



Date of Report: 06/09/2020

Wes Bergman

Palomar Land and Cattle  
34300 Canfield Road  
Palomar Mountain, CA 92060

Client Project: Source Water  
BCL Project: Annual Title 21  
BCL Work Order: 2013608  
Invoice ID: B382233

Enclosed are the results of analyses for samples received by the laboratory on 5/8/2020. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Felicia Johnson  
Client Service Rep

Authorized Signature

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

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### Executive Summary - MCL Exceedances

Constituent	Result	PQL	MCL	Units	Method	Lab Quals
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No exceedances found

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Chain of Custody Form



20-13608

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**Required Fields**

Report To: Palomar Land & Cattle Company  
 Client: Wes Bergman  
 Attn: Wes Bergman  
 Street Address: 34300 Canfield Road  
 City: Palomar Mountain State: CA Zip: 92060  
 Phone: (951) 719-5574 Fax: -  
 Email Address: wes@palomarlandandcattle.com  
 Submission #:

Project Description: Annual Title 21  
 Project Code: Annual Title 21  
 Sampler(s):

Sample #	Sample Description	Date	Time	Matrix*
1	B-1	5/11/20	10:27	DW

Analysis Requested:  
 Title 21 Group Test  
 Low Level Bromide  
 Hardness

Notes:  
 \*Standard Turnaround = 30  
 Are there any tests with holding times? less than or equal to 48 hours?  
 Yes  NO

Matrix Types: S = Soil SL = Sludge DW = Drinking Water WW = Wastewater GW = Groundwater L = Liquid M = Miscellaneous O = Other

Turnaround # of working days:  24 Hr Rush  48 Hr Rush  3-5 Day Rush  Normal (10 - Days)

Lab TAT Approval: \_\_\_\_\_ \*Additional Charges May Apply

Global ID: \_\_\_\_\_

Cost Center:  
 1. Relinquished By: Wesley Bergman Date: 5/17/2020 Time: 1:00 PM  
 2. Relinquished By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 3. Relinquished By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Comments:  
 Note to client: Please fill out each sample description, sample time and date, and sign under relinquished by. Thanks

MBU Site   
 CXV RCRA   
 Geotracker 5 File (CA Default)   
 Geotracker 2 File   
 Other (Specify) \_\_\_\_\_

CHK BY: Wes Bergman  
 DISTRIBUTION IN: Wes Bergman  
 SUB OUT: X

SHORT HOLDING TIME  
 Cr<sup>6</sup> NO<sub>2</sub> NO<sub>3</sub> OP SS  
 DO Cl<sub>2</sub> BOD MBAS CO<sub>2</sub>

BC Laboratories, Inc. 4100 Atlas Court - Bakersfield CA 93308 (661) 327-4911 Fax: (661) 327-1918 www.bclabs.com

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BC LABORATORIES INC. COOLER RECEIPT FORM Page 1 of 1

Submission #: 20-13608

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

SHIPPING CONTAINER: Ice Chest  None  Box  Other  (Specify)

REFRIGERANT: Ice  Blue Ice  None  Other  Comments:

CUSTODY SEALS: Ice Chest  Containers  Intact? Yes  No  None  Comments: 2

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

COC Received:  YES  NO

Emissivity: 0.7 Container: 5 gallon Thermometer ID: Z14 Date/Time: 5/11/20

Temperature: (A) 23.4 °C / (C) 23.3 °C Analyst Init: TK

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT PE UNPRES	SKL									
4oz / 8oz / 16oz PE UNPRES	M									
3oz or 5 GALLON	A									
QT INORGANIC CHEMICAL METALS	ND									
INORGANIC CHEMICAL METALS 4oz / 8oz (16oz)	P									
PT CYANIDE	Q									
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PT PHENOLICS <sup>or</sup>	RS									
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	DEF									
QT EPA 1664										
PT ODOR	T									
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504	GHI									
QT EPA 8130/8080	V									
QT EPA 8151/8150	V									
QT EPA 525	W									
QT EPA 525 TRAVEL BLANK										
40ml EPA 547	B									
40ml EPA 531.1	C									
8oz EPA 548	X									
QT EPA 549	Y									
QT EPA 8015M										
QT EPA 8120 32oz Amber	Z "A"									
8oz / 16oz / 32oz AMBER HATS	"A-B"									
16oz / 16oz / 32oz Amber	"A-B"									
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SUMMA CANISTER										

Comments:

Sample Numbering Completed By: Cotm/ENR Date/Time: 5/11/20 10:28 Rev 21 05/23/2016

A = Actual / C = Corrected

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Palomar Land and Cattle  
34300 Canfield Road  
Palomar Mountain, CA 92060

**Reported:** 06/09/2020 13:11  
**Project:** Annual Title 21  
**Project Number:** Source Water  
**Project Manager:** Wes Bergman

### Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
2013608-01	<b>COC Number:</b>	---	<b>Receive Date:</b>	05/08/2020 09:00
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	05/11/2020 10:27
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	B-1	<b>Lab Matrix:</b>	Water
	<b>Sampled By:</b>	---	<b>Sample Type:</b>	Drinking Water

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Palomar Land and Cattle 34300 Canfield Road Palomar Mountain, CA 92060	<b>Reported:</b> 06/09/2020 13:11 Project: Annual Title 21 Project Number: Source Water Project Manager: Wes Bergman
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<b>BCL Sample ID:</b> 2013608-01	<b>Client Sample Name:</b> B-1, 5/11/2020 10:27:00AM
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Constituent	Method	Result	Units	Dilution	PQL	BW-MCL	Prep Date	Run Date/Time	Lab Quals
<b>Inorganics</b>									
Chloride	EPA-300.0	4.5	mg/L	1	0.50	250	05/11/20	05/12/20 00:29	
Fluoride	EPA-300.0	ND	mg/L	1	0.10	2.0	05/11/20	05/12/20 00:29	
Nitrate as N	EPA-300.0	0.16	mg/L	1	0.10	10	05/11/20	05/12/20 00:29	
Sulfate	EPA-300.0	8.7	mg/L	1	1.0	250	05/11/20	05/12/20 00:29	
Nitrate + Nitrite as N	Calc	0.16	mg/L	1	0.10	10	05/12/20	05/20/20 17:01	
Turbidity	EPA-180.1	0.68	NT Units	1	0.10	5	05/12/20	05/12/20 07:50	
Nitrite as N	EPA-353.2	ND	mg/L	1	0.050	1	05/11/20	05/11/20 23:32	
<b>Metals</b>									
Total Recoverable Aluminum	EPA-200.7	ND	mg/L	1	0.050	0.2	05/13/20	05/14/20 19:08	
Total Recoverable Antimony	EPA-200.8	ND	mg/L	1	0.0020	0.006	05/13/20	05/13/20 09:42	
Total Recoverable Arsenic	EPA-200.8	ND	mg/L	1	0.0020	0.010	05/13/20	05/13/20 09:42	
Total Recoverable Barium	EPA-200.7	0.016	mg/L	1	0.010	2	05/13/20	05/14/20 19:08	
Total Recoverable Beryllium	EPA-200.8	ND	mg/L	1	0.0010	0.004	05/13/20	05/13/20 09:42	
Total Recoverable Cadmium	EPA-200.8	ND	mg/L	1	0.0010	0.005	05/13/20	05/13/20 09:42	
Total Recoverable Chromium	EPA-200.7	ND	mg/L	1	0.010	0.1	05/13/20	05/14/20 19:08	
Total Recoverable Copper	EPA-200.7	ND	mg/L	1	0.010	1.0	05/13/20	05/14/20 19:08	
Total Recoverable Iron	EPA-200.7	0.094	mg/L	1	0.050	0.3	05/13/20	05/14/20 19:08	
Total Recoverable Lead	EPA-200.8	ND	mg/L	1	0.0010	0.005	05/13/20	05/13/20 09:42	
Total Recoverable Manganese	EPA-200.7	0.017	mg/L	1	0.010	0.05	05/13/20	05/14/20 19:08	
Total Recoverable Mercury	EPA-245.1	ND	ug/L	1	0.20	2	05/18/20	05/18/20 14:10	
Total Recoverable Nickel	EPA-200.7	ND	mg/L	1	0.010	0.1	05/13/20	05/14/20 19:08	
Total Recoverable Selenium	EPA-200.8	ND	mg/L	1	0.0020	0.05	05/13/20	05/13/20 09:42	
Total Recoverable Silver	EPA-200.7	ND	mg/L	1	0.010	0.1	05/13/20	05/14/20 19:08	
Total Recoverable Thallium	EPA-200.8	ND	mg/L	1	0.0010	0.002	05/13/20	05/13/20 09:42	
Total Recoverable Zinc	EPA-200.7	ND	mg/L	1	0.050	5.0	05/13/20	05/14/20 19:08	
<b>Organics</b>									
1,2-Dibromo-3-chloropropane	EPA-504.1	ND	ug/L	0.946	0.010	0.2	05/19/20	05/19/20 16:15	
Ethylene dibromide	EPA-504.1	ND	ug/L	0.946	0.010	0.05	05/19/20	05/19/20 16:15	
Aldrin	EPA-508	ND	ug/L	1	0.0050	n/a	05/18/20	05/20/20 07:47	
alpha-BHC	EPA-508	ND	ug/L	1	0.0050	n/a	05/18/20	05/20/20 07:47	
beta-BHC	EPA-508	ND	ug/L	1	0.0050	n/a	05/18/20	05/20/20 07:47	
delta-BHC	EPA-508	ND	ug/L	1	0.0050	n/a	05/18/20	05/20/20 07:47	
gamma-BHC (Lindane)	EPA-508	ND	ug/L	1	0.0050	0.2	05/18/20	05/20/20 07:47	

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Palomar Land and Cattle 34300 Canfield Road Palomar Mountain, CA 92060	<b>Reported:</b> 06/09/2020 13:11 Project: Annual Title 21 Project Number: Source Water Project Manager: Wes Bergman
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BCL Sample ID:	2013608-01	Client Sample Name:	B-1, 5/11/2020 10:27:00AM						
Constituent	Method	Result	Units	Dilution	PQL	BW-MCL	Prep Date	Run Date/Time	Lab Quals
<b>Organics</b>									
Chlordane (Technical)	EPA-508	ND	ug/L	1	0.10	2	05/18/20	05/20/20 07:47	
4,4'-DDD	EPA-508	ND	ug/L	1	0.0050	n/a	05/18/20	05/20/20 07:47	
4,4'-DDE	EPA-508	ND	ug/L	1	0.0050	n/a	05/18/20	05/20/20 07:47	
4,4'-DDT	EPA-508	ND	ug/L	1	0.0050	n/a	05/18/20	05/20/20 07:47	
Dieldrin	EPA-508	ND	ug/L	1	0.0050	n/a	05/18/20	05/20/20 07:47	
Endosulfan I	EPA-508	ND	ug/L	1	0.0050	n/a	05/18/20	05/20/20 07:47	
Endosulfan II	EPA-508	ND	ug/L	1	0.0050	n/a	05/18/20	05/20/20 07:47	
Endosulfan sulfate	EPA-508	ND	ug/L	1	0.0050	n/a	05/18/20	05/20/20 07:47	
Endrin	EPA-508	ND	ug/L	1	0.0050	2	05/18/20	05/20/20 07:47	
Endrin aldehyde	EPA-508	ND	ug/L	1	0.010	n/a	05/18/20	05/20/20 07:47	
Heptachlor	EPA-508	ND	ug/L	1	0.0050	0.4	05/18/20	05/20/20 07:47	
Heptachlor epoxide	EPA-508	ND	ug/L	1	0.0050	0.2	05/18/20	05/20/20 07:47	
Methoxychlor	EPA-508	ND	ug/L	1	0.0050	40	05/18/20	05/20/20 07:47	
Toxaphene	EPA-508	ND	ug/L	1	1.0	3	05/18/20	05/20/20 07:47	
PCB-1016	EPA-508	ND	ug/L	1	0.20	n/a	05/18/20	05/20/20 07:47	
PCB-1221	EPA-508	ND	ug/L	1	0.20	n/a	05/18/20	05/20/20 07:47	
PCB-1232	EPA-508	ND	ug/L	1	0.20	n/a	05/18/20	05/20/20 07:47	
PCB-1242	EPA-508	ND	ug/L	1	0.20	n/a	05/18/20	05/20/20 07:47	
PCB-1248	EPA-508	ND	ug/L	1	0.20	n/a	05/18/20	05/20/20 07:47	
PCB-1254	EPA-508	ND	ug/L	1	0.20	n/a	05/18/20	05/20/20 07:47	
PCB-1260	EPA-508	ND	ug/L	1	0.20	n/a	05/18/20	05/20/20 07:47	
Total PCB's (Summation)	EPA-508	ND	ug/L	1	0.20	0.5	05/18/20	05/20/20 07:47	
TCMX (Surrogate)	EPA-508	61.7	%	1	60 - 130 (LCL - UCL)		05/18/20	05/20/20 07:47	
Bentazon	EPA-515.1	ND	ug/L	1	0.80	n/a	05/13/20	05/15/20 04:01	
2,4-D	EPA-515.1	ND	ug/L	1	0.40	70	05/13/20	05/15/20 04:01	
Dalapon	EPA-515.1	ND	ug/L	1	5.0	200	05/13/20	05/15/20 04:01	
Dinoseb	EPA-515.1	ND	ug/L	1	0.20	7	05/13/20	05/15/20 04:01	
2,4,5-TP (Silvex)	EPA-515.1	ND	ug/L	1	0.070	50	05/13/20	05/15/20 04:01	
2,4-Dichlorophenylacetic acid (Surrogate)	EPA-515.1	70.0	%	1	40 - 120 (LCL - UCL)		05/13/20	05/15/20 04:01	
Benzene	EPA-524.2	ND	ug/L	1	0.50	5	05/12/20	05/12/20 12:39	
Bromobenzene	EPA-524.2	ND	ug/L	1	0.50	n/a	05/12/20	05/12/20 12:39	
Bromochloromethane	EPA-524.2	ND	ug/L	1	0.50	n/a	05/12/20	05/12/20 12:39	
Bromodichloromethane	EPA-524.2	ND	ug/L	1	0.50	n/a	05/12/20	05/12/20 12:39	
Bromoform	EPA-524.2	ND	ug/L	1	0.50	n/a	05/12/20	05/12/20 12:39	
Bromomethane	EPA-524.2	ND	ug/L	1	0.50	n/a	05/12/20	05/12/20 12:39	

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BCL Sample ID: 2013608-01		Client Sample Name: B-1, 5/11/2020 10:27:00AM							
Constituent	Method	Result	Units	Dilution	PQL	BW-MCL	Prep Date	Run Date/Time	Lab Quals
<b>Organics</b>									
n-Butylbenzene	EPA-524.2	ND	ug/L	1	0.50	n/a	05/12/20	05/12/20 12:39	
sec-Butylbenzene	EPA-524.2	ND	ug/L	1	0.50	n/a	05/12/20	05/12/20 12:39	
tert-Butylbenzene	EPA-524.2	ND	ug/L	1	0.50	n/a	05/12/20	05/12/20 12:39	
Carbon tetrachloride	EPA-524.2	ND	ug/L	1	0.50	5	05/12/20	05/12/20 12:39	
Chlorobenzene	EPA-524.2	ND	ug/L	1	0.50	100	05/12/20	05/12/20 12:39	
Chloroethane	EPA-524.2	ND	ug/L	1	0.50	n/a	05/12/20	05/12/20 12:39	
Chloroform	EPA-524.2	ND	ug/L	1	0.50	n/a	05/12/20	05/12/20 12:39	
Chloromethane	EPA-524.2	ND	ug/L	1	0.50	n/a	05/12/20	05/12/20 12:39	
2-Chlorotoluene	EPA-524.2	ND	ug/L	1	0.50	n/a	05/12/20	05/12/20 12:39	
4-Chlorotoluene	EPA-524.2	ND	ug/L	1	0.50	n/a	05/12/20	05/12/20 12:39	
Dibromochloromethane	EPA-524.2	ND	ug/L	1	0.50	n/a	05/12/20	05/12/20 12:39	
1,2-Dibromo-3-chloropropane	EPA-524.2	ND	ug/L	1	1.0	0.2	05/12/20	05/12/20 12:39	
1,2-Dibromoethane	EPA-524.2	ND	ug/L	1	0.50	n/a	05/12/20	05/12/20 12:39	
Dibromomethane	EPA-524.2	ND	ug/L	1	0.50	n/a	05/12/20	05/12/20 12:39	
1,2-Dichlorobenzene	EPA-524.2	ND	ug/L	1	0.50	600	05/12/20	05/12/20 12:39	
1,3-Dichlorobenzene	EPA-524.2	ND	ug/L	1	0.50	n/a	05/12/20	05/12/20 12:39	
1,4-Dichlorobenzene	EPA-524.2	ND	ug/L	1	0.50	75	05/12/20	05/12/20 12:39	
Dichlorodifluoromethane	EPA-524.2	ND	ug/L	1	0.50	n/a	05/12/20	05/12/20 12:39	
1,1-Dichloroethane	EPA-524.2	ND	ug/L	1	0.50	n/a	05/12/20	05/12/20 12:39	
1,2-Dichloroethane	EPA-524.2	ND	ug/L	1	0.50	5	05/12/20	05/12/20 12:39	
1,1-Dichloroethene	EPA-524.2	ND	ug/L	1	0.50	7	05/12/20	05/12/20 12:39	
cis-1,2-Dichloroethene	EPA-524.2	ND	ug/L	1	0.50	70	05/12/20	05/12/20 12:39	
trans-1,2-Dichloroethene	EPA-524.2	ND	ug/L	1	0.50	100	05/12/20	05/12/20 12:39	
1,2-Dichloropropane	EPA-524.2	ND	ug/L	1	0.50	5	05/12/20	05/12/20 12:39	
1,3-Dichloropropane	EPA-524.2	ND	ug/L	1	0.50	n/a	05/12/20	05/12/20 12:39	
2,2-Dichloropropane	EPA-524.2	ND	ug/L	1	0.50	n/a	05/12/20	05/12/20 12:39	
1,1-Dichloropropene	EPA-524.2	ND	ug/L	1	0.50	n/a	05/12/20	05/12/20 12:39	
cis-1,3-Dichloropropene	EPA-524.2	ND	ug/L	1	0.50	n/a	05/12/20	05/12/20 12:39	
trans-1,3-Dichloropropene	EPA-524.2	ND	ug/L	1	0.50	n/a	05/12/20	05/12/20 12:39	
Total 1,3-Dichloropropene	EPA-524.2	ND	ug/L	1	0.50	n/a	05/12/20	05/12/20 12:39	
Ethylbenzene	EPA-524.2	ND	ug/L	1	0.50	700	05/12/20	05/12/20 12:39	
Hexachlorobutadiene	EPA-524.2	ND	ug/L	1	0.50	n/a	05/12/20	05/12/20 12:39	
Isopropylbenzene	EPA-524.2	ND	ug/L	1	0.50	n/a	05/12/20	05/12/20 12:39	
p-Isopropyltoluene	EPA-524.2	ND	ug/L	1	0.50	n/a	05/12/20	05/12/20 12:39	
Methylene chloride	EPA-524.2	3.4	ug/L	1	0.50	n/a	05/12/20	05/12/20 12:39	

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BCL Sample ID:	2013608-01	Client Sample Name:	B-1, 5/11/2020 10:27:00AM						
Constituent	Method	Result	Units	Dilution	PQL	BW-MCL	Prep Date	Run Date/Time	Lab Quals
<b>Organics</b>									
Methyl t-butyl ether	EPA-524.2	ND	ug/L	1	0.50	n/a	05/12/20	05/12/20 12:39	
Naphthalene	EPA-524.2	ND	ug/L	1	0.50	n/a	05/12/20	05/12/20 12:39	V11
n-Propylbenzene	EPA-524.2	ND	ug/L	1	0.50	n/a	05/12/20	05/12/20 12:39	
Styrene	EPA-524.2	ND	ug/L	1	0.50	100	05/12/20	05/12/20 12:39	
1,1,1,2-Tetrachloroethane	EPA-524.2	ND	ug/L	1	0.50	n/a	05/12/20	05/12/20 12:39	
1,1,2,2-Tetrachloroethane	EPA-524.2	ND	ug/L	1	0.50	n/a	05/12/20	05/12/20 12:39	
Tetrachloroethene	EPA-524.2	ND	ug/L	1	0.50	5	05/12/20	05/12/20 12:39	
Toluene	EPA-524.2	ND	ug/L	1	0.50	1000	05/12/20	05/12/20 12:39	
1,2,3-Trichlorobenzene	EPA-524.2	ND	ug/L	1	0.50	n/a	05/12/20	05/12/20 12:39	V11
1,2,4-Trichlorobenzene	EPA-524.2	ND	ug/L	1	0.50	70	05/12/20	05/12/20 12:39	V11
1,1,1-Trichloroethane	EPA-524.2	ND	ug/L	1	0.50	200	05/12/20	05/12/20 12:39	
1,1,2-Trichloroethane	EPA-524.2	ND	ug/L	1	0.50	5	05/12/20	05/12/20 12:39	
Trichloroethene	EPA-524.2	ND	ug/L	1	0.50	5	05/12/20	05/12/20 12:39	
Trichlorofluoromethane	EPA-524.2	ND	ug/L	1	0.50	n/a	05/12/20	05/12/20 12:39	
1,2,3-Trichloropropane	EPA-524.2	ND	ug/L	1	1.0	n/a	05/12/20	05/12/20 12:39	
1,1,2-Trichloro-1,2,2-trifluoroethane	EPA-524.2	ND	ug/L	1	0.50	n/a	05/12/20	05/12/20 12:39	
1,2,4-Trimethylbenzene	EPA-524.2	ND	ug/L	1	0.50	n/a	05/12/20	05/12/20 12:39	
1,3,5-Trimethylbenzene	EPA-524.2	ND	ug/L	1	0.50	n/a	05/12/20	05/12/20 12:39	
Vinyl chloride	EPA-524.2	ND	ug/L	1	0.50	2	05/12/20	05/12/20 12:39	
Total Xylenes	EPA-524.2	ND	ug/L	1	0.50	10000	05/12/20	05/12/20 12:39	
Total Trihalomethanes	EPA-524.2	ND	ug/L	1	2.0	10	05/12/20	05/12/20 12:39	
t-Amyl Methyl ether	EPA-524.2	ND	ug/L	1	0.50	n/a	05/12/20	05/12/20 12:39	
t-Butyl alcohol	EPA-524.2	ND	ug/L	1	10	n/a	05/12/20	05/12/20 12:39	
Ethyl t-butyl ether	EPA-524.2	ND	ug/L	1	0.50	n/a	05/12/20	05/12/20 12:39	
p- & m-Xylenes	EPA-524.2	ND	ug/L	1	0.50	n/a	05/12/20	05/12/20 12:39	
o-Xylene	EPA-524.2	ND	ug/L	1	0.50	n/a	05/12/20	05/12/20 12:39	
1,2-Dichloroethane-d4 (Surrogate)	EPA-524.2	110	%	1	75 - 125 (LCL - UCL)		05/12/20	05/12/20 12:39	
Toluene-d8 (Surrogate)	EPA-524.2	101	%	1	80 - 120 (LCL - UCL)		05/12/20	05/12/20 12:39	
4-Bromofluorobenzene (Surrogate)	EPA-524.2	81.1	%	1	80 - 120 (LCL - UCL)		05/12/20	05/12/20 12:39	
Acenaphthylene	EPA-525.2	ND	ug/L	1	0.10	n/a	05/12/20	05/14/20 11:20	
Alachlor	EPA-525.2	ND	ug/L	1	0.20	2	05/12/20	05/14/20 11:20	
Anthracene	EPA-525.2	ND	ug/L	1	0.10	n/a	05/12/20	05/14/20 11:20	
Atraton	EPA-525.2	ND	ug/L	1	0.50	n/a	05/12/20	05/14/20 11:20	
Atrazine	EPA-525.2	ND	ug/L	1	0.30	3	05/12/20	05/14/20 11:20	
Benzo[a]anthracene	EPA-525.2	ND	ug/L	1	0.20	n/a	05/12/20	05/14/20 11:20	

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Palomar Land and Cattle
34300 Canfield Road
Palomar Mountain, CA 92060

Reported: 06/09/2020 13:11
Project: Annual Title 21
Project Number: Source Water
Project Manager: Wes Bergman

Table with 2 columns: BCL Sample ID (2013608-01) and Client Sample Name (B-1, 5/11/2020 10:27:00AM)

Table with 10 columns: Constituent, Method, Result, Units, Dilution, PQL, BW-MCL, Prep Date, Run Date/Time, Lab Quals

Organics

Main data table listing various organic compounds like Benzo[b]fluoranthene, Benzo[k]fluoranthene, etc., with their respective test results and methods.

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Table with 10 columns: Constituent, Method, Result, Units, Dilution, PQL, BW-MCL, Prep Date, Run Date/Time, Lab Quads

Organics

Table listing organic compounds: Propoxur, Carbaryl, Carbofuran, 3-Hydroxycarbofuran, Methiocarb, Methomyl, Oxamyl, BDMC (Surrogate), Endothal, Diquat

Uncategorized

Table listing various chemical and physical parameters: Decachlorobiphenyl (Surrogate), Pentachlorophenol, Picloram, Diisopropyl ether, bis(2-Ethylhexyl)phthalate, 1,3-Dimethyl-2-nitrobenzene (Surrogate), Triphenylphosphate (Surrogate), Pyrene-d10 (Surrogate), 1-Naphthol, Glyphosate, Dibromoacetic acid, Dichloroacetic acid, Monobromoacetic acid, Monochloroacetic acid, Trichloroacetic acid, Total HAA's (Summation), 2,3-Dibromopropionic acid (Surrogate), Total Recoverable Calcium, Total Recoverable Magnesium, Total Recoverable Sodium, Total Recoverable Potassium, Bicarbonate Alkalinity as CaCO3, Carbonate Alkalinity as CaCO3

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Palomar Land and Cattle  
34300 Canfield Road  
Palomar Mountain, CA 92060

**Reported:** 06/09/2020 13:11  
**Project:** Annual Title 21  
**Project Number:** Source Water  
**Project Manager:** Wes Bergman

<b>BCL Sample ID:</b> 2013608-01	<b>Client Sample Name:</b> B-1, 5/11/2020 10:27:00AM
----------------------------------	--

Constituent	Method	Result	Units	Dilution	PQL	BW-MCL	Prep Date	Run Date/Time	Lab Quals
<b>Uncategorized</b>									
Hydroxide Alkalinity as CaCO3	SM-2320B	ND	mg/L	1	4.1	n/a	05/15/20	05/15/20 21:03	
Total Alkalinity as CaCO3	SM-2320B	66	mg/L	1	4.1	n/a	05/15/20	05/15/20 21:03	
pH	SM-4500H B	7.25	pH Units	1	0.05	n/a	05/15/20	05/15/20 21:03	S05
Total Dissolved Solids @ 180 C	SM-2540C	120	mg/L	0.500	5.0	n/a	05/13/20	05/13/20 14:00	
Color	SM-2120B	1.0	Color Units	1	1.0	n/a	05/12/20	05/12/20 07:50	
Odor	SM-2150B	No Obs Odor	Odor Units	1	1.0	n/a	05/12/20	05/12/20 07:50	
Chloramine as Cl2	SM-4500-C LF	ND	mg/L	1	0.10	n/a	05/11/20	05/11/20 14:00	S05
Residual Chlorine	SM-4500-C LF	ND	mg/L	1	0.10	n/a	05/11/20	05/11/20 14:00	S05
Chlorine dioxide	SM-4500-C IO2-B	ND	mg/L	1	0.20	n/a	05/11/20	05/11/20 14:30	S05
Total Cyanide	EPA-335.4	ND	mg/L	1	0.0050	n/a	05/13/20	05/14/20 15:50	

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

**ADE1368**  
5/28/2020  
Invoice: AD10146

Felicia Johnson  
BC Laboratories  
4100 Atlas Court  
Bakersfield, CA 93308

**RE: Report for ADE1368 General: Project Manager-Felicia Johnson**

Dear Felicia Johnson,

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 5/13/2020. 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, Sarah K. Guenther, at 559-497-2888.

Thank you 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 #4021-009

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ADE1368 FINAL 05282020 0905

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**ADE1368**

General: Project Manager-Felicia Johnson

**Case Narrative**

**Project and Report Details Invoice Details**

**Client:** BC Laboratories  
**Report To:** Felicia Johnson  
**Project #:** 2013608  
**Received:** 5/13/2020 - 15:59  
**Report Due:** 5/28/2020

**Invoice To:** BC Laboratories  
**Invoice Attn:** Felicia Johnson  
**Project PO#:** -

**Sample Receipt Conditions**

**Cooler:** Default Cooler  
**Temperature on Receipt °C:** 2.2

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:

SC1.41 Sample was received without chemical preservation. Sample volume was split and preserved by the laboratory.

**Report Distribution**

Recipient(s)	Report Format	CC:
Felicia Johnson	FINAL.RPT	
Felicia Johnson	FINAL.RPT	sguenther@bskassociates.com;johnw@bclabs.com

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ADE1368 FINAL 05282020 0905



**ADE1368**

General: Project Manager-Felicia Johnson

2013608

**Certificate of Analysis**

Sample ID: ADE1368-01  
Sampled By: Client  
Sample Description: 2013608-01

Sample Date - Time: 05/11/2020 - 10:27  
Matrix: Bottled Water  
Sample Type: Grab

**BSK Associates Laboratory Fresno  
General Chemistry**

Analyte	Method	Result	RL	Units	RL Mult	Batch	Prepared	Analyzed	Qual
Bromate	EPA 317.0	ND	0.0010	mg/L	1	ADE0981	05/26/20	05/26/20	SC1.41
Bromide	EPA 300.1	0.024	0.0050	mg/L	1	ADE0841	05/18/20	05/18/20	
Surrogate: Dichloroacetate	EPA 300.1	108 %	Acceptable range: 90-115 %						
Chlorite	EPA 300.1	ND	0.0050	mg/L	1	ADE0841	05/18/20	05/18/20	SC1.41
Surrogate: Dichloroacetate	EPA 300.1	108 %	Acceptable range: 90-115 %						

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ADE1368

General: Project Manager-Felicia Johnson

BSK Associates Laboratory Fresno
General Chemistry Quality Control Report

Table with 11 columns: Analyte, Result, RL, Units, Spike Level, Source Result, %REC, %REC Limits, RPD, RPD Limit, Date Analyzed, Qual

EPA 300.1 - Quality Control

Batch: ADE0841

Prepared: 5/18/2020

Prep Method: Method Specific Preparation

Analyst: RES

Blank (ADE0841-BLK1)

Table with 11 columns for Chlorite, Bromide, and Surrogate: Dichloroacetate results.

Blank Spike (ADE0841-BS1)

Table with 11 columns for Chlorite, Bromide, and Surrogate: Dichloroacetate results.

Blank Spike Dup (ADE0841-BS1)

Table with 11 columns for Chlorite, Bromide, and Surrogate: Dichloroacetate results.

Matrix Spike (ADE0841-MS1), Source: ADE1368-01

Table with 11 columns for Chlorite, Bromide, and Surrogate: Dichloroacetate results.

Matrix Spike (ADE0841-MS2), Source: ADE0895-07

Table with 11 columns for Chlorite, Bromide, and Surrogate: Dichloroacetate results.

Matrix Spike Dup (ADE0841-MSD1), Source: ADE1368-01

Table with 11 columns for Chlorite, Bromide, and Surrogate: Dichloroacetate results.

Matrix Spike Dup (ADE0841-MSD2), Source: ADE0895-07

Table with 11 columns for Chlorite, Bromide, and Surrogate: Dichloroacetate results.

EPA 317.0 - Quality Control

Batch: ADE0981

Prepared: 5/26/2020

Prep Method: Method Specific Preparation

Analyst: DXR

Blank (ADE0981-BLK1)

Table with 11 columns for Bromate results.

Blank Spike (ADE0981-BS1)

Table with 11 columns for Bromate results.

Blank Spike Dup (ADE0981-BS1)

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ADE1368 FINAL 05282020 0905



**ADE1368**

General: Project Manager-Felicia Johnson

**BSK Associates Laboratory Fresno  
General Chemistry Quality Control Report**

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Date Analyzed	Qual
---------	--------	----	-------	-------------	---------------	------	-------------	-----	-----------	---------------	------

**EPA 317.0 - Quality Control**

Batch: ADE0981

Prepared: 5/26/2020

Prep Method: Method Specific Preparation

Analyst: DXR

**Blank Spike Dup (ADE0981-BSD1)**

Bromate	0.010	0.0010	mg/L	0.010	ND	104	85-115	5	10	05/26/20	
---------	-------	--------	------	-------	----	-----	--------	---	----	----------	--

**Matrix Spike (ADE0981-MS1), Source: ADE1368-01**

Bromate	0.0096	0.0010	mg/L	0.010	ND	96	75-125			05/26/20	
---------	--------	--------	------	-------	----	----	--------	--	--	----------	--

**Matrix Spike Dup (ADE0981-MSD1), Source: ADE1368-01**

Bromate	0.0097	0.0010	mg/L	0.010	ND	97	75-125	1	10	05/26/20	
---------	--------	--------	------	-------	----	----	--------	---	----	----------	--

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ADE1368

General: Project Manager-Felicia Johnson

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.
Field tests are outside the scope of laboratory accreditation and there is no certification available for field testing.
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.
(2) - Formerly known as Bis(2-Chloroisopropyl) ether.

Definitions

Table with 4 columns: Unit/Code, Definition, Unit/Code, Definition. Includes mg/L, mg/Kg, ug/L, ug/Kg, %, NR, MDL, RL, ND, pCi/L, RL Mult, MCL, MDA95, MPN, CFU, Absent, Present, U.

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

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

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ADE1368 FINAL 05282020 0905



**ADE1368**

*General: Project Manager-Felicia Johnson*

**Certificate of Analysis**

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

	2435		
<b>Fresno</b>			
State of California - ELAP	1180	State of Hawaii	4021
Los Angeles CSD	9254479	NELAP certified	4021-014
State of Nevada	CA000792020-2	State of Oregon - NELAP	4021-014
EPA - UCMR4	CA00079	State of Washington	C997-20
<b>San Bernardino</b>			
State of California - ELAP	2993	Los Angeles CSD	9254478
NELAP certified	4119-004	State of Oregon - NELAP	4119-004
<b>Vancouver</b>			
NELAP certified	WA100008-012	State of Oregon - NELAP	WA100008-013
State of Washington	C824-19		

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BSK Associates SR-FL-0002-20

ADE1368 BCLab4911 05/13/2020



10

Sample Integrity

BSK Bottles: Yes No Page 1 of 1

COC Info	Is temperature within range? Chemistry $\leq 6^{\circ}\text{C}$ Micro $< 8^{\circ}\text{C}$	Yes	No	NA	Are correct containers and preservatives received for the tests requested?	Yes	No	NA
	If samples were taken today, is there evidence that chilling has begun?	Yes	No	NA	Bubbles Present in VOA (524.2/TCP/TTHM)? TB Received? (Check Method Below)	Yes	No	NA
	Did all bottles arrive unbroken and intact?	Yes	No		Is sufficient amount of sample received?	Yes	No	
	Do all bottle labels agree with COC?	Yes	No		Do samples have a hold time <72 hours?	Yes	No	
Bottles Received	Was sodium thiosulfate added to CN sample(s) until chlorine was no longer present?	Yes	No	NA	Has PM been notified of discrepancies? PM: By/Time:	Yes	No	NA
	250mL(A) 500mL(B) 1Liter(C) 40mL VOA(V) 125mL(D)	Checks	Passed?					
	Bacti $\text{Na}_2\text{S}_2\text{O}_3$	—	—					
	None (P) White Cap	—	—	ICA				
	Cr6 (P) Lt. Green Label/Blue Cap $\text{NH}_4\text{OH}/\text{NH}_4\text{ZSO}_4$ DW	Cl, pH > 8	P	F				
	Cr6 (P) Pink Label/Blue Cap $\text{NH}_4\text{OH}/\text{NH}_4\text{ZSO}_4$ WW	pH 9.3-9.7	P	F				
	Cr6 (P) Black Label/Blue Cap $\text{NH}_4\text{OH}/\text{NH}_4\text{ZSO}_4$ 7199 ***24 HOUR HOLD TIME***	pH 9.0-9.5	P	F				
	$\text{HNO}_3$ (P) Red Cap or HCl (P) Purple Cap/Lt. Blue Label	—	—					
	$\text{H}_2\text{SO}_4$ (P) or (AG) Yellow Cap/Label	pH < 2	P	F				
	NaOH (P) Green Cap	Cl, pH > 10	P	F				
	NaOH + ZnAc (P)	pH > 9	P	F				
	Dissolved Oxygen 300ml (g)	—	—					
	None (AG) 608/8081/8052, 625, 632/8321, 8151, 8270	—	—					
	HCl (AG) Lt. Blue Label O&G, Diesel, TCP	—	—					
	Ascorbic, EDTA, $\text{KH}_2\text{Ct}$ (AG) Pink Label 525	—	—					
	$\text{Na}_2\text{SO}_3$ 250mL (AG) Neon Green Label 515	—	—					
	$\text{Na}_2\text{S}_2\text{O}_3$ 1 Liter (Brown P) 549	—	—					
	$\text{Na}_2\text{S}_2\text{O}_3$ (AG) Blue Label 548, THM, 524	—	—					
	$\text{Na}_2\text{S}_2\text{O}_3$ (CG) Blue Label 504, 505, 547	—	—					
	$\text{Na}_2\text{S}_2\text{O}_3$ + MCAA (CG) Orange Label 531	pH < 3	P	F				
	$\text{NH}_4\text{Cl}$ (AG) Purple Label 552	—	—					
	EDA (AG) Brown Label DBPs	—	—	IA				
	HCL (CG) 524.2, BTEX, Gas, MTBE, 8260/624	—	—					
	Buffer pH 4 (CG)	—	—					
	$\text{H}_3\text{PO}_4$ (CG) Salmon Label	—	—					
	Trizma - EPA 537.1	—	—					
	Other:							
	Asbestos 1L (P) w/ Foil / LL Metals Bottle	—	—					
Bottled Water	—	—						
Clear Glass 125mL / 250mL / 500mL / 1 Liter	—	—						
Solids: Brass / Steel / Plastic Bag	—	—						
Split	Container	Preservative	Date/Time/Initials	Container	Preservative	Date/Time/Initials		
	S P	IA	EDTA 5/13/2020/16:02/VUE	S P				
Comments	✓ Indicates Blanks Received							
	504 __ 524.2 __ TCP __ TTHM __ 537 __ 8260/624 __							

VUE 5-13-2020

Scanned: [Signature]

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# Laboratories, Inc.

Environmental Testing Laboratory Since 1949



2-2#55  
PMS  
WIRBW

### SUBCONTRACT ORDER

BC Laboratories  
2013608

ADE1368 BCLab4911 05/13/2020



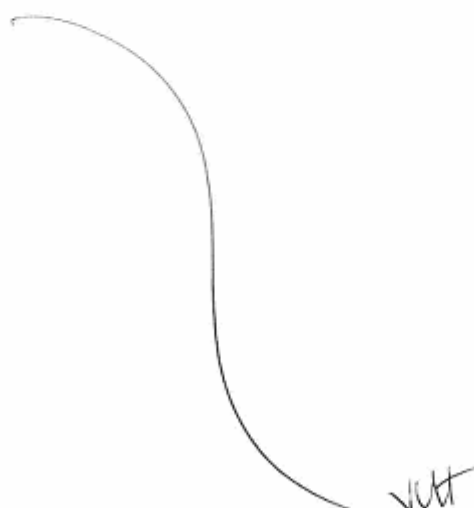
#### SENDING LABORATORY:

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

#### RECEIVING LABORATORY:

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

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: 2013608-01	Water	Sampled:05/11/20 10:27		Bottle Water
oi300.1w Chlorite BSKSA	05/22/20 17:00	05/25/20 10:27		
oi300.1w Bromide Low Level BSKSA	05/22/20 17:00	06/08/20 10:27		
oi300.0w Bromate (ug/L) BSKSA	05/22/20 17:00	06/08/20 10:27		
Containers Supplied: PAT PE x2 / 802 AG				



Released By: [Signature] Date: 5-13-20 Received By: [Signature] Date: 5-13-20 15:59

Released By: \_\_\_\_\_ Date: \_\_\_\_\_ Received By: \_\_\_\_\_ Date: \_\_\_\_\_

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.



May 19, 2020

FAL Project 13120

Ms. Felicia Johnson  
BC Laboratories  
4100 Atlas Court  
Bakersfield, CA 93308

Dear Ms. Johnson,

The following results are associated with Frontier Analytical Laboratory project 13120. This corresponds to your subcontract order number 2013608. One drinking water sample was received on 5/14/2020 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 13120.

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 enclosed results are specifically for the sample referenced in this report only. These results shall not be reproduced except in full. Frontier Analytical Laboratory's State of Oregon NELAP certificate number is 4041. Our State of California ELAP certificate number is 2934. This report has been emailed to you as a portable document file (PDF). A hardcopy of this report will not be sent to you unless specifically requested.

If you have any questions regarding project 13120, please feel free to 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 Hillside Circle \* El Dorado Hills, CA 95762

Tel (916) 934-0900 \* Fax (916) 934-0999

www.frontieranalytical.com

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Frontier Analytical Laboratory

Sample Tracking Log

FAL Project ID: 13120

Received on: 05/14/2020

Project Due: 06/05/2020

Storage: R-4

FAL Sample ID	Dup	Client Project ID	Client Sample ID	Requested Method	Matrix	Sampling Date	Sampling Time	Hold Time Due Date
13120-001-SA	1	2013608	2013608-01	EPA 1613 TCDD	Drinking Water	05/11/2020	10:27 am	05/11/2021

000002 of 000008

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EPA Method 1613 TCDD



FAL ID: 13120-001-MB  
Client ID: Method Blank  
Matrix: Drinking Water  
Batch No: X5324

Date Extracted: 05-15-2020  
Date Received: NA  
Amount: 1.000 L

ICal: PCDDFAL3-3-23-20  
GC Column: DB5MS  
Units: pg/L


Acquired: 05-15-2020  
WHO TEQ: NA

Compound	Conc	DL	Qual	MDL
2,3,7,8-TCDD	ND	0.539		0.368

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	90.5	31.0 - 137	

Cleanup Surrogate	% Rec	QC Limits	Qual
37Cl-2,3,7,8-TCDD	99.3	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: 5/19/2020

Reviewed By:   
Date: 5/19/2020

000003 of 000008

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

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EPA Method 1613  
TCDD



FAL ID: 13120-001-OPR  
Client ID: OPR  
Matrix: Drinking Water  
Batch No: X5324

Date Extracted: 05-15-2020  
Date Received: NA  
Amount: 1.000 L

ICal: PCDDFAL3-3-23-20  
GC Column: DB5MS  
Units: ng/ml

Acquired: 05-15-2020  
WHO TEQ: NA

Compound	Conc	QC Limits
2,3,7,8-TCDD	11.9	7.30 - 14.6
Internal Standards		
13C-2,3,7,8-TCDD	87.9	25.0 - 141
Cleanup Surrogate		
37Cl-2,3,7,8-TCDD	99.5	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: 5/19/2020

Reviewed By:   
Date: 5/19/2020

000004 of 000008

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

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EPA Method 1613  
TCDD



FAL ID: 13120-001-SA  
Client ID: 2013608-01  
Matrix: Drinking Water  
Batch No: X5324

Date Extracted: 05-15-2020  
Date Received: 05-14-2020  
Amount: 0.968 L

ICal: PCDDFAL3-3-23-20  
GC Column: DB5MS  
Units: pg/L


Acquired: 05-15-2020  
WHO TEQ: NA

Compound	Conc	DL	Qual	MDL
2,3,7,8-TCDD	ND	0.561		0.368

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	88.6	31.0 - 137	

Cleanup Surrogate		
37Cl-2,3,7,8-TCDD	103	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: 5/19/2020

Reviewed By:   
Date: 5/19/2020

000005 of 000008

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

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**SUBCONTRACT ORDER**  
**BC Laboratories**  
**2013608**

**SENDING LABORATORY:**

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

**RECEIVING LABORATORY:**

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

13120  
O'C  
FRNTL

Analysis	Due	Expires	Comments
Sample ID: 2013608-01	Water	Sampled: 05/11/20 10:27	Bottle Water
EPA 1613B - 2,3,7,8-TCDD	05/22/20 17:00	05/10/21 10:27	
Containers supplied: 2x Col AG			

Released By [Signature] Date 5-13-20
 Received By [Signature] Date 5-14-20 @ 10:50

Released By \_\_\_\_\_ Date \_\_\_\_\_ Received By \_\_\_\_\_ Date \_\_\_\_\_ 000006 of 000008

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**Frontier Analytical Laboratory**

**Sample Login Form**

FAL Project ID: 13120

Client:	BC Laboratories, Inc
Client Project ID:	2013608
Date Received:	05/14/2020
Time Received:	10:50 am
Received By:	KZ
Logged In By:	KZ
# of Samples Received:	1
Duplicates:	1
Storage Location:	R-4

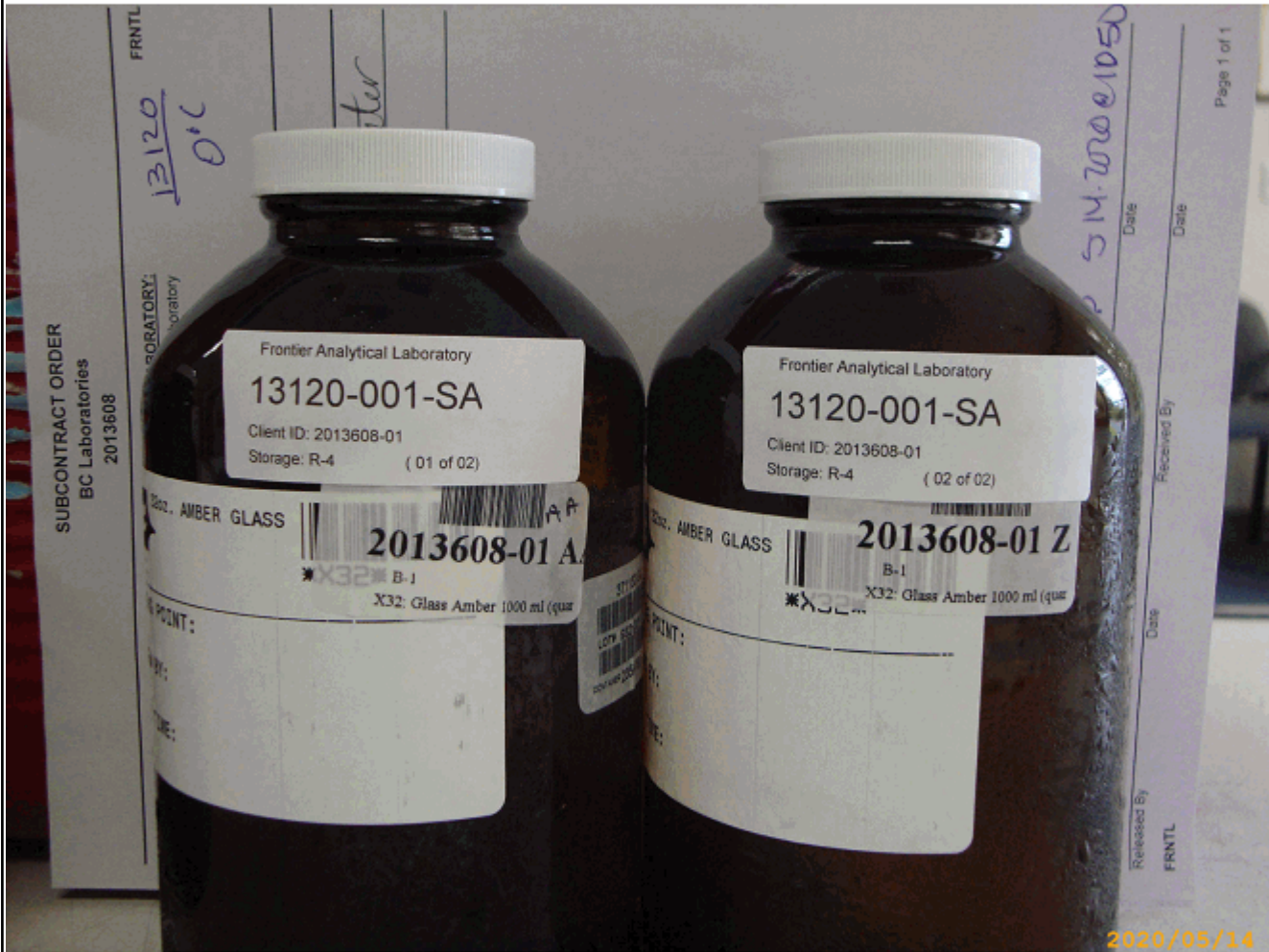
Method of Delivery:	Golden State Overnight
Tracking Number:	47057051320371826500
Shipping Container Received Intact	Yes
Custody seals(s) present?	No
Custody seals(s) intact?	No
Sample Arrival Temperature (C)	0
Cooling Method	Ice
Chain Of Custody Present?	Yes
Return Shipping Container To Client	Yes
Test 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 Hillside Circle \* El Dorado Hills, CA 95762 \* Tel (916) 934-0900 \* Fax (916) 934-0999 \* www.frontieranalytical.com

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Eaton Analytical

750 Royal Oaks Drive, Suite 100  
Monrovia, California 91016-3629  
Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)



### Laboratory Report

for

BC Laboratories, Inc.  
4100 Atlas Court  
Bakersfield, CA 93308  
Attention: Tina Green

**Date of Issue**  
05/27/2020



**EUROFINS EATON ANALYTICAL, LLC**

WV6M: Rosalynn Dang  
Project Manager



Utah ELCP CA00006

Report:871358  
Project:SUBCONTRACT  
Group:Low Level Phenolics

- \* Accredited in accordance with **TNI 2016 and ISO/IEC 17025:2017**.
- \* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.
- \* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.
- \* Test results relate only to the sample(s) tested.
- \* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).
- \* This report shall not be reproduced except in full, without the written approval of the laboratory.



Eaton Analytical

STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

\* NELAP/TNI Recognized Accreditation Bodies

Eurofins Eaton Analytical, LLC

750 Royal Oaks Drive, Suite 100  
Mcrovia, CA 91016-3629

T | 626-386-1100  
F | 866-988-3757  
www.EurofinsUS.com/Eaton

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ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA. Refer to Certificate and scope of accreditation (5890) found at: https://www.eurofinsus.com/Eaton

Table with 5 columns: SPECIFIC TESTS, METHOD OR TECHNIQUE USED, Environmental (Drinking Water), Environmental (Waste Water), Water as a Component of Food and Sewer/ Recycled Water. The table lists various tests such as 1,2,3-TCP, Hexavalent Chromium, BOD/CBOD, and many others.

750 Royal Oaks Dr., Ste 100, Monrovia, CA 91016 Tel (626) 386-1100 Fax (866) 988-3757 https://www.eurofinsus.com/Eaton\_Version 906 (rev) 05/04/20

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**Acknowledgement of Samples Received**

Addr: **BC Laboratories, Inc.**  
4100 Atlas Court  
Bakersfield, CA 93308

Attn: Tina Green  
Phone: 661-852-4272

Client ID: BCLAB  
Folder #: 871358  
Project: SUBCONTRACT  
Sample Group: Low Level Phenolics

Project Manager: Rosalynn Dang  
Phone: 626-386-1250  
PO #: 2013608

The following samples were received from you on **May 14, 2020** at **1043**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
202005140653	2013608-01	05/11/2020 1027

Phenolic Compounds-low level

**Test Description**

Reported: 05/27/2020

Page 1 of 1

750 Royal Oaks Drive, Suite 100, Monrovia, CA 91016 Tel (626) 386-1100 Fax (866) 988-3757 [www.EurofinsUS.com/Eaton](http://www.EurofinsUS.com/Eaton)

Page 4 of 9 pages

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**SUBCONTRACT ORDER**

BC Laboratories

8A1358 2013608 2.3 on ICG

**SENDING LABORATORY:**

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

**RECEIVING LABORATORY:**

Eurofins Eaton Analytical - Monrovia  
750 Royal Oaks, Suite 100  
Monrovia, CA 91101  
Martha Frost  
Phone: (626) 386-1100  
FAX: (626) 568-6324

MWHMR

Analysis	Due	Expires	Comments
Sample ID: 2013608-01	Water	Sampled: 05/11/20 10:27	Bottle Water
EPA 420.4 - Phenols	05/22/20 17:00	06/08/20 10:27	
Containers supplied: 2 x 16oz AG Yellow			

 5-13-20     
  5/14/20 1043  
 Released By      Date      Received By      Date

Released By      Date      Received By      Date

MWHMR

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INTERNAL CHAIN OF CUSTODY RECORD

eurofins Eaton Analytical

EEA Folder Number: 2013608

SAMPLE TEMP RECEIVED: Note: If samples are out of temperature range, let the ASM know. ASM will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 031A (Observation = 2.5 °C) (Corr. Factor = 0.2 °C) (Final = 2.3 °C)

TYPE OF ICE: Real Synthetic No Ice Frozen Partially Frozen Thawed N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: OLS

Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤ 6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
2) Microbiology, Distribution: < 10°C, not frozen (can be ≥ 10°C if received on ice the same day as sample collection, within 8 hours)
3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If not temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and report each temperature of the quadrants.

Table with 4 columns: 1 - (Observation), (Corr. Factor), (Final), 2 - (Observation), (Corr. Factor), (Final), 3 - (Observation), (Corr. Factor), (Final), 4 - (Observation), (Corr. Factor), (Final)

4 Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) pH Check. Manufacturer: Lot Number: pH strip type: 0 - 14 or Expiration Date: Results:

6) Chlorine check. Manufacturer: Samsafe. Lot No.: Expiration Date: Results:

7) VOA Headspace: No Samples with Headspace: Samples with Headspace (see below):

Headspace Documentation (use additional VOC Internal COFC for additional bottles)

Exempt from Headspace concerns: Methods 515.4, HAA(6251.552), 505, SPME, @CH, 532LCMS, 506, 536, Analoxins, LCM5 methods using 40 ml vials, International clients:

Table with 4 columns: Sample ID, Bottle #, Name(s), >fillml, and 4 empty columns for data entry.

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors):

Signature and Date fields with labels: SIGNATURE, PRINT NAME, COMPARTICLE, DATE, TIME

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Eaton Analytical

Tel: (626) 386-1100  
Fax: (956) 988-3757  
1 800 566 LABS (1 800 566 5227)

**Laboratory Comments**

Report: 871358  
Project: SUBCONTRACT  
Group: Low Level Phenolics

BC Laboratories, Inc.  
Tina Green  
4100 Atlas Court  
Bakersfield, CA 93308

---

**Flags Legend:**

NE - Results reported for Phenolic Compounds Low Level are obtained using an in-line distillation process, based on EPA Methods 420.2 and 420.4

The Comments Report may be blank if there are no comments for this report.



Eaton Analytical

Laboratory Data

Tel: (626) 386-1100  
Fax: (866) 968-3757  
1 800 566 LABS (1 800 566 5227)

Report: 871358  
Project: SUBCONTRACT  
Group: Low Level Phenolics

BC Laboratories, Inc.  
Tina Green  
4100 Atlas Court  
Bakersfield, CA 93308

Samples Received on:  
05/14/2020 1043

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>2013608-01 (202005140653)</b>						<b>Sampled on 05/11/2020 1027</b>			
<b>EPA 420.4 - Phenolic Compounds-low level</b>									
	05/24/20 17:42		1250951	(EPA 420.4)	Phenolic Compounds-low level	ND (NE)	ug/L	1.0	1

Rounding on totals after summation.  
(C) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.



Eaton Analytical

Laboratory QC

Tel: (626) 388-1100
Fax: (666) 988-3757
1 800 568 LABS (1 800 568 5227)

Report: 871358
Project: SUBCONTRACT
Group: Low Level Phenolics

BC Laboratories, Inc.

Table with columns: QC Type, Analyte, Native, Spiked, Recovered, Units, Yield(%), Limits (%), RPD Limit(%), RPD%. Contains data for Phenolic Compounds-low level by EPA 420.4.

Spikes recovery is already corrected for native results. Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining. Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.



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

June 09, 2020

Felicia Johnson  
BC Laboratories  
4100 Atlas Ct.  
Bakersfield, CA 93308

RE: Project: 2013608  
Pace Project No.: 30363595

Dear Felicia Johnson:

Enclosed are the analytical results for sample(s) received by the laboratory on May 18, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:  
• Pace Analytical Services - Greensburg

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

Sincerely,

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

Enclosures



**REPORT OF LABORATORY ANALYSIS**

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

**CERTIFICATIONS**

Project: 2013608  
Pace Project No.: 30363595

**Pace Analytical Services Pennsylvania**

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601  
ANAB DOD-ELAP Rad Accreditation #: L2417  
Alabama Certification #: 41590  
Arizona Certification #: AZ0734  
Arkansas Certification  
California Certification #: 04222CA  
Colorado Certification #: PA01547  
Connecticut Certification #: PH-0694  
Delaware Certification  
EPA Region 4 DW Rad  
Florida/TNI Certification #: E87683  
Georgia Certification #: C040  
Florida: Cert E871149 SEKS WET  
Guam Certification  
Hawaii Certification  
Idaho Certification  
Illinois Certification  
Indiana Certification  
Iowa Certification #: 391  
Kansas/TNI Certification #: E-10356  
Kentucky Certification #: KY90133  
KY WW Permit #: KY0098221  
KY WW Permit #: KY0000221  
Louisiana DHH/TNI Certification #: LA180012  
Louisiana DEQ/TNI Certification #: 4086  
Maine Certification #: 2017020  
Maryland Certification #: 308  
Massachusetts Certification #: M-PA1457  
Michigan/PADEP Certification #: 9991

Missouri Certification #: 235  
Montana Certification #: Cert0082  
Nebraska Certification #: NE-OS-29-14  
Nevada Certification #: PA014572018-1  
New Hampshire/TNI Certification #: 297617  
New Jersey/TNI Certification #: PA051  
New Mexico Certification #: PA01457  
New York/TNI Certification #: 10888  
North Carolina Certification #: 42706  
North Dakota Certification #: R-190  
Ohio EPA Rad Approval: #41249  
Oregon/TNI Certification #: PA200002-010  
Pennsylvania/TNI Certification #: 65-00282  
Puerto Rico Certification #: PA01457  
Rhode Island Certification #: 65-00282  
South Dakota Certification  
Tennessee Certification #: 02867  
Texas/TNI Certification #: T104704188-17-3  
Utah/TNI Certification #: PA014572017-9  
USDA Soil Permit #: P330-17-00091  
Vermont Dept. of Health: ID# VT-0282  
Virgin Island/PADEP Certification  
Virginia/VELAP Certification #: 9526  
Washington Certification #: C868  
West Virginia DEP Certification #: 143  
West Virginia DHHR Certification #: 9964C  
Wisconsin Approve List for Rad  
Wyoming Certification #: 8TMS-L

**REPORT OF LABORATORY ANALYSIS**

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

**SAMPLE SUMMARY**

Project: 2013608  
Pace Project No.: 30363595

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30363595001	2013608-01	Drinking Water	05/11/20 10:27	05/18/20 10:00

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SAMPLE ANALYTE COUNT

Project: 2013608  
Pace Project No.: 30363595

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30363595001	2013608-01	EPA 904.0	VAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

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PROJECT NARRATIVE

Project: 2013608  
Pace Project No.: 30363595

Method: EPA 904.0  
Description: 904.0 Radium 228  
Client: BC Laboratories  
Date: June 09, 2020

General Information:

1 sample was analyzed for EPA 904.0 by Pace Analytical Services Greensburg. 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.

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**ANALYTICAL RESULTS - RADIOCHEMISTRY**

Project: 2013608  
Pace Project No.: 30363595

Sample: 2013608-01 Lab ID: 30363595001 Collected: 05/11/20 10:27 Received: 05/18/20 10:00 Matrix: Drinking Water  
PWS: Site ID: Sample Type:  
Comments: • The sampler's name and signature were not listed on the COC.

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-228	EPA 904.0	0.425 ± 0.343 (0.692) C:72% T:82%	pCi/L	06/08/20 14:13	15262-20-1	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: 2013608  
Pace Project No.: 30363595

QC Batch: 397244  
QC Batch Method: EPA 904.0

Analysis Method: EPA 904.0  
Analysis Description: 904.0 Radium 228  
Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 30363595001

METHOD BLANK: 1924014 Matrix: Water  
Associated Lab Samples: 30363595001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.522 ± 0.355 (0.679) C:75% T:84%	pCi/L	06/08/20 10:59	

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.

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**QUALIFIERS**

Project: 2013608  
Pace Project No.: 30363595

**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.

TNTC - Too Numerous To Count

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 - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

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: For Safe Drinking Water Act (SDWA) analyses, the reported Unc. is the calculated Count Uncertainty (95% confidence interval) using a coverage factor of 1.96. For all other matrices (non-SDWA), the reported Unc. is the calculated Expanded Uncertainty (aka Combined Standard Uncertainty, CSU), reported at the 95% confidence interval using a coverage factor of 1.96.

Gamma Spec: The Unc. reported for all gamma-spectroscopy analyses (EPA 901.1), is the calculated Expanded Uncertainty (CSU) at the 95.4% confidence interval, using a coverage factor of 2.0.

(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: 06/09/2020 12:51 PM

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Page 8 of 10

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**SUBCONTRACT ORDER**  
**BC Laboratories**  
**2013608**

**SENDING LABORATORY:**

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

**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: 2013608-01	Water	Sampled: 05/11/20 10:27	QA Bottle 01
EPA 904.0 Radium 228	05/22/20 17:00	11/08/20 10:27	Water
Containers supplied:			QPE



Released By [Signature] Date 5-13-20
 Received By [Signature] Date 5-18-20 10:00

Released By \_\_\_\_\_ Date \_\_\_\_\_
 Received By \_\_\_\_\_ Date \_\_\_\_\_

PACEA

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Pittsburgh Lab Sample Condition Upon Receipt



Client Name: BC Labs

Project # 30363595

Courier:  Fed Ex  UPS  USPS  Client  Commercial  Pace Other

Tracking #: 1Z 965 376 02 4263 7508

Label PAC  
LIMS Login DU

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

Thermometer Used 10 Type of Ice:  (wet) Blue None

Cooler Temperature Observed Temp \_\_\_\_\_ °C Correction Factor: -0.3 °C Final Temp: \_\_\_\_\_ °C

Temp should be above freezing to 6°C

Comments:	Yes	No	N/A	pH paper Lot#	Date and Initials of person examining contents:
				<u>10D2192</u>	<u>PAC 5-18-20</u>
Chain of Custody Present:	/				
Chain of Custody Filled Out:	/				
Chain of Custody Relinquished:	/				
Sampler Name & Signature on COC:	/				
Sample Labels match COC:	/				
-Includes date/time/ID Matrix:				<u>DU</u>	<u>No time/date</u>
Samples Arrived within Hold Time:	/				
Short Hold Time Analysis (<72hr remaining):	/				
Rush Turn Around Time Requested:	/				
Sufficient Volume:	/				
Correct Containers Used:	/				
-Pace Containers Used:	/				
Containers Intact:	/				
Orthophosphate field filtered	/				
Hex Cr Aqueous sample field filtered	/				
Organic Samples checked for dechlorination:	/				
Filtered volume received for Dissolved tests	/				
All containers have been checked for preservation.	/				
exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix	/				
All containers meet method preservation requirements.	/			Initial when completed <u>DU</u>	Date/time of preservation
				Lot # of added preservative	
Headspace in VOA Vials (>6mm):	/				
Trip Blank Present:	/				
Trip Blank Custody Seals Present	/				
Rad Samples Screened < 0.5 mrem/yr	/			Initial when completed <u>DU</u>	Date: <u>5-18-20</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 reports.

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.



# Certificate of Analysis

FINAL REPORT

Work Orders: 0E14025

Report Date: 5/28/2020

Project: 2013608

Received Date: 5/14/2020

Turnaround Time: Normal

Phones: (661) 327-4911

Fax: (661) 327-1918

Attn: Felicia Johnson

P.O. #:

Client: BC Laboratories  
4100 Atlas Court  
Bakersfield, CA 93308

Billing Code:

Dear Felicia Johnson,

Enclosed are the results of analyses for samples received 5/14/20 with the Chain-of-Custody document. The samples were received in good condition, at 3.3 °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

Sample:	2013608-01	Sampled: 05/11/20 10:27 by Client						
	0E14025-01 (Water)							
Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier		
Method: EPA 900.0	Batch ID: W0E0978	Instr: RAD02	Prepared: 05/18/20 10:19	Analyst: hot				
Gross Alpha	1.1		pCi/L	1	05/22/20			
Uncertainty: 0.45	MDA: 0.653							
Gross Beta	5.4		pCi/L	1	05/22/20			
Uncertainty: 0.665	MDA: 0.906							

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Certificate of Analysis

FINAL REPORT

Quality Control Results

Radiological Parameters by APHA/EPA Methods

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch: W0E0978 - NONE (RADIOCHEM)										
Blank (W0E0978-BLK1)				Prepared: 05/18/20 Analyzed: 05/21/20						
Gross Alpha	0.17		pCi/L							
Uncertainty: 0.251	MDA: 0.428									
Gross Beta	0.29		pCi/L							
Uncertainty: 0.501	MDA: 0.841									
LCS (W0E0978-BS1)				Prepared: 05/18/20 Analyzed: 05/21/20						
Gross Alpha	10		pCi/L	12.0		86	64-139			
Uncertainty: 0.713	MDA: 0.495									
Gross Beta	14		pCi/L	16.0		88	77-138			
Uncertainty: 0.85	MDA: 0.85									
LCS Dup (W0E0978-BS01)				Prepared: 05/18/20 Analyzed: 05/21/20						
Gross Alpha	13		pCi/L	12.0		107	64-139	22	30	
Uncertainty: 0.802	MDA: 0.65									
Gross Beta	13		pCi/L	16.0		83	77-138	6	30	
Uncertainty: 0.853	MDA: 0.884									

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# Certificate of Analysis

FINAL REPORT

## Notes and Definitions

Item	Definition
%REC	Percent Recovery
Dil	Dilution
MDA	Minimum Detectable Activity
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)
RPD	Relative Percent Difference

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

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 MIS002.

Reviewed by:

Regina M. Giancola  
Project Manager



ELAP-CA #1132 • EPA-UCMR #CA00211 • HW-DOH # • ISO17025 ANAB #L2457.01 • LACSD #10143 • 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.*



Palomar Land and Cattle  
34300 Canfield Road  
Palomar Mountain, CA 92060

**Reported:** 06/09/2020 13:11  
**Project:** Annual Title 21  
**Project Number:** Source Water  
**Project Manager:** Wes Bergman

**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 for this compound was not within the control limits.
  - V11 The Continuing Calibration Verification (CCV) recovery was not within established control limits.
- BW-MCL = MCLs for Title 21 Bottled Water