

Daily Analysis Runlog For Sequence/QC Batch ID # LB94472

Review By		Review On				
SubDirectory		LB94472		Test : Anions		
STD. NAME		STD REF.#				
ICAL Standard		wp62836,wp62837,wp62838,wp62839,wp62840,wp62841,wp62842,wp62843				
ICV Standard		wp62844				
CCV Standard		wp63515,wp63564				
ICSA Standard		N/A				
CRI Standard		N/A				
LCS Standard		wp63516,wp63565				
Chk Standard		WP63116,WP63117				
Sr#	SampleId	ClientID	QcType	Date	Comment	Status
1	STD1	STD1	CAL1	03/19/18 11:39		OK
2	STD2	STD2	CAL2	03/19/18 12:11		OK
3	STD3	STD3	CAL3	03/19/18 12:43		OK
4	STD4	STD4	CAL4	03/19/18 13:15		OK
5	STD5	STD5	CAL5	03/19/18 13:47		OK
6	STD6	STD6	CAL6	03/19/18 14:19		OK
7	STD7	STD7	CAL7	03/19/18 14:51		OK
8	ICV1	ICV1	ICV	03/19/18 16:27		OK
9	ICB1	ICB1	ICB	03/19/18 17:23		OK
10	CCV1	CCV1	CCV	04/09/18 08:45		OK
11	CCB1	CCB1	CCB	04/09/18 09:54		OK
12	LB94472BLW	LB94472BLW	MB	04/09/18 10:57		OK
13	LB94472BSW	LB94472BSW	LCS	04/09/18 11:28		OK
14	J2281-01	EPE-118-5-OW	SAM	04/09/18 11:59	CLhigh	Dilution
15	J2281-01DUP	EPE-118-5-OWDUP	DUP	04/09/18 13:00		OK
16	J2281-01MS	EPE-118-5-OWMS	MS	04/09/18 13:31		OK
17	CCV2	CCV2	CCV	04/09/18 14:02		OK
18	CCB2	CCB2	CCB	04/09/18 14:33		OK
19	CCV3	CCV3	CCV	04/10/18 08:47		OK
20	CCB3	CCB3	CCB	04/10/18 09:18		OK
21	LB94472BLW2	LB94472BLW2	MB	04/10/18 09:49		OK

284 Sheffield Street, Mountainside, New Jersey 07092 Phone : 908 789 8900 Fax : 908 789 8922

Daily Analysis Runlog For Sequence/QC Batch ID # LB94472

Review By			Review On			
SubDirectory		LB94472		Test : Anions		
STD. NAME		STD REF.#				
ICAL Standard		wp62836,wp62837,wp62838,wp62839,wp62840,wp62841,wp62842,wp62843				
ICV Standard		wp62844				
CCV Standard		wp63515,wp63564				
ICSA Standard		N/A				
CRI Standard		N/A				
LCS Standard		wp63516,wp63565				
Chk Standard		WP63116,WP63117				
22	LB94472BSW2	LB94472BSW2	LCS	04/10/18 10:20		OK
23	J2281-02	FIELD-BLANK	SAM	04/10/18 10:51		OK
24	J2281-01DL	EPE-118-5-OWDL	SAM	04/10/18 11:22	50X for CL	Confirms
25	J2311-01	POOLWATER	SAM	04/10/18 11:52		OK
26	J2311-01DUP	POOLWATERDUP	DUP	04/10/18 12:23		OK
27	J2311-01MS	POOLWATERMS	MS	04/10/18 12:54		OK
28	CCV4	CCV4	CCV	04/10/18 13:25		OK
29	CCB4	CCB4	CCB	04/10/18 13:56		OK



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Report of Analysis

Client:		Date Collected:	4/5/2018 12:00:00 AM
Project:	LB94472	Date Received:	4/6/2018 12:00:00 AM
Client Sample ID:	EPE-118-5-OW	SDG No.:	LB94472
Lab Sample ID:	J2281-01	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	0	U	1	0.066		0.5	mg/L		04/09/2018	300.0
	Chloride	330	OR	1	0.075		0.15	mg/L		04/09/2018	300.0
	Fluoride	0.64		1	0.043		0.1	mg/L		04/09/2018	300.0
	Nitrate	0.21		1	0.027		0.13	mg/L		04/09/2018	300.0
	Nitrite	0	U	1	0.022		0.15	mg/L		04/09/2018	300.0
	Phosphorus, Ortho	0	U	1	0.01		0.25	mg/L		04/09/2018	300.0
	Sulfate	21.2		1	0.13		0.75	mg/L		04/09/2018	300.0



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Report of Analysis

Client:		Date Collected:	4/5/2018 12:00:00 AM
Project:	LB94472	Date Received:	4/6/2018 12:00:00 AM
Client Sample ID:	EPE-118-5-OWDL	SDG No.:	LB94472
Lab Sample ID:	J2281-01DL	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	UD	50	3.3		25	mg/L		04/10/2018	300.0
	Chloride	238	D	50	3.8		7.5	mg/L		04/10/2018	300.0
	Fluoride	0	UD	50	2.2		5	mg/L		04/10/2018	300.0
	Nitrate	0	UD	50	1.4		6.3	mg/L		04/10/2018	300.0
	Nitrite	0	UD	50	1.1		7.5	mg/L		04/10/2018	300.0
	Phosphorus, Ortho	0	UD	50	0.5		12.5	mg/L		04/10/2018	300.0
	Sulfate	0	UD	50	6.6		37.5	mg/L		04/10/2018	300.0



Report of Analysis

Client:		Date Collected:	4/5/2018 12:00:00 AM
Project:	LB94472	Date Received:	4/6/2018 12:00:00 AM
Client Sample ID:	FIELD-BLANK	SDG No.:	LB94472
Lab Sample ID:	J2281-02	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		04/10/2018	300.0
	Chloride	0	U	1	0.075		0.15	mg/L		04/10/2018	300.0
	Fluoride	0	U	1	0.043		0.1	mg/L		04/10/2018	300.0
	Nitrate	0	U	1	0.027		0.13	mg/L		04/10/2018	300.0
	Nitrite	0	U	1	0.022		0.15	mg/L		04/10/2018	300.0
	Phosphorus, Ortho	0	U	1	0.01		0.25	mg/L		04/10/2018	300.0
	Sulfate	0	U	1	0.13		0.75	mg/L		04/10/2018	300.0



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Report of Analysis

Client:		Date Collected:	4/2/2018 12:00:00 AM
Project:	LB94472	Date Received:	4/10/2018 12:00:00 AM
Client Sample ID:	POOLWATER	SDG No.:	LB94472
Lab Sample ID:	J2311-01	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	0	U	1	0.066		0.5	mg/L		04/10/2018	300.0
	Chloride	0.14	J	1	0.075		0.15	mg/L		04/10/2018	300.0
	Fluoride	0	U	1	0.043		0.1	mg/L		04/10/2018	300.0
	Nitrate	0	U	1	0.027		0.13	mg/L		04/10/2018	300.0
	Nitrite	0	U	1	0.022		0.15	mg/L		04/10/2018	300.0
	Phosphorus, Ortho	0	U	1	0.01		0.25	mg/L		04/10/2018	300.0
	Sulfate	0	U	1	0.13		0.75	mg/L		04/10/2018	300.0



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Report of Analysis

Client:		Date Collected:	4/2/2018 12:00:00 AM
Project:	LB94472	Date Received:	4/10/2018 12:00:00 AM
Client Sample ID:	POOLWATER	SDG No.:	LB94472
Lab Sample ID:	J2311-01	Matrix:	WATER
Level (low/med):	low	% Solid:	0

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



GENCHEM

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: LB94472

SDG No.: LB94472

Contract: _____ Lab Code: CHEM

Case No.: LB94472

SAS No.: LB94472

Initial Calibration Source: _____

Continuing Calibration Source: _____

Sample ID	Analyte	Result mg/L	True Value	% Recovery	Qual	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
ICV1	Bromide	9.7	10	97		90 - 110		03/19/2018	16:27	lb94472
	Chloride	2.9	3	96.7		90 - 110		03/19/2018	16:27	lb94472
	Fluoride	2	2	100		90 - 110		03/19/2018	16:27	lb94472
	Phosphorus, Ortho	5.3	5	106		90 - 110		03/19/2018	16:27	lb94472
	Nitrite	2.9	3	96.7		90 - 110		03/19/2018	16:27	lb94472
	Nitrate	2.4	2.5	96		90 - 110		03/19/2018	16:27	lb94472
	Sulfate	15.2	15	101.3		90 - 110		03/19/2018	16:27	lb94472



GENCHEM

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: LB94472

SDG No.: LB94472

Contract: Lab Code: CHEM

Case No.: LB94472

SAS No.: LB94472

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		03/19/2018	17:23	1b94472
	Chloride	0.075	+/-0.15	U		0.15		03/19/2018	17:23	1b94472
	Fluoride	0.043	+/-0.1	U		0.1		03/19/2018	17:23	1b94472
	Phosphorus, Ortho	0.01	+/-0.25	U		0.25		03/19/2018	17:23	1b94472
	Nitrite	0.022	+/-0.15	U		0.15		03/19/2018	17:23	1b94472
	Nitrate	0.027	+/-0.13	U		0.13		03/19/2018	17:23	1b94472
	Sulfate	0.13	+/-0.75	U		0.75		03/19/2018	17:23	1b94472



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- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: LB94472 SDG No.: LB94472
Contract: _____ Lab Code: CHEM Case No.: LB94472 SAS No.: LB94472

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		04/09/2018	09:54	lb94472
	Chloride	0.075	+/-0.15	U		0.15		04/09/2018	09:54	lb94472
	Fluoride	0.043	+/-0.1	U		0.1		04/09/2018	09:54	lb94472
	Phosphorus, Ortho	0.01	+/-0.25	U		0.25		04/09/2018	09:54	lb94472
	Nitrite	0.022	+/-0.15	U		0.15		04/09/2018	09:54	lb94472
	Nitrate	0.027	+/-0.13	U		0.13		04/09/2018	09:54	lb94472
	Sulfate	0.13	+/-0.75	U		0.75		04/09/2018	09:54	lb94472
CCB2	Bromide	0.066	+/-0.5	U		0.5		04/09/2018	14:33	lb94472
	Chloride	0.075	+/-0.15	U		0.15		04/09/2018	14:33	lb94472
	Fluoride	0.043	+/-0.1	U		0.1		04/09/2018	14:33	lb94472
	Phosphorus, Ortho	0.01	+/-0.25	U		0.25		04/09/2018	14:33	lb94472
	Nitrite	0.022	+/-0.15	U		0.15		04/09/2018	14:33	lb94472
	Nitrate	0.027	+/-0.13	U		0.13		04/09/2018	14:33	lb94472
	Sulfate	0.13	+/-0.75	U		0.75		04/09/2018	14:33	lb94472
CCB3	Bromide	0.066	+/-0.5	U		0.5		04/10/2018	09:18	lb94472
	Chloride	0.075	+/-0.15	U		0.15		04/10/2018	09:18	lb94472
	Fluoride	0.043	+/-0.1	U		0.1		04/10/2018	09:18	lb94472
	Phosphorus, Ortho	0.01	+/-0.25	U		0.25		04/10/2018	09:18	lb94472
	Nitrite	0.022	+/-0.15	U		0.15		04/10/2018	09:18	lb94472
	Nitrate	0.027	+/-0.13	U		0.13		04/10/2018	09:18	lb94472
	Sulfate	0.13	+/-0.75	U		0.75		04/10/2018	09:18	lb94472
CCB4	Bromide	0.066	+/-0.5	U		0.5		04/10/2018	13:56	lb94472
	Chloride	0.075	+/-0.15	U		0.15		04/10/2018	13:56	lb94472
	Fluoride	0.043	+/-0.1	U		0.1		04/10/2018	13:56	lb94472
	Phosphorus, Ortho	0.01	+/-0.25	U		0.25		04/10/2018	13:56	lb94472
	Nitrite	0.022	+/-0.15	U		0.15		04/10/2018	13:56	lb94472
	Nitrate	0.027	+/-0.13	U		0.13		04/10/2018	13:56	lb94472
	Sulfate	0.13	+/-0.75	U		0.75		04/10/2018	13:56	lb94472



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- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: LB94472

SDG No.: LB94472

Contract: Lab Code: CHEM

Case No.: LB94472

SAS No.: LB94472

Sample ID	Analyte	Result mg/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
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- 3b -
PREPARATION BLANK SUMMARY

Client: LB94472

SDG No.: LB94472

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
LB94472BLW		WATER		Batch Number:				Prep Date:		
	Bromide	0.066	<0.5	U		0.5		04/09/2018	10:57	lb94472
	Chloride	0.075	<0.15	U		0.15		04/09/2018	10:57	lb94472
	Fluoride	0.043	<0.1	U		0.1		04/09/2018	10:57	lb94472
	Phosphorus, Ortho	0.01	<0.25	U		0.25		04/09/2018	10:57	lb94472
	Nitrite	0.022	<0.15	U		0.15		04/09/2018	10:57	lb94472
	Nitrate	0.027	<0.13	U		0.13		04/09/2018	10:57	lb94472
	Sulfate	0.13	<0.75	U		0.75		04/09/2018	10:57	lb94472
Sample ID	Analyte	Result (mg/L)	Acceptance Limit	Conc Qual	LOD mg/L	CRQL mg/L	M	Analysis Date	Analysis Time	Run
LB94472BLW2		WATER		Batch Number:				Prep Date:		
	Bromide	0.066	<0.5	U		0.5		04/10/2018	09:49	lb94472
	Chloride	0.075	<0.15	U		0.15		04/10/2018	09:49	lb94472
	Fluoride	0.043	<0.1	U		0.1		04/10/2018	09:49	lb94472
	Phosphorus, Ortho	0.01	<0.25	U		0.25		04/10/2018	09:49	lb94472
	Nitrite	0.022	<0.15	U		0.15		04/10/2018	09:49	lb94472
	Nitrate	0.027	<0.13	U		0.13		04/10/2018	09:49	lb94472
	Sulfate	0.13	<0.75	U		0.75		04/10/2018	09:49	lb94472



GENCHEM
- 5a -
MATRIX SPIKE SUMMARY

client: LB94472 level: low sdg no.: LB94472
contract: _____ lab code: CHEM case no.: LB94472 sas no.: LB94472
matrix: WATER sample id: J2281-01 client id: EPE-118-5-OWMS
Percent Solids for Sample: 0 Spiked ID: J2281-01MS Percent Solids for Spike Sample: 0

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Bromide	mg/L	80 - 120	10.2		0.066	U	10	102		
Chloride	mg/L	80 - 120	301	OR	330	OR	3	-967	*	
Fluoride	mg/L	80 - 120	2.3		0.64		2	83		
Phosphorus, Ortho	mg/L	80 - 120	7.1		0.01	U	5	142	*	
Nitrite	mg/L	80 - 120	2.8		0.022	U	3	93.3		
Nitrate	mg/L	80 - 120	2.6		0.21		2.5	96		
Sulfate	mg/L	80 - 120	35		21.2		15	92		



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MATRIX SPIKE SUMMARY

client: LB94472 level: low sdg no.: LB94472
contract: _____ lab code: CHEM case no.: LB94472 sas no.: LB94472
matrix: WATER sample id: J2311-01 client id: POOLWATERMS
Percent Solids for Sample: 0 Spiked ID: J2311-01MS Percent Solids for Spike Sample: 0

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Bromide	mg/L	80 - 120	9.7		0.066	U	10	97		
Chloride	mg/L	80 - 120	3.1		0.14	J	3	99		
Fluoride	mg/L	80 - 120	1.9		0.043	U	2	95		
Phosphorus, Ortho	mg/L	80 - 120	5.6		0.01	U	5	112		
Nitrite	mg/L	80 - 120	2.9		0.022	U	3	96.7		
Nitrate	mg/L	80 - 120	2.4		0.027	U	2.5	96		
Sulfate	mg/L	80 - 120	14.8		0.13	U	15	98.7		

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DUPLICATE SAMPLE SUMMARY

Client: LB94472 **Level:** LOW **SDG No.:** LB94472
Contract: _____ **Lab Code:** CHEM **Case No.:** LB94472 **SAS No.:** LB94472
Matrix: WATER **Sample ID:** J2281-01 **Client ID:** EPE-118-5-OWDUP
Percent Solids for Sample: 0 **Duplicate ID** J2281-01DUP **Percent Solids for Spike Sample:** 0

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Bromide	mg/L	20	0.066	U	0	U			
Chloride	mg/L	20	330	OR	334	OR	1		
Fluoride	mg/L	20	0.64		0.5		25	*	
Phosphorus, Ortho	mg/L	20	0.01	U	0	U			
Nitrite	mg/L	20	0.022	U	0	U			
Nitrate	mg/L	20	0.21		0.2		5		
Sulfate	mg/L	20	21.2		21.5		1		

GENCHEM

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DUPLICATE SAMPLE SUMMARY

Client: LB94472 **Level:** LOW **SDG No.:** LB94472
Contract: _____ **Lab Code:** CHEM **Case No.:** LB94472 **SAS No.:** LB94472
Matrix: WATER **Sample ID:** J2311-01 **Client ID:** POOLWATERDUP
Percent Solids for Sample: 0 **Duplicate ID** J2311-01DUP **Percent Solids for Spike Sample:** 0

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Bromide	mg/L	20	0.066	U	0	U			
Chloride	mg/L	20	0.14	J	0.2		35	*	
Fluoride	mg/L	20	0.043	U	0	U			
Phosphorus, Ortho	mg/L	20	0.01	U	0	U			
Nitrite	mg/L	20	0.022	U	0	U			
Nitrate	mg/L	20	0.027	U	0	U			
Sulfate	mg/L	20	0.13	U	0	U			



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LABORATORY CONTROL SAMPLE SUMMARY

Client: LB94472

SDG No.: LB94472

Contract:

Lab Code: CHEM

Case No.: LB94472

SAS No.: LB94472

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
LB94472BSW							
Bromide	mg/L	10	9.4		94	90 - 110	
Chloride	mg/L	3	2.8		93.3	90 - 110	
Fluoride	mg/L	2	1.9		95	90 - 110	
Phosphorus, Ortho	mg/L	5	5.4		108	90 - 110	
Nitrite	mg/L	3	2.8		93.3	90 - 110	
Nitrate	mg/L	2.5	2.3		92	90 - 110	
Sulfate	mg/L	15	14.4		96	90 - 110	



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LABORATORY CONTROL SAMPLE SUMMARY

Client: LB94472

SDG No.: LB94472

Contract:

Lab Code: CHEM

Case No.: LB94472

SAS No.: LB94472

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
LB94472BSW2							
Bromide	mg/L	10	9.4		94	90 - 110	
Chloride	mg/L	3	2.9		96.7	90 - 110	
Fluoride	mg/L	2	1.9		95	90 - 110	
Phosphorus, Ortho	mg/L	5	5.6		112	90 - 110	
Nitrite	mg/L	3	2.8		93.3	90 - 110	
Nitrate	mg/L	2.5	2.4		96	90 - 110	
Sulfate	mg/L	15	15		100	90 - 110	
