobe Springs
P.O. Box 1417
Patterson, CA 95363

Reported: 05/26/2017 17:23
Project: Title 21 Source
Project Number: Annual Title 21
Project Manager: Paul Mason

BCL Sample ID: 1711423-01	Client Sample Name: Adobe Springs, 4/27/2017 9:15:00AM, Mark Ellis
----------------------------------	---

Constituent	Method	Result	Units	Dilution	PQL	BW-MCL	Prep Date	Run Date/Time	Lab Quals
Uncategorized									
Decachlorobiphenyl (Surrogate)	EPA-508	34.6	%	1	60 - 130 (LCL - UCL)		05/02/17	05/03/17 16:32	S09
Pentachlorophenol	EPA-515.1	ND	ug/L	1	0.050	n/a	05/01/17	05/02/17 21:16	
Picloram	EPA-515.1	ND	ug/L	1	0.050	n/a	05/01/17	05/02/17 21:16	
Diisopropyl ether	EPA-524.2	ND	ug/L	1	0.50	n/a	05/01/17	05/01/17 13:22	
bis(2-Ethylhexyl)phthalate	EPA-525.2	ND	ug/L	1	3.0	n/a	05/03/17	05/17/17 10:15	
1,3-Dimethyl-2-nitrobenzene (Surrogate)	EPA-525.2	86.8	%	1	70 - 130 (LCL - UCL)		05/03/17	05/17/17 10:15	
Triphenylphosphate (Surrogate)	EPA-525.2	80.8	%	1	70 - 130 (LCL - UCL)		05/03/17	05/17/17 10:15	
Dibromoacetic acid	EPA-552.3	ND	ug/L	1	1.0	n/a	05/02/17	05/03/17 12:05	
Dichloroacetic acid	EPA-552.3	ND	ug/L	1	1.0	n/a	05/02/17	05/03/17 12:05	
Monobromoacetic acid	EPA-552.3	ND	ug/L	1	1.0	n/a	05/02/17	05/03/17 12:05	
Monochloroacetic acid	EPA-552.3	ND	ug/L	1	1.0	n/a	05/02/17	05/03/17 12:05	
Trichloroacetic acid	EPA-552.3	ND	ug/L	1	1.0	n/a	05/02/17	05/03/17 12:05	
Total HAA's (Summation)	EPA-552.3	ND	ug/L	1	1.0	n/a	05/02/17	05/03/17 12:05	
2,3-Dibromopropionic acid (Surrogate)	EPA-552.3	127	%	1	70 - 130 (LCL - UCL)		05/02/17	05/03/17 12:05	
Total Recoverable Calcium	EPA-200.7	6.0	mg/L	1	0.10	n/a	05/08/17	05/08/17 18:08	
Total Recoverable Magnesium	EPA-200.7	110	mg/L	1	0.050	n/a	05/08/17	05/08/17 18:08	
Total Recoverable Sodium	EPA-200.7	7.0	mg/L	1	0.50	n/a	05/08/17	05/08/17 18:08	
Total Recoverable Potassium	EPA-200.7	ND	mg/L	1	1.0	n/a	05/08/17	05/08/17 18:08	
Bicarbonate Alkalinity as CaCO3	SM-2320B	350	mg/L	1	4.1	n/a	05/02/17	05/02/17 11:22	
Carbonate Alkalinity as CaCO3	SM-2320B	57	mg/L	1	4.1	n/a	05/02/17	05/02/17 11:22	
Hydroxide Alkalinity as CaCO3	SM-2320B	ND	mg/L	1	4.1	n/a	05/02/17	05/02/17 11:22	
Total Alkalinity as CaCO3	SM-2320B	410	mg/L	1	4.1	n/a	05/02/17	05/02/17 11:22	
pH	SM-4500H B	8.82	pH Units	1	0.05	n/a	05/02/17	05/02/17 11:22	S05
Total Dissolved Solids @ 180 C	SM-2540C	400	mg/L	3.333	33	n/a	05/03/17	05/03/17 15:30	
Color	SM-2120B	1.0	Color Units	1	1.0	n/a	04/28/17	04/28/17 15:00	
Odor	SM-2150B	No Obs Odor	Odor Units	1	1.0	n/a	04/28/17	04/28/17 15:00	
Chloramine as Cl2	SM-4500-C LF	ND	mg/L	1	0.10	n/a	04/28/17	04/28/17 14:50	S05
Residual Chlorine	SM-4500-C LF	ND	mg/L	1	0.10	n/a	04/28/17	04/28/17 14:50	S05
Chlorine dioxide	SM-4500-C IO2-B	ND	mg/L	1	0.20	n/a	04/28/17	04/28/17 14:50	S05
Total Cyanide	EPA-335.4	ND	mg/L	1	0.0050	n/a	05/03/17	05/08/17 10:20	

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. All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.



BSK Associates Laboratory Fresno
1414 Stanislaus St
Fresno, CA 93706
559-497-2888 (Main)
559-485-6935 (FAX)



A7E0093
5/15/2017
Invoice: A711472

Vanessa Sandoval
BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308

RE: Report for A7E0093 General: Project Manager-Vanessa Sandoval

Dear Vanessa Sandoval,

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 5/1/2017. 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.

If additional clarification of any information is required, please contact your Project Manager, Sarah K. Guenther, at 559-497-2888.

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

Sincerely,

Sarah K. Guenther, Project Manager



Accredited in Accordance with NELAP
ORELAP #4021

A7E0093 FINAL 05152017 1348
Printed: 5/15/2017
QA-RP-0001-10 Final.rpt

www.BSKAssociates.com

Page 1 of 10



A7E0093

General: Project Manager-Vanessa Sandoval



Case Narrative

Project and Report Details Invoice Details

Client: BC Laboratories
Report To: Vanessa Sandoval
Project #: 1711423
Received: 5/01/2017 - 15:10
Report Due: 5/15/2017

Invoice To: BC Laboratories
Invoice Attn: Vanessa Sandoval
Project PO#: -

Sample Receipt Conditions

Cooler: Default Cooler
Temperature on Receipt °C: 3.2

Containers Intact
COC/Labels Agree
Received On Wet Ice
Packing Material - Bubble Wrap
Sample(s) were received in temperature range.
Initial receipt at BSK-FAL

Data Qualifiers

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

- BS Blank spike recoveries did not meet acceptance limits.
- BS1.0 Blank spike recovery for this analyte was biased high; no material impact on reported result as sample is ND for this parameter.
- CV0.0 CCV recovery was above method acceptance limits; no material impact on reported result as sample is ND for this parameter.
- MS1.0 Matrix spike recoveries exceed control limits.
- MS1.5 Matrix spike recovery exceeds upper control limit. No material impact as sample results are Non-Detected.
- MS2.1 MS/MSD RPD exceeds control limit. Reportable results in parent sample may have some degree of variability, higher than that inherent in the method.
- SR.x Surrogate recovery exceeds upper control limit. Associated results should be considered biased high.
- SR1.0 Surrogate recovery exceeds upper control limit. No material impact as associated analytes are Non-Detect.

Report Distribution

Recipient(s)	Report Format	CC:
Vanessa Sandoval	FINAL.RPT	

A7E0093 FINAL 05152017 1348

Printed: 5/15/2017

QA-RP-0001-10 Final.rpt

www.BSKAssociates.com

Page 2 of 10



A7E0093

General: Project Manager-Vanessa Sandoval

1711423

Certificate of Analysis

Sample ID: A7E0093-01
Sampled By: Client
Sample Description: 1711423-01

Sample Date - Time: 04/27/17 - 09:15
Matrix: Water
Sample Type: Grab

BSK Associates Laboratory Fresno
General Chemistry

Table with 10 columns: Analyte, Method, Result, RL, Units, RL Mult, Batch, Prepared, Analyzed, Qual. Rows include Bromate, Chlorite, and Surrogate: Dichloroacetate.

Organics

Table with 10 columns: Analyte, Method, Result, RL, Units, RL Mult, Batch, Prepared, Analyzed, Qual. Sections include Carbamates by HPLC and Glyphosate by HPLC.

A7E0093 FINAL 05152017 1348

Printed: 5/15/2017

QA-RP-0001-10 Final.rpt

www.BSKAssociates.com

Page 3 of 10



A7E0093

General: Project Manager-Vanessa Sandoval

BSK Associates Laboratory Fresno
General Chemistry Quality Control Report

Table with 12 columns: Analyte, Result, RL, Units, Spike Level, Source Result, %REC, %REC Limits, RPD, RPD Limit, Date Analyzed, Qual

EPA 317.0 - Quality Control

Batch: A705595

Prepared: 5/5/2017

Prep Method: Method Specific Preparation

Analyst: RES

Blank (A705595-BLK1)

Bromate ND 0.0010 mg/L 05/05/17

Blank Spike (A705595-BS1)

Bromate 0.010 0.0010 mg/L 0.010 103 85-115 05/05/17

Blank Spike Dup (A705595-BSD1)

Bromate 0.0099 0.0010 mg/L 0.010 99 85-115 4 10 05/05/17

Matrix Spike (A705595-MS1), Source: A7E0220-01

Bromate 0.018 0.0010 mg/L 0.010 ND 176 75-125 05/05/17 MS1.0 High

Matrix Spike Dup (A705595-MSD1), Source: A7E0220-01

Bromate 0.032 0.0010 mg/L 0.010 ND 324 75-125 59 10 05/05/17 MS1.0 High MS2.1

A7E0093 FINAL 05152017 1348

Printed: 5/15/2017

QA-RP-0001-10 Final.rpt

www.BSKAssociates.com

Page 4 of 10



A7E0093

General: Project Manager-Vanessa Sandoval

BSK Associates Laboratory Fresno
Organics Quality Control Report

Table with 12 columns: Analyte, Result, RL, Units, Spike Level, Source Result, %REC, %REC Limits, RPD, RPD Limit, Date Analyzed, Qual

EPA 531.1 - Quality Control

Batch: A705799

Prepared: 5/10/2017

Prep Method: EPA 531.1

Analyst: ZZZ

Blank (A705799-BLK1)

Table with 4 columns: Analyte, Result, RL, Date Analyzed. Rows include 3-Hydroxycarbofuran, Aldicarb, Aldicarb Sulfone, Aldicarb Sulfoxide, Carbaryl, Carbofuran, Methomyl, Oxamyl.

Blank Spike (A705799-BS1)

Table with 7 columns: Analyte, Result, RL, Units, Spike Level, %REC, Date Analyzed. Rows include 3-Hydroxycarbofuran, Aldicarb, Aldicarb Sulfone, Aldicarb Sulfoxide, Carbaryl, Carbofuran, Methomyl, Oxamyl.

Blank Spike Dup (A705799-BSD1)

Table with 10 columns: Analyte, Result, RL, Units, Spike Level, %REC, RPD, RPD Limit, Date Analyzed. Rows include 3-Hydroxycarbofuran, Aldicarb, Aldicarb Sulfone, Aldicarb Sulfoxide, Carbaryl, Carbofuran, Methomyl, Oxamyl.

Matrix Spike (A705799-MS1), Source: A7E0301-01

Table with 10 columns: Analyte, Result, RL, Units, Spike Level, %REC, RPD, RPD Limit, Date Analyzed. Rows include 3-Hydroxycarbofuran, Aldicarb, Aldicarb Sulfone, Aldicarb Sulfoxide, Carbaryl, Carbofuran, Methomyl, Oxamyl.

EPA 547 - Quality Control

Batch: A705377

Prepared: 5/1/2017

Prep Method: EPA 547

Analyst: AMN

Blank (A705377-BLK1)

Table with 12 columns: Analyte, Result, RL, Units, Spike Level, Source Result, %REC, %REC Limits, RPD, RPD Limit, Date Analyzed, Qual. Rows include Glyphosate, Surrogate: AMPA.

A7E0093 FINAL 05152017 1348

Printed: 5/15/2017

QA-RP-0001-10 Final.rpt

www.BSKAssociates.com

Page 5 of 10



A7E0093

General: Project Manager-Vanessa Sandoval

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 547 - Quality Control

Batch: A705377

Prepared: 5/1/2017

Prep Method: EPA 547

Analyst: AMN

Blank Spike (A705377-BS1)

Glyphosate	160	25	ug/L	100		155	70-130			05/01/17	BS	High
Surrogate: AMPA	150			100		146	70-130			05/01/17	SR.x	

Blank Spike Dup (A705377-BSD1)

Glyphosate	140	25	ug/L	100		136	70-130	13	30	05/01/17	BS	High
Surrogate: AMPA	140			100		139	70-130			05/01/17	SR.x	

Matrix Spike (A705377-MS1), Source: A7E0093-01

Glyphosate	130	25	ug/L	100	ND	132	70-130			05/02/17	MS1.0	High
Surrogate: AMPA	130			100		130	70-130			05/02/17		

A7E0093 FINAL 05152017 1348

Printed: 5/15/2017

QA-RP-0001-10 Final.rpt

www.BSKAssociates.com

Page 6 of 10



A7E0093

General: Project Manager-Vanessa Sandoval

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.
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.
(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.
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 MCLs provided in this report (if applicable) represent the primary MCLs for that analyte.

Definitions

Table with 4 columns: Unit/Abbreviation, Definition, Method/Unit, and Value/Unit. Includes entries for mg/L, mg/Kg, µg/L, µg/Kg, %, NR, MDL, RL, ND, pCi/L, RL Mult, MCL, MDA95, MPN, CFU, Absent, Present.

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

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

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

Fresno

Table listing certifications for Fresno: State of California - ELAP (1180), State of Nevada (CA000792016-1), EPA - UCMR3 (CA00079), State of New York (12073), State of Hawaii (4021), State of Oregon - NELAP (4021), State of Washington (C997-16).

Sacramento

Table listing certifications for Sacramento: State of California - ELAP (2435), San Bernardino, State of California - ELAP (2993), Vancouver, State of Oregon - NELAP, State of Washington (C824-16).

A7E0093 FINAL 05152017 1348

Printed: 5/15/2017

QA-RP-0001-10 Final.rpt

www.BSKAssociates.com

Page 7 of 10



A7E0093



05012017

BCLab4911

Turnaround: Standard

Due Date: 5/15/2017



BC Laboratories



Printed: 5/1/2017 4:51:32PM

Page 1 of 1

Page 8 of 10



3.2

SUBCONTRACT ORDER
BC Laboratories
1711423

A7E0093
BCLab4911

05/01/2017
10



BSKSA



SENDING LABORATORY:

BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308
Phone: 661-327-4911
FAX: 661-327-1918
Project Manager: Vanessa Sandoval

RECEIVING LABORATORY:

BSK Analytical Labs
1414 Stanislaus Street
Fresno, CA 93706
Phone: (800) 877-8310
FAX: (559) 485-6935

Analysis	Due	Expires	Comments
Sample ID: 1711423-01	Water	Sampled: 04/27/17 09:15	
EPA 531.1 - Carbamate & Urea Pesticides	05/12/17 17:00	05/25/17 09:15	
EPA 547 - Glyphosate	05/12/17 17:00	05/11/17 09:15	
EPA 300.0 - Bromate	05/12/17 17:00	05/25/17 09:15	
EPA 300.1 - Chlorite	05/12/17 17:00	05/11/17 09:15	
<i>Containers supplied:</i>			

Released By  Date 5.1.17
 Received By  Date 5-1-17 @1510
 Released By BSKSA w/ bwr, PMS Date _____
 Received By _____ Date _____



BSK Associates SR-FL-0002-18

A7E0093
BCLab4911

05/01/2017
10

Sample Integrity



BSK Bottles: Yes No Page 1 of 1

COC Info	Was temperature within range? Chemistry $\leq 6^{\circ}\text{C}$ Micro $< 8^{\circ}\text{C}$	<u>Yes</u>	No	NA	Were correct containers and preservatives received for the tests requested?	<u>Yes</u>	No	NA
	If samples were taken today, is there evidence that chilling has begun?	Yes	No	<u>NA</u>	Were there bubbles in the VOA vials? (Volatiles Only)	Yes	No	<u>NA</u>
	Did all bottles arrive unbroken and intact?	<u>Yes</u>	No		Was a sufficient amount of sample received?	<u>Yes</u>	No	
	Did all bottle labels agree with COC?	<u>Yes</u>	No		Do samples have a hold time <72 hours?	Yes	No	<u>NA</u>
	Was sodium thiosulfate added to CN sample(s) until chlorine was no longer present?	Yes	No	<u>NA</u>	Was PM notified of discrepancies? PM: _____ By/Time: _____	Yes	No	<u>NA</u>
Bottles Received <small>means preservation/chlorine checks are either N/A or are performed in the lab</small>	250ml(A) 500ml(B) 1Liter(C) 40ml VOA(V)	Checks	Passed?					
	Bacti Na ₂ S ₂ O ₃	—	—					
	None (P) White Cap	—	—					
	Cr6 (P) Lt. Green Label/Blue Cap NH ₄ OH(NH ₄) ₂ SO ₄ DW	Cl, pH > 8	Y	N				
	Cr6 (P) Pink Label/Blue Cap NH ₄ OH(NH ₄) ₂ SO ₄ WW	pH 9.3-9.7	Y	N				
	Cr6 (P) Black Label/Blue Cap NH ₄ OH(NH ₄) ₂ SO ₄ 7199 ***24 HOUR HOLD TIME***	pH 9.0-9.5	Y	N				
	HNO ₃ (P) Red Cap or HCl (P) Purple Cap/Lt. Blue Label	—	—		IC			
	H ₂ SO ₄ (P) or (AG) Yellow Cap/Label	pH < 2	Y	N				
	NaOH (P) Green Cap	Cl, pH > 10	Y	N				
	NaOH + ZnAc (P)	pH > 9	Y	N				
	Dissolved Oxygen 300ml (g)	—	—					
	None (AG) 608/8081/8082, 625, 632/8321, 8151, 8270	—	—					
	HCl (AG) Lt. Blue Label O&G, Diesel	—	—					
	Ascorbic, EDTA, KH ₂ Ct (AG) Pink Label 525	—	—					
	Na ₂ SO ₃ 250mL (AG) Neon Green Label 515	—	—					
	Na ₂ S ₂ O ₃ 1 Liter (Brown P) 549	—	—					
	Na ₂ S ₂ O ₃ (AG) Blue Label 548, THM, 524	—	—					
	Na ₂ S ₂ O ₃ (CG) Blue Label 504, 505, 547	—	—		IU			
	Na ₂ S ₂ O ₃ + MCAA (CG) Orange Label 531	pH < 3	Y	N	IU			
	NH ₄ Cl (AG) Purple Label 552	—	—					
EDA (AG) Brown Label DBPs Plastic	—	—		IA				
HCL (CG) 524.2.BTEX, Gas, MTBE, 8260/624	—	—						
Buffer pH 4 (CG)	—	—						
H ₃ PO ₄ (CG) Salmon Label	—	—						
Other:								
Asbestos 1Liter Plastic w/ Foil	—	—						
Low Level Hg / Metals Double Baggie	—	—						
Bottled Water	—	—						
Clear Glass 250mL / 500mL / 1 Liter	—	—						
Soil Tube Brass / Steel / Plastic	—	—						
Tedlar Bag / Plastic Bag	—	—						
Split	Container	Preservative	Date/Time/Initials	Container	Preservative	Date/Time/Initials		
	S 1A-P	EDA	5-1-15/12	S P				
Comments	S 1L(P)	HNO ₃	5-1-17/03R	S P				

Handwritten signature/initials: SH7 ER

Labeled by: RA @ 1600 Labels checked by: RE @ 1604 RUSH Paged by: _____ @ _____



May 16, 2017

FAL Project ID: 10648

Ms. Vanessa Sandoval
BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308

Dear Ms. Sandoval,

The following results are associated with Frontier Analytical Laboratory project **10648**. This corresponds to your subcontract order number **1711423**. One aqueous sample was received on 5/4/2017 in good condition. This sample was extracted and analyzed by EPA Method 1613 for 2,3,7,8-TCDD only. BC Laboratories requested a turnaround time of fifteen business days for project **10648**.

The following report consists of an Analytical Data section and a Sample Receipt section. The Analytical Data section contains our sample tracking log and the analytical results. The Sample Receipt section contains your chain of custody, our sample login form and a sample photo. The attached results are specifically for the sample referenced in this report only. These results meet all National Environmental Laboratory Accreditation Program (NELAP) requirements and shall not be reproduced except in full. Frontier Analytical Laboratory's State of Oregon NELAP certificate number is **4041** and our State of California ELAP certificate number is **2934**. This report has been emailed to you as a portable document format (PDF) file. A hardcopy of this report will not be sent to you unless specifically requested.

If you have any questions regarding project **10648**, please contact me at (916) 934-0900. Thank you for choosing Frontier Analytical Laboratory for your analytical testing needs.

Sincerely,

Thomas C. Crabtree
Director

FRONTIER ANALYTICAL LABORATORY
5172 Hillisdale Circle * El Dorado Hills, CA 95762
Tel (916) 934-0900 * Fax (916) 934-0999
www.frontieranalytical.com

000001 of 000008



Frontier Analytical Laboratory

Sample Tracking Log

FAL Project ID: 10648

Received on: 05/04/2017

Project Due: 05/26/2017

Storage: R2

FAL Sample ID	Dup	Client Project ID	Client Sample ID	Requested Method	Matrix	Sampling Date	Sampling Time	Hold Time Due Date
10648-001-SA	0	1711423	1711423-01	EPA 1613 TCDD	Aqueous	04/27/2017	09:15 am	04/27/2018

000002 of 000008

5172 Hillisdale Circle * El Dorado Hills, CA 95762 * Tel (916) 934-0900 * Fax (916) 934-0999 * www.frontieranalytical.com



EPA Method 1613
TCDD



FAL ID: 10648-001-MB
Client ID: Method Blank
Matrix: Aqueous
Batch No: X4101

Date Extracted: 05-11-2017
Date Received: NA
Amount: 1.000 L

ICal: PCDDFAL3-5-3-17
GC Column: DB5MS
Units: pg/L

Acquired: 05-12-2017
WHO TEQ: NA


Compound	Conc	DL	Qual	MDL
2,3,7,8-TCDD	ND	0.613		0.161

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	82.1	31.0 - 137	

Cleanup Surrogate	% Rec	QC Limits	Qual
37Cl-2,3,7,8-TCDD	88.1	42.0 - 164	

- A Isotopic Labeled Standard outside QC range but signal to noise ratio is >10:1
- B Analyte is present in Method Blank
- C Chemical Interference
- D Presence of Diphenyl Ethers
- DNQ Analyte concentration is below calibration range
- E Analyte concentration is above calibration range
- F Analyte confirmation on secondary column
- J Analyte concentration is below calibration range
- M Maximum possible concentration
- ND Analyte Not Detected at Detection Limit Level
- NP Not Provided
- P Pre-filtered through a Whatman 0.7um GF/F filter
- S Sample acceptance criteria not met
- X Matrix interferences
- * Result taken from dilution or reinjection

Analyst: 
Date: 5/15/2017

Reviewed By: 
Date: 5/16/2017

000003 of 000008

5172 Hillside Circle * El Dorado Hills, CA 95762 * Tel (916) 934-0900 * Fax (916) 934-0999 * www.frontieranalytical.com



EPA Method 1613
TCDD



FAL ID: 10648-001-OPR
Client ID: OPR
Matrix: Aqueous
Batch No: X4101


Date Extracted: 05-11-2017
Date Received: NA
Amount: 1.000 L


ICal: PCDDFAL3-5-3-17
GC Column: DB5MS
Units: ng/ml

Acquired: 05-12-2017
WHO TEQ: NA

Compound	Conc	QC Limits
2,3,7,8-TCDD	9.95	7.30 - 14.6
Internal Standards		
13C-2,3,7,8-TCDD	88.9	25.0 - 141
Cleanup Surrogate		
37Cl-2,3,7,8-TCDD	80.7	37.0 - 158

- A Isotopic Labeled Standard outside QC range but signal to noise ratio is >10:1
- B Analyte is present in Method Blank
- C Chemical Interference
- D Presence of Diphenyl Ethers
- DNQ Analyte concentration is below calibration range
- E Analyte concentration is above calibration range
- F Analyte confirmation on secondary column
- J Analyte concentration is below calibration range
- M Maximum possible concentration
- ND Analyte Not Detected at Detection Limit Level
- NP Not Provided
- P Pre-filtered through a Whatman 0.7um GF/F filter
- S Sample acceptance criteria not met
- X Matrix interferences
- * Result taken from dilution or reinjection

Analyst: 
Date: 5/15/2017

Reviewed By: 
Date: 5/16/2017

000004 of 000008

5172 Hillside Circle * El Dorado Hills, CA 95762 * Tel (916) 934-0900 * Fax (916) 934-0999 * www.frontieranalytical.com



EPA Method 1613
TCDD



FAL ID: 10648-001-SA
Client ID: 1711423-01
Matrix: Aqueous
Batch No: X4101

Date Extracted: 05-11-2017
Date Received: 05-04-2017
Amount: 0.978 L

ICal: PCDDFAL3-5-3-17
GC Column: DB5MS
Units: pg/L

Acquired: 05-12-2017
WHO TEQ: NA


Compound	Conc	DL	Qual	MDL
2,3,7,8-TCDD	ND	0.673		0.161

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	83.2	31.0 - 137	

Cleanup Surrogate		
37Cl-2,3,7,8-TCDD	91.7	42.0 - 164

- A Isotopic Labeled Standard outside QC range but signal to noise ratio is >10:1
- B Analyte is present in Method Blank
- C Chemical Interference
- D Presence of Diphenyl Ethers
- DNQ Analyte concentration is below calibration range
- E Analyte concentration is above calibration range
- F Analyte confirmation on secondary column
- J Analyte concentration is below calibration range
- M Maximum possible concentration
- ND Analyte Not Detected at Detection Limit Level
- NP Not Provided
- P Pre-filtered through a Whatman 0.7um GF/F filter
- S Sample acceptance criteria not met
- X Matrix interferences
- * Result taken from dilution or reinjection

Analyst: 
Date: 5/15/2017

Reviewed By: 
Date: 5/16/2017

000005 of 000008

5172 Hillside Circle * El Dorado Hills, CA 95762 * Tel (916) 934-0900 * Fax (916) 934-0999 * www.frontieranalytical.com



SUBCONTRACT ORDER

BC Laboratories
1711423

10648
002

SENDING LABORATORY:

BC Laboratories
4100 Atlas Ct
Bakersfield, CA 93308
Phone: 661-327-4911
Fax: 661-327-1918
Project Manager: Vanessa Sandoval

RECEIVING LABORATORY:

Frontier Analytical Laboratory SFRNTL-EINV
5172 Hillside Circle
El Dorado Hills, CA 95762
Phone : (916) 934-0900
Fax: (916) 934-0999

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: 1711423-01	Water	Sampled:04/27/17 09:15		
og1613w 2,3,7,8-TCDD FRNTL	05/12/17 17:00	04/26/18 09:15		
<i>Containers Supplied:</i>				

Released By 5-3-17 Date Received By 5-4-17 Date

Released By _____ Date Received By _____ Date



Frontier Analytical Laboratory

Sample Login Form

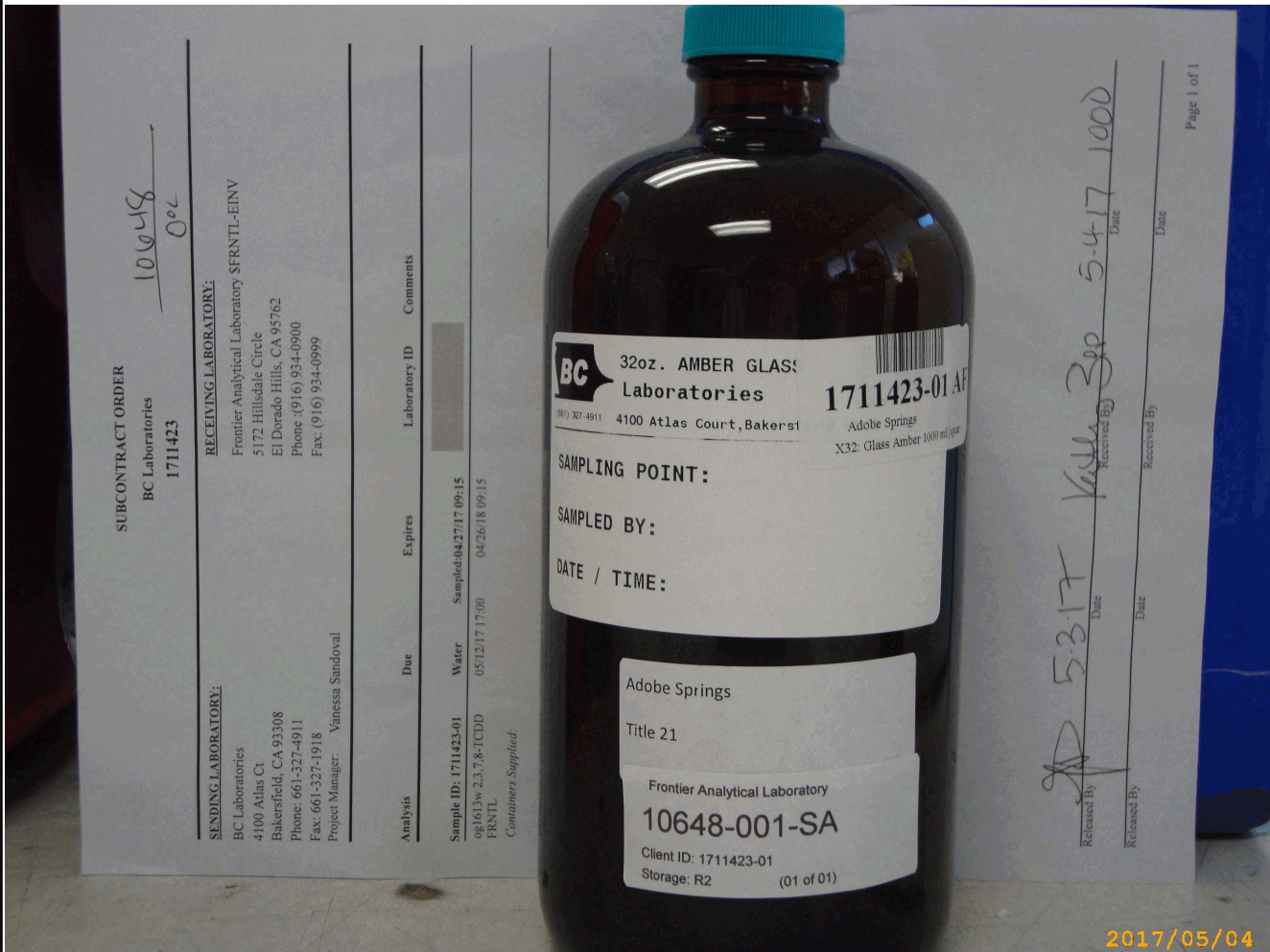
FAL Project ID: **10648**

Client:	BC Laboratories, Inc
Client Project ID:	1711423
Date Received:	05/04/2017
Time Received:	10:00 am
Received By:	KZ
Logged In By:	KZ
# of Samples Received:	1
Duplicates:	0
Storage Location:	R2

Method of Delivery:	California Overnight
Tracking Number:	C11235900246156
Shipping Container Received Intact	Yes
Custody seals(s) present?	No
Custody seals(s) intact?	No
Sample Arrival Temperature (C)	0
Cooling Method	Ice
Chain Of Custody Present?	Yes
Return Shipping Container To Client	Yes
Test aqueous sample for residual Chlorine	Yes
Sodium Thiosulfate Added	No
Adequate Sample Volume	Yes
Appropriate Sample Container	Yes
pH Range of Aqueous Sample	Between 4 and 9
Anomalies or additional comments:	

000007 of 000008

5172 Hillisdale Circle * El Dorado Hills, CA 95762 * Tel (916) 934-0900 * Fax (916) 934-0999 * www.frontieranalytical.com



000008 of 000008

5172 Hillside Circle * El Dorado Hills, CA 95762 * Tel (916) 934-0900 * Fax (916) 934-0999 * www.frontieranalytical.com



Laboratory ID: 2568

National Testing Laboratories, Ltd
556 South Mansfield, Ypsilanti, MI, 48197-5166
(440) 449-2525, Fax: (440) 449-8585

ANALYTICAL REPORTS

SAMPLE CODE: 370129

5/16/2017

Customer: B C Laboratories
Chrissy Herndon
4100 Atlas Court
Bakersfield, CA 93308

Source: 1711423-01

Date/Time Received: 5/9/2017 09:15

Collected by: Client

The results herein conform to TNI and ISO/IEC 17025:2005 standards, where applicable, unless otherwise narrated in the body of the report. The uncertainty of the test results are available upon request. All Dates and Times are reported as U.S. Eastern Time.

Legend:

Any "Level Detected" marked with an asterisk (*) indicates that the value has exceeded the EPA Maximum Contaminant Level (MCL) or one of the Standards of Quality.

"ND" This contaminant was not detected at or above our lower reporting limit (LRL)

"NA" Not Analyzed

"Standard" This column indicates either the Maximum Contaminant Level (MCL) for EPA Primary Standards or the guideline values for EPA Secondary Standards.

"LRL" This column indicates the Lower Reporting Limit, which is the lowest level that the laboratory can detect a contaminant.

"DF" This column indicates the contaminant dilution factor.

Report Notes:

Table with 11 columns: Fed Id #, Contaminant, Method, Standard, Units, LRL, Level Detected, DF, Date/Time Sampled, Date Prepped, Date/Time Analyzed. Row 1: 2910, Total Phenols, 420.4, --, mg/L, 0.001, ND, R2, Y5 1, 4/27/2017 12:15, 5/10/2017

Qualifiers:

R2: The laboratory is not accredited for this analyte. The resulting value should be used for informational purposes only.
Y5: Sample received outside of temperature acceptance range. Sample does not meet method requirements for acceptable thermal preservation.

These test results may be used for compliance purpose as required.

Table with 2 columns: Analyst, Tests. Row 1: DHG, 420.4

Handwritten signature of James Abston

James Abston, Operations Manager

This report cannot be reproduced, except in full, without the written approval of National Testing Laboratories, Ltd.

Page 1 of 1 370129

Custom Comp: Phenols

Date Printed: 5/16/2017 2:05:09 PM



Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

May 22, 2017

Ms. Vanessa Sandoval
BC Laboratories
4100 Atlas Ct.
Bakersfield, CA 93308

RE: Project: 1711423
Pace Project No.: 30217992

Dear Ms. Sandoval:

Enclosed are the analytical results for sample(s) received by the laboratory on May 05, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC 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,

Carin A. Ferris

Carin Ferris
carin.ferris@pacelabs.com
724-850-5615
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: 1711423
Pace Project No.: 30217992

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235

Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification #: PA014572015-1
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Certification
Wyoming Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: 1711423
Pace Project No.: 30217992

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30217992001	1711423-01	Drinking Water	04/27/17 09:15	05/05/17 10:10

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: 1711423
Pace Project No.: 30217992

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30217992001	1711423-01	EPA 904.0	JLW	1

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: 1711423
Pace Project No.: 30217992

Method: EPA 904.0
Description: 904.0 Radium 228
Client: BC Laboratories
Date: May 22, 2017

General Information:

1 sample was analyzed for EPA 904.0. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: 1711423
Pace Project No.: 30217992

Sample: 1711423-01 Lab ID: 30217992001 Collected: 04/27/17 09:15 Received: 05/05/17 10:10 Matrix: Drinking Water
PWS: Site ID: Sample Type:

Comments:
• Sample collection dates and times were not present on the sample containers.
• Upon receipt at the laboratory, 3 mls of nitric acid were added to the sample to meet the sample preservation requirement of pH <2 for radiochemistry analysis.
• The sampler's name and signature were not listed on the COC.

Table with 7 columns: Parameters, Method, Act ± Unc (MDC) Carr Trac, Units, Analyzed, CAS No., Qual. Row 1: Radium-228, EPA 904.0, 0.415 ± 0.376 (0.785), pCi/L, 05/18/17 11:53, 15262-20-1, C:75% T:87%

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: 1711423
Pace Project No.: 30217992

QC Batch: 258132	Analysis Method: EPA 904.0
QC Batch Method: EPA 904.0	Analysis Description: 904.0 Radium 228
Associated Lab Samples: 30217992001	

METHOD BLANK: 1271234	Matrix: Water
Associated Lab Samples: 30217992001	

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.316 ± 0.329 (0.677) C:73% T:79%	pCi/L	05/18/17 11:54	

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

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: 1711423
Pace Project No.: 30217992

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.
Act - Activity
Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval).
Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)
(MDC) - Minimum Detectable Concentration
Trac - Tracer Recovery (%)
Carr - Carrier Recovery (%)
Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.
TNI - The NELAC Institute.

REPORT OF LABORATORY ANALYSIS

Date: 05/22/2017 03:16 PM

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Page 8 of 10



SUBCONTRACT ORDER

**BC Laboratories
1711423**

SENDING LABORATORY:

BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308
Phone: 661-327-4911
FAX: 661-327-1918
Project Manager: Vanessa Sandoval





RECEIVING LABORATORY:

PACE Analytical
1638 Roseytown Road, Ste 2,3 &4
Greensburg, PA 15601
Phone: (724) 850-5600
FAX: (724) 850-5601

PACEA

Analysis	Due	Expires	Comments
Sample ID: 1711423-01	Water	Sampled: 04/27/17 09:15	001
EPA 904.0 Radium 228	05/12/17 17:00	10/25/17 09:15	CA Drinking Water
Containers supplied:			



Released By _____ Date _____ Received By _____ Date _____

PACEA



Laboratories, Inc.

Environmental Testing Laboratory Since 1949

Subcontract Report for 1711423 PDF File Name: WO_1711423_SUB_PACEA.pdf Page 10 of 10

Sample Condition Upon Receipt Pittsburgh

ANL



Client Name: BC Labs

Project # 30217992

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

Tracking #: 1Z 965 376 03 628 0750

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

Thermometer Used N/A Type of Ice: Wet Blue None

Cooler Temperature Observed Temp _____ °C Correction Factor: _____ °C Final Temp: _____ °C

Temp should be above freezing to 6°C

Date and Initials of person examining contents: DEAR 5-5-17

Comments:	Yes	No	N/A	
Chain of Custody Present:	X			1.
Chain of Custody Filled Out:	X			2.
Chain of Custody Relinquished:	X			3.
Sampler Name & Signature on COC:		X		4.
Sample Labels match COC: -Includes date/time/ID Matrix: <u>WT</u>		X		5. <u>Only date/time on bottle</u>
Samples Arrived within Hold Time:	X			6.
Short Hold Time Analysis (<72hr remaining):		X		7.
Rush Turn Around Time Requested:		X		8.
Sufficient Volume:	X			9.
Correct Containers Used: -Pace Containers Used:	X	X		10.
Containers Intact:	X			11.
Orthophosphate field filtered			X	12.
Organic Samples checked for dechlorination:			X	13.
Filtered volume received for Dissolved tests			X	14.
All containers have been checked for preservation.	X			15. <u>Added 3ml of HNO3 to 1 bottle</u>
All containers needing preservation are found to be in compliance with EPA recommendation.		X		
exceptions: VOA, coliform, TOC, O&G, Phenolics				
Initial when completed: <u>DEAR</u> Date/time of preservation: <u>5-5-17/1150</u>				
Lot # of added preservative: <u>DU17-0483</u>				
Headspace in VOA Vials (>6mm):			X	16.
Trip Blank Present:		X		17.
Trip Blank Custody Seals Present		X		
Rad Aqueous Samples Screened > 0.5 mrem/hr		X		
Initial when completed: <u>DEAR</u> Date: <u>5-5-17</u>				

Client Notification/ Resolution:

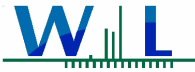
Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.



WECK LABORATORIES, INC.

Certificate of Analysis

FINAL REPORT

Work Orders: 7E02019

Project: 1711423

Attn: Vanessa Sandoval

Client: BC Laboratories
4100 Atlas Court
Bakersfield, CA 93308

Report Date: 5/16/2017

Received Date: 5/2/2017

Turnaround Time: Normal

Phones: (661) 327-4911

Fax: (661) 327-1918

P.O. #:

Billing Code:

Dear Vanessa Sandoval,

Enclosed are the results of analyses for samples received 5/02/17 with the Chain-of-Custody document. The samples were received in good condition, at 4.6 °C and on ice. All analyses met the method criteria except as noted in the case narrative or in the report with data qualifiers.

Sample Results

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Sample: 1711423-01 Sampled: 04/27/17 9:15 by Client						
7E02019-01 (Water)						
Method: EPA 900.0	Batch ID: W7E0198	Instr: Inst	Prepared: 05/03/17 14:49	Analyst: sap		
Gross Beta	-0.34		pCi/L 1 05/08/17 15:57			
Uncertainty: 0.663	MDA: 1.079					
Method: SM 7110C	Batch ID: W7E0409	Instr: MPC 9604-2	Prepared: 05/08/17 08:16	Analyst: sap		
Gross Alpha	3.11		pCi/L 1 05/09/17 13:13			
Uncertainty: 0.201	MDA: 0.034					



WECK LABORATORIES, INC.

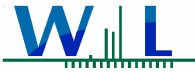
Quality Control Results

Certificate of Analysis

FINAL REPORT

Radiological Parameters by APHA/EPA Methods

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch: W7E0198 - Radiochemistry General Preparation										
Blank (W7E0198-BLK1)				Prepared: 05/03/17 Analyzed: 05/08/17						
Gross Beta	0.13		pCi/L							
Uncertainty:	0.493	MDA:	0.821							
LCS (W7E0198-B51)				Prepared: 05/03/17 Analyzed: 05/08/17						
Gross Beta	13		pCi/L	15.0		89	77-138			
Uncertainty:	0.834	MDA:	0.888							
LCS Dup (W7E0198-B5D1)				Prepared: 05/03/17 Analyzed: 05/08/17						
Gross Beta	13		pCi/L	15.0		87	77-138	2	30	
Uncertainty:	0.855	MDA:	0.936							
Batch: W7E0409 - Radiochemistry General Preparation										
Blank (W7E0409-BLK1)				Prepared: 05/08/17 Analyzed: 05/10/17						
Gross Alpha	-0.0420		pCi/L							
Uncertainty:	0.088	MDA:	0.034							
LCS (W7E0409-B51)				Prepared: 05/08/17 Analyzed: 05/10/17						
Gross Alpha	4.30		pCi/L	4.80		90	55-149			
Uncertainty:	0.244	MDA:	0.034							
LCS Dup (W7E0409-B5D1)				Prepared: 05/08/17 Analyzed: 05/10/17						
Gross Alpha	5.78		pCi/L	4.80		120	55-149	29	30	
Uncertainty:	0.297	MDA:	0.034							



WECK LABORATORIES, INC.

Certificate of Analysis

FINAL REPORT

Notes and Definitions

Item	Definition
ND	NOT DETECTED at or above the Method Reporting Limit (MRL). If Method Detection Limit (MDL) is reported, then ND means not detected at or above the MDL.
Dil	Dilution
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
% Rec	Percent Recovery
Source	Sample that was matrix spiked or duplicated.
MDL	Method Detection Limit
MRL	The minimum levels, concentrations, or quantities of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence. The MRL is also known as Limit of Quantitation (LOQ) and Detection Limit for Reporting (DLR)
MDA	Minimum Detectable Activity
NR	Not Reportable
TIC	Tentatively Identified Compound (TIC) using mass spectrometry. The reported concentration is relative concentration based on the nearest internal standard. If the library search produces no matches at, or above 85%, the compound is reported as unknown.

Any remaining sample(s) will be disposed of one month from the final report date unless other arrangements are made in advance.

An Absence of Total Coliform meets the drinking water standards as established by the California State Water Resources Control Board (SWRCB)

All results are expressed on wet weight basis unless otherwise specified.

All samples collected by Weck Laboratories have been sampled in accordance to laboratory SOP Number MIS 002.

Reviewed by:

Kim G. Tu
Project Manager



DoD-ELAP #L2457 • ELAP-CA #1132 • EPA-UCMR #CA00211 • HW-DOH # • ISO 17025 #L2457.01 • LACSD #10143 • NELAP-CA #04229CA • NELAP-OR #4047 • NJ-DEP #CA015 • NV-DEP #NAC 445A • SCAQMD #93LA1006

This is a complete final report. The information in this report applies to the samples analyzed in accordance with the chain-of-custody document. Weck Laboratories certifies that the test results meet all requirements of TNI unless noted by qualifiers or written in the Case Narrative. This analytical report must be reproduced in its entirety.



Adobe Springs
P.O. Box 1417
Patterson, CA 95363

Reported: 05/26/2017 17:23
Project: Title 21 Source
Project Number: Annual Title 21
Project Manager: Paul Mason

Notes And Definitions

- MDL Method Detection Limit
 - ND Analyte Not Detected
 - PQL Practical Quantitation Limit
 - S05 The sample holding time was exceeded.
 - S09 The surrogate recovery on the sample for this compound was not within the control limits.
 - V11 The Continuing Calibration Verification (CCV) recovery is not within established control limits.
- BW-MCL = MCLs for Title 21 Bottled Water