



284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

Report of Analysis

Client:		Date Collected:	9/7/2017 12:00:00 AM
Project:	LB89938	Date Received:	9/7/2017 12:00:00 AM
Client Sample ID:	DSN001	SDG No.:	LB89938
Lab Sample ID:	I5157-01	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	1.2		1	0.066		0.5	mg/L		09/07/2017	300.0
	Chloride	36.2	OR	1	0.075		0.15	mg/L		09/07/2017	300.0
	Fluoride	0.2		1	0.043		0.1	mg/L		09/07/2017	300.0
	Nitrate	0.4		1	0.027		0.13	mg/L		09/07/2017	300.0
	Nitrite	0	U	1	0.022		0.15	mg/L		09/07/2017	300.0
	Phosphorus, Ortho	0	U	1	0.01		0.25	mg/L		09/07/2017	300.0
	Sulfate	11.2		1	0.13		0.75	mg/L		09/07/2017	300.0



284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

Report of Analysis

Client:		Date Collected:	9/7/2017 12:00:00 AM
Project:	LB89938	Date Received:	9/7/2017 12:00:00 AM
Client Sample ID:	DSN001	SDG No.:	LB89938
Lab Sample ID:	I5157-01	Matrix:	WATER
Level (low/med):	low	% Solid:	0

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

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: LB89938

SDG No.: LB89938

Contract: _____ Lab Code: CHEM

Case No.: LB89938

SAS No.: LB89938

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		08/22/2017	21:09	LB89938
	Chloride	3	3	100	0	90 - 110		08/22/2017	21:09	LB89938
	Fluoride	2	2	100	0	90 - 110		08/22/2017	21:09	LB89938
	Phosphorus, Ortho	4.1	5	82	0	90 - 110		08/22/2017	21:09	LB89938
	Nitrite	3	3	100	0	90 - 110		08/22/2017	21:09	LB89938
	Nitrate	2.4	2.5	96	0	90 - 110		08/22/2017	21:09	LB89938
	Sulfate	14.7	15	98	0	90 - 110		08/22/2017	21:09	LB89938



GENCHEM

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: LB89938

SDG No.: LB89938

Contract: _____ Lab Code: CHEM

Case No.: LB89938

SAS No.: LB89938

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		09/07/2017	09:20	LB89938
	Chloride	3	3	100	0	90 - 110		09/07/2017	09:20	LB89938
	Fluoride	2.1	2	105	0	90 - 110		09/07/2017	09:20	LB89938
	Phosphorus, Ortho	11.3	5	226	0	90 - 110		09/07/2017	09:20	LB89938
	Nitrite	3	3	100	0	90 - 110		09/07/2017	09:20	LB89938
	Nitrate	2.4	2.5	96	0	90 - 110		09/07/2017	09:20	LB89938
	Sulfate	14	15	93.3	0	90 - 110		09/07/2017	09:20	LB89938
CCV2	Bromide	10.6	10	106	0	90 - 110		09/07/2017	18:37	LB89938
	Chloride	2.9	3	96.7	0	90 - 110		09/07/2017	18:37	LB89938
	Fluoride	2	2	100	0	90 - 110		09/07/2017	18:37	LB89938
	Phosphorus, Ortho	12	5	240	0	90 - 110		09/07/2017	18:37	LB89938
	Nitrite	2.9	3	96.7	0	90 - 110		09/07/2017	18:37	LB89938
	Nitrate	2.4	2.5	96	0	90 - 110		09/07/2017	18:37	LB89938
	Sulfate	14.2	15	94.7	0	90 - 110		09/07/2017	18:37	LB89938



GENCHEM

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: LB89938

SDG No.: LB89938

Contract: Lab Code: CHEM

Case No.: LB89938

SAS No.: LB89938

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		08/22/2017	21:39	LB89938
	Chloride	0.075	+/-0.15	U		0.15		08/22/2017	21:39	LB89938
	Fluoride	0.043	+/-0.1	U		0.1		08/22/2017	21:39	LB89938
	Phosphorus, Ortho	0.01	+/-0.25	U		0.25		08/22/2017	21:39	LB89938
	Nitrite	0.022	+/-0.15	U		0.15		08/22/2017	21:39	LB89938
	Nitrate	0.027	+/-0.13	U		0.13		08/22/2017	21:39	LB89938
	Sulfate	0.13	+/-0.75	U		0.75		08/22/2017	21:39	LB89938

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		09/07/2017	09:50	LB89938
	Chloride	0.075	+/-0.15	U		0.15		09/07/2017	09:50	LB89938
	Fluoride	0.043	+/-0.1	U		0.1		09/07/2017	09:50	LB89938
	Phosphorus, Ortho	0.01	+/-0.25	U		0.25		09/07/2017	09:50	LB89938
	Nitrite	0.022	+/-0.15	U		0.15		09/07/2017	09:50	LB89938
	Nitrate	0.027	+/-0.13	U		0.13		09/07/2017	09:50	LB89938
	Sulfate	0.13	+/-0.75	U		0.75		09/07/2017	09:50	LB89938
CCB2	Bromide	0.066	+/-0.5	U		0.5		09/07/2017	19:07	LB89938
	Chloride	0.075	+/-0.15	U		0.15		09/07/2017	19:07	LB89938
	Fluoride	0.043	+/-0.1	U		0.1		09/07/2017	19:07	LB89938
	Phosphorus, Ortho	0.01	+/-0.25	U		0.25		09/07/2017	19:07	LB89938
	Nitrite	0.022	+/-0.15	U		0.15		09/07/2017	19:07	LB89938
	Nitrate	0.027	+/-0.13	U		0.13		09/07/2017	19:07	LB89938
	Sulfate	0.13	+/-0.75	U		0.75		09/07/2017	19:07	LB89938



GENCHEM

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client:

LB89938

SDG No.:

LB89938

Contract:

Lab Code:

CHEM

Case No.:

LB89938

SAS No.:

LB89938

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



GENCHEM
- 3b -
PREPARATION BLANK SUMMARY

Client: LB89938

SDG No.: LB89938

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
LB89938BLW		WATER		Batch Number:				Prep Date:		
	Bromide	0.066	<0.5	U		0.5		09/07/2017	10:20	LB89938
	Chloride	0.075	<0.15	U		0.15		09/07/2017	10:20	LB89938
	Fluoride	0.043	<0.1	U		0.1		09/07/2017	10:20	LB89938
	Phosphorus, Ortho	0.01	<0.25	U		0.25		09/07/2017	10:20	LB89938
	Nitrite	0.022	<0.15	U		0.15		09/07/2017	10:20	LB89938
	Nitrate	0.027	<0.13	U		0.13		09/07/2017	10:20	LB89938
	Sulfate	0.13	<0.75	U		0.75		09/07/2017	10:20	LB89938



GENCHEM
- 5a -
MATRIX SPIKE SUMMARY

client: LB89938 **level:** low **sdg no.:** LB89938
contract: **lab code:** CHEM **case no.:** LB89938 **sas no.:** LB89938
matrix: WATER **sample id:** I5157-01 **client id:** DSN001MS
Percent Solids for Sample: 0 **Spiked ID:** I5157-01MS **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	11.4		1.2		10	102		
Chloride	mg/L	80 - 120	37.5	OR	36.2	OR	3	43	*	
Fluoride	mg/L	80 - 120	2.3		0.2		2	105		
Phosphorus, Ortho	mg/L	80 - 120	14.3	OR	0.01	U	5	286	*	
Nitrite	mg/L	80 - 120	3.1		0.022	U	3	103.3		
Nitrate	mg/L	80 - 120	2.8		0.4		2.5	96		
Sulfate	mg/L	80 - 120	24.7		11.2		15	90		

GENCHEM

- 6 -

DUPLICATE SAMPLE SUMMARY

Client: LB89938 **Level:** LOW **SDG No.:** LB89938
Contract: _____ **Lab Code:** CHEM **Case No.:** LB89938 **SAS No.:** LB89938
Matrix: WATER **Sample ID:** I5157-01 **Client ID:** DSN001DUP
Percent Solids for Sample: 0 **Duplicate ID** I5157-01DUP **Percent Solids for Spike Sample:** 0

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Bromide	mg/L	20	1.2		1.2		0		
Chloride	mg/L	20	36.2	OR	36.5	OR	1		
Fluoride	mg/L	20	0.2		0.19		5		
Phosphorus, Ortho	mg/L	20	0.01	U	0	U			
Nitrite	mg/L	20	0.022	U	0	U			
Nitrate	mg/L	20	0.4		0.39		3		
Sulfate	mg/L	20	11.2		11.4		2		



GENCHEM

- 7 -

LABORATORY CONTROL SAMPLE SUMMARY

Client: LB89938

SDG No.: LB89938

Contract:

Lab Code: CHEM

Case No.: LB89938

SAS No.: LB89938

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
LB89938BSW							
Bromide	mg/L	10	10.4		104	90 - 110	
Chloride	mg/L	3	3		100	90 - 110	
Fluoride	mg/L	2	2		100	90 - 110	
Phosphorus, Ortho	mg/L	5	11.8		236	90 - 110	
Nitrite	mg/L	3	3		100	90 - 110	
Nitrate	mg/L	2.5	2.4		96	90 - 110	
Sulfate	mg/L	15	13.8		92	90 - 110	

Daily Analysis Runlog For Sequence/QC Batch ID # LB89938

Review By

Review On

SubDirectory

LB89938

Test :

Anions

STD. NAME		STD REF.#				
ICAL Standard		WP57402,WP57403,WP57404,WP57405,WP57406,WP57407,WP57408				
ICV Standard		WP57409				
CCV Standard		WP57725				
ICSA Standard		N/A				
CRI Standard		N/A				
LCS Standard		WP57730				
Chk Standard		WP57411,WP57732				

Sr#	SampleId	ClientID	QcType	Date	Comment	Status
1	STD1	STD1	CAL1	08/22/17 16:40		OK
2	STD2	STD2	CAL2	08/22/17 17:10		OK
3	STD3	STD3	CAL3	08/22/17 17:40		OK
4	STD4	STD4	CAL4	08/22/17 18:10		OK
5	STD5	STD5	CAL5	08/22/17 18:40		OK
6	STD6	STD6	CAL6	08/22/17 19:10		OK
7	STD7	STD7	CAL7	08/22/17 19:39		OK
8	ICV1	ICV1	ICV	08/22/17 21:09		OK
9	ICB1	ICB1	ICB	08/22/17 21:39		OK
10	CCV1	CCV1	CCV	09/07/17 09:20		OK
11	CCB1	CCB1	CCB	09/07/17 09:50		OK
12	LB89938BLW	LB89938BLW	MB	09/07/17 10:20		OK
13	LB89938BSW	LB89938BSW	LCS	09/07/17 10:49		OK
14	I5157-01	DSN001	SAM	09/07/17 16:36		OK
15	I5157-01DUP	DSN001DUP	DUP	09/07/17 17:06		OK
16	I5157-01MS	DSN001MS	MS	09/07/17 17:35		OK
17	CCV2	CCV2	CCV	09/07/17 18:37		OK
18	CCB2	CCB2	CCB	09/07/17 19:07		OK