



**NORTH COAST
LABORATORIES LTD.**

November 21, 2019

Smith River CSD
241 First St
Smith River, CA 95567

Attn: Eric Shearer

Order No.: 1910067
Invoice No.: 149135
PO No.:
ELAP No.1247-Expires July 2020

RE: 0810002-002

SAMPLE IDENTIFICATION

Fraction	Client Sample Description
01A	Well #2
01B	Well #2
01C	Well #2

ND = Not Detected at the Reporting Limit

Limit = Reporting Limit

Flag = Explanation in Case Narrative

All solid results are expressed on a wet-weight basis unless otherwise noted.

Approved for release by:

Roxanne Moore, Project Manager

Date: 21-Nov-2019

WorkOrder: 1910067

CASE NARRATIVE

THIS IS AN AMENDED REPORT (1910067 R1):

Results for arsenic and hardness were added as per client request.

Samples for pH, chlorine and dissolved oxygen analysis must be analyzed within 15 minutes of collection. Therefore, any samples requiring these analyses were analyzed past the official holding time.

Aluminum:

The reporting limit was raised due to trace contamination of the method blank.

Date: 21-Nov-2019

WorkOrder: 1910067

ANALYTICAL REPORT

Client Sample ID: Well #2

Received: 10/4/2019

Lab ID: 1910067-01A

Collected: 10/4/2019 8:50

Test Name: Apparent Color

Reference: SM 2120B, 2001. Revs 2011

<u>Parameter</u>	<u>Result</u>	<u>Flag</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Apparent Color	3.0		3.0	C.U.	1.0		10/4/2019

Test Name: Odor (at 60° C)

Reference: SM 2150B, 1997. Revs 2011

<u>Parameter</u>	<u>Result</u>	<u>Flag</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Odor	ND		1.0	TON	1.0		10/4/2019

Client Sample ID: Well #2

Received: 10/4/2019

Lab ID: 1910067-01B

Collected: 10/4/2019 8:50

Test Name: Alkalinity

Reference: SM 2320B, 1997. Revs 2011.

<u>Parameter</u>	<u>Result</u>	<u>Flag</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Alkalinity	36		1.0	mg/L CaCO ₃	1.0		10/10/2019

Test Name: Anions by Ion Chromatography

Reference: EPA 300.0 Rev 2.1 (1993)

<u>Parameter</u>	<u>Result</u>	<u>Flag</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Chloride	5.7		0.10	mg/L	1.0		10/4/2019
Fluoride	ND		0.10	mg/L	1.0		10/4/2019
Sulfate	3.3		0.50	mg/L	1.0		10/4/2019

Test Name: Forms of Alkalinity

Reference: SM 2320B, 1997. Revs 2011

<u>Parameter</u>	<u>Result</u>	<u>Flag</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Bicarbonate	36		1.0	mg/L CaCO ₃	1.0		10/15/2019
Carbonate	ND		1.0	mg/L CaCO ₃	1.0		10/15/2019
Hydroxide	ND		1.0	mg/L CaCO ₃	1.0		10/15/2019

Test Name: pH

Reference: SM 4500-HB, 2000. Revs 2011

<u>Parameter</u>	<u>Result</u>	<u>Flag</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
pH	6.5		N/A	pH Units	1.0		10/4/2019

Test Name: Total Dissolved Solids

Reference: SM 2540C, 1997. Revs 2011

<u>Parameter</u>	<u>Result</u>	<u>Flag</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Total Dissolved Solids	59		10	mg/L	1.0		10/8/2019

Client Sample ID: Well #2

Received: 10/4/2019

Lab ID: 1910067-01C

Collected: 10/4/2019 8:50

Test Name: Hardness

Reference: SM 2340B, 1997. Revs 2011

<u>Parameter</u>	<u>Result</u>	<u>Flag</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Hardness	39		1.0	mg/L CaCO ₃	1.0	10/11/2019	11/20/2019

Date: 21-Nov-2019

WorkOrder: 1910067

ANALYTICAL REPORT

Client Sample ID: Well #2

Received: 10/4/2019

Lab ID: 1910067-01C

Collected: 10/4/2019 8:50

Test Name: ICAP Metals

Reference: EPA 200.7 Rev 4.4 (1994)

<u>Parameter</u>	<u>Result</u>	<u>Flag</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Aluminum	ND		25	µg/L	1.0	10/11/2019	10/14/2019
Calcium	5,100		50	µg/L	1.0	10/11/2019	10/14/2019
Iron	ND		15	µg/L	1.0	10/11/2019	10/14/2019
Magnesium	6,500		20	µg/L	1.0	10/11/2019	10/14/2019
Manganese	ND		1.0	µg/L	1.0	10/11/2019	10/14/2019
Silver	ND		5.0	µg/L	1.0	10/11/2019	10/14/2019
Sodium	3,100		20	µg/L	1.0	10/11/2019	10/14/2019

Test Name: ICP-MS Metals

Reference: EPA 200.8 Rev 5.4 (1994)

<u>Parameter</u>	<u>Result</u>	<u>Flag</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Antimony	ND		1.0	µg/L	1.0	10/11/2019	10/11/2019
Arsenic	2.9		2.0	µg/L	1.0	10/11/2019	10/11/2019
Barium	16		1.0	µg/L	1.0	10/11/2019	10/11/2019
Beryllium	ND		1.0	µg/L	1.0	10/11/2019	10/11/2019
Cadmium	ND		1.0	µg/L	1.0	10/11/2019	10/11/2019
Chromium	ND		1.0	µg/L	1.0	10/11/2019	10/11/2019
Copper	3.0		1.0	µg/L	1.0	10/11/2019	10/11/2019
Nickel	5.8		2.0	µg/L	1.0	10/11/2019	10/11/2019
Selenium	ND		5.0	µg/L	1.0	10/11/2019	10/11/2019
Thallium	ND		1.0	µg/L	1.0	10/11/2019	10/11/2019
Zinc	5.8		5.0	µg/L	1.0	10/11/2019	10/11/2019

Test Name: Mercury

Reference: EPA 245.1 Rev 3.0 (1994)

<u>Parameter</u>	<u>Result</u>	<u>Flag</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Mercury	ND		1.0	µg/L	1.0	10/15/2019	10/16/2019

North Coast Laboratories, Ltd.

Date: 11/21/2019

CLIENT: Smith River CSD
Work Order: 1910067
Project: 0810002-002

QC SUMMARY REPORT

Method Blank

Sample ID	Batch ID	Test Code	Units	Analysis Date	Prep Date						
MBLANK	R101193	ALKW	mg/L CaCO3	10/10/2019 8:45:00 AM							
Client ID:		Run ID:	WC_191010G	SeqNo:	1440161						
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity	ND	1.0									

Sample ID	Batch ID	Test Code	Units	Analysis Date	Prep Date						
MBLK 100419	R101144	ICIONW	mg/L	10/4/2019 5:16:48 PM							
Client ID:		Run ID:	INIC2_191004B	SeqNo:	1439448						
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	ND	0.10									
Fluoride	ND	0.10									
Sulfate	ND	0.50									

Sample ID	Batch ID	Test Code	Units	Analysis Date	Prep Date						
MB-37924	37924	ICPMSDW	µg/L	10/11/2019 10:57:25 A	10/11/2019						
Client ID:		Run ID:	ICPMS2_191014A	SeqNo:	1440356						
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	1.0									
Arsenic	ND	2.0									
Barium	ND	1.0									
Beryllium	ND	1.0									
Cadmium	ND	1.0									
Chromium	ND	1.0									
Copper	ND	1.0									
Nickel	ND	2.0									
Selenium	ND	5.0									
Thallium	ND	1.0									
Zinc	ND	5.0									

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Smith River CSD
Work Order: 1910067
Project: 0810002-002

QC SUMMARY REPORT
 Method Blank

Sample ID MB-37924	Batch ID: 37924	Test Code: ICPW	Units: µg/L	Analysis Date 10/14/2019 12:02:20 P	Prep Date 10/11/2019						
Client ID:	Run ID: INICP2_191014B	SeqNo: 1440432									
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	25									
Calcium	ND	50									
Iron	ND	15									
Magnesium	ND	20									
Manganese	ND	1.0									
Silver	ND	5.0									
Sodium	ND	20									

Sample ID MB-37940	Batch ID: 37940	Test Code: MERCW	Units: µg/L	Analysis Date 10/16/2019 11:50:49 A	Prep Date 10/15/2019						
Client ID:	Run ID: CVAA2_191016A	SeqNo: 1440938									
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	1.0									

Sample ID MBLK	Batch ID: R101229	Test Code: TDS	Units: mg/L	Analysis Date 10/8/2019	Prep Date						
Client ID:	Run ID: WC_191008B	SeqNo: 1440691									
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	10									

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits B - Analyte detected in the associated Method Blank
 J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits

North Coast Laboratories, Ltd.

Date: 11/21/2019

CLIENT: Smith River CSD
Work Order: 1910067
Project: 0810002-002

QC SUMMARY REPORT
 Laboratory Control Spike

Sample ID	BLKSPK	Batch ID:	R101193	Test Code:	ALKW	Units:	mg/L CaCO3	Analysis Date	10/10/2019 8:45:00 AM	Prep Date			
Client ID:		Run ID:	WC_191010G	SeqNo:	1440162								
Analyte		Result		Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity		104.6		1.0	100	0	105%	90	110	0			

Sample ID	LCS WL-100419-0	Batch ID:	R101144	Test Code:	ICIONW	Units:	mg/L	Analysis Date	10/4/2019 6:06:43 PM	Prep Date			
Client ID:		Run ID:	INIC2_191004B	SeqNo:	1439451								
Analyte		Result		Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride		4.931		0.10	5.00	0	98.6%	90	110	0			
Fluoride		4.848		0.10	5.00	0	97.0%	90	110	0			
Sulfate		52.40		0.50	50.0	0	105%	90	110	0			

Sample ID	LCSD WL-100419-	Batch ID:	R101144	Test Code:	ICIONW	Units:	mg/L	Analysis Date	10/4/2019 6:23:21 PM	Prep Date			
Client ID:		Run ID:	INIC2_191004B	SeqNo:	1439452								
Analyte		Result		Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride		4.855		0.10	5.00	0	97.1%	90	110	4.93	1.56%	10	
Fluoride		4.776		0.10	5.00	0	95.5%	90	110	4.85	1.51%	10	
Sulfate		52.10		0.50	50.0	0	104%	90	110	52.4	0.572%	10	

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits B - Analyte detected in the associated Method Blank
 J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits

CLIENT: Smith River CSD
Work Order: 1910067
Project: 0810002-002

QC SUMMARY REPORT
 Laboratory Control Spike

Sample ID	Batch ID	Test Code	Units	Analysis Date	Prep Date						
LCS-37924	37924	ICPMSDW	µg/L	10/11/2019 11:01:30 A	10/11/2019						
Client ID:		Run ID:	ICPMS2_191014A	SeqNo:	1440357						
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	487.4	5.0	500	0.0530	97.5%	85	115	0			
Arsenic	480.6	10	500	0	96.1%	85	115	0			
Barium	463.6	5.0	500	0.195	92.7%	85	115	0			
Beryllium	459.6	5.0	500	0	91.9%	85	115	0			
Cadmium	483.0	5.0	500	0	96.6%	85	115	0			
Chromium	461.1	5.0	500	0	92.2%	85	115	0			
Copper	470.2	5.0	500	0	94.0%	85	115	0			
Nickel	473.6	10	500	0	94.7%	85	115	0			
Selenium	483.3	25	500	0	96.7%	85	115	0			
Thallium	472.8	5.0	500	0	94.6%	85	115	0			
Zinc	479.2	25	500	0	95.8%	85	115	0			

Sample ID	Batch ID	Test Code	Units	Analysis Date	Prep Date						
LCSD-37924	37924	ICPMSDW	µg/L	10/11/2019 11:18:12 A	10/11/2019						
Client ID:		Run ID:	ICPMS2_191014A	SeqNo:	1440358						
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	481.5	1.0	500	0.0530	96.3%	85	115	487	1.22%	20	
Arsenic	497.6	2.0	500	0	99.5%	85	115	481	3.48%	20	
Barium	453.1	1.0	500	0.195	90.6%	85	115	464	2.28%	20	
Beryllium	454.7	1.0	500	0	90.9%	85	115	460	1.07%	20	
Cadmium	477.9	1.0	500	0	95.6%	85	115	483	1.05%	20	
Chromium	449.5	1.0	500	0	89.9%	85	115	461	2.53%	20	
Copper	478.1	1.0	500	0	95.6%	85	115	470	1.68%	20	
Nickel	464.6	2.0	500	0	92.9%	85	115	474	1.91%	20	
Selenium	505.4	5.0	500	0	101%	85	115	483	4.46%	20	
Thallium	488.4	1.0	500	0	97.7%	85	115	473	3.25%	20	
Zinc	496.2	5.0	500	0	99.2%	85	115	479	3.50%	20	

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Smith River CSD
Work Order: 1910067
Project: 0810002-002

QC SUMMARY REPORT
 Laboratory Control Spike

Sample ID	Batch ID	Test Code	Units	Analysis Date	Prep Date						
LCS-37924	37924	ICPW	µg/L	10/14/2019 12:04:34 P	10/11/2019						
Client ID:	Run ID:	SeqNo:									
	INICP2_191014B	1440433									
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	471.7	25	500	21.2	90.1%	85	115	0			
Calcium	476.3	50	500	26.1	90.0%	85	115	0			
Iron	462.3	15	500	0	92.5%	85	115	0			
Magnesium	476.3	20	500	5.25	94.2%	85	115	0			
Manganese	454.8	1.0	500	0	91.0%	85	115	0			
Silver	53.67	5.0	62.5	0	85.9%	85	115	0			
Sodium	492.1	20	500	15.2	95.4%	85	115	0			

Sample ID	Batch ID	Test Code	Units	Analysis Date	Prep Date						
LCSD-37924	37924	ICPW	µg/L	10/14/2019 12:07:58 P	10/11/2019						
Client ID:	Run ID:	SeqNo:									
	INICP2_191014B	1440434									
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	471.7	25	500	21.2	90.1%	85	115	472	0.00700%	20	
Calcium	467.2	50	500	26.1	88.2%	85	115	476	1.93%	20	
Iron	467.7	15	500	0	93.5%	85	115	462	1.17%	20	
Magnesium	478.6	20	500	5.25	94.7%	85	115	476	0.481%	20	
Manganese	459.1	1.0	500	0	91.8%	85	115	455	0.945%	20	
Silver	54.24	5.0	62.5	0	86.8%	85	115	53.7	1.07%	20	
Sodium	495.2	20	500	15.2	96.0%	85	115	492	0.625%	20	

Sample ID	Batch ID	Test Code	Units	Analysis Date	Prep Date						
LCS-37940	37940	MERCW	µg/L	10/16/2019 11:53:20 A	10/15/2019						
Client ID:	Run ID:	SeqNo:									
	CVAA2_191016A	1440939									
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	4.775	1.0	5.00	0	95.5%	85	115	0			

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits

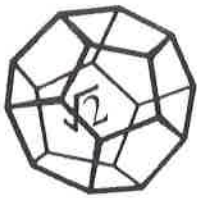
B - Analyte detected in the associated Method Blank

CLIENT: Smith River CSD
Work Order: 1910067
Project: 0810002-002

QC SUMMARY REPORT
 Laboratory Control Spike Duplicate

Sample ID	LCSD-37940	Batch ID:	37940	Test Code:	MERCW	Units:	µg/L	Analysis Date	10/16/2019 11:55:21 A	Prep Date	10/15/2019											
Client ID:		Run ID:	CVAA2_191016A	SeqNo:	1440940																	
Analyte		Result		Limit		SPK value		SPK Ref Val		% Rec		LowLimit		HighLimit		RPD Ref Val		%RPD		RPDLimit		Qual
Mercury		4.558		1.0		5.00		0		91.2%		85		115		4.78		4.65%		20		

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits B - Analyte detected in the associated Method Blank
 J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits



NORTH COAST LABORATORIES LTD.

5680 West End Road • Arcata • CA 95521-9202
707-822-4649 Fax 707-822-6831

Chain of Custody

1910067

LABORATORY NUMBER:

Attention: Eric Shearer
 Results & Invoice to: Smith River C.S.D.
 Address: 241 First St. Smith River, CA. 95567
 Phone: (559) 676-0830
 Copies of Report to: Franklin Saylor - CA Water Board
 Sampler (Sign & Print): Eric Shearer / ERIC SHEARER

TAT: STD (2-3 Wk) Other:
 PRIOR AUTHORIZATION IS REQUIRED FOR RUSH SAMPLES.

REPORTING REQUIREMENTS:
 State Forms
 Geotracker SWAMP Other EDD:
 Final Report PDF FAX By: _____

CONTAINER CODES: 1—½ gal. pl; 2—250 ml pl; 3—500 ml pl; 4—1 L Nalgene; 5—250 ml BG; 6—500 ml BG; 7—1 L BG; 8—40 ml VOA; 9—60 ml VOA; 10—125 ml VOA; 11—4 oz glass jar; 12—8 oz glass jar; 13—brass tube; 14—other
 PRESERVATIVE CODES: a—HNO₃; b—HCl; c—H₂SO₄; d—Na₂S₂O₃; e—NaOH; f—C₂H₃O₂Cl; g—other

PROJECT INFORMATION
 Project Number: 081002-002
 Project Name: _____
 Purchase Order Number: _____

SAMPLE CONDITION/SPECIAL INSTRUCTIONS
MBAS is being recampled -
brought in on a Friday -
Lab could not analyze.
Please email w/ results
Email / General Manager @ SRWater.Net
4.4°C

LAB ID	SAMPLE ID	DATE	TIME	MATRIX*
A	Well #2	10-4-19	0850	GW
B	"	"	0851	"
C	"	"	0852	"
D	"	"	0853	"

ANALYSIS	CONTAINER	PRESERVATIVE
MBAS	½ gal Plastic	none
Color odor	500ml amg	none
Minerals	1 liter plastic	none
Metals	500ml Plastic	HNO ₃

RELINQUISHED BY (Sign & Print)	DATE/TIME	RECEIVED BY (Sign)	DATE/TIME
		<u>EG</u>	<u>10/4/19</u>
			<u>1230</u>

SAMPLE DISPOSAL
 NCL Disposal of Non-Contaminated
 Return Pickup

CHAIN OF CUSTODY SEALS Y/N/NA
 SHIPPED VIA: UPS Fed-Ex Hand

*MATRIX: DW=Drinking Water; Eff=Effluent; Inf=Influent; SW=Surface Water; GW=Ground Water; WW=Waste Water; S=Soil; O=Other.

ALL CONTAMINATED NON-AQUEOUS SAMPLES WILL BE RETURNED TO CLIENT

