

Daily Analysis Runlog For Sequence/QC Batch ID # LB93282

Review By

Review On

SubDirectory

LB93282

Test :

Reactive Cyanide

STD. NAME		STD REF.#				
ICAL Standard		WP61907,WP61908,WP61909,WP61910,WP61911,WP61912,WP61913				
ICV Standard		wp61915				
CCV Standard		WP61914				
ICSA Standard		N/A				
CRI Standard		N/A				
LCS Standard		N/A				
Chk Standard		WP61916,WP59958,WP60878				

Sr#	SampleID	ClientID	QcType	Date	Comment	Status
1	0.0PPBCN	0.0PPBCN	CAL1	02/14/18 12:08		OK
2	5.0PPBCN	5.0PPBCN	CAL2	02/14/18 12:08		OK
3	10PPBCN	10PPBCN	CAL3	02/14/18 12:08		OK
4	50PPBCN	50PPBCN	CAL4	02/14/18 12:08		OK
5	100PPBCN	100PPBCN	CAL5	02/14/18 12:08		OK
6	250PPBCN	250PPBCN	CAL6	02/14/18 12:08		OK
7	500PPBCN	500PPBCN	CAL7	02/14/18 12:08		OK
8	ICV1	ICV1	ICV	02/14/18 13:51		OK
9	ICB1	ICB1	ICB	02/14/18 13:51		OK
10	CCV1	CCV1	CCV	02/14/18 13:51		OK
11	CCB1	CCB1	CCB	02/14/18 13:51		OK
12	PB106547BL	PB106547BL	MB	02/14/18 13:51		OK
13	J1530-41	WC-01	SAM	02/14/18 13:51		OK
14	J1530-41DUP	WC-01DUP	DUP	02/14/18 13:51		OK
15	J1530-42	WC-02	SAM	02/14/18 13:51		OK
16	J1530-43	WC-03	SAM	02/14/18 13:52		OK
17	J1530-44	WC-04	SAM	02/14/18 13:52		OK
18	J1541-04	SAMPLE-A-1-3	SAM	02/14/18 13:52		OK
19	J1541-08	SAMPLE-B-1-3	SAM	02/14/18 13:59		OK
20	J1541-12	SAMPLE-C-1-3	SAM	02/14/18 13:59		OK
21	J1545-07	TEST-PIT-1	SAM	02/14/18 13:59		OK

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

Daily Analysis Runlog For Sequence/QC Batch ID # LB93282

Review By		Review On				
SubDirectory		LB93282		Test : Reactive Cyanide		
STD. NAME		STD REF.#				
ICAL Standard		WP61907,WP61908,WP61909,WP61910,WP61911,WP61912,WP61913				
ICV Standard		wp61915				
CCV Standard		WP61914				
ICSA Standard		N/A				
CRI Standard		N/A				
LCS Standard		N/A				
Chk Standard		WP61916,WP59958,WP60878				
22	CCV2	CCV2	CCV	02/14/18 13:59		OK
23	CCB2	CCB2	CCB	02/14/18 13:59		OK
24	J1545-14	TEST-PIT-2	SAM	02/14/18 13:59		OK
25	PB106548BL	PB106548BL	MB	02/14/18 13:59		OK
26	J1549-01	Frac-Tank-N37475	SAM	02/14/18 13:59		OK
27	J1549-01DUP	Frac-Tank-N37475DU	DUP	02/14/18 13:59		OK
28	J1549-02	Frac-Tank-N28427	SAM	02/14/18 13:59		OK
29	CCV3	CCV3	CCV	02/14/18 13:59		OK
30	CCB3	CCB3	CCB	02/14/18 14:02		OK



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

Report of Analysis

Client:		Date Collected:	2/9/2018 12:00:00 AM
Project:	LB93282	Date Received:	2/12/2018 12:00:00 AM
Client Sample ID:	WC-01	SDG No.:	LB93282
Lab Sample ID:	J1530-41	Matrix:	Solid
Level (low/med):	low	% Solid:	100

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
	Reactive Cyanide	0.0056	U	1	0.025		0.05	mg/Kg	02/14/2018	02/14/2018	9012B

Report of Analysis

Client:		Date Collected:	2/9/2018 12:00:00 AM
Project:	LB93282	Date Received:	2/12/2018 12:00:00 AM
Client Sample ID:	WC-02	SDG No.:	LB93282
Lab Sample ID:	J1530-42	Matrix:	Solid
Level (low/med):	low	% Solid:	100

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
	Reactive Cyanide	0.0074	U	1	0.025		0.05	mg/Kg	02/14/2018	02/14/2018	9012B



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

Report of Analysis

Client:		Date Collected:	2/9/2018 12:00:00 AM
Project:	LB93282	Date Received:	2/12/2018 12:00:00 AM
Client Sample ID:	WC-03	SDG No.:	LB93282
Lab Sample ID:	J1530-43	Matrix:	Solid
Level (low/med):	low	% Solid:	100

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
	Reactive Cyanide	0.0058	U	1	0.025		0.05	mg/Kg	02/14/2018	02/14/2018	9012B



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

Report of Analysis

Client:		Date Collected:	2/9/2018 12:00:00 AM
Project:	LB93282	Date Received:	2/12/2018 12:00:00 AM
Client Sample ID:	WC-04	SDG No.:	LB93282
Lab Sample ID:	J1530-44	Matrix:	Solid
Level (low/med):	low	% Solid:	100

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
	Reactive Cyanide	0.0057	U	1	0.025		0.05	mg/Kg	02/14/2018	02/14/2018	9012B

Report of Analysis

Client:		Date Collected:	2/13/2018 12:00:00 AM
Project:	LB93282	Date Received:	2/13/2018 12:00:00 AM
Client Sample ID:	SAMPLE-A-1-3	SDG No.:	LB93282
Lab Sample ID:	J1541-04	Matrix:	Solid
Level (low/med):	low	% Solid:	88.5

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
	Reactive Cyanide	0.0067	U	1	0.025		0.05	mg/Kg	02/14/2018	02/14/2018	9012B



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

Report of Analysis

Client:		Date Collected:	2/13/2018 12:00:00 AM
Project:	LB93282	Date Received:	2/13/2018 12:00:00 AM
Client Sample ID:	SAMPLE-B-1-3	SDG No.:	LB93282
Lab Sample ID:	J1541-08	Matrix:	Solid
Level (low/med):	low	% Solid:	88.6

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
	Reactive Cyanide	0.017	U	1	0.025		0.05	mg/Kg	02/14/2018	02/14/2018	9012B



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

Report of Analysis

Client:		Date Collected:	2/13/2018 12:00:00 AM
Project:	LB93282	Date Received:	2/13/2018 12:00:00 AM
Client Sample ID:	SAMPLE-C-1-3	SDG No.:	LB93282
Lab Sample ID:	J1541-12	Matrix:	Solid
Level (low/med):	low	% Solid:	89.3

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
	Reactive Cyanide	0.0075	U	1	0.025		0.05	mg/Kg	02/14/2018	02/14/2018	9012B



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

Report of Analysis

Client:		Date Collected:	2/13/2018 12:00:00 AM
Project:	LB93282	Date Received:	2/13/2018 12:00:00 AM
Client Sample ID:	TEST-PIT-1	SDG No.:	LB93282
Lab Sample ID:	J1545-07	Matrix:	Solid
Level (low/med):	low	% Solid:	100

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
	Reactive Cyanide	0.01	U	1	0.025		0.05	mg/Kg	02/14/2018	02/14/2018	9012B

Report of Analysis

Client:		Date Collected:	2/13/2018 12:00:00 AM
Project:	LB93282	Date Received:	2/13/2018 12:00:00 AM
Client Sample ID:	TEST-PIT-2	SDG No.:	LB93282
Lab Sample ID:	J1545-14	Matrix:	Solid
Level (low/med):	low	% Solid:	100

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
	Reactive Cyanide	0.0057	U	1	0.025		0.05	mg/Kg	02/14/2018	02/14/2018	9012B



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

Report of Analysis

Client:		Date Collected:	2/13/2018 12:00:00 AM
Project:	LB93282	Date Received:	2/13/2018 12:00:00 AM
Client Sample ID:	Frac-Tank-N37475	SDG No.:	LB93282
Lab Sample ID:	J1549-01	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
	Reactive Cyanide	0.00042	U	1	0.0025		0.005	mg/L	02/14/2018	02/14/2018	9012B



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

Report of Analysis

Client:		Date Collected:	2/13/2018 12:00:00 AM
Project:	LB93282	Date Received:	2/13/2018 12:00:00 AM
Client Sample ID:	Frac-Tank-N28427	SDG No.:	LB93282
Lab Sample ID:	J1549-02	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
	Reactive Cyanide	0.00064	U	1	0.0025		0.005	mg/L	02/14/2018	02/14/2018	9012B



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

Report of Analysis

Client:		Date Collected:	2/13/2018 12:00:00 AM
Project:	LB93282	Date Received:	2/13/2018 12:00:00 AM
Client Sample ID:	Frac-Tank-N28427	SDG No.:	LB93282
Lab Sample ID:	J1549-02	Matrix:	WATER
Level (low/med):	low	% Solid:	0

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

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: LB93282

SDG No.: LB93282

Contract: _____ Lab Code: CHEM

Case No.: LB93282

SAS No.: LB93282

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	Reactive Cyanide	0.094	0.099	94.9		85 - 115		02/14/2018	13:51	LB93282



GENCHEM

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: LB93282

SDG No.: LB93282

Contract: _____ Lab Code: CHEM

Case No.: LB93282

SAS No.: LB93282

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
CCV1	Reactive Cyanide	0.23	0.25	92		90 - 110		02/14/2018	13:51	LB93282
CCV2	Reactive Cyanide	0.24	0.25	96		90 - 110		02/14/2018	13:59	LB93282
CCV3	Reactive Cyanide	0.24	0.25	96		90 - 110		02/14/2018	13:59	LB93282



GENCHEM

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: LB93282

SDG No.: LB93282

Contract:

Lab Code: CHEM

Case No.: LB93282

SAS No.: LB93282

Sample ID	Analyte	Result mg/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB1	Reactive Cyanide	0.00085	+/-0.005	U		0.005		02/14/2018	13:51	LB93282



GENCHEM

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: LB93282

SDG No.: LB93282

Contract:

Lab Code: CHEM

Case No.: LB93282

SAS No.: LB93282

Sample ID	Analyte	Result mg/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB1	Reactive Cyanide	0.00068	+/-0.005	U		0.005		02/14/2018	13:51	LB93282
CCB2	Reactive Cyanide	0.00084	+/-0.005	U		0.005		02/14/2018	13:59	LB93282
CCB3	Reactive Cyanide	0.00038	+/-0.005	U		0.005		02/14/2018	14:02	LB93282



GENCHEM

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client:	LB93282	SDG No.:	LB93282				
Contract:		Lab Code:	CHEM	Case No.:	LB93282	SAS No.:	LB93282

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: LB93282

SDG No.: LB93282

Instrument: Konelab 20

Sample ID	Analyte	Result (mg/Kg)	Acceptance Limit	Conc Qual	LOD mg/Kg	CRQL mg/Kg	M	Analysis Date	Analysis Time	Run
PB106547BL	Reactive Cyanide	SOLID		Batch Number:		PB106547		Prep Date:	02/14/2018	
		0.0066	<0.05	U		0.05		02/14/2018	13:51	LB93282
Sample ID	Analyte	Result (mg/L)	Acceptance Limit	Conc Qual	LOD mg/L	CRQL mg/L	M	Analysis Date	Analysis Time	Run
PB106548BL	Reactive Cyanide	WATER		Batch Number:		PB106548		Prep Date:	02/14/2018	
		0.00055	<0.005	U		0.005		02/14/2018	13:59	LB93282



GENCHEM
- 5a -

client:

level:

low

sdg no.:

contract:

lab code:

case no.:

sas no.:

matrix:

sample id:

client id:

Percent Solids for Sample:

Spiked ID:

Percent Solids for Spike Sample:

Analyte	Units	Acceptance Limit %R	C	Sample Result	C	Spike Added	% Recovery	Qual	M
---------	-------	------------------------	---	------------------	---	----------------	---------------	------	---

GENCHEM

- 6 -

DUPLICATE SAMPLE SUMMARY

Client: LB93282 **Level:** LOW **SDG No.:** LB93282
Contract: **Lab Code:** CHEM **Case No.:** LB93282 **SAS No.:** LB93282
Matrix: Solid **Sample ID:** J1530-41 **Client ID:** WC-01DUP
Percent Solids for Sample: 100 **Duplicate ID** J1530-41DUP **Percent Solids for Spike Sample:** 100

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Reactive Cyanide	mg/Kg	20	0.025	U	0.0056	U			

GENCHEM

- 6 -

DUPLICATE SAMPLE SUMMARY

Client: LB93282 **Level:** LOW **SDG No.:** LB93282
Contract: **Lab Code:** CHEM **Case No.:** LB93282 **SAS No.:** LB93282
Matrix: WATER **Sample ID:** J1549-01 **Client ID:** Frac-Tank-N37475DUP
Percent Solids for Sample: 0 **Duplicate ID** J1549-01DUP **Percent Solids for Spike Sample:** 0

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Reactive Cyanide	mg/L	20	0.0025	U	0.00066	U			



GENCHEM

- 7 -

Client: LB93282

SDG No.: LB93282

Contract:

Lab Code: CHEM

Case No.: LB93282

SAS No.: LB93282

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
---------	-------	------------	--------	---	---------------	----------------------	---