

Daily Analysis Runlog For Sequence/QC Batch ID # LB91935

Review By

Review On

SubDirectory

LB91935

Test :

Anions

STD. NAME	STD REF.#
ICAL Standard	WP59884,WP59885,WP59886,WP59887,WP59888,WP59889,WP59890
ICV Standard	WP59891
CCV Standard	WP60080
ICSA Standard	N/A
CRI Standard	N/A
LCS Standard	WP60085
Chk Standard	WP60017,WP60019

Sr#	SampleId	ClientID	QcType	Date	Comment	Status
1	STD1	STD1	CAL1	11/27/17 11:32		OK
2	STD2	STD2	CAL2	11/27/17 12:03		OK
3	STD3	STD3	CAL3	11/27/17 12:34		OK
4	STD4	STD4	CAL4	11/27/17 13:06		OK
5	STD5	STD5	CAL5	11/27/17 13:38		OK
6	STD6	STD6	CAL6	11/27/17 14:10		OK
7	STD7	STD7	CAL7	11/27/17 14:42		OK
8	CCV1	CCV1	CCV	11/27/17 15:14		OK
9	CCB1	CCB1	CCB	11/27/17 15:45		OK
10	ICV1	ICV1	ICV	11/27/17 16:17		OK
11	ICB1	ICB1	ICB	11/27/17 16:50		OK
12	CCV2	CCV2	CCV	12/05/17 09:30		OK
13	CCB2	CCB2	CCB	12/05/17 10:02		OK
14	LB91935BLS	LB91935BLS	MB	12/05/17 10:33		OK
15	LB91935BSS	LB91935BSS	LCS	12/05/17 11:04		OK
16	I6728-01	LOCATION-1	SAM	12/05/17 11:35		OK
17	I6728-02	LOCATION-2	SAM	12/05/17 12:06		OK
18	I6728-03	LOCATION-3	SAM	12/05/17 12:37		OK
19	I6728-03DUP	LOCATION-3DUP	DUP	12/05/17 13:08		OK
20	I6728-03MS	LOCATION-3MS	MS	12/05/17 13:39		OK
21	I6728-03MSD	LOCATION-3MSD	MSD	12/05/17 14:10		OK



Instrument ID : IC-1

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

Daily Analysis Runlog For Sequence/QC Batch ID # LB91935

Review By		Review On				
SubDirectory		Test : Anions				
LB91935						
STD. NAME		STD REF.#				
ICAL Standard		WP59884,WP59885,WP59886,WP59887,WP59888,WP59889,WP59890				
ICV Standard		WP59891				
CCV Standard		WP60080				
ICSA Standard		N/A				
CRI Standard		N/A				
LCS Standard		WP60085				
Chk Standard		WP60017,WP60019				
22	CCV3	CCV3	CCV	12/05/17 14:41		OK
23	CCB3	CCB3	CCB	12/05/17 15:12		OK



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

Report of Analysis

Client:		Date Collected:	10/17/2017 12:00:00 AM
Project:	LB91935	Date Received:	12/1/2017 12:00:00 AM
Client Sample ID:	LOCATION-1	SDG No.:	LB91935
Lab Sample ID:	I6728-01	Matrix:	Solid
Level (low/med):	low	% Solid:	80.7

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
	Bromide	0	U	1	0.24		0.62	mg/Kg		12/05/2017	9056
	Chloride	0.21		1	0.04		0.19	mg/Kg		12/05/2017	9056
	Fluoride	0.32		1	0.021		0.12	mg/Kg		12/05/2017	9056
	Nitrate	0.37		1	0.014		0.14	mg/Kg		12/05/2017	9056
	Nitrite	0	U	1	0.012		0.19	mg/Kg		12/05/2017	9056
	Phosphorus, Ortho	-0.21	U	1	0.0025		0.3	mg/Kg		12/05/2017	9056
	Sulfate	1.1		1	0.12		0.93	mg/Kg		12/05/2017	9056

Report of Analysis

Client:		Date Collected:	10/17/2017 12:00:00 AM
Project:	LB91935	Date Received:	12/1/2017 12:00:00 AM
Client Sample ID:	LOCATION-2	SDG No.:	LB91935
Lab Sample ID:	I6728-02	Matrix:	Solid
Level (low/med):	low	% Solid:	78.8

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
	Bromide	0	U	1	0.24		0.63	mg/Kg		12/05/2017	9056
	Chloride	1.5		1	0.041		0.19	mg/Kg		12/05/2017	9056
	Fluoride	0.34		1	0.022		0.13	mg/Kg		12/05/2017	9056
	Nitrate	0.47		1	0.014		0.14	mg/Kg		12/05/2017	9056
	Nitrite	0	U	1	0.013		0.19	mg/Kg		12/05/2017	9056
	Phosphorus, Ortho	-0.027	U	1	0.0025		0.31	mg/Kg		12/05/2017	9056
	Sulfate	3		1	0.12		0.95	mg/Kg		12/05/2017	9056

Report of Analysis

Client:		Date Collected:	10/17/2017 12:00:00 AM
Project:	LB91935	Date Received:	12/1/2017 12:00:00 AM
Client Sample ID:	LOCATION-3	SDG No.:	LB91935
Lab Sample ID:	I6728-03	Matrix:	Solid
Level (low/med):	low	% Solid:	78.7

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
	Bromide	0	U	1	0.24		0.64	mg/Kg		12/05/2017	9056
	Chloride	0.34		1	0.041		0.19	mg/Kg		12/05/2017	9056
	Fluoride	0.22		1	0.022		0.13	mg/Kg		12/05/2017	9056
	Nitrate	0.52		1	0.014		0.14	mg/Kg		12/05/2017	9056
	Nitrite	0	U	1	0.013		0.19	mg/Kg		12/05/2017	9056
	Phosphorus, Ortho	-0.15	U	1	0.0025		0.31	mg/Kg		12/05/2017	9056
	Sulfate	1.8		1	0.12		0.95	mg/Kg		12/05/2017	9056

Report of Analysis

Client:		Date Collected:	10/17/2017 12:00:00 AM
Project:	LB91935	Date Received:	12/1/2017 12:00:00 AM
Client Sample ID:	LOCATION-3	SDG No.:	LB91935
Lab Sample ID:	I6728-03	Matrix:	Solid
Level (low/med):	low	% Solid:	78.7

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

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: LB91935

SDG No.: LB91935

Contract: _____ Lab Code: CHEM

Case No.: LB91935

SAS No.: LB91935

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	9.7	10	97	0	90 - 110		11/27/2017	15:14	LB91935
	Chloride	3	3	100	0	90 - 110		11/27/2017	15:14	LB91935
	Fluoride	1.9	2	95	0	90 - 110		11/27/2017	15:14	LB91935
	Phosphorus, Ortho	5.6	5	112	0	90 - 110		11/27/2017	15:14	LB91935
	Nitrite	2.9	3	96.7	0	90 - 110		11/27/2017	15:14	LB91935
	Nitrate	2.4	2.5	96	0	90 - 110		11/27/2017	15:14	LB91935
	Sulfate	14.3	15	95.3	0	90 - 110		11/27/2017	15:14	LB91935

Sample ID	Analyte	Result	True Value	%	% RSD	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
		mg/L								
ICV1	Bromide	9.8	10	98	0	90 - 110		11/27/2017	16:17	LB91935
	Chloride	2.9	3	96.7	0	90 - 110		11/27/2017	16:17	LB91935
	Fluoride	2	2	100	0	90 - 110		11/27/2017	16:17	LB91935
	Phosphorus, Ortho	5.9	5	118	0	90 - 110		11/27/2017	16:17	LB91935
	Nitrite	3	3	100	0	90 - 110		11/27/2017	16:17	LB91935
	Nitrate	2.4	2.5	96	0	90 - 110		11/27/2017	16:17	LB91935
	Sulfate	14.6	15	97.3	0	90 - 110		11/27/2017	16:17	LB91935



GENCHEM

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: LB91935

SDG No.: LB91935

Contract: Lab Code: CHEM

Case No.: LB91935

SAS No.: LB91935

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		11/27/2017	15:45	LB91935
	Chloride	0.075	+/-0.15	U		0.15		11/27/2017	15:45	LB91935
	Fluoride	0.043	+/-0.1	U		0.1		11/27/2017	15:45	LB91935
	Phosphorus, Ortho	0.01	+/-0.24	U		0.24		11/27/2017	15:45	LB91935
	Nitrite	0.022	+/-0.15	U		0.15		11/27/2017	15:45	LB91935
	Nitrate	0.027	+/-0.11	U		0.11		11/27/2017	15:45	LB91935
	Sulfate	0.13	+/-0.75	U		0.75		11/27/2017	15:45	LB91935



GENCHEM

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: LB91935

SDG No.: LB91935

Contract:

Lab Code: CHEM

Case No.: LB91935

SAS No.: LB91935

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		11/27/2017	16:50	LB91935
	Chloride	0.075	+/-0.15	U		0.15		11/27/2017	16:50	LB91935
	Fluoride	0.043	+/-0.1	U		0.1		11/27/2017	16:50	LB91935
	Phosphorus, Ortho	0.01	+/-0.24	U		0.24		11/27/2017	16:50	LB91935
	Nitrite	0.022	+/-0.15	U		0.15		11/27/2017	16:50	LB91935
	Nitrate	0.027	+/-0.11	U		0.11		11/27/2017	16:50	LB91935
	Sulfate	0.13	+/-0.75	U		0.75		11/27/2017	16:50	LB91935



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- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: LB91935

SDG No.: LB91935

Contract:

Lab Code: CHEM

Case No.: LB91935

SAS No.: LB91935

Sample ID	Analyte	Result mg/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB2	Bromide	0.066	+/-0.5	U		0.5		12/05/2017	10:02	LB91935
	Chloride	0.075	+/-0.15	U		0.15		12/05/2017	10:02	LB91935
	Fluoride	0.043	+/-0.1	U		0.1		12/05/2017	10:02	LB91935
	Phosphorus, Ortho	0.01	+/-0.24	U		0.24		12/05/2017	10:02	LB91935
	Nitrite	0.022	+/-0.15	U		0.15		12/05/2017	10:02	LB91935
	Nitrate	0.027	+/-0.11	U		0.11		12/05/2017	10:02	LB91935
	Sulfate	0.13	+/-0.75	U		0.75		12/05/2017	10:02	LB91935
CCB3	Bromide	0.066	+/-0.5	U		0.5		12/05/2017	15:12	LB91935
	Chloride	0.075	+/-0.15	U		0.15		12/05/2017	15:12	LB91935
	Fluoride	0.043	+/-0.1	U		0.1		12/05/2017	15:12	LB91935
	Phosphorus, Ortho	0.01	+/-0.24	U		0.24		12/05/2017	15:12	LB91935
	Nitrite	0.022	+/-0.15	U		0.15		12/05/2017	15:12	LB91935
	Nitrate	0.027	+/-0.11	U		0.11		12/05/2017	15:12	LB91935
	Sulfate	0.13	+/-0.75	U		0.75		12/05/2017	15:12	LB91935



GENCHEM

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: LB91935

SDG No.: LB91935

Contract: Lab Code: CHEM

Case No.: LB91935

SAS No.: LB91935

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

Client: LB91935

SDG No.: LB91935

Instrument: IC-1

Sample ID	Analyte	Result (mg/Kg)	Acceptance Limit	Conc Qual	LOD mg/Kg	CRQL mg/Kg	M	Analysis Date	Analysis Time	Run
LB91935BLS		SOLID		Batch Number:				Prep Date:		
	Bromide	0.19	<0.5	U		0.5		12/05/2017	10:33	LB91935
	Chloride	0.032	<0.15	U		0.15		12/05/2017	10:33	LB91935
	Fluoride	0.017	<0.1	U		0.1		12/05/2017	10:33	LB91935
	Phosphorus, Ortho	0.002	<0.24	U		0.24		12/05/2017	10:33	LB91935
	Nitrite	0.01	<0.15	U		0.15		12/05/2017	10:33	LB91935
	Nitrate	0.011	<0.11	U		0.11		12/05/2017	10:33	LB91935
	Sulfate	0.096	<0.75	U		0.75		12/05/2017	10:33	LB91935



GENCHEM
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MATRIX SPIKE SUMMARY

client: LB91935 **level:** low **sdg no.:** LB91935
contract: **lab code:** CHEM **case no.:** LB91935 **sas no.:** LB91935
matrix: Solid **sample id:** I6728-03 **client id:** LOCATION-3MS
Percent Solids for Sample: 78.7 **Spiked ID:** I6728-03MS **Percent Solids for Spike Sample:** 78.7

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Bromide	mg/Kg	80 - 120	12.6		0.24	U	12.7	99.2		
Chloride	mg/Kg	80 - 120	4.1		0.34		3.8	99		
Fluoride	mg/Kg	80 - 120	2.2		0.22		2.5	79	*	
Phosphorus, Ortho	mg/Kg	80 - 120	7.6		0.0025	U	6.4	118.8		
Nitrite	mg/Kg	80 - 120	3.8		0.013	U	3.8	100		
Nitrate	mg/Kg	80 - 120	3.9		0.52		3.2	106		
Sulfate	mg/Kg	80 - 120	20.2		1.8		19.1	96		



GENCHEM
- 5a -
MATRIX SPIKE DUPLICATE SUMMARY

client: LB91935 **level:** low **sdg no.:** LB91935
contract: **lab code:** CHEM **case no.:** LB91935 **sas no.:** LB91935
matrix: Solid **sample id:** I6728-03 **client id:** LOCATION-3MSD
Percent Solids for Sample: 78.7 **Spiked ID:** I6728-03MSD **Percent Solids for Spike Sample:** 78.7

Analyte	Units	Acceptance	MSD	Sample		Spike	%	Qual	M
		Limit %R	Result	C	Result	C	Added	Recovery	
Bromide	mg/Kg	80 - 120	12.4		0.24	U	12.7	97.6	
Chloride	mg/Kg	80 - 120	4		0.34		3.8	96	
Fluoride	mg/Kg	80 - 120	2.2		0.22		2.5	79	*
Phosphorus, Ortho	mg/Kg	80 - 120	7.6		0.0025	U	6.4	118.8	
Nitrite	mg/Kg	80 - 120	3.7		0.013	U	3.8	97.4	
Nitrate	mg/Kg	80 - 120	3.9		0.52		3.2	106	
Sulfate	mg/Kg	80 - 120	20.1		1.8		19.1	96	

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DUPLICATE SAMPLE SUMMARY

Client: LB91935 **Level:** LOW **SDG No.:** LB91935
Contract: **Lab Code:** CHEM **Case No.:** LB91935 **SAS No.:** LB91935
Matrix: Solid **Sample ID:** I6728-03 **Client ID:** LOCATION-3DUP
Percent Solids for Sample: 78.7 **Duplicate ID** I6728-03DUP **Percent Solids for Spike Sample:** 78.7

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Bromide	mg/Kg	20	0.24	U	0	U			
Chloride	mg/Kg	20	0.34		0.35		3		
Fluoride	mg/Kg	20	0.22		0.24		9		
Phosphorus, Ortho	mg/Kg	20	0.0025	U	-0.21	U			
Nitrite	mg/Kg	20	0.013	U	0	U			
Nitrate	mg/Kg	20	0.52		0.53		2		
Sulfate	mg/Kg	20	1.8		1.8		0		

GENCHEM

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DUPLICATE SAMPLE SUMMARY

Client: LB91935 **Level:** LOW **SDG No.:** LB91935
Contract: **Lab Code:** CHEM **Case No.:** LB91935 **SAS No.:** LB91935
Matrix: Solid **Sample ID:** I6728-03MS **Client ID:** LOCATION-3MSD
Percent Solids for Sample: 78.7 **Duplicate ID** I6728-03MSD **Percent Solids for Spike Sample:** 78.7

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Bromide	mg/Kg	20	12.6		12.4		2		
Chloride	mg/Kg	20	4.1		4		2		
Fluoride	mg/Kg	20	2.2		2.2		0		
Phosphorus, Ortho	mg/Kg	20	7.6		7.6		0		
Nitrite	mg/Kg	20	3.8		3.7		3		
Nitrate	mg/Kg	20	3.9		3.9		0		
Sulfate	mg/Kg	20	20.2		20.1		0		



GENCHEM

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LABORATORY CONTROL SAMPLE SUMMARY

Client: LB91935

SDG No.: LB91935

Contract: _____

Lab Code: CHEM

Case No.: LB91935

SAS No.: LB91935

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
LB91935BSS							
Bromide	mg/Kg	10	10		100	90 - 110	
Chloride	mg/Kg	3	3		100	90 - 110	
Fluoride	mg/Kg	2	1.9		95	90 - 110	
Phosphorus, Ortho	mg/Kg	5	5.5		110	90 - 110	
Nitrite	mg/Kg	3	3.1		103.3	90 - 110	
Nitrate	mg/Kg	2.5	2.5		100	90 - 110	
Sulfate	mg/Kg	15	15		100	90 - 110	
