



GENCHEM

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: LB87446

SDG No.: LB87446

Contract: _____ Lab Code: CHEM

Case No.: LB87446

SAS No.: LB87446

Initial Calibration Source: _____

Continuing Calibration Source: _____

Sample ID	Analyte	Result mg/L	True Value	% Recovery	% RSD	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
ICV1	Bromide	9.8	10	98	0	90 - 110		04/14/2017	18:12	LB87446
	Chloride	3.1	3	103.3	0	90 - 110		04/14/2017	18:12	LB87446
	Fluoride	2.1	2	105	0	90 - 110		04/14/2017	18:12	LB87446
	Phosphorus, Ortho	5.5	5	110	0	90 - 110		04/14/2017	18:12	LB87446
	Nitrite	3.1	3	103.3	0	90 - 110		04/14/2017	18:12	LB87446
	Nitrate	2.4	2.5	96	0	90 - 110		04/14/2017	18:12	LB87446
	Sulfate	14.5	15	96.7	0	90 - 110		04/14/2017	18:12	LB87446



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Client: LB87446

SDG No.: LB87446

Contract: _____ Lab Code: CHEM

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Initial Calibration Source: _____

Continuing Calibration Source: _____

Sample ID	Analyte	Result mg/L	True Value	% Recovery	% RSD	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV1	Bromide	10.6	10	106	0	90 - 110		05/12/2017	11:24	LB87446
	Chloride	3	3	100	0	90 - 110		05/12/2017	11:24	LB87446
	Fluoride	2	2	100	0	90 - 110		05/12/2017	11:24	LB87446
	Phosphorus, Ortho	4.8	5	96	0	90 - 110		05/12/2017	11:24	LB87446
	Nitrite	3.2	3	106.7	0	90 - 110		05/12/2017	11:24	LB87446
	Nitrate	2.4	2.5	96	0	90 - 110		05/12/2017	11:24	LB87446
	Sulfate	14.3	15	95.3	0	90 - 110		05/12/2017	11:24	LB87446
CCV2	Bromide	10.7	10	107	0	90 - 110		05/12/2017	19:04	LB87446
	Chloride	3	3	100	0	90 - 110		05/12/2017	19:04	LB87446
	Fluoride	1.9	2	95	0	90 - 110		05/12/2017	19:04	LB87446
	Phosphorus, Ortho	4.9	5	98	0	90 - 110		05/12/2017	19:04	LB87446
	Nitrite	3.1	3	103.3	0	90 - 110		05/12/2017	19:04	LB87446
	Nitrate	2.4	2.5	96	0	90 - 110		05/12/2017	19:04	LB87446
	Sulfate	14.4	15	96	0	90 - 110		05/12/2017	19:04	LB87446



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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: LB87446

SDG No.: LB87446

Contract: **Lab Code:** CHEM

Case No.: LB87446

SAS No.: LB87446

Sample ID	Analyte	Result mg/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB1	Bromide	0.066	+/-0.5	U		0.5		04/14/2017	18:43	LB87446
	Chloride	0.075	+/-0.15	U		0.15		04/14/2017	18:43	LB87446
	Fluoride	0.043	+/-0.1	U		0.1		04/14/2017	18:43	LB87446
	Phosphorus, Ortho	0.01	+/-0.25	U		0.25		04/14/2017	18:43	LB87446
	Nitrite	0.022	+/-0.15	U		0.15		04/14/2017	18:43	LB87446
	Nitrate	0.027	+/-0.13	U		0.13		04/14/2017	18:43	LB87446
	Sulfate	0.13	+/-0.75	U		0.75		04/14/2017	18:43	LB87446



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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: LB87446

SDG No.: LB87446

Contract:

Lab Code: CHEM

Case No.: LB87446

SAS No.: LB87446

Sample ID	Analyte	Result mg/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB1	Bromide	0.066	+/-0.5	U		0.5		05/12/2017	11:58	LB87446
	Chloride	0.075	+/-0.15	U		0.15		05/12/2017	11:58	LB87446
	Fluoride	0.043	+/-0.1	U		0.1		05/12/2017	11:58	LB87446
	Phosphorus, Ortho	0.01	+/-0.25	U		0.25		05/12/2017	11:58	LB87446
	Nitrite	0.022	+/-0.15	U		0.15		05/12/2017	11:58	LB87446
	Nitrate	0.027	+/-0.13	U		0.13		05/12/2017	11:58	LB87446
	Sulfate	0.13	+/-0.75	U		0.75		05/12/2017	11:58	LB87446
CCB2	Bromide	0.066	+/-0.5	U		0.5		05/12/2017	19:33	LB87446
	Chloride	0.075	+/-0.15	U		0.15		05/12/2017	19:33	LB87446
	Fluoride	0.043	+/-0.1	U		0.1		05/12/2017	19:33	LB87446
	Phosphorus, Ortho	0.01	+/-0.25	U		0.25		05/12/2017	19:33	LB87446
	Nitrite	0.022	+/-0.15	U		0.15		05/12/2017	19:33	LB87446
	Nitrate	0.027	+/-0.13	U		0.13		05/12/2017	19:33	LB87446
	Sulfate	0.13	+/-0.75	U		0.75		05/12/2017	19:33	LB87446



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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: LB87446

SDG No.: LB87446

Contract: Lab Code: CHEM

Case No.: LB87446

SAS No.: LB87446

Sample ID	Analyte	Result mg/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
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284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

Report of Analysis

Client:		Date Collected:	5/12/2017 12:00:00 AM
Project:	LB87446	Date Received:	5/12/2017 12:00:00 AM
Client Sample ID:	WS-1	SDG No.:	LB87446
Lab Sample ID:	I3150-01	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
	Bromide	2.8		1	0.066		0.5	mg/L		05/12/2017	300.0
	Chloride	238	OR	1	0.075		0.15	mg/L		05/12/2017	300.0
	Fluoride	0.17		1	0.043		0.1	mg/L		05/12/2017	300.0
	Nitrate	2.4		1	0.027		0.13	mg/L		05/12/2017	300.0
	Nitrite	0	U	1	0.022		0.15	mg/L		05/12/2017	300.0
	Phosphorus, Ortho	0	U	1	0.01		0.25	mg/L		05/12/2017	300.0
	Sulfate	68.1	OR	1	0.13		0.75	mg/L		05/12/2017	300.0



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Report of Analysis

Client:		Date Collected:	5/12/2017 12:00:00 AM
Project:	LB87446	Date Received:	5/12/2017 12:00:00 AM
Client Sample ID:	WS-2	SDG No.:	LB87446
Lab Sample ID:	I3150-02	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
	Bromide	0	U	1	0.066		0.5	mg/L		05/12/2017	300.0
	Chloride	928	OR	1	0.075		0.15	mg/L		05/12/2017	300.0
	Fluoride	0	U	1	0.043		0.1	mg/L		05/12/2017	300.0
	Nitrate	1.2		1	0.027		0.13	mg/L		05/12/2017	300.0
	Nitrite	0	U	1	0.022		0.15	mg/L		05/12/2017	300.0
	Phosphorus, Ortho	0	U	1	0.01		0.25	mg/L		05/12/2017	300.0
	Sulfate	43.3	OR	1	0.13		0.75	mg/L		05/12/2017	300.0



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Report of Analysis

Client:		Date Collected:	5/12/2017 12:00:00 AM
Project:	LB87446	Date Received:	5/12/2017 12:00:00 AM
Client Sample ID:	WS-2	SDG No.:	LB87446
Lab Sample ID:	I3150-02	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
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Color Before:

Clarity Before:

Texture:

Color After:

Clarity After:

Artifacts:

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

* = indicates the duplicate analysis is not within control limits.

E = Indicates the reported value is estimated because of the presence of interference.

OR = Over Range

N = Spiked sample recovery not within control limits



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PREPARATION BLANK SUMMARY

Client: LB87446

SDG No.: LB87446

Instrument: IC-1

Sample ID	Analyte	Result (mg/L)	Acceptance Limit	Conc Qual	LOD mg/L	CRQL mg/L	M	Analysis Date	Analysis Time	Run
LB87446BLW		WATER		Batch Number:				Prep Date:		
	Bromide	0.066	<0.5	U		0.5		05/12/2017	12:26	LB87446
	Chloride	0.075	<0.15	U		0.15		05/12/2017	12:26	LB87446
	Fluoride	0.043	<0.1	U		0.1		05/12/2017	12:26	LB87446
	Phosphorus, Ortho	0.01	<0.25	U		0.25		05/12/2017	12:26	LB87446
	Nitrite	0.022	<0.15	U		0.15		05/12/2017	12:26	LB87446
	Nitrate	0.027	<0.13	U		0.13		05/12/2017	12:26	LB87446
	Sulfate	0.13	<0.75	U		0.75		05/12/2017	12:26	LB87446



GENCHEM
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MATRIX SPIKE SUMMARY

client: LB87446 **level:** low **sdg no.:** LB87446
contract: _____ **lab code:** CHEM **case no.:** LB87446 **sas no.:** LB87446
matrix: WATER **sample id:** I3150-01 **client id:** WS-1MS
Percent Solids for Sample: 0 **Spiked ID:** I3150-01MS **Percent Solids for Spike Sample:** 0

Analyte	Units	Acceptance	Spiked	Sample		Spike	%	Qual	M
		Limit %R	Result	C	Result	C	Added	Recovery	
Bromide	mg/L	80 - 120	12.2		2.8		10	94	
Chloride	mg/L	80 - 120	217	OR	238	OR	3	-700	*
Fluoride	mg/L	80 - 120	2.3		0.17		2	106	
Phosphorus, Ortho	mg/L	80 - 120	6.3		0.01	U	5	126	*
Nitrite	mg/L	80 - 120	3		0.022	U	3	100	
Nitrate	mg/L	80 - 120	4.9		2.4		2.5	100	
Sulfate	mg/L	80 - 120	78.6	OR	68.1	OR	15	70	*



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DUPLICATE SAMPLE SUMMARY

Client: LB87446 **Level:** LOW **SDG No.:** LB87446
Contract: **Lab Code:** CHEM **Case No.:** LB87446 **SAS No.:** LB87446
Matrix: WATER **Sample ID:** I3150-01 **Client ID:** WS-1DUP
Percent Solids for Sample: 0 **Duplicate ID** I3150-01DUP **Percent Solids for Spike Sample:** 0

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Bromide	mg/L	20	2.8		2.7		4		
Chloride	mg/L	20	238	OR	238	OR	0		
Fluoride	mg/L	20	0.17		0.18		6		
Phosphorus, Ortho	mg/L	20	0.01	U	0	U			
Nitrite	mg/L	20	0.022	U	0	U			
Nitrate	mg/L	20	2.4		2.4		0		
Sulfate	mg/L	20	68.1	OR	67.7	OR	1		



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LABORATORY CONTROL SAMPLE SUMMARY

Client: LB87446

SDG No.: LB87446

Contract:

Lab Code: CHEM

Case No.: LB87446

SAS No.: LB87446

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
LB87446BSW							
Bromide	mg/L	10	10.4		104	90 - 110	
Chloride	mg/L	3	3		100	90 - 110	
Fluoride	mg/L	2	1.9		95	90 - 110	
Phosphorus, Ortho	mg/L	5	4.8		96	90 - 110	
Nitrite	mg/L	3	3.2		106.7	90 - 110	
Nitrate	mg/L	2.5	2.4		96	90 - 110	
Sulfate	mg/L	15	14.2		94.7	90 - 110	
